

CRAZY TYPHOON MINI OPERATION MANUAL

The actual product you have received may differ slightly from the illustration.



- To ensure safe operation of the game machine, be sure to read this Operation Manual before use.
- Keep this Operation Manual in a safe place for quick access whenever needed.

NAMCO BANDAI Games Inc.

INTRODUCTION

Thank you for purchasing the "CRAZY TYPHOON MINI" game machine (hereafter referred to as the "machine").

This operation manual describes:

- How to install, operate, relocate, transport, maintain and discard the machine safely and properly
- How to operate the machine correctly and make full use of its features
- How to ensure safety of players and bystanders

IMPORTANT

Read PRECAUTIONS and INSTALLATION Sections before operating game

RF Notice

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operating in a commercial environment. This equipment uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Copyright 2008, 2012 NAMCO AMERICA INC. All rights reserved

No part of this publication may be reproduced by any mechanical photographic, or electronic process, or in the form of a photographic recording, nor may it be stored in a retrieval system, transmitted, or otherwise copied for public or private use, without permission from NAMCO AMERICA INC.

Instructions to the owner

If you entrust another party to perform installation, operation, relocation, transportation, maintenance or discarding of the machine, instruct the concerned party to read and observe all the instructions and precautions in this operation manual regarding the particular action to be taken.

1-1 Magnitudes of risk

On the labels attached to the machine and in this operation manual, precautions regarding safety and property damage are classified as shown below in accordance with the magnitude of the particular risk.

WARNING: Failure to avoid the indicated risk may result in death or serious in-

CAUTION : Failure to avoid the indicated risk may result in minor injury or property damage.

Notes related to machine functions but not to safety are marked with the following label.

NOTICE

: Notes related to product functions or protection.

1-2 Definition of the term "technician"

This operation manual is written for arcade personnel. However, the sections marked "To be conducted by a technician only" in the table of contents are written for technicians. These tasks should be conducted by technicians only.

Technician: A person engaged in machine design, manufacture, inspection or maintenance service for a manufacturer of amusement equipment, or a person who has technical knowledge related to electricity, electronics or mechanical engineering at a level equal to or higher than that of a technical high school graduate and is engaged routinely in the maintenance (repair) of amusement machines.

1-3 Top-priority safety precautions



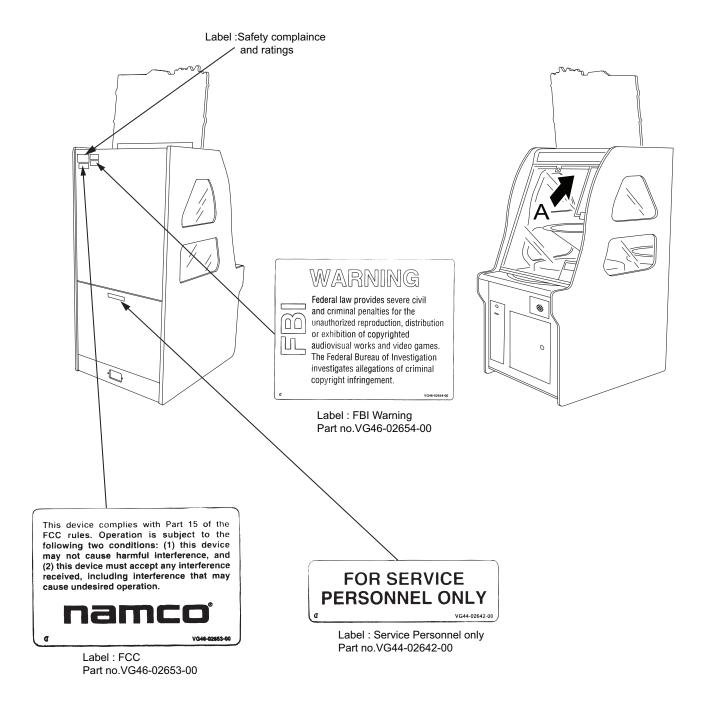
- Should any problem occur, turn off the power switch immediately to stop operating the machine. Then, unplug the power cord plug from the AC outlet. Operating the machine without correcting a problem may cause a fire or accident.
- Dust accumulated on the power cord plug may cause a fire. Check the power cord plug regularly and remove dust.
- Insert the power cord plug firmly into the AC outlet. Poor contact may cause overheating that can lead to a fire or burns.
- A damaged power cord can cause a fire, electric shock or electrical leakage. Observe the following cautions.
 - Keep the power cord away from heating devices.
 - Do not twist the power cord.
 - Do not bend the power cord forcibly.
 - Do not alter the power cord.
 - Do not bundle the power cord.
 - Do not pull the power cord. (Always unplug by holding the power cord plug, and avoid pulling the power cord.)
 - Do not place anything on the power cord.
 - Do not get the power cord caught by the machine, other products or wall.
 - Do not do anything else that might damage the power cord.
- Do not wet the power cord or power cord plug with water. Water can cause an electric shock or leakage.
- Do not touch the power cord with a wet hand. Doing so can result in an electric shock.
- The power rating for the machine is 120 VAC and 1.5 A (maximum current consumption). To prevent fire and electric shock, always use indoor wiring that conforms to the machine's power specifications.
- Operate the machine with a power supply voltage in the range of 105 to 125 VAC.
 Using the machine with a supply voltage outside the specified range may cause a
 fire or electric shock. To ensure that the machine operates in optimum condition,
 maintain the power supply at 120 VAC.
- To ensure safe operation of the machine, be sure to conduct the pre-service check (see P. 28 "7-1 Pre-service check") and maintenance (see P. 69 "8 MAINTENANCE").
 Failure to perform the specified inspection and maintenance can result in unexpected accidents.
- Use only consumables and service parts (including fasteners) specified by NAMCO BANDAI Games Inc. To order parts, contact your distributor.
- Do not convert the machine without permission. Do not perform any work that is not described in this operation manual. Unauthorized conversion of the machine may create unforeseen hazards.
- When transferring the ownership of the machine, be sure to provide this operation manual together with the machine.

1-4 Description of warning labels attached to the machine



- The warning labels describe important safety precautions. Observe the following:
 - To make sure that the warning labels attached to the machine are easily legible, install the machine at a proper location with ample illumination and keep the labels clean at all times. Also, make sure that the labels are not hidden behind another game machine or other objects.
 - Do not remove or alter the warning labels.
 - If the warning labels become dirty or damaged, replace them with new labels. To order warning labels, contact your distributor.

The warning labels shown in the diagram on the following page are attached on machine to notify danger to the people operating, maintaining, transporting or moving the machine.



CONTENTS

INTRODUCTION

1.	SAFETY PRECAUTIONS - Be sure to read these instructions to ensure safety	1
	1-1 Magnitudes of risk	1
	1-2 Definition of the term "technician"	1
	1-3 Top-priority safety precautions	2
	1-4 Description of warning labels attached to the machine	3
CC	ONTENTS	5
2.	SPECIFICATIONS	8
3.	CHECKING THE PACKAGE CONTENTS	9
4.	OVERALL CONSTRUCTION (Components and Their Names)	11
5.	INSTALLATION	14
	5-1 Installation conditions	14
	5-1-1 Locations to avoid	14
	5-1-2 Play zone of installed machine	
	5-2 Required dimensions of carry-in passage (such as doors and corridors)	
	5-3 Assembly	
	5-3-1 Installing the Signboard Assy	
	5-3-2 Preparing coins	
	5-3-3 Installing the halogen lamp	
	5-4 Connecting the power cord	19
6.	MOVING AND TRANSPORTING	20
	6-1 Transportation	21
	6-1-1 Moving (on the floor)	21
	6-1-2 Manual transport (carrying up or down the stairs, etc.)	
	6-1-3 Loading on or unloading from a vehicle	
	6-1-4 Trucking	24
7.	OPERATION	25
	7-1 Pre-service check	26
	7-1-1 Safety check (before power ON)	26
	7-1-2 Operation check (after power ON)	26
	7-2 How to play	27
	7-2-1 Description of the game	27
	(1) Game rules	27

CONTENTS

	7-3 Adju	istment	28
	7-3-1	Turning on the power switch	28
	7-3-2	Adjustment switches	29
	7-4 Test	mode	30
	7-4-1	Description of the "TOTAL IN, TOTAL OUT" screen	30
	7-4-2	Display/initialization of data (DATA DISPLAY)	32
		(1) Income data (INCOME DATE)	32
	7-4-3	Error history (ERROR HISTORY)	34
		Settings (OPTIONS)	
	7-4-5	Input/output test (I/O TEST)	37
		① MOTOR TEST	
		AC motor test	38
		② SENSOR/LED TEST	
		Coin/tilt sensor/LED test	39
		③ BUTTON TEST	
		Service panel button test	40
	7-4-6	Ticket test (TICKET TEST)	41
		Sound test (SOUND TEST)	
		Other tests (OTHERS)	
		Error display	
	7-5 Collection of coins		
		Collection of coins from the coin box	
8.	MAINTE	NA NICE	47
Ο.	. MAINTENANCE		
		Inspection items	
		Cleaning the Main Unit Assy	
		,	
		Cleaning the drop rail - To be conducted by a technician only	
		Cleaning the field	
		Cleaning the roulette panel	
		ponse to Errors	
		Error list - To be conducted by a technician only -	
		Resetting errors - To be conducted by a technician only	
		ubleshooting - To be conducted by a technician only	
		General - To be conducted by a technician only	
		Main Unit Assy - To be conducted by a technician only	
		Slot Machine Assy - To be conducted by a technician only -	
		Redemption Door Assy - To be conducted by a technician only	
		Coin Entry Door Assy - To be conducted by a technician only -	
	8-3-6	Roulette Assy - To be conducted by a technician only	61

-	8-4 Rem	oving and installing Assys and parts	62
	8-4-1	Main Unit Assy - To be conducted by a technician only	62
		(1) Replacing the fluorescent lamp/glow lamp	62
		(2) Replacing the halogen lamp	63
		(3) Replacing the 7-Segment Display PC Board - To be conducted by a technician only	64
		(4) Replacing the fan motor - To be conducted by a technician only	65
	8-4-2	Redemption Door Assy	66
		(1) Replacing the ticket redemption unit - To be conducted by a technician only	66
	8-4-3	Roulette Assy	67
		(1) Replacing the LED PC Board - To be conducted by a technician only	67
		(2) Replacing the origin sensor	68
		(3) Replacing sensor A (light-receiving photosensor unit)	
		- To be conducted by a technician only	69
		(4) Replacing sensor B (light-emitting photosensor unit)	
		- To be conducted by a technician only	71
		(5) Replacing the area sensor	74
		(6) Replacing the AC motor - To be conducted by a technician only	
	8-4-4	Control Panel Assy	
		(1) Replacing the Main PC Board - To be conducted by a technician only	
		(2) Replacing the Power Supply- To be conducted by a technician only	
	8-4-5	Replacing the fuse - To be conducted by a technician only	78
9.	DISCARI	DING THE MACHINE	79
10.	PARTS L	IST	80
	10-1 Main	Unit Assy	80
	10-2 Slot Machine Assy8		
		emption Door Assy	
10-4 Roulette Assy			
10-5 Control Panel Assy			
	10-6 Othe	r Assys	89
	10-6-1	Lamp Assy	89
	10-6-2	Pront Glass Assy	90
	10-6-3	Front Door Assy	91
	10-6-4	Service Panel Assy	92
	10-6-5	AC Plate Assy	93
	10-6-6	Signboard Assy	94
	10-6-7	Other replacement parts	95
11. \	WIRING I	DIAGRAMS	96

2. SPECIFICATIONS

(1) Rated power supply 120 VAC (60 Hz)

(2) Rated power consumption(3) Maximum current consumption240 W2.0 A

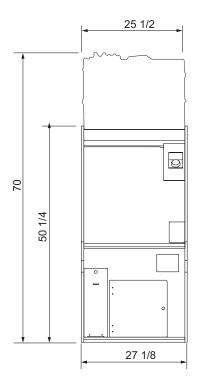
(4) Compatible coins Diameter: 20 to 26 mm, \pm 0.05 Thickness: 2.0 \pm 0.1 mm

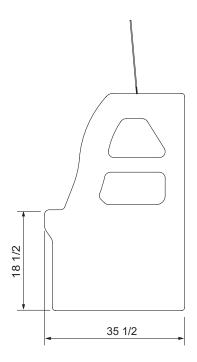
* Depending on the coin size deviation range, it may be necessary to check operation.

(5) Coin box capacity 6,000 coins

(6) Dimensions [unit: in.]

As installed: $27 \frac{1}{8} (W) \times 35 \frac{1}{2} (D) \times 71 (H)$





(7) Weight

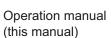
Approx.155 lbs.

3. CHECKING THE PACKAGE CONTENTS

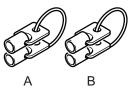
The product package contains the following parts.



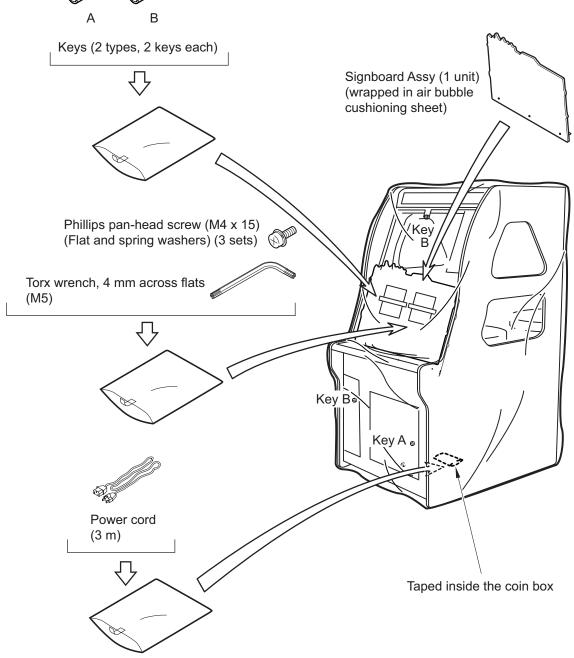
- Make sure all the parts shown below are contained in the product package.
- If parts are missing, contact your distributor.







