

# SERVICE MANUAL



Ver 3.0



ISSUE DATE: Jan. 27, 2014



- ▶ Please read the manual carefully and keep it in mind before using this machine.
- ▶ Put this manual within touch of your reference in anytime.

# PRECAUTIONS FOR USE

The following safety precautions are given throughout this manual. They must be strictly followed to protect those who install, use or maintain this product as well as to protect players, visitors and property.

For safety reasons.

- The following suggestions should be adhered to:



**WARNING**  
Disregarding could result in serious injury.



**CAUTION**  
Disregarding could result in injury or product damage.

- The following graphic suggestions describe the types of precautions to be followed.



Indicates a care should be taken.



Forbidden.



Indicates a matter which must be performed.

- **Precautions to be followed:**

**Certain procedures require a qualified in-shop maintenance person or industry specialist. For such instructions, a qualified person must take care of the jobs.**

- Otherwise an electric shock, machine trouble, or a serious accident may result.
- Replacing the machine parts, inspecting and maintaining the machines, and troubleshooting must be assigned only to a qualified in-shop maintenance person or industry specialist. This booklet gives instructions that hazardous jobs in particular must be handled by an industry specialist. Qualified in-shop maintenance person and industry specialist are defined as follows.

#### **Qualified in-shop maintenance person**


- A service staff shall have experience in operations of game machines. The staff shall be responsible for assembly, installation, inspection and maintenance of the machine.

#### **Industry specialist**

- An industry specialist must be engaged in designing, manufacturing, inspecting and servicing amusement machines. He or she must have an education in electrical, electronic and mechanical engineering, and routinely maintain and repair amusement machines.

# PRECAUTIONS FOR USE

## WARNING

If there is any abnormality such as smoke, bad smell or abnormal noise being emitted from the machine, immediately turn OFF the main power switch and unplug the power cord from the receptacle to stop operating it. 

- Using the machine in abnormal conditions could result in fire or accidents.


In case of abnormality

1. Turn OFF the main power switch.
2. Unplug the power cord from the receptacle.
3. Contact your nearest dealer.

**Do not leave the power cord plugged in improperly or covered with dust.** 


- Doing so could result the power cord periodically.


## CAUTION

**Do not use this product anywhere other than industrial areas.** 

- Using in a residential area or an area next to a residential area could affect signal reception of radios, television sets, telephones, etc..
- Do not give shock the surface of glass products.

- Please do not play this game if
  - When you do drinking;
  - When your physical condition is not normal;
  - When you are in pregnancy;
  - When you have on a pulse controller;
  - When you have recently experienced a cramp or fainting away while watching TV.
- Avoid excessive force/shock while playing/moving the game.
- While do games, pay attention to surrounding.

**Do not plug or unplug the power cord with wet hands.** 

**In handling the power cord, follow the instructions below.** 

- |   |  |
|---|--|
| • Do not damage the power cord.           | • Do not modify the power cord.            |
| • Do not bend the power cord excessively. | • Do not twist the power cord.             |
| • Do not heat the power cord.             | • Do not pull the power cord.              |
| • Do not bind the power cord.             | • Do not stand on the power cord.          |
| • Do not sandwich the power cord.         | • Do not drive a nail into the power cord. |

**If the power cord or power plug becomes damaged, stop using the machine immediately and ask your nearest dealer to replace the parts.**

# PRECAUTIONS FOR USE

## WARNING

**Be sure to consult an industry specialist when setting up, moving or transporting this product.**

- This product should not be set up, moved or transported by any one other than an industry specialist.
- When installing this product, set the 4 leg levelers evenly on the floor and make sure that the product is installed stably in a horizontal position. Unstable installation may result in injury or accident.
- When installing this product, do not apply undue force on movable parts. Otherwise, injury and accident may result, or the product may be damaged.

**The machine for indoor usage only does not install outside.**



**Do not set the game machine up near emergency exits.**



**Protect the game machine from:**

- Rain or moisture.
- Direct sunlight.
- Direct heat from air-conditioning and heating equipment, etc..
- Hazardous flammable substances.
- Otherwise an accident or malfunction may result.



**Do not place containers holding chemicals or water on or near the game machine.**



**Do not place objects near the ventilating holes.**



**Do not bend the power cord by force or place heavy objects on it.**



**Never plug or unplug the power cord with wet hands.**



**Never unplug the game machine by pulling the power cord.**



## CAUTION

**Be sure to use indoor wiring within the specified voltage requirements. For extension cord, use the specified rating or more.**

**Be sure to use the attached power cord.**

**Never plug more than one cord at a time into the electrical receptacle.**



**Do not lay the power cord where people walk through.**



**Be sure to ground this product.**



**Do not exert excessive force when moving the machine.**



**For proper ventilation, keep the game machine 100mm(4") away from the walls.**

**Do not alter the system related dipswitch settings.**

# PRECAUTIONS FOR USE

## ⚠ WARNING

Be sure to turn OFF the main power switch and unplug the power cord from the receptacle before inspecting or cleaning the machine.



When replacing parts, be sure to use parts of the correct specifications. Never use parts other than the specified ones.



Opening inside the machine shall be done by machine specialist only as high electric current is being sent inside. For game machine with monitor, a care should be taken while opening its back door. If not, a damage to the inside parts or the monitor may occur.



If the sub power switch of the service panel is turned OFF without turning OFF the main power switch of the power supply unit, some parts in the units remain live. When opening the back door, be sure to turn OFF the main power switch and unplug the power cord from the receptacle.



Strictly refrain from disassembly and repair of parts which are not indicated in this manual, as well as settings and remodeling.



To clean the game machine, wipe it with a soft cloth dampened in a neutral detergent.

- Using thinner or other organic solvent or alcohol may decompose the material.
- Electrical shock or equipment failure could be caused by water entering the inside of the machine.

## ⚠ CAUTION

Components in the game are sensitive to vibrations and impact. Care should be used when moving and transporting the game machine.



Be sure not to let the machine tip over.

Before moving the machine, be sure to turn OFF the main power switch, unplug the power cord from the receptacle and remove the power cord from the machine.



Before moving take the machine, off the levelers and move it on the casters.

Avoid excessive force while moving the machine.

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## PRECAUTIONS IN HANDLING

- When setting up, inspecting, maintaining, moving or transporting this product, follow the procedures and instructions set forth in this manual and perform such work safely.
- Do not set up, handle, inspect, maintain, move or transport this product under conditions equivalent to the condition of "WARNING" or "CAUTION" specified in this manual.
- If a new owner is to have this product as a result of transfer, etc., be sure to give this manual to the new owner.

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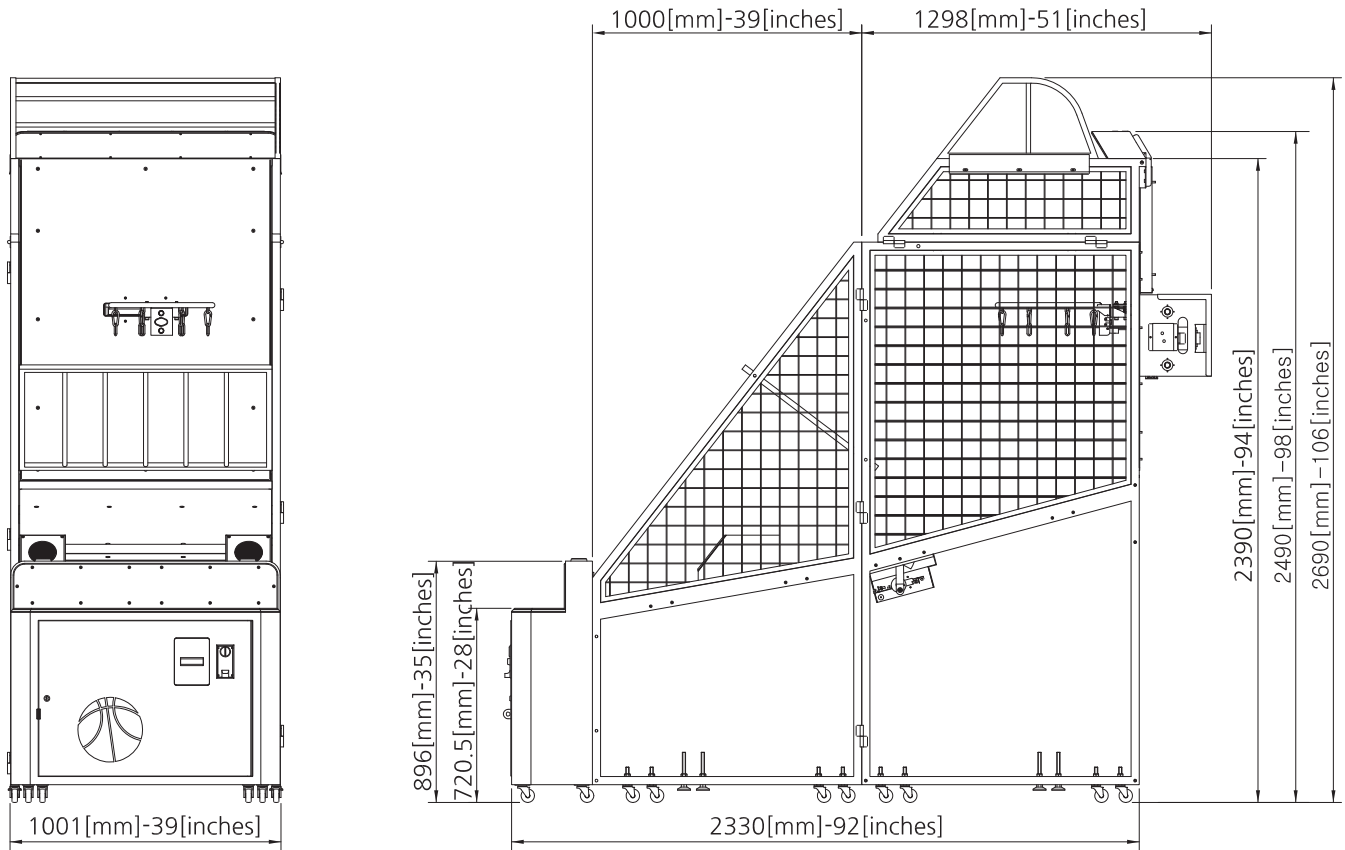
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# 1. DIMENSION & SPECIFICATION

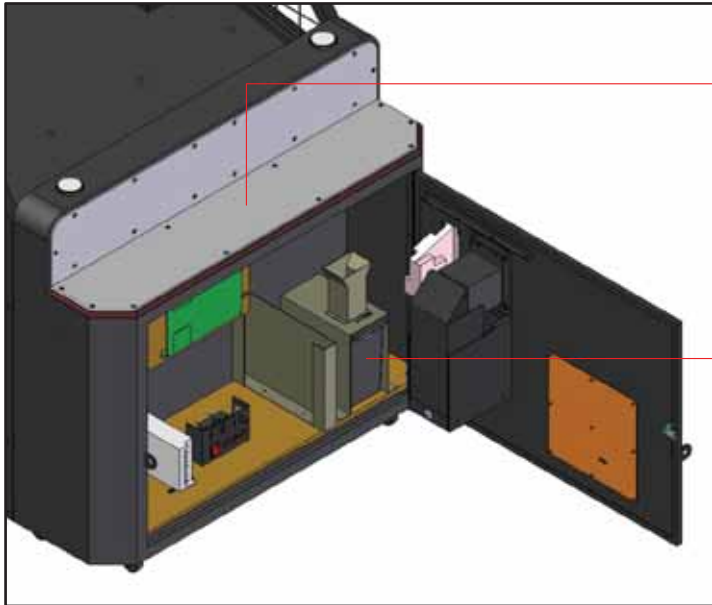
## 1-1. DIMENSION



## 1-2. SPECIFICATION

DIMENSION (W x D x H)	1006 x 2335 x 2501 (mm)
WEIGHT (kg)	250 kg
VOLTAGE	AC 120V
FREQUENCY RANGE	60 Hz
CUNSUMPTION	<b>220V</b>
TOTAL	300 W

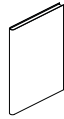


## 1-3. STICKER LOCATION



- Do not lean against the machine or climb on the machine.

BILL COUNTER

## COMPONENTS

NO.	PART NAME	SPEC.	QTY
1	CASH BOX KEY		1
2	FRONT DOOR KEY		1
3	AC POWER CORD	110V	1
4	LAN CABLE		1
5	CABLE TIE		20
6	MANUAL		1
7	BALL		4
8	MONEY BALL		1

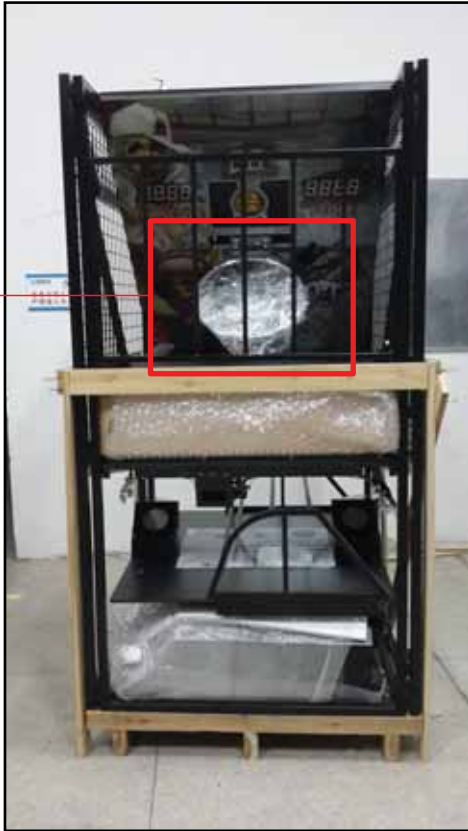


## 2. INATALLATION

### STEP1.

**\*If necessary, temporarily fixing bolts, then completely assemble at the last minute.**

– Product is packaged as shown on the pictures of STEP1 at the time of shipment.



