



Be Sure to Read this Manual Before Use

# **Operation Manual**



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Thank you for purchasing Crystal Ball. We hope you enjoy the product.

This manual contains valuable information about how to operate and maintain your game machine properly and safely. It is intended for the owner and/or personnel in charge of product operation. Carefully read and understand the instructions.

If you need any help during installation and setup please utilize this manual and troubleshooting guide. If the product fails to function properly, *non-technical personnel* should under no circumstance attempt to service the machine. Contact your distributor or manufacturer for help.

Before use, please read IMPORTANT SAFETY INSTRUCTIONS.

#### IMPORTANT SAFETY INSTRUCTIONS

To ensure the safe usage of this product, carefully read and understand these instructions before operating your game. Save these instructions for future reference.

Use this product only as described in this manual. Other uses not recommended may cause fire, electric shock or personal injury. Unplug the game from the outlet when not in use, when moving from one location to another, and before cleaning/servicing. Explanations which require special attention are indicated by signs of warning. Depending on the potential hazardous degree, the terms: **NOTE**, **NOTICE**, and **WARNING** are used.

NOTE: A NOTE indicates useful hints or information about product usage.

**NOTICE**: A NOTICE indicates potential damage to product and how to avoid the problem.

**WARNING:** A WARNING indicates a potential for product damage or serious personal Injury.

It is important to understand the meaning of the following <u>HAZARD SIGNS</u> before continuing:

#### High Voltage and Shock Hazard:

High voltage can cause electric shock. Turn off/unplug power before servicing.

#### **High Temperature Hazard:**

This part may cause scalding.

Do not touch. Surface may be hot.

#### No Touching Hazard:

This part may be hot or can cause electric shock. Do not touch.







Use the following safety guidelines to help ensure your own personal safety and to help protect your equipment and surrounding environment from potential damage.



## This product is an indoor game machine. Do not install outdoors.

Avoid installing in the following places to prevent fire, electric shock, injury and/or machine malfunctioning:

- Places subject to rain/moisture, or places subject to high humidity.
- Places subject to direct sunlight, or places subject to extremely hot or cold temperatures to ensure that it is used within the specified operating range.
- Places where inflammable gas may be present or in the vicinity of highly inflammable/volatile chemicals or items that can easily catch fire
- On unstable or sloped surfaces. The machine may topple or cause unforeseen accidents.
- Vicinity of fire exits, fire extinguishers etc. that may block/prevent safety measures



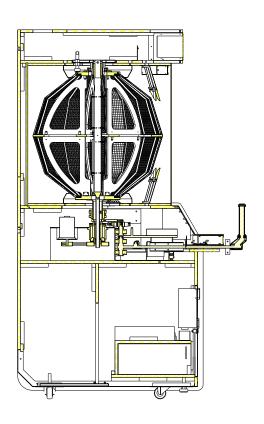
#### WARNING

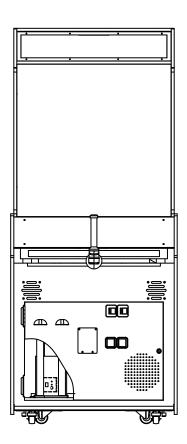
Non-technical personnel who do not have technical knowledge or expertise should not attempt to perform the maintenance procedures required to maintain this game. Failing to comply can cause severe accidents such as electric shock or other serious injuries.

WARNING: To reduce the risk of fire, electric shock or personal injury, unplug or disconnect the machine from the power supply before servicing.

Note: The contents of this manual may be updated without notice.

### 1. SPECIFICATIONS





Rated power supply: AC110V 50/60Hz

Min. Power consumption: 100W Max. Power consumption: 300W

Dimensions: 486(L) X330(W) X783(H) (inch)

Weight:

NOTICE: After turning off the game, please wait at least 1 minute before restarting again.

**Note**: Game parameters are subject to change without notice.

### 2. PACKAGE CONTENTS

Open the package and make sure all the items are included:

- 1 x Body Assembly
- Following accessories

Item	Part NO.	Name	Specification	Qty	Illustration	Note
1	C116-401-000	Light bulb	12V 3W	4		
2	C116-402-000	Fuse	Ф5×20mm T6A/250VAC	1		
3	C116-701-000	Manual	ENGLISH	1		
4	C116-403-000	Key	171	2	-	Service door
-	C116-404-000	ricy	2222	2	Grand Company of the	Coin box
5	C116-801-000	Power cord	10A/250V-1.8M	1		

If any items are found to be missing, please contact your sales representative for help immediately.

**NOTE:** Part models are subject to change without notice.

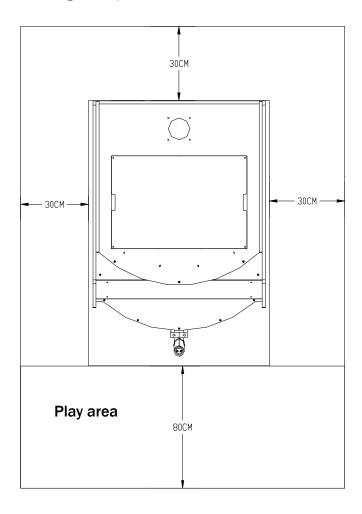
### 3. SET UP & INSTALLATION

# This product is an indoor game machine. Do not install outdoors.

- Refer to IMPORTANT SAFETY INSTRUCTIONS (Pg. 2) for places to avoid
- Place the unit on a dry level surface
- Ventilation openings in the back of the unit must not be obstructed by objects or by wall.

#### 3.1 Play Zone

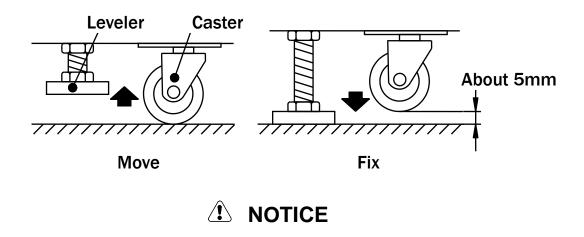
This machine requires space for playing and for maintenance as shown below. Leave space around the game upon installation:



#### 3.2 Level Adjustment

Install this machine on a flat surface. Adjust levers to lift casters off the ground to level the game. If the game is installed on an unsuitable floor, it could cause a malfunction.

To fix the game, adjust the Leveler down until it touches the floor, lifting the casters off the ground by 5mm. Repeat the same for all levelers.



Make sure the machine is level with the ground and all the adjustable legs should stick to the floor closely.

#### 3.3 Transporting the Game

If you need to move the game, adjust the levelers back to an "up" position so the casters touch the ground.

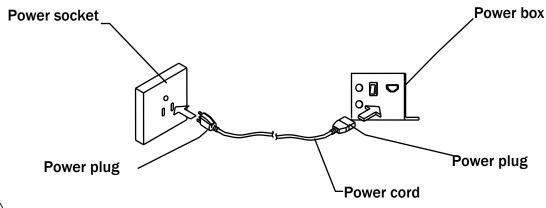


- Be careful not to damage the machine during transport.
- The machine should be handled with care when bringing it down from a higher level.
- Always unplug the game before moving.
- Keep the machine in upright position during transport.
- For longer distance transport, package the game properly to prevent damages.

