





SERVICE MANUAL



[IMPORTANT]

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

ISSUE DATE:Dec. 9, 2024

PRODUCT INFO	PART INFO	SUPPORT INFO	NEW PRODUCT INFO
			

※ QR(SUPPROT) - Leaflets, manuals, solution(error code,trouble shooting document, watch&solve)

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:



Disregarding could result in serious injury.



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

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

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 and 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.

*** Electromagnetic wave may cause unexpected noise from speaker.**

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, and etc., be sure to give this manual to the new owner.

PRÉCAUTION D'EMPLOI

Les consignes de sécurité suivantes sont données dans ce manuel. Elles doivent être strictement suivies pour protéger ceux qui les installent. Utiliser ou entretenir ce produit pour la sécurité des utilisateurs, des visiteurs et des biens.

Pour des raisons de sécurité.

- **Les suggestions suivantes doivent être respectées:**

ATTENTION

Le non-respect peut entraîner des blessures graves.

PRUDENCE

Le non-respect peut entraîner des blessures ou des dommages au produit.

- **Les suggestions graphiques suivantes décrivent les types de précautions à prendre.**



Indique qu'attention est requise.



Interdit.



Indique que quelque chose doit être effectuée.

- **Les précautions à prendre :**

Certaines procédures exigent une personne de maintenance qualifiée en atelier ou un spécialiste de l'industrie. Pour ces instructions, une personne qualifiée doit prendre soin des travaux.

- Sinon, un choc électrique, un dysfonctionnement de la machine, ou un accident grave peut en résulter.
- Remplacement des pièces de machines, l'inspection et la maintenance des machines, et le dépannage doit être attribué qu'à une personne de maintenance qualifiée en atelier ou spécialiste de l'industrie. Cette brochure donne des instructions que les emplois dangereux, en particulier, doivent être traités par un spécialiste de l'industrie. La personne de maintenance qualifiée en atelier et le spécialiste de l'industrie sont définis comme suit.

La personne de maintenance qualifiée en atelier

- Un personnel de service doit avoir de l'expérience dans les opérations de machines de jeux. Le personnel est responsable pour l'assemblage, l'installation, l'inspection et l'entretien de la machine.

Le spécialiste de l'industrie

- Un spécialiste de l'industrie doit être engagé dans la conception, la fabrication, l'inspection et l'entretien des appareils d'amusement.
Il ou elle doit avoir une formation en génie électrique, électronique et mécanique, et de maintenir régulièrement et de réparer les appareils d'amusement.

PRÉCAUTION D'EMPLOI


ATTENTION

Si il y a une anomalie comme fumée, mauvaise odeur ou bruit anormal émis par la machine,  couper immédiatement l'interrupteur principal et débranchez le câble d'alimentation de la prise pour arrêter son fonctionnement.

- L'utilisation de l'appareil dans des conditions anormales peut provoquer un incendie ou un accident.

En cas d'anomalie

1. Mettez l'interrupteur principal sur ARRÊT.
2. Débranchez le câble d'alimentation de la prise.
3. Contactez votre revendeur le plus proche.

Ne pas brancher le câble d'alimentation incorrectement ou le laisser être recouvert de poussière. 

Cela pourrait nuire le câble d'alimentation.

PRUDENCE

Ne pas utiliser ce produit ailleurs que dans les zones industrielles. 

- L'utiliser dans une zone résidentielle ou d'une zone à côté d'un quartier résidentiel pourrait nuire à la réception des radios, téléviseurs, téléphones, etc.
- Ne donnez pas de choc à la surface d'un produit en verre.

- S'il vous plaît ne pas jouer à ce jeu.
 - Quand vous buvez;
 - Lorsque votre condition physique n'est pas normale;
 - Lorsque vous êtes dans une période de grossesse;
 - Lorsque vous avez un contrôleur d'impulsion;
 - Lorsque vous avez récemment subi une crampe ou évanouissement en regardant la télévision.
- Évitez une force excessive / un choc pendant la lecture / de déplacer le jeu.
- Quand vous jouez les jeux, faite attention aux alentours.

Ne pas brancher ou débrancher le câble d'alimentation avec les mains mouillées. 

Dans la manipulation du câble d'alimentation, suivez les instructions ci-dessous. 

- | | |
|--|---|
| • Ne pas endommager le câble d'alimentation. | • Ne pas modifier le câble d'alimentation. |
| • Ne pas plier le câble d'alimentation de manière excessive. | • Ne tordez pas le câble d'alimentation. |
| • Ne pas chauffer le câble d'alimentation. | • Ne tirez pas sur le câble d'alimentation. |
| • Ne pas lier le câble d'alimentation. | • Ne montez pas sur le câble d'alimentation. |
| • Ne pas prendre en sandwich le câble d'alimentation. | • Ne pas mettre un clou dans le câble d'alimentation. |

Si la fiche du câble d'alimentation ou est endommagé, cessez immédiatement d'utiliser la machine et demandez à votre revendeur le plus proche de remplacer les pièces.

PRÉCAUTION D'EMPLOI

⚠ ATTENTION

Assurez-vous de consulter un spécialiste de l'industrie lors de la mise en place, du déplacement ou le transport de ce produit.

- Ce produit ne doit pas être mis en place, déplacé ou transporté par une quelconque autre qu'un spécialiste de l'industrie.
- Lors de l'installation de ce produit, installez 4 niveleurs de pieds uniformément sur le sol et assurez-vous que le produit est installé de façon stable dans une position horizontale. Une installation instable peut entraîner des blessures ou un accident.
- Lors de l'installation de ce produit, ne pas appliquer une force excessive sur les pièces mobiles. Sinon, des blessures et des accidents peuvent y résulter, ou le produit peut être endommagé.

La machine pour une utilisation en intérieur uniquement, ne pas installer à l'extérieur.



N'installez pas la machine de jeu près des issues de secours.



Protéger la machine de jeu de:



- L'humidité ou la pluie.
- La lumière directe du soleil.
- La chaleur directe de la climatisation et du chauffage, etc...
- Des substances inflammables dangereuses.
- Sinon, un accident ou un dysfonctionnement.

Ne pas placer les récipients contenant des produits chimiques ou de l'eau sur ou près de la machine de jeu.



Ne placez pas d'objets à proximité des orifices de ventilation.



Ne pas plier le cordon d'alimentation par la force ou de placer des objets lourds au-dessus.



Ne jamais brancher ou débrancher le cordon d'alimentation avec les mains mouillées.



Ne jamais débrancher la machine de jeu en tirant le câble d'alimentation.



⚠ PRUDENCE

Veillez à utiliser le câblage intérieur selon les exigences de tension spécifiées. Pour une rallonge, utilisez la notation spécifiée ou plus.

Veillez à utiliser le cordon d'alimentation fourni.

Ne jamais brancher plus d'un cordon à la fois dans la prise électrique.



Ne pas poser le cordon d'alimentation où les gens marchent à travers.



Soyez sûr de mettre à la terre ce produit.



Ne pas exercer une force excessive lors du déplacement de la machine.




Pour une ventilation correcte, garder la machine de jeu 100mm (4 ") loin des murs.


Ne pas modifier les réglages des commutateurs DIP liées au système.


PRÉCAUTION D'EMPLOI


ATTENTION

Veillez à éteindre l'interrupteur d'alimentation principale et débranchez le cordon d'alimentation de la prise avant d'inspecter ou de nettoyer la machine. 

Lors du remplacement des pièces, veillez à utiliser une partie des spécifications correctes. Ne jamais utiliser de pièces autres que celles spécifiées. 

L'ouverture à l'intérieur de la machine doit être effectuée par le spécialiste de la machine seulement, comme le courant électrique élevé est transmis à l'intérieur. Pour la machine de jeu avec le moniteur, un soin doit être pris lors de l'ouverture de sa porte arrière. Si non, une détérioration des pièces à l'intérieur ou à l'écran peut se produire. 


Si l'interrupteur secondaire du panneau de service est éteint sans éteindre le commutateur d'alimentation principale de l'unité d'alimentation, certaines parties dans les unités restent sous tension. Lors de l'ouverture de la porte arrière, veillez à éteindre l'interrupteur d'alimentation principale et débranchez le cordon d'alimentation de la prise. 

Il est strictement conseillé de s'abstenir de démonter et de réparer des pièces qui ne sont pas indiqués dans ce manuel, ainsi que les paramètres et le remodelage. 


Pour nettoyer la machine de jeu, l'essuyer avec un chiffon doux imbibé avec un détergent neutre.

- L'utilisation plus mince d'un autre solvant organique ou de l'alcool peut décomposer le matériel.
- Un choc électrique ou une défaillance de l'équipement pourraient être causés par la pénétration de l'eau à l'intérieur de la machine.

PRUDENCE

Les composants de la machine de jeu sont sensibles aux vibrations et aux chocs. Il faut faire attention lors du déplacement et le transport de la machine de jeu. 

Veillez à ne pas laisser la machine se renverser.

Avant de déplacer la machine, veillez à éteindre l'interrupteur d'alimentation principale, débranchez le cordon d'alimentation de la prise et débranchez le cordon d'alimentation de la machine. 

Avant de déplacer la machine, la mettre hors des niveleurs et le déplacer sur les roulettes.

Éviter une force excessive lors du déplacement de la machine.

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PRÉCAUTIONS LORS DU MANIEMENT

- Lors de la mise en place, l'inspection, l'entretien, déplacement ou le transport de ce produit, suivez les procédures et les instructions énoncées dans ce manuel et effectuer ce travail en toute sécurité.
- Ne pas mettre en place, manipuler, inspecter, entretenir, déplacer ou transporter ce produit dans des conditions équivalentes à l'état de "ATTENTION" ou "PRUDENCE" spécifiée dans ce manuel.
- Si un nouveau propriétaire obtient ce produit à la suite d'un transfert, etc., soyez sûr de donner ce manuel au nouveau propriétaire.

CONTENTS

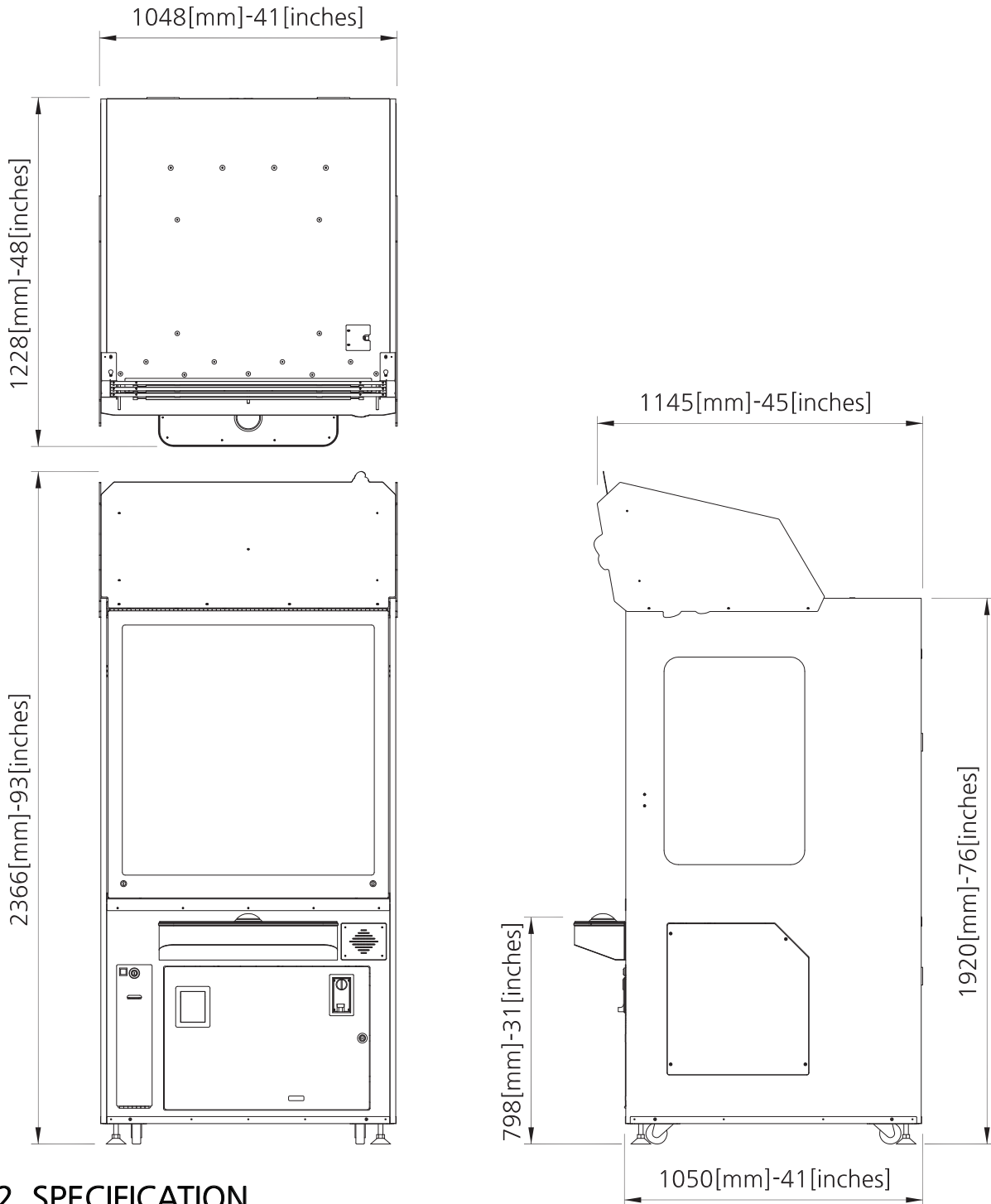
1. SPECIFICATION AND DIMENSION	P04
1-1. DIMENSION	P04
1-2. SPECIFICATION	P04
1-3. STICKER LOCATION	P05
2. INSTALL INFOMATION	P06
2-1. INSTALLATION SPACE	P06
2-2. MAINTAIN PRODUCT FLATNESS	P06
2-3. IMPORTANCE	P06
3. COMPONENTS	P07
4. INSTALL	P08
4-1. HOW TO INSTALL_BILLBOARD	P08
5. SETUP SETTING	P10
5-1. MACHINE SETUP	P10
5-2. PROGRAM SETTINGS	P10
5-3. CLEAR MODE	P18
5-4. BOOKKEEPING	P18
5-5. TEST MODE	P21
5-6. ERROR CODE	P27
6. MAINTENANCE	P35
6-1. PRECAUTIONS FOR TURNING ON THE POWER	P35
6-2. WHEN INSTALLING THE DEVICE	P35
6-3. MAIN BOARD MANAGEMENT	P35
6-4. BASIC PRODUCT MANAGEMENT CLEAN IT REGULARLY	P35
6-5. THIS PRODUCT SHOULD ONLY BE USED FOR INDOOR USE	P35
7. EXPLODED VIEW	P36
7-1. MAIN CABINET PART	P36
7-2. BILLBOARD PART	P37
7-3. MAIN BOARD PART	P38
7-4. SMPS PART	P38
7-5. CONTROL PANEL PART	P39
7-6. AC INPUT PART	P39
7-7. CABINET UPPER BAR LED_REAR PART	P39
7-8. CABINET UPPER BAR LED_FRONT PART	P39
7-9. CABINET FRONT UPPER DISPLAY PART	P40
7-10. CABINET SIDE LIGHTING-L, R PART	P40
7-11. CABINET SIDE LIGHTING COVER-L, R PART	P40

7-12. ELEVATOR HOPPER ROTATE PART	P41
7-13. PUSHER PLATE PART	P42
7-14. BIG BALL DIVIDE DEVICE PART	P43
7-15. BIG BALL DIVIDE DEVICE ROTATE PART	P44
7-16. GAME BOARD MAIN UPPER PART	P45
7-17. GAME BOARD MAIN LOWER PART	P45
7-18. BONUS WHEEL TOTAL PART	P46
7-19. BONUS WHEEL MAIN SHAFT PART	P47
7-20. CHECKER PART	P48
7-21. SMALL BALL ELEVATOR PART	P49
7-22. BIG BALL ELEVATOR PART	P50
7-23. BIG BALL DIVIDE UPPER RAIL ACRYL PART	P51
7-24. BIG BALL DIVIDE LOWER ACRYL PART	P51
7-25. BIG BALL OUT CHUTE PART	P52
7-26. SMALL BALL OUT CHUTE PART	P52
7-27. PUSHER SIDE REAR UPPER COVER PART	P52
7-28. SHOOTER PART	P53
7-29. COIN BOX COVER PART	P54
7-30. TICKET DOOR PART	P54
7-31. FRONT LOWER DOOR PART	P55
7-32. CABINET UPPER DOOR PART	P56
7-33. BUTTON PLATE PART	P57
8. SOLUTION	P58
9. PCB CONNECTION LOCATION	P60
9-1. MAIN PCB ASS'Y	P60
9-2. STM BLDC IO PCB ASS'Y	P61
9-3. WS2812B IO PCB ASS'Y	P61
9-4. CHECKER SENSOR RX, TX PCB ASS'Y	P61
9-5. SENSOR_T, R PCB ASS'Y	P61
9-6. PHOTO INT-1, 2 PCB ASS'Y	P61
10. BLOCK DIAGRAM	P62
11. WARRANTY ITEM	P69

12. TROUBLE SHOOTING	P73
12-1. REGION ERROR (Er01)	P73
12-2. SYSTEM ERROR (Er02, Er03)	P73
12-3. COIN MACHINE ERROR (Er.11)	P73
12-4. BILL ACCEPTOR ERROR (Er.13)	P73
12-5. PUSHER MOTOR & SENSOR ERROR (Er.41)	P74
12-6. BIG BALL GAME MOTOR & SENSOR ERROR (Er.51, Er.52)	P74
12-7. BIG BALL GAME START SWITCH & SOLENOIDE ERROR (Er.53)	P75
12-8. BIG BALL GAME SUCCESS SWITCH ERROR (Er.54)	P75
12-9. BIG BALL GAME START SWITCH & SUCCESS SWITCH ERROR (Er.55)	P76
12-10. BIG BALL GAME MOTOR & SUB ENCODER COUNT ERROR (Er.56)	P76
12-11. BIG BALL ELEVATOR MOTOR & SENSOR ERROR (Er.61)	P77
12-12. BIG BALL ELEVATOR UPPER SWITCH ERROR (Er.62)	P77
12-13. BIG BALL FEEDING MOTOR & SENSOR ERROR (Er.63)	P78
12-14. BIG BALL FEEDING LIMIT SWITCH ERROR (Er.65)	P78
12-15. SMALL BALL ELEVATOR MOTOR & SENSOR ERROR (Er.71)	P79
12-16. SMALL BALL ELEVATOR UPPER SWITCH ERROR (Er.72)	P79
12-17. SHOOTER HOPPER MOTOR & SENSOR ERROR (Er.81)	P80
12-18. SHOOTER MOTOR & SENSOR ERROR (Er.82)	P80
12-19. SHOOTER BLDC ROLLER MOTOR ERROR (Er.83)	P81
12-20. SHOOTER MOVE MOTOR & SENSOR ERROR (Er.84)	P81
12-21. SHOOTER BLDC ROLLER MOTOR SPEED ERROR (Er.87)	P82
12-22. CHECKER SENSOR ERROR (Er.91, Er.92)	P82
12-23. PUSHER PLATE SMALL BALL DROP SENSOR ERROR (Er.93)	P83
12-24. PUSHER PLATE BIG BALL DROP SENSOR ERROR (Er.94)	P83
12-25. TICKET ERROR (HELP)	P84

1. SPECIFICATION AND DIMENSION

1-1. DIMENSION

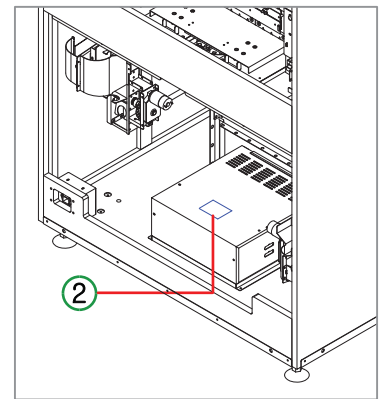
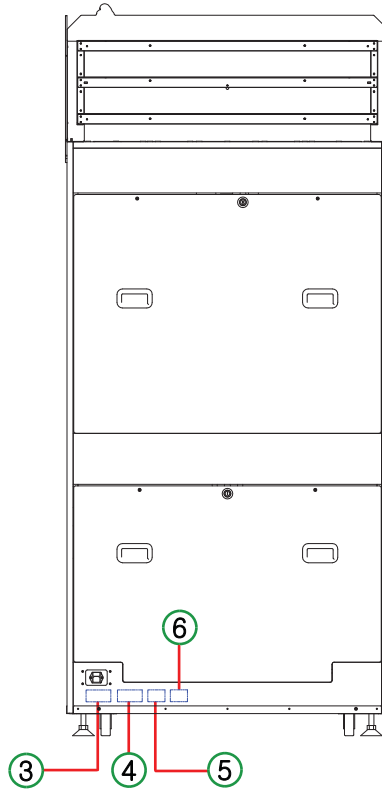
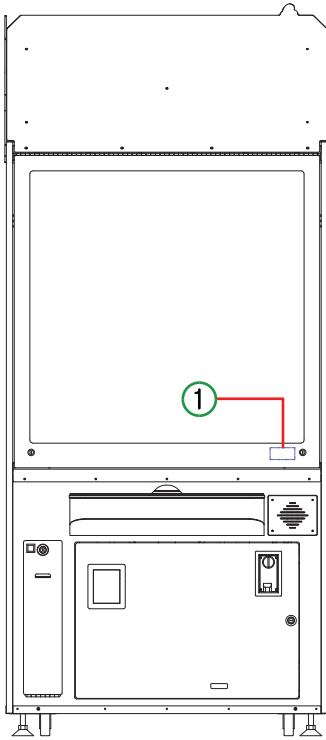


1-2. SPECIFICATION

DIMENSIONS (W x D x H)	1048 x 1145 x 2366 (mm)	
PACKING DIMENSIONS (W x D x H)	1150 x 1330 x 2140 (mm)	
WEIGHT (kg)	306 kg [WEIGHT INCLUDING : 339 kg] PACKAGING	
VOLTAGE	AC 120V	AC 230V
FREQUENCY RANGE	60Hz	50/60Hz
CONSUMPTION	240 W	
CERTIFICATION	-	

* The 120V voltage specification is for the Americas only, and the 230V (50/60Hz) voltage specifications are for other countries.

1-3. STICKER LOCATION



1	 <p>Do not push or hit this. It would be damaged. Ne pas la pousser ou frapper. Elle serait endommagée.</p>	2	 <p>WARNING/ATTENTION Except service personnel, please never open the product as there is a risk of electric shock. Il y a un risque d'électrocution, n'ouvrez pas le produit excepté le responsable, s'il vous plaît.</p>	3	 <p>CAUTION/PRUDENCE "For continuous protection against risk of fire, replace only with the same type T10A-250V fuse" "Pour une protection continue contre les risques d'incendie, remplacer un fusible avec seulement le même type T10A-250V"</p>
4	 <p>WARNING ROCKING, SHAKING, OR TIPPING MAY CAUSE INJURY OR DEATH! This unit must be fastened securely to the wall, floor or adjacent object in compliance with the installation instructions. ATTENTION AGITER, SECOUER OU BASCULER PEUT CAUSER DES BLESSURES OU ENTRAINER LA MORT! Cette unité doit être fixée au mur, au plancher ou à un objet à proximité conformément aux instructions d'installation.</p>	5		6	 <p>Product Name: GAME MACHINE Model No.: STEELMAN POWER 1P Rating: 120V~, 60Hz, 540W Web site: http://www.andamiro.com ANDAMIRO MADE IN KOREA Serial Number</p>

2. INSTALL INFORMATION

*** PLEASE DO NOT INSTALL PRODUCT IN A PLACE WITH A LOT OF SUNLIGHT. IT CAN BE A PROBLEM FOR THE OPERATION OF THE PRODUCT.**

2-1. INSTALLATION SPACE

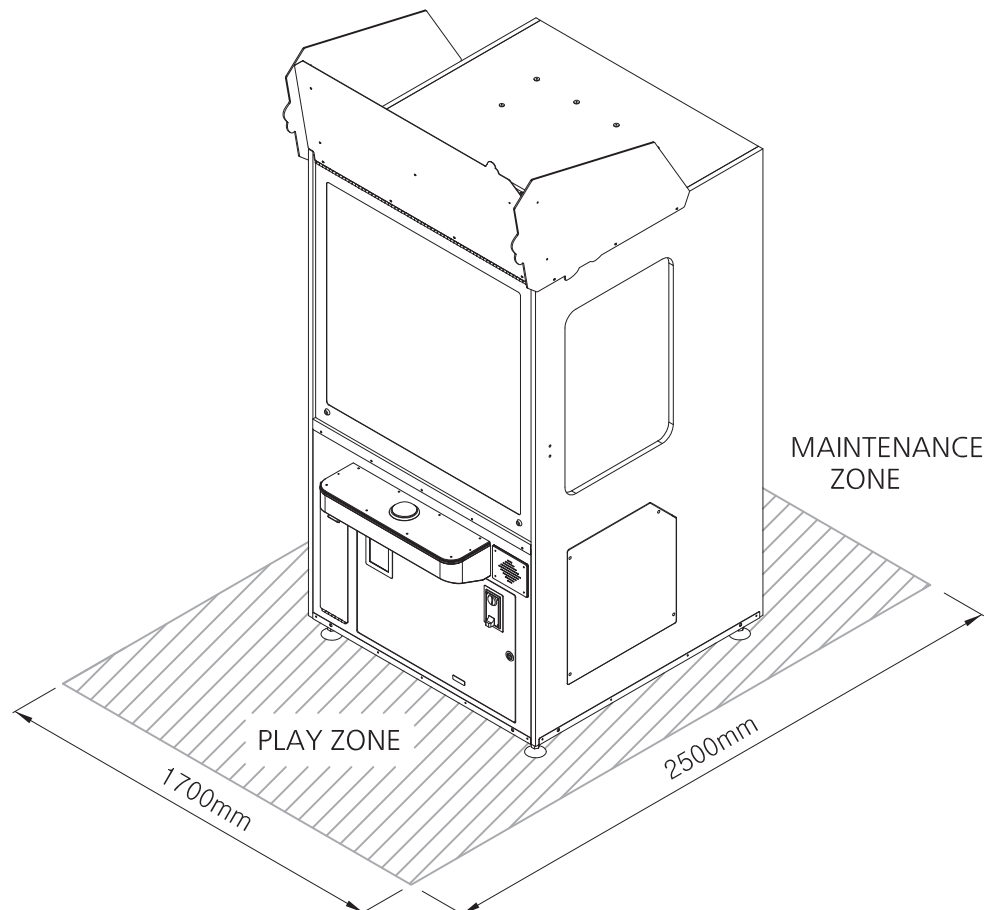
- ※ Maintenance zone & Play zone should have at least 1700mm(67inch) * 2500mm(99inch) each

2-2. MAINTAIN PRODUCT FLATNESS

- ※ After installation is complete
- ※ 2-1 After securing space, adjust the 4 adjuster so that the product is stably leveled








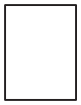
2-3. IMPORTANCE

- ※ **This product should be indoor use and out of direct sunlight**



3. COMPONENTS

NO	PART NAME	Q'TY	SPARE	NO	PART NAME	Q'TY
1	AC POWER CORD	1		8	MEDAL	2200 / 1100 per P
2	KEY 7001	2		9	MEDAL SPARE	200 / 100 per P
3	KEY 6001	1		10	CARD HEAVY PUSH BKT	2
4	SCREW TH [M4x20L]	-	4	11	CARD DISPENSER SETTING JIG	1
5	RENCH [2.5mm]	1		12	MANUAL	1
6	RENCH [3mm]	1				
7	RENCH [4mm]	1				

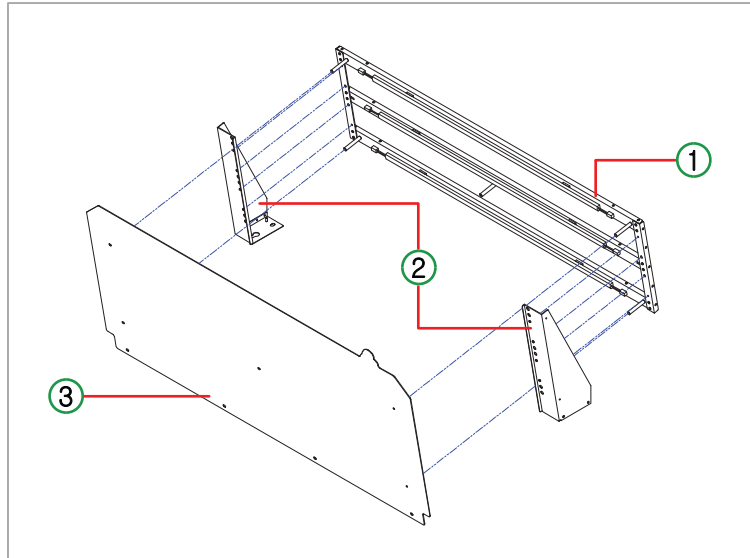
▼ 1	▼ 2,3	▼ 4	▼ 5,6,7	▼ 8,9	▼ 10
					
▼ 11	▼ 12				
					

4. INSTALL

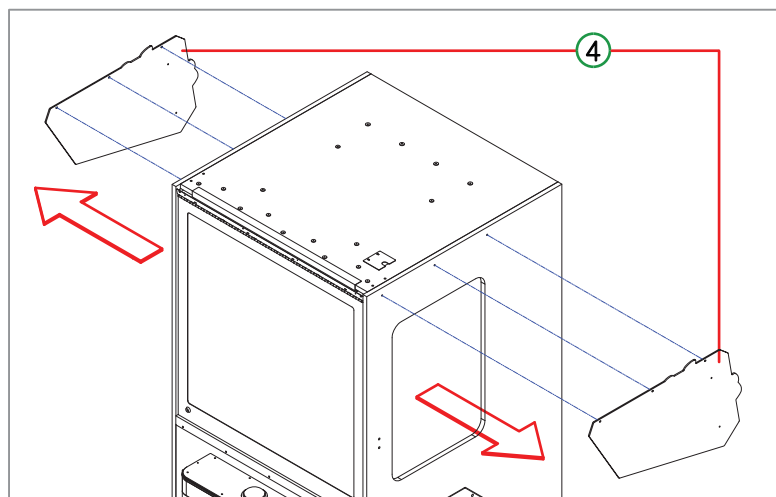
4-1. PRECATIONS WHEN INSTALLING THE CARD READER

* When installing the card reader, proceed with power distribution so that the card reader wiring does not touch the driving part.