BACKBOARD ASS'Y

MAIN FRAME ASS'Y

RIM ASS'Y

TOP FRAME ASS'Y

2ND BASE PANEL ASS'Y

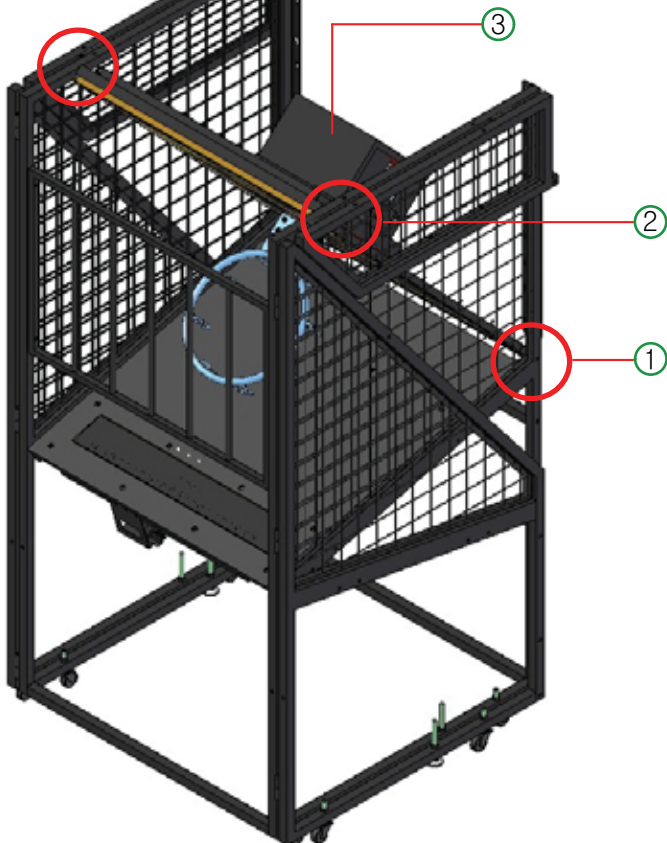
FRONT CASE PART ASS'Y

\* Before separation, if separate the packaging packed into RIM ASS'Y, installation is easy in the future.

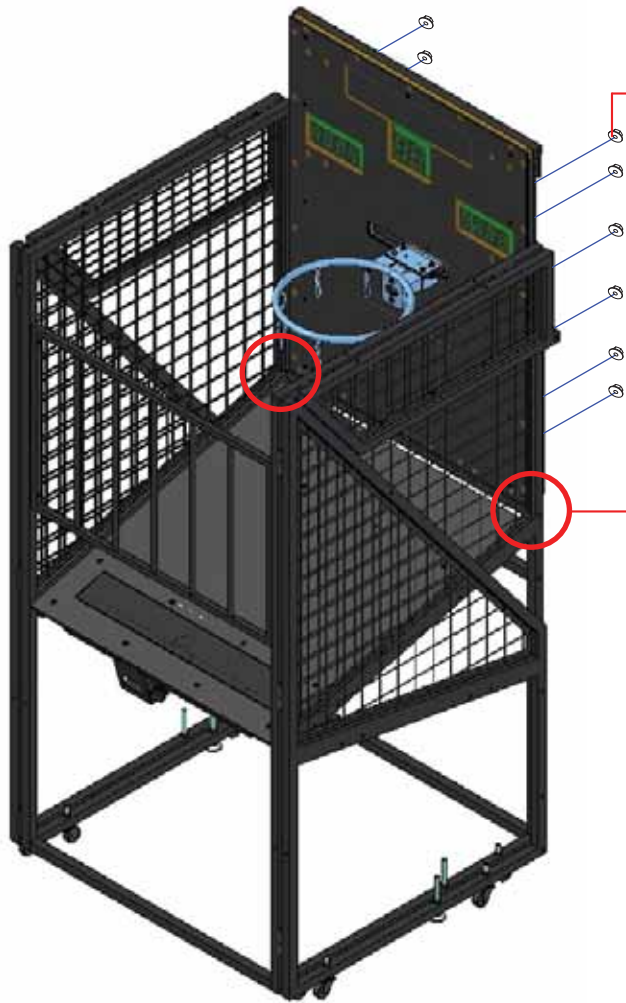
- 1) Loosen ① bottom bolt around 1/3.
- 2) Separate ② fixed bolts on the top of BACKBOARD ASS'Y.
- 3) Lift up ③ ASS'Y for BACKBOARD ASS'Y to be equipped with the FRAME.

**\* 1) Disassembled bolts in the item reused in the STEP3.**

\* Be careful not to damage the wiring work upon the left and right side of frame, when BACKBOARD ASS'Y build up.

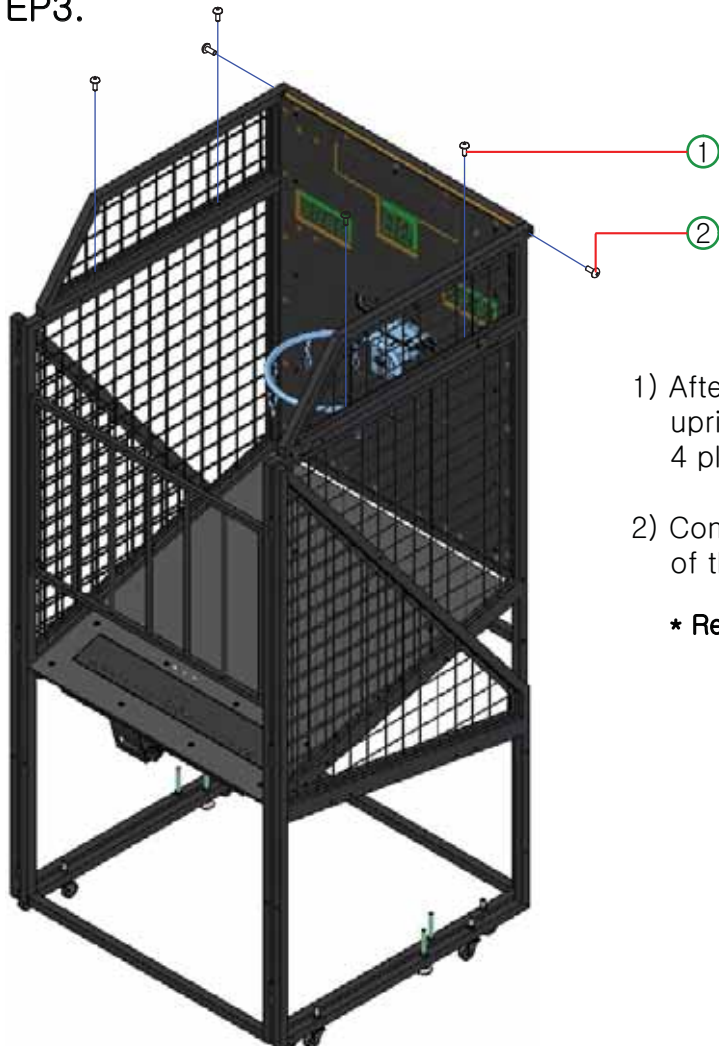


## STEP2.



- 1) Combine the BACKBOARD ASSY using ① WASHER [Chrom-PLAIN WASHER] + M6 NYLON NUT\_12EA
- 2) After the combination, Fasten the uncompleted ② bottom bolt for the final combination.

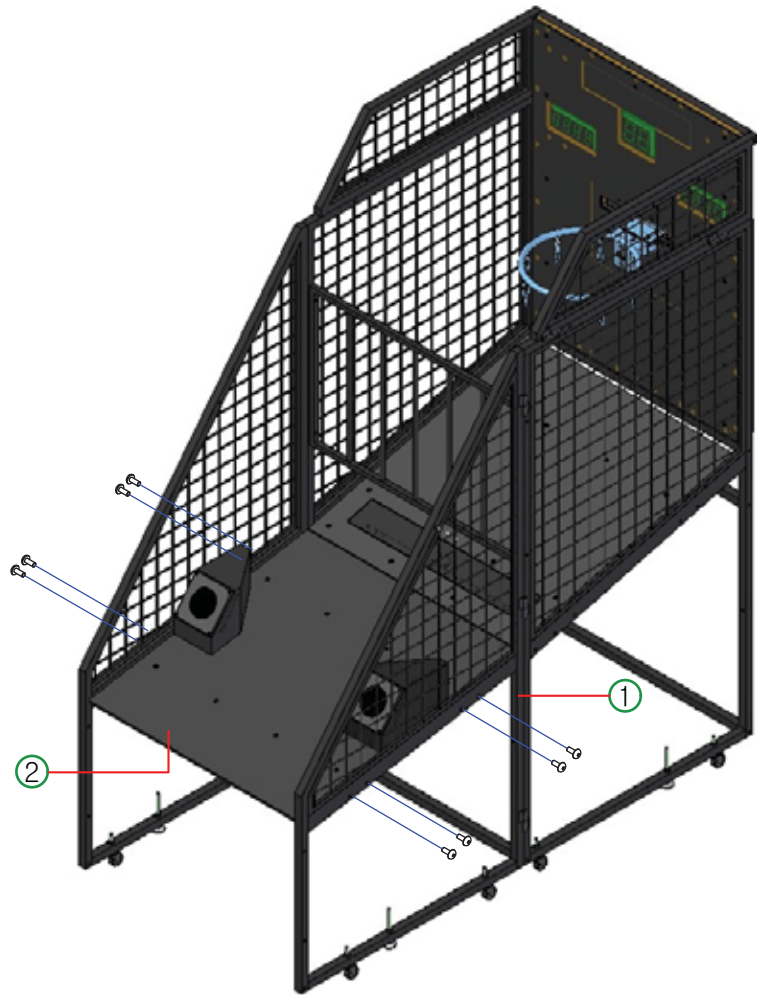
## STEP3.



- 1) After stand ① SIDE UPPER FRAME L, R at the top of the upright, fix as shown on the photo using M6 bolt + 4 places nut.
- 2) Combine ② M8 bolts, 2 places at the left and right side of the BACKBOARD ASS'Y.

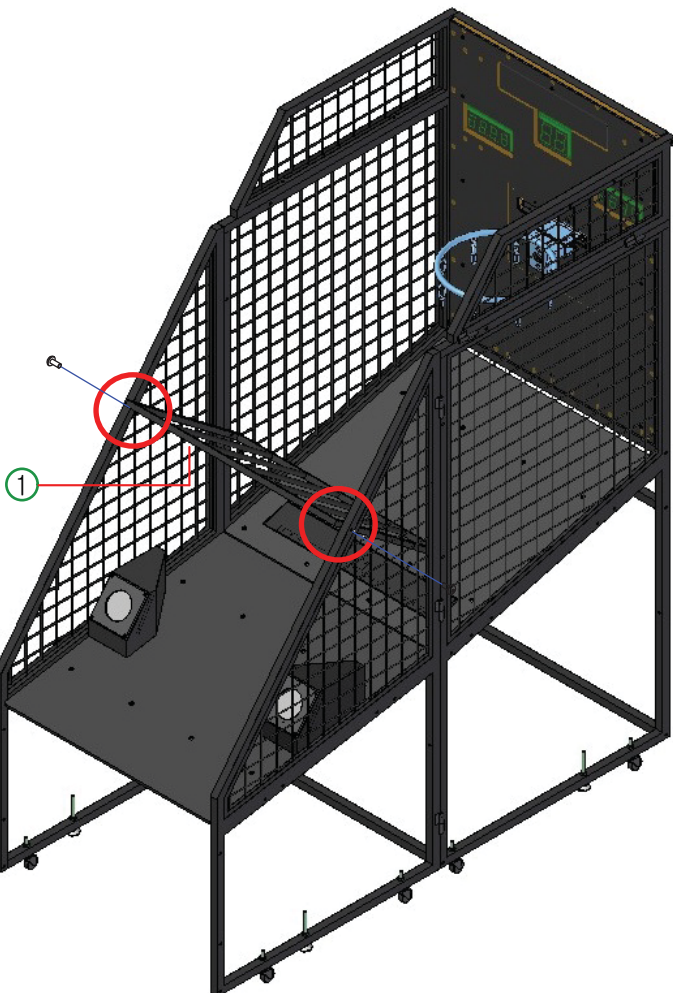
\* Re-use removed the bolt from STEP1.