#### 3.4 Connecting Power

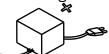
**WARNING:** Check the voltage rating before you connect the equipment to an electrical outlet to ensure that the required voltage and frequency match the available power source. Please refer the label of the machine.

- Do not plug the equipment power cables into an electrical outlet if the power cable is damaged.
- Avoid putting many loads on one electrical outlet as it could generate heat and fire resulting from overload.
- Connect the grounding conductor to the earth terminal (GND):



## **WARNING**

Ensure no heavy objects rest on the power cord. Check to make sure the game cabinet does not sit on the power cord as this could damage the cord and become hazardous.



To disconnect the game, grip the plug and pull it from the wall outlet. Never pull by the cord.



To prevent electric shock, do not touch the power plug when hand is wet.



Ensure that nothing rests on the power cord and that it is not located where it can be stepped on or tripped over.

## 4. HOW TO PLAY

1. Insert coin(s) for credits.

spin the ball

2. Pull the lever to spin the ball.



### 5. GAME OPTIONS

- 1. Refer to the I/O chart, wiring diagram and main board diagram for corresponding INPUT and OUTPUT settings.
- 2. Adjust DIP settings based on the I/O chart. Words in **CAPITAL** letters are default settings; operators can adjust settings according to location earnings.

#### 5.1 DIP settings

#### 5.1.1 Super Bonus Credit

Itom	Content	SW	1	Note		
Item		1	2	Note		
Super	4	on	on	Insert coins to		
Bonus	3	off	on	activate the Bonus		
Credit	2	ON	OFF			
	1	off	off			

#### 5.1.2 Auto start time(s)

	Content		DIPSW1		Noto		
Item		3	4	5	Note		
	10	on	on	on	Adjust the auto		
	15	off	on	on	start time if no		
Α	20	on	off	on	operate to the		
Auto	25	OFF	OFF	ON	game.		
start time(s)	30	on	on	off			
une(s)	35	off	on	off			
	40	on	off	off			
	45	off	off	off			

#### 5.1.3 Mercy ticket per arrow

Itom	Contont	DIPS	SW1	Noto		
Item	Content	6	7	Note		
Mercy	0	on	on	Adjust the		
ticket	2	off	on	minimum ticket		
per	4	ON	OFF			
game	6	off	off			

#### 5.1.4 Score memory

Item	Content	DIPSW1	Note			
item	Content	8	Note			
Score	YES	ON	Adjust to keep a record			
memory	NO	off	when power off.			

#### 5.1.5 Score Group

ltom	Content	DIPSW	/2	Noto
Item		7	8	Note
	Α	on	on	4 groups of
Score	В	OFF	ON	numbers to
Group	С	on	off	select.
	D	off	off	

Α	BONUS	10	12	20	15	5/150/5	12	10	20	5/150/5	20	10	12	5/150/5	15	20	12	10
В	BONUS	10	12	20	15	4/100/4	12	10	20	4/100/4	20	10	12	4/100/4	15	20	12	10
С	BONUS	10	8	15	8	3/80/3	8	10	15	3/80/3	15	10	12	3/80/3	8	15	8	10
D	BONUS	10	6	10	5	2/50/2	6	10	10	2/50/2	10	10	12	2/50/2	5	10	6	10

#### 5.1.6 Super bonus

Itom	Contont				DIP	SW3			
Item	Content	1	2	3	4	5	6	7	8
	100	on	on	on	on				
	200	off	on	on	on				
	300	on	off	on	on				
	400	off	off	on	on				
	500	ON	ON	OFF	ON				
	600	off	on	off	on				
	700	on	off	off	on				
Super	800	off	off	off	on				
bonus	900	on	on	on	off				
	1000	off	on	on	off				
	1200	on	off	on	off				
	1400	off	off	on	off				
	1600	on	on	off	off				
	1800	off	on	off	off				
	2000	on	off	off	off				
	3000	off	off	off	off				

#### 5.1.7 Mode

Itom	Content	DIPSW3						
Item	Content	5	6	7	8			
Mada	Normal			ON				
Mode	Test			off				
		ON	ON		ON			

#### 6. MAINTENANCE & INSPECTION

#### 6.1 Safety Check

Check the points listed before operating the machine. These checks are necessary for safe machine operation:

- 1. Try to run the game before operation each day.
- 2. Conduct monthly routine checks of game components ensure good working condition
- 3. Check the machine regularly for dust and clean when necessary.

Note: Parts and components require preventative maintenance to be kept running smoothly

#### **6.2 Handling Precautions**

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

Non-compliance with the following points or inappropriate handling running counter to the cautionary matters herein stated can cause personal injury or damage to the machine