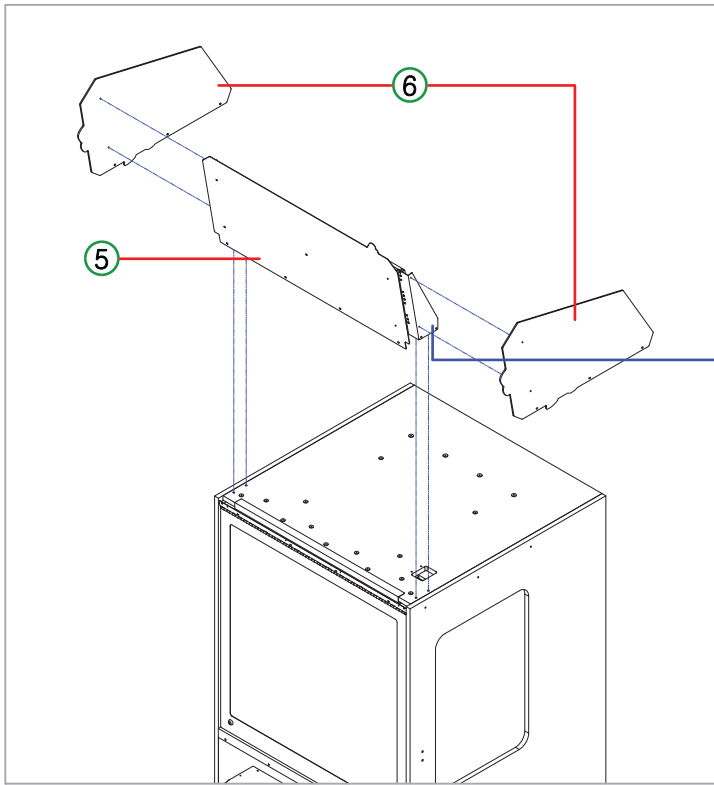
4-2. HOW TO INSTALL BILLBOARD



NO	PROCESS	ITEM	Q'TY	BOLT	SPEC	Q'TY
1		BILLBOARD FRONT ACRYL ASS'Y	1			
2	ASSEMBLE	BILLBOARD SIDE FOMAX FRONT FIX BKT	2	SEMS NI	M4*8L	8
3	ASSEMBLE	BILLBOARD FRONT ACRYL	1	SCREW TH	M4*10L	9

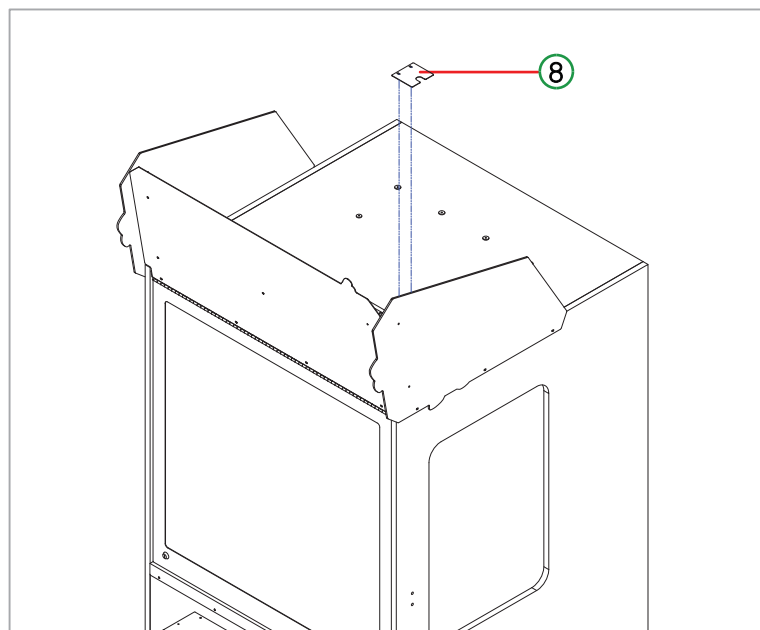


NO	PROCESS	ITEM	Q'TY	BOLT	SPEC	Q'TY
4	SEPARATION	BILLBOARD SIDE FOMAX-L, R	2	SCREW TH	M4*25L	6



⑦ * Connector

NO	PROCESS	ITEM	Q'TY	BOLT	SPEC	Q'TY
5	ASSEMBLE	BILLBOARD ASS'Y	1	SEMS NI	M6*25L	4
6	ASSEMBLE	BILLBOARD SIDE FOMAX-L, R	2	SCREW TH	M4*25L	6
				SCREW TH	M4*10L	4
7	CONNECTION	BILLBOARD CONNECTOR				

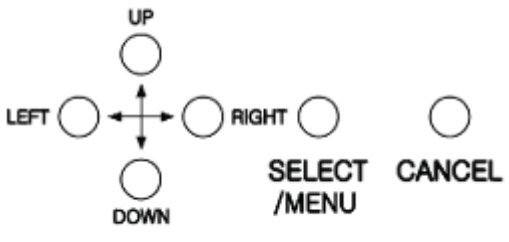



NO	PROCESS	ITEM	Q'TY	BOLT	SPEC	Q'TY	
8	ASSEMBLE	CABINET TOP HARNESS COVER BKT	1	SCREW TH	M4*20L	2	
9	POWER ON	The voltage of this product is (120V or 230V) *(LRS-350-12 / AC S/W TYPE_Transform)					

5. SETUP SETTING

5-1. MACHINE SETUP

1.SETUP BUTTON LAYOUT

	<p>1) UP, DOWN : MENU UP/DOWN MOVE 2) LEFT, RIGHT : CHANGE SETTING VALUE 3) SELECT /MENU : SETUP MENU MODE, SELECT AND PERFORM 4) CANCEL : EXIT</p>
 <p>1P SERVICE / RESET</p>	<p>NORMALLY SERVICE IN, IN CASE OF ERROR, USE THIS BUTTON TO CLEAR ERROR * EACH TIME SERVICE IN IS PRESSED ONCE, THE NUMBER SET IN PLAYS/COIN GOES UP</p>

OPERATING OPTIONS	
PRESS MENU BUTTON. [MENU/SELECT BUTTON: ENTER]	
PROGRAM SETTINGS	MODE FOR SETTING
CLEAR MODE	MODE FOR CLEAR
BOOKKEEPING	CHECKING GAME DATA
FACTORY SETTING	INITIALIZING TO FACTORY SETTING
TEST MODE	MODE FOR TESTING
EXIT	EXIT OPERATION OPTIONS

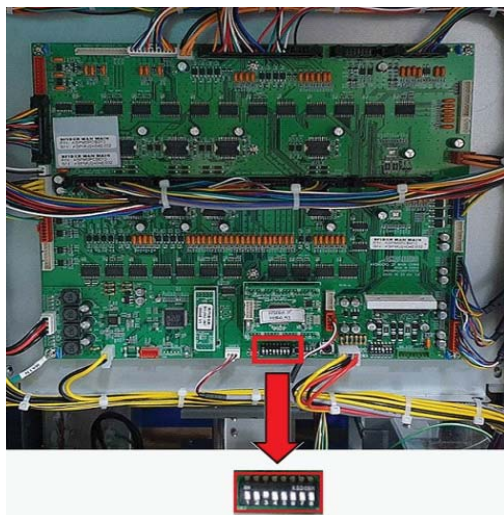
5-2. PROGRAM SETTINGS

● PROGRAM SETTINGS			
LCD DISPLAY	DESCRIPTION	RANGE	DEFAULT
PLAYS / COIN [-> sub menu]	USE COIN OR CARD AND SELECT FREE PLAY SETTINGS. SET PLAYS (CREDITS) PER COIN USE. (If you use your COIN or SWIPE card consecutively, you will receive differential payments depending on the number of consecutive uses.) !CAUTION! VALUE IS MAINTAINED EVEN AFTER FACTORY SET	=> (SUB MENU) (REFER TO BELOW TABLE #1)	
PLAYS / BILL [-> sub menu]	SET THE NUMBER OF PLAYS (CREDITS) PER BILL INPUT. BILL DIFFERENTIAL PAYMENT DEPENDING ON THE INPUT AMOUNT. !CAUTION! VALUE IS MAINTAINED EVEN AFTER FACTORY SET	=> (SUB MENU) (REFER TO BELOW TABLE #2)	

PAYOUT SETTING [-> sub menu]	SETTING NUMBER OF TICKETS PER SWIPE	=> (SUB MENU) (REFER TO BELOW TABLE #3)	
SHOT COUNT	THE NUMBER OF MEDALS TO BE FIRED 1 ~ 3 : FIRES A SET NUMBER OF MEDALS	1 ~ 3	3
S-BALL BALANCE	A FUNCTION TO CALCULATE THE AVERAGE VALUE INCLUDING THE NUMBER OF MEDALS FIRED DURING THE GAME AFTER THE RAPID AUTO SHOT EVENT AND EMIT SMALL BALLS BASED ON THE VALUE SET IN S_BALANCE (Basically, when the S-BALL BALANCE setting is set to 25 and the average value of medal firing is 25, the number of small balls discharged may differ from the set value depending on the game progress based on the average discharge of successful small balls in checkers.)	20 ~ 30 (Increase by 1 unit)	25
S-BALL BONUS ※ For WA scent only, other scents are not applicable.	SMALL BALL EVENT FINISH BONUS SCORE (There is no RAPID AUTO SHOT event with bonus points when you reach the end of the horse board ramp.)	10 ~ 1000 (Increase by 10 unit)	100
B-BALL FORCE ※ For WA scent only, other scents are not applicable.	BIG BALL GAME BALL EJECTION START BUTTON TIME SETTING OFF : Wait until the button is pressed 5 ~ 30 : Balls are automatically ejected after the time set in seconds	OFF, 5 ~ 30 Sec (Increase by 5 unit)	20
RAPID FIRE OP ※ Not applicable to WA	RAPID AUTO SHOT EVENT MEDAL FIRE OPTION “AUTO” : AUTO “MANU” : MANUAL	“AUTO” “MANU”	“AUTO”
RAPID FIRE TIME ※ Not applicable to WA	RAPID AUTO SHOT EVENT TIME (DURING RAPID AUTO SHOT EVENT, MEDALS ARE FIRED WITHOUT CONSUMING PLAYS)	10 ~ 30 (UNIT = SEC) (Increase by 1 unit)	15
SHOOTER SPEED	SETTING MEDAL SHOOTER FIRE SPEED !CAUTION! VALUE IS MAINTAINED EVEN AFTER FACTORY SET	=> (SUB MENU) (REFER TO BELOW TABLE #4)	
ATTRACT TIME	OVERALL, RESISTANCE EXERCISE IS SET TO THE LEFT/RIGHT OF THE BIG BALL DROP DEVICE AS A COUNTER FOR THE SET TIME IN THE SET TIME IN THE DEMO STATE “OFF” : No movement of big ball drop device “5Min” : Operates at 5 minute intervals “10Min” : Operates at 10 minute intervals	“OFF” 5, 10 (Min unit)	5
PUSHER ATTRACT	SET PUSHER MOVEMENT WHEN IN PLAYER DEMO STATE “OFF” : No movement “ON” : Always moving “3” : Pusher movements for 1 minute at 3-minute intervals “6” : Pusher movements for 1 minute at 6-minute intervals “9” : Pusher movements for 1 minute at 9 minute intervals	“OFF” “ON” 3, 6, 9 (Min unit)	3

MERCY TICKET	WHEN YOU SPEND CREDITS TO FIRE A MEDAL WITH THE FIRE BUTTON, YOU WILL RECEIVE A SET MERCY TICKET IF YOU DO NOT SCORE A TICKET IN THE CHECKER	0 ~ 20 (Increase by 1 unit)	0
FIXED TICKET	REGARDLESS OF THE GAME RESULT, ONLY FIXED TICKETS ARE PAID ONCE CREDITS ARE INVESTED (If it is set to FIXED TICKET 5 When credit is inserted, 5 TICKETs are paid, and tickets are not paid for winning results in the game)	"OFF", "1" ~ "20" (Increase by 1 unit)	OFF
TICKET/SCORE	SETTING TICKET RATIO PER SCORE NONE : AUTOMATICALLY REDUCING TICKET COUNTS WITHOUT DISPENSING TICKETS 1/1 : 1 SCORE = 1 TICKET 1/2 : 2 SCORE = 1 TICKET 1/3 : 3 SCORE = 1 TICKET 1/4 : 4 SCORE = 1 TICKET 1/5 : 5 SCORE = 1 TICKET	"NONE", "1/1 ~ 1/5"	1/1
ATTRACT VOLUME	SETTING DEMO SOUND ON/OFF AND VOLUME "OFF" : NO SOUND 10 ~ 100 : SOUND VOLUME (%)	"OFF", 10 ~ 100 (INCREASES BY 10)	60
SAVE AND EXIT	SAVE AND EXIT	BY PRESSING SELECT BUTTON, PERFORM BY MOVING THE CURSOR TO [YES] or [NO]	
CANCEL AND EXIT	CANCEL AND EXIT		

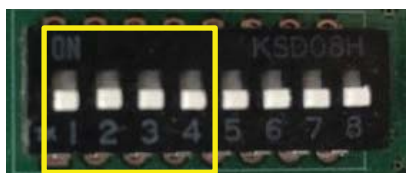
● MAIN PCB DIP SW LOCATION



1. After changing the destination, run FACTORY SETTING
2. After changing the direction, turn the power OFF -> ON and run FACTORY SETTING if an error occurs.

★ After changing the direction, you must FACTORY SET the NJ and WA options and then turn the power off and on to display the normal menu.

<DIP S/W SETTING OPTION>



	A	B	NJ	C	D	WA
DIP 1	OFF	ON	on/off	OFF	OFF	on/off
DIP 2	OFF	OFF	ON	OFF	OFF	OFF
DIP 3	OFF	OFF	on/off	ON	OFF	on/off
DIP 4	OFF	OFF	OFF	OFF	ON	OFF
DIP 5	OFF	OFF	OFF	OFF	OFF	ON

<TABLE #1>

- PROGRAM SETTINGS -> PLAYS / COIN
 - SETTING PLAYS (CREDITS) PER COIN or SWIPE
- IN CASE OF CONTINUOUS COIN or SWIPING WITHOUT PLAYING, SETTING VALUE INCREASES AS FOLLOWS UP TO FIVE TIMES AND THE 1ST SETTING VALUE WILL BE APPLIED FROM THE 6TH TIMES (BASED ON FIVE TIMES)

*DEFAULT

LCD DISPLAY	DESCRIPTION	RANGE	A, B, NJ, WA	C, NJ, WA	D
PAYMENT TYPE	FREE PLAY OR COIN SETTING "FREE" - FREE PLAY "COIN" - COIN OR SWIPE SETTING	"FREE" "COIN"	"COIN"	"COIN"	"COIN"
MINIMUM COIN	SETTING MINIMUM COIN NUMBER FOR PLAY APPLIED ALL SETTING VALUES BELOW EX) IF MINIMUM COIN IS 5, WHEN 5 COINS ARE INPUT, 1 ST COIN VALUE IS PAID	1 ~ 9 (INCREASES BY 1)	1	1	1
1st. COIN	SETTING NUMBER OF PLAYS PER CREDIT	1 ~ 500 (INCREASES BY 1)	12	5	1
2nd. COIN			26	10	2
3rd. COIN			42	15	3
4th. COIN			60	20	4
5th. COIN			75	25	5
SAVE AND EXIT	SAVE AND EXIT (VALUE IS MAINTAINED EVEN AFTER FACTORY SET)	BY PRESSING SELECT BUTTON, PERFORM BY MOVING THE CURSOR TO [YES] or [NO]			
CANCEL AND EXIT	CANCEL AND EXIT				

<TABLE #2>

<ul style="list-style-type: none"> ● PROGRAM SETTINGS -> PLAYS / BILL ● SETTING PLAYS (CREDITS) PER BILL or SWIPE <p>NUMBER OF PLAYS INCREASES AS FOLLOWS IN CONJUNCTION WITH SIGNAL FROM BILL ACCEPTOR</p> <p style="text-align: right;">*DEFAULT</p>						
LCD DISPLAY	DESCRIPTION	RANGE	A, B, WA	NJ	C, WA	D
1 BILL	SETTING NUMBER OF PLAYS PER \$1.00	1 ~ 2000 (INCREASES BY 1)	12	12	5	1
2 BILLS	SETTING NUMBER OF PLAYS PER \$2.00		26	26	10	2
3 BILLS	SETTING NUMBER OF PLAYS PER \$3.00		42	42	15	3
4 BILLS	SETTING NUMBER OF PLAYS PER \$4.00		60	60	20	4
5 BILLS	SETTING NUMBER OF PLAYS PER \$5.00		75	75	25	5
10 BILLS	SETTING NUMBER OF PLAYS PER \$10.00		150	150	50	10
20 BILLS	SETTING NUMBER OF PLAYS PER \$20.00		300	NOT USED	100	20
SAVE AND EXIT	SAVE AND EXIT (VALUE IS MAINTAINED EVEN AFTER FACTORY SET)	BY PRESSING SELECT BUTTON, PERFORM BY MOVING THE CURSOR TO [YES] or [NO]				
CANCEL AND EXIT	CANCEL AND EXIT					

<TABLE #3>

<ul style="list-style-type: none"> ● PROGRAM SETTINGS -> PAYOUT SETTINGS <p>SETTING THE SCORE TABLE FOR CHECKERS, MINI BALL BOARD, BIG BALL GAME AND SUPER SPIN SCORE</p> <p>※ REFER TO <TABLE #3-1> BELOW REGARDING EACHPRESET TYPE TABLEVALUE</p> <p style="text-align: right;">*RANGE *DEFAULT</p>						
LCD DISPLAY	DESCRIPTION	A, B, C, D	A, NJ, WA	B, NJ, WA	C, NJ, WA	D
PRESET TYPE	TYPES OF PRESET <REFER TO TABLE #3-1-1>	1 ~ 9 (TYPE)	9	5	1	8
CHECKER TABLE	TYPES OF CHECKER SCORE TABLE <REFER TO TABLE #3-1-2>	1 ~ 6 (TYPE1 ~ 6)	2	5	1	2
MINI BALL TABLE	TYPES OF MINI GAME BOARD SCORE TABLE <REFER TO TABLE #3-1-3>	1 ~ 6 (TYPE1 ~ 6)	4	5	1	2
B-BALL GAME TABLE	TYPES OF BIG BALL GAME SCORE TABLE <REFER TO TABLE #3-1-4>	1 ~ 6 (TYPE1 ~ 6)	3	5	1	2
SP-BNS SCORE	SUPER BONUS SCORE (CANNOT SET BEYOND SP-BNS LIMIT VALUE)	100 ~ 9999 (INCREASES BY 10)	1000	1000	200	500
SP-BNS INCREMENT	SUPER BONUS INCREASE SCORE	0 ~ 10	0	0	0	0
SP-BNS LIMIT	SUPER BONUS SCORE LIMIT VALUE	1000 ~ 9999 (INCREASES BY 50)	1000	1000	200	500
SAVE AND EXIT	SAVE AND EXIT	BY PRESSING SELECT BUTTON, PERFORM BY MOVING THE CURSOR TO [YES] or [NO]				
CANCEL AND EXIT	CANCEL AND EXIT					

<TABLE #3-1>

◎ PRESET TYPE TABLE

- SCORE TABLE FOR EACH PRESET TYPE

A TYPE OPTION <TABLE #3-1-1>

PRESET TYPE COMBINATION SETTING TABLE

PRESET TYPE	TYPE 1	TYPE 2	TYPE 3	TYPE 4	TYPE 5	TYPE 6
AVERAGE TICKET	About 10 sheets	About 33 sheets	About 54 sheets	About 78 sheets	About 91 sheets	About 146 sheets
CHECKER TABLE	1	2	3	4	5	6
SMALL BALL TABLE	1	2	3	4	5	6
B-BALL GAME TABLE	1	2	3	4	5	6
SP-BNS SCORE	200	300	500	1000	1000	2000

PRESET TYPE	TYPE 7	TYPE 8	TYPE 9			
AVERAGE TICKET	About 56 sheets	About 59 sheets	About 61 sheets			
CHECKER TABLE	4	2	2			
SMALL BALL TABLE	4	2	4			
B-BALL GAME TABLE	3	2	3			
SP-BNS SCORE	1000	500	1000			

<TABLE #3-1-2>

CHECKER TABLE TYPE

	HOLE 1 (LEFT)	HOLE 2 (CENTER)	HOLE 3 (RIGHT)
TYPE 1	1 Ticket	1 Ticket	1 Ticket
TYPE 2	1 Ticket	2 Ticket s	1 Ticket
TYPE 3	2 Tickets	2 Tickets	2 Tickets
TYPE 4	2 Tickets	3 Tickets	2 Tickets
TYPE 5	2 Tickets	4 Tickets	2 Tickets
TYPE 6	3 Tickets	5 Tickets	3 Tickets

<TABLE #3-1-3>

SMALL BALL (MAP) TABLE TYPE

	1	2	3	4	5	6	7	8	9	10	11	12
TYPE 1	3 tickets	BIG BALL	2 tickets	2 tickets	3 tickets	BIG BALL	2 tickets	2 tickets	3 tickets	BIG BALL	2 tickets	2 tickets
TYPE 2	4 tickets	BIG BALL	2 tickets	3 tickets	4 tickets	BIG BALL	2 tickets	3 tickets	4 tickets	BIG BALL	2 tickets	3 tickets
TYPE 3	6 tickets	BIG BALL	2 tickets	4 tickets	6 tickets	BIG BALL	2 tickets	4 tickets	6 tickets	BIG BALL	2 tickets	4 tickets
TYPE 4	8 tickets	BIG BALL	4 tickets	6 tickets	8 tickets	BIG BALL	4 tickets	6 tickets	8 tickets	BIG BALL	4 tickets	6 tickets
TYPE 5	10 tickets	BIG BALL	6 tickets	8 tickets	10 tickets	BIG BALL	6 tickets	8 tickets	10 tickets	BIG BALL	6 tickets	8 tickets
TYPE 6	12 tickets	BIG BALL	8 tickets	10 tickets	12 tickets	BIG BALL	8 tickets	10 tickets	12 tickets	BIG BALL	8 tickets	10 tickets

<TABLE #3-1-4>

BIG BALL GAME TABLE TYPE

(BIG BALL GAME)

	HOLE 1	HOLE 2	HOLE 3	HOLE 4	HOLE 5	HOLE 6	HOLE 7
TYPE 1	SUPER BONUS	5 Tickets	10 Tickets	8 Tickets	7 Tickets	12 Tickets	6 Tickets
TYPE 2	SUPER BONUS	5 Tickets	15 Tickets	10 Tickets	8 Tickets	20 Tickets	7 Tickets
TYPE 3	SUPER BONUS	10 Tickets	30 Tickets	20 Tickets	15 Tickets	40 Tickets	12 Tickets
TYPE 4	SUPER BONUS	16 Tickets	40 Tickets	32 Tickets	26 Tickets	50 Tickets	20 Tickets
TYPE 5	SUPER BONUS	20 Tickets	60 Tickets	50 Tickets	40 Tickets	70 Tickets	30 Tickets
TYPE 6	SUPER BONUS	30 Tickets	100 Tickets	70 Tickets	50 Tickets	150 Tickets	40 Tickets

<TABLE #4>

- PROGRAM SETTINGS -> SHOOTER SPEED
 - MEDAL SHOOTER FIRE SPEED AND RANGE LIMIT ADJUSTMENTS
SPEED AFFECTS MEDAL LAUNCH DISTANCE
HIGHER SPEEDS RESULT IN LONGER DISTANCES AND LOWER SPEEDS RESULT IN SHORTER FIRING DISTANCES
 - ※ START BUTTON : 1P MEDAL LAUNCH TEST
 - ▶ TICKET FND [■■■■] DISPLAYS CURRENT MOTOR SPEED
 - ▶ PLAYS FND [■■■] DISPLAYS CURRENT OPERATING MOTOR DUTY VALUE
 - ▶ BIG BALL STOCK FND [■] DISPLAYS CURRENT OPERATING BLDC ROLLER MOTOR STATUS
- [3]: SPEED SETTING ON PROCESSING, [5]: NORMAL SPEED SETTING

LCD DISPLAY	DESCRIPTION	RANGE	DEFAULT
SPEED	MAIN SHOOTER MEDAL LAUNCH SPEED SETTING	120 ~ 150	135
SAVE AND EXIT	SAVE AND EXIT (VALUE IS MAINTAINED EVEN AFTER FACTORY SET)	BY PRESSING SELECT BUTTON, PERFORM BY MOVING THE CURSOR TO [YES] or [NO]	
CANCEL AND EXIT	CANCEL AND EXIT		

5-3. CLEAR MODE

<ul style="list-style-type: none"> ● CLEAR MODE ● GAME DATA AND BOOKKEEPING DATA CAN BE DELETED 		
LCD DISPLAY	DESCRIPTION	EXECUTION
CLEAR TICKETS	DELETE REMAINING TICKETS TO BE DISPENSED NOW	BY PRESSING SELECT BUTTON, PERFORM BY MOVING THE CURSOR TO [YES] or [NO]
CLEAR PLAYS	ERASE ALL REMAINING PLAYS (CREDITS) AND GAMEPLAYS	
CLEAR DATA	DELETE ALL GAME DATA AND BOOKKEEPING DATA INCLUDING CREDITS AND TICKETS	
EXIT	EXIT	

5-4. BOOKKEEPING

● BOOKKEEPING		
LCD DISPLAY	DESCRIPTION	
- COIN IN - TOTAL: 0	NUMBER OF COIN IN	
- BILL IN - TOTAL: 0	NUMBER OF BILL IN	
- SERVICE PLAYS - TOTAL: 0	PLAYER TOTAL SERVICE PLAY COUNT	
- SHOT COUNT - PLAY: 0 EVENT: 0 TOTAL: 0	PLAYERS ALL GAME PLAY MAIN SHOOTER MEDAL SHOTS	
- TOTAL SCORE - TOTAL: 0	PLAYER EARNED TOTAL POINTS (TICKET)	
- SMALL BALL - WIN: 0, 0 OUT: 0, 0	SMALL BALL WINNING INFORMATION WIN : NUMBER OF SMALL BALL DISCHARGES OUT : NUMBER OF SMALL BALL WON (DROPPED UNDER PUSHER FIELD)	
- BIG BALL - WIN: 0, 0 OUT: 0, 0	BIG BALL WINNING INFORMATION WIN : NUMBER OF BIG BALL DISCHARGES OUT : NUMBER OF BIG BALL WON (DROPPED UNDER PUSHER FIELD)	
- CHECKER HOLE - 1>: 0 2>: 0 3>: 0	CHECKER HOLE SENSOR MEDAL CHECK COUNT #1 HOLE (LEFT) #2 HOLE (CENTER) #3 HOLE (RIGHT)	
- MINI GAME BOARD 1 - CNT: 0 SCR: 0	PLAYER SMALL BALL BOARD GAME COUNT AND SCORE CNT: YEARS OF SMALL BALL BOARD GAME SCR : POINTS EARNED IN THE SMALL BALL BOARD GAME	
- MINI GAME BOARD 2 - BIG: 0 END: 0	SMALL BALL MINI GAME COUNTS AND SCORES BIG: SMALL BALL MINI GAME NUMBER OF BIG BALLS ACQUIRED END : SMALL BALL MINI GAME COUNT TO THE END (RAPID AUTO(FREE FIRE))	

- BIG BALL GAME - COUNT: 0 SCORE: 0	BIG BALL GAME COUNTS AND SCORES COUNT : GAME COUNT SCORE : TOTAL SCORE
- BIG BALL GAME TYPE 1 - 1(S-B)>: 0 2>: 0 3>: 0	NUMBER OF PLAYER BIG BALL GAME DIVIDEND HOLE WINS (CCW order based on SUPER BONUS hole) SUPER BONUS WINNING NUMBER OF HOLES WON 2: NUMBER OF TICKET HOLE WINNING 3: NUMBER OF TICKET HOLE WINNING
- BIG BALL GAME TYPE 2 - 4>: 0 5>: 0 6>: 0	NUMBER OF PLAYER BIG BALL GAME DIVIDEND HOLE WINS 4: NUMBER OF SPIDER SENS HOLE WINNING 5: NUMBER OF SPIDER SENS HOLE WINNING 6: NUMBER OF SPIDER SENS HOLE WINNING
- BIG BALL GAME TYPE 3 - 7>: 0	PLAYER BIG BALL GAME ODDS HOLE WINNING NUMBER NUMBER OF WINS ON HOLE 7
** VER INFO 1 ** INT Ver 0.xx Snd Ver None LED Ver None	DISPLAY VERSION INFORMATION 1 Main board program version Sound version LED IO version
** VER INFO 2 ** BLDC Ver	DISPLAY VERSION INFORMATION 2 Medal launcher BLDC IO version
CANCEL button: Exit	

5-5. FACTORY SETTING

- FACTORY - SETTING INITIALIZE TO FACTORY SETTING VALUE (DELETE ALL DATA AND SET TO GAME DEFAULT VALUE)

★ COIN, BILL SETTINGS AND SHOOTING SPEED CAN NOT BE INITIALIZED AGAINST FACTORY SETTING

LCD DISPLAY (PERFORM)	LCD DISPLAY (PERFORM)
FACTORY -SETTING ARE YOU SURE? YES or [NO] PERORM BY MOVING THE CURSOR	FACTORY -SETTING REALLY ? YES or [NO] PERFORM BY MOVING THE CURSOR



5-6. TEST MODE

● TEST MODE		
LCD DISPLAY	COMPOSITION	DESCRIPTION
INPUT TEST	[=>]	ENTER INPUT TEST MODE
		GAME BTN : GAME BUTTON COIN SEN : COIN INPUT SENSOR BILL SEN : BILL INPUT SENSOR TICKET BTN : TICKET BUTTON TICKET SEN : TICKET SENSOR SERVICE : SERVICE BUTTON TILT : TILT SWITCH SETUP UP, DOWN, LEFT, RIGHT, SELECT, CANCEL BUTTON : SETUP BUTTON INPUT STATUS PER EACH NUMBER AND EACH IO PORT (INPUT 0 ~ 4, GPIO A ~ E) 0: 0000000000000000 1: 0000000000000000 2: 0000000000000000 3: 0000000000000000 4: 0000000000000000 A: 0000000000000000 B: 0000000000000000 C: 0000000000000000 D: 0000000000000000 E: 0000000000000000
FND & LAMP	“OFF” “STEP” “ON” “ON/OFF”	LAMP, FND, LED TEST EVERY TIME YOU PRESS SELECT BUTTON, EACH STEP IS EXECUTED OFF : ALL OFF STEP : DISPLAY LAMP, FND, LED ORDER PATTERN ON : ALL ON ON/OFF : ALL ON / OFF REPETITIVE MOTION
MOT PUSHER	“OFF” “ON”	MAIN PUSHER MOTOR TEST ◎ ON, OFF OPERATION WITH SELECT BUTTON OR SHOOT BUTTON RAPID AUTO SHOT FND 2-DIGIT TEST STATUS DISPLAY FND [■■] : [On], [Of] TICKET FND 4-DIGIT MOTOR ENCODER SENSOR STATUS DISPLAY FND [■■□□] : ENCODER SENSOR COUNT FND [□□■■] : DISPLAYS THE MAXIMUM NUMBER OF ENCODER SENSOR COUNTS BIG BALL STOCK FND 1-DIGIT MOTOR ENCODER SENSOR STATUS DISPLAY FND [■] : ENCODER SENSOR (0 - Off, 1 - On) SUPER BONUS FND 4-DIGIT SMALL BALL, BIG BALL AT THE BOTTOM OF THE PUSHER BALL CHECK SENSOR STATUS FND [■□□□] : SMALL BALL DROPPED SENSOR CHECK STATUS DISPLAY (0 or 1) FND [□■□□] : BIG BALL DROPPED SENSOR CHECK STATUS DISPLAY (0 or 1)

		<p>※ SMALL BALL BOARD LED LAMP STATUS DISPLAY</p> <ul style="list-style-type: none"> - SMALL BALL DETECTION : FIRST(TICKETS) LAMP On - BIG BALL DETECTION : SECOND(BIG BALL) LAMP On
MOT SHOT-SHOT	<p>“OFF”</p> <p>“ON”</p>	<p>MEDAL SHOOTER FIRING TEST</p> <ul style="list-style-type: none"> ◎ AFTER SELECTING A PLAYER WITH THE LEFT AND RIGHT BUTTONS, PRESS THE SELECT BUTTON TO OPERATE (OR INDIVIDUAL ON/OFF ACTION WITH FIRING BUTTON) ◎ MEDAL FIRING SPEED ADJUSTMENT WITH SERVICE BUTTON (0 TO 10 STEPS) <p>(※ 0.1 SECOND UNIT ~ 1.0 SECOND RANGE, CURRENT SPEED NUMBER DISPLAYED ON PLAYS FND WHEN BUTTON IS PRESSED)</p> <p>BIG BALL STOCK FND 1-DIGIT MEDAL SHOOTER SENSOR STATUS DISPLAY</p> <p>FND [■] : MEDAL SHOOTER SENSOR DETECTION STATUS DISPLAY (0 or 1)</p> <p>RAPID AUTO SHOT FND 2-DIGIT TEST STATUS DISPLAY</p> <p>FND [■■] : [On], [Of]</p> <p>TICKETS FND 4-DIGIT MEDAL FIRING CHECK COUNT AND FIRING SPEED DISPLAY</p> <p>FND [■□□□] : MEDALS SHOOTER SENSOR DETECTION STATUS DISPLAY (0 ~ 1)</p> <p>FND [□■■■■] : COUNT THE NUMBER OF MEDALS FIRED (0 ~ 999)</p> <p>PLAYS FND 3-DIGIT MEDAL LAUNCH BLDC ROLLER MOTOR SPEED DISPLAY</p> <p>FND [■■■] : CURRENT MOTION SPEED OR DISPLAY FIRING SPEED (WHEN SERVICE BUTTON IS PRESSED)</p> <p>FND [-■■] : MEDAL FIRING SPEED DISPLAY</p> <p>[-00] ~ [-10] : 00 NO TIME LIMIT, RANGE FROM 01 TO 10 (IN UNITS OF 0.1 SECONDS)</p> <p>CHECKER HOLE LED CHECKER SENSOR STATUS DISPLAY</p> <p>OFF - NO CHECKERS SIGNAL</p> <p>RED LED ON - WITH CHECKERS SIGNAL</p>

