SERVICE MANUAL G-ENEX Video Slot Gaming Machine

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Introduction

This manual is intended for Operators, Owners, and Qualified Maintenance/Service Personnel to provide the important information about the machine installation, operation, and servicing.

It is strongly recommended to thoroughly read and understand this manual before starting the machine. Please keep this manual at hand, so that you can quickly refer to it whenever necessary.

Technical Support

Aruze Gaming America, Inc., Aruze Gaming Australia Pty. Ltd, and Aruze Gaming Africa (Pty.) Ltd. (ARUZE thereinafter) are dedicated to providing high quality service and maintenance. Please feel free to contact us any time.

Limited Warranty

ARUZE warrants that the products it manufactures will be free from defects in materials and workmanship for a period of six (6) months commencing on the date the products are shipped from Japan (except as otherwise provided in any separate sales agreement). Within this period, ARUZE will provide replacement parts at no charge for the products covered under this limited warranty when a part requires replacement.

This warranty does not cover any damage or failure caused by or attributable to improper installation, improper usage, abuse, improper maintenance, excessive operating voltages, or repairs performed or recommended by anyone other than an ARUZE technician or an authorized distributor of ARUZE.

TO THE MAXIMUM EXTENT PERMITTED BY LAW, ARUZE SHALL NOT BE LIABLE FOR ANY DIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OR WARRANTY OR UNDER ANY OTHER LEGAL THEORY (INCLUDING, BUT NOT LIMITED TO, LOST PROFITS), EVEN IF ARUZE HAS BEEN ADVISED OF THE POSSIBILITY OF THE DAMAGES.

Safety Instructions

1. Definition of Safety Words

The safety words of DANGER, WARNING, and CAUTION are used in this manual to indicate hazard levels. Please understand each meaning to handle the machine safely.



2. Environmental Specifications

Refer to Chapter 8, "Machine Specifications".

3. Handling of LCD

Although the built-in LCD is protected from the danger of electric shock, handle it carefully by referring to this manual.

If a problem happens, please contact your nearest distributor.



4. Installation

WARNING!

To prevent an accident or a fire;

- 1. Install this machine on flat, stable, well-constructed floor.
- 2. Keep this machine away from the direct ray of the sun.
- 3. Keep this machine away from a dusty place.
- 4. Keep this machine away from water and other liquids.
- 5. Keep this machine away from disaster preventive facilities. (ex. emergency exit, emergency stairs, fire hydrant, and fire extinguisher)
- 6. Do not install this machine outdoors.
- 7. Keep this machine away from vibration.
- 8. Keep this machine away from dangerous articles.

5. Grounding

Be sure to GROUND this machine to prevent a current leak.



Risk of Electric Shock.

ARUZE makes no warranty as to accidents (including failures) caused by improper grounding.

6. Disposal of Lithium Batteries



Risk of Injury of Fire

Care must be paid to dispose the lithium batteries. Improper disposal of waste lithium batteries may result in heating or ignition of the batteries that could cause personal injury or fire.

A lithium battery contains flammable substance (ex. lithium metal and organic solvents).

Because electricity may remain even in a used battery, wrap the + and – electrodes with nonconductive material to prevent short-circuit causing a hazard.



7. Others WARNING!

NEVER retrofit the machine. Retrofitting the machine could cause an accident or a failure.

ARUZE makes no warranty as to accidents (including failures) caused by retrofit.

- 1. Only qualified personnel should assemble, install, maintain, inspect, and troubleshoot the machine.
- 2. Do not mount or sit on the machine. Or, do not put a heavy object on the machine. A dented machine could cause trouble.
- 3. As soon as smoke, smell, and/or an unknown trouble is detected, turn off the POWER switch and the power source breakers.
- 4. Before servicing the machine, turn off the POWER switch to prevent an electric hazard.
- 5. Unless specified, NEVER use a multimeter for continuity check. Using a multimeter may damage the electrical circuits.
- 6. The shield of the hopper motor may be hot. Wait until the shield cools down before touching the hopper.
- 7. The coin diverter may be hot. Wait until it cools down before touching.
- 8. Never use chemical duster, thinner, benzine, alcohol, or synthetic detergent for cleaning the machine. They will damage the surface of the machine.
- 9. Electrostatic discharge may damage the internal components. When accessing into the cabinet, take the anti-static action (ex. touching the door) before proceeding.
- 10. Use this machine in commercial areas. Using it in residential areas is prohibited.
- 11. Actual currency and date format may differ slightly from the screen displays shown in this manual.

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No. 5 NOT	E ACCEPTOR (CASHCODE BV (600) ASSEMBLY)	
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No. 7 CON	FROL PANEL ASSEMBLY	
No. 8 DOO	R ASSEMBLY (1/2)	
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No. 10 19I	NCH MAIN LCD ASSEMBLY	
No. 11 3 R	EEL ASSEMBLY	
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Chapter 1: Major Components

This chapter shows the major components of this machine.

1.1 Appearance



1. Tower Light (Option)	2. S
3. Main LCD (Touch Screen)	4. T
5 Gama Buttons	6 D

- 5. Game Buttons
- 8. Mechanical Meters
- 11. Coin Head

- 2. Sub-LCD
- 4. Ticket Printer
- 6. Belly Door Glass
- 9. Note Entry
- 12. Main Cabinet
- Coin Tray
 Speakers
 Top Box



- 14. Belly Door Lock
- 17. Main Door Lock
- 19. RESET/AUDIT keyswitch
- 15. Belly Door Latch16. Main Door Latch18. Power Save Keyswitch

1.2 Internal Structure



1. Body I/O PCB Housing	2. Main LCD	3. Coin Acceptor
4. Coin Diverter	5. Door I/O PCB Housing	6. Inverter Fluorescent Lamp
7. Security Cage	8. Hopper	9. Note Acceptor
10. Ticket Printer (Optional)	11. Woofers	12. Power Box
13. Power Switch	14. AUSCOM PCB	

14. AUSCOM PCB

Belly Door



- 1. Fluorescent Lamp Unit
- 2. Coin Duct

4

- 3. Coin Drop Sensor
- 4. Belly Door Switch
- 5. Note Stacker Lock

Main LCD



- Inverter and Scaling PCB Housing
- 2. Touch Panel PCB Housing

Security Cage





- 1. Connected to Power Box
- 2. Connected to Power Box
- DSP controller from Body I/O PCB
- 4. Connected to Door I/O PCB
- 5. Connected to Body I/O PCB
- Connected to Head Connector Located in Top Box
- 7. To Main LCD
- 8. To Speakers
- 9. GMEM Cassette
- 10. To Sub LCD
 - 1. AMP PCB
 - 2. GMEM PCB
 - 3. Video PCB
 - 4. Fan
 - 5. Mother Board
 - 6. Memory PCB
 - 7. CPU Fan
 - Security Cage Door Switch
 - 9. Security Cage Lock

Power Box



1.3 Closing Door

To close the Main Door and/or Belly Door, pull and lift the stay lever.

CAUTION!

Do not open the Main door and Belly door at the same time. Otherwise it may damage the surface of the door.



WARNING!

Do not put hands on speakers and/or edge of side door when you open the main door. Otherwise it may jam your fingers.

<u>Main Door</u>



Belly Door



Chapter 2: Installation

This chapter shows how to install this machine.

2.1 Unpacking and Inspection

WARNING!

The installation must be performed by qualified service personnel. Before starting the installation, refer to "Safety Instruction". ARUZE cannot be held liable for damages or injuries caused by improper installation.

Unpack the machine, and check for shipping damage. If any one is missing or damaged, immediately report it to ARUZE or your nearest distributor.

1.	Main body	1
2.	Accessories	
	Key (B2155)	1
	Key (B1963)	1
	Key (231)	1
	Operation & Service Manual	1
	Parts Catalogue	1
	Tower Light (Option)	1
	Template (Option)	1

NOTE

The content of the accessories may vary according to your specifications.

2.2 Cabinet Dimension

The cabinet dimension is depicted below. Secure enough space so that the doors can be easily opened for POWER-ON/OFF, maintenance, and so on.

<Outer Dimension>



Keep at least the following space between the machines.



Unit: mm

2.3 Installing the Machine on Your Cabinet Stand

Use the following procedure to install the machine on the cabinet-stand you prepared:

- 1. Place the template (option) on your cabinet stand as depicted below.
- Using a punch, mark the circles for the AC power cable (a hole with 40mm dia.), the coin drop chute (a hole with 40mm dia.), and the fixing bolts (7 holes with 9mm dia).
- 3. Remove the template.
- 4. Drill the marks to make the holes.



- 5. Place the machine on the stand aligning the holes on the stand to their counterparts on the machine.
- 6. Using hexagon coupling bolts (8 x 70mm) and flat washers, bolt the machine on the stand.
- 7. Route the AC power cable into the stand.
- 8. Plug in the cable.



2.4 Installing Optional Tower Light

Use the following procedure to install the tower light:

- 1. Unlock and unlatch the main door to open it.
- 2. Referring to Paragraphs 6.5.1.1, remove the escutcheon, top glass, and the LCD.
- 3. Route the 4P cable of the tower light into the top box through the top hole as depicted.
- 4. Screw down the tower light from the inside of the top box.
- 5. Connect the 4P cable connector to the machine's connector.
- 6. Return the LCD, top glass and escutcheon in the reverse order of the above.
- 7. Close the main door.





2.5 Removing Shipping Screw from Security Cage

Use the following procedure to remove the shipping screw from the security cage:

- 1. Unlock and unlatch the main door to open it.
- 2. Locate the security cage just above the hopper.
- 3. Locate the shipping screw just above the security cage lock.
- 4. Loosen and remove the screw.

2.6 When Mounting Player Tracking System

Use the following procedure to mount a player tracking system.

- 1. Unlock and unlatch the main door to open it.
- 2. Unscrew (6 screws) and detach the PTS base plate.
- 3. Set the tracking system assembly and screw down to fix.
- 4. Close the main door.





2.7 Key Lock Specifications

The machine is shipped with generic door locks installed. To increase security, the following door locks should be replaced:

Location	Number of locks
Main door	1 pc.
Belly door	1 pc.
Security Cage door	1 pc.
Body I/O PCB door	1 pc.
Door I/O PCB door	1 pc.
AUSCOM PCB door	1 pc.
Note acceptor door	1 pc.
Note stacker door	1 pc.

< Door Lock>



< Door Lock Installing Hole>



16.2mm (0.64")

INSTALL CHECK LIST

- 1. Review the environment and power requirement. Refer to "Safety Instruction".
- 2. Unpack and inspect for shipping damage.
- 3. Install the machine on the cabinet stand.
- 4. Install the tower light on the machine if any.
- 5. Removing the shipping screw from the security cage
- 6. Install the player tracking system if necessary.
- 7. **Replace the locks.**

Chapter 3: Software Setting

WARNING!