Key type	Location of use	Coin lock model no.
Α	Coin box door	
В	Coin entry door, ticket redemption door	C201-1

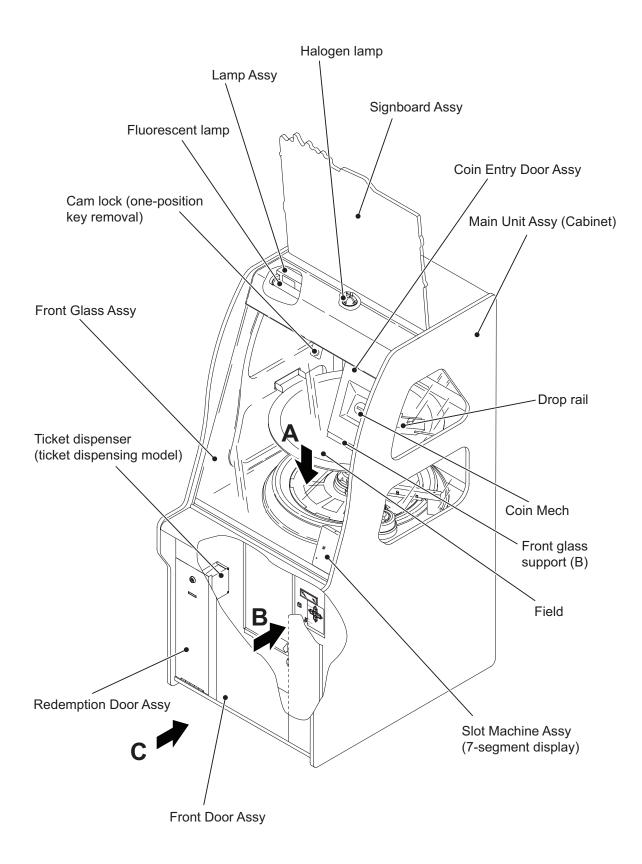


3. CHECKING THE PACKAGE CONTENTS

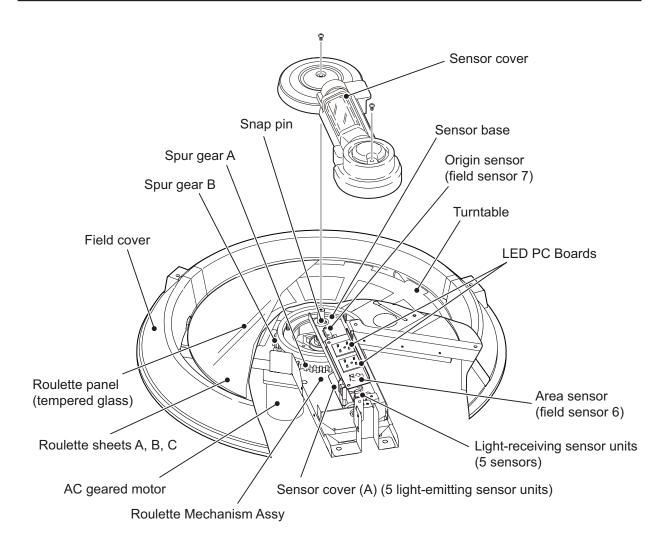
Accessory list

Name	Specification	Qty
Operation Manual (this manual)		1
Key (for coin box door)		2
Key (for coin entry door, ticket redemption door)		2
Signboard Assy		1
Phillips pan-head screw (with flat and spring washers)	M4 x 15	3
Torx wrench, 4 mm across flats (M5)		1
Power cord (3 m)		1

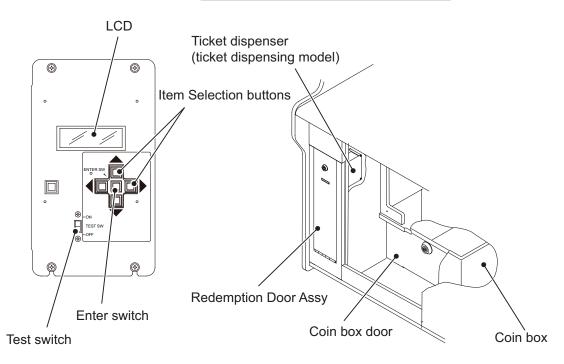
4. OVERALL CONSTRUCTION (Components and Their Names)



4. OVERALL CONSTRUCTION (Components and Their Names)

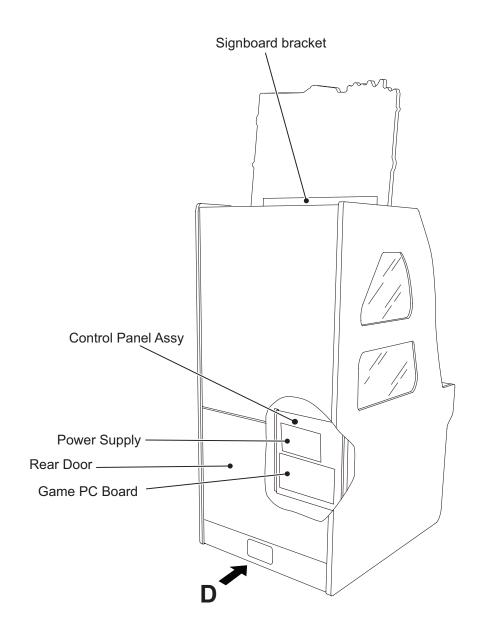


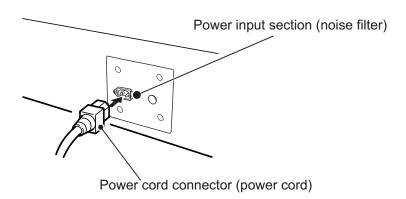
View from direction A (Roulette Assy)



View from direction B (Service Panel Assy)

View from direction C





View from direction D (cord box)

5. INSTALLATION

WARNING

- Install the machine according to the instructions and procedures in this operation manual. Failure to follow the specified procedures may result in a fire, electric shock, injury, or machine malfunction.
- Insert the power cord plug firmly into the AC outlet. Poor contact may cause overheating that can lead to a fire or burns.
- Install the machine on a flat and level floor, and make sure that the machine is stable and perfectly vertical.

5-1 Installation conditions



 Do not block the air vent holes on the back side of the machine with objects or a wall. If the air vent holes are blocked, the inside of the machine becomes hot, and a fire or machine malfunction can result.

5-1-1 Locations to avoid



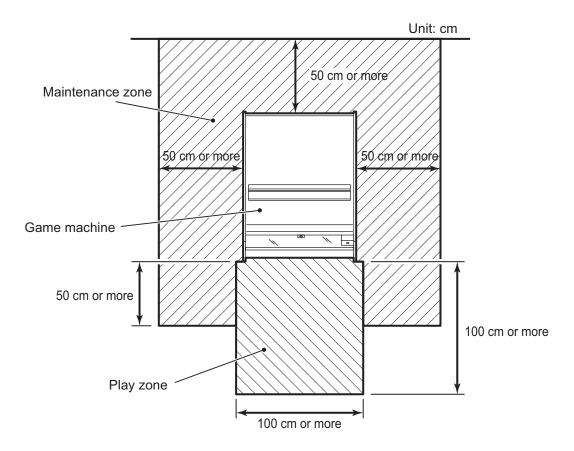
- The machine is designed for indoor use. Never install the machine outdoors or at any of the following locations:
 - · Place in direct sunlight
 - Place exposed to rain or water leakage
 - Damp place
 - Dusty place
 - Close to heating devices
 - Hot place
 - Extremely cold place
 - Place where dew condensation may occur due to temperature differences
 - Place where the machine may become an obstruction in emergencies (such as near emergency exit) and place where fire extinguisher or similar equipment is installed
 - Unstable place or location where vibrations are produced

5-1-2 Play zone of installed machine



 Set a play zone as shown below so that players can move away from the machine without bumping into observers or passersby.

Provide the following play zone around the installed machine. This play zone is also necessary for performing maintenance work. Therefore, be sure to ensure that the size of the play zone conforms to the dimensions shown below.



5-2 Required dimensions of carry-in passage (such as doors and corridors)

The doors and passages must be larger than the dimensions indicated below so that the machine can be carried to the installation site. By referring to the dimensions indicated below, make sure in advance that the machine can be carried smoothly to the installation site.

The dimensions of the machine are as follows (unit: in.):

 $27^{1}/_{4}$ (W) x $35^{1}/_{2}$ (D) x $79^{3}/_{4}$ (H) (with Signboard Assy attached)

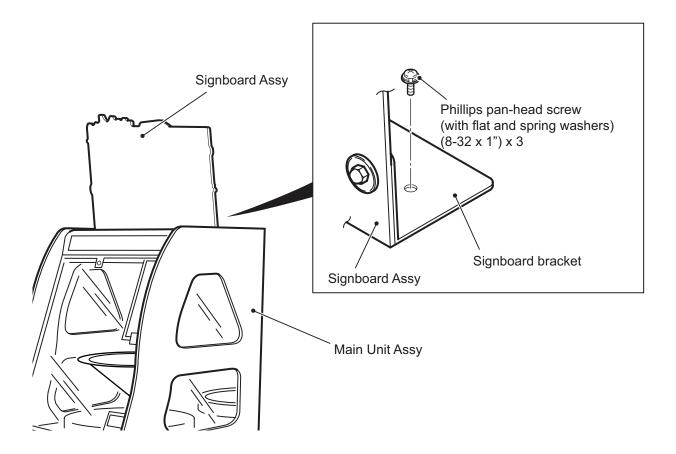
 $27 \frac{1}{4}$ (W) x $35 \frac{1}{2}$ (D) x 59 (H) (with Signboard Assy removed)

5-3 Assembly

5-3-1 Installing the Signboard Assy

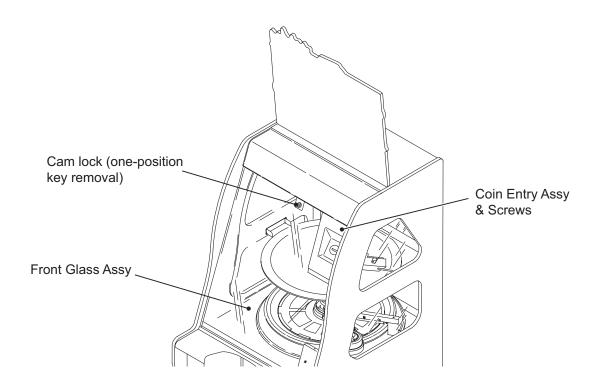
CAUTION

- Before installing the Signboard Assy (signboard panel), make sure that the machine has been installed as specified in "5-1 Installation conditions" on page 14.
 - Install the signboard bracket for the Signboard Assy to the main unit by using three Phillips pan-head screw (with flat and spring washers) (8-32 x 1").



5-3-2 Preparing coins

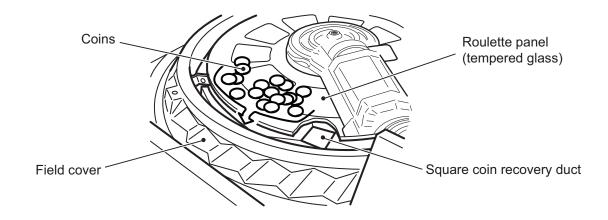
Using the provided key, open the cam lock (one-position key removal) and screws below the Coin Entry Assy.



Place coins on the roulette panel (tempered glass), and drop them through the gap at the field cover.



 Make sure that placed coins are lower than the square coin recovery duct located below the roulette panel. If too many coins are placed, coins may overflow from the hopper head.



Reinstall the Front Glass Assy by following the sequence described in 1 in reverse.

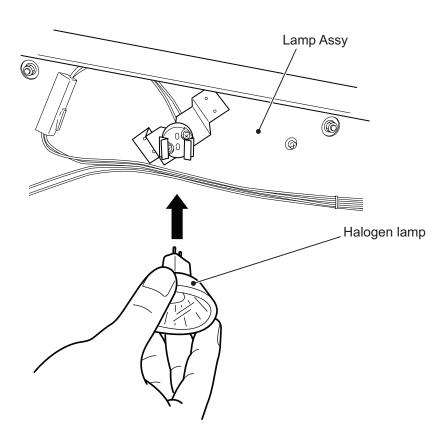
5-3-3 Installing the halogen lamp

/ WARNING

 To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

Reinstall the halogen lamp that were removed from the main unit before transportation.

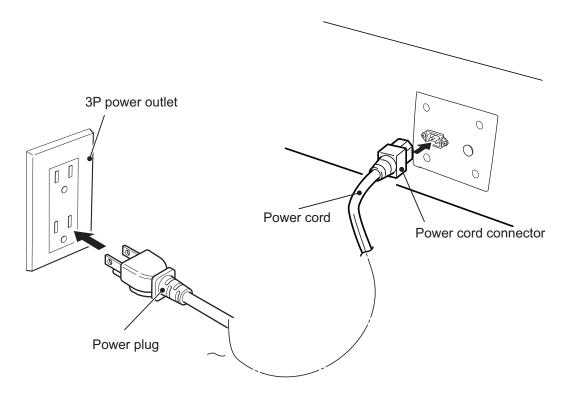
- Open the Front Glass Assy.
 (See P. 17 "5-3-2 Preparing coins" 1 .)
- 2 Insert the halogen lamp in the halogen lamp socket in the Lamp Assy.



Reinstall the Front Glass Assy by following the procedure in [1] in reverse.

5-4 Connecting the power cord

Connect the provided power cord to the power input section located on the back side of the Main Unit Assy.



6. MOVING AND TRANSPORTING

!\WARNING

 Do not leave the machine on a slope; otherwise, the machine may tip over or cause an unforeseen accident.

The machine is not designed to be carried by a forklift. Do not use a forklift to move or transport the machine. Use of a forklift can cause the machine to topple or result in an unexpected accident.

Remove all coins from the Main Unit Assy before moving or transporting machine.
 Observe this instruction in order to prevent fire or electric shock caused by coins entering unexpected places inside the machine.

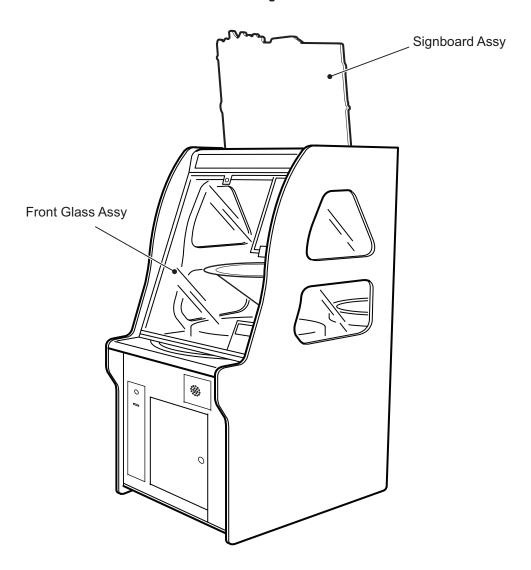
(See P. 67 "7-6 Collection of coins.")

Be sure to collect coins from the roulette panel (tempered glass) and the field and coins spilled inside the Main Unit Assy. Also, take out coins from the coin box and coin hopper.

Do not hold on to the following places when moving or transporting the machine.
 Those parts can cause your hands to slip, causing the machine to fall and resulting in an accident or injury.

Front Glass Assy, Signboard Assy

Do not hold on to the following sections of the machine.



6-1 Transportation

6-1-1 Moving (on the floor)

!WARNING

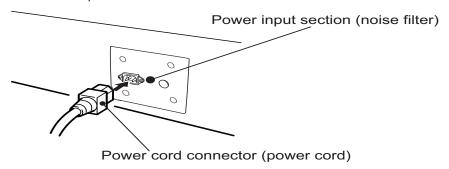
- The machine must be carried by the following number of persons. If the machine is moved improperly, accidents and injury can result.
 - Main machine (80 kg): 4 persons or more

! CAUTION

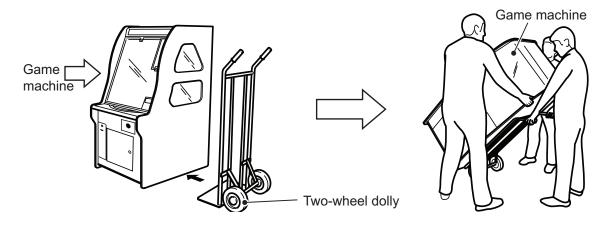
 Be sure to remove the Signboard Assy before moving the machine. To dismount the Signboard Assy, following the Signboard Assy installation sequence in reverse. (See P. 18 "5-3-1 Installing the Signboard Assy.")



- Move the machine carefully to prevent damage.
- Do not apply impact to the machine when carrying the machine over a ridge.
- Be sure to unplug the power cord before moving the machine.
- Turn off the power switch inside the coin door, behind the service bracket.



- 2 Disconnect the power cord from the Main Unit Assy.
- 3 Place the machine on a two-wheel dolly.