<p>MOT SHOT-MOVE</p>	<p>“OFF” “ON”</p>	<p>MAIN MEDAL SHOOTER LEFT/RIGHT MOVEMENT TEST ◎ ON, OFF OPERATION WITH SELECT BUTTON OR FIRE BUTTON</p> <p>SUPER BONUS FND 4-DIGIT MEDAL SHOOTER LEFT/RIGHT MOVEMENT MOTOR ENCODER STATUS FND [■□□□] : 1P MOTOR ORIGIN ENCODER SENSOR STATUS (0 or 1) FND [□■□□] : 1P MOTOR ORIGIN ENCODER SENSOR CHECK COUNT (0 ~ 9)</p> <p>RAPID AUTO SHOT FND 2-DIGIT TEST STATUS DISPLAY FND [■■] : [On], [Of]</p> <p>TICKET FND 4-DIGIT MOTOR ENCODER STATUS FND [■□□□] : ENCODER SENSOR STATUS DISPLAY (0 or 1) FND [□□■■] : ENCODER SENSOR CHECK COUNT (00 ~ 99)</p>
<p>MOT SMB-ELEV</p>	<p>“OFF” “ON”</p>	<p>SMALL BALL ELEVATOR MOTION TEST - THE SMALL BALL ELEVATOR STOPS FOR 1 SECOND AFTER OPERATING WHEN THERE IS A SWITCH CHANGE AT THE TOP, AND THEN OPERATES AGAIN ◎ ON, OFF OPERATION WITH SELECT BUTTON OR FIRE BUTTON</p> <p>BIG BALL STOCK FND 1-DIGIT UPPER ELEVATOR SWITCH STATUS DISPLAY FND [■] : ELEVATOR TOP SWITCH DETECTION STATUS DISPLAY (0 or 1) ※ SMALL BALL BOARD LED LAMP STATUS INDICATION - SWITCH DETECTION : FIRST(TICKETS) LAMP On</p> <p>RAPID AUTO SHOT FND 2-DIGIT MOTOR TEST STATUS DISPLAY FND [■■] : [On], [Of]</p> <p>TICKET FND 4-DIGIT MOTOR ENCODER STATUS FND [■□□□] : ENCODER SENSOR STATUS DISPLAY (0 or 1) FND [□□■■] : ENCODER SENSOR CHECK COUNT (00 ~ 99)</p>

<p>MOT BIG-DROP</p>	<p>“OFF” “ON”</p>	<p>BIG BALL SUPPLY LEFT/RIGHT MOVEMENT MOTOR OPERATION TEST ◎ OPERATION BY PRESSING SELECT BUTTON (ON, OFF)</p> <p>SUPER BONUS FND 4 -DIGIT MOTOR MOVEMENT OPERATION TIME DISPLAY (10ms UNIT) FND [■ ■ ■ ■] : LEFT ~ MIDDLE ~ RIGHT POSITION MOVEMENT OPERATION TIME</p> <p>BIG BALL STOCK FND 1 -DIGIT FND [■] : DISPLAY LEFT/RIGHT MOVEMENT LIMIT SWITCH STATUS 0: NO SIGNAL, 1: DETECT LEFT POSITION</p> <p>RAPID AUTO SHOT FND 2-DIGIT TEST STATUS DISPLAY FND [■ ■] : [On], [Of]</p> <p>TICKET FND 4-DIGIT MOTOR DIVIDEND ENCODER STATUS FND [■ □ □ □] : DIVIDEND ENCODER SENSOR STATUS DISPLAY (0 OR 1)</p> <p>FND [□ ■ □ □] : DIVIDEND ENCODER SENSOR STATUS DISPLAY (0 OR 1)</p> <p>FND [□ □ ■ ■] : DIVIDEND ENCODER SENSOR CHECK COUNT (0 OR 99)</p>
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<p>MOT BIG-ELEV</p>	<p>“OFF” “ON”</p>	<p>BIG BALL ELEVATOR MOTION TEST ◎ ON, OFF OPERATION WITH SELECT BUTTON OR FIRE BUTTON</p> <p>BIG BALL STOCK FND 1 -DIGIT UPPER ELEVATOR SWITCH STATUS DISPLAY FND [■] : ELEVATOR TOP SWITCH DETECTION STATUS DISPLAY (0 OR 1) ※ SMALL BALL BOARD LED LAMP STATUS DISPLAY - SWITCH DETECTION: SECOND(BIG BALL) LAMP ON</p> <p>RAPID AUTO SHOT FND 2-DIGIT TEST STATUS DISPLAY FND [■■] : [On], [Of]</p> <p>TICKET FND 4-DIGIT MOTOR ENCODER STATUS FND [■□□□] : ENCODER SENSOR STATUS DISPLAY (0 or 1) FND [□□■■■] : ENCODER SENSOR CHECK COUNT (00 ~ 99)</p>
<p>MOT BNS-GAME</p>	<p>“OFF” “ON”</p>	<p>BIG BALL GAME MOTOR WHEEL MOTION TEST ◎ ON, OFF OPERATION WITH SELECT BUTTON OR FIRING BUTTON</p> <p>SUPER BONUS FND 4 -DIGIT BIG BALL GAME WHEEL MOTOR ENCODER STATUS FND [■□□□] : MOTOR ENCODER SENSOR STATUS (0 or 1) FND [□■□□] : MOTOR ENCODER SENSOR CHECK COUNT (0 ~ 9)</p> <p>BIG BALL STOCK FND 1-DIGIT BALL START, GOAL DETECTION SWITCH STATUS FND [■] : 0 : NO BALL DETECTION STATUS 1 : BALL START POSITION DETECTED 2 : BALL GOAL INSPECTION SWITCH DETECTED 3 : BALL START, GOAL SWITCH BOTH DETECTED</p> <p>LED LAMP DISPLAY : 1. BALL START POSITION STATUS [RAPID AUTO SHOT LED LAMP ON, OFF] 2. BALL GOAL INSPECTION SWITCH STATUS [SMALL BALL BOARD LED LAMP ALL ON, OFF]</p>

		<p>RAPID AUTO SHOT FND 2-DIGIT TEST STATUS DISPLAY FND [■■] : [On], [OFF]</p> <p>TICKET FND 4-DIGIT MOTOR ENCODER STATUS FND [■□□□] : ENCODER SENSOR STATUS DISPLAY (0 OR 1) FND [□■■□] : ENCODER SENSOR CHECK COUNT (01 ~ 21) FND [□□□■] : GOAL-IN HOLE POSITION (12 O'CLOCK DIRECTION) STANDARD HOLE NUMBER DISPLAY (0 ~ 6), #0: SUPER BONUS HOLE</p> <p>PLAYS FND 3-DIGIT WHEN THE GOAL HALL SWITCH IS CHECKED, THE WINNING SCORE IS DISPLAYED (MORE THAN ONE ROTATION OF THE WHEEL PLATE IS REQUIRED FOR ACCURACY.)</p> <p>FND [■■■] : [S-B] : SUPER BONUS [006, 012, 007, 008, 010, 005] : NUMBER SCORE</p>
SOL BNS-GAME	<p>“OFF” “ON”</p>	<p>BIG BALL GAME SOLENOID TEST ◎ ON, OFF OPERATION WITH SELECT BUTTON OR FIRING BUTTON</p> <p>FND, LED STATUS SAME AS MOT BNS -GAME STATUS</p>
COIN	<p>“OFF” “ON”</p>	<p>COIN TEST ◎ ON, OFF OPERATION WITH SELECT BUTTON OR FIRING BUTTON</p> <p>RAPID AUTO SHOT FND 2-DIGIT TEST STATUS DISPLAY FND [■■] : [On], [Of]</p> <p>TICKET FND 4-DIGIT COIN SENSOR STATUS DISPLAY FND [■□□□] : COIN SENSOR STATUS DISPLAY (0 or 1) FND [□□■■] : COIN SENSOR CHECK COUNT (00 ~ 99)</p>
BILL	<p>“OFF” “ON”</p>	<p>BILL ACCEPTOR TEST ◎ ON, OFF OPERATION WITH SELECT BUTTON OR FIRING BUTTON</p> <p>RAPID AUTO SHOT FND 2-DIGIT TEST STATUS DISPLAY FND [■■] : [On], [Of]</p> <p>TICKET FND 4-DIGIT BILL ACCEPTOR SENSOR STATUS DISPLAY FND [■□□□] : BILL ACCEPTOR SENSOR STATUS DISPLAY (0 or 1) FND [□□■■] : BILL ACCEPTOR SENSOR CHECK COUNT (00 ~ 99)</p>
TICKET	<p>“OFF” “ON”</p>	<p>TICKET TEST (DISPENSE 3 TICKETS) ◎ ON, OFF OPERATION WITH SELECT BUTTON OR FIRING BUTTON</p> <p>RAPID AUTO SHOT FND 2-DIGIT TEST STATUS DISPLAY FND [■■] : [On], [Of]</p> <p>TICKET FND 4-DIGIT TICKET SENSOR STATUS DISPLAY FND [■□□□] : TICKET SENSOR STATUS DISPLAY (0 or 1) FND [□□■■] : TICKET SENSOR CHECK COUNT (00 ~ 99)</p>

COUNTER	“COIN” “TICKET”	COUNTER MACHINE TEST ◎ AFTER SELECTING THE TYPE WITH THE LEFT AND RIGHT BUTTONS, PRESS THE SELECT BUTTON TO TEST ◎ START BUTTON INDIVIDUAL COIN COUNT TEST ◎ TICKET BUTTON INDIVIDUAL TICKET COUNT TEST RAPID AUTO SHOT FND 2-DIGIT TEST STATUS DISPLAY FND [■■] : [On], [Of]
SOUND	“OFF” “CH” “PLAY”	SOUND TEST ◎ AFTER SELECTING THE TYPE WITH THE LEFT AND RIGHT BUTTONS, TEST WITH THE SELECT BUTTON (PLAY, STOP) - STOP PLAYING SOUND - EACH PLAYER SPEAKER TEST - PLAY FULL SOUND LIST
EXIT		EXIT FROM TEST MODE

5-7. ERROR CODE

ONLY "E.02", "E.03", "E.31 ~ E.34", "E.61 ~ E.67" ERROR CODES STOP THE ENTIRE GAME, AND FOR OTHER ERRORS, ONLY THE PLAYER WITH THE ERROR CANNOT PLAY THE GAME. "TICKET ERROR", DOES NOT STOP GAMEPLAY, ONLY "HELP" MESSAGE IS DISPLAYED.

ERROR CODE	ERROR TYPE	DESCRIPTION	CHECK POINT
E.01	BY REGION	SETUP SAVE DATA AND LOCATION OF MAIN PCB DIP SW ARE INCORRECT	1. CHECK MAIN PCB DIP SW LOCATION 2. RUN FACTORY SET 3. IF THE PROBLEM PERSISTS, REPLACE THE MOTHERBOARD
E.02	SYSTEM	SETUP SAVE DATA PROBLEM	1. CHECK AND SAVE SETUP SETTINGS 2. DO FASTORY SET 3. CHECK POWER ON/OFF 4. IF THE PROBLEM PERSISTS, REPLACE THE MAIN BOARD
E.03		GAME SAVE DATA PROBLEM	1. SETUP IN CLEAR MODE CLEAR DATA 2. CHECK POWER ON/OFF 3. IF THE PROBLEM PERSISTS, REPLACE THE MAIN BOARD
E.11	COIN MACHINE	PLAYER COIN SENSOR SIGNAL STILL PRESENT	CHECK THE PROBLEM PLAYER COIN MACHINE
E.13	BILL ACCEPTOR	PLAYER BILL SENSOR SIGNAL STILL PRESENT	CHECK THE PROBLEM PLAYER BILL ACCEPTOR
E.41	PUSHER MOTOR	PUSHER MOTOR PROBLEM	1. CHECK MOTOR OPERATION STATUS 2. CHECK THE ENCODER SENSOR INPUT STATUS

E.51	BIG BALL GAME MOTOR	WHEEL SUB (DEVIDE) ENCODER PROBLEM	1. CHECK MOTOR OPERATION STATUS 2. CHECK THE ENCODER SENSOR INPUT STATUS
E.52		WHEEL MAIN (ORIGIN) ENCODER PROBLEM	1. CHECK MOTOR OPERATION STATUS 2. CHECK THE ENCODER SENSOR INPUT STATUS
E.53	BIG BALL GAME SWITCH(SENSOR)	BALL EJECTION START POSITION SWITCH PROBLEM	1. CHECK SWITCH OPERATION 2. CHECK SOLENOID OPERATION
E.54		BALL GOAL CHECK SWITCH SIGNAL PROBLEM (NO SWITCH SIGNAL, STILL PRESENT)	1. CHECK SWITCH OPERATION
E.55		PROBLEMS INPUTTING THE BALL EJECTION START POSITION AND THE GOAL CHECK SWITCH SIGNAL AT THE SAME TIME	1. CHECK EACH SWITCH OPERATION STATUS
E.56	BIG BALL GAME MOTOR SUB ENCODER COUNT	WHEEL SUB (DEVIDE) ENCODER COUNT OUT OF BOUNDS.	1. CHECK THE ENCODER SENSOR INPUT STATUS 2. CHECK THE NUMBER OF ENCODER DISK COUNTS (COUNT REFERENCE VALUE 20)
E.61	BIG BALL ELEVATOR	BIG BALL ELEVATOR MOTOR ENCODER PROBLEM	1. CHECK MOTOR OPERATION STATUS 2. CHECK THE ENCODER SENSOR INPUT STATUS
E.62		BIG BALL ELEVATOR TOP SENSOR PROBLEM	1. CHECK MOTOR OPERATION STATUS 2. CHECK FOR BIG BALLS 3. CHECK THE TOP SWITCH OPERATION STATUS
E.63	BIG BALL SUPPLY LEFT/RIGHT MOVE MOTOR	BIG BALL SUPPLY LEFT/RIGHT MOVE MOTOR SUB (DEVIDE) ENCODER	1. CHECK MOTOR OPERATION STATUS 2. CHECK THE ENCODER SENSOR INPUT STATUS
E.65	BIG BALL SUPPLY LEFT/RIGHT MOVE MOTOR LIMIT SWITCH	BIG BALL SUPPLY LEFT/RIGHT MOVE MOTOR LEFT LIMIT SWITCH PROBLEM (NO SIGNAL, STILL PRESENT)	1. CHECK LEFT LIMIT SWITCH OPERATION STATUS
E.71	SMALL BALL ELEVATOR	SMALL BALL ELEVATOR MOTOR ENCODER PROBLEM	1. CHECK MOTOR OPERATION STATUS 2. CHECK THE ENCODER SENSOR INPUT STATUS
E.72		SMALL BALL ELEVATOR TOP SENSOR PROBLEM	1. CHECK MOTOR OPERATION STATUS 2. MAKE SURE YOU HAVE A SMALL BALL 3. CHECK THE TOP SWITCH OPERATION STATUS

E.81	MEDAL SHOOTER HOPPER OR SENSOR	MEDAL SHOOTER HOPPER LAUNCH PROBLEM (NO LAUNCH SENSOR SIGNAL)	1. MAKE SURE YOU HAVE MEDALS 2. CHECK HOPPER MOTOR OPERATION STATUS 3. CHECK LAUNCH SENSOR OPERATION STATUS
E.82		MEDAL SHOOTER HOPPER LAUNCH SENSOR PROBLEM (FIRE SENSOR SIGNAL STILL PRESENT)	1. CHECK BLDC ROLLER MOTOR OPERATION STATUS 2. CHECK LAUNCH SENSOR OPERATION STATUS
E.83	MEDAL SHOOTER BLDC ROLLER MOTOR	MEDAL SHOOTER BLDC MOTOR ROLLER PROBLEM	1. CHECK BLDC ROLLER MOTOR IO COMMUNICATION STATUS 2. CHECK THE BLDC ROLLER MOTOR OPERATION STATUS
E.84	MEDAL SHOOTER LEFT/RIGHT MOVE MOTOR	MEDAL FIRING LEFT/RIGHT MOVE MOTOR SUB (DEVIDE) ENCODER PROBLEM	1. CHECK MOTOR OPERATION STATUS 2. CHECK THE ENCODER SENSOR INPUT STATUS
E.87	MEDAL SHOOTER BLDC ROLLER MOTOR	MEDAL SHOOTER BLDC MOTOR IO SPEED SETTING PROBLEM	BLDC ROLLER MOTOR IN OPERATION 1. CHECK THE BLDC ROLLER MOTOR 2. BLDC ROLLER MOTOR IO OPERATION CHECK
E.91	CHECKER SENSOR & PUSHER BOTTOM BALL DROP SENSOR	CHECKER SENSOR SIGNAL STILL PRESENT	1. CHECK MEDAL JAM STATUS 2. CHECK SENSOR OPERATION STATUS
E.92		CHECKER SENSOR NO SIGNAL	1. CHECK SENSOR OPERATION STATUS
E.93		SMALL BALL FALL DETECTION SENSOR PROBLEM AT THE BOTTOM OF THE PUSHER PLATE (SIGNAL STILL EXISTS)	1. CHECK BALL OR MEDAL JAM STATUS 2. CHECK SENSOR OPERATION STATUS
E.94		BIG BALL FALL DETECTION SENSOR PROBLEM AT THE BOTTOM OF THE PUSHER PLATE (SIGNAL STILL EXISTS)	1. CHECK BALL OR MEDAL JAM STATUS 2. CHECK SENSOR OPERATION STATUS
HELP (DISPLAY AT TICKET FND)	TICKET ERROR	NO TICKET	1. CHECK TICKET 2. CHECK TICKET MOTOR OPERATION 3. CHECK TICKET EJECT SENSOR

※ BASICALLY, THE ERROR CODE IS DISPLAYED ON THE SETUP LCD AND TICKET FND OF THE PLAYER WHERE THE ERROR OCCURRED.
THE PHRASE "Er" AND THE ERROR CODE NUMBER ARE DISPLAYED.

- ERROR CODE ERROR DETECTION METHOD

ERROR CODE	ERROR TYPE	DESCRIPTION	CHECK POINT
E.01	BY REGION	LOCAL STORAGE DATA AND MAIN PCB DIP SW LOCATION CHANGE	WHEN THE POWER IS TURNED ON, THE LOCAL BACKUP MEMORY DIP SW LOCATION DATA IS READ AND COMPARED WITH THE CURRENT DIP SW LOCATION DATA ON THE MAIN PCB. IF THE TWO VALUES ARE DIFFERENT, AN ERROR OCCURS. (IF YOU SET FACTORY, THE CURRENT LOCAL DIP S/W STATUS IS SAVED)
E.02	SYSTEM	SETUP SAVE DATA PROBLEM	TURN ON THE POWER AND CHECK THE BACKUP MEMORY RELATED TO THE MAIN BOARD SETUP
E.03		GAME SAVE DATA PROBLEM	TURN ON THE POWER AND CHECK THE BACKUP MEMORY RELATED TO THE MAIN BOARD GAME
E.11	COIN MACHINE	PLAYER COIN SENSOR SIGNAL STILL PRESENT	WHEN INHIBIT IS ON, SIGNAL IS CONTINUOUSLY PRESENT FOR MORE THAN 2 SECONDS
E.13	BILL MACHINE	PLAYER BILL SENSOR SIGNAL STILL PRESENT	WHEN INHIBIT ON, THE SIGNAL When INHIBIT ON, the signal continues for more than 2 seconds.
E.41	PUSHER MOTOR	PUSHER MOTOR PROBLEM	CHECK DURING MOTOR OPERATION 1> NO ENCODER SENSOR SIGNAL FOR MORE THAN 3 SECONDS 2> MOTOR STOPS 1 SECOND 3> PROCEED REVERSE ROTATION-> GO TO NO. 1 IF THERE IS NO SIGNAL EVEN IF YOU TRY THE ABOVE METHOD 3 TIMES, AN ERROR OCCURS
E.51	BIG BALL GAME MOTOR	WHEEL SUB (DEVIDE) ENCODER PROBLEM	CHECK DURING MOTOR OPERATION 1> NO ENCODER SENSOR SIGNAL FOR MORE THAN 3 SECONDS 2> MOTOR STOPS 1 SECOND 3> PROCEED REVERSE ROTATION-> GO TO NO. 1 IF THERE IS NO SIGNAL EVEN IF YOU TRY THE ABOVE METHOD 3 TIMES, AN ERROR OCCURS
E.52		WHEEL MAIN (ORIGIN) ENCODER PROBLEM	CHECK DURING MOTOR OPERATION NO SENSOR SIGNAL FOR MORE THAN 15 SECONDS

E.53	BIG BALL GAME SWITCH(SENSOR)	BALL EJECTION START POSITION SWITCH PROBLEM	CHECK DURING THE BIG BALL GAME 1> BALL DISCHARGE ACTION (SOLENOID ACTION) 2> WHEN THE START POSITION SENSOR SIGNAL IS PRESENT FOR MORE THAN 5 SECONDS 3> BALL EJECTION ATTEMPT 3 TIMES IN TOTAL 4> ERROR IF SIGNAL CONTINUES ※ IF THERE IS A BALL GOAL SWITCH SIGNAL DURING THE E53 ERROR CHECK, IT IS TREATED AS NORMAL GAME PLAY AND THE ERROR CHECK IS SKIPPED
E.54		BALL GOAL CHECK SWITCH SIGNAL PROBLEM (NO SWITCH SIGNAL, STILL PRESENT)	CHECK DURING MOTOR OPERATION 1> GOAL SWITCH SIGNAL PRESENT CONTINUOUSLY FOR MORE THAN 3 SECONDS 2> NO GOAL RECOGNITION SENSOR SIGNAL FOR MORE THAN 90 SECONDS AFTER BALL LAUNCH DURING BIG BALL GAME (ADDITIONALLY REDUCE WHEEL SPEED EVERY 5 SECONDS)
E.55		PROBLEMS INPUTTING THE BALL EJECTION START POSITION AND THE GOAL CHECK SWITCH SIGNAL AT THE SAME TIME	IF THE SIGNAL IS CONTINUOUS FOR MORE THAN 3 SECONDS, AN ERROR OCCURS. (SIMULTANEOUS SIGNAL OF 2 SWITCHES)
E.56	BIG BALL GAME MOTOR SUB ENCODER COUNT	WHEEL SUB (DEVIDE) ENCODER COUNT OUT OF BOUNDS	CHECK DURING MOTOR OPERATION 1 WHEN THE ORIGIN IS CHECKED, THE NUMBER OF BRANCH COUNTS SO FAR IS COMPARED TO THE STANDARD COUNT OF 20 2. DURING ORIGIN CHECK, A DIFFERENCE OF 2 OR MORE OR 2 OR LESS FROM THE REFERENCE COUNT OCCURS MORE THAN 3 TIMES IN A ROW
E.61	BIG BALL ELEVATOR	BIG BALL ELEVATOR MOTOR ENCODER PROBLEM	NO ENCODER SENSOR SIGNAL FOR MORE THAN 3 SECONDS
E.62		BIG BALL ELEVATOR TOP SENSOR PROBLEM	CHECK DURING MOTOR OPERATION 1. NO SIGNAL FROM TOP SENSOR FOR MORE THAN 20 SECONDS 2. THE TOP SENSOR SIGNAL IS CONTINUOUSLY PRESENT FOR MORE THAN 3 SECONDS
E.63	BIG BALL SUPPLY LEFT/RIGHT MOVE MOTOR	BIG BALL SUPPLY LEFT/RIGHT MOVE MOTOR SUB (DEVIDE) ENCODER	CHECK DURING MOTOR OPERATION 1. NO ENCODER SENSOR SIGNAL FOR MORE THAN 3 SECONDS 2. PAUSE 1 SECOND 3. PROCEED WITH REVERSE ROTATION -> GO TO NO. 1 IF THERE IS NO SIGNAL EVEN IF YOU TRY THE ABOVE METHOD 3 TIMES, AN ERROR OCCURS

E.56	BIG BALL GAME MOTOR SUB ENCODER COUNT	WHEEL SUB (DEVIDE) ENCODER COUNT COUNT OUT OF BOUNDS	CHECK DURING MOTOR OPERATION 1. WHEN THE ORIGIN IS CHECKED, THE NUMBER OF BRANCH COUNTS SO FAR IS COMPARED TO THE STANDARD COUNT OF 20 2. DURING ORIGIN CHECK, A DIFFERENCE OF 2 OR MORE OR 2 OR LESS FROM THE REFERENCE COUNT OCCURS MORE THAN 3 TIMES IN A ROW
E.61	BIG BALL ELEVATOR	BIG BALL ELEVATOR MOTOR ENCODER PROBLEM	NO ENCODER SENSOR SIGNAL FOR MORE THAN 3 SECONDS
E.62		BIG BALL ELEVATOR TOP SENSOR PROBLEM	CHECK DURING MOTOR OPERATION 1. NO SIGNAL FROM TOP SENSOR FOR MORE THAN 20 SECONDS 2. THE TOP SENSOR SIGNAL IS CONTINUOUSLY PRESENT FOR MORE THAN 3 SECONDS
E.63	BIG BALL SUPPLY LEFT/RIGHT MOVE MOTOR	BIG BALL SUPPLY LEFT/RIGHT MOVE MOTOR SUB (DEVIDE) ENCODER	CHECK DURING MOTOR OPERATION 1. NO ENCODER SENSOR SIGNAL FOR MORE THAN 3 SECONDS 2. PAUSE 1 SECOND 3. PROCEED WITH REVERSE ROTATION -> GO TO NO. 1 IF THERE IS NO SIGNAL EVEN IF YOU TRY THE ABOVE METHOD 3 TIMES, AN ERROR OCCURS
E.65	BIG BALL SUPPLY LEFT/RIGHT MOVE MOTOR LIMIT SWITCH	BIG BALL SUPPLY LEFT/RIGHT MOVE MOTOR LEFT LIMIT SWITCH PROBLEM (NO SIGNAL, STILL PRESENT)	1. WHILE MOTOR IS OPERATING LEFT LIMIT SWITCH SIGNAL STILL PRESENT FOR MORE THAN 3 SECONDS 2. NO LEFT LIMIT SWITCH SIGNAL FOR MORE THAN 10 SECONDS
E.71	SMALL BALL ELEVATOR	SMALL BALL ELEVATOR MOTOR ENCODER PROBLEM	WHILE MOTOR IS OPERATING NO ENCODER SENSOR SIGNAL FOR MORE THAN 3 SECONDS EXCEPTION) WHEN THE SMALL BALL IS DISCHARGED, RESET THE ENCODER CHECK TIME BY 3 SECONDS AND CHECK AGAIN. (EVEN IF THERE IS NO ENCODER SIGNAL, IF THE BALL DISCHARGE IS CONFIRMED WITH THE TOP SWITCH, NO ERROR HANDLING)

E.72		SMALL BALL ELEVATOR TOP SENSOR PROBLEM	1. NO SIGNAL FROM TOP SENSOR FOR MORE THAN 60 SECONDS 2. THE UPPER SENSOR SIGNAL IS CONTINUOUSLY PRESENT FOR MORE THAN 3 SECONDS DURING MOTOR OPERATION
E.81	MEDAL SHOOTER HOPPER OR SENSOR	MEDAL SHOOTER HOPPER LAUNCH PROBLEM (NO LAUNCH SENSOR SIGNAL)	CHECK DURING MEDAL FIRING OPERATION 1> NO SENSOR SIGNAL FOR MORE THAN 3 SECONDS 2> PAUSE 1 SECOND 3> RETRY -> GO TO #1 ERROR HANDLING AFTER 3 OR MORE FIRING ATTEMPTS IN THE ABOVE METHOD
E.82		MEDAL SHOOTER HOPPER LAUNCH SENSOR PROBLEM (FIRE SENSOR SIGNAL STILL PRESENT)	MEDAL FIRING IN ACTION ERROR PROCESSING WHEN THERE IS CONTINUOUS FIRING SENSOR SIGNAL FOR MORE THAN 3 SECONDS
E.83	MEDAL SHOOTER BLDC ROLLER MOTOR	MEDAL SHOOTER BLDC MOTOR ROLLER PROBLEM	1. WHEN COMMUNICATION FAILS WHEN MOTOR SPEED SETTING AND VERSION INFORMATION IS RETRIEVED IN BOOT MODE 2. IN THE BASIC OPERATION, IF THE MEDAL FIRING BLDC ROLLER MOTOR IO PASSES TO THE ERROR CODE COMMUNICATION, AN ERROR OCCURS
E.84	MEDAL SHOOTER LEFT/RIGHT MOVE MOTOR	MEDAL FIRING LEFT/RIGHT MOVE MOTOR SUB (DEVIDE) ENCODER PROBLEM	CHECK DURING MOTOR OPERATION 1. NO ENCODER SENSOR SIGNAL FOR MORE THAN 3 SECONDS 2. PAUSE 1 SECOND 3. PROCEED WITH REVERSE ROTATION -> GO TO NO. 1 IF THERE IS NO SIGNAL EVEN IF YOU TRY THE ABOVE METHOD 3 TIMES, AN ERROR OCCURS
E.87	MEDAL SHOOTER BLDC ROLLER MOTOR	MEDAL SHOOTER BLDC MOTOR IO SPEED SETTING PROBLEM	BLDC ROLLER MOTOR IN OPERATION 1. WHEN THE SELF-SET SPEED IS CALIBRATED, IT IS RECEIVED THROUGH STATUS PLUG COMMUNICATION, BUT THERE IS NO STATUS PLUG INFORMATION FOR A CERTAIN PERIOD OF TIME (20 SECONDS)
E.91	CHECKER SENSOR & PUSHER BOTTOM BALL DROP SENSOR	CHECKER SENSOR SIGNAL STILL PRESENT	GAME IN PROGRESS SENSOR SIGNAL STILL PRESENT FOR MORE THAN 10 SECONDS
E.92		CHECKER SENSOR NO SIGNAL	IN CASE OF SETTING CHECKER SENSOR ENABLE (BOOT MODE, PROCEEDING WITH GAMEPLAY) IF THERE IS NO SIGNAL DURING VERIFICATION PROCESS WITH CHECKER SENSOR MCU OPERATION STATUS CONFIRMATION CODE, AN

			ERROR OCCURS
E.93		SMALL BALL FALL DETECTION SENSOR PROBLEM AT THE BOTTOM OF THE PUSHER PLATE (SIGNAL STILL EXISTS)	GAME IN PROGRESS SENSOR SIGNAL STILL PRESENT FOR MORE THAN 10 SECONDS
E.94		BIG BALL FALL DETECTION SENSOR PROBLEM AT THE BOTTOM OF THE PUSHER PLATE (SIGNAL STILL EXISTS)	GAME IN PROGRESS SENSOR SIGNAL STILL PRESENT FOR MORE THAN 10 SECONDS
HELP (DISPLAY AT TICKET FND)	TICKET ERROR	NO TICKET	1. CHECK YOUR TICKET 2. CHECK TICKET MOTOR OPERATION 3. CHECK TICKET EJECT SENSOR

6. MAINTENANCE

6-1. Precautions for turning on the power

: When it is newly turned on after power is turned off, the power must be turned on after 10 seconds.

6-2. When installing the device

: Connect the device with a ground outlet to which fg is connected.