Software setting must be done by authorized personnel. Once your software setting is updated, all the soft meters have cleared to zero. Write down the necessary soft meters before updating.

3.1 Accessing Software Setting Mode

When the game machine is on standby (that is, no game is being played, or there is no tilt on this machine), you can access the software setting mode in the following procedure:

1. Turn ON and OFF the AUDIT keyswitch



to call the following screen.

AUDIT MODE – MAIN MENU			
GMID: 0 PROGRAM #: ZANEP003 PROGRAM #: LOSEP003 FIRMWARE #: SPMRD046 FIRMWARE #: SPMDB046 PROGRAM #: SMOCX046			
	METER INFORMATION	TICKET HISTORY	
	GAME RECALL	HOPPER REFILL	
	MACHINE IDENTIFICATION	ERROR LOG	
	GAME STATISTICS	MACHINE SETUP	
		EXIT	
MOTHER BOARD BIOS #: AP31 BODY I/O PCB BIOS #: S1 DOOR I/O PCB BIOS #: S1 XCOM I/O PCB BIOS #: S1 KERNEL VERSION #: 2.6.12-1.1381_fc3 04			

- 2. Choose "MACHINE SETUP" by touch the screen. Otherwise, use the game buttons on control panel.
- 3. To exit to the game mode, touch "EXIT" or press a game button.

3.2 MACHINE SETUP



Choose your desired item by touching screen. the screen. Otherwise, use the game buttons on control panel.

CONFIGURE System configuration options.	
SOUND SYSTEM	Sound system setup.
TOUCH SCREEN	Touch screen calibration
TICKET PRINT TEST	Testing connected ticket printer

3.2.1 CONFIGURE

AUDIT MODE - CONFIGURE			
MACHINE NUMBER (GMID)	1	(READ ONLY)	
COIN DENOMINATION (CENTS)	100	(READ ONLY)	
BASE CREDIT VALUE (CENTS)	5	(READ ONLY)	
VARIATION	0001	(READ ONLY)	
BET BUTTON CONFIGURATION	1, 2, 3, 4, 5	(READ ONLY)	
CCCE	ENABLED	(READ ONLY)	
GAMBLE	ENABLED	(READ ONLY)	
DATE (DD/MM/YYYY)	24/10/2005		
TIME	21:18		
COIN ACCEPTOR TYPE	CONDOR PLUS CP130/133	(READ ONLY)	
HOPPER TYPE	GM		
CANCEL CREDIT LEVEL (COINS)	400		
REFILL AMOUNT (COINS)			
PRINTER TYPE	ITHACA 95	50	
VENUE NAME			
HOUSE NUMBER	default hous	se	
NOTE ACCEPTOR	ENABLED	*	
\$5 NOTES ACCEPTED	NO	*	
\$10 NOTES ACCEPTED	NO	*	
\$20 NOTES ACCEPTED	NO	*	
\$30 NOTES ACCEPTED \$100 NOTES ACCEPTED	NO	*	
STOUNOTES ACCEPTED			
DATE & TIME SYNCHRONIZATION	DISABLED	(HOST ID: ****)	
TOPPER ILLUMINATION PATTERN	GAME		
LED BRIGHTNESS	HIGH		
RESIDUAL GAMBLE GAME	ENABLED	(READ ONLY)	
DEMO MODE AND SOUND	DEMO: ON DEMOSOU	ND: OFF	
TO MODIEV THESE PARAMETERS TH	F DOOR MUST BE OPEN		
GAME VERSION IS [707006-XXI N-A]	L0021		
SYSTEM VERSION IS [Z67000-AALN-AC	01211		
MEDIA VERSION IS [(512000)]	0121]		
CONNECTION NOTE ACCEPTOR IS [GPT: AU28EB331		
CONNECTION TICKET PRINTER IS IS	S00122]		
	1		
EXIT			

Choose your desired item by touching screen. Otherwise, use the game buttons on control panel..

To update the settings, use the PLAY 25 LINES button.

NOTE:

The items with the indications of "(READ ONLY)" can be set only just after RAM CLEAR.

To set the items with asterisks, open the main door.

MACHINE NUMBER (GMID)	Machine serial number.
COIN DENOMINATION (CENTS)	Token / Coin denomination in cents.
BASE CREDIT VALUE (CENTS)	Base credit value in cents.
VARIATION	Current game variation.
BET BUTTON CONFIGURATION	Bet button configuration.
CCCE	Electronic Fund Transfer setting
GAMBLE	Gamble Enable (yes/no).
DATE (YYYY / MM / DD)	Date setting.
TIME (HH : MM : SS)	Time setting.
COIN ACCEPTOR TYPE	Coin acceptor type.
HOPPER TYPE	Hopper type.
CANCEL CREDIT LEVEL (COINS)	Cancel credit trigger level in coins.
REFILL AMOUNT (COINS)	Hopper refill amount in coins
PRINTER TYPE	Printer type.
VENUE NAME	Venue number to be printed on ticket.
HOUSE NUMBER	House number to be printed on ticket.
NOTE ACCEPTOR	Note acceptor type.
\$5 BANKNOTES ACCEPTED	\$5 banknotes accepted (yes/no).
\$10 BANKNOTES ACCEPTED	\$10 banknotes accepted (yes/no).
\$20 BANKNOTES ACCEPTED	\$20 banknotes accepted (yes/no).
\$50 BANKNOTES ACCEPTED	\$50 banknotes accepted (yes/no).
\$100 BANKNOTES ACCEPTED	\$100 banknotes accepted (yes/no).
DATE & TIME SYNCHRONIZATION	Date and time setting via host computer
TOPPER ILLUMINATION PATTERN	Topper illumination pattern setting
LED BRIGHTNESS	LED brightness setting
RESIDUAL GAMBLE GAME	Type of residual credit gamble game
DEMO MODE AND SOUND	Setting of demonstration mode.

3.2.2 SOUND SYSTEM



Sound volume level can be adjusted by "VOLUME SETTING MENU", and all the game sounds can be tested by "SOUND TEST.

VOLUME SETTING



MASTER VOLUME	
BGM VOLUME	
SOUND EFFECT VOLUME	
ERROR VOLUME	
SOUND TEST	

SOUND TEST



3.2.3 TOUCH SCREEN

You can calibrate the touch screen on the LCD.

NOTE:

This calibration screen appears every after POWER-ON following RAM clear.

TOUCH SCREEN	CALIBRATION	
	W: 800 H: 600 TOUCH POINT: 581/199	
	+	
	·	

(1) Touch the five crosshairs (located at each corner and the center) to display the following message.



- (2) Press the HELP button to enter the new setting. To cancel it, press the CASH OUT button.
- (3) After calibration, touch any point on the screen.When your finger is exactly on the intersection of the two lines depicted above, the touch panel has been successfully calibrated.

NOTE:

The coordinates of the touched point is displayed on the screen.

3.2.4 TICKET PRINT TEST

AUDIT MODE – TICKET PRINT TEST				
TICKET PRINT TEST				
EXIT : [GAMBLE OR COLLECT] TEST START : [TAKEWIN]				
EXIT TEST START				

By pressing [TEST START] button, you can test the ticket printer.
Chapter 4: Hardware Setting



WARNING!

Hardware setting must be done by authorized personnel. Once your hardware setting is updated, all the soft meters have cleared to zero. Write down the necessary soft meters before updating.

Hardware machine options can be set by using the DIP and jumper switches on the Body I/O, Door I/O, GMEM, and AUSCOM PCB's.

NOTE:

The AUSCOM PCB is only installed on the machines to be shipped to the area where X-Series protocol is used.

Refer to the following pages for the details.

4.1 Setting DIP Switch and Jumper Switch on Body I/O PCB



<Jumper Switches>

SW2 (DIP Switch):

BIT 1:

ON (When installed):

The back-up battery is activated to detect a SECURITY CAGE OPEN that occurred during the POWER OFF.

OFF (Factory Setting):

The back-up battery is not activated, and a SECURITY CAGE OPEN that occurred during the POWER OFF cannot be detected.

BIT 2:

ON: (When installed):

Secondary battery is activated as backup in addition to Lithium battery.

OFF (Factory Setting):

Secondary battery is not activated as backup in addition to Lithium battery.

JP1:

CLOSED (ON) (Factory Setting): Not used.

<LED Indicators>

LED 1:

Green light flashing:

Indicates the BODY I/O PCB is operating normally.

Red light lighted with Green light flashing(quick): Indicates the BODY I/O PCB is abnormal.

LED2:

Green light: Pilot lamp of +5V power

4.2 Setting DIP Switch and Jumper Switch on Door I/O PCB



<Jumper Switches>

JP1:

CLOSED (ON) (Factory Setting):

The back-up battery is activated to detect a SECURITY CAGE OPEN that occurred during the POWER OFF.

OPEN (OFF):

The back-up battery is not activated, and a SECURITY CAGE OPEN that occurred during the POWER OFF cannot be detected

JP2&JP3:

JP2 1-2 CLOSED (ON) and JP3 1-2 CLOSED (ON):

The serial programming mode becomes effective. Programs can be written into the IC4 (ATmega 128).

JP2 3-4 CLOSED (ON) and JP3 3-4 CLOSED (ON) (Factory Setting): The serial communication mode (RS232C Mode) is effective. The GAT3 can be used.

JP4&JP5: The capacity of IC5 (NVRAM) can be selected.

JP4 1-2 CLOSED (ON) and JP5 1-2 CLOSED (ON) (Factory Setting): The capacity becomes 32KB (M48Z35).

JP4 3-4 CLOSED (ON) and JP5 3-4 CLOSED (ON): The capacity becomes 2KB (M48Z02).

JP4 1-2 CLOSED (ON) and JP5 3-4 OPEN (OFF): The capacity becomes 8KB (M48Z08).

JP6:

CLOSED (ON):

The watchdog timer becomes ineffective.

OPEN (OFF) (Factory Setting):

The watchdog timer becomes effective.

JP7:

JP7: OFF (Factory Setting)

JP7 1-2 CLOSED (ON):

The RS232C mode becomes effective. The pins 30 and 31 of CN7 can be used.

JP7 3-4 CLOSED (ON):

The current Loop mode becomes effective. The pins 27 and 28 of CN7 can be used.

JP8:

CLOSED (ON):

The power save mode becomes ineffective.

OPEN (OFF) (Factory Setting):

The power save mode becomes effective.

SW1 (Push Button):

It is a hardware reset switch, but not used.

SW2 (DIP Switch):

BIT 1:

OFF (Factory Setting):

A CP130 coin acceptor supplied by Money Controls or a MC62 inhibit H coin acceptor supplied by Coin Mechanism Inc. can be used.

ON:

A CP133 coin acceptor supplied by Money Controls or a MC62 inhibit L coin acceptor supplied by Coin Mechanism Inc. can be used.