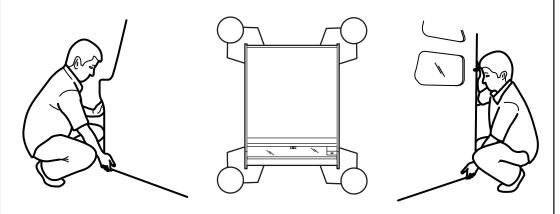


After moving the machine, install it by following the instructions in "5. INSTALLATION" on page 16.

6-1-2 Manual transport (carrying up or down the stairs, etc.)

MARNING

- When manually carrying the machine, the machine must be carried by the following number of persons. If the machine is moved improperly, accidents and injury can result.
 - Main machine (70 kg): 4 persons or more
- Remove coins from the coin hopper, roulette panel (tempered glass) and field in the Main Unit Assy, as well as from the coin box.



Hold the Main Unit Assy at the four bottom corners.

CAUTION

 Be sure to remove the Signboard Assy before moving the machine. To dismount the Signboard Assy, following the Signboard Assy installation sequence in reverse. (See P. 18 "5-3-1 Installing the Signboard Assy.")



- Move the machine carefully to prevent damage.
- Do not apply impact to the machine when carrying the machine over a ridge.
- Be sure to unplug the power cord before moving the machine.
- Secure the coin box in place with fabric tape so that it will not move around.
- Unplug the power cord from the cord box located on the back side of the Main Unit Assy.

(See P. 23 "6-1-1 Moving (on the floor)" 1 and 2.)

After transporting the machine, install it by following the instructions in "5. INSTAL-LATION" on page 16.

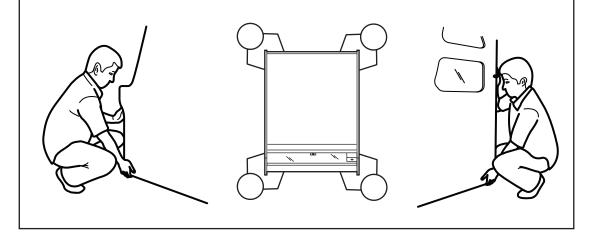
6-1-3 Loading on or unloading from a vehicle

!\WARNING

- When loading the machine onto or unloading the machine from a truck, be sure to detach the Signboard Assy from the Main Unit Assy for easy handling. If the machine is loaded on or unloaded from a truck with the Signboard Assy attached, an unexpected accident can occur. (See P. 18 "5-3-1 Installing the Signboard Assy.")
- The machine is not designed to be carried by a forklift. Do not use a forklift to load, unload, move or transport the machine. Use of a forklift can cause the machine to topple or result in an unexpected accident.
- The machine must be carried manually by the following number of persons. If the machine is moved improperly, accidents and injury can result.

Weight of divided assys

- Main Unit Assy (68 kg): 4 persons or more
- Signboard Assy (2 kg): 1 person or more





- Carry the machine carefully to prevent damage.
- Be sure to unplug the power cord before moving the machine.
- Do not apply impact to the machine when carrying the machine over a ridge.

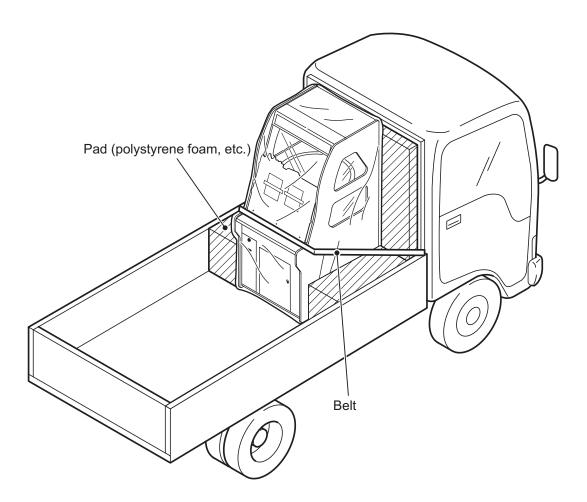
6-1-4 Trucking

!WARNING

 When transporting the machine on a truck, secure the machine to the truck in order to prevent it from moving due to acceleration or deceleration of the vehicle. Failure to tie the machine to the vehicle may result in an accident.



- Be sure to secure the machine using belts.
- Place cushioning materials such as blankets between the machine and belts for the protection of machine surfaces.
- Insert pads made of polystyrene foam or other materials between the machine and cargo bed and between the machine and adjacent equipment for the protection of machine surfaces.
- Be sure to position the belt at the location shown in the diagram below.
- When transporting the machine on a rainy day, use a vehicle equipped with a cargo cover or container truck to protect the machine from rain.
- Hold the coin box in place with fabric tape so that it will not move around.



7. OPERATION

!WARNING

- Should any problem occur, turn off the power switch immediately to stop operating the machine. Then, unplug the power cord from the AC outlet. Operating the machine without correcting a problem may cause a fire or accident.
- Dust accumulated on the power cord plug may cause a fire. Check the power cord plug regularly and remove dust.
- Insert the power cord plug firmly into the AC outlet. Poor contact may cause overheating that can lead to a fire or burns.
- Before operating the machine, check to make sure that the machine has been installed according to the specified instructions (see P. 14 "5. INSTALLATION"). If the machine is installed improperly, a fire, electric shock, injury or malfunction may result.
- The warning labels describe important precautions. Observe the following.
 - To make sure that the warning labels attached to the machine are easily legible, install the machine at a proper location with ample illumination and keep the labels clean at all times. Also, make sure that the labels are not hidden behind another game machine or other objects.
 - Do not remove or alter the warning labels.
 - If warning labels become dirty or damaged, replace them with new labels. To order warning labels, contact your distributor.
- To ensure safe operation of the machine, be sure to conduct the pre-service check (see P. 26 "7-1 Pre-service check") and maintenance (see P. 47 "8 MAINTENANCE").
 Failure to perform the specified inspection and maintenance can result in unexpected accidents.



- The machine can use only a certain type of coins. Make sure that the coins used in your arcade meet the coin specifications allowed for use in this machine.
 - Use of different coins can result in malfunctions.
- When ordering coin-handling parts (coin hopper, coin selector), be sure to order the parts designed for the type of coins used in your arcade.
 Use of parts that are not designed for the specified type of coins can result in a machine malfunction.

7-1 Pre-service check

Check the items described below before commencing operation.

If any problem is found, take corrective measures by referring to "8-2 Response to Errors" on page 53 or "8-3 Troubleshooting" on page 58.

7-1-1 Safety check (before power ON)



- To prevent accidents and injury, be sure to check the following items before commencing operation.
 - (1) Are all warning indications legible?
 - (See P. 3 "1-4 Description of warning labels attached to the machine.")
 - (2) Is the play zone area established as specified? (See P. 15 "5-1-2 Play zone of installed machine.")
 - (3) Is there any item in the coin discharging outlet box?
 - (4) Is the power cord connected securely to the AC outlet and power input socket?
 - (5) Is the power plug free of dust?
 - (6) Is the Front Glass Assy installed securely?

Check the following items after turning on the power switch. If any abnormality is found, turn off the power switch immediately and stop operating the machine. Then, unplug the power cord from the AC power outlet and contact your distributor.

- (7) Is any part of the power cord or plug abnormally hot?
- (8) Does touching the machine give an electrical shock?
- (9) Is there a burning smell, abnormal noise or vibration?
- (10) Is there any other sign of abnormality or malfunction?

7-1-2 Operation check (after power ON)

- Check that the machine produces background music and sound effects properly (see P. 49 "7-4-7 Sound test (SOUND TEST)").
- (2) Check that the fluorescent lamp, halogen lamp, Win lamps (WIN LEDs), slot machine 7-segment display, and service panel LCD the Main Unit Assy light properly (see P. 13 "4. OVERALL CONSTRUCTION (Components and Their Names)").

Check the following items in the Test mode.

(See P. 44 "7-4-5 Input/output test (I/O TEST MENU).")

- (3) Check the Test switch, Item Selection button, Enter switch, coin sensor, AC motor, coin hopper/ticket redemption sensors, etc. for proper operation.
- (4) Check to make sure that the AC motor operates properly.

7-2 How to play

7-2-1 Description of the game

Basic rules of the game

- (1) Coins inserted from the coin slot by a player are counted by the coin sensor. Inserted coins pass through the field and fall onto the rotating roulette.
- (2) When a coin lands in a framed area on the roulette, coins or tickets in the number indicated by that area are dispensed.
- (3) If a multiple number of coins land in a framed area, the coins in the frame area are counted as "1."
 - If one coin lands within a framed area and another coin touches the frame, both coins are considered to be in contact with the black edge, and coins will not be dispensed.
- (4) Coins falling through a gap in the roulette enter the coin hopper, or the coin box in the case of ticket redemption.

(1) Rules of the CRAZY TYPHOON game machine

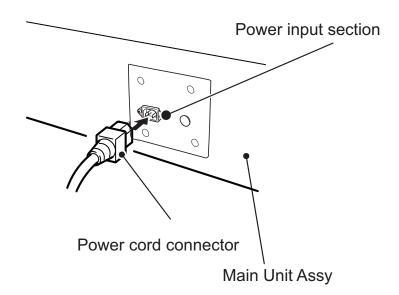
- 1 The purpose of the game is to drop a coin onto a framed area on the roulette with an indication such as "2," "4," "JP" and "?."
- ② If a coin falls on the "JP" area, instead of a framed area with a number indication such as "2" or "4," coins or tickets in the number indicated on the Slot Machine Assy (7-segment display) in the Front Glass Assy are dispensed.
- 3 If a coin falls on the "?" area, "Mystery Win" results and the number of coins to be dispensed is determined randomly. The number of coins or tickets dispensed varies from 0 to 10 (cash dispensing model) or from 1 to 40 (ticket dispensing model), depending on the set payout rate. Therefore, players do not know in advance how many coins or tickets will be dispensed.

7-3 Adjustment

7-3-1 Turning on the power switch

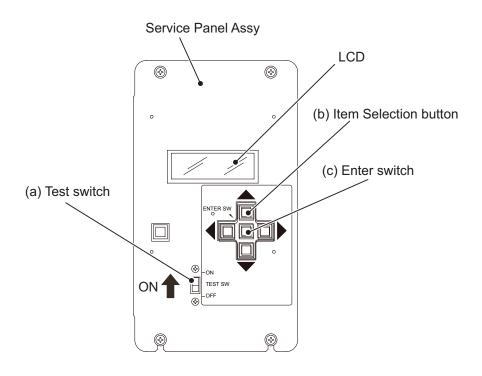


- Avoid turning the power switch On and Off frequently. Frequent On/Off operations can cause an equipment malfunction.
- After installing the machine according to the instructions in "5. INSTALLATION" on page 16, turn on the power switch located inside the coin door behind the service switch assembly.



7-3-2 Adjustment switches

Using the provided key, open the Front Door Assy to locate the Service Panel Assy on the front side.



(a) Test switch

Set this switch to ON to enter the Test mode.

The Test mode allows the setting of the payout rate and testing of parts.

(b) Item Selection buttons

Press the UP, DOWN, RIGHT or LEFT button to select an item in the Test mode.

(c) Enter switch

Press this switch to enter or execute the item selected with the Item Selection button.

7-4 Test mode

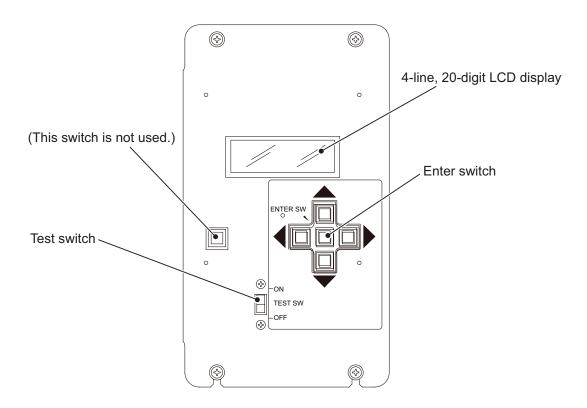
7-4-1 Description of the "TOTAL IN, TOTAL OUT" screen

* In the Test mode, coins cannot be inserted unless the display shows the "I/O TEST 1/3, 2/3" screen.

(See P. 39 "7-4-5 2 SENSOR/LED TEST.")

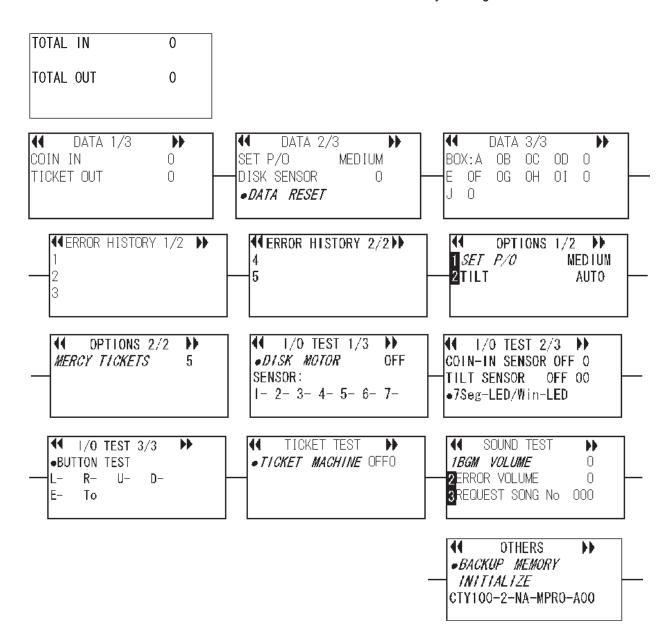
- Set the Test switch to ON to display the DATA 1/3 screen.
- Press the UP, DOWN, RIGHT or LEFT button to select an item. The selected item is indicated by blinking.
- 3 Press the Enter switch to enter the selection.
- After completing adjustments, set the Test switch to OFF to exit the Test mode. The display returns to the game screen.

Service Panel Assy



Screen displays

* The LCD display 4 lines, each with 20 digits.
 Characters in italic shown below are indicated by blinking.



7-4-2 Display/initialization of data (DATA DISPLAY)

Default (TOTAL IN, TOTAL OUT) screen

① Generally, the screen shows the number of inserted coins and the number of dispensed coins.

TOTAL IN	0	———— (a) Cumulative number of inserted coins (8 digits).
TOTAL OUT	0	———— (b) Cumulative number of dispensed tickets (8 digits) Includes the number of dispensed Mercy tickets.
Default screen		Data (a) and (b) will not be cleared even if Data

(1) Income data (INCOME DATA)

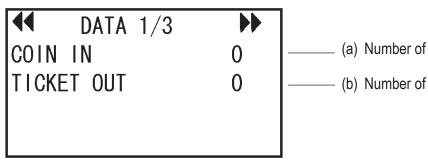
This screen displays data related to income.

When the Test switch is set to ON, the DATA 1/3 screen appears.

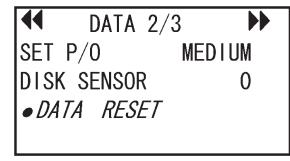
When the RIGHT or LEFT button is pressed while the DATA 1/3 screen is displayed, the screen changes to the DATA 2/3 screen.

Clear or P/O Rate Change is executed.

- Using the RIGHT or LEFT button and Enter switch, select and enter an adjustment item.
- After completing adjustments, set the Test switch to OFF to exit the Test mode. The display returns to the default screen.



INCOME DATA 1/3 screen



INCOME DATA 2/3 screen

- (a) Number of inserted coins (8 digits)
- (b) Number of dispensed tickets (8 digits)

- (a) Set P/O rate (not applicable to Mercy tickets)
- (b) Rotating times (8 digits) of roulette (AC motor). Number of origin sensor (field sensor 7) operations.
- (c) Deletes the "COIN IN," "TICKET OUT," "No. of Wins" and "Error History" data.