6-3. Main board management

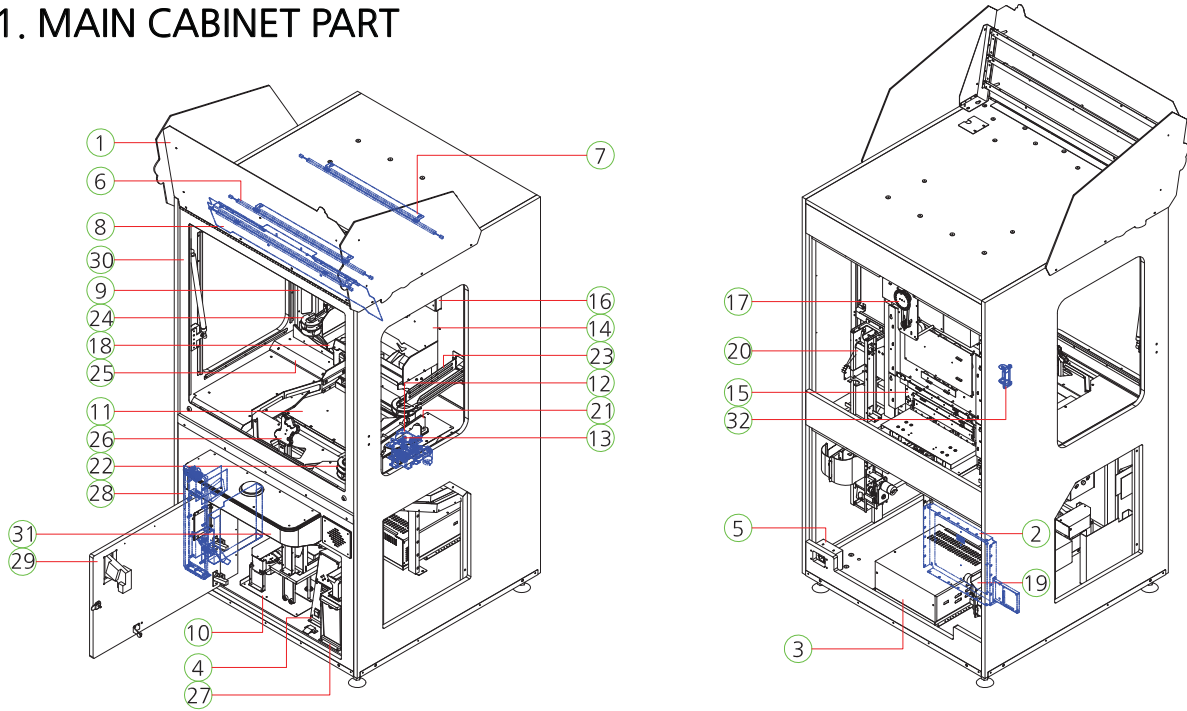
: Dust removal on the main board will be carried out once a month.

6-4. Basic product management : Clean it regularly

6-5. This product should only be used for indoor use

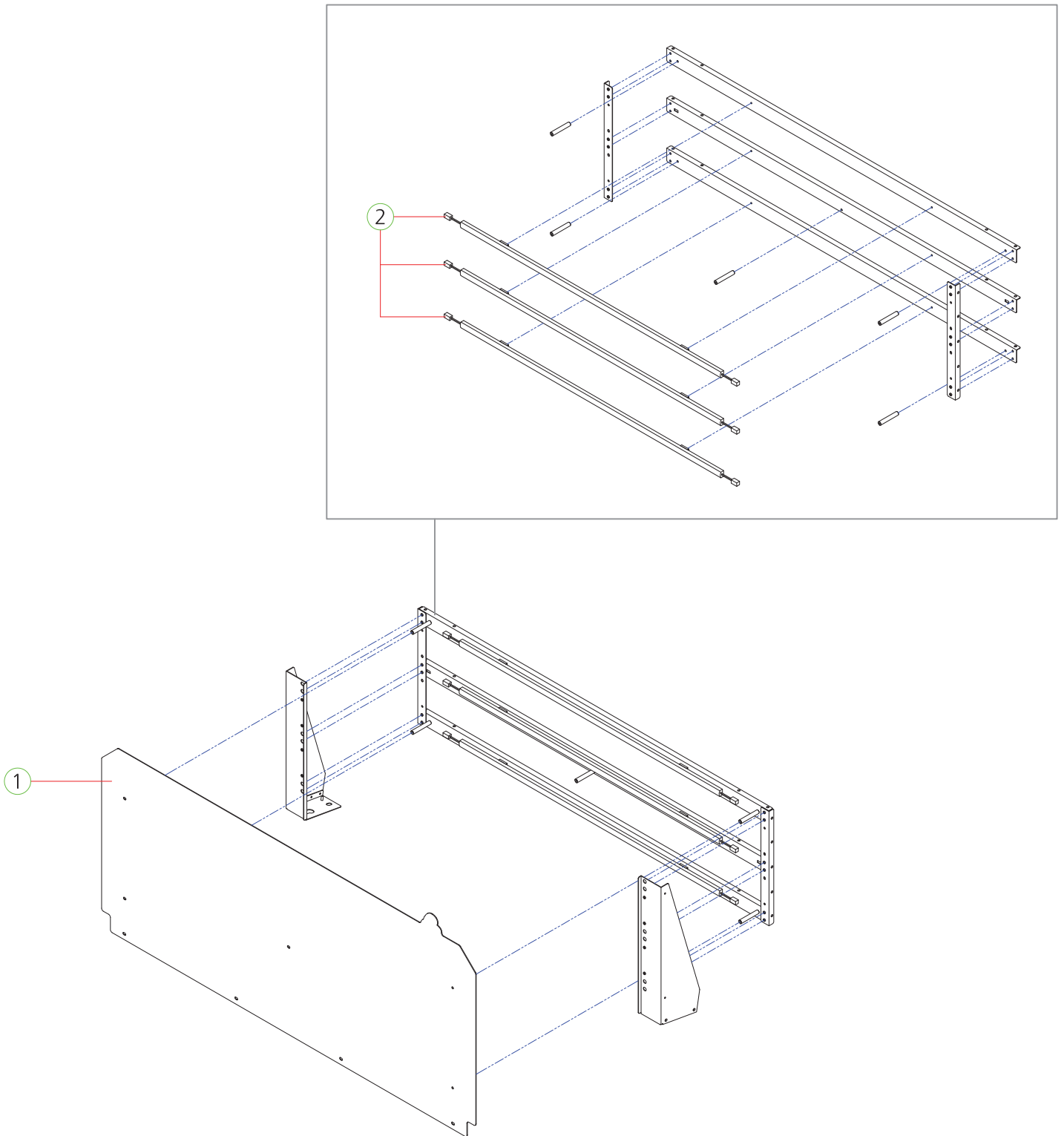
7. EXPLODED VIEW

7-1. MAIN CABINET PART



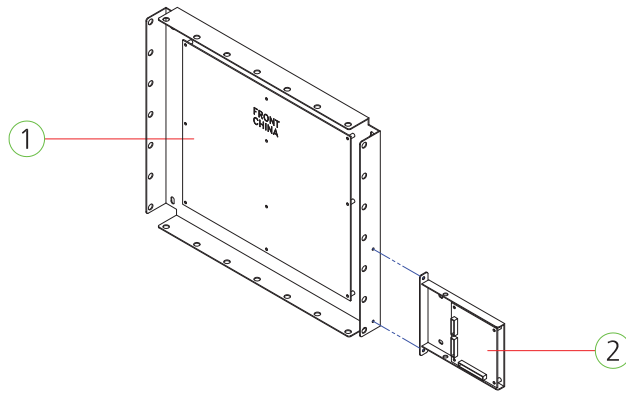
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BILLBOARD PART	-	1	-
2	MAIN BOARD PART	-	1	-
3	SMPS PART	-	1	-
4	CONTROL PANEL PART	-	1	-
5	AC INLET PART	-	1	-
6	CABINET UPPER BAR LED_FRONT PART	-	1	-
7	CABINET UPPER BAR LED_REAR PART	-	1	-
8	CABINET FRONT UPPER DISPLAY PART	-	1	-
9	CABINET SIDE LIGHTING-L, R PART	-	2	-
10	ELEVATOR HOPPER ROTATE PART	-	1	-
11	PUSHER PLATE PART	-	1	-
12	BIG BALL DIVIDE DEVICE PART	-	1	-
13	BIG BALL DIVIDE DEVICE ROTATE PART	-	1	-
14	GAME BOARD MAIN UPPER PART	-	1	-
15	GAME BOARD MAIN LOWER PART	-	1	-
16	BONUS WHEEL TOTAL PART	-	1	-
17	BONUS WHEEL MAIN SHAFT PART	-	1	-
18	CHECKER PART	-	1	-
19	SMALL BALL ELEVATOR PART	-	1	-
20	BIG BALL ELEVATOR PART	-	1	-
21	BIG BALL DIVIDE UPPER RAIL ACRYL PART	-	1	-
22	BIG BALL DIVIDE LOWER ACRYL PART	-	1	-
23	BIG BALL OUT CHUTE PART	-	1	-
24	SMALL BALL OUT CHUTE PART	-	1	-
25	PUSHER SIDE REAR UPPER COVER PART	-	1	-
26	SHOOTER PART	-	1	-
27	COIN BOX COVER PART	-	1	-
28	TICKET DOOR PART	-	1	-
29	FRONT LOWER DOOR PART	-	1	-
30	CABINET UPPER DOOR PART	-	1	-
31	BUTTON PLATE PART	-	1	-
32	TILT PART	-	1	-

7-2. BILLBOARD PART



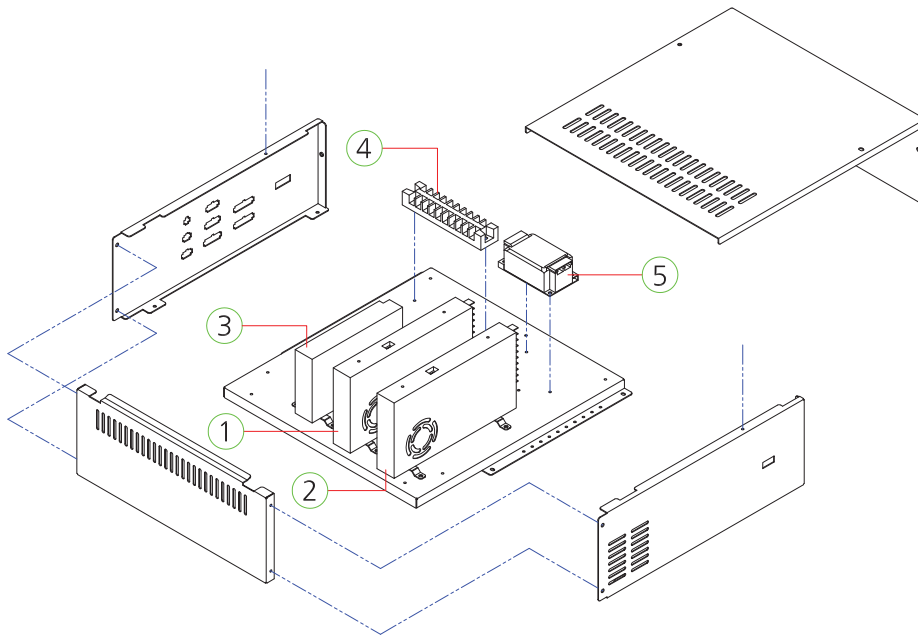
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BILLBOARD FRONT ACRYL	PET-1.5t	1	MSP10ACR008
2	LED BAR 12V ASS'Y_V2	710mm	3	AZZZ0PCB241

7-3. MAIN BOARD PART



NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	MAIN PCB ASS'Y [WITH CPU & SOUND]	-	1	ASPM0PCB013
2	NUVOTON WS2813B IO V3 PCB ASS'Y	2813 PCB	1	AZZ0PCB224

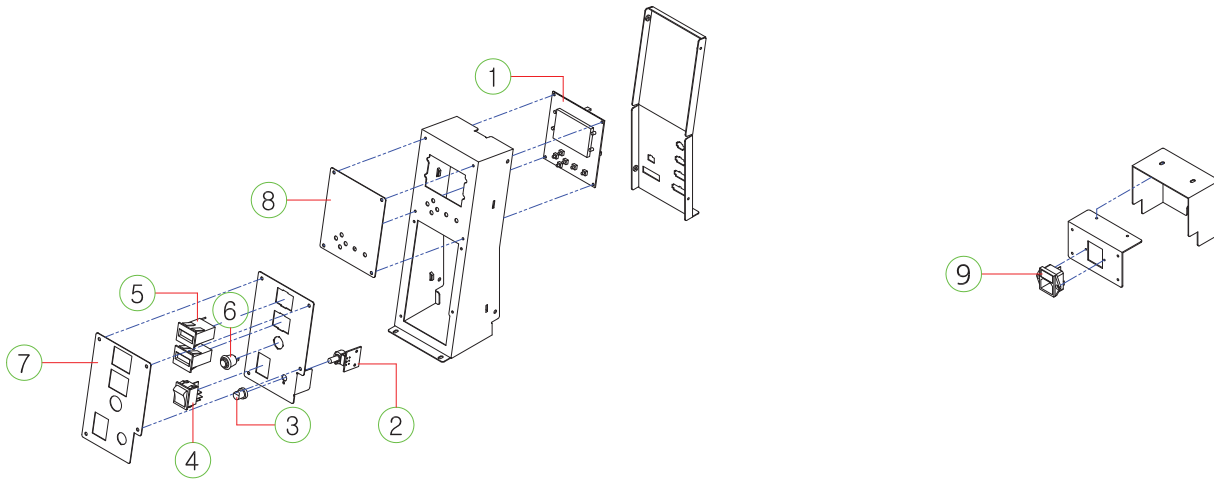
7-4. SMPS PART



NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	POWER SMPS	LRS 350_5	1	MELE0SMP154
2	POWER SMPS	LRS 350-12V	1	MELE0SMP148
3	POWER SMPS	LRS-150F-24	1	MELE0SMP085
4	TERMINAL BLOCK	250V 10P UL_CE	1	MELE0TEB003
5	NOISE FILTER	RNS-2010	1	MELE0NOI009

7-5. CONTROL PANEL PART

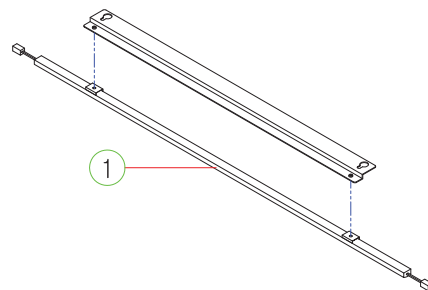
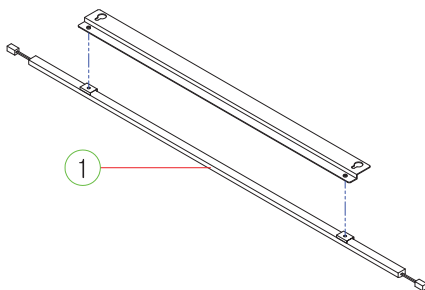
7-6. AC INPUT PART



NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	SETUP LCD PCB ASS'Y	-	1	AZZZ0PCB113
2	VOLUME PCB ASS'Y	1 VOLUME	1	AHM20PCB016
3	VOLUME KNOB	CAP BLUE	1	MELE0VOL007
4	ROCKER SWITCH	R595KDF	1	MELE0SWI021
5	COUNTER	OAT27CLW/2P CONNECTOR_20CM WIRE	2	MZZZ0COU002
6	PUSH BUTTON SWITCH	DS-412R ROHS	1	MELE0PUS006
7	CONTROL PANEL FRONT COVER ACRYL	PET-1.0t_SLIK_BLACK	1	ASPM0ACP021
8	CONTROL PANEL COVER ACRYL	PET-1.0t_SLIK_BLACK	1	ASPM0ACP020
9	AC INPUT ASS'Y	DAC-13H, WITH FUSE 10A_2EA	1	AELE0FUS002

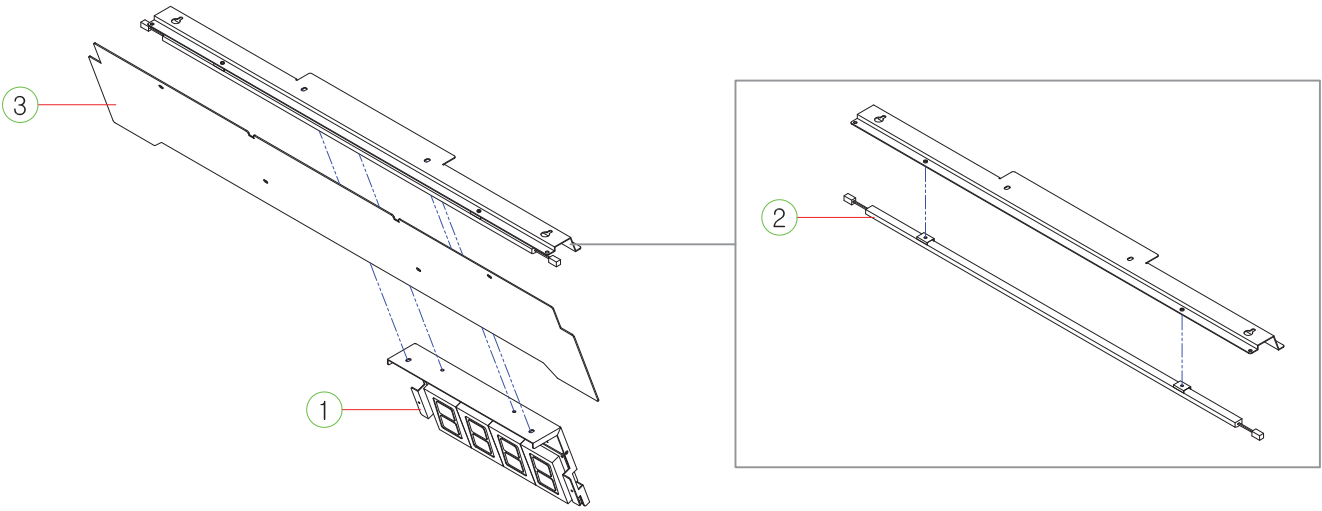
7-7. CABINET UPPER BAR LED_REAR PART

7-8. CABINET UPPER BAR LED_FRONT PART



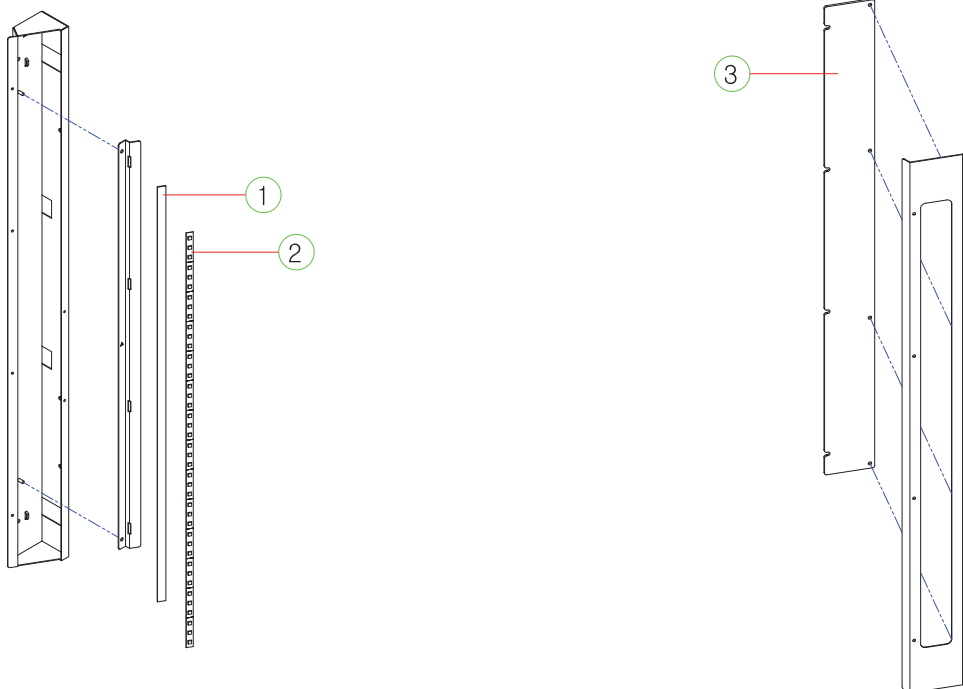
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	LED BAR 12V ASS'Y_V2	710mm	2	AZZZ0PCB241

7-9. CABINET FRONT UPPER DISPLAY PART



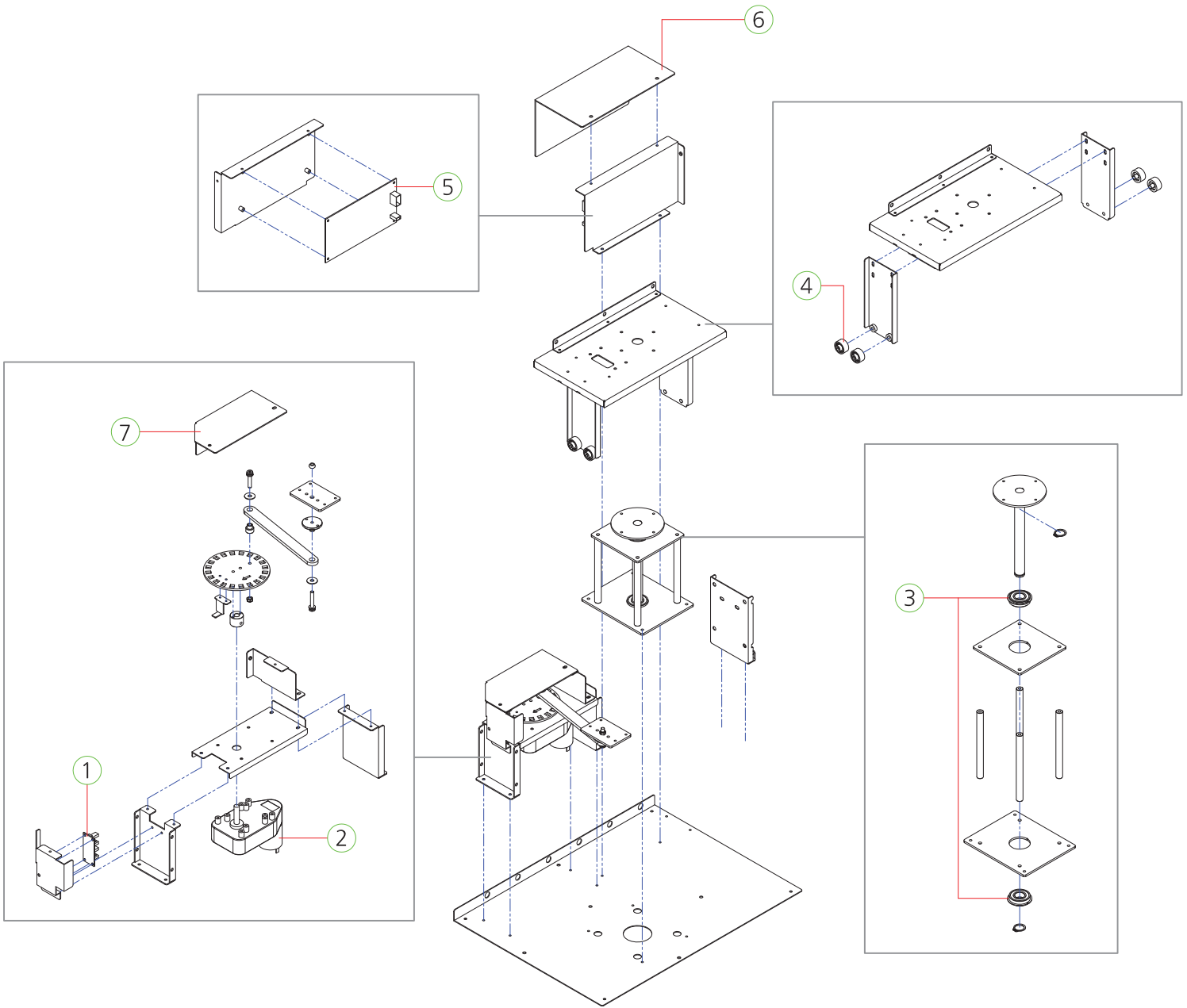
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	FND PCB ASS'Y	6390-4(STRAIGHT)	1	AFND0PCB011
2	LED BAR 12V ASS'Y	-	1	AZZ0PCB241
3	CABINET FRONT UPPER ACRYL	PET-1.5t	1	MSP10ACR017

7-10. CABINET SIDE LIGHTING-L, R PART 7-11. CABINET SIDE LIGHTING COVER-L, R PART



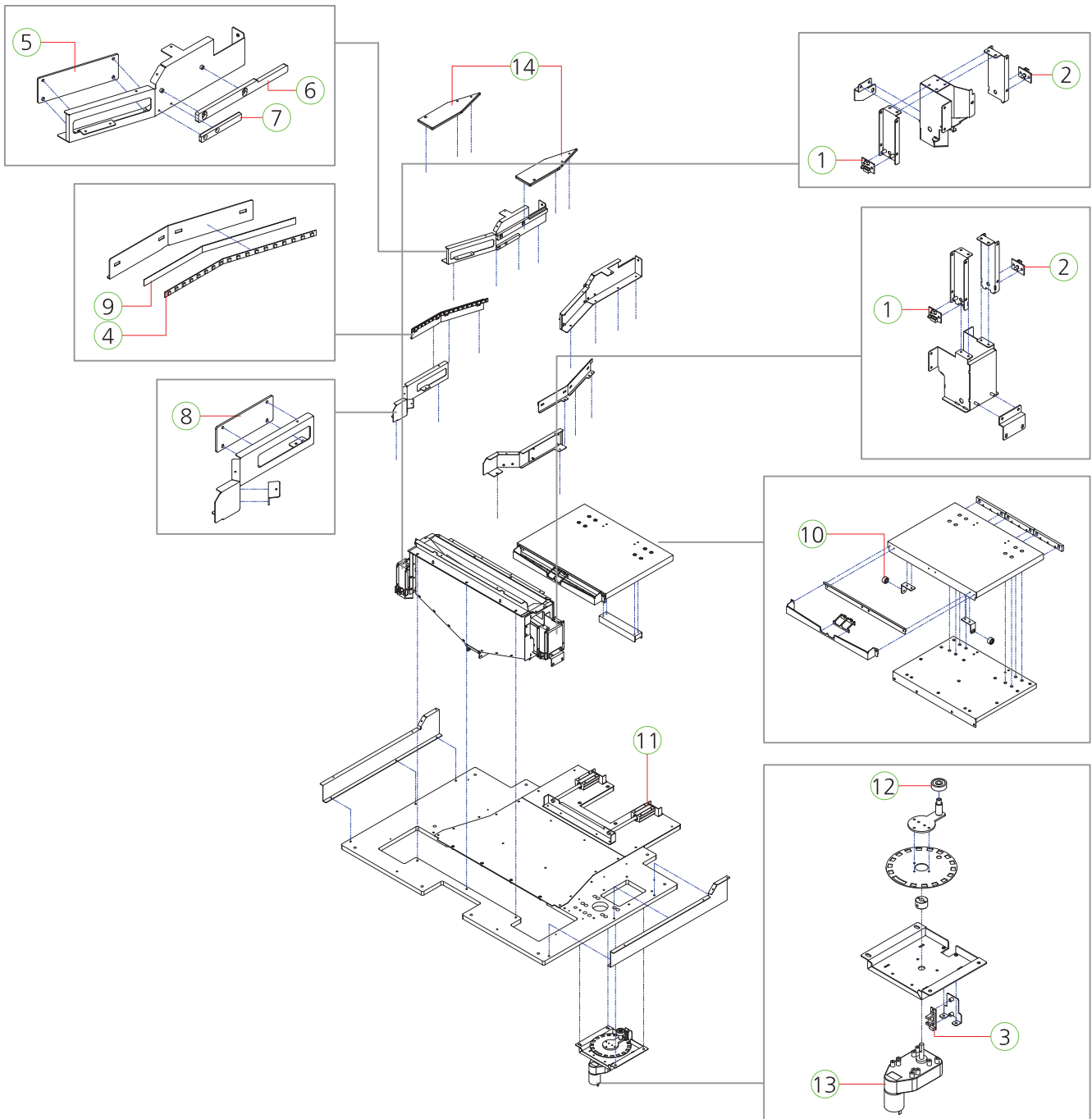
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	CABINET SIDE LIGHTING LED PCB FIX ACRYL	PET-1.0t_CLEAR	1	MSPM0ACR014
2	FLEX_WS2813B_700_NWP_LR_42	WS2813 V5 TOP300, 42	1	MELE0LED117
3	CABINET SIDE LIGHTING ACRYL	ACRYL-3.0t_POINT CLEAR	1	MSPM0ACR013

7-12. ELEVATOR HOPPER ROTATE PART



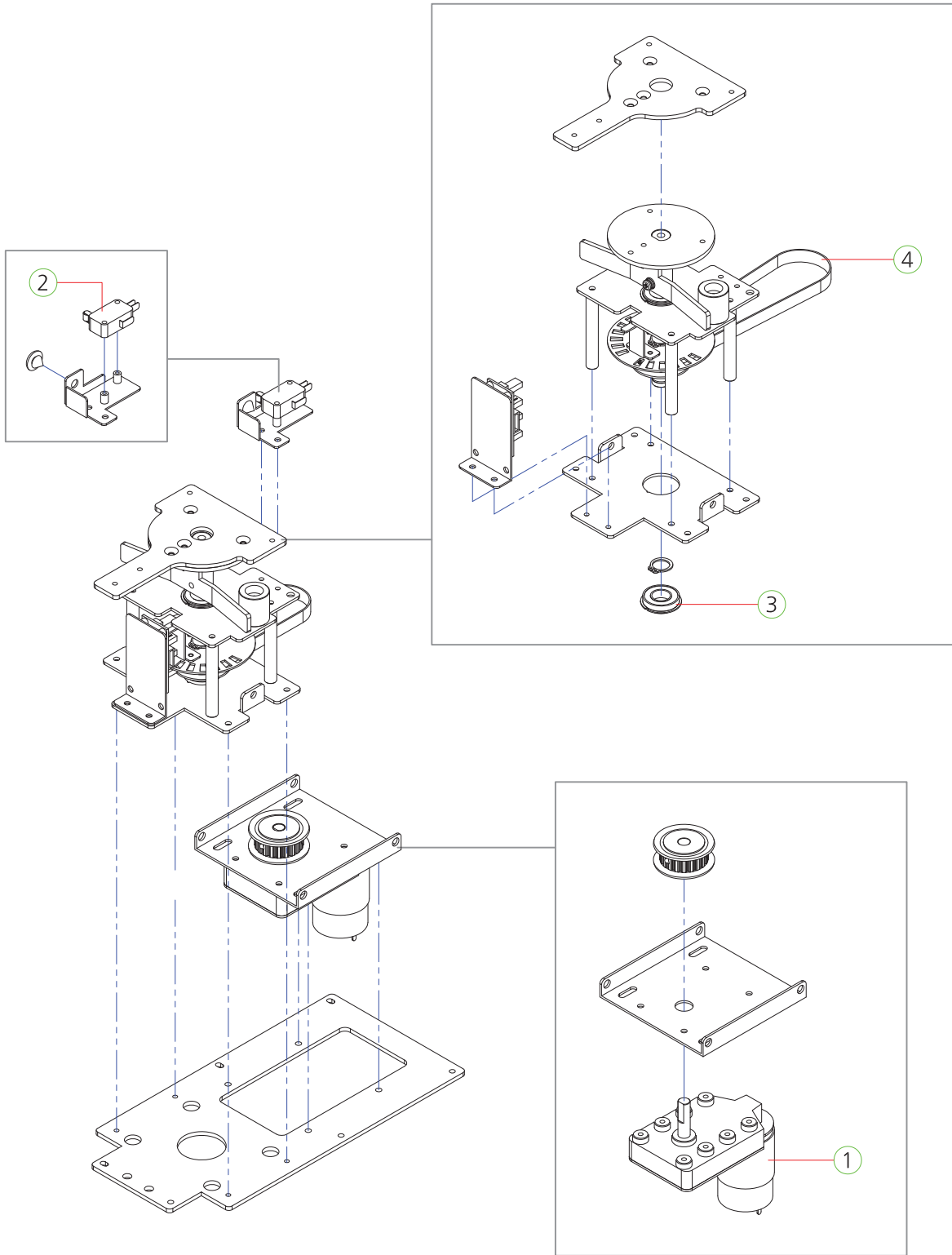
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	PHOTO INT-2 PCB ASS'Y	-	1	AWIW0PCB009
2	MOTOR_BLDC	KGV2-0500-NB3640S1	1	MZZZ0MOT160
3	BEARING	6002ZZNR	2	MZZZ0BEA116
4	PUSHER BEARING	-	4	MSBP0PRO002
5	STM BLDC IO PCB ASS'Y	SHOOTER BLDC MT IO	1	ASPM0PCB001
6	E.H ROTATE PCB COVER ACRYL	PC-1.0t_CLEAR	1	MSPM0ACR027
7	E.H CAM ENCODER COVER ACRYL	PET-1.5t_CLEAR	1	MSPM0ACR076