BIT 2: Reserved.

<LED Indicators>

Two -colored, synchronous LED 1 and LED 2:

Green light flashing:

Indicates the DOOR I/O PCB is operating normally.

Red light lighted with Green light flashing:

Indicates the DOOR I/O PCB is abnormal.

4.3 Setting DIP Switch and Jumper Switch on GMEM PCB



<Jumper Switches>

S1 (DIP Switch):

BIT 1: Reserved.

BIT 2: Reserved.

S2 (Slide Switch):

ON (Factory Setting): Normal.

OFF:

Backup RAM can be cleared by turning OFF when the cabinet is turned OFF.

JP1:

CLOSED (Factory Setting): Not Used.

<LED Indicators>

LED1:

Green light: Pilot lamp of +3.3V power (controlled by software)

4.4 Setting on GMEM Cassette PCB



LED1 Lighted:

Indicates the mother board is accessing to the Compact Flash [Master/Slave].

4.5 Setting DIP Switch on AMP PCB



<Jumper Switches>

- S1 : mode setting
 - N : Normal mode(for operating)
 - W: Test mode/No use

<LED Indicators>

LED1 Red lighted: No sound signal

LED2 Green lighted: Pilot lamp +5V power

LED3 Green lighted: Indicates the GM-FDAMP PCB is operating normally.



4.6 Setting DIP Switch and Jumper Switch on AUSCOM PCB

3 1 LK-A

<Jumper Switches>

JP1:

JP1 1-2 CLOSED (ON):

Serial data from outside the AUSCOM PCB can be fetched.

JP1 3-4 CLOSED (ON) (Factory Setting):

Serial data from within the AUSCOM PCB can be fetched.

SW3: The internal serial communication port and the program writing port of Atmel CPU can be selected.

ON (Factory Setting):

The program writing port becomes effective so that programs can be written into the Atmel CPU.

OFF:

The internal serial port of Atmel CPU becomes effective.

SW4: OFF (Default)

ON: The hardware of AUSCOM PCB can be reset when the system is locked up.

SW5: The capacity of U4 (NVRAM) can be selected.

OFF (Factory Setting):

The capacity becomes 32KB (M48Z35Y).

ON:

The capacity becomes 2KB (M48Z02Y).

SW6:

ON:

The watchdog timer is disabled

OFF (Factory Setting):

The watchdog timer is enabled.

SW7:

ON (When installed):

The battery for the logic seal is activated to monitor the logic seal during the time when the machine is OFF.

OFF (Factory Setting):

The battery for logic seal is not activated.

<LED Indicators>

Two -colored, synchronous LED 1 and LED 11:

Green light flashing:

Indicates the AUSCOM PCB is operating normally.

Red light lighted with Green light flashing:

Indicates the AUSCOM PCB is abnormal.

LED2 (TxDo):

Green light flashing:

Indicates that communication data is being output from the AUSCOM PCB through CN3 (PORT1).

LED3 (RxDo):

Red light flashing:

Indicates that the communication data is being input into the AUSCOM PCB through CN3 (PORT1).

LED6 (TxD1):

Green light flashing:

Indicates that communication data is being output from PORT 2, PORT 3, PORT4, PORT5, and PORT 6.

LED4, LED5, LED7, LED8, LED9, and LED10:

Green light lighted:

Indicates that the PORT1, PORT2, PORT3, PORT4, PORT5, and PORT6 is connected to the external equipment, respectively.

Note:

They lights up when loop back connectors are inserted in PORT1, PORT2, PORT3, PORT4, PORT5, and PORT6.

Chapter 5: Test Mode

5.1 Accessing Test Menu

When the game machine is on standby (that is, no game is being played, or there is no tilt on this machine), you can access the software test menu in the following procedure:

- 1. Cash out the credits to make the CREDIT meter zero.
- 2. Open the main door.
- 3. Turn ON and OFF the RESET keyswitch to display the following screen.



AUDIT MODE – MAIN MENU	J	
GMID: 0 PROGRAM #: ZANEP003 PROGRAM #: LOSEP003 FIRMWARE #: SPMRD046 FIRMWARE #: SPMDB046 FIRMWARE #: SMOCX046		
	DIAGNOSTICS	
	OUT OF SERVICE	
	EXIT	
MOTHER BOARD BIOS #: AP31 BODY I/O PCB BIOS #: S1 DOOR I/O PCB BIOS #: S1 XCOM I/O PCB BIOS #: S1 KERNEL VERSION #: 2.6.12-1.1381_	fc3 04	

4. Choose "DIAGNOSTICS" by touch.

Otherwise, use the game buttons on control panel..

- 5. Choose your desired item by touching screen..Otherwise, use the following CURSOR UP/DOWN, ENTER buttons.
- 6. To exit to the game mode, touch "EXIT" or press the COLLECT button.

The MAIN MENU shows you GMID, PROGRAM # and FIRMWARE #.

Once in one of the Menus or Sub-Menus, a few commands are available and are displayed on the Command Line of the screen.

5.2 DIAGNOSTICS



Various diagnostic and test functions can be performed in Test Mode. Each Test Mode function is described on the following pages.

5.2.1 INPUT TEST

TEST MODE - INPUT TEST	
RESET KEY	:OFF
AUDIT KEY	:OFF
POWER SAVE KEY	:OFF
RESERVE BUTTON	:OFF
COLLECT BUTTON	:OFF
GAME RULES BUTTON	:OFF
1ST BET BUTTON	:OFF
2ND BET BUTTON	:OFF
3RD BET BUTTON	:OFF
4TH BET BUTTON	:OFF
5TH BET BUTTON	:OFF
TAKE WIN BUTTON	:OFF
1ST LINE BUTTON	:OFF
2ND LINE BUTTON	:OFF
3RD LINE BUTTON	:OFF
4TH LINE BUTTON	:OFF
5TH LINE BUTTON	:OFF
GAMBLE BUTTON	:OFF
COIN IN	:OFF
COIN TO CASHBOX	:OFF
COIN OUT	:OFF
YO-YO ALARM	:OFF
HOPPER FULL	:OFF
MAIN DOOR	:OFF
MAIN DOOR (OPTICAL)	:OFF
SECURITY CAGE	:OFF
CASH BOX DOOR	:OFF
BELLY DOOR	:OFF
STACKER DOOR	:OFF
MECHANICAL METER DOOR	:OFF
DOOR PCB DOOR	:OFF
XCOM PCB DOOR	:OFF
BODY PCB DOOR	:OFF
EXIT	

For servicing requirements, switches, buttons and optics can be checked in the INPUT TEST. As a particular input is activated, "ON" will be displayed if operating correctly.

Note;

These function names may vary depending on game titles.

5.2.2 OUTPUT TEST

TEST MODE - OUTPUT TEST	
RESERVE BUITON LED	OFF
COLLECT BUTTON LED	OFF
GAME RULES BUITON LED	:OFF
IST BET BUTTON LED :OFF	
2ND BET BUTTON LED	:OFF
3RD BET BUTTON LED	:OFF
4TH BET BUTTON LED:OFF	
5TH BET BUTTON LED:OFF	
TAKE WIN BUTTON LED	:OFF
1ST LINE BUTTON LED	:OFF
2ND LINE BUTTON LED	:OFF
3RD LINE BUTTON LED	:OFF
4TH LINE BUTTON LED	:OFF
5TH LINE BUTTON LED	:OFF
GAMBLE BUTTON LED	:OFF
COIN LOCKOUT :EJECT	
DIVERTER :CASH BO	X
BILL INSERT LED 1	
BILL INSERT LED 2	
COLOR ILLUMINATION(ALL)	
COLOR ILLUMINATION(STEP)	
WHITE ILLUMINATION (ALL)	
WHITE ILLUMINATION (STEP)	
EXIT AUTO	

The listed lamps, diverter and coin lockout signals can be checked in the OUTPUT TEST.

Use the BET 1 PER LINE or PLAY 1 LINE button to select your desired item.

Press the PLAY 25 LINES to perform the output test.

To select "EXIT" or "AUTO", use the PLAY 9 LINES, BET 3 PER LINE, and GAMBLE buttons.

By selecting AUTO, each output will be activated in order of the above screen list.

Note;

These function names may vary depending on game titles.

5.2.3 REEL STRIP/PAY TEST

TEST MODE – RE	EL STRIP / PAY TEST			
TAKE WIN DOUBLE UP	- SET BET - SET LINE	WON	BET	BET PER LINE
LINE BUTTONS BET BUTTONS	- MOVE SYMBOLS DOWN - MOVE SYMBOLS UP	0	1	1
4 22 10 14 9 21 11 18 8 15 11 23 5	- MOVE SYMBOLS UP			

The Symbol Distribution test enables the reel symbol positions in the game software to be validated. All symbol combinations and pays can be validated in this test, which includes the pay out for each winning combination.

To move the symbols for each reel, use the corresponding Bet button and Play Button. e.g. for reel three (3) use third Bet button (BET 3 PER LINE button) to progress through the symbols and third Play Button (PLAY 5 LINES button) to go in the opposite direction.

Pressing the GAMBLE button increases the number of lines available and pressing the Take Win Button increases the credits per line.

To exit and return to the Diagnostics Menu, press the COLLECT button.

Note;

This screen may vary depending on game titles.

5.2.4 MONITOR TEST

You can test the main LCD module.



GRID TEST

As soon as entering the "**GRID TEST**", the following grid test screen appears. **Note:**

Adjustment is not available here.



COLOR TEST

As soon as entering the "COLOR TEST", the following color test screen is displayed.

Note:

Adjustment is not available here.



5.2.5 DIP SWITCH TEST

You can view the current settings of the following DIP switches.

DIP SWITCH TEST		
	GMEM PCB DIP SW D1 D2 ON OFF	
	DOOR PCB DIP SW D1 D2 ON D OFF D	
		EXIT

GMEM PCB DIP SW:Refer to Paragraph 4.3 for the details.DOOR PCB DIP SW:Refer to Paragraph 4.2 for the details.

5.2.6 NOTE ACCEPTOR TEST

You can test note acceptor.

TEST MODE – NOTE ACCEPTOR TEST It returns even if note is inserted. GPT: AU28EB33 NONE

5.3 OUT OF SERVICE

OUT OF SERVICE

This screen can be selected to place the machine OUT OF SERVICE. To exit this mode, turn the RESET keyswitch anticlockwise.

Chapter 6: Preventative Maintenance

This chapter is intended for qualified maintenance/service personnel to show the preventative maintenance servicing.



Before accessing into the cabinet for servicing, turn off the machine. Failure to do so could cause an electric shock.

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Before accessing into the cabinet for servicing, turn off the machine. Failure to do so could cause an electric shock.

6.1 RAM Clear

CAUTION!