## STEP4.



- 1) Unfold over ① 2ND FRAME L, R using the hinges as shown in the figure,.
- 2) Combine ② 2ND BASE PANEL ASS'Y and 2ND FRAME ASS'Y using the M6 bolts + Washer – Black Plain Washers 8 points.

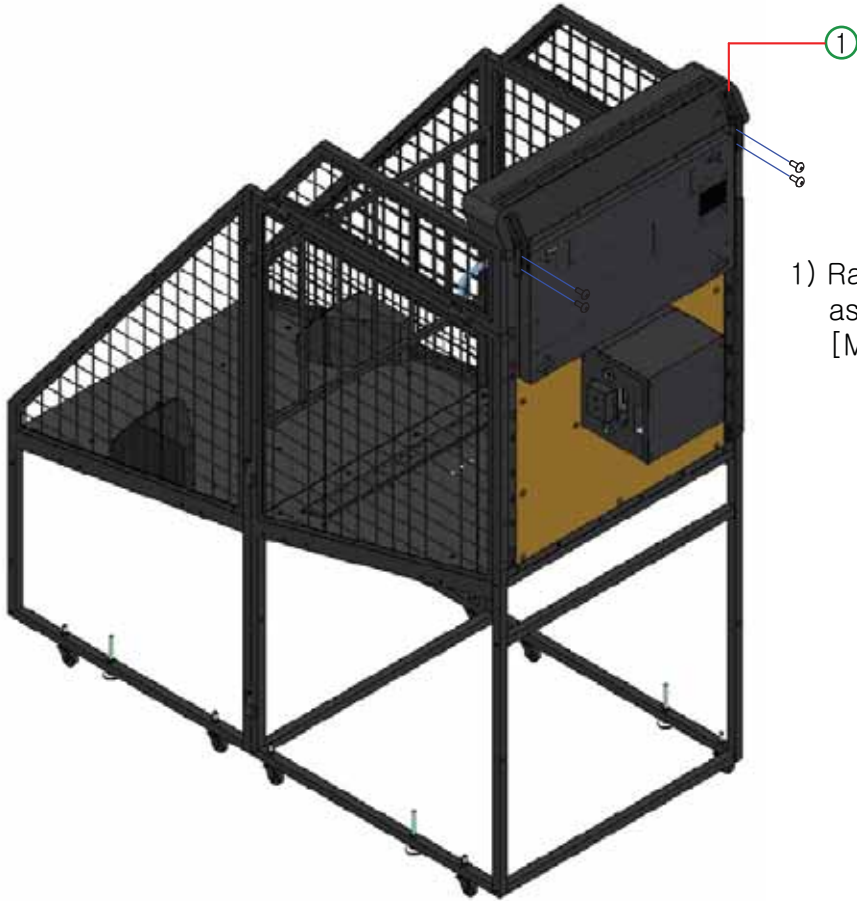
## STEP5.



- 1) After push aside ① BOUNCE BLOCK FRAME to the outward as shown in the figure, and then combine using M8 bolt + nut.

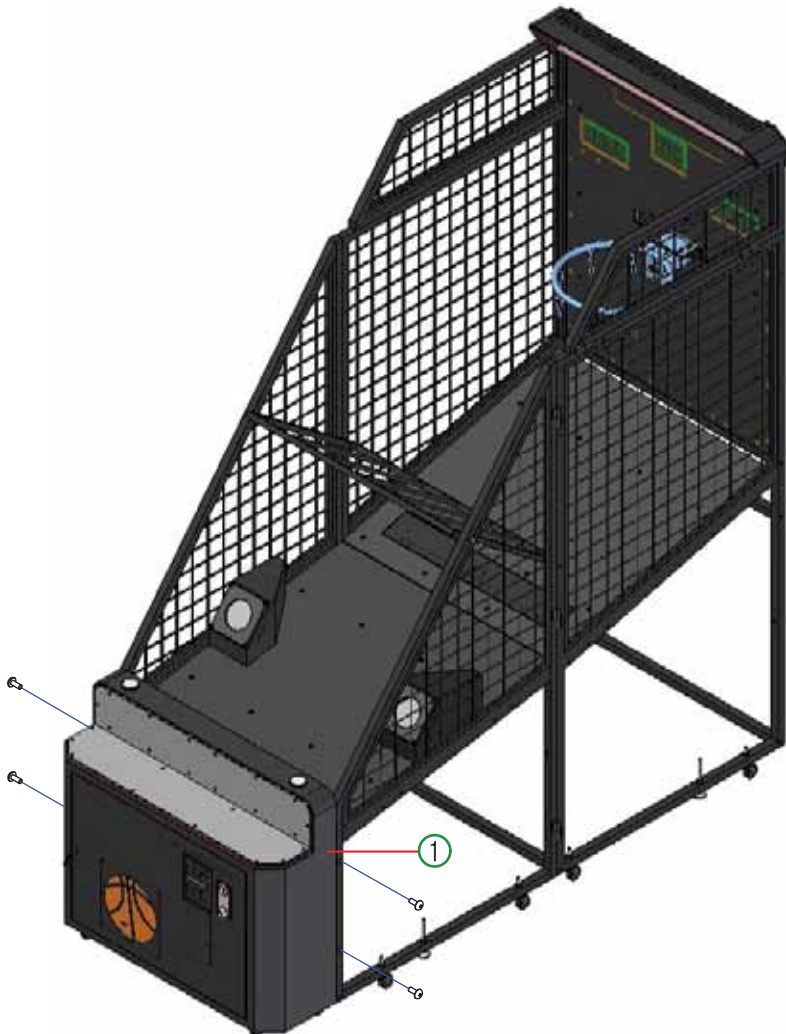
\* Re-use and combine bound bolt and nut on BOUNCE BLOCK FRAME.

## STEP6.



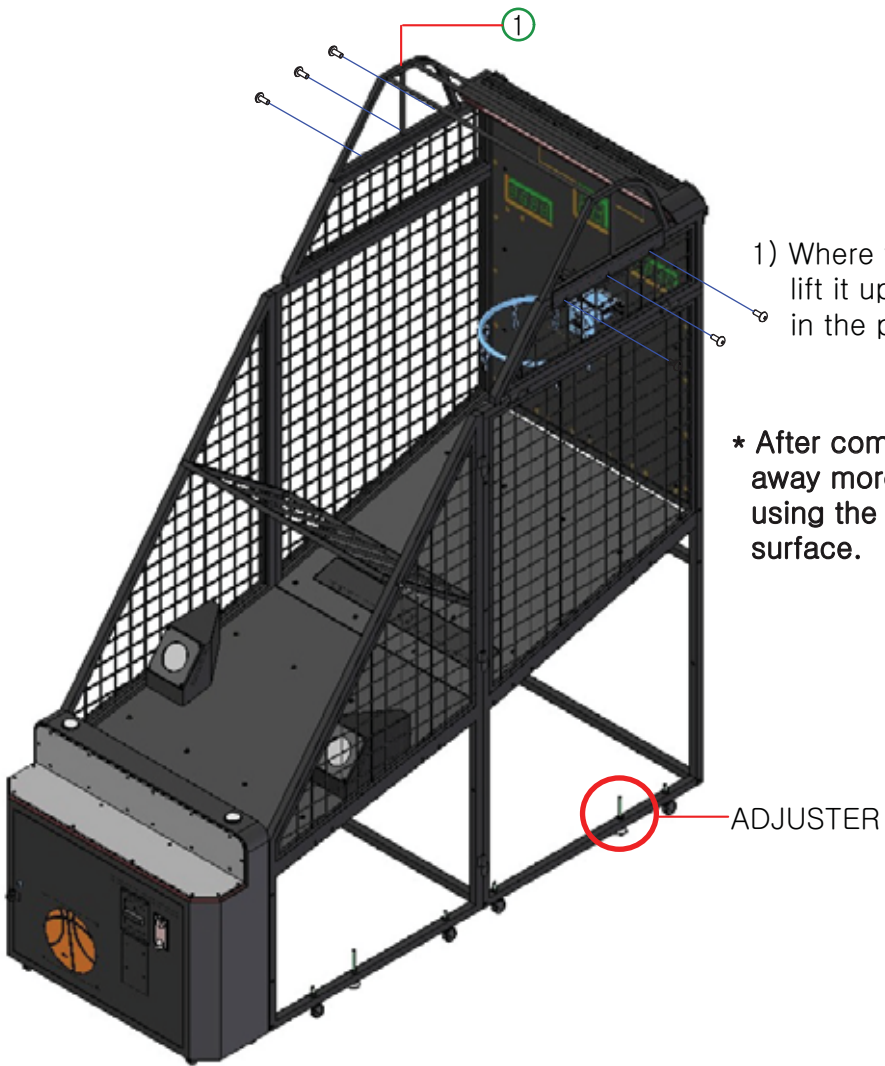
- 1) Raise ①BILLBOARD ASS'Y FRAME up to the top as shown on the picture and combine. [M6 bolts, 4 places]

## STEP7.



- 1) Combine ①FRONT CASE ASS'Y using each of the 4 points of M8 bolts+Nut+washer-chrome plain washers] as shown in the figure.

## STEP8. [OPTION]

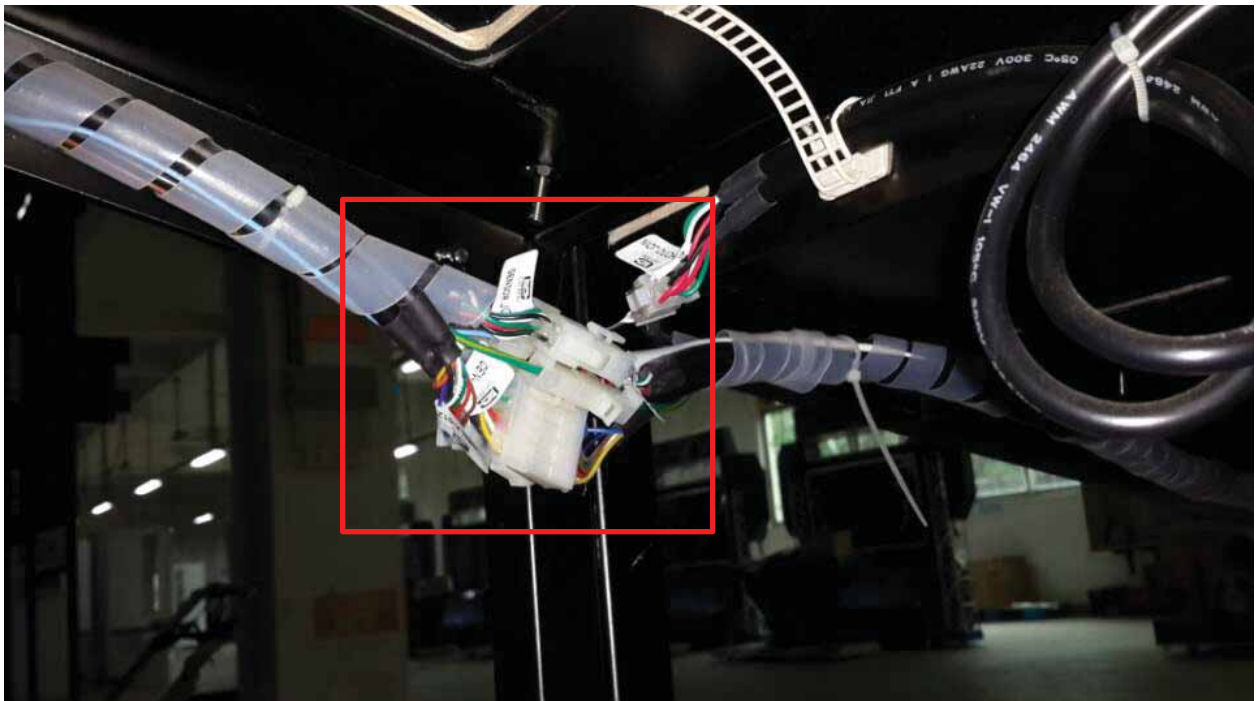


1) Where you want to install the ① TOP FRAME ASS'Y, lift it up to at the top of the 1ST FRAME as shown in the picture, then combine. [M6 bolts, 6 points]

\* After completing the installation of the product move away more than 50mm from the wall and equipped using the 4 control bar to be horizontal with the bottom surface.