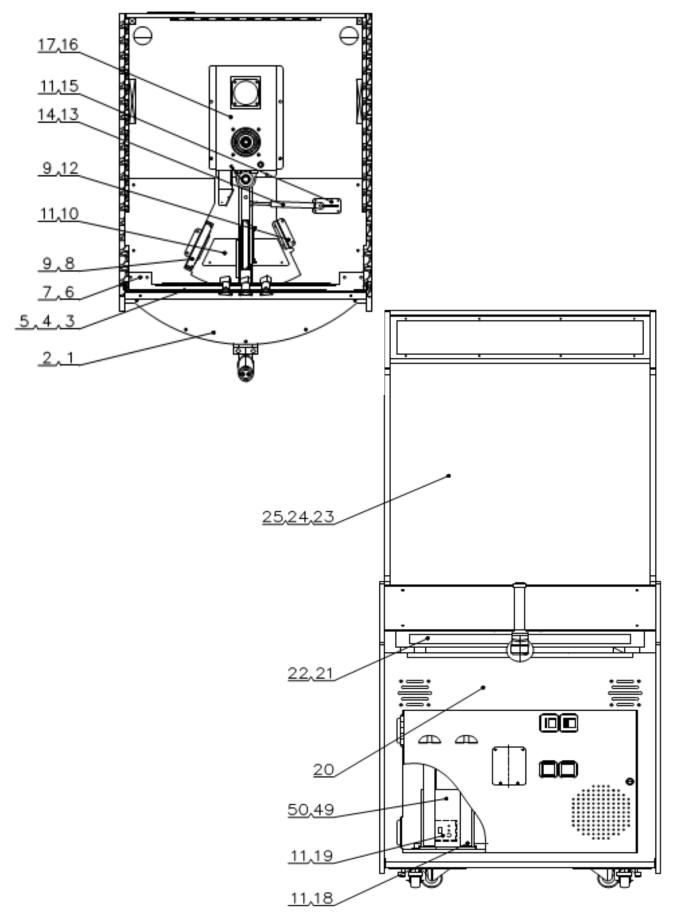


#### **WARNING**

- Before servicing the machine, be sure to turn power off. Servicing without turning the power off can cause electric shock or short circuit.
- To avoid electric shock or short circuit, do not plug then unplug the power quickly
- Do not expose power cords and earth wires, these are susceptible to damage.
- Damaged cords and wires can cause electric shock or short circuit and should be replaced immediately.
- When or after installing the product, avoid pulling the power cord to prevent unnecessary wear and tear. Use the power button to disconnect power.
- In case the power cord is damaged, ask for replacement through where the product was purchased from or replace locally. Continued usage of damaged cord can cause fire, electric shock or leakage.
- Perform grounding appropriately. Inappropriate grounding can cause electric shock.
- Use fuses that meet specified rating. Fuses that exceed the specified rating may cause electrical problems or even shock.
- Should a problem occur, turn off the power immediately and stop operating the machine.
   Unplug the power cord of the service outlet. Operating the machine without correcting the problem may cause a fire or injuries.
- Insert the power plug securely into the outlet. Poor contact may cause overheating, resulting in fire or burns.
- To ensure the warning labels attached on the machine are visible and legible, install the
  machine in a well-lit location, and keep the labels clean at all times. Make sure the
  labels are not hidden behind other game machines.

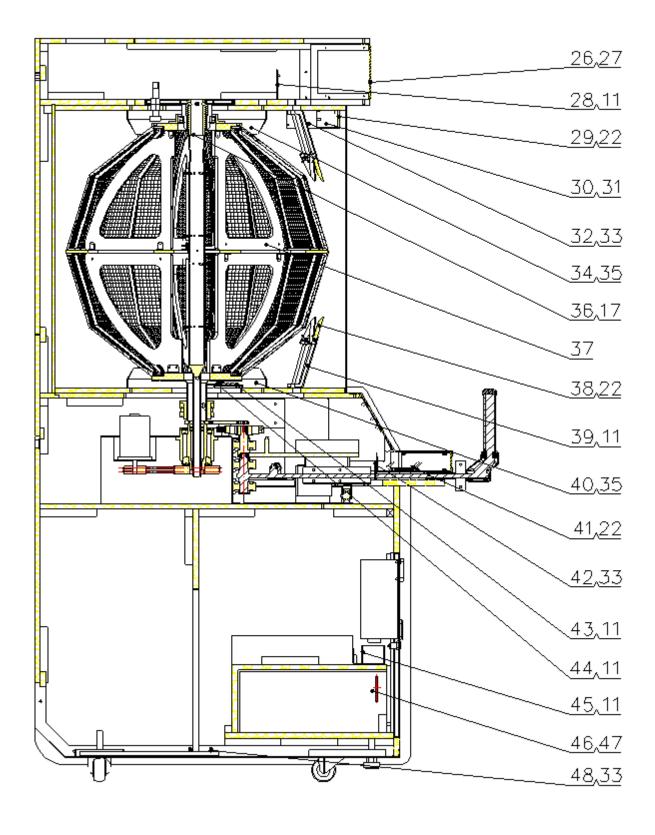
## 7. OVERALL CONSTRUCTION

### 7-1 Main Assembly 1



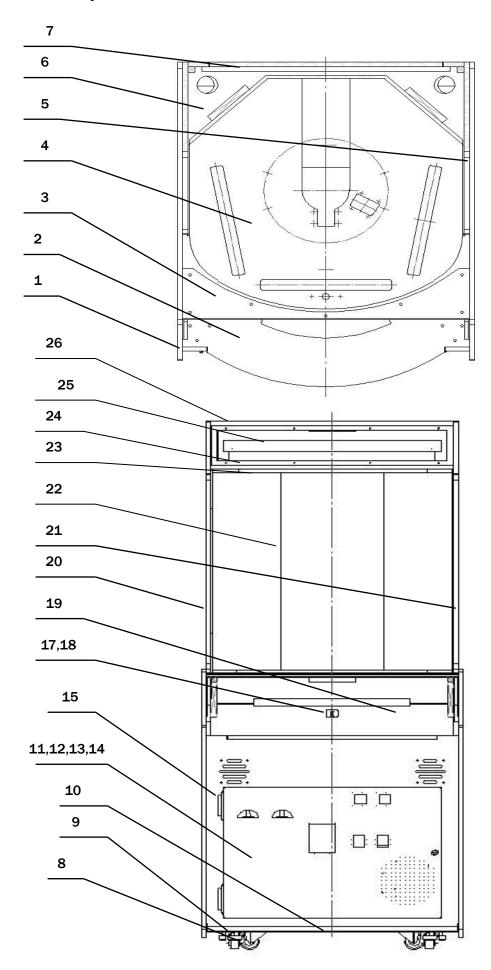
Item	Part NO.1	Part NO.2	Name	Spec.	Qty	Note
1	C116-601-000	CB-01-01	Control panel	Transparent plexi	1	
2	C116-101-000	CB-01-02	Hexagon socket countersunk head screw	Q235	9	
3	C116-102-000	CB-01-03	Control panel bracing sheet	Q235	1	
4	C116-103-000	CB-01-04	Mushroom head square neck bolt	Q235	4	
5	C116-405-000	CB-01-05	Hexagon nut with flange	M4	4	
6	C116-104-000	CB-01-06	Control panel bracket	Q235	1	
7	C116-105-000	CB-01-07	Cross recessed hexagon bolt with indentation and washer	Q235	6	
8	C116-106-000	CB-01-08	Electromagnetic lock fixation bracket	Q235	1	
9	C116-107-000	CB-01-09	Cross hexagon bolt with indentation and washer	Q235	14	
10	C116-108-000	CB-01-10	Pulley bottom plate	Electrolysis plank	1	
11	C116-109-000	CB-01-11	Cross pan head screw with washer	M4*16	37	
12	C116-110-000	CB-01-12	Lever stop	Q235	1	
13	C116-111-000	CB-01-13	Gas spring	D18*D8 B300	1	
14	C116-112-000	CB-01-14	R type lock pin	D2	2	
15	C116-113-000	CB-01-15	Gas rod bracket	Q235	1	
16	C116-001-000	CB-01-16	Lever Assembly	Assembly drawing	1	
17	C116-114-000	CB-01-17	Cross hexagon bolt with indentation and washer	M8*20	6	
18	C116-115-000	CB-01-18	Ticket box	Q235	2	
19	C116-116-000	CB-01-19	Power supply support	Q235	1	
20	C116-002-000	CB-01-20	Cabinet Assembly	Assembly drawing	1	
21	C116-602-000	CB-01-21	Control panel light sheet	PC	1	
22	C116-117-000	CB-01-22	Hexagon nut with flange	M3	34	
23	C116-603-000	CB-01-23	Cover	Transparent PVC	1	
24	C116-118-000	CB-01-24	A& C level big washer	5*1.2h GB	8	
25	C116-119-000	CB-01-25	Cross pan head screw with washer	M5*16	8	