7-13. PUSHER PLATE PART



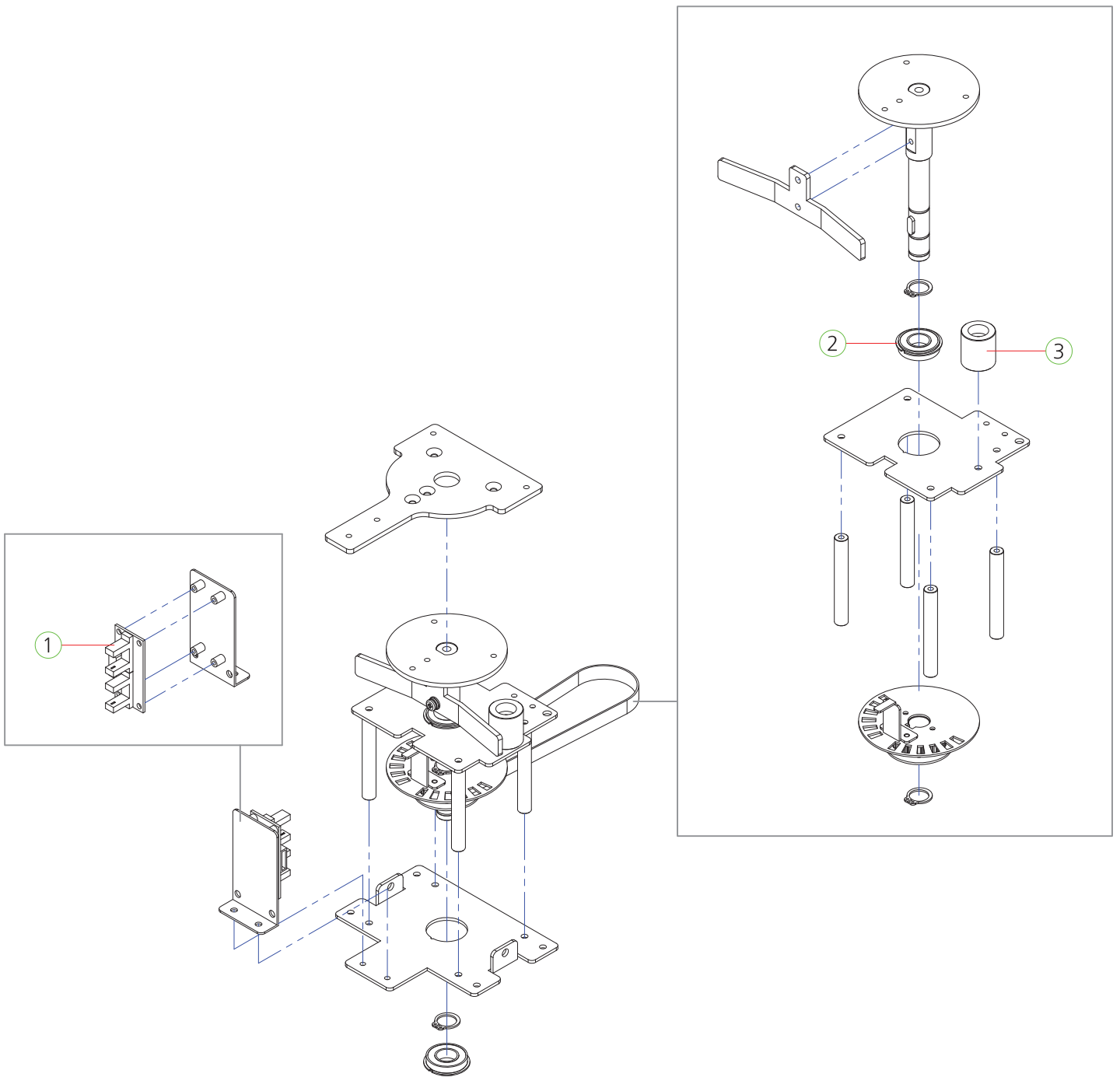
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	SENSOR_R PCB ASS'Y	-	2	MEIFOPAR014
2	SENSOR_T PCB ASS'Y	KEL5008A / 560Ω	2	AAV20PCB011
3	PHOTO INT-1 PCB ASS'Y	ANGLE TYPE	1	AZZZ0PCB103
4	FLEX_WS2813B_300_NWP_LR_18	WS2813 V5 TOP300, 18	2	MELE0LED120
5	PUSHER REAR SIDE LED PCB COVER ACRYL	ACRYL-3.0t_POINT CLEAR	2	MSPM0ACR029
6	PUSHER SIDE FENCE BLOCK ACRYL	ACRYL-5.0t_CLEAR	2	MSPM0ACR030
7	UPPER PUSHER SIDE GUIDE ACRYL	ACRYL-8.0t_CLEAR	2	MSPM0ACR033
8	PUSHER FRONT SIDE LED PCB COVER ACRYL	ACRYL-3.0t_POINT CLEAR	2	MSPM0ACR028
9	PUSHER SIDE LED PCB FIX ACRYL	PET-1.0t_CLEAR	2	MSPM0ACR031
10	PUSHER BEARING	-	2	MSBP0PRO002
11	LM BEARING	SL 10UU	2	MZZZ0BEA125
12	BEARING	638ZZ(D28d8t9)	1	MZZZ0BEA064
13	MOTOR_BLDC	KGV2-0350-NB3640S1	1	MZZZ0MOT152
14	PUSHER BALL OUT SIDE GUIDE ACRYL L, R	ACRYL-8.0t	2	MSPM0ACR071

7-14. BIG BALL DIVIDE DEVICE PART



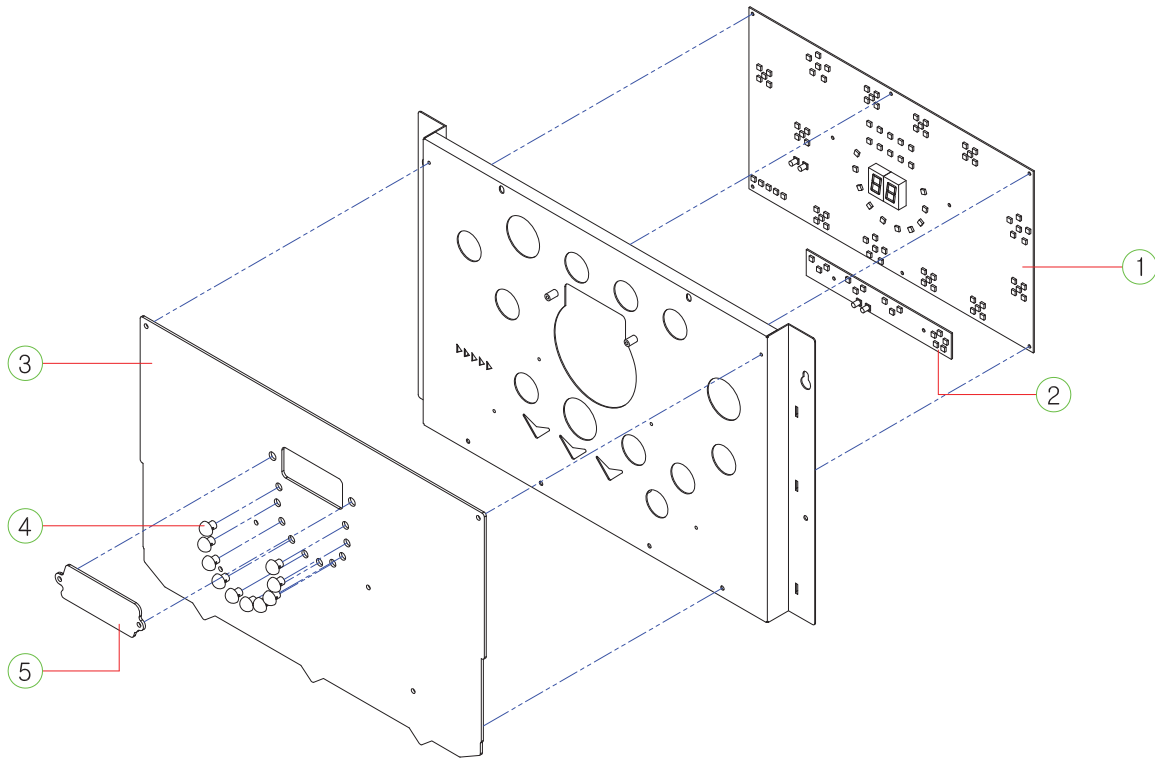
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	MOTOR	KGE-0615-3657-NB1 DC12V 6000RPM	1	MZZZ0MOT100
2	MICRO SWITCH	GSMV1651A2	1	MELE0MIC021
3	BEARING	6901ZZNR	1	MZZZ0BEA111
4	TIMMING BELT	100XL-037	1	MZZZ0BEL036

7-15. BIG BALL DIVIDE DEVICE ROTATE PART



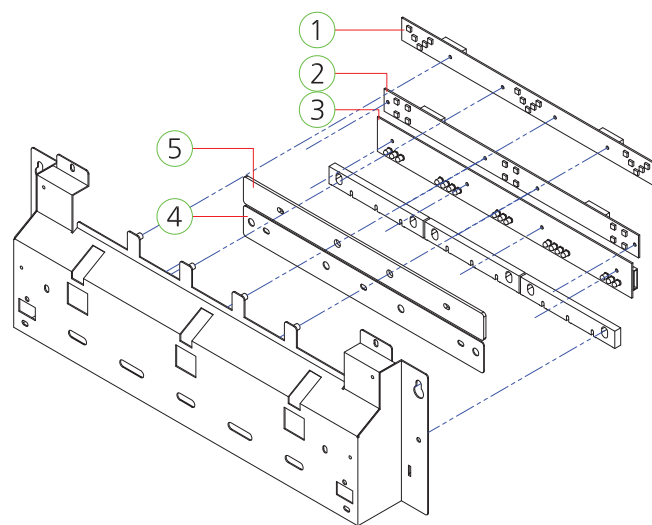
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	PHOTO INT-2 PCB ASS'Y	-	1	AWIW0PCB009
2	BEARING	6901ZZNR	1	MZZZ0BEA111
3	BIG BALL DIVIDE STOPPER URETHANE	-	1	MSP10PRO003

7-16. GAME BOARD MAIN UPPER PART



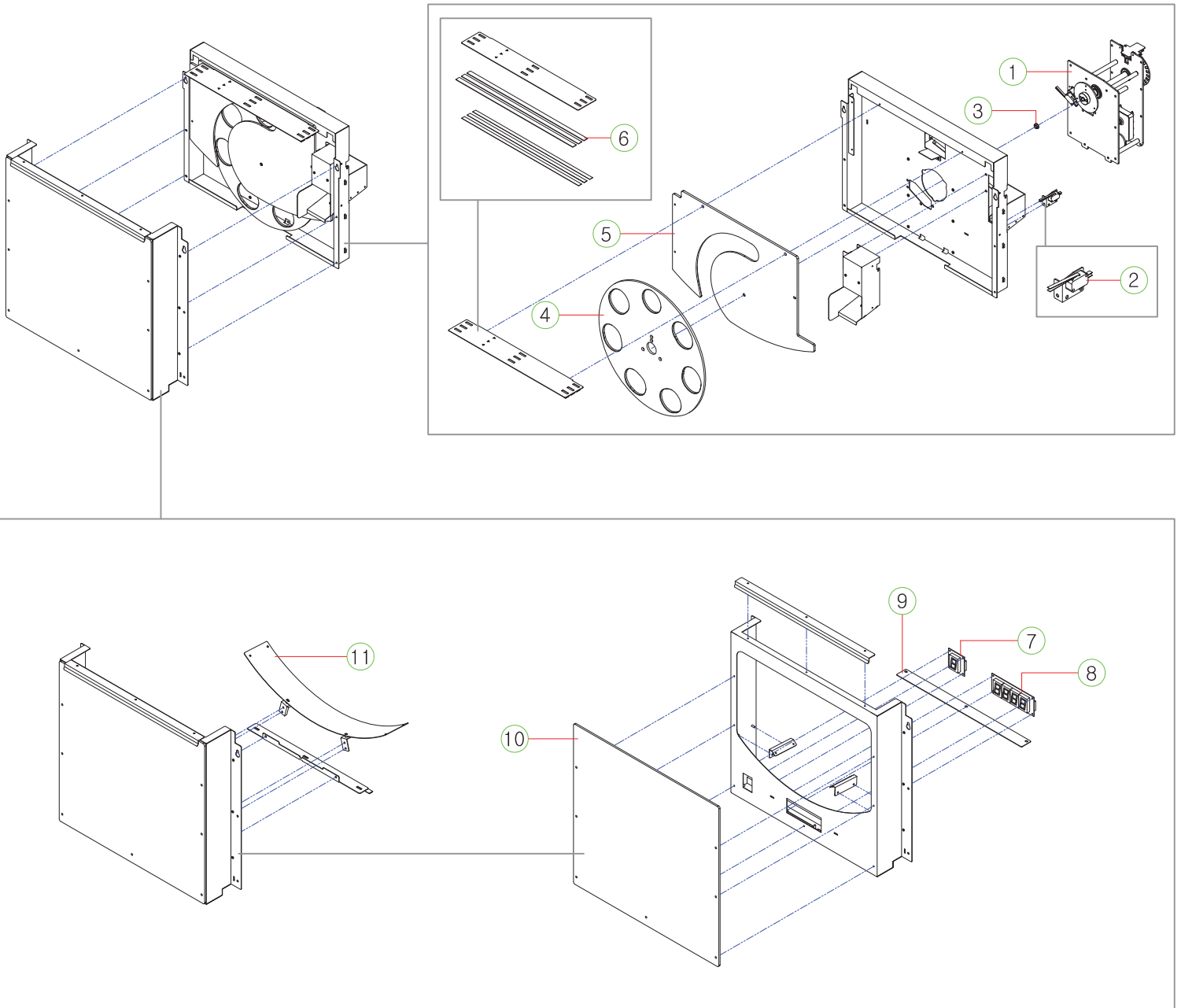
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	GAME BOARD MAIN UPPER	GAME BOARD LED PCB	1	ASPM0PCB017
2	GAME BOARD SUCCESS LED PCB ASS'Y	SUCCESS LED PCB	1	ASPM0PCB016
3	GAME BOARD FRONT COVER ACRYL	ACRYL-2.7t	1	MSP10ACR024
4	LED CAP	10MM_CLEAR	10	MWOL0PLA002
5	RAPID AUTO SHOT ACRYL	ACRYL-2.7t	1	MSPM0ACR070

7-17. GAME BOARD MAIN LOWER PART



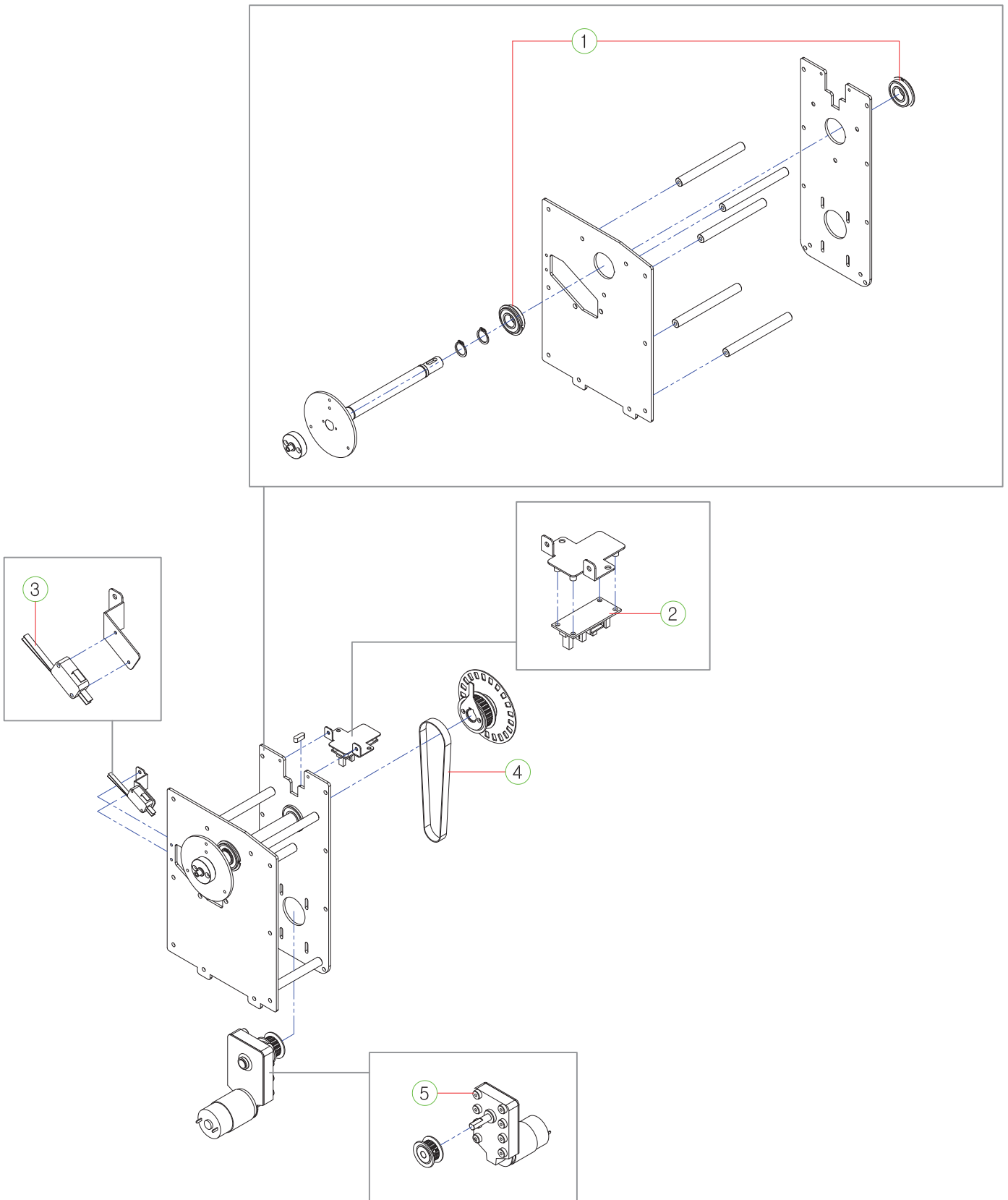
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	CHECKER REAR UPPER LED PCB ASS'Y	REAR UPPER LED PCB	1	ASPM0PCB015
2	CHECKER REAR LED PCB ASS'Y	CHECKER LED PCB	1	ASPM0PCB004
3	CHECKER SENSOR RX PCB ASS'Y	CHECKER SEN_RECEIVER	1	ASPM0PCB002
4	CHECKER REAR UPPER COVER ACRYL	ACRYL-3.0t_POINT CLEAR	1	MSPM0ACR023
5	CHECKER REAR LOWER COVER ACRYL	PET-1.0t_CLEAR	1	MSPM0ACR022

7-18. BONUS WHEEL TOTAL PART



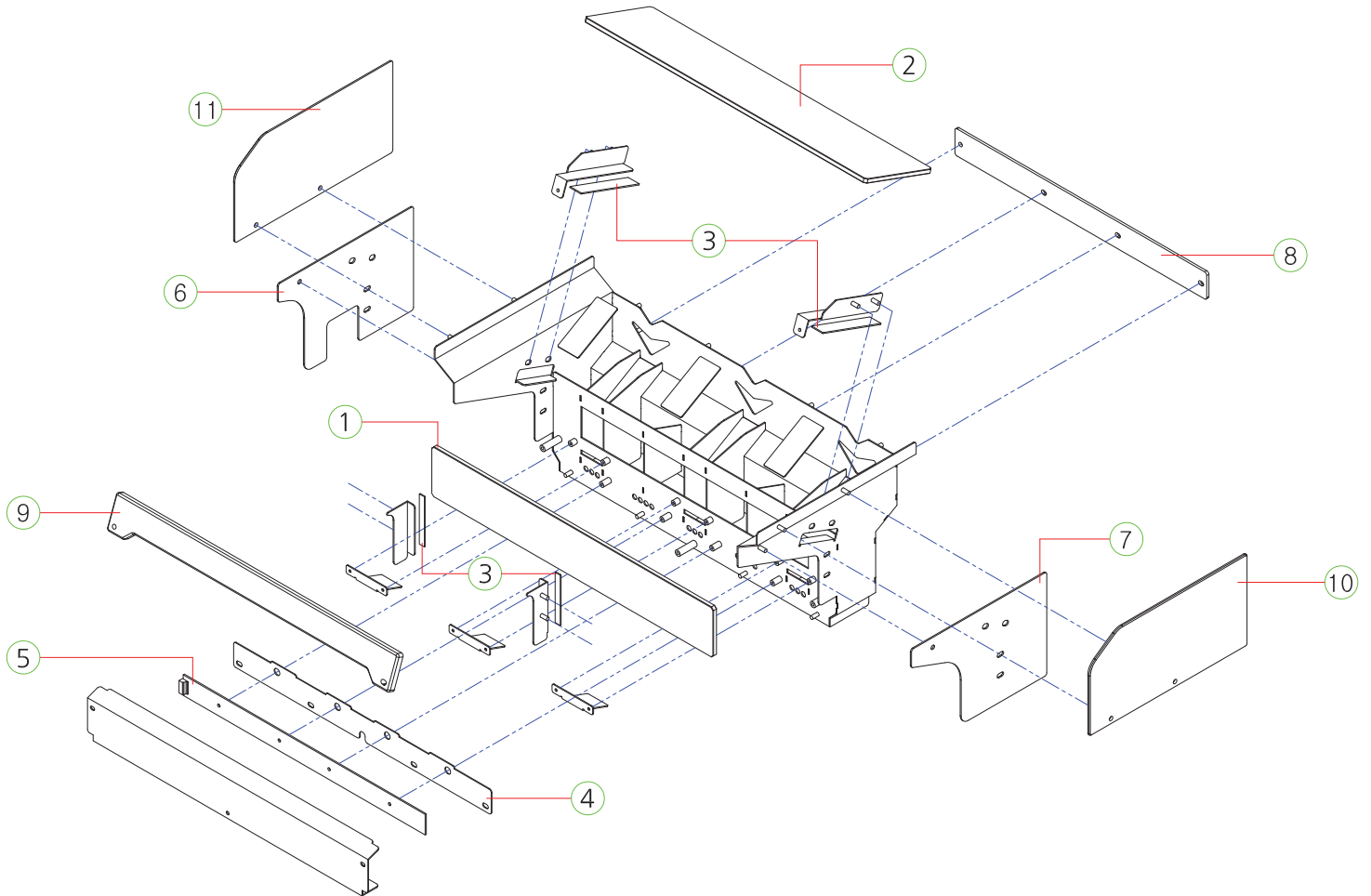
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	A_BONUS WHEEL MAIN SHAFT	-	1	-
2	MICRO SWITCH	GSM-V1631A1	1	MELE0MIC032
3	BEARING	MF126ZZ	1	MZZZ0BEA126
4	BONUS WHEEL ACRYL	PC-5t_SHEET	1	MSP10ACR013
5	BONUS WHEEL MIDDLE COVER ACRYL	PC-5t_SHEET	1	MSP10ACR016
6	BONUS WHEEL FLEXIBLE LED FIX ACRYL	PET-1.0t_CLEAR	3	MSPM0ACR005
7	FND PCB ASS'Y	2941-1(STRAIGHT)	1	AFND0PCB036
8	FND PCB ASS'Y	2941-4(STRAIGHT)	1	AFND0PCB004
9	BONUS WHEEL BOTTOM ACRYL	PET-1.0t_CLEAR	1	MSP10ACR003
10	BONUS WHEEL FRONT ACRYL	ACRYL-4.5t	1	MSP10ACR015
11	BONUS WHEEL BALL GUIDE ACRYL	PET-1.0t	1	MSP10ACR014

7-19. BONUS WHEEL MAIN SHAFT PART



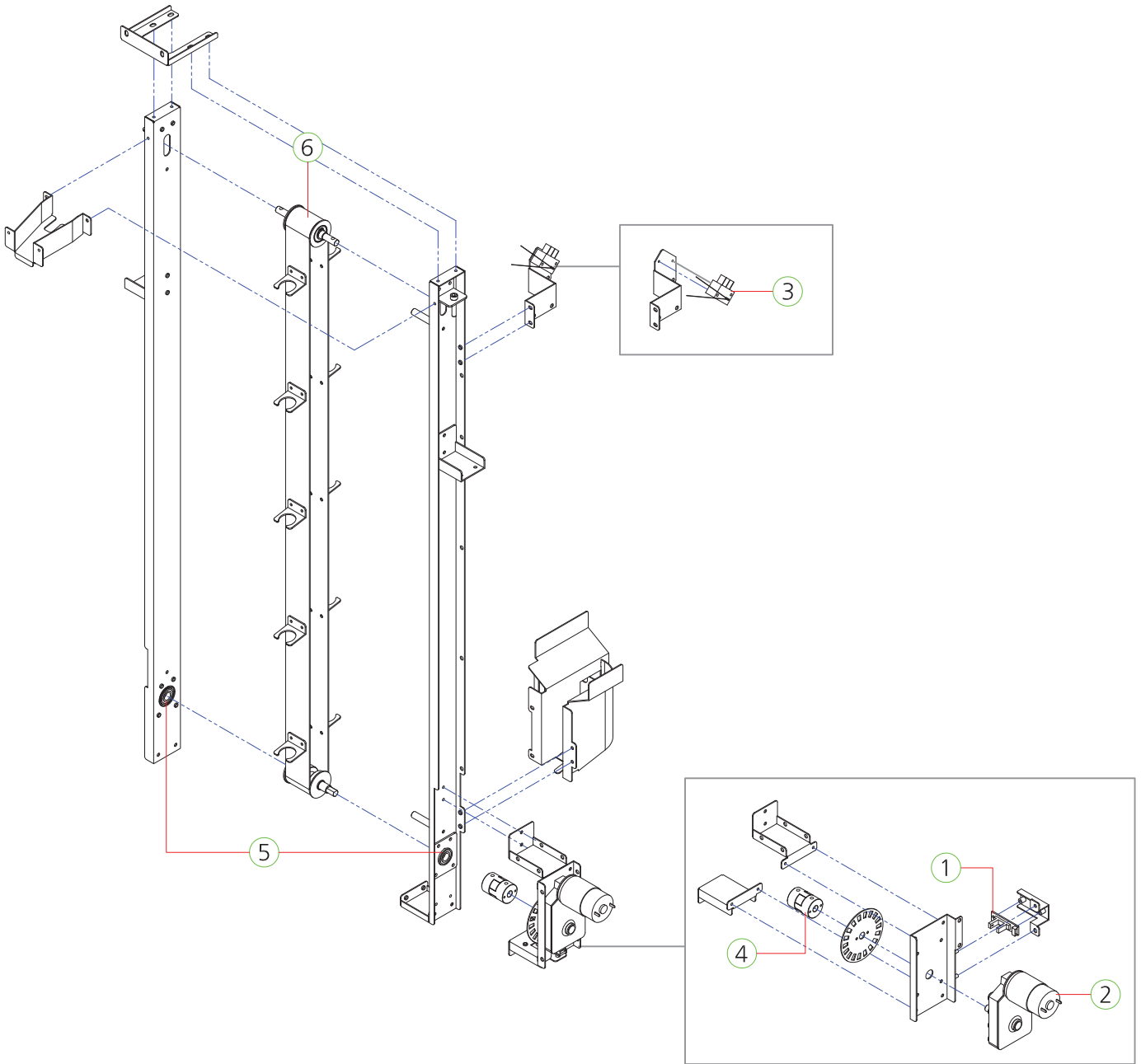
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BEARING	6002ZZNR	2	MZZZ0BEA116
2	PHOTO INT-2 PCB ASS'Y	-	1	AWIW0PCB009
3	MICRO SWITCH	GSM-V1631A1	1	MELE0MIC032
4	TIMMING BELT	126XL-037	1	MZZZ0BEL007
5	MOTOR	KGE 3657-240-U1 (F-TYPE,20RPM)	1	MZZZ0MOT130

7-20. CHECKER PART



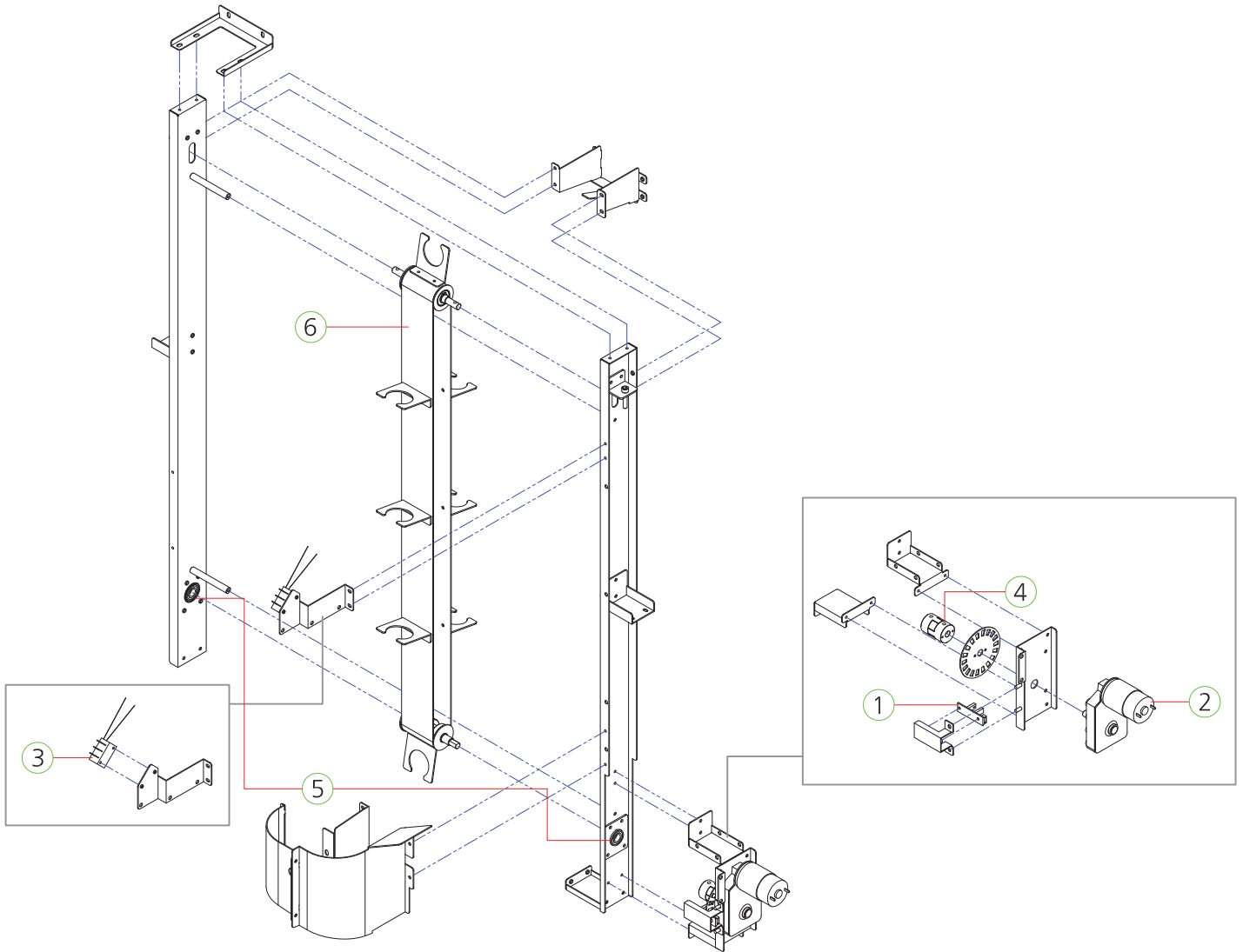
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	CHECKER FRONT COVER GLASS	TEMPERED-5t_396x61	1	MSPM0GLA004
2	CHECKER COIN FENCE GLASS	TEMPERED-5t_396x100	1	MSPM0GLA003
3	SENSOR BRACKET TAPE	25*71MM 2T	2	MPUS0000001
4	CHECKER FRONT LOWER COVER ACRYL	PET-1.0t_CLEAR	1	MSPM0ACR021
5	CHECKER SENSOR TX PCB ASS'Y	CHECKER SEN	1	ASPM0PCB003
6	CHECKER SIDE LOWER COVER ACRYL_L	PET-1.5t_CLEAR	1	MSPM0ACR024
7	CHECKER SIDE LOWER COVER ACRYL_R	PET-1.5t_CLEAR	1	MSPM0ACR025
8	CHECKER UPPER LED COVER ACRYL	ACRYL-3.0t_POINT CLEAR	1	MSPM0ACR067
9	CHECKER COIN FRONT FENCE ACRYL	ACRYL-10.0t_CLEAR	1	MSPM0ACR072
10	CHECKER SIDE UPPER COVER ACRYL	ACRYL-2.7t	1	MSPM0ACR026
11	CHECKER SIDE UPPER COVER ACRYL_mir	ACRYL-2.7t	1	MSPM0ACR026