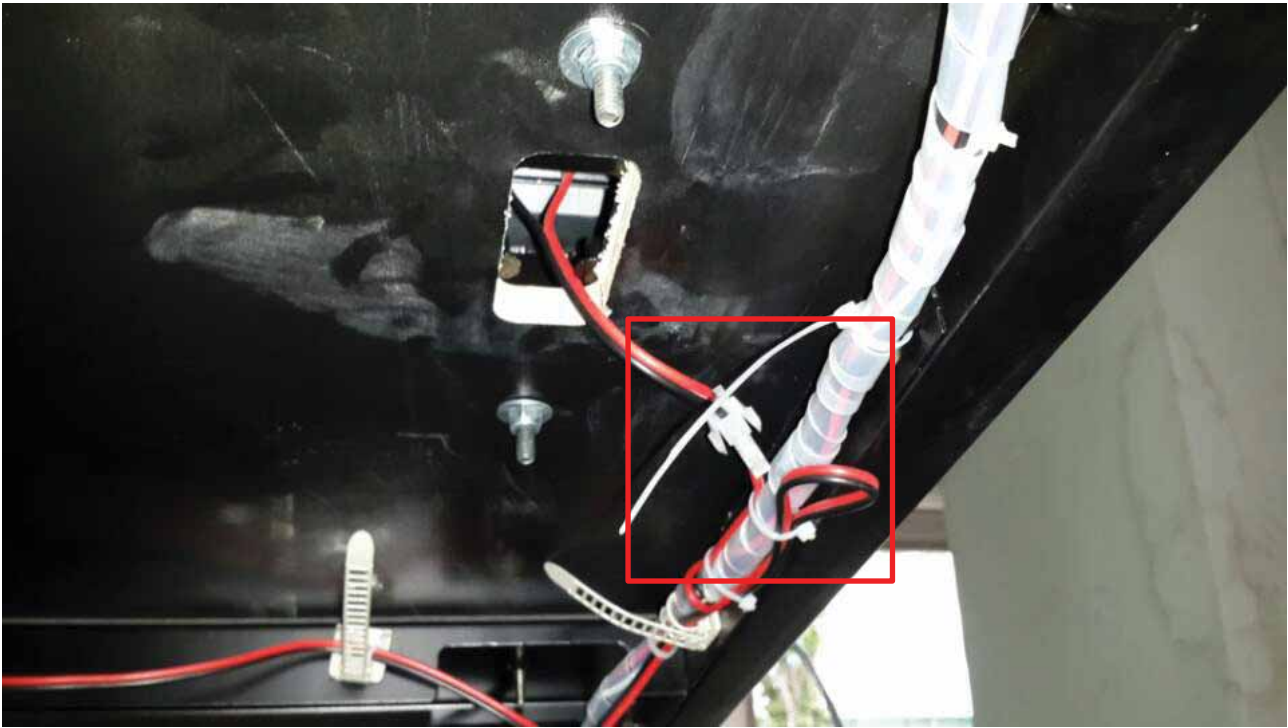
## STEP9.

- Connect wiring the FRONT CABINET REAR CABINET [L,R]



STEP10.

- Connect wiring 2ND BASE PANEL ASS'Y speaker wire and MAIN CABINET [L,R]



STEP11.

- Connect wiring MAIN CABINET and BILLBOARD ASS'Y



## STEP12.

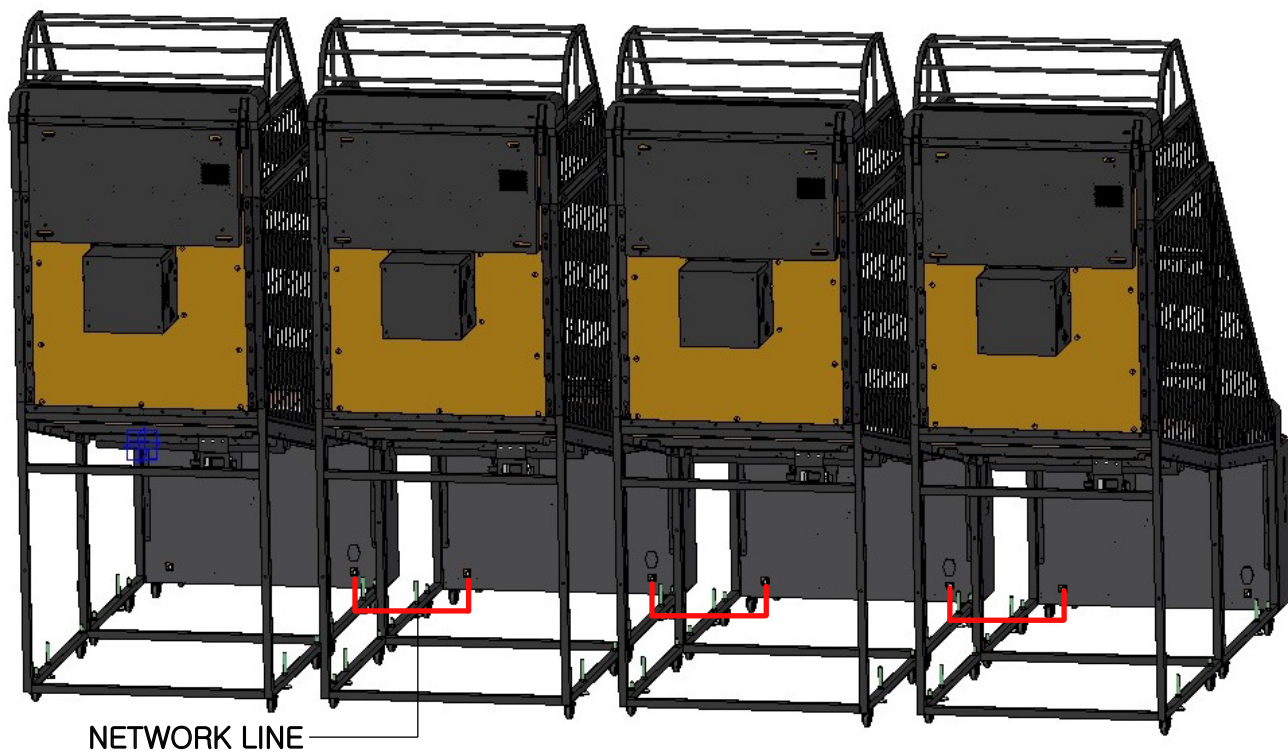
- Connect AC CORD



- Connect network line



\* How to connect product network line - [can be connected to up to 4]



## **3. OUTSTANDING CHARACTERISTICS OF EN SHOOT**

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### **3-1. SPECIALIZED DESIGN & FUNCTIONS**

- Distinguished unique design with male & female characters adds variety and sets a new bench mark for ordinary basketball games.
- Manufactured with high quality materials to pursuit excellence in basketball games.
- Highly impressive matrix keeps track of the time and scores in real time.
- Extra points for swish and color shots excite the players, and give them the drives for higher score.
- The player gets double points during the last 5 seconds of each quarter, which keeps the players focused till the last second of the play.
- Customize the minimum scores required to clear the quarter, or the length of time for each quarter.

### **3-2. THE POINT SYSTEM IS DISTINGUISHED BY THREE DIFFERENT TYPES OF SHOTS : NORMAL SHOTS, SWISH SHOTS AND COLOR SHOTS.**

- (1) When using the regular ball, there is a different point system for normal shots and swishes.
- A normal shot is indicated when the ball is registered by the top ball sensor after a signal from the impact sensor indicating that the ball hit the rim first.
  - A swish is indicated when the ball is first registered by the top goal sensor and then the impact sensor.
- (2) In order to be able to recognize color balls there is also a color sensor so that when a color ball is used higher points are given.
- In the case of a swish using a color ball, the color ball takes precedence and is included in the same score as a regular color ball shot.

### **3-3. GAME MODE**

- (1) A normal game for normal people
- At successful completion of all four quarters, bonus play will start.
  - Each quarter has a set score that must be reached in order to advance to the next quarter.
- (2) Competitive multiplayer mode is perfect for couples or friends looking for great entertainment.
- Up to 16 En Shoots can be linked together, and all players in "Multiplayer Mode" can enjoy all four quarters regardless to the score achieved.
  - During the match, the highest score among the competitors will be listed as the top score on each machine in real-time.
  - A matrix of the rankings is displayed at the end of each quarter



## 4. HOW TO PLAY

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### 4-1. SINGLE PLAY

It consists of five stages ; four quarters and one bonus play at successful completion of four quarters.

Play to earn the fixed number of points in each quarter to complete each stage.

If a player passes all four quarters, bonus play will start.

### 4-2. MULTI PLAY

All games linked in "Multiplayer Mode" shares the same four quarter game play and the same rank display.

Highest score from players in MultiPlayer mode will be displayed as top score during the play.

After completion of each quarter, ranking is displayed.

After completion of fourth quarter, the rank and the winner are displayed.

\* Network ID must be assigned in Set-Up Mode in order to utilize "Multiplay Mode"

### 4-3. EVENT PLAY – Play mode for special events & parties.

All units linked together by network will start single play game at the same time.

Game method is the same like SINGLE PLAY.

"Top Score" FND displays the highest score among the players while they're playing.

After finishing the game, it shows the players' ranking.

## 5. GAME SEQUENCE

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### 5-1. SINGLE PLAY

- 
- 1 Insert coin(s)

---

  - 2 Select the "SINGLE" button.

---

  - 3 Lower the ball block bar.

---

  - 4 Shows target score to clear the stage.

---

  - 5 Start the game.

---

  - 6 Decrease play time.

---

  - 7 Set up basket movement time. (Setup)

---

  - 8 The ball block is raised two seconds before the game finishes.

---

  - 9 The game stops at zero second.

---

  - 10 If a player(s) doesn't earn the target score or more, the game is over.

---

  - 11 If a player earns more than Top Score, his scores now appears in "Top Score" FND.

**\* Above may vary depending on the game set up.**

## 5-2. MULTI PLAY

---

- 1 Insert coin(s)

---

- 2 Select "MULTI" button.

---

- 3 Play against another player(s). After inserting coin(s), press the "MULTI" button.

---

- 4 MULTI PLAY starts when the waiting time is zero. If no another player(s) are available, it starts a SINGLE PLAY game.

---

- 5 Game starts

### [ NETWORK MATRIX DISPLAY ]

- Network Connection Sstatus



NETWORK CONNECT ID

- Players ID



ID: 2

- Multi play starts



NETWORK OK

## 5-3. EVENT PLAY

---

1 Same as Single Play Mode.

### \* How to Activate "Event Play Mode"

\* Turn on "Event Play Mode" from the server unit ("Network ID 1").

(1) Press & hold [Set Up] button & [Service] button, and turn on the power.

Matrix displays "EVENT" when "Event Play" mode is on, and all units in the network will state "EVENT ID JOIN".

(2) Press & hold [Single Play] button & [Multi Play] button from the server unit for one second to start the game.

Ten second countdown starts before the game begins.

A matrix display showing the text "EVENT MODE JOIN ID 1, 2" in yellow characters on a black background. The text is split across three segments: "EVENT MODE" on the left, "JOIN ID 1," in the middle, and "2" on the right.

- Count down before the game starts

A matrix display showing the text "EVENT GAME PLAY" in yellow characters on a black background. The text is split across two segments: "EVENT GAME" on the left and "PLAY" on the right.

(3) Repeat (2) to play again.

- Client Event Mode is connected.

A matrix display showing the text "ID 2 EVENT ID 2 JOIN" in yellow characters on a black background. The text is split across three segments: "ID 2" on the left, "EVENT ID 2" in the middle, and "JOIN" on the right.

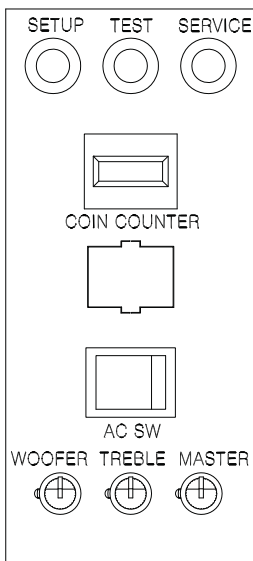
- Event Game starts

A matrix display showing the text "EVENT PLAY" in yellow characters on a black background. The text is split across two segments: "EVENT" on the left and "PLAY" on the right.

## 6. SET UP

### 6-1. HOW TO CHANGE SET-UP

- (1) Open the FRONT DOOR with 7001 KEY.
- (2) Locate the CONTROL PANEL inside cabinet between WOOFER ASS'Y and COIN BOX.



CONTROL PANEL

- Press the SET-UP button to enter SET-UP menu.








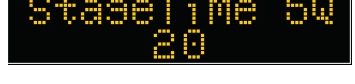
**SETUP** : To move downward on SET-UP menu /  
**TEST** : To select/To exit / **SERVICE** : To move upward on SET-UP menu

- 1) Use the SETUP/SERVICE button to locate desired SET-UP menu.
- 2) Press the TEST button to select.
- 3) Use the SET-UP/SERVICE button to change the values upward/downward.
- 4) Press the TEST button to exit.
- 5) Please select [SAVE & EXIT] to apply any Set-Up changes.










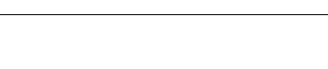
\* To cancel any SET-UP changes, select [CANCEL & EXIT] and exit the [SET-UP] menu.

\* Press "test" button on control panel to pay the ticket owed.