Before clearing the RAM, please write down all the necessary data. Besides the data of the last game and the second last game, all the meters and settings are cleared, and cannot be retrieved.

Use the following procedure to clear the RAM:

- 1. Turn OFF the machine.
- 2. Open the main door and the security cage door.



3. Locate the GMEM PCB in the security cage.



4. Turn ON and OFF the memory corruption switch on the GMEM PCB.



5. Turn ON the machine.

6. The message of "MEMORY ERROR - RAM CORRUPTED" will appear on the

monitor screen.

Starting ZEARU system	
Media Version Number	: LOFSMU
System software version number	: ZEARU-AN15-0115
Game software version number	: Z05058-XXMN-AU-015
Body PCB firmware version number	: uYD0B013
Door PCB firmware version number	: SPMDB046
Xcom PCB firmware version number	: SMOCX046
Last power on	:
Last power off	:
The current time	: 27/03/2007 14:42
Power up self testing	
Body PCB communication test	[CONNECTED]
Door PCB communication test	CONNECTED
Xcom PCB communication test	CONNECTED
EEPROM test	[OK]
PROGRAM test	[OK]
GAL test [OK]	
BODY PCB test	[OK]
DOOR PCB test	[OK]
GMEM PCB test	[OK]
CPU fan test	[OK]
SECURITY CAGE fan test	[OK]
Backup battery test	[OK]
Backup memory test	[CRACKED]
Backup version test	[OK]
MEMORY ERROR – RAM CORRUPT	ED

7. Turn the RESET keyswitch on the machine anti-clockwise – the AUDIT MODE

MAIN MENU will appear on the screen.

AUDIT MODE – MAIN MENU		
GMID: PROGRAM #: ZANEP00 PROGRAM #: LOSEP00 FIRMWARE #: SPMRD0 FIRMWARE #: SPMDB0 PROGRAM #: SMOCX0	0 03 03 046 046 046	
	METER INFORMATION	TICKET HISTORY
	GAME RECALL	HOPPER REFILL
	MACHINE IDENTIFICATION	ERROR LOG
	GAME STATISTICS	MACHINE SETUP
		EXIT
MOTHER BOARD BIO BODY I/O PCB BIOS #: DOOR I/O PCB BIOS #: XCOM I/O PCB BIOS # KERNEL VERSION #: 2	S #: AP31 S1 : S1 2.6.12-1.1381_fc3 04	

8. Select the MACHINE SETUP menu.

9. Select the CONFIGURE / RAM RESET menu.

Note: The main door must be open to perform a RAM reset.



10. To clear the RAM, press the BET 1 PER LINE and TAKE WIN button at the same time.

6.2 Maintenance Schedule

The following servicing tasks should be carried out to ensure the reliability of the machine:

6.2.1 Daily Servicing

(1). Clean the machine surface.



Never use chemical dust cloth, thinner, benzine or alcohol.

They will damage the surface of the machine.

(2). Remove loose coins inside the cabinet.



A loose coin could cause an unexpected hazard including an electric shock.

- (3). Vacuum the inside of the cabinet to remove all dust and debris from the coin chute and hopper.
- (4). Clean the monitor screen with clean, soft cloth. The static electricity gathers dust.



Never use wet cloth. Do not rub the screen.

6.2.2 Quarterly Servicing

- (1) Inspect the hopper bowl for cracks or breaks, and wipe any dust out of the bowl with clean, dry cloth.
- (2) Inspect the hopper knife and agitator for wear.
- (3) Inspect the coin path of the coin acceptor for foreign objects, films, or debris. If necessary, clean it with clean, dry cloth.
- (4) Clean the coin diverter flapper with clean, dry cloth.
- (5) Inspect the note channel, exposed drive belt, pressure rollers, etc. of the note acceptor for foreign objects.If necessary, clean them with clean, dry cloth.
- (6) Inspect every wiring for frayed, cracked, or pinched insulation.

6.3 Collecting Notes from Note Stacker

When the note stacker gets full, a "**NOTE STACKER FULL**" error message is displayed on the main LCD screen.

Use the following procedure to collect notes from the note stacker:



6.3.1 When your note acceptor is an ARGUS note acceptor;

- 1. Unlock the belly door to open it.
- 2. Unlock the note acceptor door to open it.
- 3. When your note acceptor is **an ARGUS note acceptor**, push up the head cover over the note stacker.

When your note acceptor is **a WBA note acceptor**, unlock the note stacker by pressing down the lock lever on the right side of the stacker.

- 4. Pull forward the note stacker to take it out.
- 5. Unlock and open the note stacker door to collect the notes.
- 6. After collecting the notes, return the note stacker into the note acceptor.

NOTE:

For **an ARGUS note acceptor**, push down the head cover after setting back the note stacker.

For a WBA note acceptor, press back the stacker until it snaps locked.

- 7. Close and lock the note acceptor door.
- 8. Close the belly door.
- 9. Turn the RESET keyswitch to clear the error message.

6.3.2 When your note acceptor is a CashCode note acceptor;

- 1. Unlock the belly door to open it.
- 2. Unlock the note acceptor.
- 3. While pushing the note stacker release lever at the upper right position of the stacker, withdraw the note stacker.
- 4. Turn the note stacker upside down to locate the stacker open dial.
- 5. Turn the dial to OPEN to open the stacker.
- 6. Collect the notes.
- 7. After collecting the notes, close the stacker door and lock it.
- 8. Return the note stacker into the note acceptor.
- 9. Lock the note acceptor.
- 10. Close the belly door.
- 11. Turn the RESET keyswitch to clear the error message.





6.4 Clearing a Stacker Jam Error

If the jam occurred near the entry slot of the note stacker, a "**NOTE ACCEPTOR STACKER JAM**" error message is displayed on the monitor screen.

Use the following procedure to clear the jam;

6.4.1 When your note acceptor is an ARGUS note acceptor;

- 1. Unlock the main door to open it.
- 2. Unlock the note acceptor door.
- 3. While pushing up the head cover over the note stacker, withdraw the note stacker.

If necessary, remove the note acceptor head by pushing outward the note acceptor module lock plate.

- 4. Clear the jamming note from the entry slot of the stacker.
- 5. After clearing the notes, return the note stacker into the note acceptor.
- 6. Push down the head cover after setting back the note stacker.
- 7. Lock the note stacker door.
- 8. Close the main door.
- 9. Turn the RESET keyswitch to clear the error message.



Lock Plate



6.4.2 When your note acceptor is a CashCode note acceptor;

- 1. Unlock the main door to open it.
- 2. Unlock the note acceptor.
- 3. While pushing the note stacker release lever at the upper right position of the stacker, withdraw the note stacker.

If necessary, withdraw the note acceptor head by pulling up the note acceptor head release lever.

- 4. Clear the jamming note from the entry slot of the stacker.
- 5. After clearing the jam, return the note stacker and the head to the note acceptor.

NOTE:

When you return the head, be sure to push it until you hear a locking sound.

- 6. Lock the note acceptor.
- 7. Close main door.
- 8. Turn the RESET keyswitch to clear the error message.





head release lever
6.5 Disassembly

Refer to our PARTS CATALOG for the fasteners used.

WARNING!

Be sure to turn OFF the power before disassembling. In the following disassembly procedure, the step of turning OFF the machine is omitted.

6.5.1 Top Box

6.5.1.1 Escutcheon, Top Glass and Sub-LCD

- 1. Open the main door.
- 2. Remove 2 screws at the bottom of escutcheon.



3. Press the side claw hooks, and slightly lift the escutcheon to remove it.



4. Lift the top glass to remove it from the top glass.





0

5. Remove 2 screws at the bottom of the monitor unit.

6. Disconnect the monitor cables.

7. Remove the LCD monitor by lifting slightly.



6.5.1.2 Tower Light (Option)

- 1. Referring to Paragraphs 6.5.1.1, remove the escutcheon, top glass and the sub-LCD.
- 2. Disconnect the cable connector and unscrew the tower light in the top box as depicted below.



3. Pull up the tower light to remove it.

6.5.2 Main Cabinet

6.5.2.1 Security Cage

- 1. Open the main door.
- 2. Break the logic seal.
- 3. Unlock the cage door.
- 4. Open the cage door.
- 5. Disconnect all the cable connectors from the security cage.
- 6. Lift and pull forward the box to take it out.





6.5.2.2 Body I/O PCB Housing

- 1. Locate the Body I/O PCB housing on the left side of the cabinet.
- 2. Unlock the Body I/O PCB housing by using a key.
- 3. Lift down (unhook) the housing.
- 4. Disconnect the cable connector.



6.5.2.3 AUSCOM PCB Housing

- 1. Locate the AUSCOM PCB housing on the cabinet.
- 2. Unlock the AUSCOM PCB housing by using a key.
- 3. Lift down (unhook) the housing.
- 4. Disconnect the cable connector.



6.5.2.4 Hopper

- 1. Open the main door.
- 2. Pull forward the hopper to remove it.



6.5.2.5 Woofer and Speakers

When you need to remove the woofer and speakers, contact ARUZE or your nearest distributor.

6.5.3 **Main Door**

6.5.3.1 **Door I/O PCB Housing**

- 1. Open the main door.
- 2. Locate the Door I/O PCB housing on the back of the main door.
- 3. Untie the cables on the PCB housing to set them aside.
- 3. Unscrew the PCB housing (1 screw).
- 4. Open the housing as depicted below.







DANGER!

HIGH VOLTAGE!

NEVER access into the LCD unit. Failure to do so may result in Electric Shock.

- 1. Open the main door.
- 2. Locate the main LCD unit on the back of the main door.
- 3. Disconnect the cable connectors.
- 4. Unscrew the main LCD unit (4 screws)



6.5.3.3 Note Entry Assembly

- 1. Open the main door.
- 2. Locate the note entry assembly on the back of the main door.
- 3. Unscrew the note entry assembly (1 screw).
- 4. Disconnect the cable connector.



6.5.3.4 Game Control Panel

- 1. Open the main door.
- 2. Disconnect all the cable connectors from the game buttons.
- 3. Unscrew the game control panel fixing screws (3 screws).
- 4. On the front of the main door, lift and pull the game control panel forward to remove it.



6.5.3.5 Game Button

- 1. Remove the game control panel as described in Paragraph 6.5.3.4.
- 2. Turn the control panel upside down.
- 3. Unscrew the game button to remove it.

6.5.3.6 Common Button

- 1. Open the Belly Door.
- 2. Pinch a Common Button from under the panel.
- 3. Remove the lower part of button by turning.
- 4. To remove the upper part, pinch the claw of button and push upward.



6.5.4 Belly Door

6.5.4.1 Belly Door Glass Lamp Assembly

- 1. Open the belly door.
- 2. Disconnect the cable connector from the lamp assembly.
- 3. Unscrew the assembly (2 screws) to remove it.