7-21. SMALL BALL ELEVATOR PART



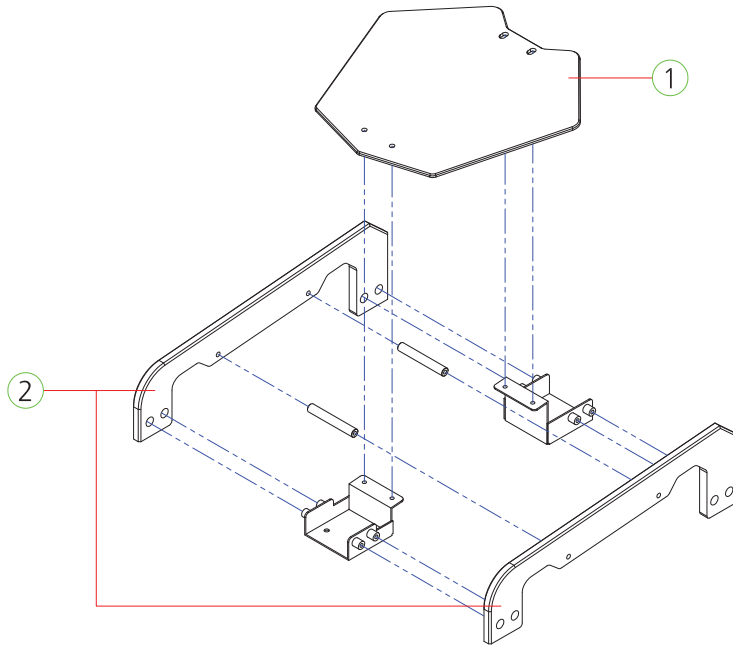
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	PHOTO INT-1 PCB ASS'Y	ANGLE TYPE	1	AZZZ0PCB103
2	MOTOR	KGE-0116-ND3657 U1	1	MZZZ0MOT155
3	MICRO SWITCH	CNR-05H-03 ZIPPY-FOR COIN	1	MELE0MIC002
4	COUPLING CR050 ASS'Y	-	1	AZZZ0COP003
5	BEARING	6900ZZNR	2	MZZZ0BEA129
6	SMALL BALL CONVEYOR BELT	-	1	MSPM0BEL002

7-22. BIG BALL ELEVATOR PART



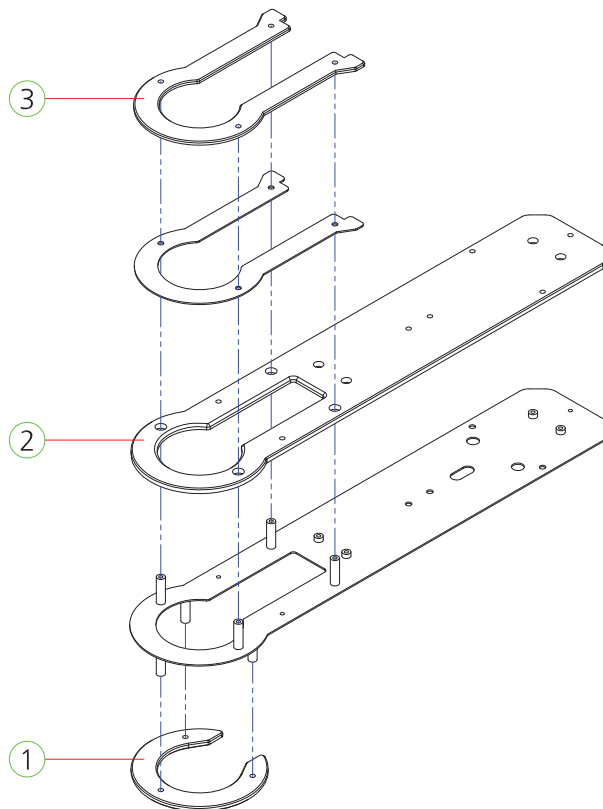
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	PHOTO INT-1 PCB ASS'Y	ANGLE TYPE	1	AZZZ0PCB103
2	MOTOR	KGE-0116-ND3657 U1	1	MZZZ0MOT155
3	MICRO SWITCH	CNR-05H-03 ZIPPY-FOR COIN	1	MELE0MIC002
4	COUPLING CR050 ASS'Y	-	1	AZZZ0COP003
5	BEARING	6900ZZNR	2	MZZZ0BEA129
6	BIG BALL CONVEYOR BELT	-	1	MSPM0BEL001

7-23. BIG BALL DIVIDE UPPER RAIL ACRYL PART



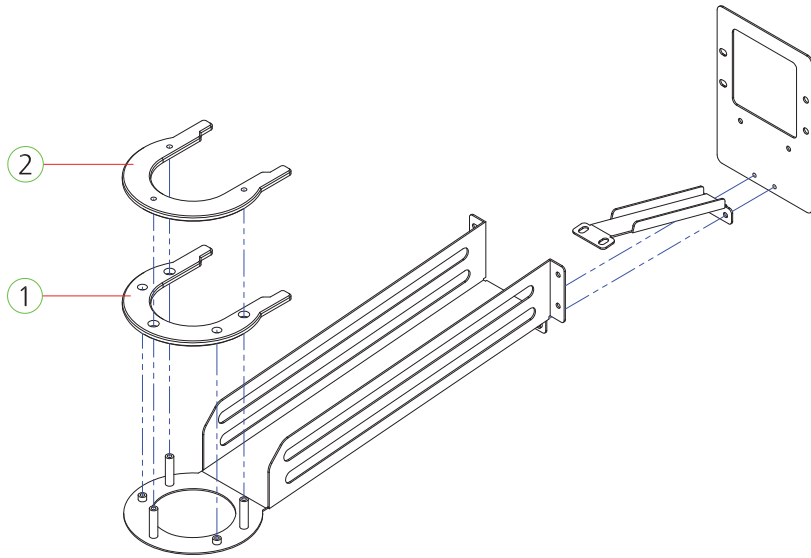
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BIG BALL DIVIDE SPIDER ACRYL	ACRYL-2.7t_SHEET	1	MSP10ACR007
2	BIG BALL DIVIDE UPPER RAIL ACRYL	ACRYL-8.0t_CLEAR	2	MSP10ACR002

7-24. BIG BALL DIVIDE LOWER ACRYL PART

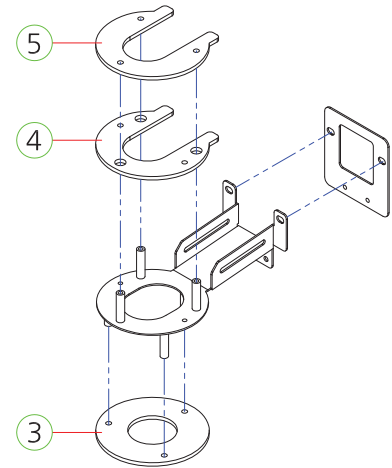


NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BIG BALL DIVIDE FRONT BOTTOM ACRYL	ACRYL-4.5t_GREEN CLEAR	1	MSPM0ACR001
2	BIG BALL DIVIDE LOWER ACRYL	ACRYL-4.5t_SHEET	1	MSP10ACR006
3	BIG BALL DIVIDE FRONT RAIL ACRYL	ACRYL-3.0t_GREEN CLEAR	1	MSP10ACR001

7-25. BIG BALL OUT CHUTE PART

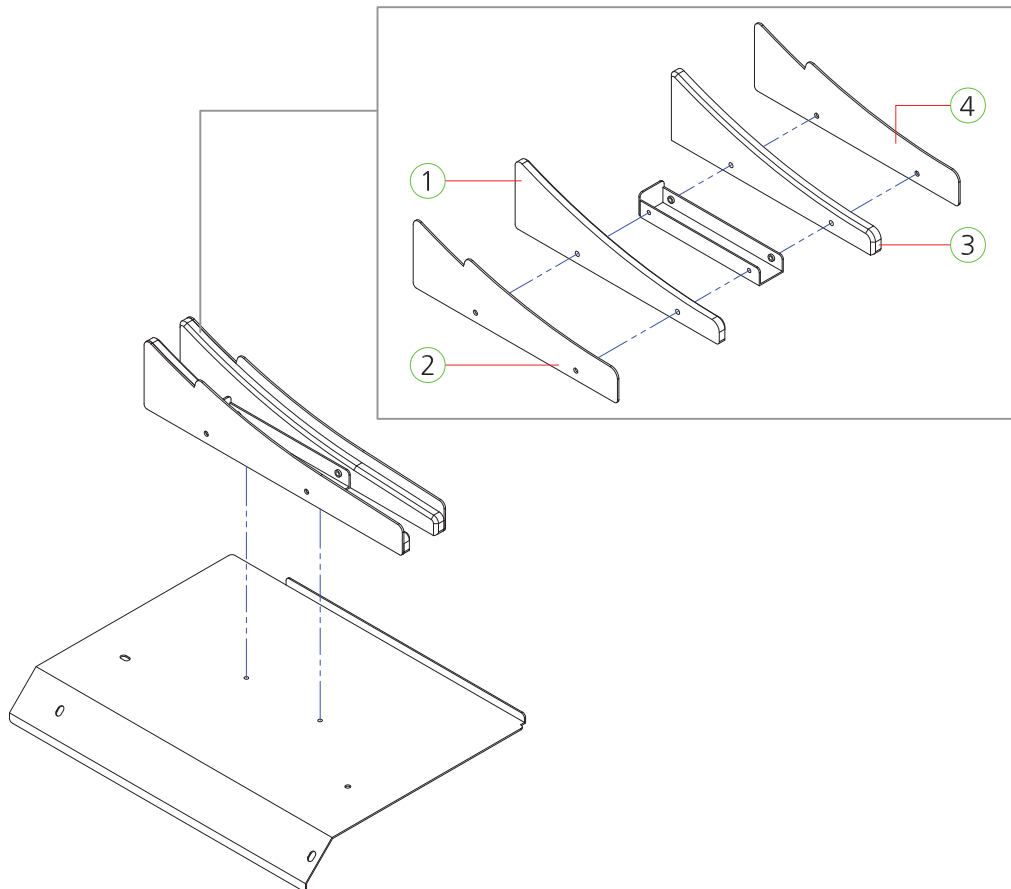


7-26. SMALL BALL OUT CHUTE PART



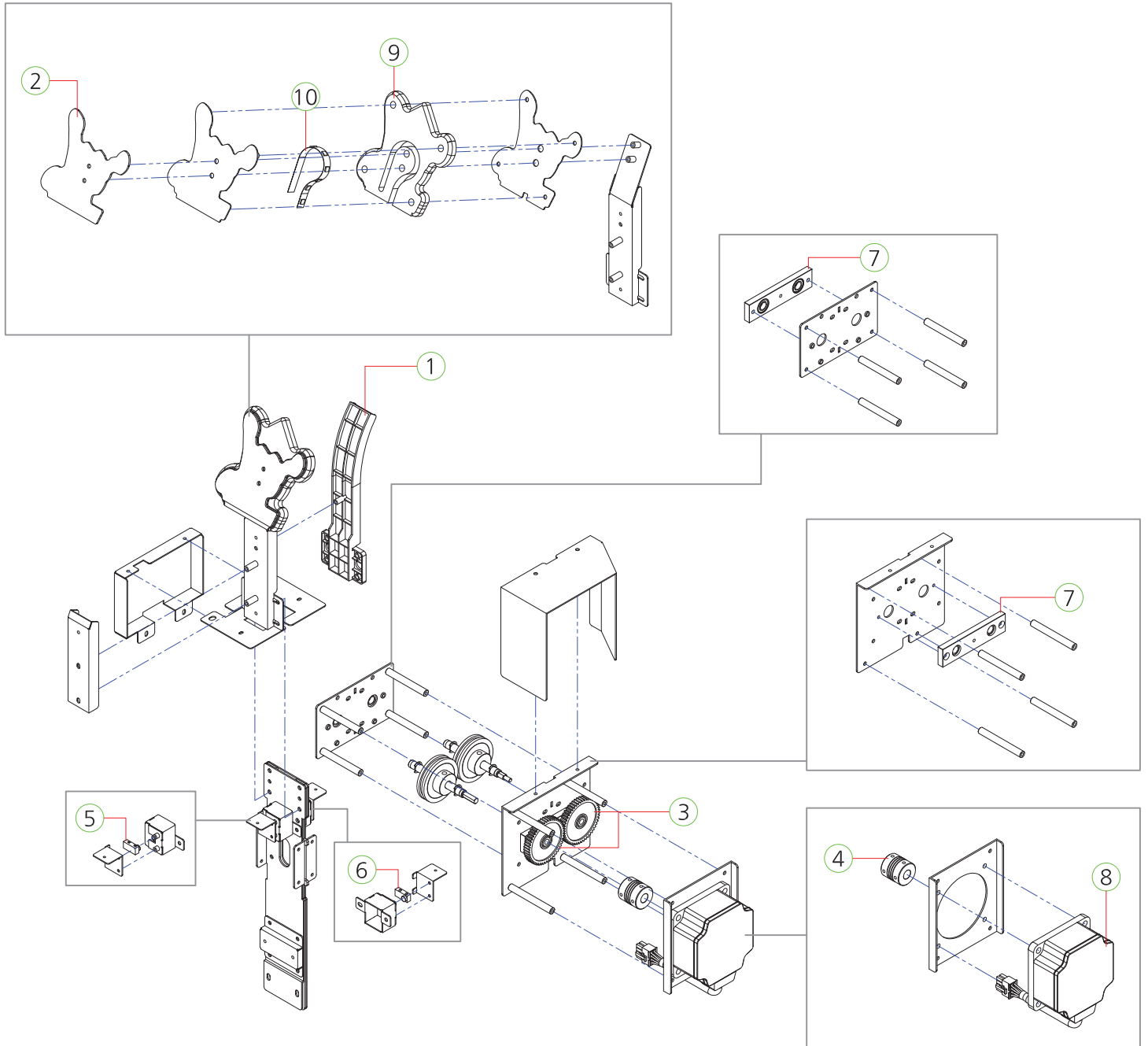
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	CABINET BIG BALL OUT CHUTE LOWER ACRYL	ACRYL-4.5t_GREEN CLEAR	1	MSPM0ACR009
2	CABINET BIG BALL OUT CHUTE UPPER ACRYL	ACRYL-4.5t_GREEN CLEAR	1	MSPM0ACR010
3	CABINET SMALL BALL OUT DISPLAY LOWER ACRYL	ACRYL-3.0t_GREEN CLEAR	1	MSPM0ACR015
4	CABINET SMALL BALL OUT DISPLAY MIDDLE ACRYL	ACRYL-3.0t_GREEN CLEAR	1	MSPM0ACR016
5	CABINET SMALL BALL OUT DISPLAY UPPER ACRYL	ACRYL-3.0t_GREEN CLEAR	1	MSPM0ACR017

7-27. PUSHER SIDE REAR UPPER COVER PART



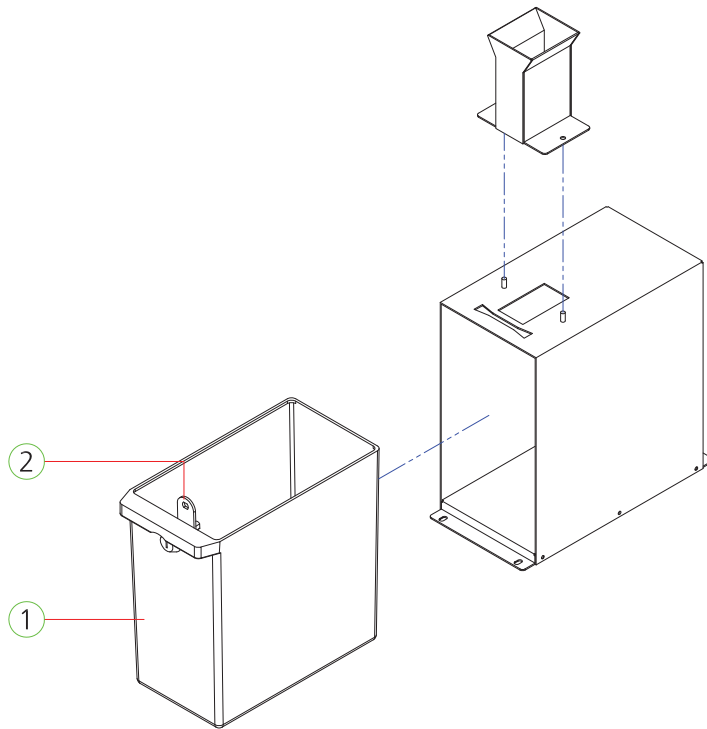
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	CABINET SMALL BALL OUT REAR GUIDE ACRYL	ACRYL-8.0t_CLEAR	1	MSP10ACR005
2	CABINET SMALL BALL OUT FRONT GUIDE ACRYL	PET-1.5t_CLEAR	1	MSP10ACR004
3	CABINET SMALL BALL OUT REAR GUIDE ACRYL_mir	ACRYL-8.0t_CLEAR	1	MSP10ACR005
4	CABINET SMALL BALL OUT FRONT GUIDE ACRYL	PET-1.5t_CLEAR	1	MSP10ACR004

7-28. SHOOTER PART



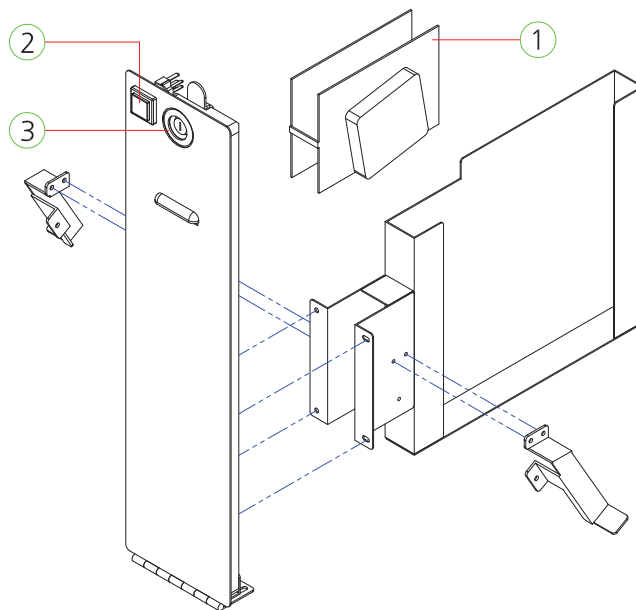
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	SHOOTER CHUTE MOLD	ACETAL_BLACK	1	MSPM0PLA001
2	SHOOTER LED COVER ACRYL	PET-2.0t	1	ASPM0ACP026
3	GEAR-50	ACETAL_BLACK	2	MPOCOPLA002
4	COUPLING	SHC-25	1	MZZZ0COP013
5	SENSOR	G-310	1	PSEN0PHO013
6	SENSOR	ST-310	1	PSEN0PHO014
7	SHOOTER ROLLER BEARING HOUSING ASS'Y	-	2	ASPM0ASS008
8	MOTOR	BLDC_K8XS50N2	1	MZZZ0MOT180
9	SHOOTER LED ACRYL	ACRYL-12.0t_CLEAR	1	MSPM0ACR069
10	FLEX_WS2813B_150_NWP_L_9	WS2813 V5 TOP300, 9	1	MELE0LED123

7-29. COIN BOX COVER PART



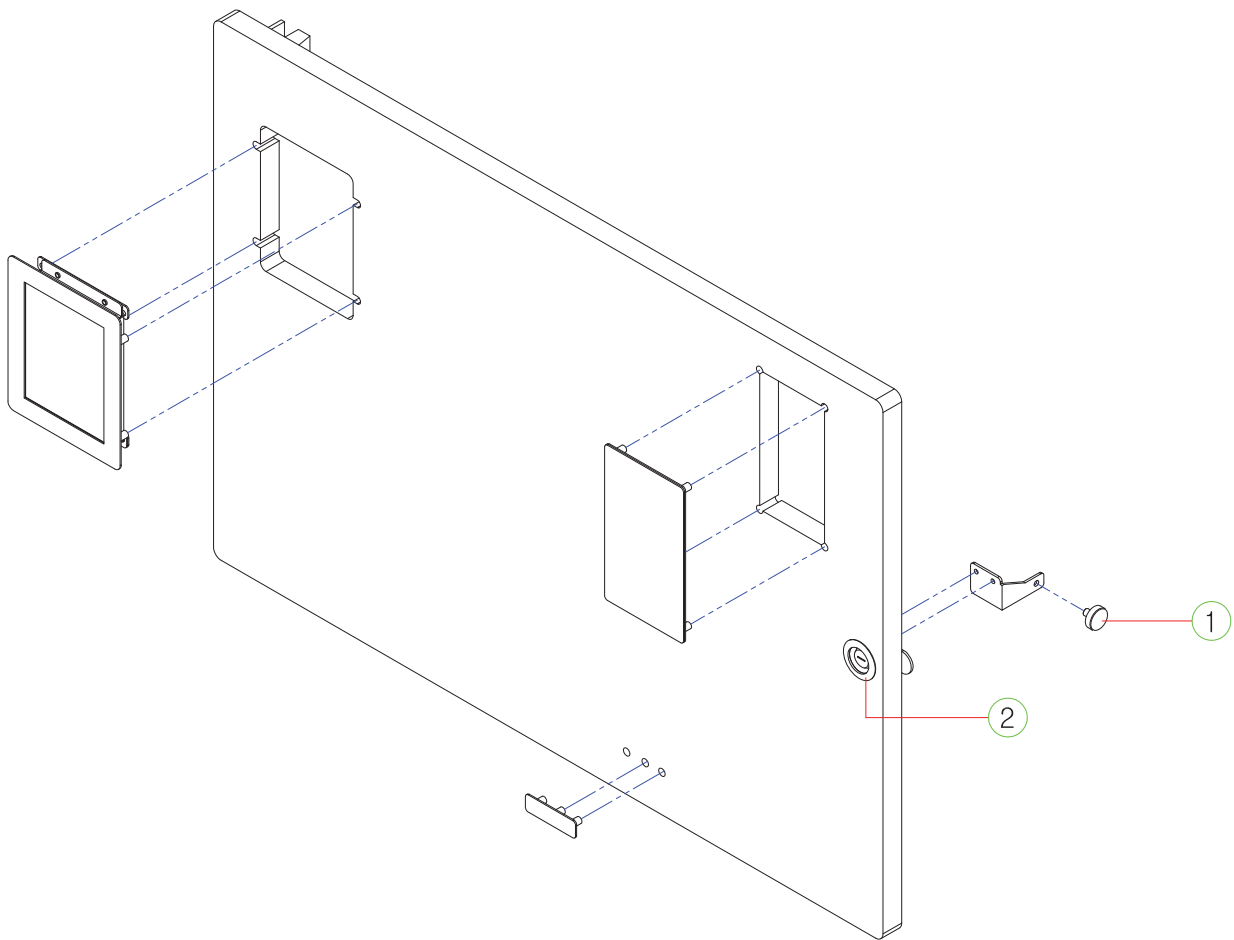
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	COIN BOX SMALL	200*198*107 BLACK	1	MDRE0PLA007
2	KEY ASS'Y	6001	1	MZZZ0KEY075

7-30. TICKET DOOR PART



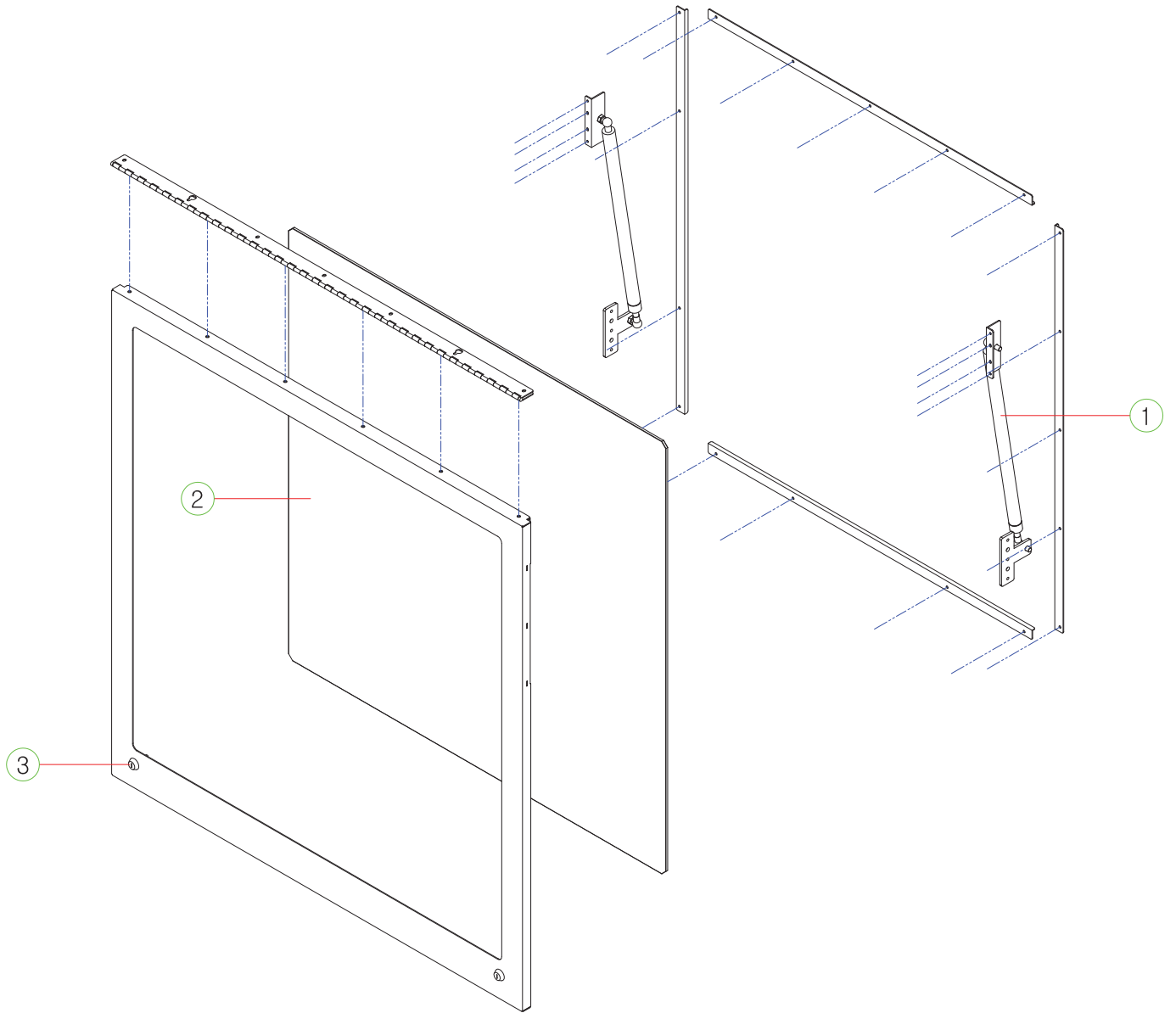
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	[OPTION] TICKET DISPENSER	-	1	-
2	BUTTON SWITCH	TICKET AM1PB-26SH R12D	1	MMUM0BUT002
3	KEY ASS'Y	7001	1	MZZZ0KEY076

7-31. FRONT LOWER DOOR PART



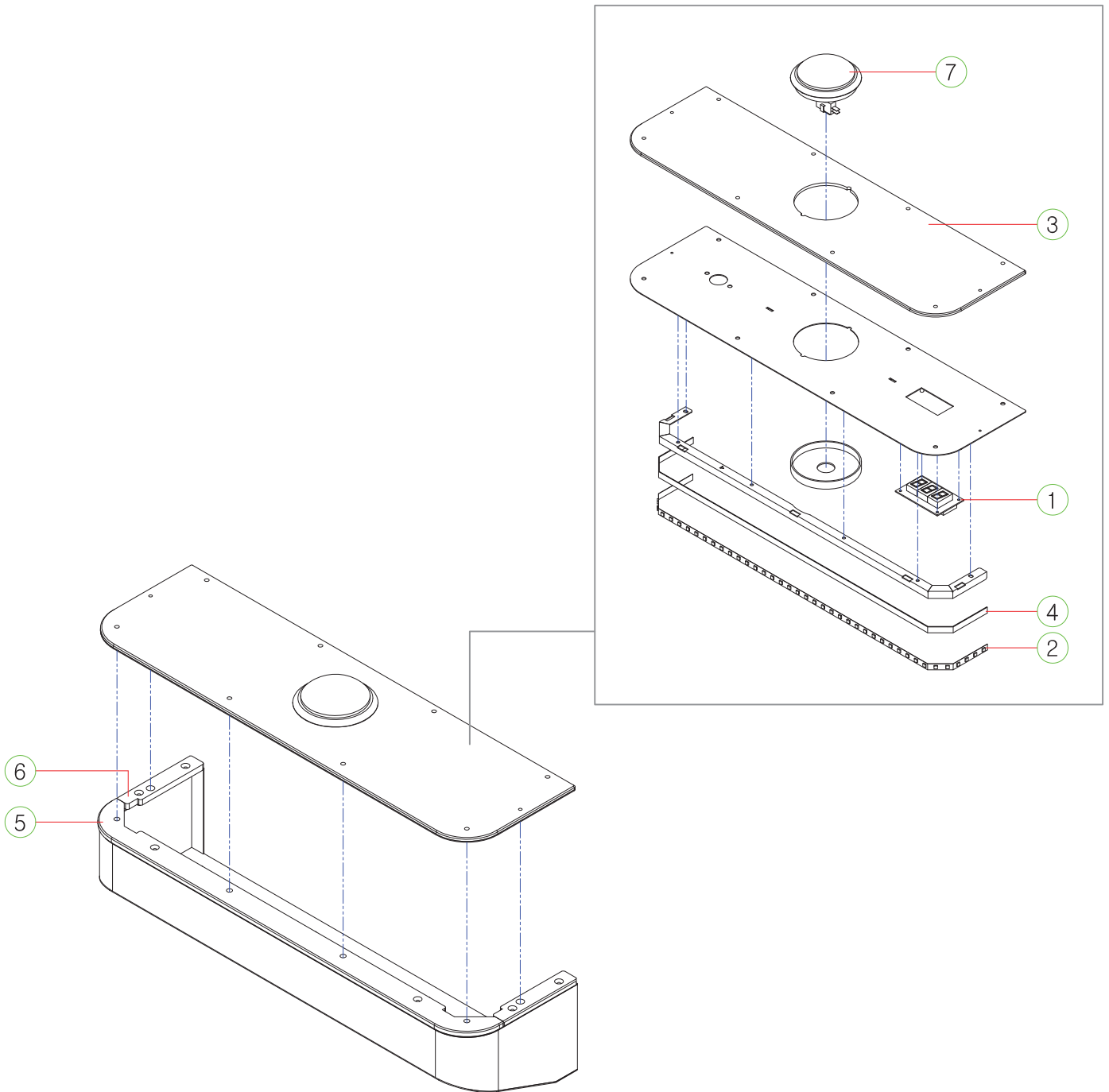
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BEARING	DR19-B	1	MZZZ0BEA117
2	KEY ASS'Y	7001	1	MZZZ0KEY076