## 6-2. SET UP


NO.	SET UP MENU	MATRIX DISPLAY	DEFAULT	SET UP VALUE	CHANGE RATIO	COMPARE
1	Credit / Coin		1-1	free		
				1-1		
				1-2		
				1-3		
				1-4		
				1-5		
2	<b>Normal Point</b> [Normal shot score]		2	1 ~ 10	1	
3	<b>Swish Point</b> [Swish shot score]		3	1 ~ 10	1	
4	<b>Money-B Point</b> [Money BALL shot score]		6	0 ~ 10	1	
5	<b>StageTime 1Q</b> [1st quarter play time]		50	10 ~ 90	10	
6	<b>StageTime 2Q</b> [2nd quarter play time]		40	10 ~ 90	10	
7	<b>StageTime 3Q</b> [3rd quarter play time]		30	10 ~ 90	10	
8	<b>StageTime 4Q</b> [4th quarter play time]		30	10 ~ 90	10	
9	<b>StageTime 5Q</b> [Bonus stage play time]		20	10 ~ 90	10	

				* Off : Disable basket movement. * On : Basket movement activated at all time.		
10	<b>RMoveTime 1Q</b> [Ring Movement time]		Off	Off, On	10	
11	<b>RMoveTime 2Q</b> [Ring Movement time]		Off	Off, On	10	
12	<b>RMoveTime 3Q</b> [Ring Movement time]		Off	Off, On	10	
13	<b>RMoveTime 4Q</b> [Ring Movement time]		Off	Off, On	10	
14	<b>RMoveTime 5Q</b> [Ring Movement time]		On	Off, On	10	
15	<b>ClearScore 1Q</b> [1st quarter clear points]		50	0 ~ 200	10	
16	<b>ClearScore 2Q</b> [2nd quarter clear points]		150	0 ~ 400	10	
17	<b>ClearScore 3Q</b> [3rd quarter clear points]		300	0 ~ 600	10	
18	<b>ClearScore 4Q</b> [4th quarter clear points]		500	0 ~ 800	10	
19	<b>Def Top Score</b> [Default]		300	0 ~ 950	50	
20	<b>Multi Time</b> [Multi-Play play time per stage]		30	0 ~ 90	5	
21	<b>Network ID</b> [Network ID Setup]		0	0 ~ 4	1	* Disable network connection.
22	<b>SEX</b> [Select Voice Sound]		0, Men	0, Men	* 0 : Male voice 1 : Female voice	
				1, Girl	1	
23	<b>Demo Sound Volume</b>		7	0 ~ 10	1	* 0% ~ 100% (Set value x 10%)

24	Language		1. ENG	0. KOR 1. ENG	* 0. KOR – KOREAN 1. ENG – ENGLISH 1
25	Score matrix effect type		1. Score	0. Message 1. Score 2. Toggle	* 0 : Display message, score 1 : Display score 2 : Display Swish (Money ball) and normal shot 1
26	Set-Up No of mercy ticket		0	0 ~ 5	1
27	Set-Up Ticket Out based on scores		0	0 ~ 150	* Pay one ticket per 10 points. * Pay one ticket per 20 points. 10
28	FACTORY-SET [Factory Default]		<p>- "CHECK TICKET" message appears when no tickets are available.</p> <p>Load the ticket and press "TEST" button to pay the ticket owed. To delete the ticket owed, please refer to "CLEAR-TICKET" option in SET-UP mode.</p>		
29	CLEAR-CREDIT [Delete remaining credit(s)]				
30	Delete Ticket Owe				
31	Number of tickets paid based on scores		* Back to default		
32	SAVE & EXIT				
33	CANCEL & EXIT ENG:1.17 or KOR:1.13, or LDM:1.10		ENG :1.17 (Display software version) KOR :1.13 (Display software version) LDM :1.10 (Display matrix graphic Rom version) - It displays software & Rom version in turn.		

\* **Customize the set-up to suit your need.**

[ For reference only ]

*	The number of linked machine		0	0 ~ 16	8	Available from the "Network ID 1 only.
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\* **Network ID must be 1 to activate.**



## 7. TEST MODE

### 7-1. TEST MODE SET UP

(1) Sound Test : Sound and Speaker Test





- Press [TEST] button on control panel for sound test.

Single Play Button : To skip to the next test on the menu.
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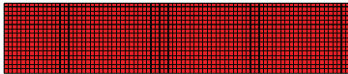

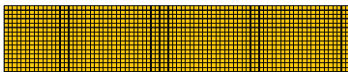

Multi Play Button : To repeat the same test.
--

### 7-2. TEST MODE

(1) SOUND TEST

NO.	TEST MENU	MATRIX DISPLAY	DESCRIPTION
1	LEFT SPEAKER		Left Speaker (Voice says, "One")
2	RIGHT SPEAKER		Right Speaker (Voice says, "Two")
3	BOTH SPEAKER		Both Speaker (Voice says, "Three")
4			To exit Sound Test




(2) MATRIX TEST

NO.	TEST MENU	MATRIX DISPLAY	DESCRIPTION
1	RED COLOR		RED Color Test
2	GREEN COLOR		GREEN Color Test
3	YELLOW COLOR		YELLOW Color Test
4			To exit Matrix Test

(3) FND TEST : Top Score, Time, Score FND Test

NO.	TEST MENU	MATRIX DISPLAY	DESCRIPTION
1	<b>TOP SCORE, TIME, SCORE FND</b>		Displays number "1" and goes up to test FND.
2			To exit FND test



(4) BUTTON INPUT & LAMP TEST

NO.	TEST MENU	MATRIX DISPLAY	DESCRIPTION
1	<b>BUTTON</b>		No buttons were pressed.
2			Multi-Play button [B1] Press & hold "Single Play" button [B2]
3			To exit Button Test

(5) RIM TEST : TEST THE MOVEMENT OF BASKET RIM

NO.	TEST MENU	MATRIX DISPLAY	DESCRIPTION
1	<b>MOVEMENT OF THE RIM</b>		Movement of the rim
2			To exit Rim Test.




(6) BALL BLOCK MECHANISM OPEN & CLOSE TEST

NO.	TEST MENU	MATRIX DISPLAY	DESCRIPTION
1	<b>BALL BLOCK MECHANISM</b>		Movement & Sensor Test
2			Movement & Sensor Test
		<ul style="list-style-type: none"> <li>- <b>BLOCK OK</b></li> <li>- <b>OPEN ERROR</b></li> <li>- <b>CLOSE ERROR</b></li> <li>- <b>BLOCK ERROR</b></li> </ul>	Normal Problem when lowering the block Problem when lifting the block Problem when opening & closing the block




 CAUTION

- Error message appears if block doesn't work within 4 seconds.





(7) GOAL-IN TEST : MAKE THE BASKET TO TEST

NO.	TEST MENU	MATRIX DISPLAY	DESCRIPTION
1	GOAL SENSOR 1,2		Goal Sensor 1,2 Test Results (ON or ERROR)
2	COLOR, SHOCK SENSOR		Color Sensor, Shock Sensor Test Result (OFF, ON)
3			To exit Goal-In Test


(8) COIN(S)-IN TEST : TEST COIN(S)-IN SIGNAL



NO.	TEST MENU	MATRIX DISPLAY	DESCRIPTION
1	COIN MECH 1, COIN MECH 2		Sensor signal
2	COIN MECH 1 SENSOR		Number of signal received when coin(s) inserted
3			To exit Goal-In Test

(9) NETWORK TEST

NO.	TEST MENU	MATRIX DISPLAY	DESCRIPTION
1	NETWORK		Client Network Connection Status
2			When Network connection is lost
3			When Network ID can not be assigned
4			To exit Goal-In Test

(10) TO EXIT TEST MODE








 CAUTION To exit the SET-UP MODE, Press and hold [TEST] button while exiting Test Mode, or turn OFF the power and turn the power back ON.

NO.	TEST MENU	MATRIX DISPLAY	DESCRIPTION
1			To exit Test Mode
2			Test Exit

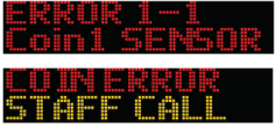
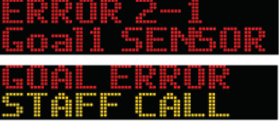
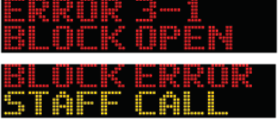
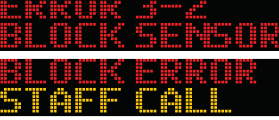
## 8. CHECK CODE / ERROR CODE

### 8-1. CHECK CODE

- Check message appears during demo play when game is still working, but one or more part(s) is not working properly.

NO.	MATRIX DISPLAY	DESCRIPTION	
1		Check Goal-In 1, Goal-In 2 sensor when no signal is received from Goal-In 1 or Goal-In 2.	* Message disappears when all issues are resolved or game is restarted by turning off & turning it back on.
2		When ball block motor is not working Check ball block when ball block sensor signal is not received.	
3		When rim motor is not working Check rim movement when rim sensor signal is not working.	
4		When shock sensor signal is not working	
5		Check color sensor using blue ball when color sensor signal is not working	
6		When Network is not working properly	
7		When Ticket dispenser is not working, When ticket runs out Press TEST button to clear.	

### 8-2. ERROR CODE

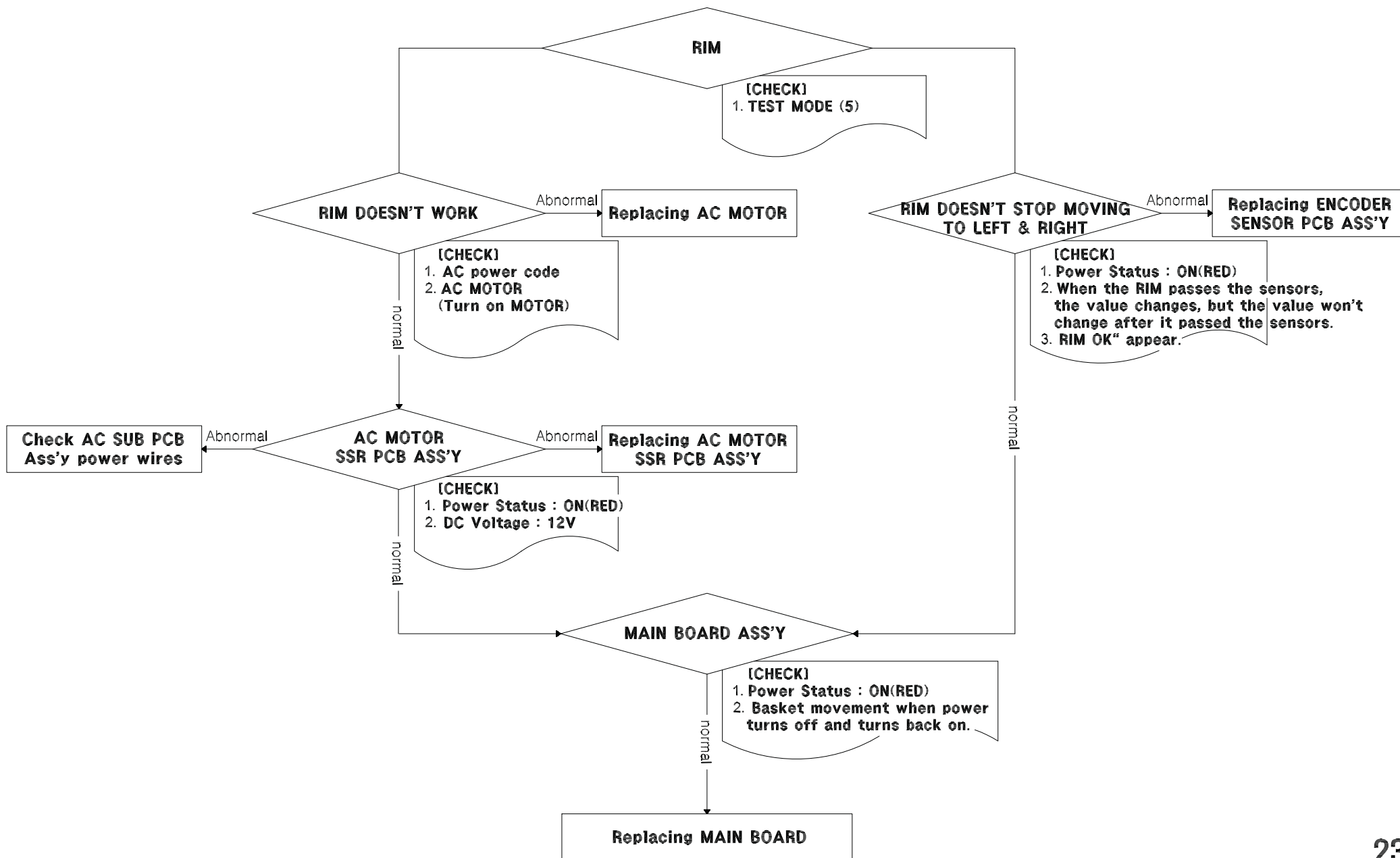
NO.	ERROR CODE	CONTENTS	MATRIX DISPLAY	DESCRIPTION
1	ERROR 1-1	COIN SENSOR		Coin Mech Error : (Coin1, Coin2) Coin Mech signal lasts more than two seconds.
2	ERROR 2-1	GOAL SENSOR		Goal-In Sensor Error : (Goal1, Goal2) Goal-In Sensor signal continues for more than ten seconds.
3	ERROR 3-1	BLOCK OPEN		Ball Block Error : (Block Open) Ball Block will not go down to open. (It doesn't recognize Block Open Sensor for more than 6 seconds)
4	ERROR 3-2	BLOCK SENSOR		Ball block Ass'y sensor Error Both sensors are defective at the same time

- Above are critical errors and game will not continue and error message appears (If outstanding credit remains, error message appears soon after all credits are used)
- Press TEST button to enter TEST MODE to check or turn off & turn the power back on to clear the error message.