### 7-2 Main Assembly 2



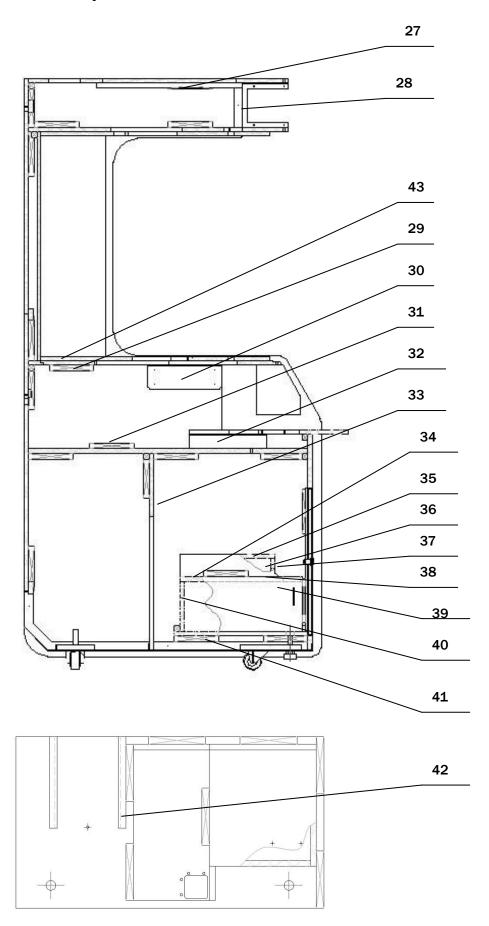
Item	Part NO.1	Part NO.2	Name	Spec.	Qty	Note
26	C116-604-000	CB-02-26	Marquee plexi	Transparent plexi	1	
27	C116-120-000	CB-02-27	Hexagon socket button head	Stainless steel	8	
			screw			
28	C116-121-000	CB-02-28	Daylight lamp bracket	Q235	1	
29	C116-605-000	CB-02-29	Top LED strip panel	Plexi	1	
30	C116-122-000	CB-02-30	Top LED strip bracket	Q235	1	
31	C116-123-000	CB-02-31	Hexagon nut with flange	M4	4	
32	C116-124-000	CB-02-32	Top LED strip cover	Q235		
33	C116-125-000	CB-02-33	Cross pan head screw with	M4*10	12	
			washer			
34	C116-126-000	CB-02-34	Ball top holder	Mirror steel	2	
35	C116-127-000	CB-02-35	Cross pan head screw with	Q235	12	
			washer			
36	C116-003-000	CB-02-36	Axle Centre Assembly	Assembly drawing	1	
37	C116-004-000	CB-02-37	Ball Assembly	Assembly drawing	1	
38	C116-606-000	CB-02-38	Arrow	Transparent plexi	2	
39	C116-128-000	CB-02-39	Arrow holder	Mirror steel	2	
40	C116-129-000	CB-02-40	Ball bottom holder	Mirror steel	2	
41	C116-130-000	CB-02-41	LED strip panel	Q235	3	
42	C116-406-000	CB-02-42	Aluminum alloy brush	28mm*0.56M	1	
43	C116-131-000	CB-02-43	Electric eye installation board	Q235	1	
44	C116-132-000	CB-02-44	Bonus sensor installation	Mirror steel	1	
45	C116-133-000	CB-02-45	Coin channel	Q235	1	
46	C116-134-000	CB-02-46	Coin slot	Q235	1	
47	C116-407-000	CB-02-47	Key	2222	1	
48	C116-135-000	CB-02-48	Electronic parts holder	electrolysis plank	1	

### 7-3 Cabinet Assembly 1



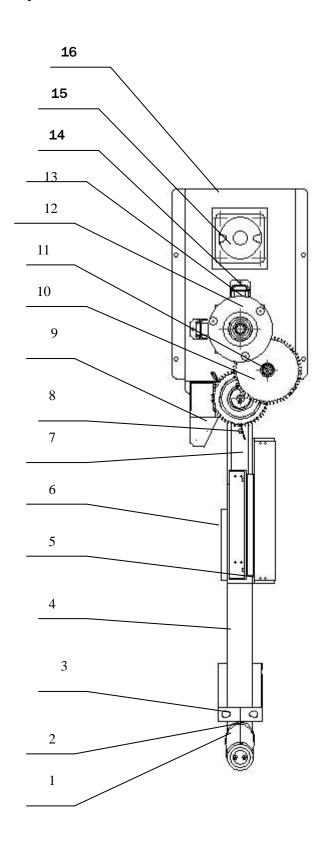
Item	Part NO.1	Part NO.2	Name	Spec.	Qty.	Note
1	C116-501-000	CB-03-01	Left cabinet	MDF	1	
2	C116-502-000	CB-03-02	Middle board	MDF	1	
3	C116-503-000	CB-03-03	Console board	MDF	1	
4	C116-504-000	CB-03-04	Bottom limiting plate	MDF	1	
5	C116-505-000	CB-03-05	Right cabinet	MDF	1	
6	C116-506-000	CB-03-06	Console board clapboard	MDF	1	
7	C116-507-000	CB-03-07	Upper service door panel	MDF	1	
8	C116-408-000	CB-03-08	2.5" Caster	3-2689-52	4	
9	C116-136-000	CB-03-09	2.5" Leveler	Q235	4	
10	C116-137-000	CB-03-10	Base	Q235	1	
11	C116-138-000	CB-03-11	Front door	Q235	1	
12	C116-409-000	CB-03-12	Bend hinge	4inch	2	
13	C116-139-000	CB-03-13	Ticket machine board	Q235	1	
14	C116-607-000	CB-03-14	Coin machine support	Plastic	2	
15	C116-140-000	CB-03-15	Hinge strengthening	Q235	2	
16	C116-141-000	CB-03-16	Front board	MDF	1	
17	C116-142-000	CB-03-17	Door lock holder	electrolysis plank	1	
18	C116-410-000	CB-03-18	Key	171	2	
19	C116-509-000	CB-03-19	Bottom service door panel	MDF	1	
20	C116-510-000	CB-03-20	Upper L panel	MDF	1	
21	C116-511-000	CB-03-21	Upper R panel	MDF	1	
22	C116-512-000	CB-03-22	Reflector panel	MDF	1	
23	C116-513-000	CB-03-23	Top limiting plate	MDF	1	
24	C116-514-000	CB-03-24	Marquee bottom board	MDF	1	
25	C116-515-000	CB-03-25	Back door deckle board	MDF	1	
26	C116-516-000	CB-03-26	Marquee top board	MDF	1	