When the Enter switch is pressed, the screen shows "Y/N." The "N" indication is blinking in the initial condition.

The "DATA RESET" indication stops blinking.

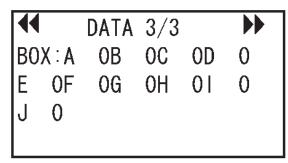
N (Does not clear the data.)

Y (Clears the data.)

Using the RIGHT or LEFT button, select "N" or "Y," and press the Enter switch to execute the command.

If "Y" is selected, the "Y" indication blinks for two seconds, and the "DATA RESET" indication appears again.

If "N" is selected, the "DATA RESET" indication appears again immediately.



INCOME DATA 3/3 screen

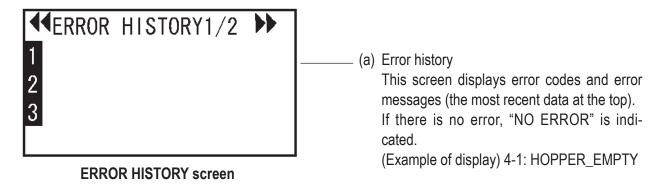
(a) Number of wins in each framed area (WIN BOX), A through J (3-digit).

The framed area immediately left of the "JP" framed area is "A," and the subsequent framed areas are indicated "B" to "I" in order in the clockwise direction, and the following framed area, "J", is indicated as "JP."

7. OPERATION

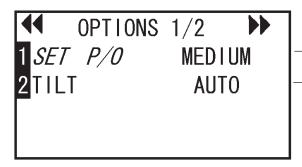
7-4-3 Error history (ERROR HISTORY)

The screen shows the five most recent errors (error codes, error messages) generated in the past.



7-4-4 Settings (OPTIONS)

- Using the RIGHT or LEFT button, select OPTIONS.
- Using the UP or DOWN button, select an item.
- Press the Enter switch to enter the selected item. The current setting is indicated by blinking.
- After selecting an item, change the setting by using the RIGHT or LEFT button.
- After changing the setting, press the Enter switch. The indication of the changed setting blinks rapidly for two seconds, and the display returns to the item selection screen.



OPTIONS 1/2 screen

(a) Payout rate setting

Ratio of the number of tickets dispensed to the number of inserted coins

Redemption setting: HARD, M-HARD, MEDIUM, M-EASY, EASY

Default setting: Medium

Guidelines:

HARD = Approx. 3.0 to 4.5 tickets per coin M-HARD = Approx. 3.5 to 5.0 tickets per coin MEDIUM = Approx. 4.5 to 6.0 tickets per coin M-EASY = Approx. 5.0 to 6.5 tickets per coin EASY = Approx. 5.5 to 7.0 tickets per coin

- Note that Mercy tickets are not taken into considerations.
- * When the set value is changed and the Enter switch is pressed, an "Y/N" indication appears in front of the "MEDIUM" indication. The value stops blinking.

N (Does not change the setting): The "N" indication is blinking in the initial condition.

Y (Clears the income data and changes the setting)

Using the RIGHT or LEFT button, select "N" or "Y," and press the Enter switch to execute the command.

If "Y" is selected, the "Y" indication blinks for two seconds, and the "SET_P/O" indication appears again.

If "N" is selected, the "SET_P/O" indication appears again immediately.

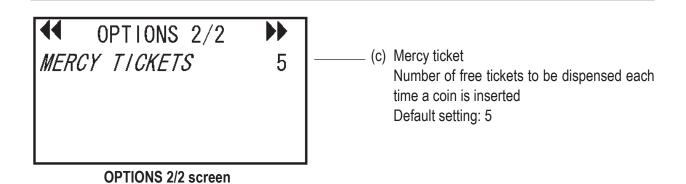
(b) Tilt setting

AUTO (automatic reset after about 10 seconds)
MANUAL (error state remains until release operation is performed)

OFF (no tilt detection)

Default setting: AUTO

7. OPERATION





When the payout rate setting is changed, some of the data (see P. 32 "7-4-2 (1) Income data (INCOME DATA)") will be cleared (except for the cumulative number of inserted coins and cumulative number of dispensed tickets).
 Before changing the payout rate setting, record the income data on paper.

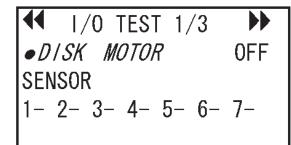
7-4-5 Input/output test (I/O TEST)

- This screen is used to check the sensor and motor operations. The selected item continues operation while the switch is held pressed.
- 1 Using the RIGHT or LEFT button, select I/O Test.
- Use the RIGHT or LEFT button to select an item. The selected item is indicated by blinking.
- 3 Press the Enter switch to enter the selected test item.

7. OPERATION

1 MOTOR TEST (AC motor test)

This screen is used to test the Roulette Assy.



I/O TEST 1/3 screen

(a) Conducts operation check for each sensor.

"-" indicates OFF, and "O" indicates ON.

The coin detection sensors on the roulette are 1 through 5, from the outside toward the inside.

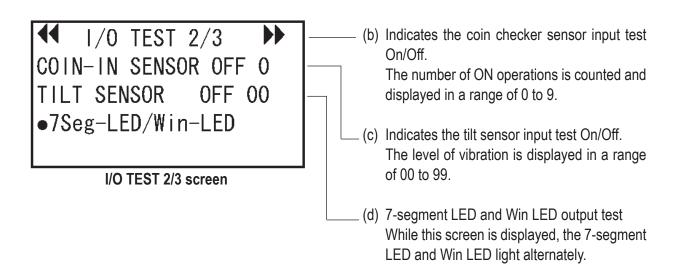
The area sensor (field sensor 6) consists of the range detection sensor that detects notches on the periphery of the roulette and the origin sensor (field sensor 7) that detects the dog at the table sensor.

(See P. 39 "7-4-5 2 SENSOR/LED TEST.")

② SENSOR/LED TEST (Coin, tilt, LED test)

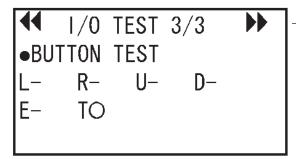
This screen is used to conduct an input test for coin and tilt sensors and an output test for LEDs.

* Coins can be inserted when this screen is displayed.



7. OPERATION

3 BUTTON TEST (Service panel button test)



I/O TEST 3/3 screen

(e) Service panel button input test Indicates the On/Off state of each button. "-" indicates OFF, and "O" indicates ON.

L = LEFT button

R = RIGHT button

U = UP button

D = DOWN button

E = Enter switch

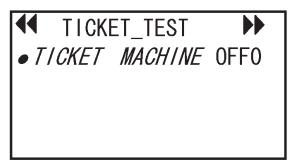
T = Test switch

* To return to the I/O TEST screen, press the Enter switch and one of the UP, DOWN, RIGHT and LEFT buttons at the same time.

7-4-6 Ticket test (TICKET TEST)

This screen is used to check the redemption unit operation. The unit continues operation while the switch is held pressed.

- 1 Using the RIGHT or LEFT button, select TICKET TEST.
- Press the Enter switch to operate the redemption unit.



(a) Conducts the redemption test by On/Off.

Counts the number of dispensed tickets in a range of 0 to 9.

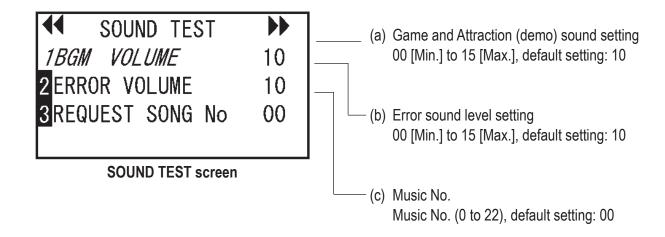
TICKET TEST screen

7-4-7 Sound test (SOUND TEST)

- This screen is used for sound level setting and sound test.
 - 1 Using the RIGHT or LEFT button, select SOUND TEST.
- 2 Use the UP or DOWN button to select an item.
- Press the Enter switch to enter the selected check item. The current setting of the selected item blinks. Using the RIGHT or LEFT button, change the setting. Each time the setting is changed, sound is reproduced in the corresponding sound level.
 - * When the set value is changed and the Enter switch is pressed, an "Y/N" indication appears.
 - Using the RIGHT or LEFT button, select "N" or "Y," and press the Enter switch to execute the command.

Each time the RIGHT or LEFT button is pressed, sound of the indicated number is reproduced.

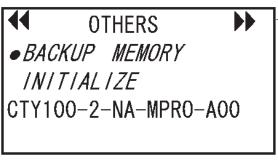
After changing the setting, press the Enter switch. The indication of the changed value blinks for two seconds.



7-4-8 Other tests (OTHERS)

This screen is used to initialize the backup memory.

- 1 Using the RIGHT or LEFT button, select OTHERS.
- 2 Using the UP or DOWN button, select an item.
- After changing the item setting, press the Enter switch. The changed item blinks for two seconds.



OTHERS screen

(a) Initializes the backup memory. When the Enter switch is pressed, an "Y/N" indication appears.

N (Does not clear the memory.)

Y (Clears the memory.)

When "Y" is selected and the Enter switch is pressed, the income data, hardware data, error history and various settings are cleared and return to defaults.

(b) Displays the version of the main software.

7-4-9 Error display

When an error is generated, an error message appears on the LCD. When an error occurs, reset the error by following the error resetting instructions.

(1) Error indication

ERROR: 5-7
HOPPER
PUSH ON AND OFF TEST
BUTTON TO RESTART

(a) Indicates that the machine has generated an error.

The "Push ON AND OFF TEST BUTTON TO RESET" indication and the "TICKET REMAIN 00" indication that shows the number of unpaid coins are displayed alternately.

ERROR screen

While the machine is in an error state, the "ERROR" indication blinks.

The above display indicates that the error can be reset by setting the Test switch to ON and then to OFF.

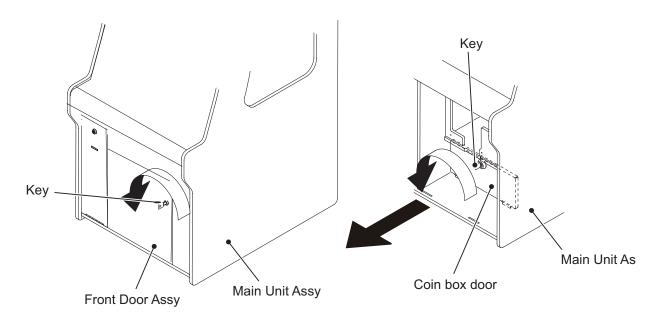
To stop the error alarm sound, press the Enter switch or one of the UP, DOWN, RIGHT and LEFT buttons.

7-5 Collection of coins

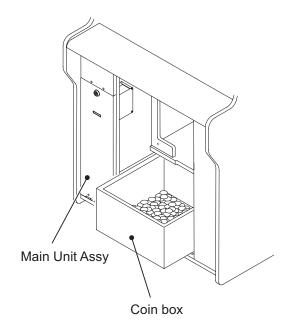
7-5-1 Collection of coins from the coin box



- The coin box becomes heavy when it contains a large quantity of coins. It
 is advised to remove coins from the con box frequently.
- Open the Front Door Assy and the coin box door by using the provided keys.



Pull out the coin box, and collect coins from the box.



After collecting coins, reinstall the coin box, and close and lock the coin box door and front door.

7. OPERATION

!\WARNING

 Before conducting maintenance (troubleshooting, repair, parts replacement, etc.), turn off the power switch to protect the service staff and other people from electrical shock, accidents and injury.

8-1 Maintenance and inspection - To be conducted by a technician only -

CAUTION

- Conduct maintenance regularly to prevent unexpected accidents.
- Conduct a pre-service check everyday to prevent accidents.
 (See P. 26 "7-1 Pre-service check.")

8-1-1 Inspection items

Check the following regularly.

(1) Inspection of the power plug

- Make sure that the power cord is connected securely to the Cord Box Assy of the machine and AC outlet.
- If the connectors are covered with dust, clean them.
- Check the power cord to make sure that the cable sheath is not cracked or dirty. If there is any abnormality in the power cord, replace it with a new cord.

(2) Inspection of screws and bolts for looseness

Check the following screws and bolts to make sure that they are tightly fastened. If they are loose, tighten them firmly.

- Retaining screws for the coin entry door and front glass support (B).
 (See P. 11 "4. OVERALL CONSTRUCTION (Components and Their Names).")
- Field retaining screws
 (See P. 11 "4. OVERALL CONSTRUCTION (Components and Their Names).")
- Drop rail retaining screws
 (See P. 49 "8-1-3 Cleaning the drop rail.")

8-1-2 Cleaning the Main Unit Assy

CAUTION

 Do not apply excessive force on the Front Glass Assy during cleaning to avoid breaking the glass.



- Do not use organic solvents such as thinner, benzine, gasoline and alcohol, as they can degrade the materials.
- Wipe the Main Unit Assy with a dry soft cloth. If it is excessively dirty, dampen a soft cloth with a neutral detergent and wipe clean. Then, scrub gently with a slightly wet cloth, and wipe thoroughly with a dry soft cloth.



8-1-3 Cleaning the drop rail - To be conducted by a technician only -

!\WARNING

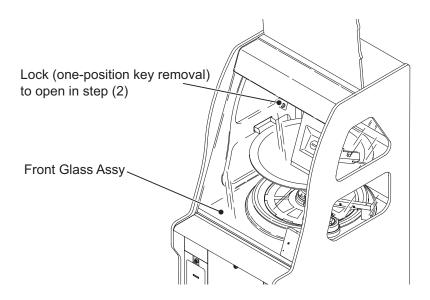
 To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.



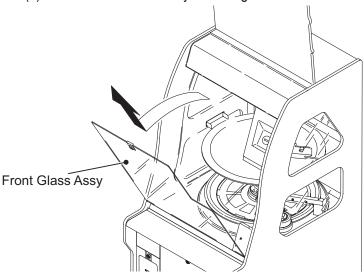
- Do not use organic solvents such as thinner, benzine, gasoline and alcohol, as they can degrade the materials.
- Turn off the power switch located at the lower section of the back panel of the Main Unit Assy.

(See P. 21 "6-1-1 Moving (on the floor)" 11.)

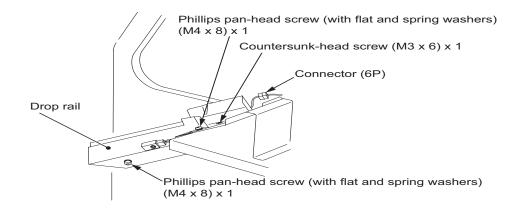
- Open the Front Glass Assy using the provided key, and dismount it from the Main Unit Assy.
 - (1) Open the cam lock by using the provided key.
 - (2) Remove the bracket.



(3) Lift the Front Glass Assy at an angle to remove it from the Main Unit Assy.

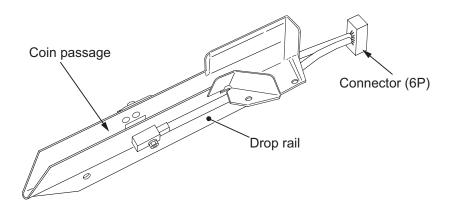


Unplug the connector (6P), remove the one countersunk-head screw (M3 x 6) and two Phillips pan-head screws (with flat and spring washers) (M4 x 8), and dismount the drop rail.



Clean the coin passage on the drop rail with a dry soft cloth.