# 9. TROUBLE SHOOTING

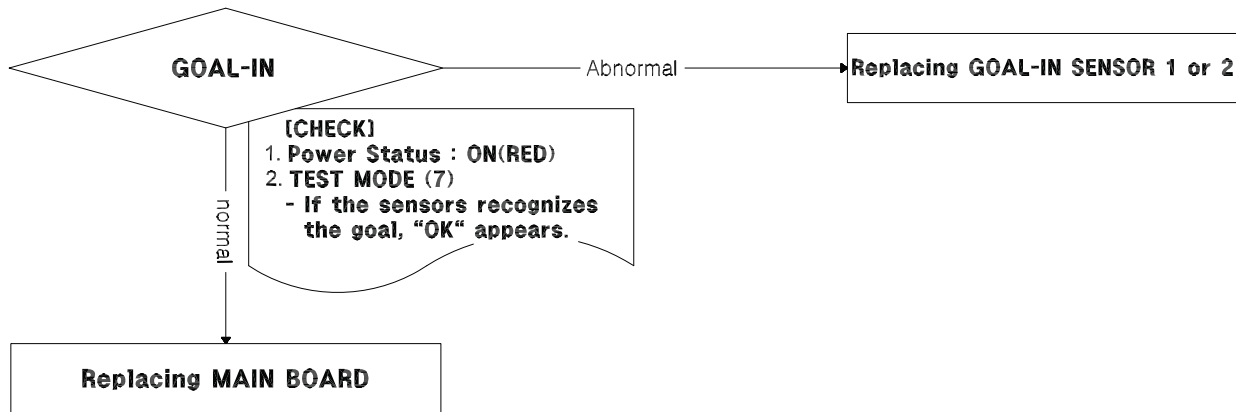
## 9-1. RIM

\*Common: Check the input voltage, check wiring



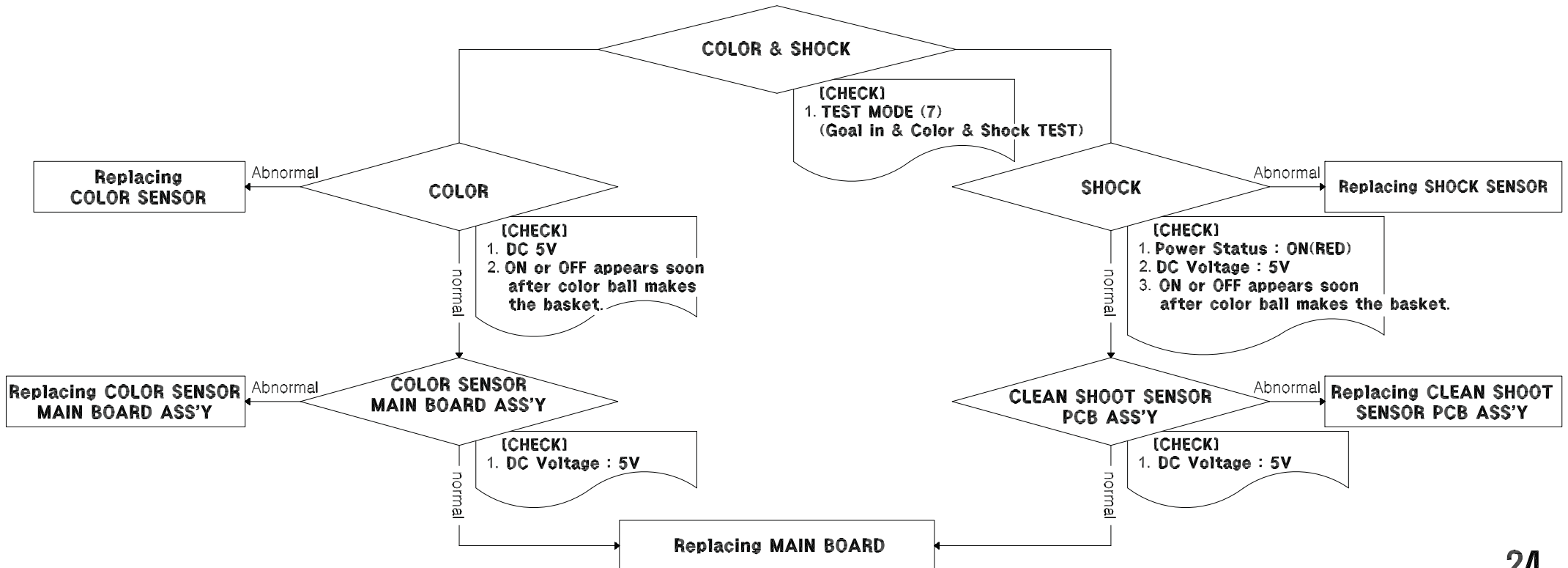
## 9-2. GOAL-IN

\*Common: Check the input voltage, check wiring



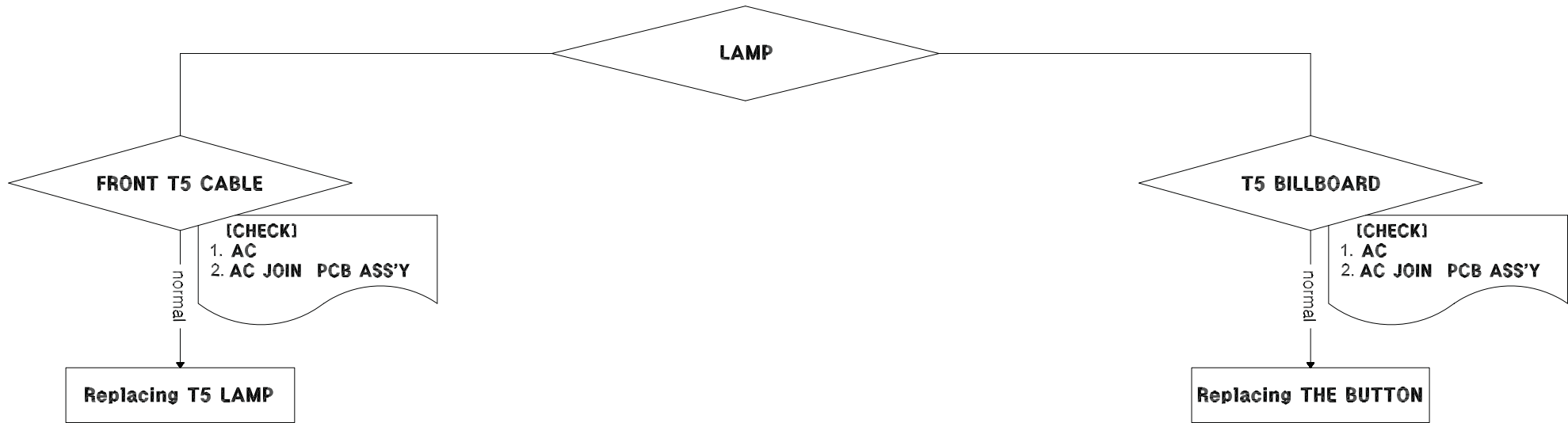
## 9-3. COLOR & SHOCK

\*Common: Check the input voltage, check wiring



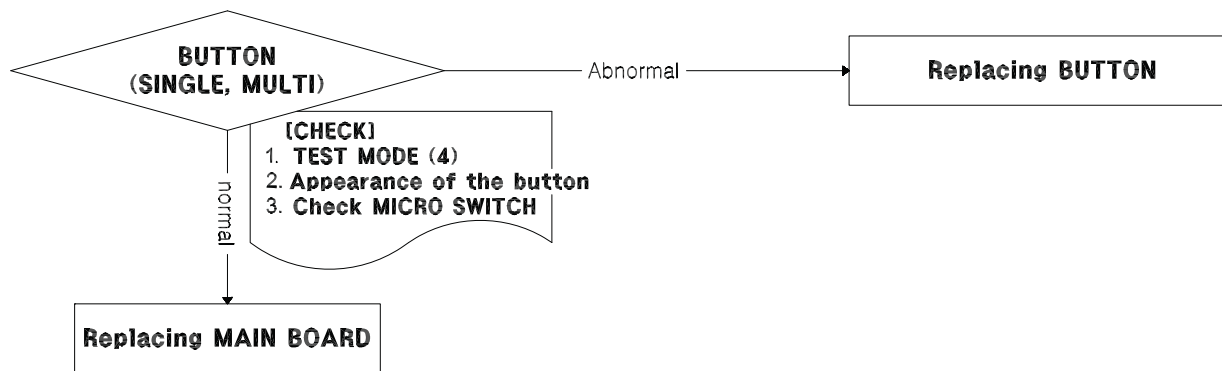
## 9-4. LAMP

\*Common: Check the input voltage, check wiring



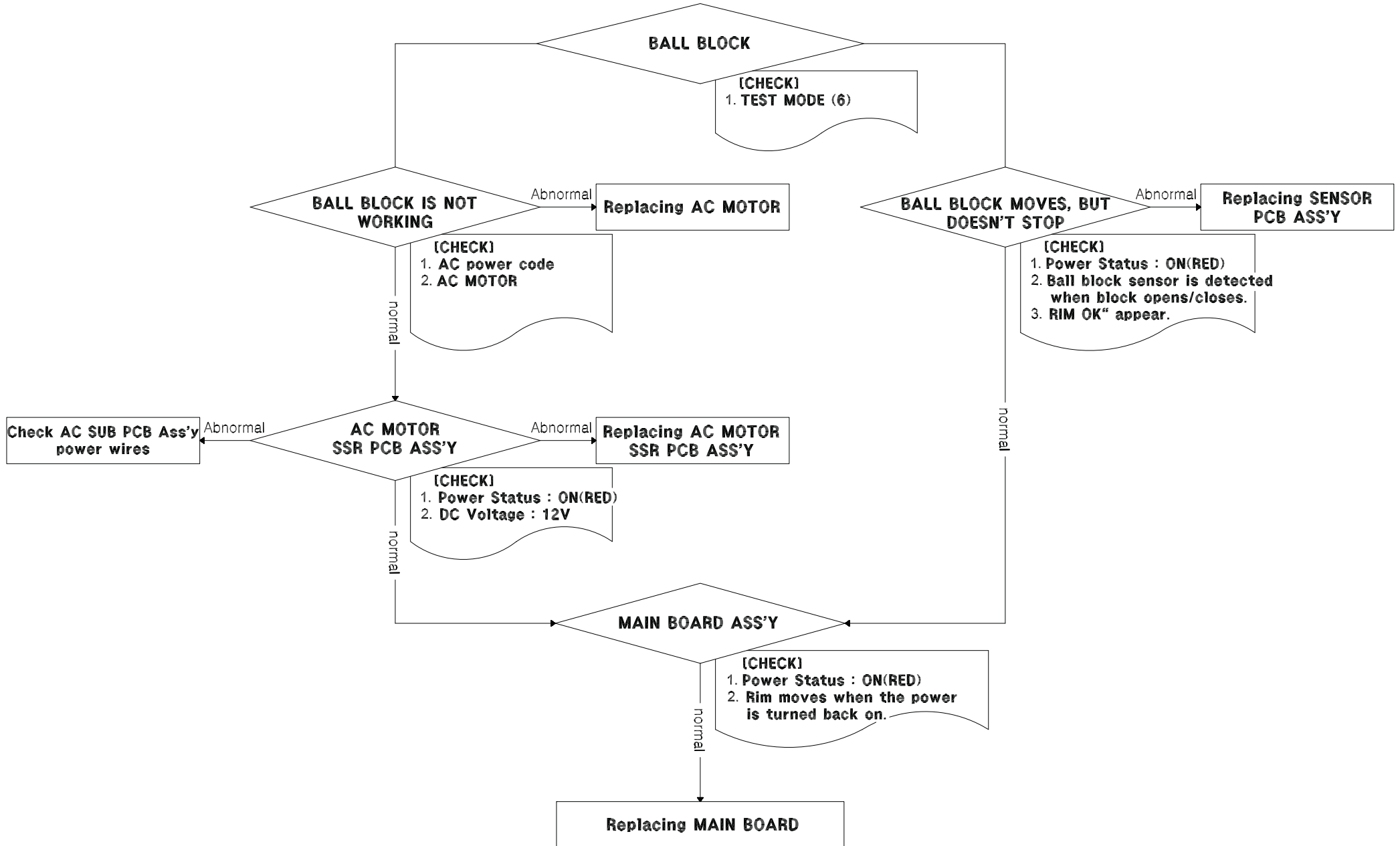
## 9-5. BUTTON

\*Common: Check the input voltage, check wiring



# 9-6. BALL BLOCK

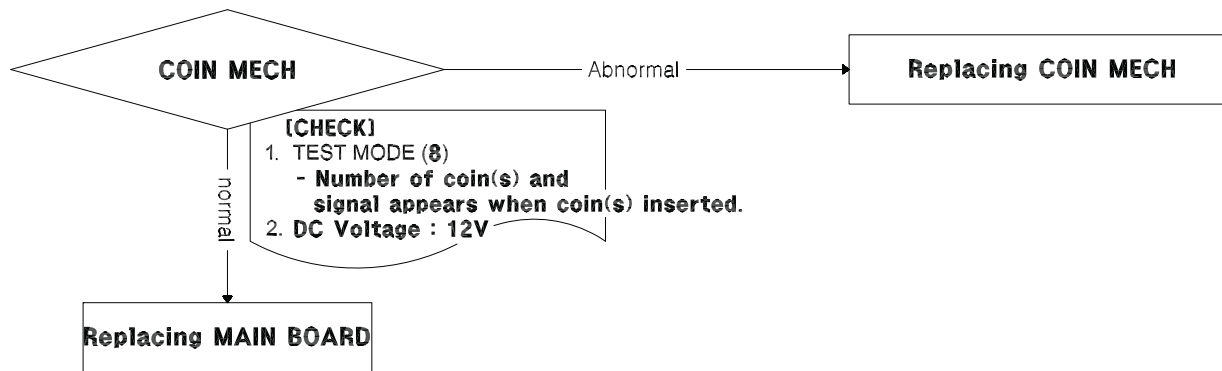
\*Common: Check the input voltage, check wiring