### 7-4 Cabinet Assembly 2



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Item	Part NO.1	Part NO.2	Name	Spec.	Qty.	Note
27	C116-517-000	CB-04-27	Top service door	MDF	1	
28	C116-143-000	CB-04-28	Marquee main body frame	Q235	1	
29	C116-518-000	CB-04-29	Indian cypress block	20*20*150	52	
30	C116-144-000	CB-04-30	Console panel holder	Q235	2	
31	C116-519-000	CB-04-31	Cabinet base plate	MDF	1	
32	C116-145-000	CB-04-32	Middle board strengthening	Q235	2	
33	C116-520-000	CB-04-33	Cabinet strengthening	MDF	1	
34	C116-521-000	CB-04-34	Coin box top board	MDF	1	
35	C116-522-000	CB-04-35	Subwoofer top board	MDF	1	
36	C116-523-000	CB-04-36	Subwoofer side board	MDF	1	
37	C116-524-000	CB-04-37	Subwoofer holder	MDF	1	
38	C116-525-000	CB-04-38	Subwoofer middle board	MDF	1	
39	C116-526-000	CB-04-39	Coin box side board	MDF	1	
40	C116-527-000	CB-04-40	Subwoofer back board	MDF	1	
41	C116-528-000	CB-04-41	Subwoofer base board	MDF	1	
42	C116-529-000	CB-04-42	Ticket dispenser block	Indian cypress	2	
43	C116-530-000	CB-04-43	Console shutter	MDF	1	

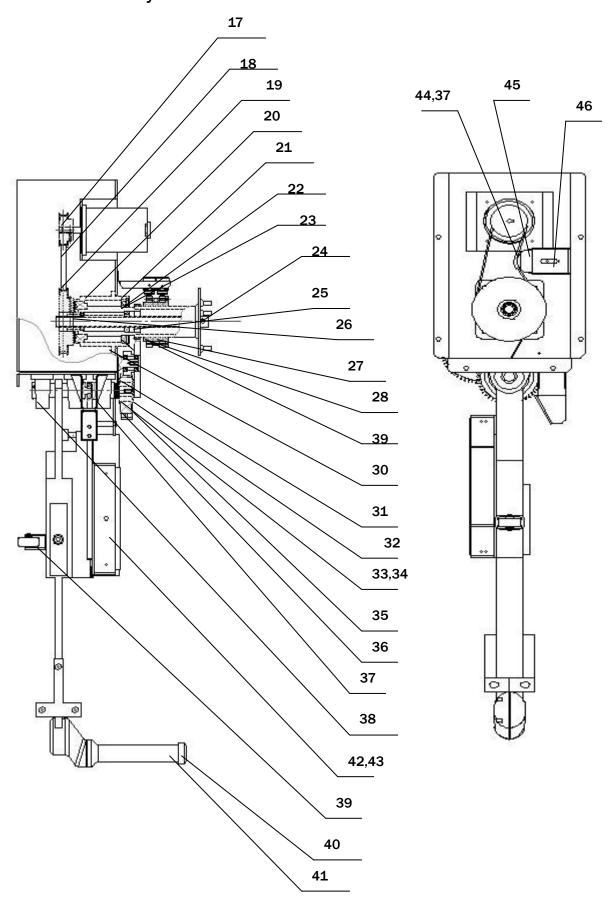
### 7-5 Lever Assembly 1



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Item	Part NO.1	Part NO.2	Name	Spec.	Qty.	Note
1	C116-608-000	CB-05-01	Lever L injection molding	ABS	1	
2	C116-609-000	CB-05-02	Lever R injection molding	ABS	1	
3	C116-610-000	CB-05-03	Lever rubber stop	Rubber	2	
4	C116-005-000	CB-05-04	Lever	Assembly welding	1	
5	C116-146-000	CB-05-05	Transmission electromagnetic lock plate	Q235	1	
6	C116-411-000	CB-05-06	Electromagnetic lock	150H	2	
7	C116-147-000	CB-05-07	One-way swing stem	45#	1	
8	C116-148-000	CB-05-08	Torsion bar spring	65Mn	1	
9	C116-149-000	CB-05-09	Resetting adjusting plate	Q235	1	
10	C116-150-000	CB-05-10	Transmission gear	45#	1	
11	C116-412-000	CB-05-11	Deep groove ball bearing	61902	2	
12	C116-151-000	CB-05-12	Rotary support	45#		
13	C116-413-000	CB-05-13	Electric brush	152 electric brush with seat	4	
14	C116-152-000	CB-05-14	Electric brush seat	Q235	2	
15	C116-414-000	CB-05-15	D.C. machine	Z5D40-24A1	1	
16	C116-153-000	CB-05-16	Lever assembly plate	Q235	1	