6.5.4.2 Belly Door Glass

- 1. Remove the belly door glass lamp assembly as described in Paragraph 6.5.4.1.
- 2. Detach the belly door glass.

6.6 Replacement

6.6.1 Lamps and Fluorescent Lamps



Turn OFF the machine before replacing a lamp.

The lamps and fluorescent lamps may be hot.

Wait until they cool down before touching them.

Any replacement lamp must be the one specified by ARUZE, or the equivalent.

6.6.1.1 Lamps of Optional Tower Light (Candle)

- 1. Referring to Paragraph 6.5.1.2, remove the tower light.
- 2. Loosen the screw on the top of the tower light to separate the tiers.
- 3. Unscrew the old lamp to replace it with a new one.
- 4. In the reverse order of the above, reassemble the tower light.
- 5. Return the tower light onto the top box.
- 6. Return the sub-LCD, the escutcheon, the top glass and game name strip bracket.
- 7. Close the main door.



6.6.1.2 Fluorescent Light for Belly Glass

- 1. Referring to Paragraph 6.5.4.1, remove the fluorescent light assembly for the belly glass.
- 2. Turn the light assembly upside down to locate the fluorescent light release tabs.
- 3. Holding the fluorescent light by one hand, press one of the tabs outward.
- 4. Pull up (or forward) the fluorescent light until the terminal releases from the socket.
- 5. Replace the light with a new one.
- 6. Return the light assembly onto the belly Fluorescent light release tab door.

NOTE:

When your machine is single-LCD type, tighten the belly door fixing screws.

- 7. Close the belly door.
- 8. Close the main door.



6.6.1.3 Fuse

- 1. Open the main door.
- 2. Locate the fuse holder just above the POWER switch.
- 3. Push the fuse holder, then turn it counterclockwise to remove it.
- 4. Pull out the fuse to replace it with a new one.
- 5. Return the fuse holder onto the power box.
- 6. Close the main door.

NOTE:

If a specified fuse is easily blown, contact ARUZE or your nearest distributor.



6.6.2 Lithium Battery

WARNING!

A lithium battery is mounted on the main, GMEM, Body I/O, and Door I/O PCB's to back up the important data. The procedure to replace the lithium batteries is outlined below:

Use a specified lithium battery or the equivalent. Failure to do so may result in an accident or a fire.

Before mounting a lithium battery, verify its polarity. Mounting the battery in the wrong direction may damage the PCB's.

Waste lithium batteries must be disposed as instructed. Refer to SAFETY INSTRUCTION, "Disposal of Lithium Batteries".

6.6.2.1 Replacing Lithium Batteries in Security Cage

Replace the lithium battery in the security cage in the following procedure:

CAUTION!

Before replacing the lithium batteries, please write down all the necessary data. The replacement after POWER-OFF may delete the data.

- 1. Open the main door.
- 2. Turn OFF the machine.
- 3. Unlock the security cage.
- 4. Referring to Paragraph 6.5.2.1, withdraw the security cage to take it out.
- 5. Referring to Paragraph 1.2, "Security Cage", locate a lithium battery on Mother Board and GMEM PCB.

NOTE:

If necessary, unscrew the PCB's fixing plate (1 screw) to remove it.

- 6. To replace the lithium battery on the Mother Board;
 - (1) Locate the battery lock.

(2) Lifting the battery lock, pull out the old battery to replace it with the new one.

To replace the battery on the GMEM PCB;

- (1) Pull out the battery.
- 7. Return the security cage into the main cabinet.
- 8. Lock the cage.
- 9. Connect the cable connectors to the cage.
- 10. Turn ON the machine, and close and the main door.



6.6.2.2 Replacing Lithium Battery on Body I/O PCB

- 1. Open the main door.
- 2. Turn OFF the machine.
- 3. Referring to Paragraph 6.5.2.2, unscrew the PCB housing.
- 4. Locate the lithium battery on the Body I/O PCB.
- 5. Set the jumper switch to Battery OFF position.

Note:

When you wish to clear the security cage status, set the jumper switch (SW2 Bit2) to Battery OFF position.

- 6. Pull out the old battery to replace it with the new one.
- 7. After the replacement, set the jumper switch back to Battery ON position.
- 8. Screw down the PCB assembly onto the cabinet.
- 9. Turn On the machine.
- 10. Close the main door.



6.6.2.3 Replacing Lithium Battery on Door I/O PCB

- 1. Open the main door.
- 2. Turn OFF the machine.
- 3. Referring to Paragraph 6.5.3.1, unscrew the Door I/O PCB housing.
- 4. Locate the lithium battery on the PCB.
- 5. Set the jumper switch to Battery OFF position.
- 6. Pull out the old battery to replace it with the new one.
- 7. After the replacement, set the jumper switch back to Battery ON position.
- 8. Screw down the PCB assembly onto the back of the main door.
- 9. Turn On the machine.
- 10. Close the main door.



6.6.2.4 Replacing Lithium Battery on AUSCOM PCB

- 1. Open the main door.
- 2. Make sure that the power is OFF.
- 3. Referring to Paragraph 6.5.2.3, unlock the AUSCOM PCB housing to open the cover.
- 4. Locate the lithium battery on the PCB.
- 5. Set the jumper switch to Battery OFF position.
- 6. Pull out the old battery to replace it with the new one.
- 7. After the replacement, set the jumper switch back to Battery ON position.
- 8. Close the PCB cover and lock the housing.
- 9. Return the hopper and the printer.
- 10. Turn On the machine.
- 11. Close the main door





6.7 Adjustment

6.7.1 Sensitivity of CONDOR Coin Acceptor

When your coin acceptor is a CONDOR coin acceptor, the sensitivity can be adjusted in the following procedure:

- 1. Open the main door.
- 2. Locate the coin acceptor on the back of the main door.
- 3. With the cable connected to the coin acceptor, push up then pull forward the coin acceptor to remove it.
- 4. Adjust the sensitivity using the rotary switch at the lower right position of the coin acceptor.



- a. For the standard sensitivity, set the rotary switch to "0" position with a small blade screwdriver.
- b. To increase the selectivity for your coinage, turn the rotary switch counterclockwise.
- c. To increase the rejectivity against slugs, turn the rotary switch clockwise.
- 5. Return the coin acceptor onto the back of the main door.
- 6. Close the main door to check the selectivity/rejectivity by inserting proper coin and/or high quality slugs.
- 7. Repeat the above steps 4 through 6 as necessary to get the finest adjustment.

6.7.2 Note Entry Level

Use the following procedure to adjust the level of note entry.

- 1. Open the main door.
- 2. Remove the hopper.
- 3. Loosen the 3 screws that are fixing the note acceptor to the cradle.
- 4. Loosen the nut under the note acceptor, which is fixing the level adjusting knob.
- 5. Turn the knob clockwise to raise the note entry. Turn the knob counterclockwise to lower the note entry.
- 6. After adjusting, tighten the 3 screws and the nut.
- 7 Return the hopper and close the main door.



6.8 Changing Game

When you want to change the game, you have to receive a GMEM Cassette from ARUZE. The GMEM Cassette consists of

Compact Flash GAL

NOTE:

The contents of the GMEM Cassette vary according to your current game.

6.8.1 Changing GMEM Cassette

Use the following procedure to change the game software.

- 1. Open the main door to turn OFF the machine.
- 2. Unlock the security cage door.
- 3. Unscrew the cassette screw, pull out the cassette.
- 4. Replace the GMEM Cassette.



GMEM Cassette



Chapter 7: Troubleshooting

This chapter is intended for qualified maintenance/service personnel to show the troubleshooting.



WARNING!

Turn OFF the machine before accessing into the cabinet.

7.1 Hopper Errors









7.2 Coin Acceptor Errors











7.3 Note Acceptor Errors











NOTE:

Set the jumpers of the BODY I/O PCB as shown below: GPT bill acceptor:

> Jumper "3-4" of JP3 and JP4 Jumper JP8 to "G".

JCM bill acceptor:

Jumper "3-4" of JP3 and JP4 Jumper JP8 to "G".

7.4 Ticket Printer Errors











7.5 Mechanical Meter Errors


7.6 Backup Battery Errors







7.7 System Errors







7-23







Mode.	/













Chapter 8: Machine Specifications

This chapter shows the machine specifications.

8.1 Cabinet Name

GENX-WD00

8.2 Overall Dimension Including Tower Light

When 2 tiers tower light is attached.624 (width) x 1534 (height) x 588 (depth) mm

When 3 tiers tower light is attached.624 (width) x 1579 (height) x 588 (depth) mm

8.3 Weight

128 Kg (including 10 Kg transformer and 7 Kg reel unit)

8.4 Electrical Specifications

<u>When Line Voltage i</u>	<u>s 220 through 240 VAC</u>			
Line frequency:		50Hz		
Max. current draw du	3.6A			
When Line Voltage i	<u>s 100 through 120VAC</u>	(011		
Line frequency:	60Hz			
Max. current draw du	ring game play:	5.5A		
Fuse:	6.3A			
Fluorescent lamp:	15W			
Outlet: Earthed power outlet				

8.5 Environment

Ambient temperature:0 through 40 degrees CAmbient humidity:5 through 95%Free from dew condensation

8.6 Coins/Notes Capacity

Hopper

About 1100 coins (Aus. \$1)

About 450 coins (US\$ 1.00) About 1800 coins (US 25 cent)

About 1600 coins (1R) About 600 coins (10R)

Note stacker

ARGUS Note Stacker:About 500 notesCashCode Note Stacker:About 600 notes

Chapter 9: Parts Catalog

MAJOR COMPONENTS



No. 1 TOP BOX ASSEMBLY



TOP BOX ASSEMBLY (PARTS LIST)