If it is excessively dirty, dampen a soft cloth with a neutral detergent and wipe clean. Then, scrub gently with a slightly wet cloth, and wipe thoroughly with a dry soft cloth.



8-1-4 Cleaning the field

/!\WARNING

 To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

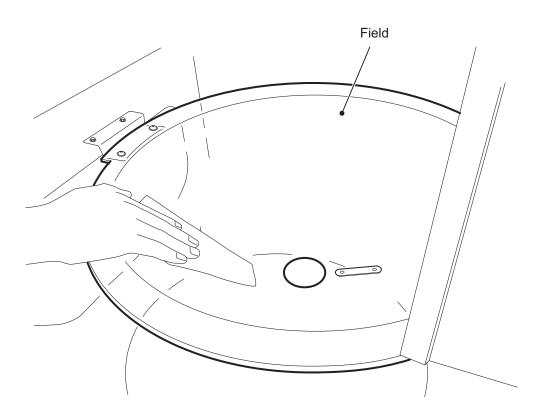


- Do not use organic solvents such as thinner, benzine, gasoline and alcohol, as they can degrade the materials.
- Turn off the power switch located at the lower section of the back panel of the Main Unit Assy.

(See P. 21 "6-1-1 Moving (on the floor)" 11.)

- Remove the Front Glass Assy from the Main Unit Assy. (See P. 49 "8-1-3 Cleaning the drop rail" 1, 2.]
- Clean the field with a dry soft cloth.

 If the field is excessively dirty, dampen a soft cloth with a neutral detergent and wipe clean. Then, scrub gently with a slightly wet cloth, and wipe thoroughly with a dry soft cloth.



8-1-5 Cleaning the roulette panel

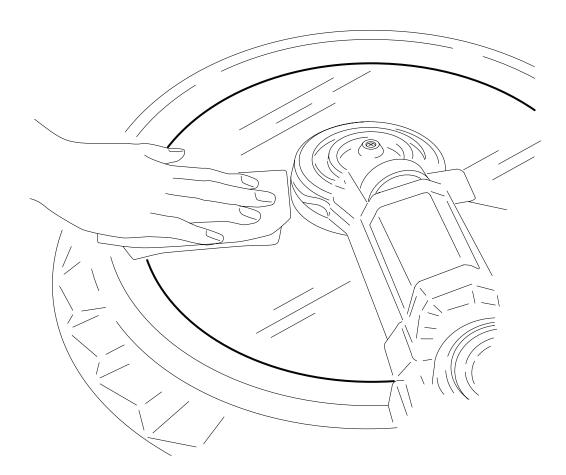
!WARNING

 To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.



- Do not use organic solvents such as thinner, benzine, gasoline and alcohol, as they can degrade the materials.
- Remove the Front Glass Assy from the Main Unit Assy. (See P. 49 "8-1-3 Cleaning the drop rail" 1, 2.]
- Clean the roulette panel (tempered glass) with a dry soft cloth.

 If the roulette panel is excessively dirty, dampen a soft cloth with a neutral detergent and wipe clean. Then, scrub gently with a slightly wet cloth, and wipe thoroughly with a dry soft cloth.



8-2 Response to Errors

8-2-1 Error list - To be conducted by a technician only -

Error	Error message	Description of error	Main cause	Remedy	Page
2-1	BACK UP MEMORY	Abnormality in the Main PC Board.	Data in the backup memory is corrupted.	Contact your distributor.	
3-1	TILT	Impact applied to the cabinet.	The cabinet was shaken intentionally or applied with impact.	Check to see if the cabinet is tilted.	
5-1	SENSOR (1)	Field sensor 1 is blocked by coin or foreign object. Dirty sensor. Malfunction of sensor.	This error is generated when there is a coin or foreign item between the roulette upper/lower coin detection sensor (at outermost location) and the periphery of the roulette or when that sensor is malfunctioning.	Remove jammed coins. If the sensor is dirty, clean. If the sensor is malfunctioning, replace the sensor.	69 - 73
5-2	SENSOR (2)	Field sensor 2 is blocked by coin or foreign object. Dirty sensor. Malfunction of sensor.	This error is generated when there is a coin or foreign item between the roulette upper/lower coin detection sensor (second sensor from outermost location) and the periphery of the roulette or when that sensor is malfunctioning.	Remove jammed coins. If the sensor is dirty, clean. If the sensor is malfunctioning, replace the sensor.	69 - 73

Error code	Error message	Description of error	Main cause	Remedy	Page
5-3	SENSOR (3)	Field sensor 3 is blocked by coin or foreign object. Dirty sensor. Malfunction of sensor.	This error is generated when there is a coin or foreign item between the roulette upper/lower coin detection sensor (third sensor from outermost location) and the periphery of the roulette or when that sensor is malfunctioning.	Remove jammed coins. If the sensor is dirty, clean. If the sensor is malfunctioning, replace the sensor.	69 - 73
5-4	SENSOR (4)	Field sensor 4 is blocked by coin or foreign object. Dirty sensor. Malfunction of sensor.	This error is generated when there is a coin or foreign item between the roulette upper/ lower coin detection sensor (fourth sensor from outermost location) and the periphery of the roulette or when that sensor is malfunctioning.	Remove jammed coins. If the sensor is dirty, clean. If the sensor is malfunctioning, replace the sensor.	69 - 73
5-5	SENSOR (5)	Field sensor 5 is blocked by coin or foreign object. Dirty sensor. Malfunction of sensor.	This error is generated when there is a coin or foreign item between the roulette upper/ lower coin detection sensor (sensor at innermost location) and the periphery of the roulette or when that sensor is malfunctioning.	Remove jammed coins. If the sensor is dirty, clean. If the sensor is malfunctioning, replace the sensor.	69 - 73
5-6	SENSOR (6)	Field sensor 6 is blocked by coin or foreign object. Dirty sensor. Malfunction of the sensor.	This error is generated when there is a coin or foreign item between the range detection sensor located on the circumference of the roulette and the periphery of the roulette or when that sensor is malfunctioning.	Remove jammed coins. If the sensor is dirty, clean. If the sensor is malfunctioning, replace the sensor.	69 - 73
5-7	SENSOR (7)	Field sensor 7 is blocked by coin or foreign object. Dirty sensor. Malfunction of sensor. Malfunction of AC motor	This error is generated when there is a coin or foreign item between the origin detection sensor on the inner periphery of the roulette and the roulette or when that sensor is malfunctioning.	Remove jammed coin. If the sensor is dirty, clean. If the sensor is malfunctioning, replace the sensor. If the AC motor is malfunctioning, replace the motor.	69 - 73 75

Error code	Error message	Description of error	Main cause	Remedy	Page
6-1	DISK TIMEOUT	Roulette is not rotating properly. Malfunction of field sensor 7.	This error is generated when the roulette fails to rotate properly or field sensor 7 is malfunctioning.	If coins are jammed, remove jammed coins. If the AC motor is malfunctioning, replace the motor. If field sensor 7 is dirty, clean the sensor. If field sensor 7 is malfunctioning, replace the sensor.	75 96 - 100
6-2	COIN-IN JAM	Coin mech microswitch is blocked. Dirty coin mech micrswitch. Malfunction of coin checker sensor.	This error is generated when the coin mech microswitch is blocked or the coin mech microswitch is malfunctioning.	If coins are jammed, remove jammed coins. If the coin mech microswitch is stuck, clear the obstruction. After the problem is corrected, the machine automatically resets itself. If the coin mech microswitch is malfunctioning, replace the switch.	
7-2	TICKET OVERPAID	Malfunction of the ticket dispenser.	This error is generated when the ticket sensor reacts while the ticket dispenser is in non-operation.	Replace the ticket dispenser.	12
7-3	TICKET EMPTY	No ticket in ticket dispenser. Jammed tickets.	This error is generated when the ticket sensor does not react during ticket dispensing operation.	Add tickets to the ticket dispenser. Remove jammed tickets.	
7-4	TICKET TIMEOUT	Jammed tickets in ticket dispenser are causing ticket sensor to remain ON. Dispensing mechanism in ticket dispenser is operating under no load.	This error is generated when the ticket sensor in the ticket dispenser remains ON for a certain period of time during ticket dispensing operation.	Remove jammed tickets. Check the lock of the dispensing mechanism in the ticket dispenser.	12

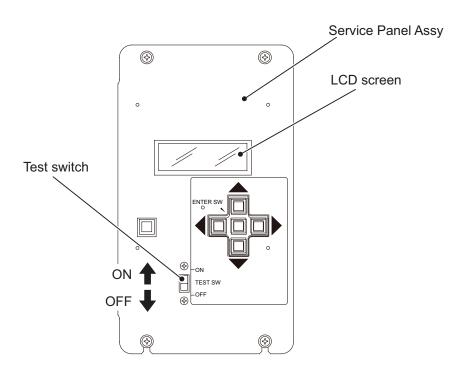
Error code	Error message	Description of error	Main cause	Remedy	Page
9-1	PRO TYPE CHANGE	DIP switch setting has been changed.	This error is recorded when DIP switching settings are changed.	The setting change was recorded, and it does not denote a malfunction.	
9-2	GAME STOP	Termination of game during dispensing operation.	This error is recorded when the power was shut down or the CPU was reset during dispensing operation.	The setting change was recorded, and it does not denote a malfunction.	

8-2-2 Resetting errors - To be conducted by a technician only -

When the LCD screen displays an error message, reset the error by following the procedures described below.

After the error has been reset, the machine returns to the game screen immediately before the error occurred, as a general rule.

- * If the machine is reset from a BACKUP MEMORY error, all data including the income data, security data, hardware data, error history and settings are cleared and returned to defaults.
- Using the provided key, open the front door and take out the Main Unit Assy (see P. 45 "7-5-1 Collection of coins from the coin box" 1).
- Check the cause of the error by referring to the error list (see P. 53 "8-2-1 Error list").
- Remove the cause of the error according to the instructions in the error list.
- Set the Test switch on the Service Panel Assy to ON and then to OFF to reset the machine.



Attach the front door to the Main Unit Assy, and lock the front door with the key.

8-3 Troubleshooting - To be conducted by a technician only -

WARNING

- To protect the service staff and other people from an electrical shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.
- If the generated problem is not described in the troubleshooting section or if the corrective measure taken does not result in an improvement, contact your distributor.



- In the event of a machine malfunction, first check to make sure that all connectors are firmly connected.
- PC boards can be easily damaged by static electricity. If a person charged with static electricity handles a PC board, electronic parts on the PC board can be damaged.
 - Before handling a PC board, touch a grounded metal surface to release electrostatic charge from your body.
- Never use a tester to conduct a continuity test on a PC board. Internal voltage of a tester can damage ICs.
- When sending parts for repair, pack them carefully. When sending PC boards, wrap them in sponge or bubble wrap, and place them in a corrugated cardboard box to protect against external impact.

8-3-1 General - To be conducted by a technician only -

Symptom	Main cause	Remedy	Page
The machine does not operate when the power switch is turned on.	The power cord plug is disconnected from the AC outlet.	Insert the power cord plug firmly into the AC outlet.	19
switch is turned on.	The fuse is blown.	Replace the fuse.	78
The machine operation is unstable, or the machine malfunctions.	The supply voltage is outside the range of 105 to 125 VAC.	Measure the power supply voltage, and ensure that the specified voltage is provided.	

8-3-2 Main Unit Assy - To be conducted by a technician only -

Symptom	Main cause	Remedy	Page
The fluorescent lamp does not light.	The fluorescent lamp is burned out.	Replace the fluorescent lamp.	62
accontacting it.	The starter is burned out.	Replace the starter.	62
The halogen lamp does not light.	The halogen lamp is burned out.	Replace the halogen lamp.	63
The tilt device is activated frequently.	The tilt detection sensitivity is out of adjustment.	Check to make sure that the Main Unit Assy is level.	
There is no sound from	The sound volume is set too low.	Adjust the sound volume.	64
the speaker.	The speaker is faulty.	Replace the speaker	115

8-3-3 Slot Machine Assy - To be conducted by a technician only -

Symptom	Main cause	Remedy	Page
The 7-Segment Display PC Board does not light.	The 7-Segment Display PC Board is faulty.	Replace the 7-Segment Display PC Board.	64
light.	There is no ticket in the ticket box.	Add tickets.	
The dot on the 7-segment display is blinking.	The ticket dispenser is faulty.	Replace the ticket dispenser.	12

8-3-4 Redemption Door Assy - To be conducted by a technician only -

Symptom	Main cause	Remedy	Page
The ticket dispenser does not operate.	The ticket dispenser is faulty.	Replace the ticket dispenser.	12
The ticket dispenser operates, but it does	There is no ticket in the ticket box.	Add tickets.	
not dispense tickets.	Tickets are jammed.	Removed jammed tickets.	
	The ticket dispenser is not installed properly.	Install the ticket dispenser in the proper position.	12
The ticket dispenser does not stop operation.	The ticket dispenser is faulty.	Replace the ticket dispenser.	12

8-3-5 Coin Entry Door Assy - To be conducted by a technician only -

Symptom	Main cause	Remedy	Page
When coins are inserted from the slot,	The selector rail is dirty.	Clean the selector rail.	71
they do not fall onto the field.	The drop rail is dirty.	Clean the drop rail.	75
illoid.	Foreign items are blocking the coin passage.	Remove foreign items.	71, 75

8-3-6 Roulette Assy - To be conducted by a technician only -

Symptom	Main cause	Remedy	Page
The roulette does not	The AC motor is faulty.	Replace the AC motor.	102
rotate.	Field sensor 7 is faulty.	Replace field sensor 7.	95
Coins on the roulette are not detected.	Sensor A (light-receiving photosensor unit) is faulty.	Replace sensor A (light-receiving photosensor unit).	96
	Sensor B (light-emitting photosensor unit) is faulty.	Replace sensor B (light-emitting photosensor unit).	98
	Field sensor 6 is faulty.	Replace field sensor 6.	101
The LED PC Board does not light.	The LED PC Board is faulty.	Replace the LED PC Board.	94

8-4 Removing and installing Assys and parts

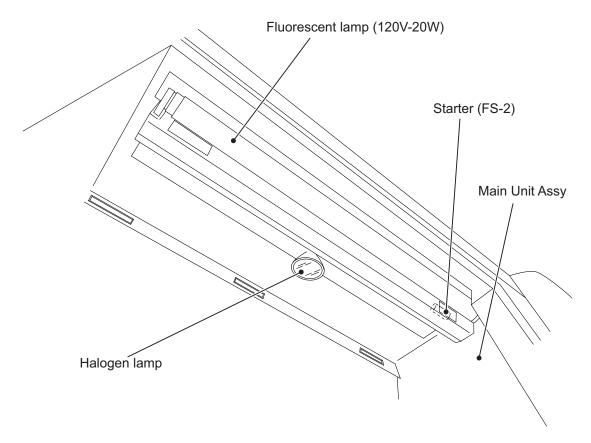
8-4-1 Main Unit Assy - To be conducted by a technician only -

!WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.
 - (1) Replacing the fluorescent lamp/glow lamp

CAUTION

- The fluorescent lamp becomes hot. Exercise caution when removing.
 - Turn off the power switch located at the lower section of the back panel of the Main Unit Assy. (See P. 21 "6-1-1 Moving (on the floor)" 1.)
 - Using the provided key, open the Front Glass Assy, and dismount the Front Glass Assy from the Main Unit Assy.
 - Replace the fluorescent lamp (20W) and starter (FS-2). [Replace with a 120V-20W fluorescent lamp.]