#### 7-6 Lever Assembly 2

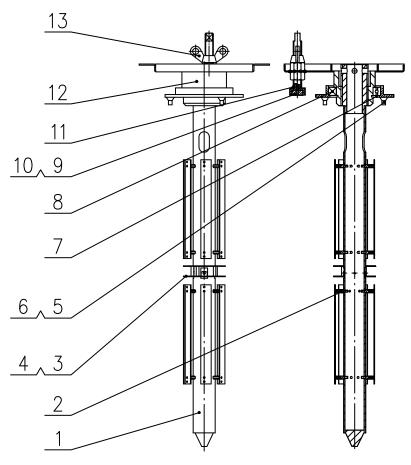


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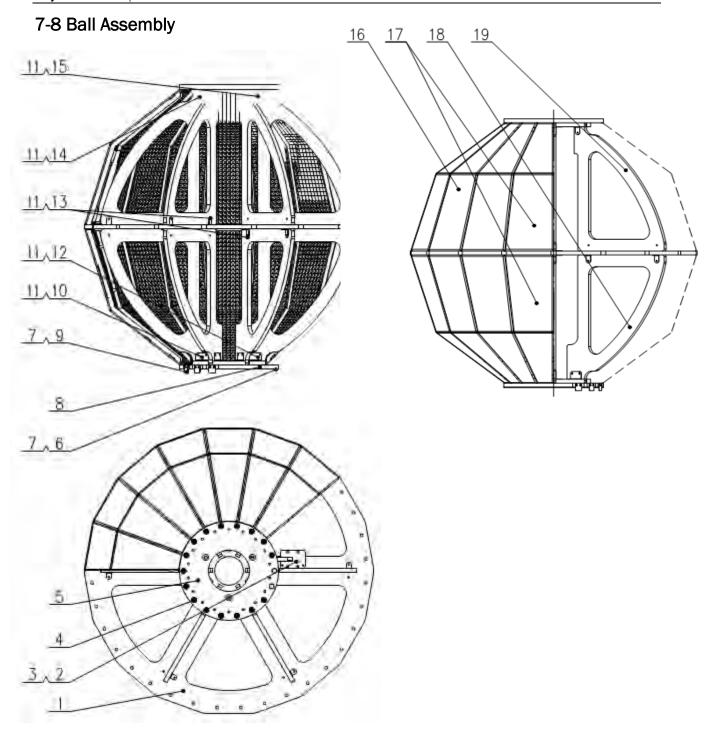
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Item	Part NO.1	Part NO.2	Name	Spec.	Qty.	Note
17	C116-154-000	CB-06-17	Motor gear	Aluminum	1	
18	C116-415-000	CB-06-18	Round drive belt	Polyurethane	ne 2	
19	C116-155-000	CB-06-19	Motor engaged wheel	Aluminum	1	
20	C116-416-000	CB-06-20	Single-row tapered roller bearing	32009	1	
21	C116-611-000	CB-06-21	Principal axis dust cap	Nylon	1	
22	C116-417-000	CB-06-22	Deep groove ball bearing	16010	1	
23	C116-156-000	CB-06-23	Principal axis	45#	1	
24	C116-157-000	CB-06-24	Principal axis centre	Q235	1	
25	C116-418-000	CB-06-25	Deep groove ball bearing	61904ZZ	1	
26	C116-419-000	CB-06-26	Deep groove ball bearing	61804	1	
27	C116-612-000	CB-06-27	Electric conduction bracket	Nylon	2	
28	C116-158-000	CB-06-28	Conducting ring	Stainless	2	
29	C116-613-000	CB-06-29	Insulation ring	Nylon	1	
30	C116-159-000	CB-06-30	Principal axis base bracket	45#	1	
31	C116-420-000	CB-06-31	General A-type parallel key	12*8*22	1	
32	C116-160-000	CB-06-32	Φ40 washer	Q235	1	
33	C116-161-000	CB-06-33	One-way bearing axle housing	45#	1	
34	C116-421-000	CB-06-34	General A-type parallel key	5*5*24	1	
35	C116-422-000	CB-06-35	Deep groove ball bearing	CSK40	1	
36	C116-162-000	CB-06-36	Driving wheel	45#	1	
37	C116-423-000	CB-06-37	Deep groove ball bearing	6000	1	
38	C116-424-000	CB-06-38	Bearing with spherical outside surface	UCPA2/204	3	
39	C116-425-000	CB-06-39	1.5" One-way nylon wheel	1-1568-23	1	
40	C116-614-000	CB-06-40	Lever injection molding	ABS	1	
41	C116-615-000	CB-06-41	Lever bearing	Nylon	1	
42	C116-163-000	CB-06-42	Transmitt support plate	Q235	1	
43	C116-164-000	CB-06-43	Electromagnetic lock		1	
44	C116-165-000	CB-06-44	Adjust wheel	Aluminum	1	
45	C116-166-000	CB-06-45	Adjust wheel plate	Q235	1	
46	C116-167-000	CB-06-46	Adjust wheel base plate	Q235	1	

### 7-7 Axle Centre Assembly



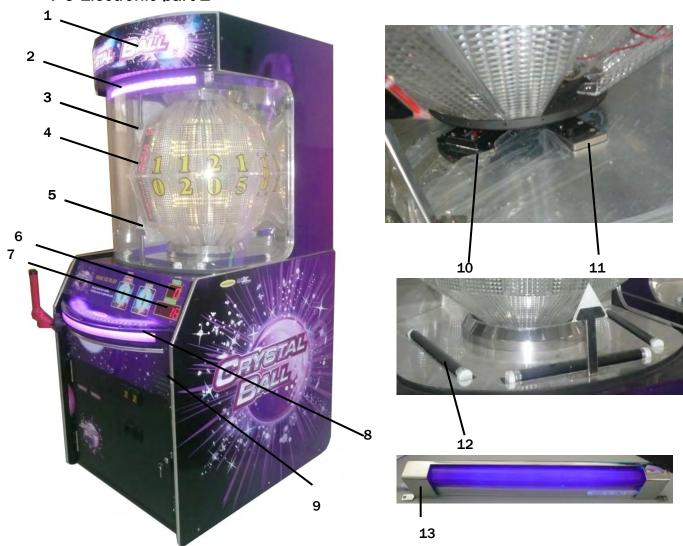
Item	Part NO.1	Part NO.2	Name	Spec.	Qty.	Note
1	C116-168-000	CB-07-01	Ball axle center	Q235	1	
2	C116-426-000	CB-07-02	Hexagon bolt	Brass	24	
3	C116-169-000	CB-07-03	Axle center sensor fixing plate	Electrolysis plank	2	
4	C116-170-000	CB-07-04	Cross pan head screw with washer	M4*8	4	
5	C116-171-000	CB-07-05	Chuck	45#	1	
6	C116-172-000	CB-07-06	Hexagon socket set screw with flat point	M4*6	2	
7	C116-173-000	CB-07-07	A-type circlip for shaft	do70	1	
8	C116-427-000	CB-07-08	Deep groove ball bearing	61914Z	1	
9	C116-428-000	CB-07-09	Permanent magnet	NdFeB Magnet	1	
10	C116-174-000	CB-07-10	Hexagon socket countersunk head screw	Q235	1	
11	C116-616-000	CB-07-11	Magnetic force adjusting lever	Nylon	1	_
12	C116-175-000	CB-07-12	Axle center fixing bracket	Q235	1	
13	C116-176-000	CB-07-13	Butterfly nut	Q235	1	