ITEM	PART NO.	PARTS NAME	Q'TY	MATERIAL/TYPE	REMARKS
1	MEX-343-00	ENEX TB SIDE REF L FRONT	1	ABS	
2	MEX-344-00	ENEX TB SIDE REF L REAR	1	ABS	
3	MEX-345-00	ENEX TB SIDE REF FRAME L	1	SECC t=1.2	
4		BD-GM-M2LED4	2		
5	ML2-525-00	ML2 TB LED PCB BKT	2	SECC t=1.2	
6	ML2-515-00	ML2 TB 19IN UPPER SPONGE	2	CR 360x4 t=1.0	
7	MEX-310-00	ASSY SUB ENEX TB	1		
8		TOWER LIGHT	1	TWL2-12V	By customer's demand.
9	0C0022800	TOP TOWER HOLE BLIND PLATE	1	SECC-C t=1.0	
10		TOWER LIGHT	1	TWL3-12V	By customer's demand.
11		G-TOPPER	1	GTPR-PP	By customer's demand
12	MEX-347-00	ENEX TB SIDE REF R FRONT	1	ABS	
13	MEX-349-00	ENEX TB SIDE REF FRAME R	1	SECC t=1.2	
14	MEX-348-00	ENEX TB SIDE REF FRAME R	1	ABS	
15	ML2-034-00	ML2 TB TOP GLASS	1	t=5.0	
16		ONE TOUCH BUSH	2	NB-8	
17	ML2-408-00	19IN LCD CASE ASM	1		
18	ML2-418-00	19IN LCD ADJ COVER	1	SECC t=1.2	
19	ML2-419-00	19IN LCD REAR COVER ASM	1		
20	ML2-183-00	19IN INSURATION SHEET	1	PC t=0.5	
21	2D4106400	LCD RUBBER	4	EPM	
22		19IN LCD	1	Model Name: LM190E03	
				Manufacturer: LG.PHILIPS L	CD
23	ML2-163-00	MONITOR MASK 19 ASM	1		
24	MEX-341-00	ENEX TB 19 ESC UPPER BKT	1	SECC t=1.2	
25	ML2-505-00	ML2 TB 19 ESC LOWER BKT	1	SECC t=1.2	
26	ML2-489-00	MONITOR MASK LED LENS	2		
27	609926100	DVI/RGB to LVDS PCB SC-3B	1	SC-3B	Manufacturer: COLCOAT
28	602426000	LCD BACKLIGHT INVERTER IM6501	1	IM6501	Manufacturer: MNB
29	2EK006800	ST W HIGH VOLTAGE UL	1	PET t=0.75	
30	810346200	CLAMP	1	EMT-6N	

No. 2 CABINET ASSEMBLY (1/2)



CABINET ASSEMBLY 1/2 (PARTS LIST)

ITEM	PART NO.	PARTS NAME	Q'TY	MATERIAL/TYPE	REMARKS
1	MEX-501-00	ASSY ENEX SUB CABI AUS	1		
2	No.13, No.14	HOPPER ASSEMBLY	1	Model Number: GM-HOPPER	
				Manufacturer: ARUZE GAMIN	NG AMERICA, INC.
3	Refer to No.5	NOTE ACCEPTOR (CASHCODE)	1	Model Number: FL-0510	
				Manufacturer: CashCode Cor	mpany Inc
				Firmware: FL-AU2218	
	Refer to No.6	NOTE ACCEPTOR (GTP)		Model Number: SA-4, 304X3311	21G
				Manufacturer: GPT	
				Firmware: AU28EB33	
4		SWITCHING POWER SUPPLY	1	Model Number: A2PSAPSU2G04	4 / A2PSAPSU2G07
				Manufacturer: TEGA SANYO K	OUGYO CORPORATION
5	ML2-604-00	ASSY ML2 CB KYE PLATE	1		
6	ML2-605-00	ML2 BILL SPACER TABLE BRKT	1	SECC t=1.6	
7	ML2-606-00	ML2 CB HOPPER BASE ASM	1		
8	ML2-619-00	ML2 CABI BOTTOM WOOD 01	1	t=18	
9	ML2-647-00	HEAT INSULATOR	1	SECC t=1.2	
10	ML2-611-00	ML2 CB PRINTER BASE	1	SECC t=1.2	
11	0D4014200	LOCK SLIDER COLLAR	4	C3601BD <i>ϕ</i> =10	
12	0D4008400	MAIN DOOR SW BKT	1	SECC-C t=1.2	
13	0D4006600	PCB BOX SW BKT	1	SECC-C t=1.2	
14	0D4007000	MAIN DOOR KEY PLATE	1	SECC-C t=2.3	
15		KEY SW LABEL	2	PC t=0.5	
16		TICKET PRINTER	1	Model Name: Ithaca EPIC950	
				Manufacturer: Transact Tech	nologies, Inc.
				Firmware: S00122	
17	601356400	KEY SW	1	KG3C-20D ASSY	Varies according to spec.
18	ML2-623-00	ML2 SPEAKER BORD 01	1	MDF t=12	
19		SPEAKER	1	FL160U132-1	
20		ML2 CB UPPER HINGE PLATE ASM	1		
21		ML2 CB LOWER HINGE PLATE ASM	1		
22		SPACER	1	CC-0816-10	
23		WASHER	1	NN-0816-10	
24	ML2-603-00	ML2 DROP CHOUTE ASM	1		
25	600138000	DOOR SWITCH	3	SDKNA20600	
26		DC FAN	2	109R0812S401	
27		SENSOR	1	KB875-AZ02LF	

CABINET ASSEMBLY (1/2) (PARTS LIST)

ITEM	PART NO.	PARTS NAME	Q'TY	MATERIAL/TYPE	REMARKS
28	601306201	SHORT DOOR LOOK (2155)	1	GSK-501SB2155 (Key way: left)	
29	600894700	FINGER GUARD	2	109-049E	
30	2C0005600	NYLON WASHER	4	CC-0612-05	
31		ML2 DR DOOR STOPPER	1	SGD Ø8	
32	3382309-50115	SPACER	1		
33		SPRING	1	E-593	
34	ML2-658-00	MAIN POWER SW BOX	1	SECC t=1.2	
35		LOCKER SWITCH	1	AJ8202BF	
36	MEX-114-00	KEY SW HOLE BLIND PLATE ASM (B)	1		
37		TP POWER BOX COVER	1	TPA-4004	
38		SWITCHING POWER SUPPLY	1	Model Name: ZWS75AF-24/J	
				Manufacturer: DENSEI-LAMBD	A
39	0D4114200	BLIND PLATE WASHER	1		
40	2D40EAN00	POWER SAVE SW LABEL	(1)		Varies according to spec.
41	601367000	POWER SAVE KEY SW	(1)	KH2C-10A ASSY	

No. 3 CABINET ASSEMBLY (2/2)



CABINET ASSEMBLY (2/2) (PARTS LIST)

ITEM	PART NO.	PARTS NAME	Q'TY	MATERIAL/TYPE	REMARKS
1	MEX-505-00	BODY IO CASE AUS	1		
2		DOOR SWITCH	1(2)	SDKNA20600	Varies according to spec.
3	CEK000200	BD-GM-M2IO	1	P509002-0303TI	
4	MEX-506-00	BODY IO COVER AUS	1		Varies according to spec.
5		S411668	2		Varies according to spec.
6		KEY2155	2		Varies according to spec.
7	ML2-420-00	ML2 DR BLY KEY PLT	2		Varies according to spec.
8	MEX-509-00	AUSCOM COVER	1		Varies according to spec.
9	CD4018A00A	AUSCOM-A PCB	1	Model Name: FR-4/UA2054-11	A
				Manufacturer: ARUZE GAMINO	G AMERICA INC.
10	810338100	EDGING SADDLE	6	TSB-1909L	Varies according to spec.
11	MEX-508-00	AUSCOM CASE	1		Varies according to spec.
12	MEX-133-00	BODY IO COVER	1		
13	Refer to No.4	PC BOX	1	Model Name: AP-7	
				Manufacturer: ARUZE GAMING	G AMERICA INC.
14	MEX-511-00	POWER PORT BRKT	1		Varies according to spec.
15	600614300	CIRCUIT BREAKER	6	106-P10-0.5A	Varies according to spec.
16	0EK014800	TRANS BOX ASM	1	SECC	Varies according to spec.
17		ST W HIGH VOLTAGE UL	1	PET t=0.75	Varies according to spec.
18		TRANS INPUT AC 115V	(1)	600746200	Varies according to spec.
19	601403400	INLET	1	AC-P03CS05	Varies according to spec.
20	601403200	OUTLET	1	AC-F01FB01	Varies according to spec.
21	601515400	FUSE HOLDER KNOB	2	3455LF1-020	Varies according to spec.
22		FUSE	1	215 001.P	Varies according to spec.
23	601515000	FUSE HOLDER	2	3453LF2-010	Varies according to spec.
24		MAIN FUSE LABEL	1		Varies according to spec.
25		UNSWITCHD FUSE LABEL	1		Varies according to spec.
26		INLET LABEL	1		Varies according to spec.
27		OUTLET LABEL	1		Varies according to spec.
28		FUSE	(1)	215 012.P	Varies according to spec.
29	810338200	EDGING SADDLE	2	TSB-3027	
30		FUSE	(1)	215 010.P	Varies according to spec.
31		TRANS INPUT AC220V	(1)	600746300	Varies according to spec.

No. 4 PC BOX AP-7



PC BOX AP-7 (PARTS LIST)

ITEM	PART NO.	PARTS NAME	Q'TY	MATERIAL/TYPE	REMARKS
1	603537200	MOTHER BOARD AP-7	1	AP-7	Manufacturer: ALBATRON
2	M311042	MOTHER INSULATION SPACER	1		
3	600138000	DOOR SW	1	SDKNA20600	
4	ABE1-0051	POLY BUSH	2		
5	ABE1-0045	AP7 PC SW BRKT	1		
6		POLY WASHER	2		
7		SPRING	1	E577	
8	ABE1-0049	AP7 PC SW GUIDE FRONT	1		
9	ABE1-0050	AP7 PC SW GUIDE REAR	1		
10		LOCKING ADJUST CLAMP	1	LCT-4Si	
11	ABE1-0055	AP7 CONNECTOR COVER G	1		
12		KEY CYLINDER	1	F750-MSDS-L90	
13	ABE1-0038	AP7 PC FRONT COVER	1		
14		HINGE	2	LSB-50	
15	ABE1-0043	AP7 PC KEY PLATE	1		
16		ASSY GMEM CASSETTE	1		
17	ABE1-0036	AP7 PC BASE	1		
18	PC2-2000	ASSY AP-7 GMEM2	1	P509012-0202HK-02	
19	ABE1-0047	AP7 PC SLOT COVER	1		
20	603537400	GRAPHIC BOARD 7600GS	1	9GP76GSQ-R00-10BH1	Manufacturer: ALBATRON
21		DC FAN	1	9G0812H105	
22	CEK002700	BD-GM-FDAMP	1	P509001-0303SK	
23	ABE1-0044	AP7 PC FIX BRKT	1		
24	ABE1-0058	AP7 SPONGE	2		
25	ABE1-0037	AP7 PC FRONT PANEL	1		
26		AP7 I/O PANEL	1		
27	CEK002800	BD-STH	1	P611101-0101KT	
28		CPU	1	BX80552352(D0-)	
29	603537500	MEMORY DDR2 ARF5300K-512	2	ARF5300K-512	Manufacturer: Adtec
30		LOCKING PCB SPACER	6	LCBT-3S	
31		LOCKING ADJUST CLAMP	2	LCT-2.5S	
32		LOCKING ADJUST CLAMP	2	LCT-2S	

No. 5 NOTE ACCEPTOR (CASHCODE BV (600) ASSEMBLY)



CASHCODE BV (600) ASSEMBLY (PARTS LIST)