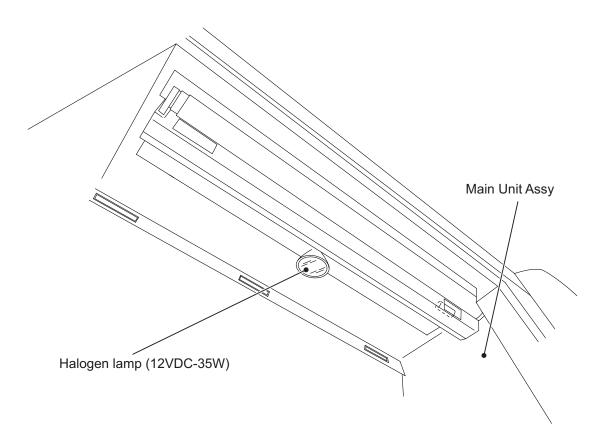
4 Reinstall the Front Glass Assy to the Main Unit Assy, and lock with the key.

(2) Replacing the halogen lamp

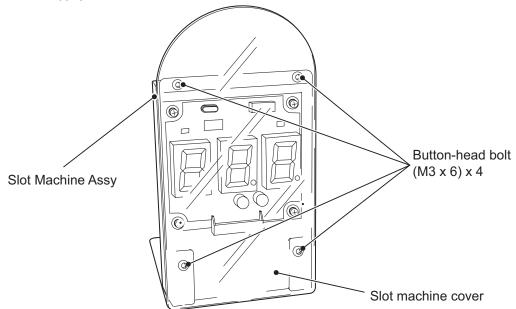


- The halogen lamp remains hot even after the power switch is turned off. To prevent burns, make sure that the lamps have cooled sufficiently before initiating the described task.
 - Remove the Front Glass Assy.

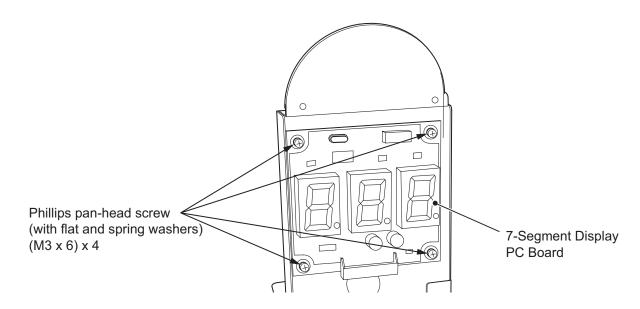
 (See P. 62 "8-4-1 (1) Replacing the fluorescent lamp/glow lamp" 1, 2.)
 - Pull out the halogen lamp, and install a new halogen lamp. [Replace with 12VDC-35W halogen lamps.]



- (3) Replacing the 7-Segment Display PC Board To be conducted by a technician only -
 - Remove the Front Glass Assy from the Main Unit Assy. (See P. 49 "8-1-6 Cleaning the drop rail" 1, 2.)
 - Remove the four button-head bolts (M3 x 6), and dismount the slot machine cover.

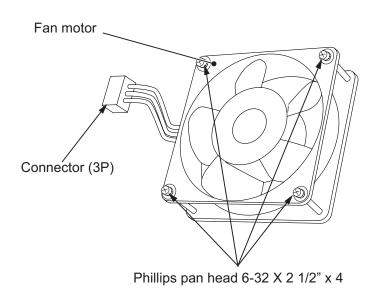


Disconnect the connector (12P), remove the four Phillips pan-head screw (with flat and spring washers) (M3 x 6), and replace the 7-Segment Display PC Board.



(4) Replacing the fan motor - To be conducted by a technician only -

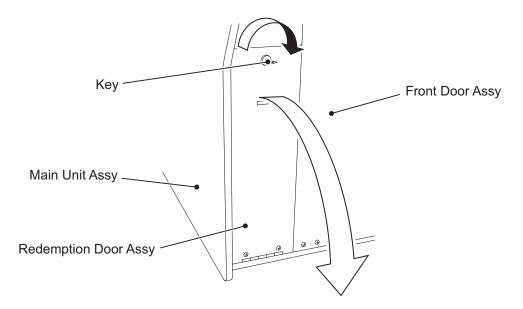
- Turn off the power switch located inside the coin door below the sevice panel of the Main Unit Assy. (See P. 21 "6-1-1 Moving (on the floor)" 1.)
- Four Phillips pan-head screws (with flat washers) (6-32 x 2 ½ in.) are holding the exhaust fan in place to the floor of the machine. Remove the four screws.
- 3 Disconnect the connector (3P), and replace the fan motor.



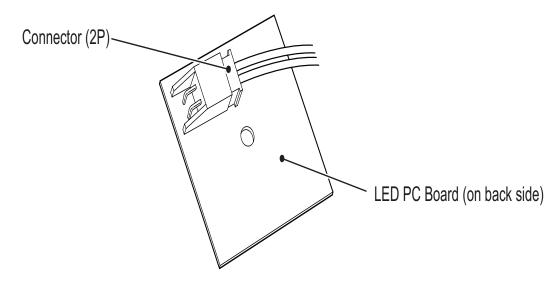
8-4-2 Redemption Door Assy

!WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.
 - (1) Replacing the ticket redemption unit To be conducted by a technician only -
 - Turn off the power switch located at the lower section of the back panel of the Main Unit Assy. (See P. 21 "6-1-1 Moving (on the floor)" 1.)
 - Using the provided key, unlock the Redemption Door Assy, and pull it forward.



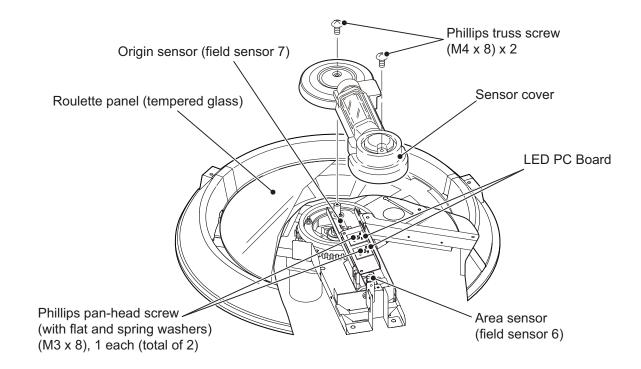
Disconnect the connector (4P), remove the four flanged hexagon nuts (M4), and replace the ticket redemption unit together with the dispenser bracket.



8-4-3 Roulette Assy

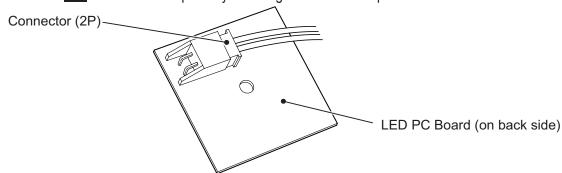
! WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.
 - (1) Replacing the LED PC Board To be conducted by a technician only -
 - Remove the Front Glass Assy from the Main Unit Assy. (See P. 49 "8-1-5 Cleaning the drop rail" 1, 2.)
 - Remove the two Phillips truss screws (M4 x 8), and dismount the sensor cover.



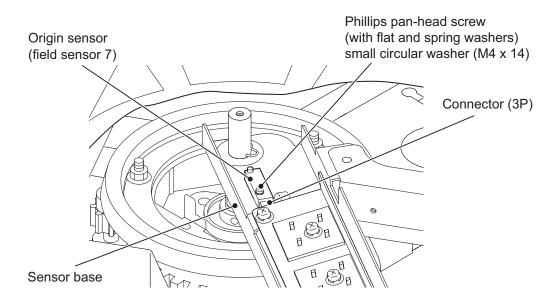
- Remove the Phillips pan-head screw (with flat and spring washers) (M3 x 8), and dismount the LED PC Board.

 Then, disconnect the connector (2P) from the back side of the removed LED PC Board.
- 4 Reinstall the parts by following the removal sequence in reverse.



(2) Replacing the origin sensor

- Remove the sensor cover. (See P. 67 "8-4-3 (1) Removing the LED PC Board" 1, 2.)
- Remove the Phillips pan-head screw (with flat and spring washers) small circular washer (M4 x 14), dismount the origin sensor (field sensor 7), and disconnect the connector (3P).

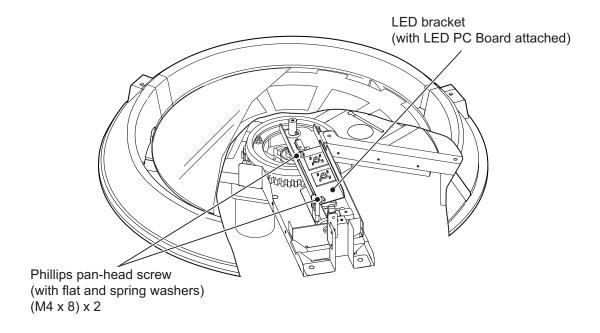


- (3) Replacing sensor A (light-receiving photosensor unit) To be conducted by a technician only -
 - Each separated-type photosensor consists of a light-receiving unit on the sensor base and a light-emitting unit on the main base.



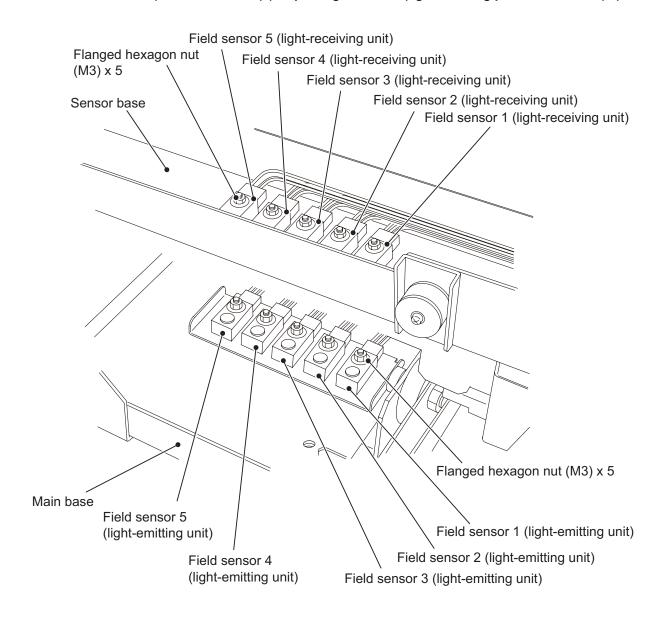
- When replacing a separated-type photosensor, it is recommended to replace the light-emitting and light-receiving units as a set.
- Remove the sensor cover.

 (See P. 67 "8-4-3 (1) Replacing the LED PC Board" 1, 2.)
- Remove the two Phillips pan-head screws (with flat and spring washers) (M4 x 8), and dismount the LED bracket together with the LED PC Board.



Remove the flanged hexagon nut (M3), and replace the faulty photosensor. If the light-receiving unit of a photosensor is replaced, it is recommended to replace the corresponding light-emitting unit at the same time.

(See P. 71 "8-4-3 (4) Replacing sensor B (light-emitting photosensor unit).")

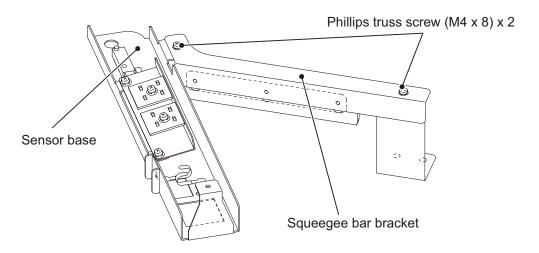


- (4) Replacing sensor B (light-emitting photosensor unit) To be conducted by a technician only -
 - Each separated-type photosensor consists of a light-receiving unit on the sensor base and a light-emitting unit on the main base.

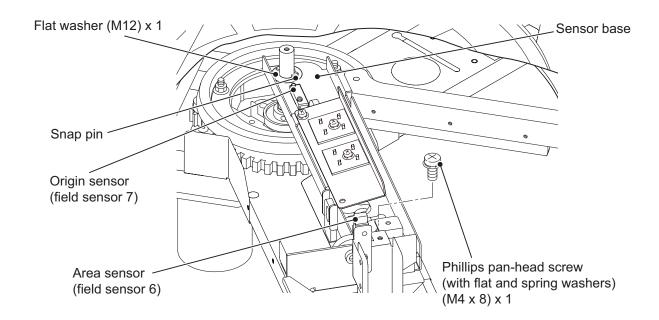


- When replacing a separated-type photosensor, it is recommended to replace the light-emitting and light-receiving units as a set.
- Remove the sensor cover.

 (See P. 67 "8-4-3 (1) Replacing the LED PC Board" 1, 2.)
- Remove the two Phillips truss screws (M4 x 8), and dismount the squeegee bar bracket from the sensor base.

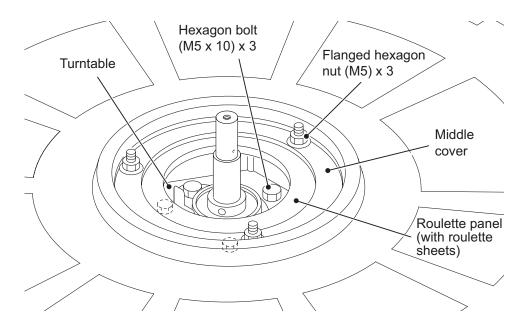


Remove the one Phillips pan-head screw (with flat and spring washers) (M4 x 8), one snap pin (nominal size: 12) and one flat washer (M12), and remove the sensor base together with the photosensors.



8. MAINTENANCE

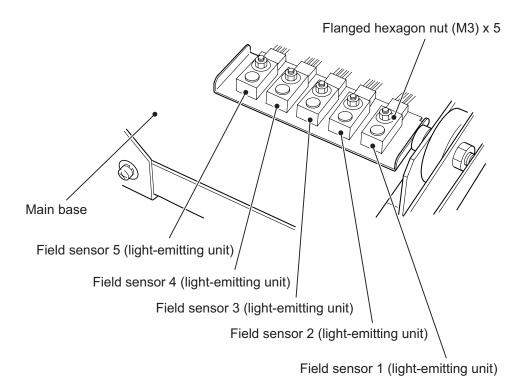
Remove the three flanged hexagon nuts (M5), and dismount the middle cover, roulette panel and roulette sheets.



Remove the three hexagon-head bolts (M5 x 10), and dismount the turntable.

Remove the flanged hexagon nut (M3), and replace the faulty photosensor. If the light-emitting unit of a photosensor is replaced, it is recommended to replace the corresponding light-receiving unit at the same time.

(See P. 69 "8-4-3 (3) Replacing sensor A (light-receiving photosensor unit).")

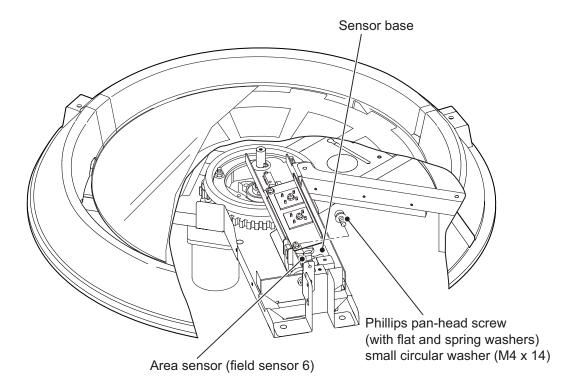


(5) Replacing the area sensor

- Remove the sensor base.