#### Crystal Ball Operation Manual

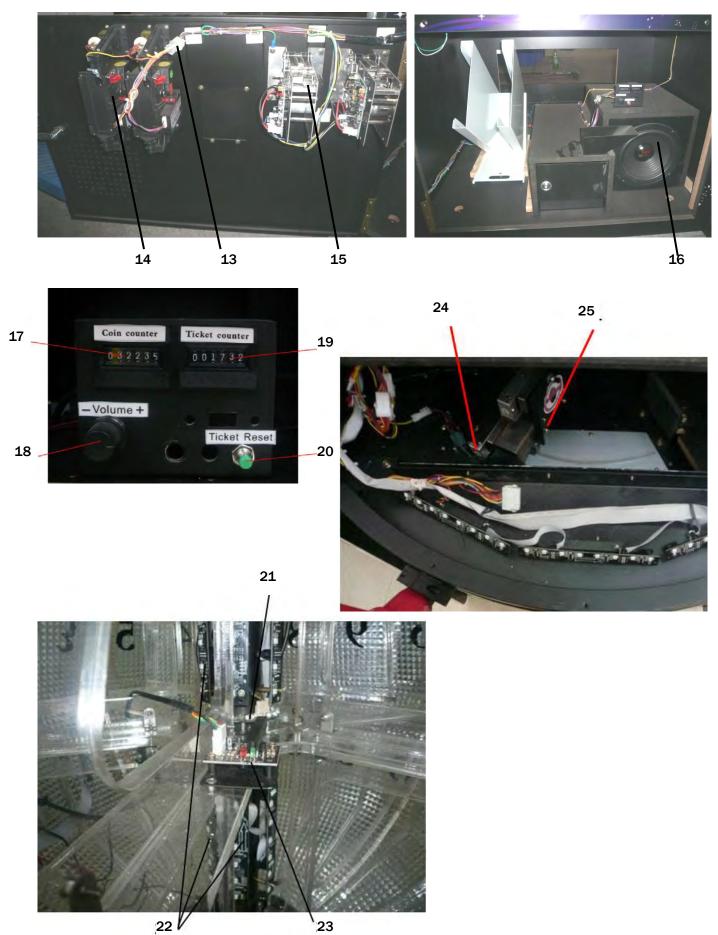
Crysta	al Ball Operation	Manual			Ver. 1	.0
Item	Part NO.1	Part NO.2	Name	Spec.	Qty.	Note
1	C116-617-000	CB-08-01	Ball middle sheet	Transparent plexi	1	
2	C116-177-000	CB-08-02	Sensor installation board	Q235	1	
3	C116-178-000	CB-08-03	Cross pan head screw with	M3*10 GB	3	
			washer			
4	C116-429-000	CB-08-04	Permanent magnet	NdFeB Magnet	16	
5	C116-179-000	CB-08-05	Ball top plate	POM	1	
6	C116-180-000	CB-08-06	Angle detecting plate	Q235	1	
7	C116-181-000	CB-08-07	Cross recessed countersunk	Q235	9	
			head screw			
8	C116-182-000	CB-08-08	Ball base plate	POM	1	
9	C116-183-000	CB-08-09	Bonus detecting plate	Sand steel	3	
10	C116-184-000	CB-08-10	Lower frame R mounting	Stainless steel	6	
			bracket			
11	C116-185-000	CB-08-11	Pan head screw with cross	M3*16	112	
			recesses			
12	C116-186-000	CB-08-12	Lower frame L mounting	Stainless steel	6	
			bracket			
13	C116-187-000	CB-08-13	Middle frame mounting	Stainless steel	24	
			bracket			
14	C116-188-000	CB-08-14	Upper frame L mounting	Stainless steel	6	
			bracket			
15	C116-189-000	CB-08-15	Upper frame R mounting	Stainless steel	6	
			bracket			
16	C116-618-000	CB-08-16	Ball cover sheet	PMMA	34	
17	C116-619-000	CB-08-17	Dot matrix cover	PMMA	2	
18	C116-620-000	CB-08-18	Lower frame	Transparent plexi	6	
19	C116-621-000	CB-08-19	Upper frame	Transparent plexi	6	

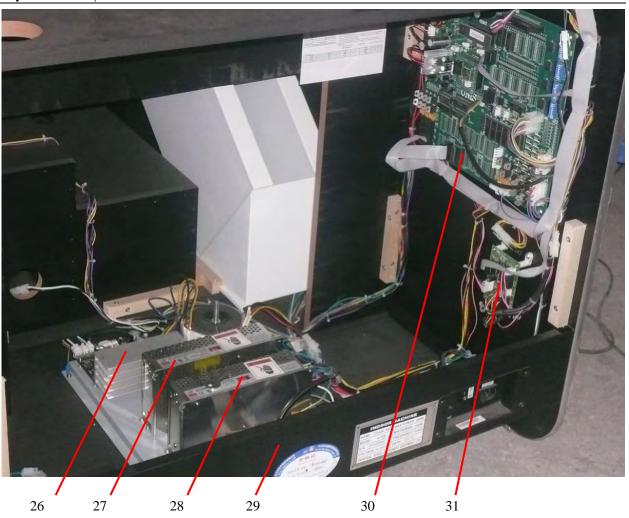
## 7-9 Electronic part 1

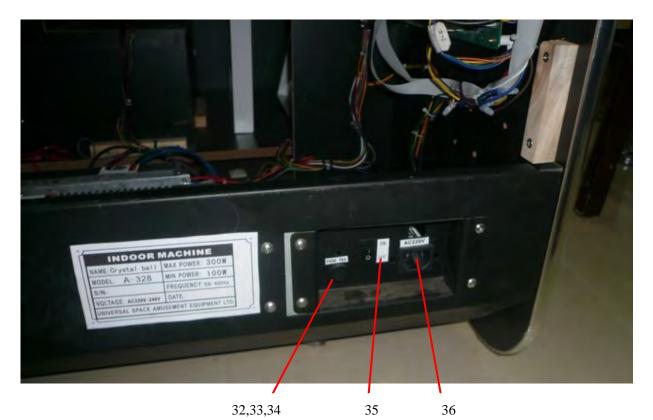


Item	Part NO.1	Part NO.2	Name	Spec.	Qty.	Note
1	C116-430-000	CB-09-01	Marquee light	T5/14W	1	
2	C116-802-000	CB-09-02	Upper LED strip	YHYX-LED01.PCB(V1.1)	1	
3	C116-431-000	CB-09-03	Upper arrow LED	Red	1	
4	C116-803-000	CB-09-04	Dot matrix	MLSM-3088HBHRG1B10	12	
5	C116-432-000	CB-09-05	Lower arrow LED	Red	1	
6	C116-804-000	CB-09-06	Time LED display	LED15B2.PCB	1	
7	C116-805-000	CB-09-07	Score LED display	LED15B4.PCB	1	
8	C116-802-000	CB-09-08	Lower LED strip	YHYX-LED01.PCB(V1.1)	1	
9	C116-433-000	CB-09-09	Speakers	4" 4ohm 15W	2	
10	C116-806-000	CB-09-10	Ball position	MHSJQ-HW02.PCB(V1.0)	1	
			detecting sensor			
11	C116-807-000	CB-09-11	Ball initial value	GPS4238.PCB	1	
			detecting sensor			
12	C116-808-000	CB-09-12	UV light	T8/10W	6	
13	C116-809-000	CB-09-13	Metal plate	Stainless steel	6	