ITEM	PART NO.	PARTS NAME	Q'TY	MATERIAL/TYPE	REMARKS
1	0D4008600	BV ACTUATOR SPRING (JCM)	1	SWP Ø0.5	
2		ST W AVOID INJURY UL	1	PET t=0.75	
3	ML2-659-00	BV ADJUST BKT W	1	SECC-C 2.0t	
4	0D4009200	BV CASE (JCM)	1	SECC-C 1.2t	
5	0D4021600	BV STACKER DOOR (Cash Code)	1	SECC-C 1.2t	
6	0D4021400	BV STACKER RAIL (Cash Code)	1	SECC-C 1.2t	
7	0D4009800	BV ACTUATOR (JCM)	1	SECC-C 1.2t	
8	0D4010000	BV SW BKT (JCM)	1	SECC-C 1.2t	
9	0D4010200	BV ACTUATOR PIN (JCM)	1	SUS 304 Ø 3	
10		VALIDATING HEAD		MFLV-2110	
11		BEZEL	1	MFLB-2401	
12		HOUSING	1	FLH-0110	
13		POWER INTERFACE	1	FLP-1710	
14		CASSETTE	1	FLC-103	
15	600121000	SAFETY DOOR SW	1	E77-40A-001 .	
16	601306201	SHORT DOOR LOCK (2155)	1	GSK-501SB2155 (keyway, left)	
17	0D4020600	BV SIDE PANEL	1	SECC-C 1.2t	
18	0C0010000	PCB DOOR HINGE	1	D-HH100	
19	2D4007800	SUPER KNOB	1	SK-34	
20	0D4016000	BV CASE BKT	1	SECC-C 1.2t	
21	0D4016200	BV SW COVER (JCM)	1	SECC-C 1.2t	
22	ML2-651-00	ML2 BV SIDE BLIND PLATE	1	SECC-C 1.2t	
23	0D4020800	STACKER DOOR LINK PLATE	1	SECC-C 2.3t	
24	0D4021000	STACKER DOOR LOCK PLATE	2	SECC-C 2.3t	
25	0D4021200	STACKER DOOR LOCK HOLDER	1	SECC-C 1.2t	
26	0D4019400	SPACER	2	3382309-40030	

No. 6 NOTE ACCEPTOR (GPT) ASSEMBLY



NOTE ACCEPTOR (GPT) ASSEMBLY (PARTS LIST)

ITEM	PART NO.	PARTS NAME	Q'TY	MATERIAL/TYPE	REMARKS
1	0D4010800	BV SUPPORT BKT (GPT)	1	SECC-C 1.2t	
2	ML2-659-00	BV ADJUST BKT W	1	SECC-C 2.0t	
3	0D4010400A	BV CASE (GPT)	1	SECC-C 1.2t	
4		ARGUS SW BKT	1	SECC-C 1.6t	
5	0C0016200	ARGUS SW BASE	1	SECC-C 1.6t	
6		BILL VALIDATOR HEAD ARGUS-D	1		
7		ENCLOSURE	1		
8		STACKER	1		
9	600132100	MICRO SW	2	AM50632C3	
10	0C0017000	ARGUS SW BKT COLLAR	2	SS400 Φ10	
11	0C0017200	ARGUS SW BKT SPACER	1	SS400 Φ10	
12	0D4010600	BV REAR COVER (GPT)	1	SECC-C 1.2t	
13	2D4007800	SUPER KNOB	1	SK-34	
14	0D4016000	BV CASE BKT	1	SECC-C 1.2t	

No. 7 CONTROL PANEL ASSEMBLY



CONTROL PANEL ASSEMBLY (PARTS LIST)

ITEM	PART NO.	PARTS NAME	Q'TY	MATERIAL/TYPE	REMARKS
1	0D4113400	COIN ENTRY	1		
2		COIN ENTRY B	1		Depends on denomi
3		PLATE G-ENEX	1	AI t=1.0	
4	MEX-517-00	CONTROL PANEL MALL AUS	1	ABS	
5	MEX-515-00	CTRL PNL FRM ASM AUS	1		
6	MEX-519-00	CONTROL PNL ASM 15 AUS	1		
7	ML2-001-00	ML2 DR BILL FACE	1	ABS	
8	ML2-437-00	ML2 DR BILL FACE EARTH	1	SECC t=1.0	
9	D-25-0004	ST BILL SIGN	1	PC t=0.5	
10		BD-GM-M2BV	1	P509009-0101TI	
11		PUSH BUTTON	3	SS-18UKK-x-LEDT5-W-F	By the game.
12		GAME BUTTON FILM	3	PET t=0.2	By the game.
13		PUSH BUTTON	2	SS-25KK-W-LEDT5-W-F	By the game.
14		GAME BUTTON FILM	2	PET t=0.2	By the game.
15		PUSH BUTTON	2	SS-41KK-X-LEDT5-W-F	By the game.
16		GAME BUTTON FILM	2	PET t=0.2	By the game.

No. 8 DOOR ASSEMBLY (1/2)



DOOR ASSEMBLY (1/2) (PARTS LIST)

ITEM	PART NO.	PARTS NAME	Q'TY	MATERIAL/TYPE	REMARKS
1	ML2-412-00	ML2 DR LK PIN BRKT B	2	SECC t=1.6	
2	ML2-413-00	ML2 DR BLY LK PIN BRKT	2	SECC t=1.6	
3	ML2-443-00	ML2 DR SENSOR BASE	1	SECC t=1.2	
4	0D4106600	DOOR LOCK SHAFT	4	SUS303 <i>ф</i> =6	
5	0D4011200	SPACER	4	3382309-60100 (<i>ф</i> 6,10mm)	
6	MEX-220-00	ASSY DOOR MAIN FRAME	1		
7	ML2-009-00	ML2 DR IF BEZEL-4	1	ABS	
8	ML2-445-00	ML2 DR EXTRUSION R	1	A6063-T5	
9	ML2-444-00	ML2 DR EXTRUSION L	1	A6063-T5	
10	D-25-0005	ST ARUZE	1	PC t=0.5	
11	D-25-0002	ST BV FACE (ENG)	1	PC t=0.5	
12	ML2-010-00	ML2 PRINTER BEZEL	1	ABS	
13		BD-GM-PRI-LED	1	P509007-0101YK	
14	ML2-423-00	ML2 DR PRINT C ASM	1		
15	D-25-0007	ST PR BEZEL (ENG)	1	PC t=250µm	
16	ML2-163-00	MONITOR MASK19 ASM	1		
17	ML2-489-00	MOMITOR MASK LED LENS	2		
18		SENSOR	1	KB875-AZ01LF	
19		CLAMP	3	EMT-3N	
20	2D4106600	SPONGE FOR HOPPER	1	CR	
21	2ZZZ55200	SPONGE FOR SEAL (WD)	1		
22	ML2-483-00	PTS BLANK PANEL	1		
23	MEX-266-00	REFLECTOR BRKT LASM	1		
24	MEX-262-00	DOOR REF FRONT CASE L	1		
25	MEX-263-00	DOOR REF REAR CASE L	1		
26	MEX-264-00	SPEAKER BOX L	1		
27		SPEAKER	2	F02210D0	
28	MEX-274-00	SPEAKER COVER PANEL	2		
29	MEX-265-00	SPEAKER NET L	1		
30	MEX-272-00	REFLECTOR BRKT R ASM	1		
31	MEX-262-00	DOOR REF FRONT CASE R	1		
32	MEX-269-00	DOOR REF REAR CASE R	1		
33	MEX-270-00	SPEAKER BOX R	1		
34	MEX-271-00	SPEAKER NET R	1		
35	ML2-735-00	RUBBER 300x3x7	3	CR	
36	ML2-736-00	RUBBER 375x2x7	1	CR	
37	No.11	19IN MAIN LCD ASSEMBLY	1		

No. 9 DOOR ASSEMBLY (2/2)



DOOR ASSEMBLY (2/2) (PARTS LIST)

ITEM	PART NO.	PARTS NAME	Q'TY	MATERIAL/TYPE	REMARKS
1	ML2-411-00	ML2 DR ROLL BRKT ASM	1		
2	ML2-432-00	BLY DOOR HINGE UPR ASM	1		
3	ML2-433-00	BLY DOOR HINGE LWR ASM	1		
4	ML2-434-01	BLY DR SLIDE GUIDE A	1	SPCC t=2.0	
5	ML2-434-02	BLY DR SLIDE GUIDE B	1	SPCC t=2.3	
6	ML2-434-03	BLY DR SLIDE GUIDE C	1	SPCC t=2.3	
7	600205001	PHOTO SENSOR	1	U-97PA	
8	0D4107000	DOOR ROLLER SHAFT	1	SUS303 Ø=7	
9	0C0108200	BEARING	1	DR-26-H6	
10	ML2-002-00	ML2 DR BLY COVER 2	1	ABS	
11	ML2-004-00	ML2 DR BLY MALL	2	ABS	
12	ML2-431-00	ML2 DR BLY KEY HK SLD	1	SECC t=2.3	
13	ML2-401-00	ML2 DR BLY HK ASM	1		
14	0D4014200	LOCK SLIDER COLLAR	8	C3601BD	
15	ML2-420-00	ML2 DR BLY KEY PLT	1(2)	SECC t=2	
16	ML2-428-00	ML2 DR BLY COVER ASM	1		
17	ML2-470-00	ML2 COIN TRAY CHUTE ASM	1		
18	ML2-167-00	ML2 DR BLY LED PLATE	1	PC t=2	
19	ML2-427-00	ML2 DR BLY LED COVER	1	SECC t=1.2	
20		TENSION SPRING	1	E-593	
21	601306201	KEY	1	GSK-501SB2155 (LH)	
22	2L3105000	RUBBER	2	TM-96-3	
23	ML2-400-00	ML2 DR BLY REF-2	1	SECC t=1.2	
24	ML2-148-00	ML2 DR BLY ACRYLIC	1	PC t=3	
25	ML2-149-00	ML2 DR BLY GLASS	1	t=3	
26	ML2-467-00	COIN TRAY BASE ASM	1		
27	ML2-468-00	COIN TRAY	1		
28	2C0007400	DOOR GUIDE	1	POM	
29	ML2-402-00	ML2 DR COUNTER BRKT ASM	1		
30	IM-0078-00	INNER COUNTER BKT	1	SECC-C t=1.0	
31	0D4109400	DUMMY COUNTER (3P)	1	SECC-C t=0.8	
32	2D4109600	PLATE COUNTER 5 (SA,CE)	1	PC t=0.5	
33	2D4107000	SPONGE FOR COUNTER FIX	1	C-4305	
34		COUNTER	1	GC-127BA-5L800	
35		ML2 DR PCB RID	1	SECC t=1.2	
DOOR ASSEMBLY (2/2) (PARTS LIST)