7-32. CABINET UPPER DOOR PART



NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	GAS SPRING	GSB-22X761-25Kg	2	MZZZ0SH0017
2	CABINET UPPER DOOR GLASS	TEMPERED-5t_900x907	1	MSP10GLA001
3	KEY ASS'Y	7001, KEY(BODY+PLATE)	2	MZZZ0KEY076

7-33. BUTTON PLATE PART



NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	FND PCB ASS'Y	2029-3(STRAIGHT)	1	AFND0PCB028
2	FLEX_WS2813B_850_NWP_LR_44	WS2813 V5 TOP300, 44	1	MELE0LED166
3	BUTTON PLATE COVER ACRYL	ACRYL-4.5t	1	MSP10ACR022
4	BUTTON FLEXIBLE LED FIX ACRYL	PET-1.0t_CLEAR	1	MSP10ACR011
5	BUTTON FRONT ACRYL	ACRYL-8.0t_CLEAR	1	MSPM0ACR007
6	BUTTON FRONT REAR ACRYL	ACRYL-8.0t_CLEAR	2	MSPM0ACR008
7	BUTTON ASS'Y	CWB 401-WHITE 100MM LED	1	MZZZ0BUT080

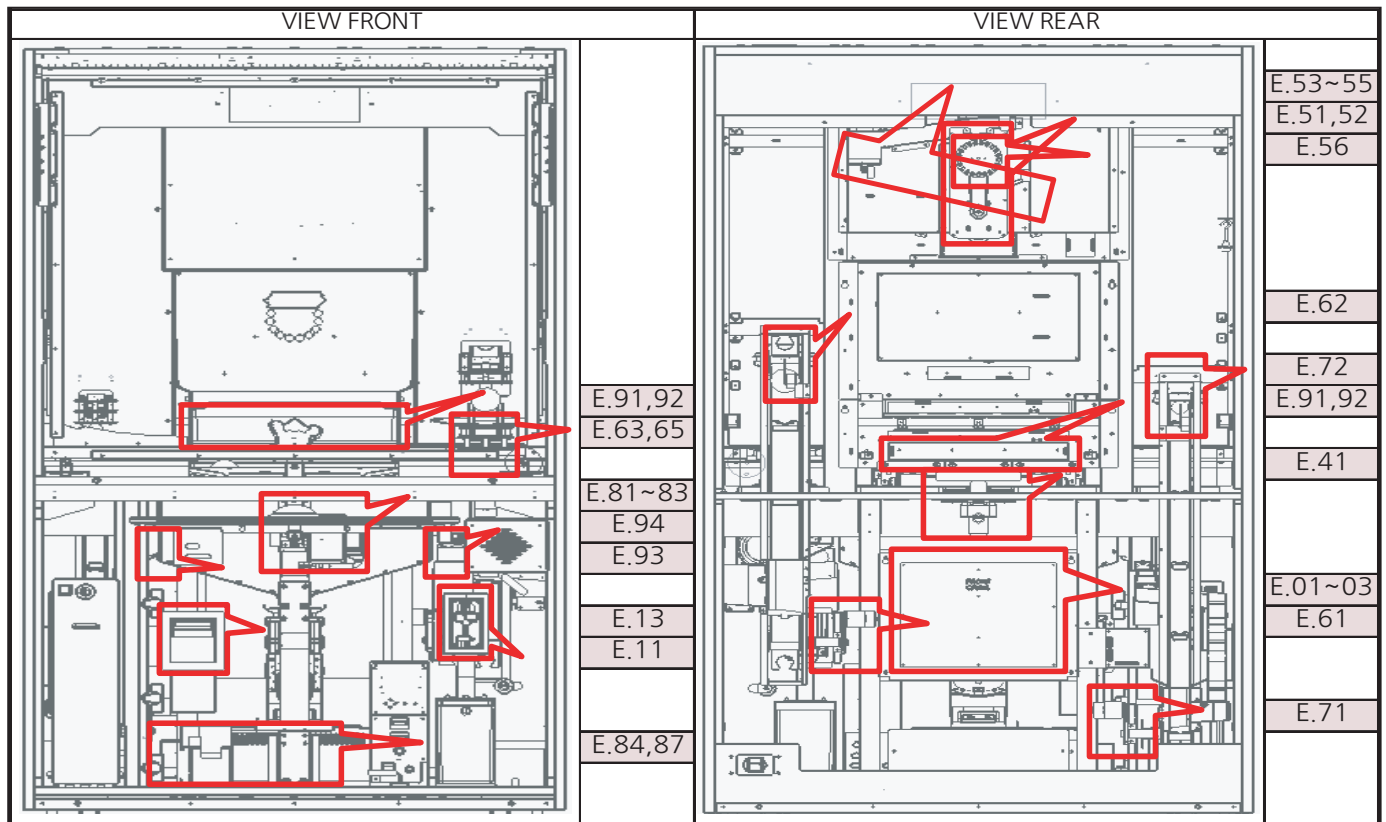
8. SOLUTION

* ERROR CODES

CODE	ERROR	NOTE
E.01	BY REGION	SETUP SAVE DATA AND LOCATION OF MAIN PCB DIP SW ARE INCORRECT
E.02	SYSTEM	SETUP SAVE DATA PROBLEM
E.03		GAME SAVE DATA PROBLEM
E.11	COIN MACHINE	PLAYER COIN SENSOR SIGNAL STILL PRESENT
E.13	BILL ACCEPTOR	PLAYER BILL SENSOR SIGNAL STILL PRESENT
E.41	PUSHER MOTOR	PUSHER MOTOR PROBLEM
E.51	BIG BALL GAME MOTOR	BALL EJECTION START POSITION SWITCH PROBLEM
E.52		WHEEL MAIN (ORIGIN) ENCODER PROBLEM
E.53	BIG BALL GAME SWITCH(SENSOR)	BALL EJECTION START POSITION SWITCH PROBLEM
E.54		BALL GOAL CHECK SWITCH SIGNAL PROBLEM (NO SWITCH SIGNAL, STILL PRESENT)
E.55		PROBLEMS INPUTTING THE BALL EJECTION START POSITION AND THE GOAL CHECK SWITCH SIGNAL AT THE SAME TIME
E.56	BIG BALL GAME MOTOR SUB ENCODER COUNT	WHEEL SUB (DEVIDE) ENCODER COUNT COUNT OUT OF BOUNDS
E.61	BIG BALL ELEVATOR	BIG BALL ELEVATOR MOTOR ENCODER PROBLEM
E.62		BIG BALL ELEVATOR TOP SENSOR PROBLEM
E.63	BIG BALL SUPPLY LEFT/RIGHT MOVE MOTOR	BIG BALL SUPPLY LEFT/RIGHT MOVE MOTOR SUB (DEVIDE) ENCODER
E.65	BIG BALL SUPPLY LEFT/RIGHT MOVE MOTOR LIMIT SWITCH	BIG BALL SUPPLY LEFT/RIGHT MOVE MOTOR LEFT LIMIT SWITCH PROBLEM (NO SIGNAL, STILL PRESENT)
E.71	SMALL BALL ELEVATOR	SMALL BALL ELEVATOR MOTOR ENCODER PROBLEM
E.72		SMALL BALL ELEVATOR TOP SENSOR PROBLEM
E.81	MEDAL SHOOTER HOPPER OR SENSOR	MEDAL SHOOTER HOPPER LAUNCH PROBLEM (NO LAUNCH SENSOR SIGNAL)
E.82		MEDAL SHOOTER HOPPER LAUNCH SENSOR PROBLEM (FIRE SENSOR SIGNAL STILLPRESENT)
E.83	MEDAL SHOOTER BLDC ROLLER MOTOR	MEDAL SHOOTER BLDC MOTOR ROLLER PROBLEM
E.84	MEDAL SHOOTER LEFT/RIGHT MOVE MOTOR	MEDAL FIRING LEFT/RIGHT MOVE MOTOR SUB (DEVIDE) ENCODER PROBLEM

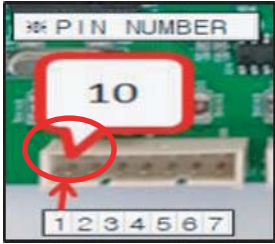
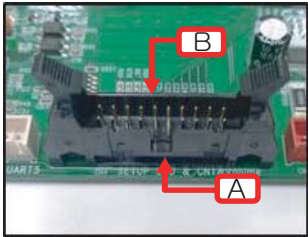
CODE	ERROR	NOTE
E.87	MEDAL SHOOTER BLDC ROLLER MOTOR	MEDAL SHOOTER BLDC MOTOR IO SPEED SETTING PROBLEM
E.91	CHECKER SENSOR & PUSHER BOTTOM BALL DROP SENSOR	CHECKER SENSOR SIGNAL STILL PRESENT
E.92		CHECKER SENSOR NO SIGNAL
E.93		SMALL BALL FALL DETECTION SENSOR PROBLEM AT THE BOTTOM OF THE PUSHER PLATE (SIGNAL STILL EXISTS)
E.94		SMALL BALL FALL DETECTION SENSOR PROBLEM AT THE BOTTOM OF THE PUSHER PLATE (SIGNAL STILL EXISTS)
HELP (DISPLAY AT TICKET FND)	TICKET ERROR	NO TICKET

※ Reset button after taking actions

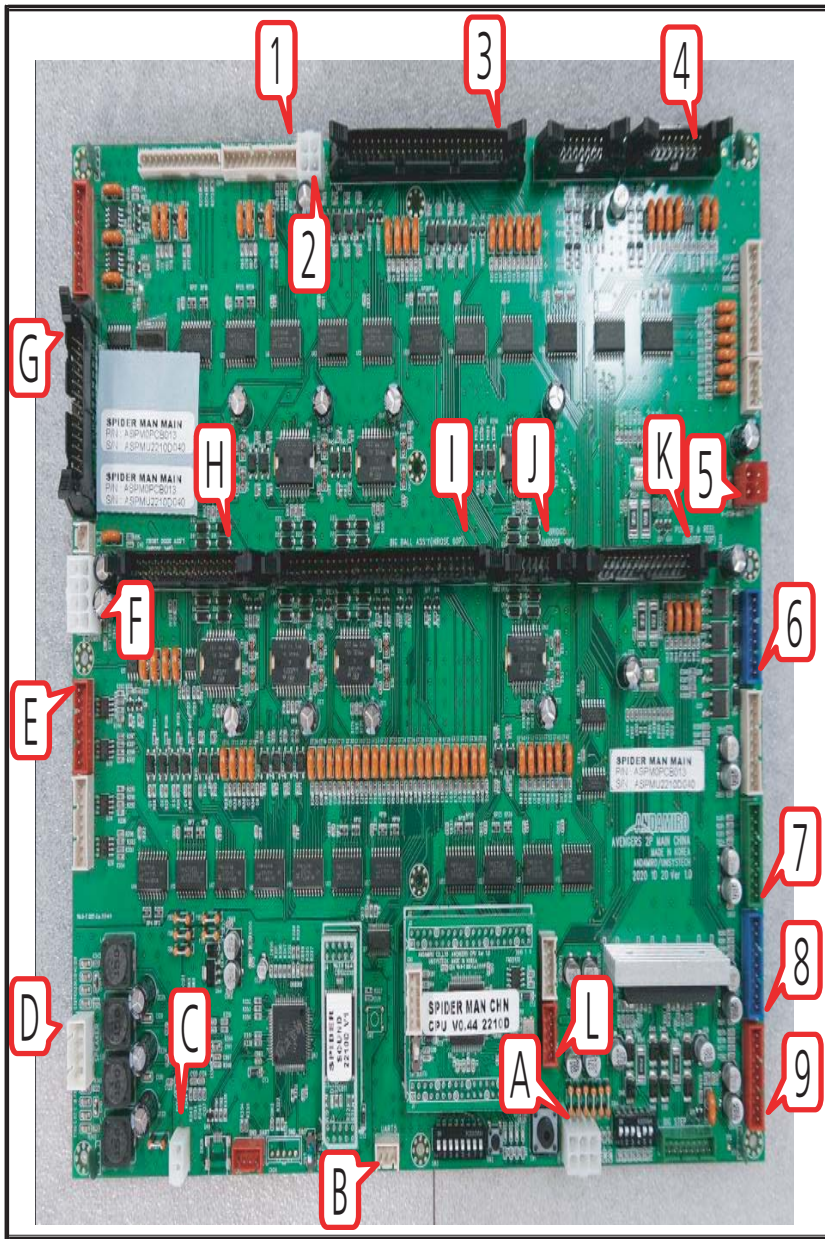


9. PCB CONNECTOR LOCATION

* PIN INFORMATION

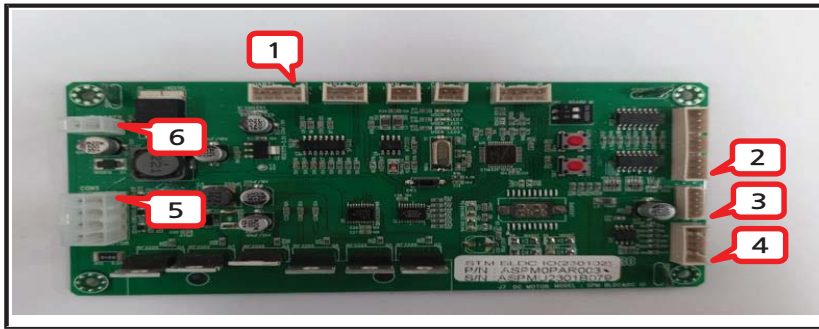
1	2	PIN DESCRIPTION
		<ol style="list-style-type: none"> The arrow point means the contact pin number 1 direction of Hirose connector

9-1. MAIN PCB ASS'Y



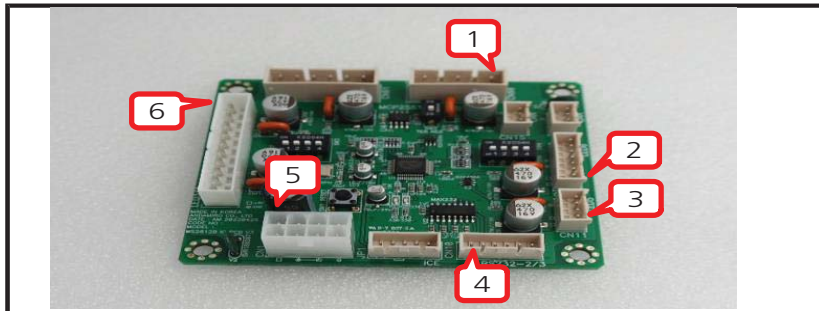
NO	FUNCTION	LOCATION	PIN
1	SHOOTER ROTATE MOTOR & SENSOR	CN13	12
2	HOPPER POWER 24V	CN34	4
3	BLDC IO PCB, BIG & SMALL BALL CHECK SENSOR, HP PCB	CN5	50
4	TICKET & LAMP SW, S-BALL ELVATOR SWITCH	CN11	16
5	STEP MOTOR POWER 24V	CN32	4
6	SOLENOID, CEILING LED BAR	CN23	8
7	GAME BOARD LED PCB & FND (BIGBALL STOCK & TICKET)	CN17	9
8	JACKPOT FND	CN16	9
9	LED (SUCCESS, CHECKER REAR CHECKER REAR), PLAY FND	CN15	9
A	MAIN POWER 5V, 12V	CN31	6
B	WS2813B IO PCB	CN3	3
C	AUDIO POWER 12V	CN30	2
D	SPEAKER	CN29	4
E	GAMEBOARD FLEX LED	CN19	8
F	DC MOTOR POWER 12V	CN33	8
G	SETUP LCD & COUNTER & VOLUME	CN4	26
H	COIN & BILL, GAME BUTTON, S-BALL ELEVATOR MOTOR & SENSOR	CN6	34
I	BONUS WHEEL ASS'Y, CHECKER SENSOR, PUSHER MT SENSOR	CN7	60
J	BIG BALL DIVIDER ASS'Y, B-BALL ELEVATOR MOTOR	CN12	10
K	PUSHER MOTOR, B-BALL ELEVATOR SENSOR & SW, DIVIDER SENSOR	CN9	30
L	BLDC IO PCB	CN2	5

9-2. STM BLDC IO PCB ASS'Y



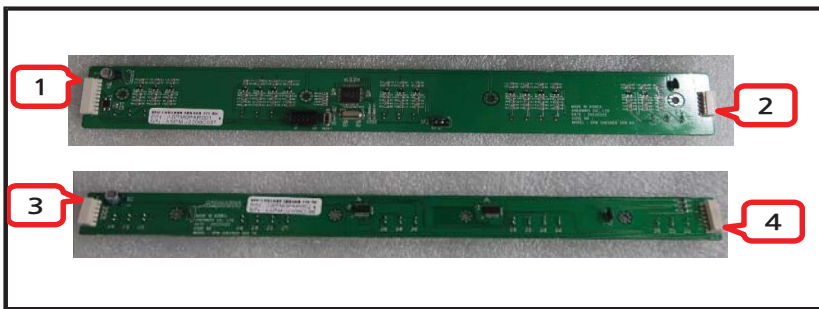
NO	FUNCTION	LOCATION	PIN
1	MAIN PCB(CN2)	J3	4
2	MAIN PCB(CN5)	CON2	10
3	SHOOTER MEDAL SENSOR	JP1	4
4	MAIN PCB(CN5)	JP2	5
5	SHOOTER BLDC MOTOR	JP3	8
6	BLDC IO POWER 24V	JP4	2

9-3. WS2812B IO PCB ASS'Y



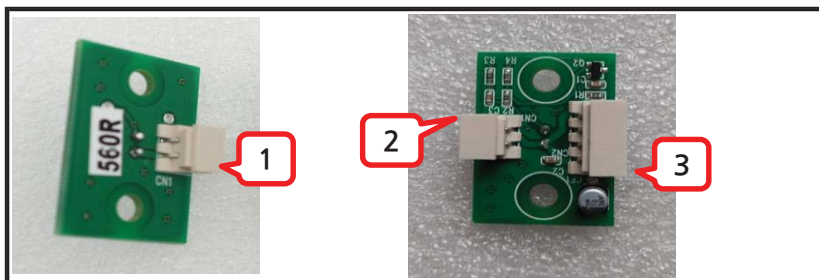
NO	FUNCTION	LOCATION	PIN
1	PUSHER LEFT, BUTTON PLATE	CN90	5
2	SHOOTER BUTTON PLATE	CN80	7
3	MAIN PCB(CN3)	CN10	6
4	RIGHT SIDE, 2P BONUS WHEEL TOP	CN11	4
5	WS2812B IO POWER 5V	CN1	8
6	LEFT SIDE, BONUS WHEEL TOP	CN92	10

9-4. CHECKER SENSOR RX,TX PCB ASS'Y



NO	FUNCTION	LOCATION	PIN
1	MAIN PCB(CN7)	J1	8
2	CHECKER SENSOR TX PCB	J2	5
3	CHECKER SENSOR RX PCB	J1	5
4	NONE	J2	6

9-5. SENSOR_T, R PCB ASS'Y



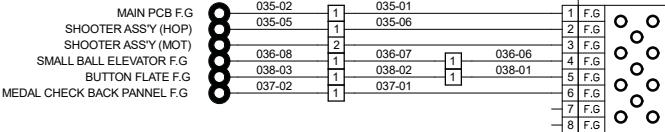
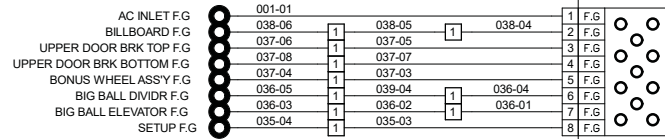
NO	FUNCTION	LOCATION	PIN
1	TO SENSOR RX PCB	CN1	2
2	TO SENSOR TX PCB	CN1	2
3	MAIN PCB	CN2	4

9-6. PHOTO INT-1, 2 PCB ASS'Y

NO	FUNCTION	PIN No
1	POWER 5V	1
2	ENABLE VOLTAGE	2
3	SENSOR OUT VOLTAGE	3
4	GND	4

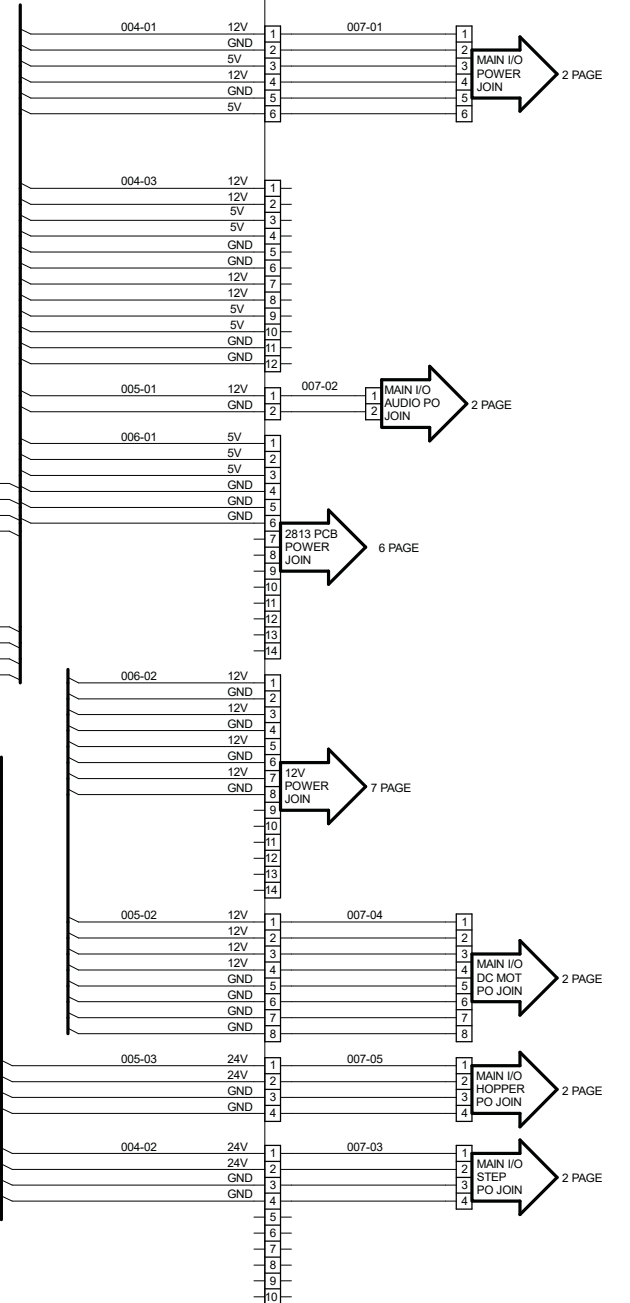
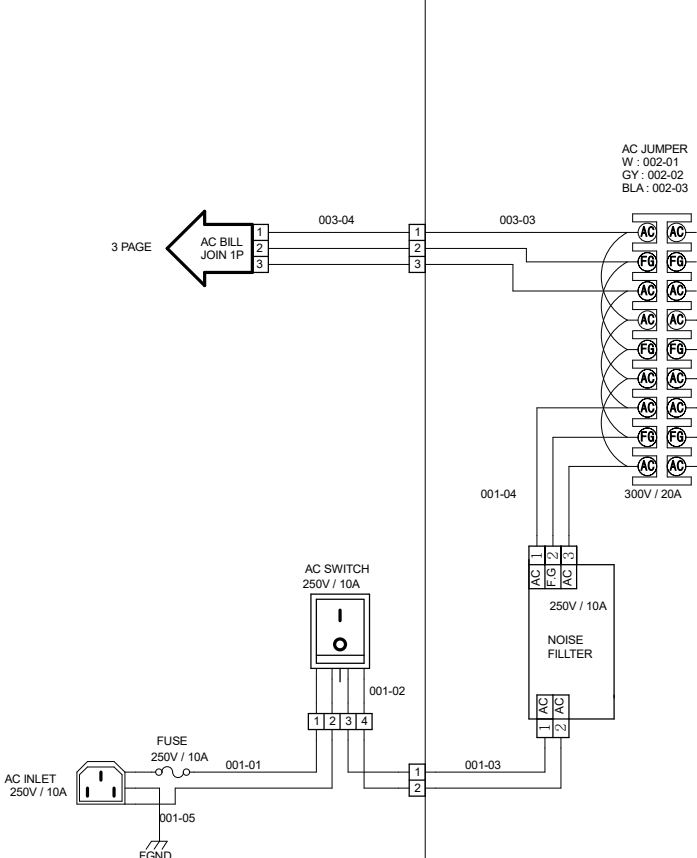
NO	FUNCTION	PIN No
1	POWER 5V	1
2	ENABLE VOLTAGE	2
3	SENSOR1 OUT VOLTAGE	3
4	SENSOR2 OUT VOLTAGE	4
5	GND	5

POWER SUPPLY



F.G LEFT SIDE

F.G RIGHT SIDE



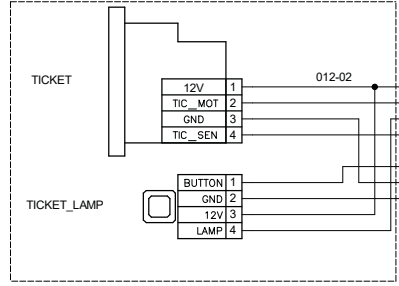
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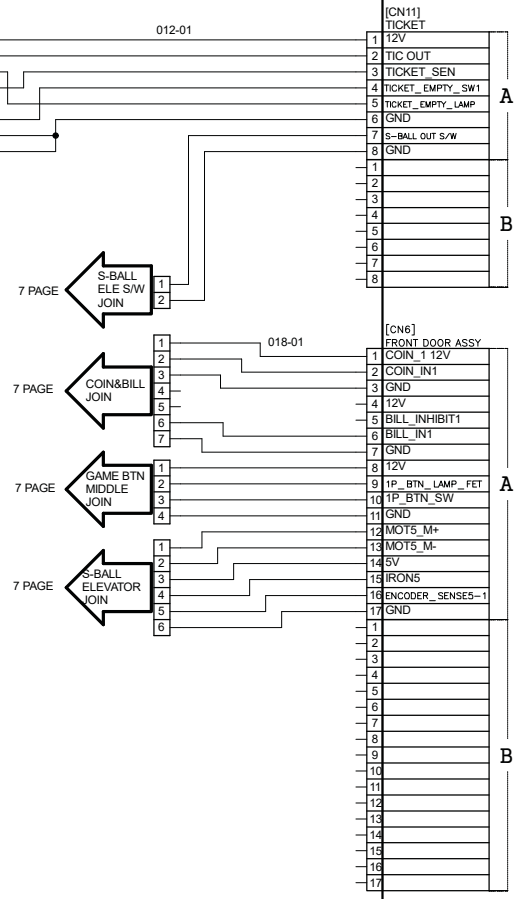
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				DATE	2024.09.19



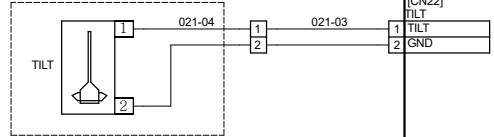
TICKET ASS'Y



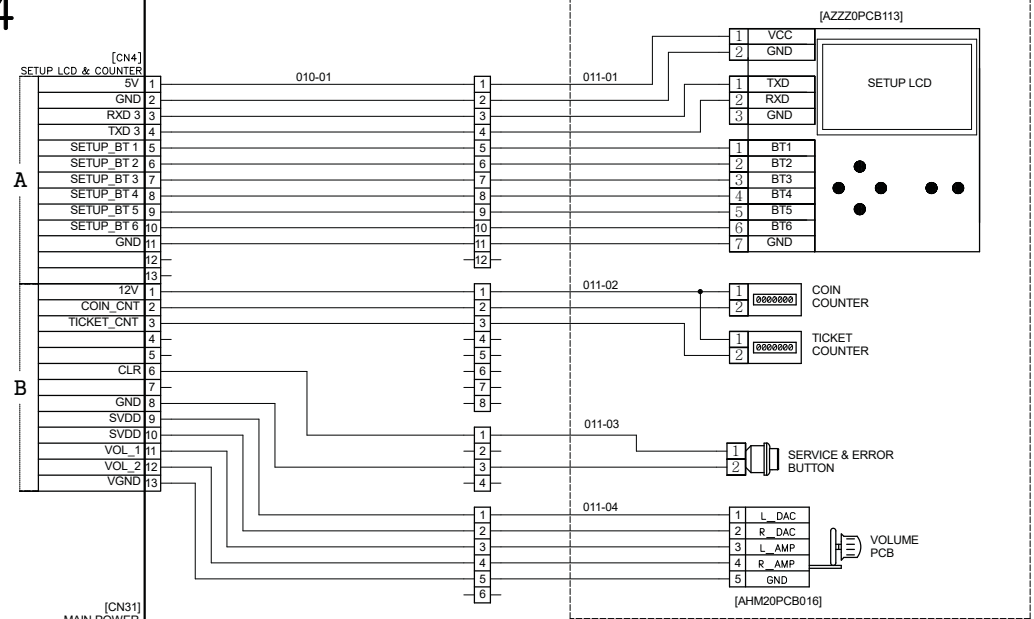
MAIN PCB 1/4



TILT ASS'Y



SETUP ASS'Y



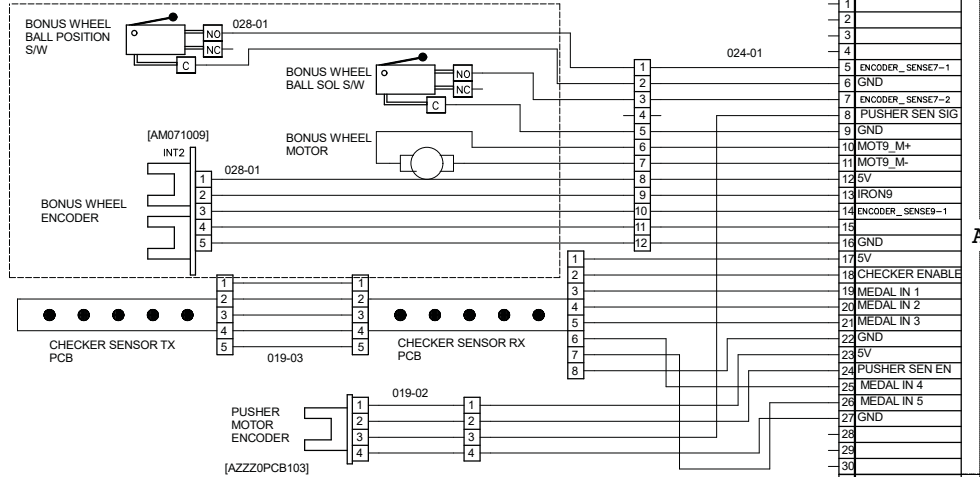
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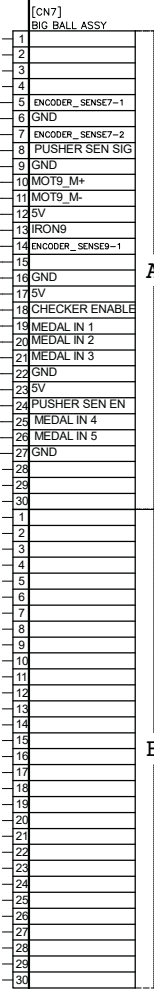
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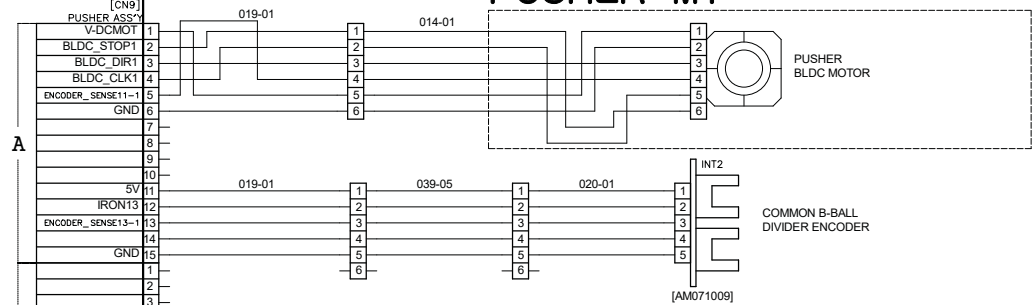
BONUS WHEEL ASS'Y