### 7-10 Electronic part 2



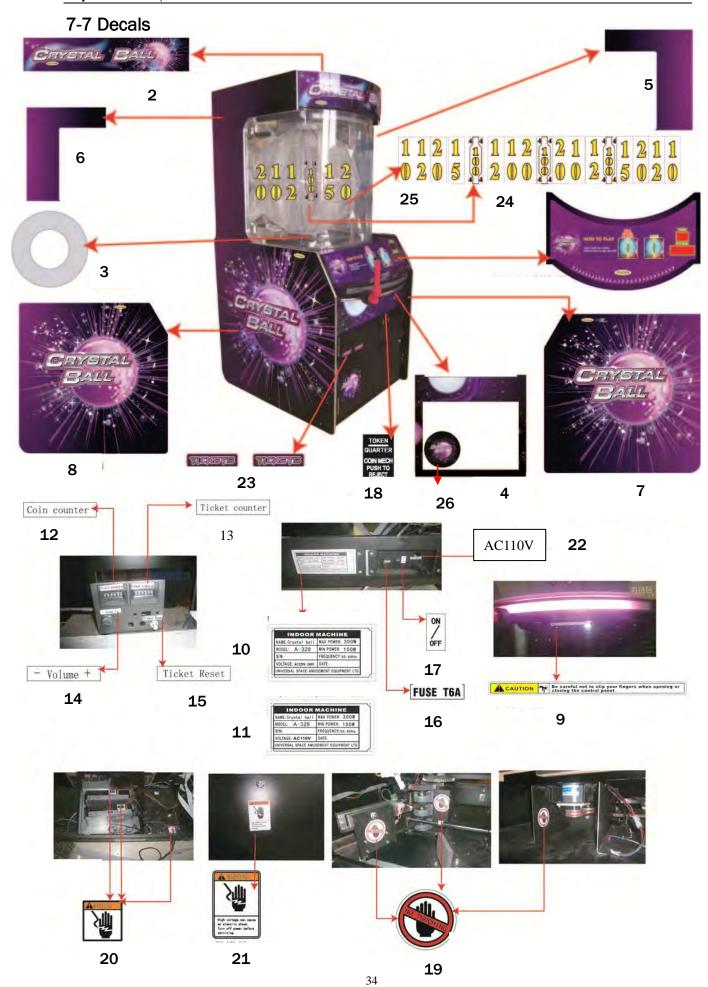




ItemPart NO.1Part NCQty.Note

Cryst	al Ball Operation	Manual			Ver. 1.0
13	C116-434-000	CB-10-13	Coin in LED	12V	2
14	C116-435-000	CB-10-14	Coin mech		2
15	C116-436-000	CB-10-15	Ticket dispenser	CL-022Q-386	2
16	C116-437-000	CB-10-16	Subwoofer	8" 8ohm 150W	1
17	C116-438-000	CB-10-17	Coin counter	C-012 DC12V	1
18	C116-439-000	CB-10-18	Volume knob	Black	
19	C116-440-000	CB-10-19	Ticket counter	C-012 DC12V	1
20	C116-441-000	CB-10-20	Ticket reset	PB:11C02R	1
21	C116-810-000	CB-10-21	Infrared sender	MHSJQ-HW01.PCB(V1.0)	2
22	C116-811-000	CB-10-22	LED board	YHYX-LED01.PCB(V1.1)	12
23	C116-812-000	CB-10-23	Infrared receiver	YLZL-HW.PCB	1
24	C116-442-000	CB-10-24	Lever electro lock		1
25	C116-443-000	CB-10-25	Lever clutch electro		1
			lock		
26	C116-444-000	CB-10-26	Amplifier	ZS150	1
27	C116-445-000	CB-10-27	Power supply	S150-D5+5R	1
28	C116-446-000	CB-10-28	Power supply	S150S24	1
29	C116-447-000	CB-10-29	Relay	SSR-40DD	1
30	C116-813-000	CB-10-30	Mainboard	PLAY V9	1
31	C116-448-000	CB-10-31	pcb board	XHZJ-BFBZ.PCB	1
32	C116-449-000	CB-10-32	Fuse	Φ5×20mm T6A 250VAC	1
33	C116-450-000	CB-10-33	Fuse holder	R3-11 110V/250V/10A	1
34	C116-451-000	CB-10-34	Restore fuse	UF500 5A	
35	C116-452-000	CB-10-35	Switch	T125/55	1
36	C116-453-000	CB-10-36	Filter	10SS1-PB	1
				115/250V10A	

1



Item	Part NO.1	Part NO.2	Name	Spec.	Qty.	Note
1	MHCIO HM 04	CB 07 04	Control named decal	861×553	1	
1	MHSJQ-HM-01	CB-07-01	Control panel decal	silkscreen		
2	MHCIO HM 03	CB-07-02	Margues desal	889×200	1	
2	MHSJQ-HM-02	CB-07-02	Marquee decal	silkscreen	1	
3	MHSJQ-HM-08	CB-07-03	Circle decal	240×240	1	
4	MHSJQ-HM-03	CB-07-04	Front panel decal	804×735	1	
5	MHSJQ-HM-04	CB-07-05	Upper cabinet decal R	784×968	1	
6	MHSJQ-HM-05	CB-07-06	Upper cabinet decal L	784×968	1	
7	MHSJQ-HM-06	CB-07-07	Cabinet decal L	1036×1046	1	
8	MHSJQ-HM-07	CB-07-08	Cabinet decal R	1036×1046	1	
9	MHSJQ-HM-09	CB-07-09	Caution decal	164×11	1	
10	MHSJQ-HM-10	CB-07-10	Non-certified 220V	128×68	1	
			nameplate decal			
11	MHSJQ-HM-11	CB-07-11	Non-certified 110V	128×68	1	
			nameplate decal			
12	TY-HM-01	CB-07-12	Coin counter decal	30×6	1	
13	TY-HM-02	CB-07-13	Ticket counter decal	30×6	1	
14	TY-HM-03	CB-07-14	Volume decal	30×6	1	
15	TY-HM-08	CB-07-15	Ticket reset decal	30×6	1	
16	TY-HM-12	CB-07-16	Fuse decal	22×6	1	
17	TY-HM-16	CB-07-17	ON/OFF decal	12×25	1	
18	TY-HM-24	CB-07-18	Coin counter sticker decal	18×26	2	
19	TY-HM-33	CB-07-19	NO touching decal	66×66	3	
20	TY-HM-36	CB-07-20	High voltage decal SMALL	41×42	3	
21	TY-HM-37	CB-07-21	High voltage decal BIG	62×88	1	
22	TY-HM-40	CB-07-22	110V Label decal	25×6	1	
23	MHSJQ-HM-14	CB-07-23	Ticket output sticker decal	193x23	1	
24	MUCIO UM 15	CP 07 24	Score board decal	80×200	2	
24	MHSJQ-HM-15	CB-07-24	Score board decar	silkscreen 3		
25	MHSJQ-HM-16	CB-07-25	25 Score decal	778×308	1	
20	1411 1-7 CO 11141-TQ	00-01-23	Julie ucual	silkscreen		
26	MHSJQ-HM-17	CB-07-26	Front door circle decal	250×250	1	

## 8. TROUBLESHOOTING

### 8-1 Trouble Shooting

Problem	Potential Cause	Solution	
The game is not	Power is not ON, or power cord is not plugged in properly	Turn on the power button or replace with specified power cord.	
The game is not turning on	The fuse is blown.	Replace with specified rating fuse.	
	Error codes displayed	Please refer to ERROR CODES table below.	
	Incorrect Sound volume settings.	Adjust the volume.	
There is no sound	Faulty connections for various	Check the connectors for	
There is no sound	connectors.	speakers and volume.	
	Faulty speakers	Replace with new speakers.	

#### 8-2 Error Codes

Error Code	Potential cause	Solution
E83,E84	Coin mech malfunctions	Check the coin mech.
E.L.	Position sensor malfunctions	Check the sensor and the sensor PCB.
	Motor malfunctions	Check the motor.
HELP	Ticket mech malfunctions	Check if it is out of ticket.
		Check the harness of ticket mech.

Note: Error codes will be displayed on SCORE LED display on the control panel.

#### 9. WIRING DIAGRAM