ITEM	PART NO.	PARTS NAME	Q'TY	MATERIAL/TYPE	REMARKS
36		ML2 DR DOOR PCB CASE	1		
37	CEK000900	DOOR_C PCB (PF)	1	UA2054-1C(PF)	
38	600138000	DOOR SWITCH	2(3)	SDKNA 20600	
39	810338200	EDGING SADDOL	2	TSB-3027	
40	602373200	FL SOCKET	1	UNV-09	
41	602305200	FL TUBE	1	FL10N	
42		FL DC INVERTER UNIT	1	AN-151F-1 ROHS	
43	810338000	EDGING SADOL	1	TSB-1915	
44	ML2-490-00	ML2 BLY GLASS SPONGE A	1	CR	
45	ML2-491-00	ML2 BLY GLASS SPONGE B	1	CR	
46	CEK000400	BD-GM-M2 LED4	3	P509008-0101TI	
47	ML2-436-00	ML2 DOOR SW BRKT	1	SECC t=1.2	
48		ST W HIGH VOLTAGE UL	1	PET t=0.75	
49	ML2-494-00	ASSY ML2 DIVERTOR BRKT	1		
50	0C0106800	DIVERTER BKT	1	SECC-C 1.6t	
51	2C0106200	DIVERTER CHUTE	1	POM	
52		SOLENOID	1	G836-AR51E DC12V	
53	0A0120400	SOLENOID SPRING	1	SWP	
54		COIN COMPARITOR	1	Model Name: CONDOR CP-130	
				Manufacturer: Money Controls	
				Firmware: CFG: CP130SAU00111, Build: BAAS01	
55		COIN COMPARITOR	1	COINMECH MC-62	(Not used)
56	MEX-514-00	DOOR IO COVER AUS	(1)		
57		KEY CYLINDER	(1)	F750-MSDS	
58		COUNTER	(1)	GC-127BA-8L700	



19INCH MAIN LCD ASSEMBLY (PARTS LIST)

ITEM	PART NO.	PARTS NAME	Q'TY	MATERIAL/TYPE	REMARKS
1	ML2-706-00	19LCD REAR COVER ASM	1		
2	ML2-718-00	19LCD ADJUSTER BRKT UNDER 2	1		
3	810346200	CLAMP	1	EMT-6N	
4	ML2-704-00	19LCD UNDER RUBBER 1	1		
5	ML2-705-00	19LCD UNDER RUBBER 2	2		
6	ML2-703-00	19IN TOUCH PANEL PCB COVER	1		
7	810338800	EDGING SADDOL	2	ES-1010	
8	ML2-707-00	19LCD BASE BRKT ASM	1		
9	ML2-716-00	T PNL RUBBER	2		
10		EDGING FOR TOUCH PANEL	2		
11		19IN TOUCH PANEL	1	Model Name: PTD-7019-D-02	
				Manufacturer: PENTEL Co.,L	TD.
12	ML2-717-00	19LCD ADJUSTER BRKT LR 2	2		
13		ONE TOUCH BUSH	2	NB-8	
14		19IN LCD	1	Model Name: LM190E03	
				Manufacturer: LG.PHILIPS LO	CD CO., LTD
15	ML2-408-00	19IN LCD CASE ASM	1		
16		INVERTER PCB	1	IM6501	
17	ML2-183-00	19IN INSURATION SHEET	1	PC t=0.5	
18		SCALING PCB	1	Model Name: CSC001	
				Manufacturer: ARUZE GAMIN	NG AMERICA INC.
19	ML2-419-00	19IN LCD REAR COVER ASM	1		
20	ML2-418-00	19IN LCD ADJ COVER	1	SECC t=1.2	
21		ST W HIGH VOLTAGE UL	1	PET t=0.75	
22	2D4106400	LCD RUBBER	6	EPM	
22	2D4106400	LCD RUBBER	2	EPM	For 3 REEL
23	ML2-700-0	19LCD ADJUSTER BRKT UNDER	1		For 3 REEL
24	ML2-701-0	19LCD ADJUSTER BRKT LR	2		For 3 REEL
25		19IN LCD UNIT 3W	1	3W 061120	For 3 REEL
26	ML2-715-00	3 REEL WALL PLT UL	2		For 3 REEL
27	ML2-724-00	3-4 REEL SIDE WALL	2		For 3 REEL
28	ML2-725-00	3-4 REEL SIDE WALL LR	2		For 3 REEL
29		EDGING SADDLE	1		For 3 REEL

No. 11 3 REEL ASSEMBLY



Chapter 8: Machine Specifications

3 REEL ASSEMBLY (PARTS LIST)

ITEM	PART NO.	PARTS NAME	Q'TY	MATERIAL/TYPE	REMARKS
1	ML2-709-00	ASSY 3REEL BASE	1		
2		ST C NOT TOUCH UL	3	PET t=0.75	
3		REEL TAPE	3	PC t=0.2	
4	500-0131	BD-GM-M2DRV/P509006-0303TI	1		
5	ML2-708-00	REEL DRV CASE	1		
6	810338000	EDGING SADDLE	2	TSB-1915	
7	810291400	EDGE SUPPORT	4	ELBT-4N	
8	20222670	REEL END WASHER	3		
9	500-0140	BD-GM-BKLED3/P509013-0202YA	3		
10	REEL-001-00	3 REEL MAIN BASE ASM	3		
11	ML2-727-00	3 REEL BL BASE	3	ABS	
12	ML2-710-00	REEL DRUM 2066IN	3	ABS	
13	ML2-711-00	REEL DRUM 2066OUT	3	ABS	
14		WIRE SADDLE	9	RLWT-1V0	
15		STEP MOTOR	3		
16	REEL-002-00	D SENSOR BASE	3		
17	600290700	PHOTO SENSOR	6	KI1306-AA	

No. 12 GM HOPPER ASSEMBLY (1/2)



GM HOPPER ASSEMBLY (1/2) (PARTS LIST)

ITEM	PART NO.	PARTS NAME	Q'TY	MATERIAL/TYPE	REMARKS
1	0C0306800	SENSOR BKT	1	SECC-C 1.0t	
2	IM-0017-00-2	HOPPER MOUNT BASE	1	SECC-C 2.0t	
3	IM-0103-00	HOPPER BUCKET PARTITION	1	SUS 430-CP 1.0t	
4	IM-0105-00	HOPPER COVER	1	SECC-C 1.0t	
5	0P0308200	HOPPER BUCKET SPRING	4	SWP-B Ø1.4	
6		CONTROL BOX	1	ABS	
7		HOPPER BUCKET FLANGE	1	РОМ	
8		HOPPER BUCKET	1	ABS	
9		GM HOPPER INNER HARNESS	1		
10	3C0305200	GM HOPPER COUNT HARNESS	1		
11	CEK002600	HOPPER PCB	1	Model Name BD-GM-HOPPER/ 98203-N	IH (ROHS)
				Manufacturer: ARUZE GAMING AMERIC	A INC.
12	0P0310800	SPACER	4	4ER25	
13	0P0311000	SPACER	1	4SP25	
14			1	KI659-AALF	
15	2P8003000	ANP BASE	3	ANP 1D	
16	810105200	INSULOCK TIE (CABLE BAND)	4	PLT1M	
17	IM-0104-00-1	HOPPER REAR COVER	1	SECC-C 1.2t	
18	0C0013200	BUILT-IN KNOB	1	AT-100B (Thickness of mounting panel: 1	.2mm)
19		SHIELD TIGHT	1	STG4-9L100	

No. 13 GM HOPPER ASSEMBLY (2/2)



GM HOPPER ASSEMBLY (2/2) (PARTS LIST)

ITEM	PART NO.	PARTS NAME	Q'TY	MATERIAL/TYPE	REMARKS
1		HOPPER BACK PLATE	1	SPCC-SD 3.2t	
2	0C0306600A	COUNT ROLLER ARM	1	SUS 430-CP 1.5t	
3		COIN GUIDE PLATE	1	SUS 304-CSP 0.6t	
4	0C0307200	KNIFE SPACER	1	SPCC-SD 3.2t	
5		COIN SHIELD	1		By token size.
6	0P0302600	COIN WIPER \$	1	SPCC-SD 2.0t	
7	0P0302400	WIPER HOLDER	1	SPCC-SD 1.0t	
8		KNIFE	1		By token size.
9		PIN WHEEL	1	SPCC-SD 3.2t	By token size.
10		SHELF WHEEL	1	SUS 430-CP 1.5t	By token size.
11	0P0306000	COIN WIPER SPRING	2	SWP-B <i>ϕ</i> 0.65	
12	0P0309800	COUNT ARM PIN	1	SS400 Ø 7	
13	0C0309600	COUNT ROLLER	1	SK4 <i>φ</i> 16	
14	0C0309800	COUNT ROLLER AXIS	1	SS400 Ø 10	
15	0P0306200	WIPER SPRING SPACER	2	SS400	
16	0P0308800	ROLLER PIN	4	SK4 φ 7	
17		MOUNTING PLATE	1	ADC-12	
18	2C0305000A	PIN WHEEL DRIVE HUB	1	POM	
19	2P0302200	AGITATOR	1	CR RUBBER	
20		DC MOTOR	1	163DV-2BUVV-L	
21	0P0308600	RADIAL BALL BEARING	4	626ZZ M3SML Y121	
22	0C0309200	SPRING	1	E598	
23	0P0306400	PLASTIC WING BOLT	1	M3×6	
24	0P0310600	SPACER	3	1382309-50055	
25	2C0305600	WASHER	1	CC-0613-10	
26		SPRING	1		



Block Diagram

Block Diagram



Wiring Diagram

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EDGE CONNECTOR

FLAT CABLE 40P

PC12

BE 406 월

()) 11 AC 0FF 0UT 233

D FCB CASE SW COM D FCB CASE SW NO C FCB CASE SW NO

20 40b

AC OFF OUT (N)

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SW HARNESS SW HARNESS

(BRL)

(EM7)

+3' 3A3 (81) +3' 3A3 (81) +3' 3A5 (91) bdue k 0k +3' 3A1 (91) -13A 001 (8k) -13A 001 (8k) -13A 001 (8k) -13A 001 (8k)

CMOB (18K) CMOS (18K)

PCI) PCI

PIP2 HARNESS

(785) (785)

AP7 PCB P1 HARNESS

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BK EX

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CND11 +15A4

MAIN SW HARNESS

G P1P2 HARNESS G P1P2 HARNESS G PIP2 HARNESS

ACP

(R) (Y) (BK)

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NONCON 11213

G DOOR PCB

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(R) (SK)

POTER BOX DC FAN

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B S S S

ACP

9-2

9-4

G-ENEX Video Slot Gaming Machine

G-ENEX Video Slot Gaming Machine Service Manual

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