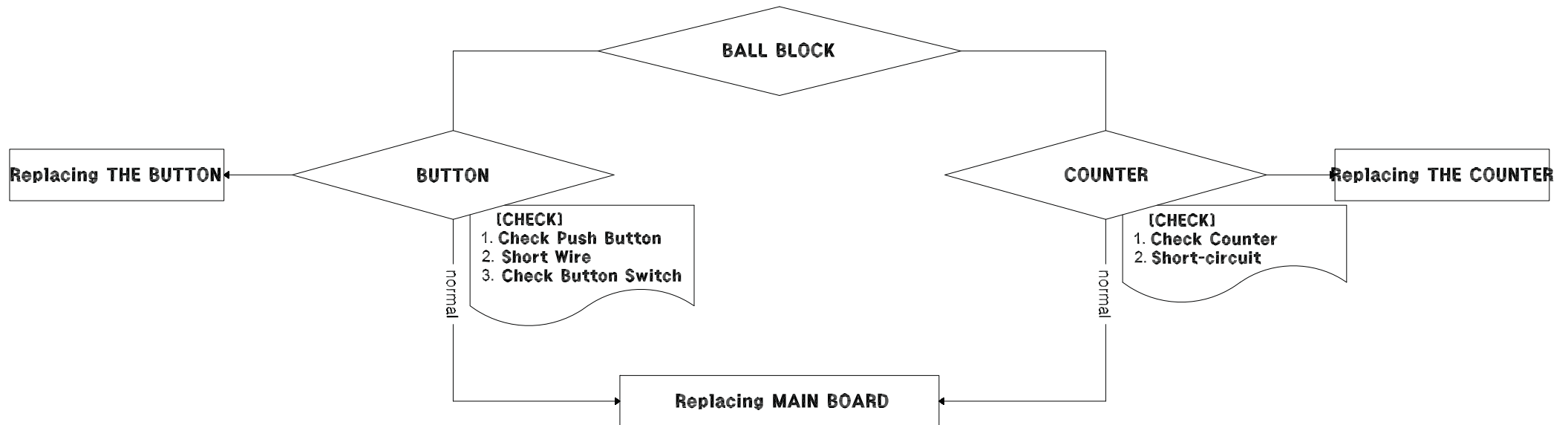
## 9-7. COIN MECH

\*Common: Check the input voltage, check wiring



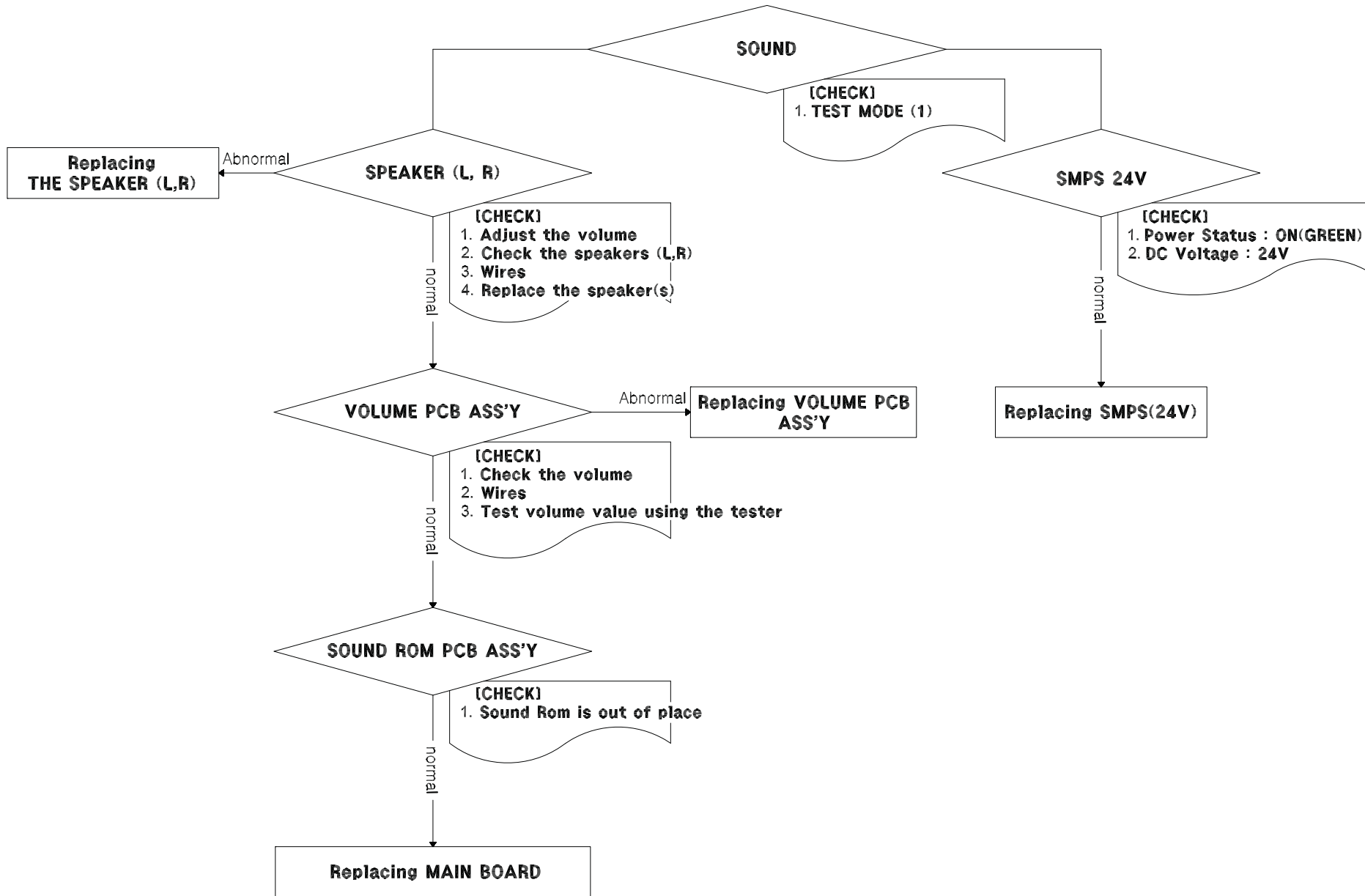
## 9-8. SETUP BUTTON & COUNTER

\*Common: Check the input voltage, check wiring



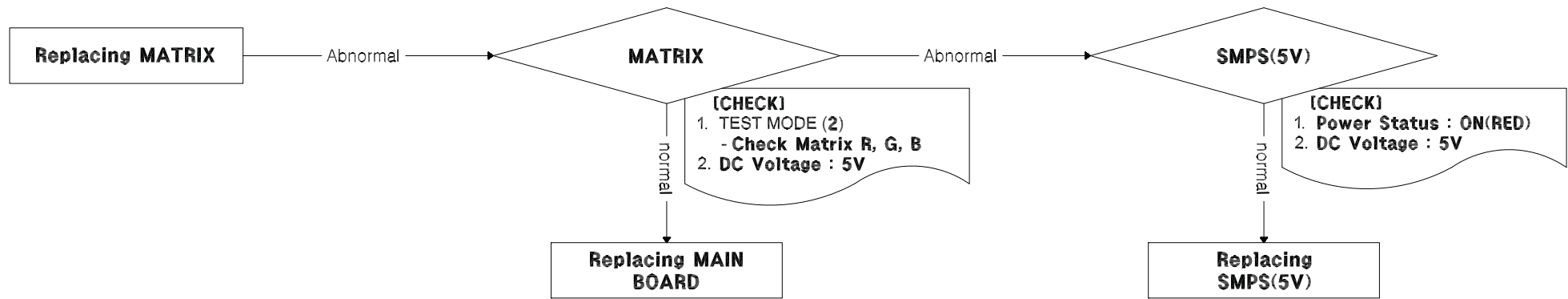
# 9-9. SOUND

\*Common: Check the input voltage, check wiring



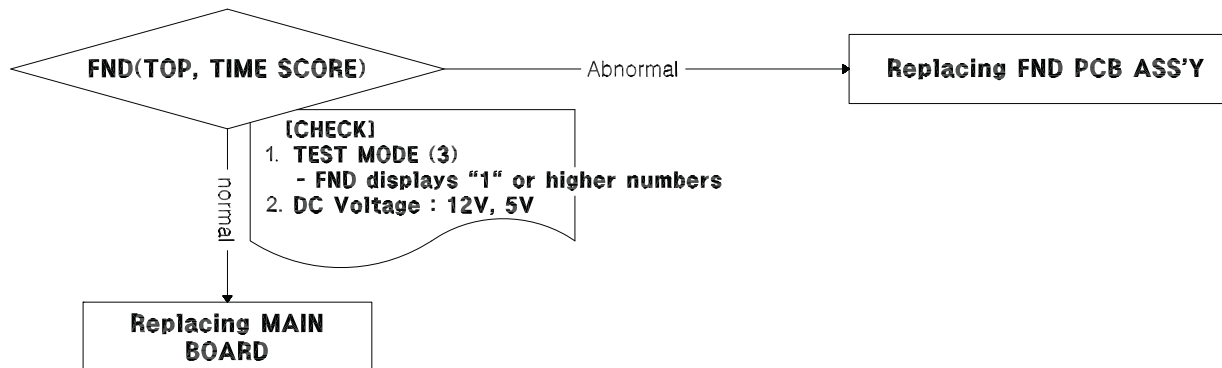
## 9-10. MATRIX

\*Common: Check the input voltage, check wiring



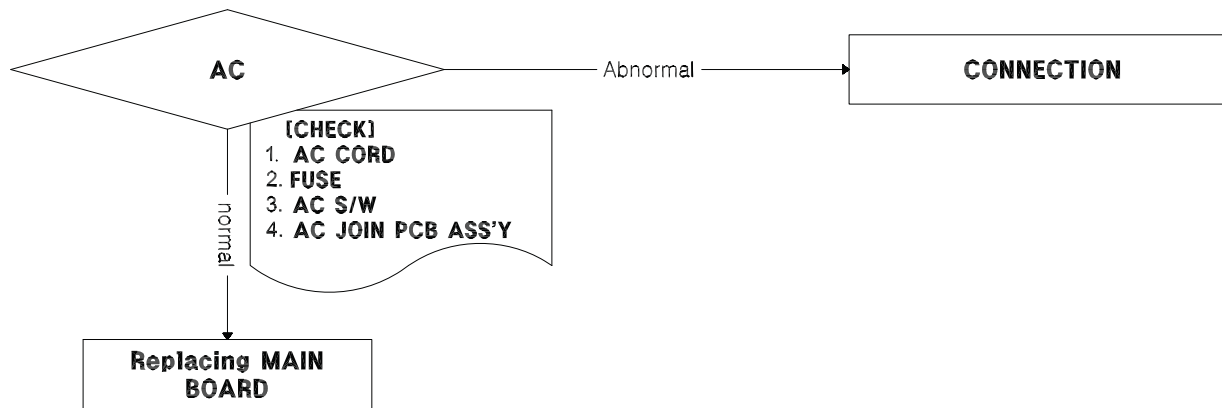
## 9-11. FND

\*Common: Check the input voltage, check wiring



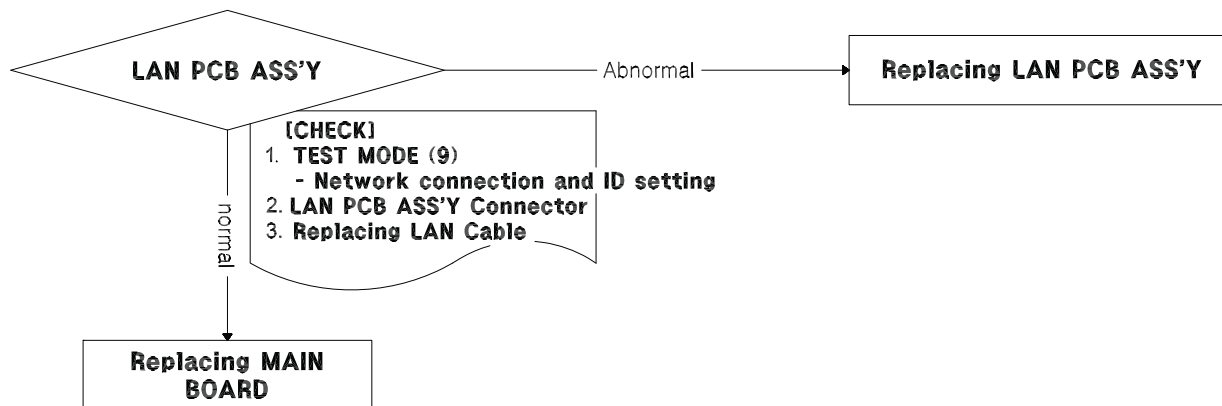
## 9-12. POWER

\*Common: Check the input voltage, check wiring



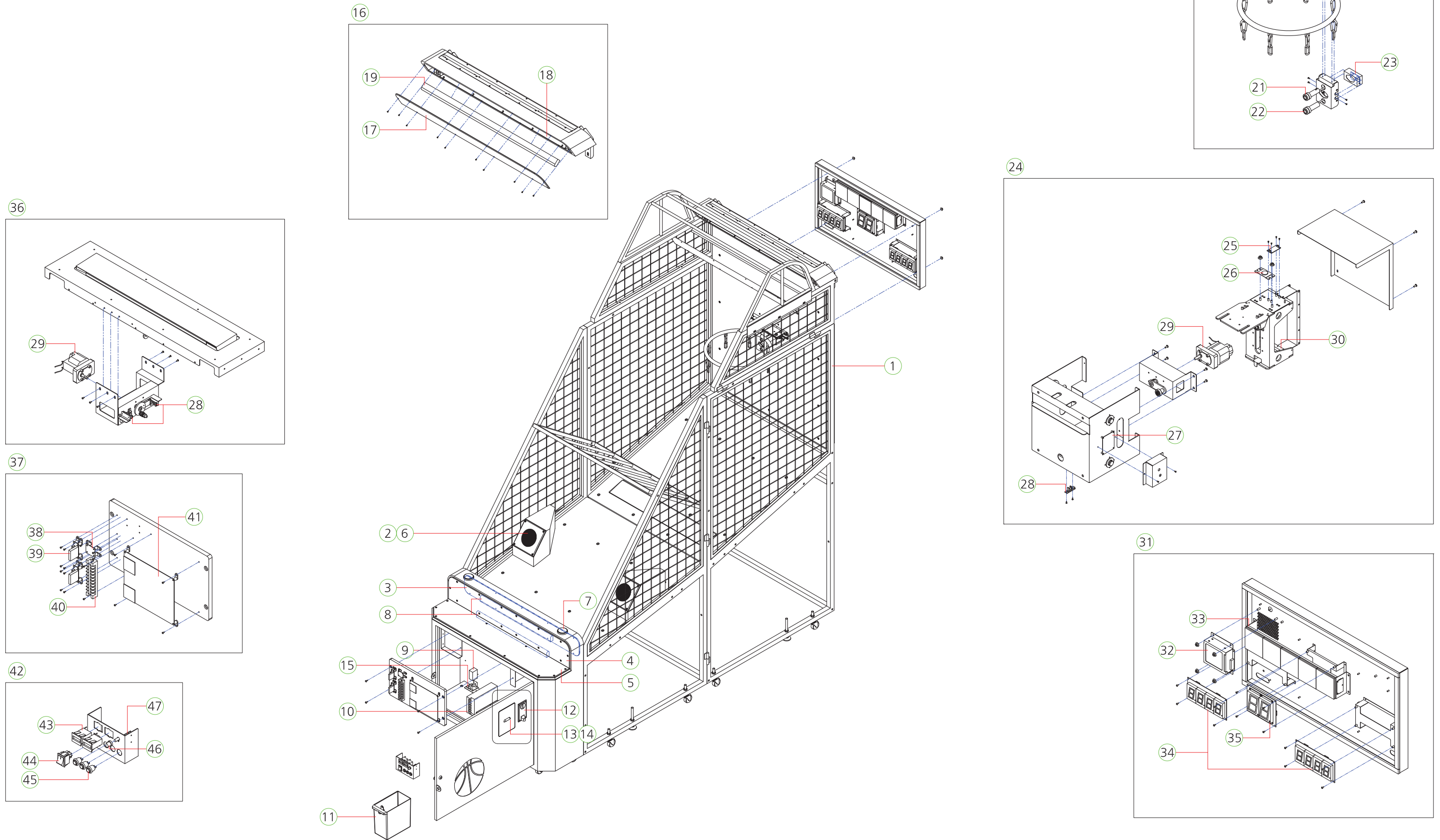
## 9-13. NETWORK

\*Common: Check the input voltage, check wiring



# 10. PARTS LIST

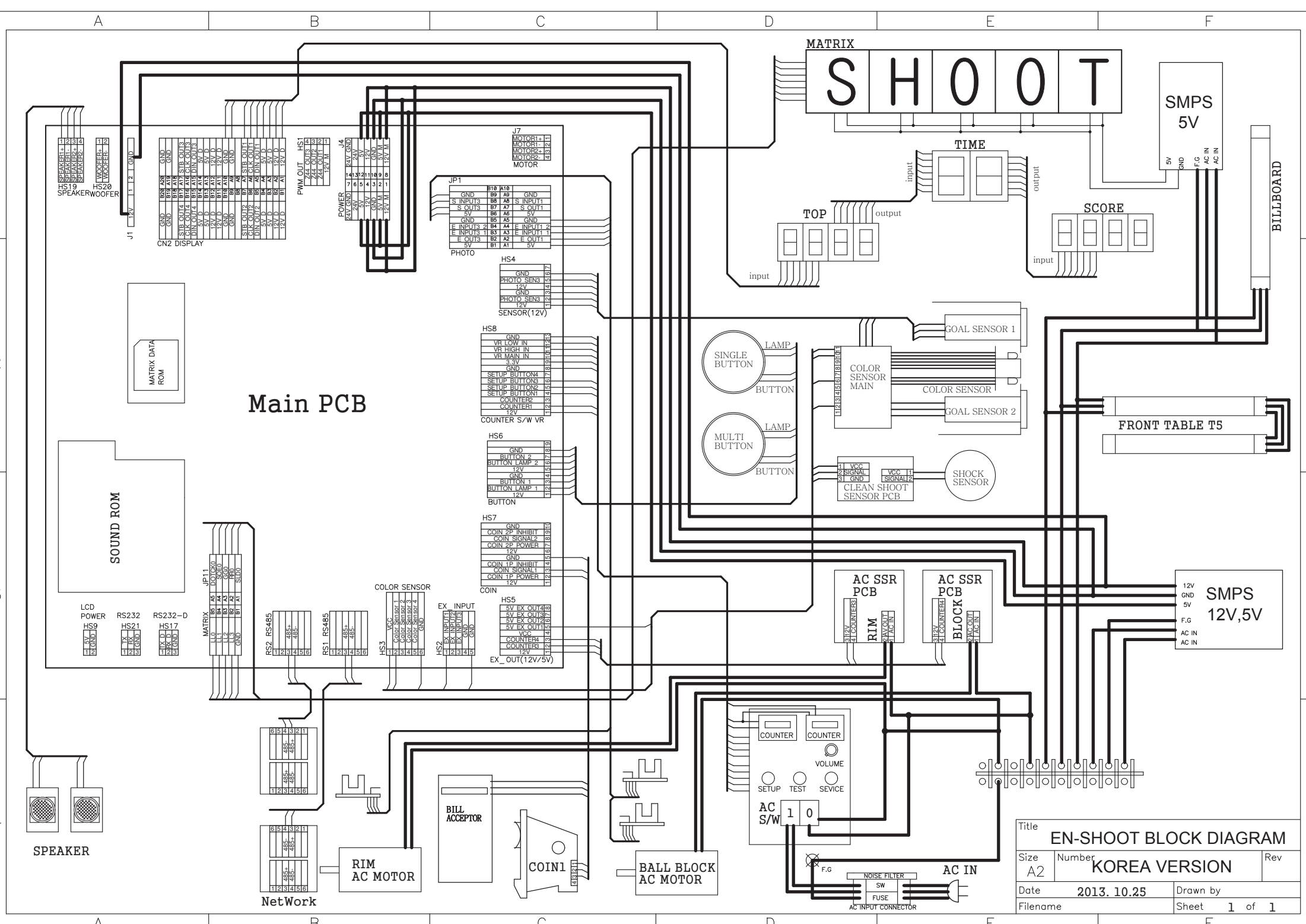
## 10-1. EXPLODED VIEW



## 10-2. LIST

NO.	PIC	LEVEL	PART NAME	SPEC.	QTY	CODE NO.
①		1	<b>MAIN CABINET ASS'Y</b>	TONG LI		AENS0ASS031
②		2	SPEAKER COVER ACRYL	ACRYL-5.0t	2	-
③		2	FRONT CASE REAR ACRYL	ACRYL-5.0t	1	-
④		2	FRONT CASE FRONT ACRYL	ACRYL-4.5t	1	-
⑤		2	FRONT CASE TABLE ACRYL	ACRYL-4.5t	1	-
⑥		2	SPEAKER	-	2	-
⑦		2	BUTTON SWITCH	-	2	-
⑧		2	T5 LAMP	-	2	-
⑨		2	NOISE FILTER	IP-0642-H2	1	MELE0NOI002
⑩		2	POWER SMPS	-	1	-
⑪		2	COIN BOX	-	1	-
⑫		2	COIN SELECTOR	-	1	-
⑬		2	BILL ACCEPTOR [ OPTION]	-	1	-
⑭		2	TICKET DISPENSER	-	1	-
⑮		2	JOIN PCB ASS'Y	-	2	-
⑯	1		<b>BILLBOARD PART</b>			
⑰		2	BILLBOARD ACRYL	ACRYL-4.5t	1	-