 (See P. 71 "8-4-3 (4) Replacing sensor B (light-emitting photosensor unit)"

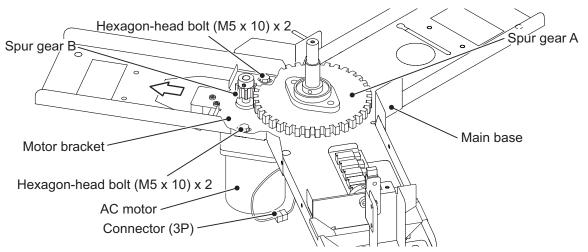
 1 through 3.)
- Remove the Phillips pan-head screw (with flat and spring washers) small circular washer (M4 x 14), dismount the area sensor, and disconnect the connector (3P).



(6) Replacing the AC motor - To be conducted by a technician only -

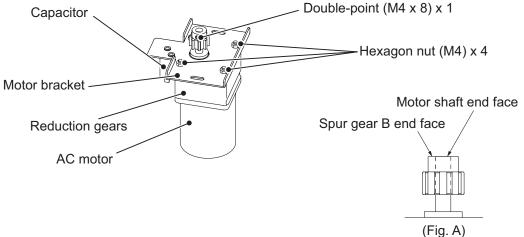
- Remove the sensor base and turntable.

 (See P. 71 "8-4-3 (4) Replacing sensor B (light-emitting photosensor unit) 1
 through 5.")
- Loosen the two hexagon-head bolts (M5 x 10), move the motor bracket with the motor in the direction of the arrow shown in the diagram, and disengage spur gears A and B.



Then, disconnect the connector (3P), remove the two previously loosened hexagonhead bolts (M5 \times 10), and dismount the motor bracket with the motor from the main base.

Remove the one double-point (M4 x 8), dismount spur gear B, remove the four hexagon nuts (M4), and detach the motor, reduction gears or capacitor for replacement.





- During reassembly, make sure that connectors are securely locked.
- When installing the double-point (M4 x 8), apply Loctite 242 and make sure that the AC motor shaft is perpendicular to the slice surface.
- When installing spur bear B, make sure that the AC motor shaft end face and spur gear B end face are flush with each other (see Fig. A).

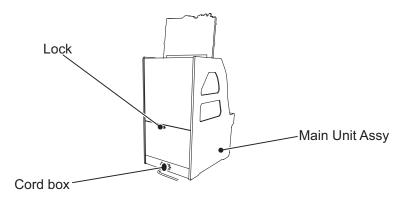
8-4-4 Control Panel Assy

MARNING

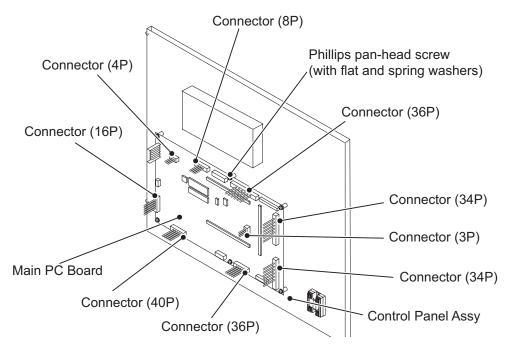
- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.
 - (1) Replacing the Main PC Board To be conducted by a technician only -
 - Turn off the power switch located at the lower section of the back panel of the Main Unit Assy.

(See P. 21 "6-1-1 Moving (on the floor)" 1.)

2 Remove the lock, and dismount the rear panel.

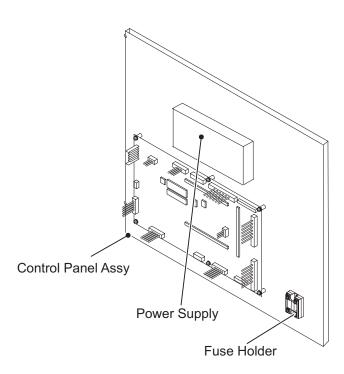


Disconnect the connectors (40P x 1, 36P x 2, 34P x 2, 16P x 1, 8P x 1, 4P x 1, 3P x 1), remove the six Phillips pan-head screws (with flat and spring washers) (M3 x 8), and replace the Main PC Board.



- (2) Replacing the Power Supply To be conducted by a technician only -
 - Remove the rear panel.

 (See P. 76 "8-4-4 (1) Replacing the Main PC Board" 1, 2.)
- To dismount the Power Supply, disconnect the two connectors.(The AC input and the DC output.) Remove the four Phillips pan-head screws securing the Power Supply to the wood.



Reinstall the parts by following the removal sequence in reverse.

NOTE: This assembly also contains a fuseholder with two fuses. One of them is a 4A Slo-Blo 250V for the +12V circuit and the other is a 1 A Slo-Blo 250V for the AC motor circuit.

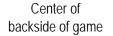
8-4-5 Replacing the fuse - To be conducted by a technician only -

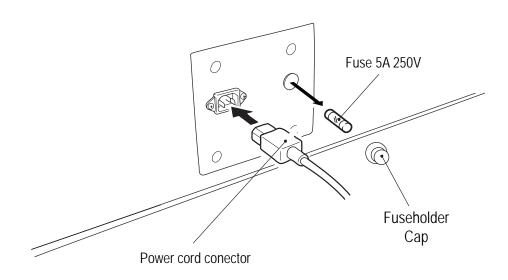
WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.
 - Unplug the power cord from the cord box located on the back side of the Main Unit Assy.

(See P. 21 "6-1-1 Moving (on the floor)" 1, 2.)

Pull out the fuseholder cap, and replace the blown fuse (glass tube fuse-5A 250V).





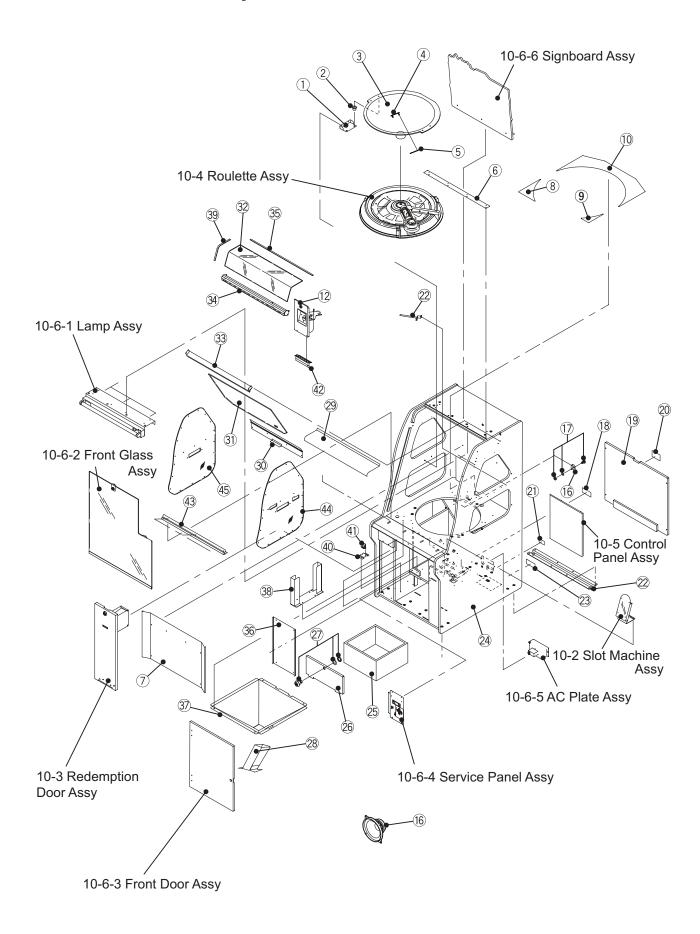
9. DISCARDING THE MACHINE

WARNING

- When discarding the machine, the machine must be collected, transported and discarded in accordance with the local laws and regulations.
- When entrusting a third party to collect, transport and discard the machine, be sure to use specialized companies to perform each task.

10. PARTS LIST

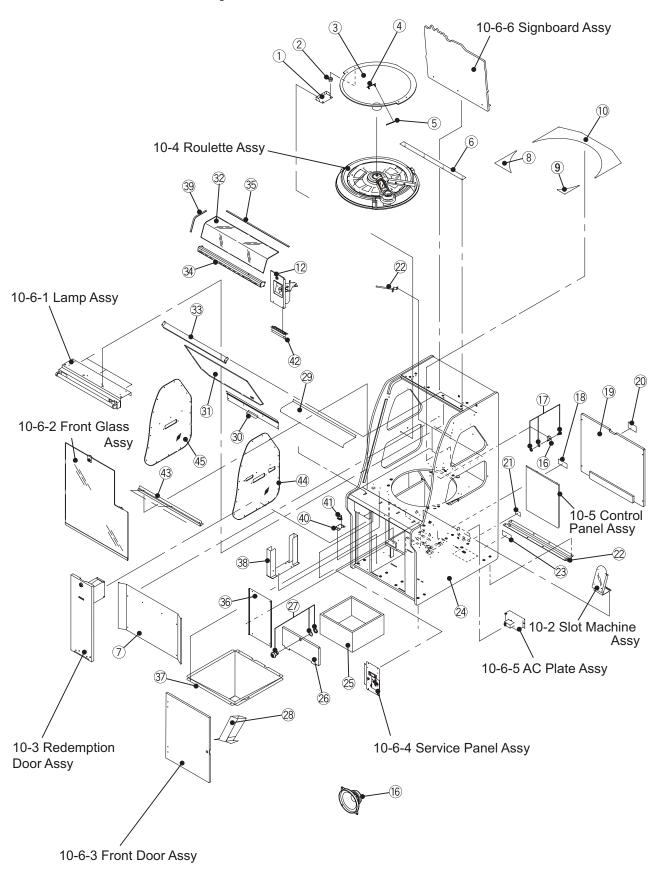
10-1 Main Unit Assy



10. PARTS LIST

No.	Name	Qty	[Model & Rating	Part No
1	Field support	2		T014-1030-US-000
2	Kuratite rubber	4	KT-5	CT96-12208-00
3	Field	1		CT90-12187-00
4	Blocker plate (A)	1		T014-1076-US-000
5	Blocker plate (B)	1		T014-1077
6	Top panel retainer	1		K181-109-000
7	Rear panel	1		T014-1038-US-000
8	Field sticker A (L)	1		CT40-12215-00
9	Field sticker A (R)	1		CT40-12216-00
10	Field sticker B	1		CT40-12217-00
12	Coin Mech	1		K164-096-000
16	Speaker	1	8 ohms 20 Watts 5"	VG54-00172-00
17	Speaker harness	1	(not displayed)	K181-060-000
18	Label, FCC	1		VG46-02653-00
19	Back door	1		CT63-13500-02
20	Label, Service Personal Only	2		VG44-02642-00
21	Label, UL	1		VG46-02652-00
22	Rail holder	1		T014-1065-US-000
23	Label, FBI	1		VG46-02654-00
24	Cabinet	1		CT63-13500-00
25	Coin box	1		0059-018-601
26	Coin box door	1		K181-038-000
27	Cam lock (one-position key removal)	1	C201-1 (with tongue)	0069-001-702
28	Center coin duct	1		K181-115-000
29	Arm rest sticker	1		CT40-12214-00
30	Mirror retainer (L)	1		T014-1026-US-000
31	Mirror	1		CT90-13498-00
32	Top panel	1		CT40-12213-00
33	Mirror retainer (U)	1		T014-1027-US-000
34	Front glass support (A)	1		K181-113-000
35	Seal (B)	1		T014-1047
36	Center door	1	Coin access door	CT63-13500-04
37	Collection duct	1		T014-1044-US-000

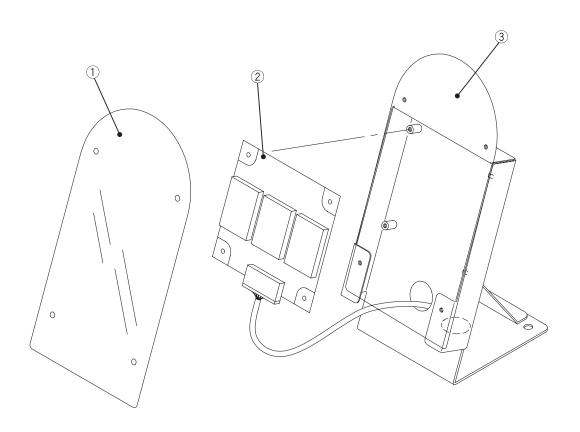
10-1 Main Unit Assy



10. PARTS LIST

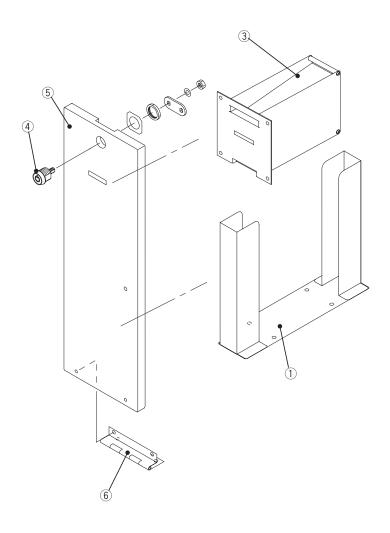
No.	Name	Qty	[Model & Rating	Part No
38	Ticket bin	1	Bin with low ticket switch	0095-086-100
39	Seal (A)	2		T014-1046
40	Tilt sensor stand	1		T014-1075-US-000
41	Tilt switch	1	D7E-2	CF79-10969-00
42	Front glass support (B)	1		T014-1024
43	Front glass support (C)	1		K181-114-000
44	Side window (R)	1		CT90-13499-00
45	Side window (L)	1		CT90-13499-01

10-2 Slot Machine Assy



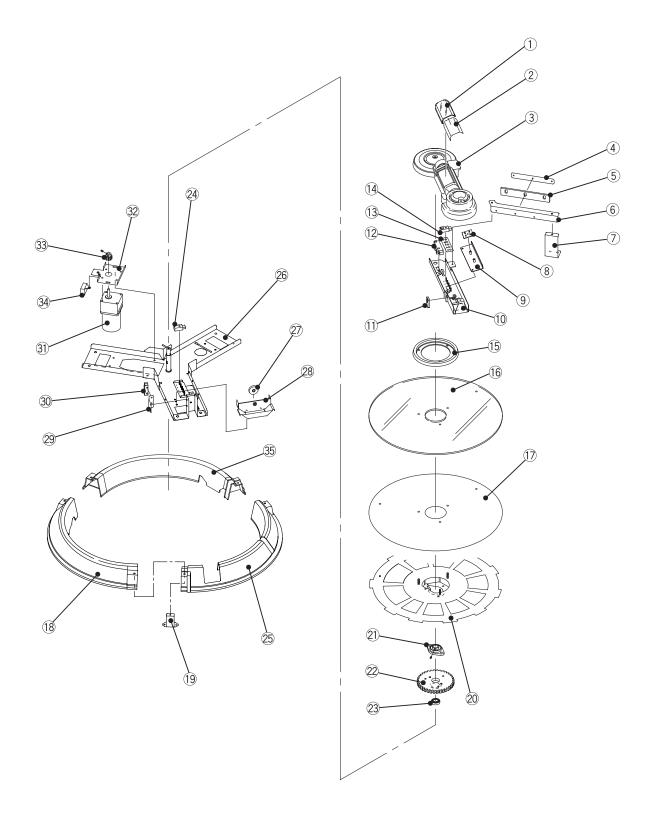
No.	Name	Qty	[Model and rating}	Parts No.
1	Slot Machine cover	1		CT40-12220-01
2	7- Segment Display PC Board	1		CT05-12184-00
3	Slot machine base	1		T014-1412-US-00

10-3 Redemption Door Assy



No.	Name	Qty	[Model and rating}	Parts No.
1	Ticket Bin With Switch	1		VG10-13506-00
2	Dispenser harness	1	(Not shown)	VG50-108779-00
3	Ticket Dispenser	1		VG82-00138-00
4	Lock	1		VG26-11226-01
5	Redemption door	1		CT63-13500-03
6	Door Hinge	1		K181-132-0PA

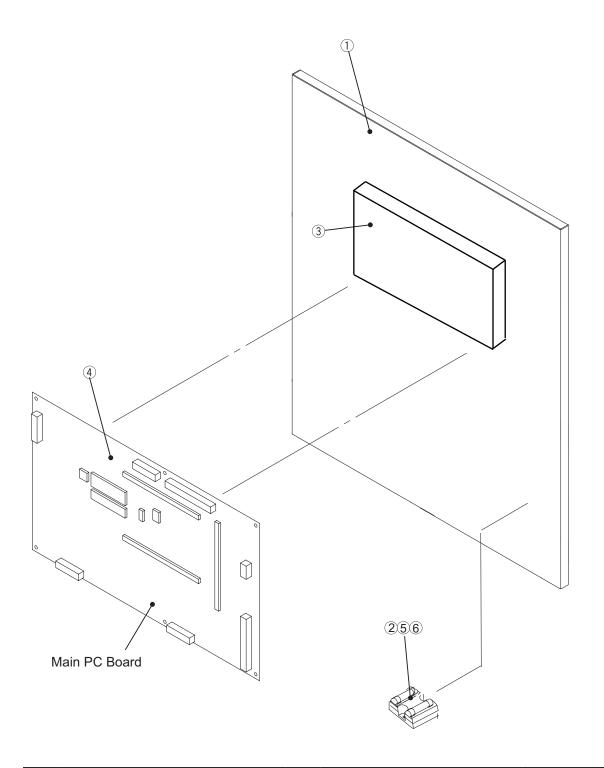
10-4 Roulette Assy



10. PARTS LIST

No.	Name	Qty	[Model & Rating	Part No
1	Win lamp cover	1		T014-5012
2	Win lamp sticker	1		CT40-12219-00
3	Sensor cover	1		CT90-12189-00
4	Squeegee bar plate	1		T014-5134
5	Squeegee bar	1		CT90-13502-00
6	Squeegee bar bracket	1		T014-5136-US-000
7	Squeegee bracket	1		T014-5018-US-000
8	LED PC Board	2	12V LED	CT05-12185-00
9	LED bracket	1		T014-5143-US-000
10	Sensor base	1		T014-5135-US-000
11	Sensor guard	1		CT90-13503-00
12	Transmission-type photosensor	1	KI1300 (origin sensor)	VG79-12197-00
13	Sensor plate	1		T014-5139
14	Separated-type photosensor	5	Combined with KB1281-AA12 (light-receiving unit) No. 24	VG79-12195-00
15	Middle cover	1		CT90-12190-00
16	Roulette panel	1		T014-5114
17	Roulette sheet	1		CT90-12205-00
18	Field cover (C)	1		CT90-12223-00
19	Field cover bracket	1		T014-5017-US-000
20	Turntable	1		T014-5113-US-000
21	Rhomboid-shaped flange unit	1	UFL002	CT59-12206-00
22	Spur gear A	1		CT59-12191-00
23	Deep-grooved ball bearing	1	6902ZZ	CT59-12201-00
24	Separated-type photosensor	5	Combined with KB1281-AA22 (light-emitting unit) No. 14	VG79-12196-00
25	Field cover (B)	1		CT90-12222-00
26	Main base	1		T014-5112-US-000
27	TOK bearing	3	DR-30-H6W1	CT59-12207-00
28	Roller bracket	3		T014-5120-US-000
29	Area sensor bracket	1		T014-5130-US-000
30	Transmission-type photosensor	1	KI1248 (area sensor)	VG79-12198-00
31	AC motor	1	IH6PF6N+6H30FBN	CT59-12191-00
32	Motor bracket	1		T014-5122-US-000
33	Spur gear B	1		CT59-12192-00
34	Capacitor	1	Accessory part for AC motor	
35	Field cover (A)	1		CT90-12221-00

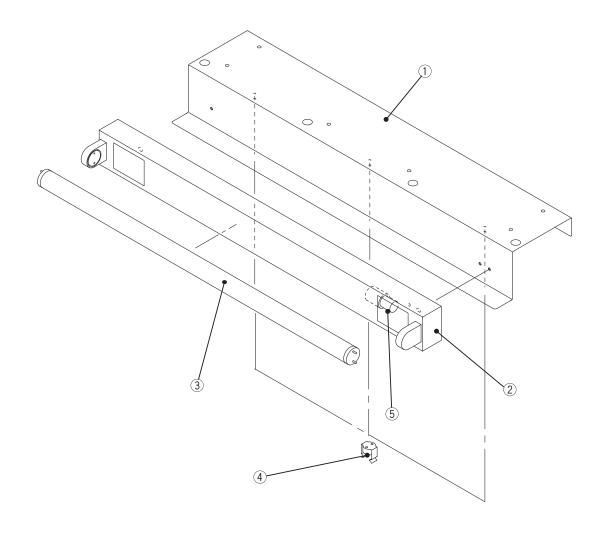
10-5 Control Panel Assy



No.	Name	Qty	[Model and rating}	Parts No.
1	Control panel	1	Wood base	CT65-13500-01
2	Fuseholder	1	2 position	0057-011-000
3	Power Supply	1	Power sply. 100-240VAC - 12VDC	0053-379-100
4	Main PC Board	1		CT05-10183-01
5	Fuse (12 V Circuit)	1	4.0A 250V Slo-Blo	0057-022-000
6	Fuse (Motor Circuit)	1	1.0A 250V Slo-Blo	0057-001-000

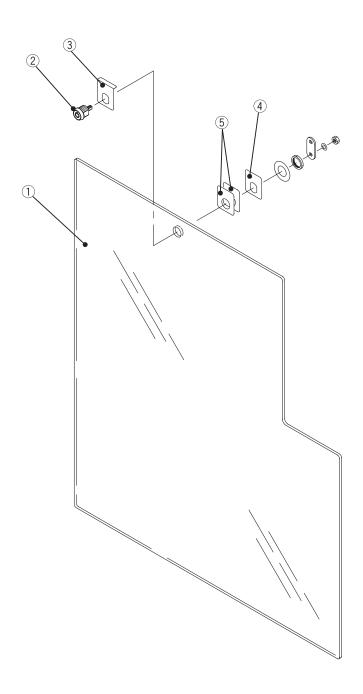
10-6 Other Assys

10-6-1 Lamp Assy



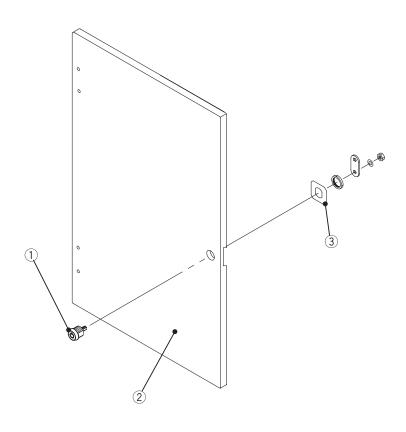
No.	Name	Qty	[Model and rating}	Parts No.
1	Lamp base	1		CT14-1711-US-000
2	Fluorescent light fixture	1		A056-013-000
3	Fluorescent lamp	1	20 W F20T12CW	A056-009-000
4	Lamp socket (Halogen)	1		0056-178-000
5	Starter	1	FS-2 (for 24" 20 Watt circuit)	

10-6-2 Front Glass Assy



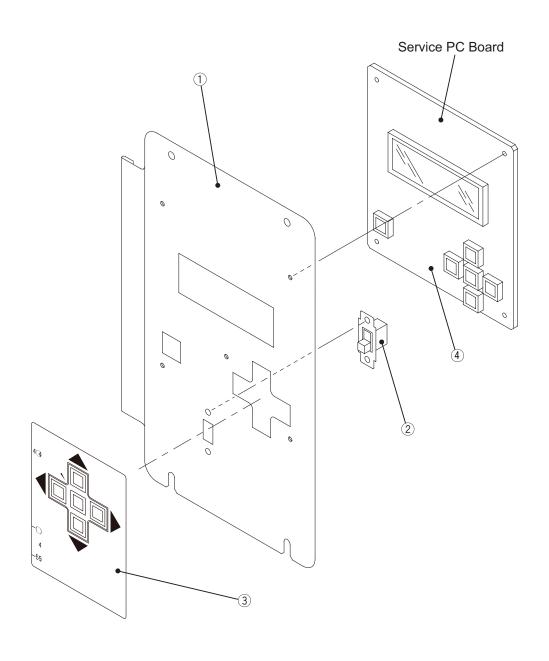
No.	Name	Qty	[Model and rating}	Parts No.
1	Front glass	1		CT99-13507-00
2	Cam lock (one-position key removal)	1		VG26-11226-00
3	Key plate (A)	1		K181-112-000
4	Key plate (B)	1		K181-110-000
5	Key plate (C)	2		K181-500-000

10-6-3 Front Door Assy



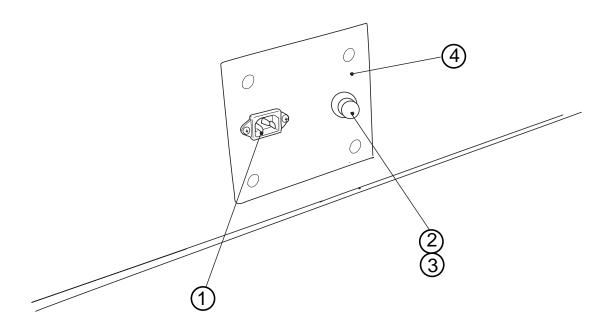
No.	Name	Qty	[Model and rating}	Parts No.
1	Cam lock (one-position key removal)	1	C201-1 (with tongue)	VG26-11226-01
2	Front door (C)	1		K181-602-000
3	Plate, Lock	1		0069-002-200

10-6-4 Service Panel Assy



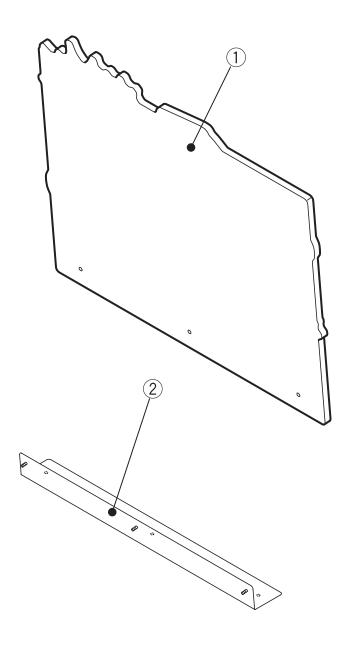
No.	Name	Qty	[Model and rating}	Parts No.
1	Service panel	1		K181-111-000
2	Slide switch	1		A059-019-000
3	Service sticker	1		T014-1512
4	Service PCB	1		CT05-12186-00

10-6-5 AC Plate Assy



No.	Name	Qty	[Model and rating}	Parts No.
1	Recepticle/ Line filter	1	Qualtec 6A	VG78-12738-00
2	Fuseholder	1	Panel Mnt.	0057-103-000
3	Fuse	1	5A 250V Slo-Blo	0057-004-000
4	AC Plate	1	Black powdercoat	K201-109-0PA

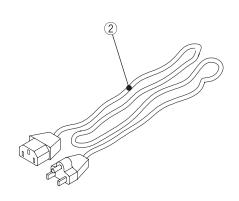
10-6-6 Signboard Assy



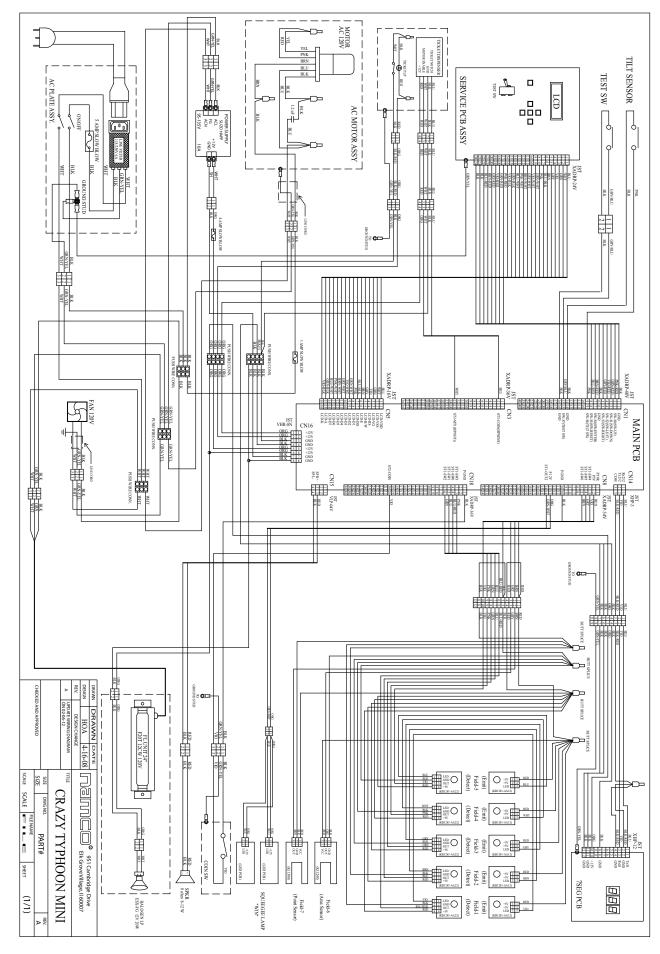
No.	Name	Qty	[Model and rating}	Parts No.
1	Title panel	1		CT40-12218-01
2	Signboard bracket	1		T014-1314-US-000

10-6-7 Other replacement parts





	No.	Name	Qty	[Model and rating}	Parts No.
	1	Operaton Manual (this manual)	1		CT45-13495-00
Г	2	Power Cord	1		VG51-01232-06



WARRANTY

Seller warrants that its printed circuit boards and parts thereon are free from defects in materials and workmanship under normal use and service for a period of ninety (90) days from the date of shipment. Seller warrants that its video displays (in games supplied with video displays) are free from defects in material and workmanship under normal use and service for a period of thirty (30) days from the date of shipment. None of the Seller's other products or parts thereof are warranted. Seller's sole liability shall be, at its option, to repair, replace, or credit Buyer's account for such products which are returned to Seller during said warranty period, provided:

- a) Seller is promptly notified in writing upon discovery by Buyer that said products are defective.
- b) Such products are returned prepaid to Seller's plant; and
- c) Seller's examination of said products discloses to Seller's satisfaction that such alleged defects existed and were not caused by accident, misuse, neglect, alteration, improper repair, improper installation, or improper testing.

In no event shall Seller be liable for loss of profits. loss of use, incidental or consequential damages.

Except for any express warranty set forth in a written contract between Seller and Buyer which contract supersedes the terms herein, this warranty is in lieu of all other warranties expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose, and all other obligations or liabilities on the Seller's part, and it neither assumes nor authorizes any other person to assume for the Seller any other liabilities in connection with the sale of products by Seller.

Namco America Inc. distributors are independent, being privately owned and operated. In their judgment they may sell parts or accessories other than Namco America Inc. parts or accessories. Namco America Inc. cannot be responsible for the quality, suitability or safety of any non-Namco America Inc. part or any modification including labor which is performed by such distributor.

SERVICE

If you have questions regarding any **Namco America Inc.** product or require technical support:

Contact Namco America Inc. Customer Service at: 1 (847) 264-5610 or FAX 1 (847) 264-5611

Hours: 9:00 am - 5:00 pm CDT

Parts and repair services for Namco America Inc. products are available through your distributor.