⑱		2	BILLBOARD BOTTOM LIGHT ACRYL	ACRYL-3.0t	1	-
⑲		2	T5 LAMP	-	1	-
⑳	1		<b>RIM PART</b>			
㉑		2	PHOTO SENSOR	BRP400-DDT 200MM BLUE	1	AENS0ASS029
㉒		2	PHOTO SENSOR	BRP400-DDT 300MM WHITE	1	AENS0ASS030
㉓		2	COLOR SENSOR LED PCB ASS'Y	-	1	-
㉔	1		<b>BRACKET MOVING PART</b>			
㉕		2	COIN SHOCK PCB ASS'Y	-	1	AFWH0PCB015
㉖		2	SHOCK SENSOR ASS'Y	-	1	AENS0ASS024
㉗		2	SENSOR LED PCB SUB ASS'Y		1	AENS0ASS027
㉘		2	PHOTO-INT1(ANGLE) PCB ASS'Y	ANGLE TYPE	3	AZZZ0PCB103
㉙		2	AC MOTOR 220V 3191-2P	KGB-6150-50 1/154 BRAKE TYPE 350MM	2	MZZZ0MOT045
㉚		2	LM BEARING	SC20WUU	1	MZZZ0BEA065
㉛	1		<b>FND PART</b>			
㉜		2	SMPS	-		-
㉝		2	MATRIX PCB ASS'Y	16X16 VS096T110-0	5	AENS0PCB007
㉞		2	SCORE FND PCB ASS'Y	SCORE FND	2	AENS0PCB005

NO.	PIC	LEVEL	PART NAME	SPEC.	QTY	CODE NO.
㉟		2	TIME FND PCB ASS'Y	TIME FND	1	AENS0PCB006
㊱	1		<b>BALL BLOCK PART</b>			
㊲	1		<b>MAIN BOARD PCB PART</b>			
㊳		2	TICKET DISPENSER DRIVER PCB ASS'Y	-	1	-
㊴		2	AC MOTOR SSR PCB ASS'Y	-	2	-
㊵		2	TERMINAL BLOCK	250V 10P	1	MELE0TEB003
㊶		2	MAIN BOARD PCB ASS'Y	EN SHOOT V2	1	AENS0PCB019
			SOUND ROM PCB ASS'Y	EN SHOOT V2 ME4	1	AENS0PCB018
			PGM ROM PCB ASS'Y		1	AENS0PCB011
㊷	1		<b>SERVICE PANEL PART</b>			
㊸		2	COUNTER	-	2	-
㊹		2	ROCKER SWITCH	-	1	-
㊺		2	PUSH BUTTON SWITCH	-	3	-
㊻		2	VOLUME KNOB	-	1	-
㊼		2	VOLUME PCB ASS'Y	-	1	-



# Main PCB

Title	EN-SHOOT BLOCK DIAGRAM		
Size	A2	Number	KOREA VERSION
Date	2013. 10.25	Drawn by	
Filename		Sheet	1 of 1



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