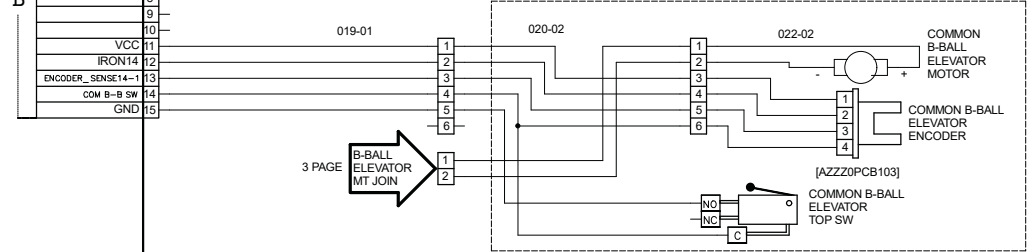
MAIN PCB 2/4



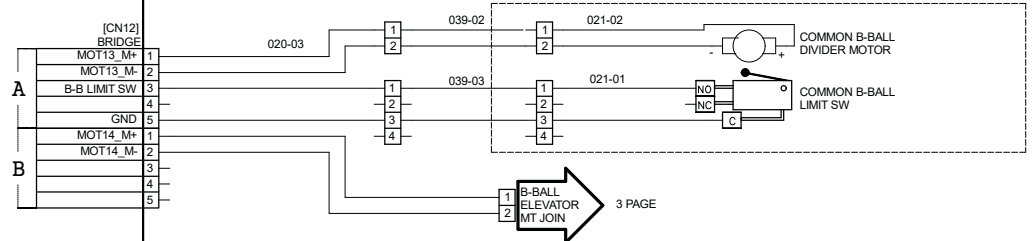
PUSHER MT



BIG BALL ELV ASS'Y



BIG BALL DIV ASS'Y

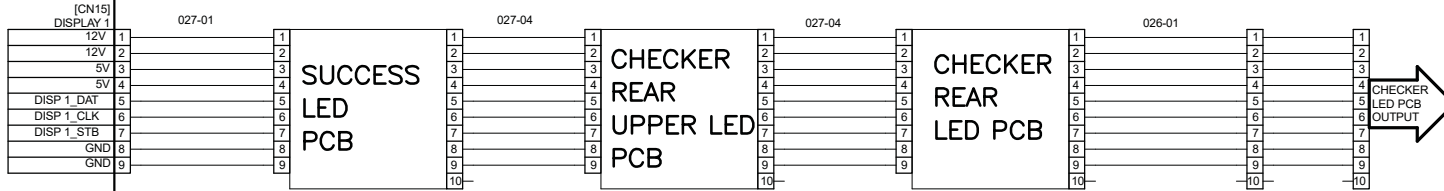
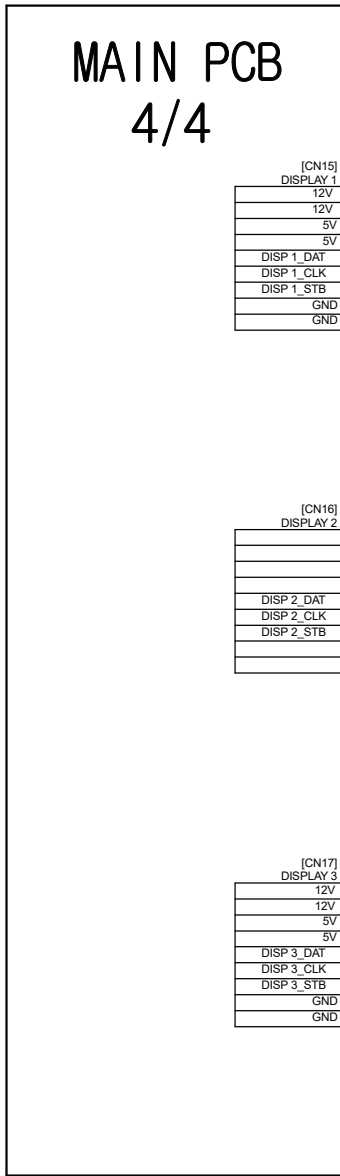


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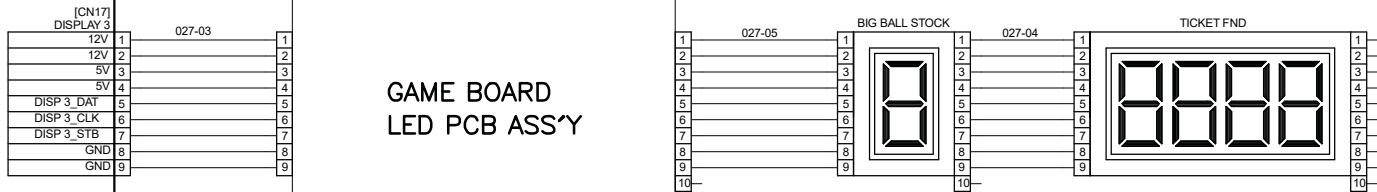
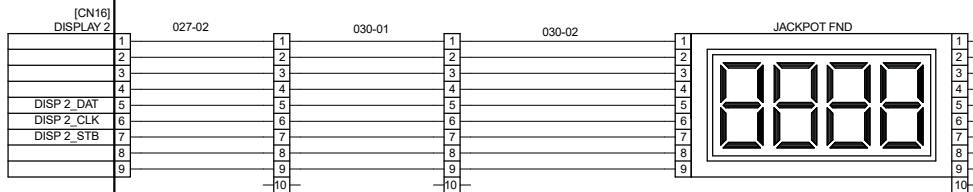
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H/W	S.G.BAE			PAGE	3 PAGE
				DATE	2024.09.19





7 PAGE

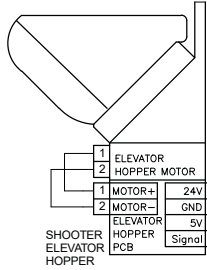


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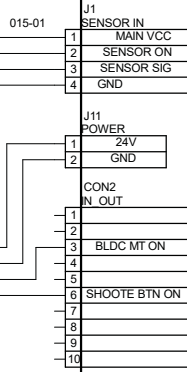
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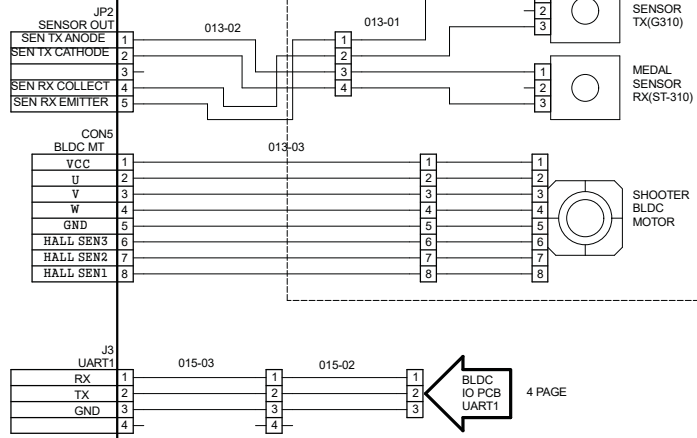
HOPPER



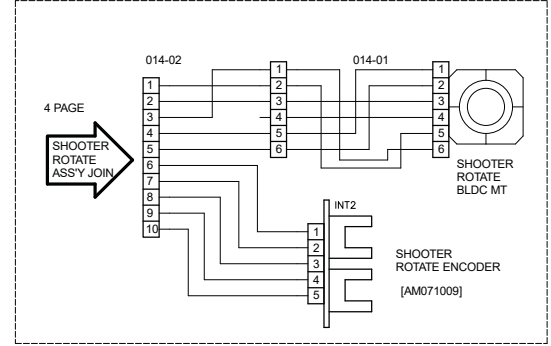
BLDC IO PCB



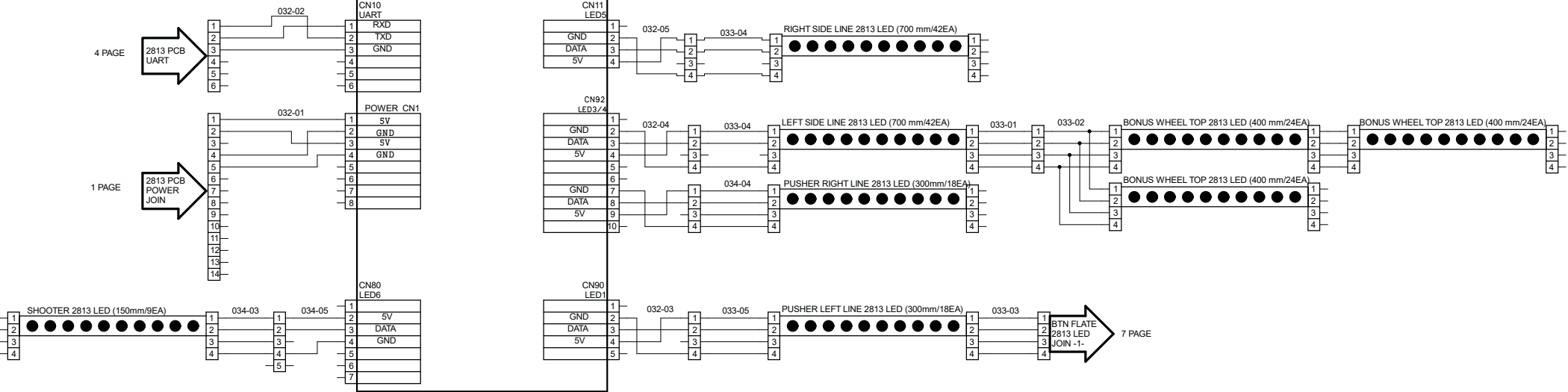
SHOOTER ASS'Y



ROTATE MT



WS2813 PCB



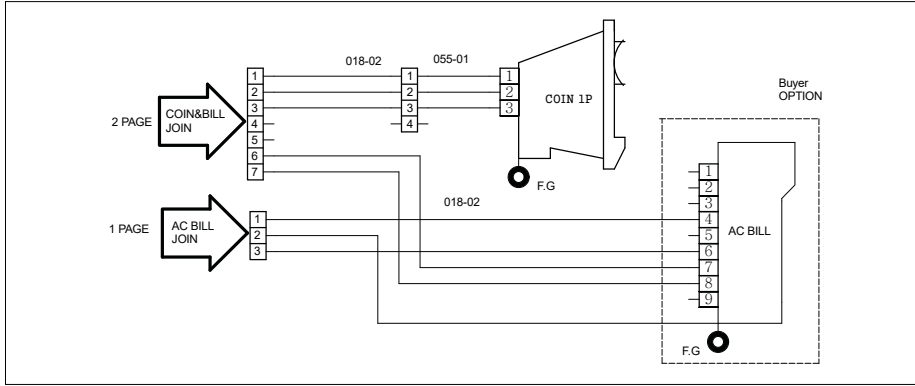
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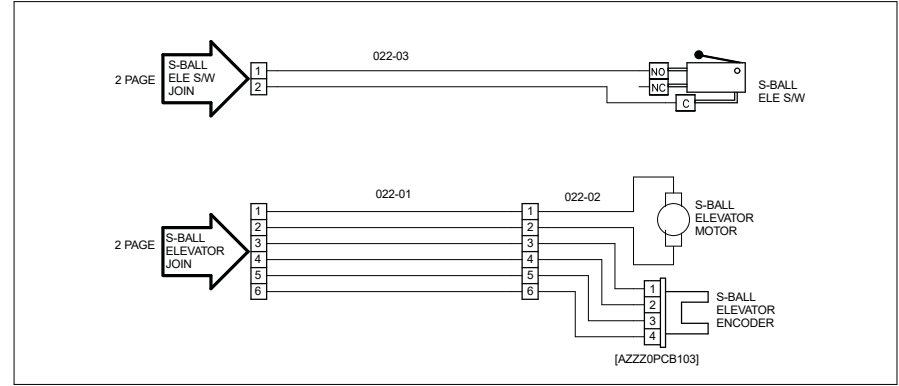
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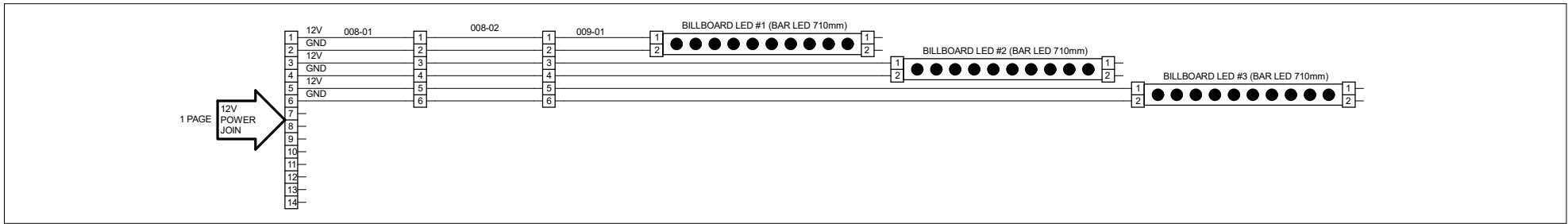
COIN & BILL



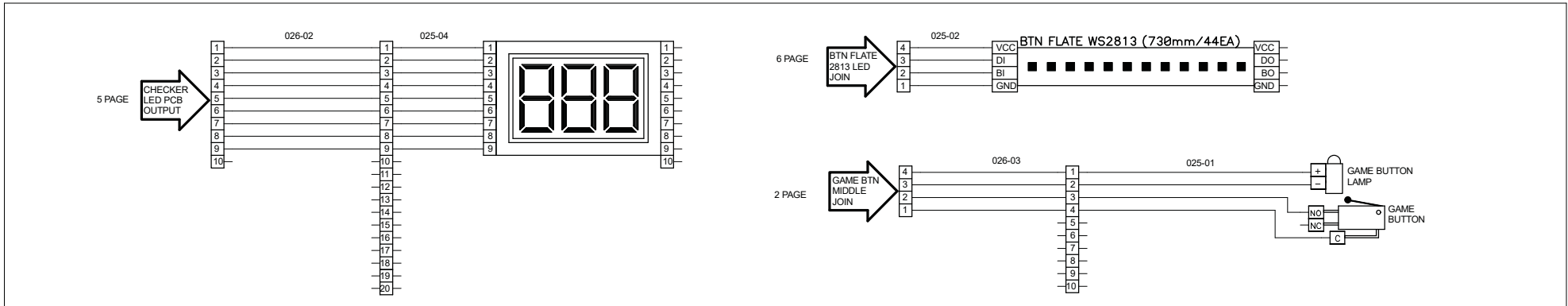
Small Ball Elevator Ass'y



12V LED & BILLBOARD



BUTTON FLATE



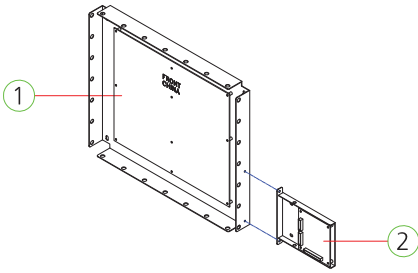
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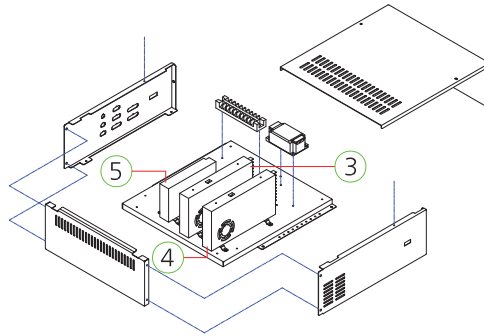
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H/W	S.G.BAE			PAGE	7 PAGE -END-
				DATE	2024.09.19

11. WARRANTY ITEM

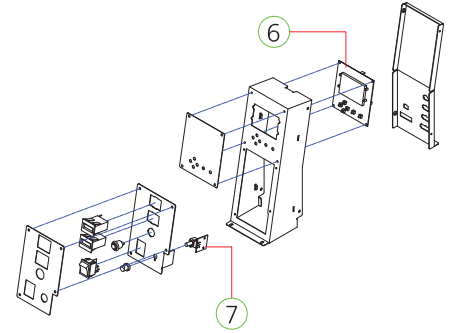
- MAIN BOARD PART



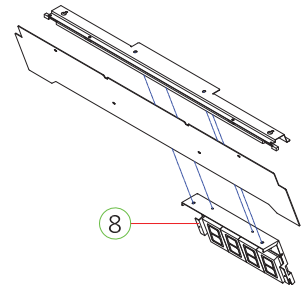
- SMPS PART



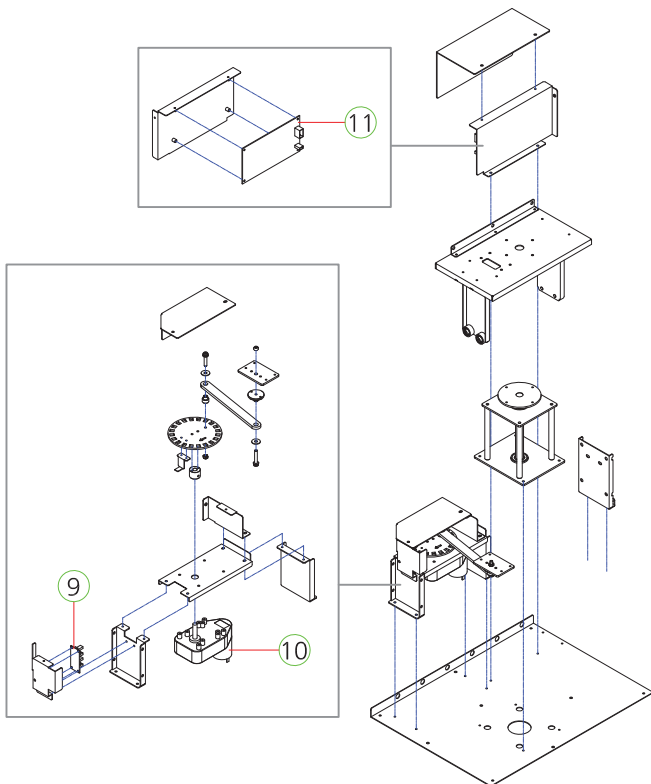
- MOTOR DRIVE PCB PART



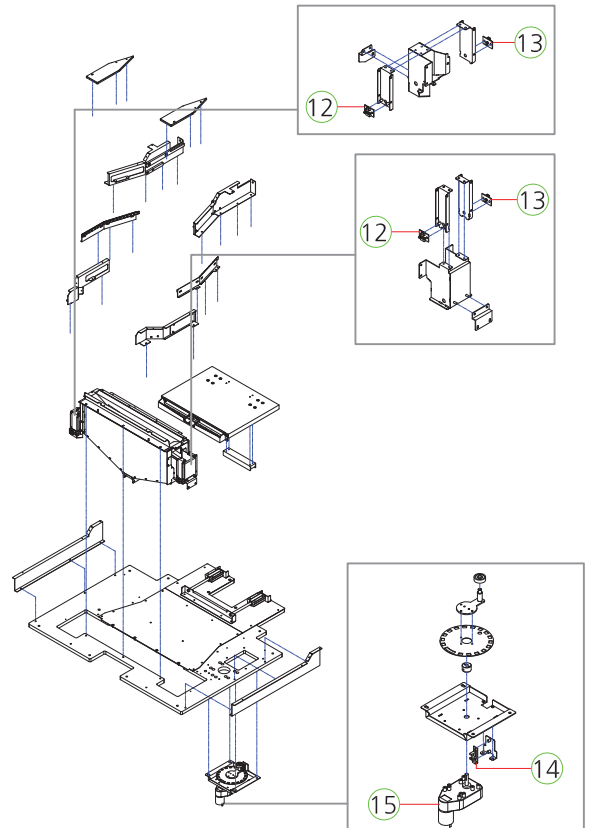
- CABINET FRONT UPPER DISPLAY PART



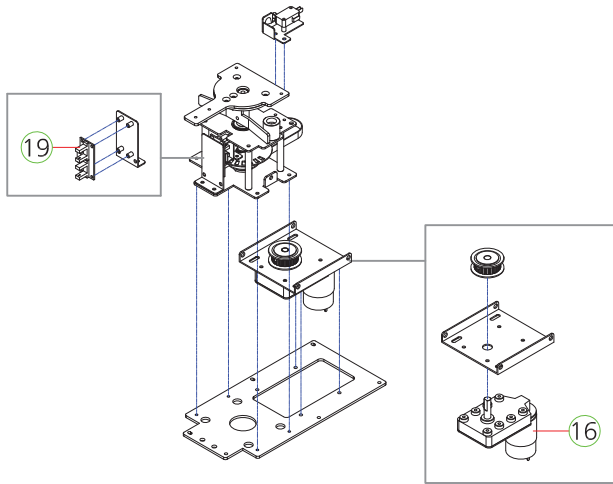
- ELEVATOR HOPPER ROTATE PART



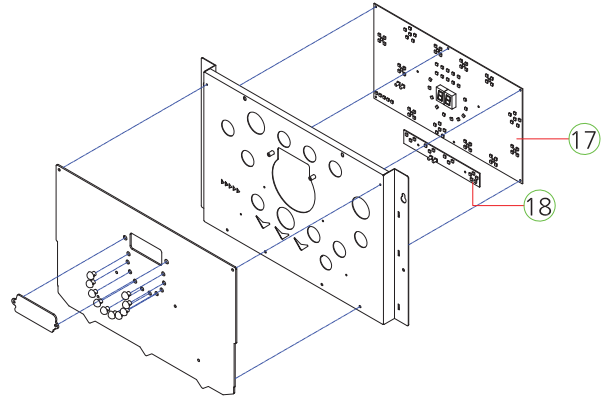
- PUSHER PLATE PART



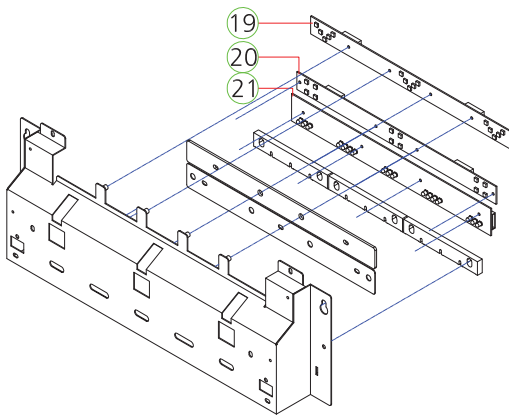
- BIG BALL DIVIDE DEVICE PART



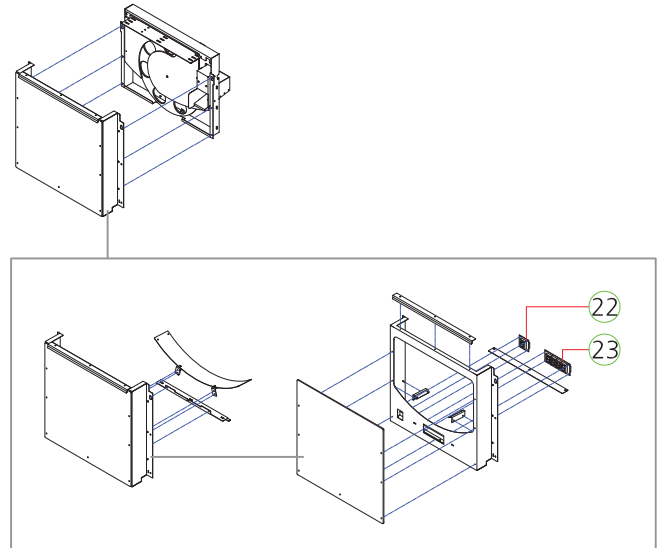
- GAME BOARD MAIN UPPER PART



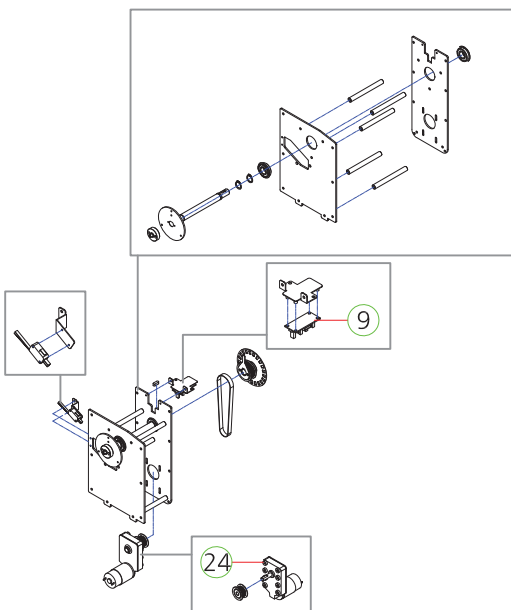
- GAME BOARD MAIN LOWER PART



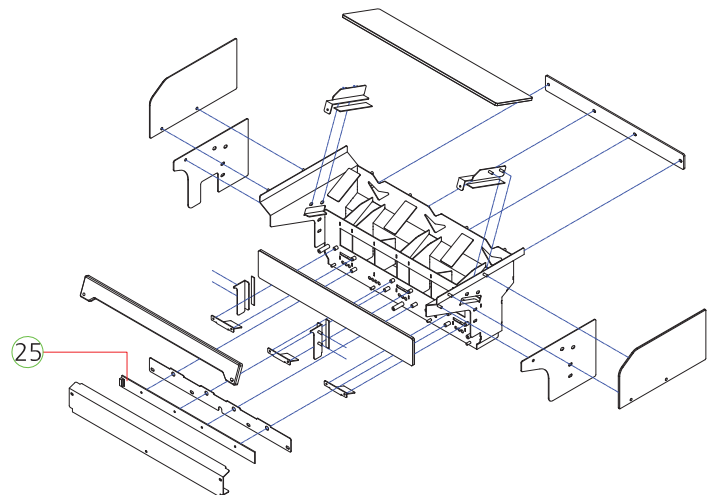
- BONUS WHEEL TOTAL PART



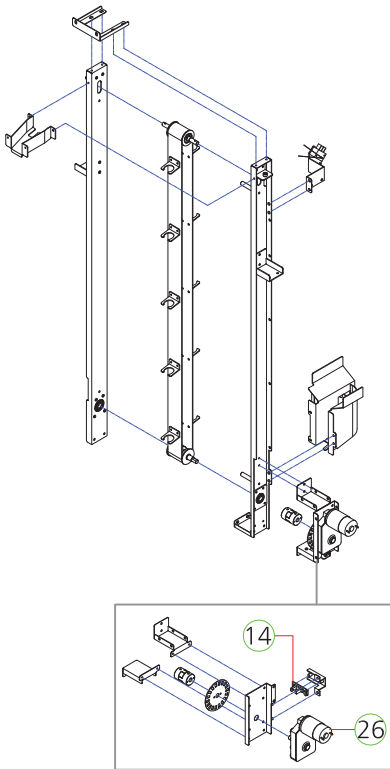
- BONUS WHEEL MAIN SHAFT PART



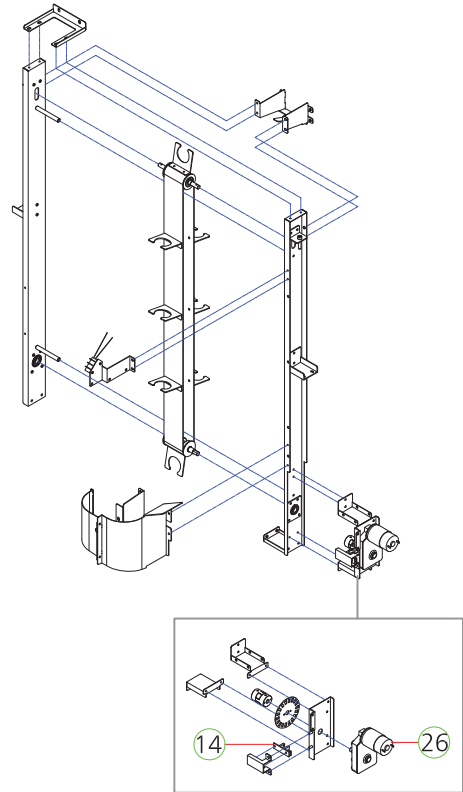
- CHECKER PART



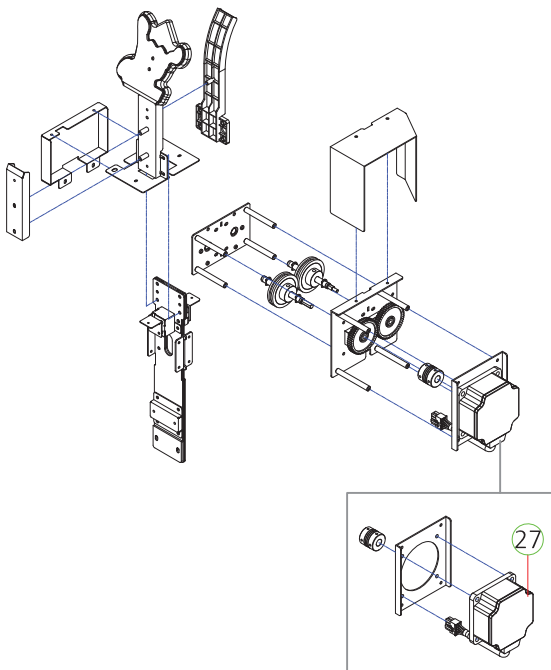
- SMALL BALL ELEVATOR PART



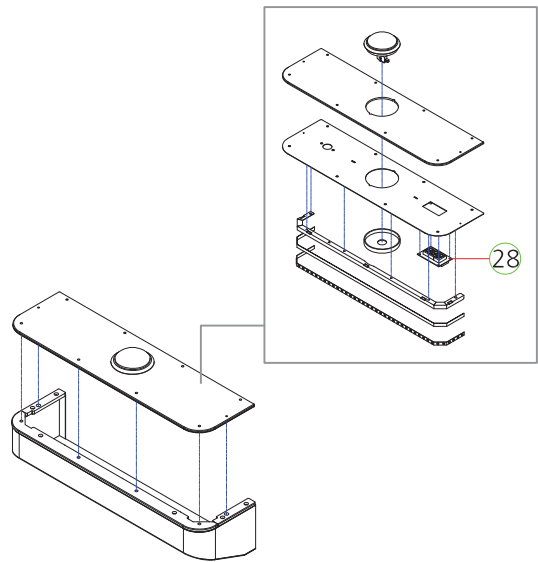
- BIG BALL ELEVATOR PART



- SHOOTER PART



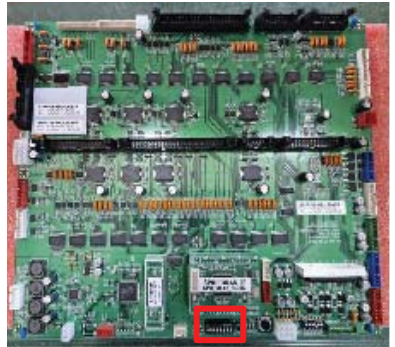
- BUTTON PLATE PART



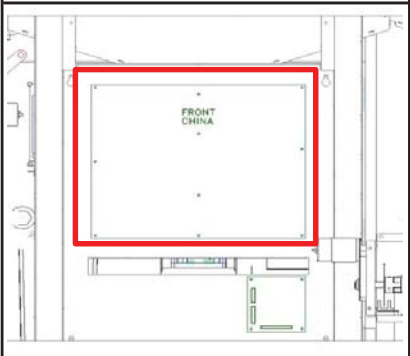
NO.	PART NAME	SPEC.	QTY	CODE NO.	WARRANTY	
					6 Month	One Year
①	MAIN PCB ASS'Y [WITH CPU & SOUND]	-	1	ASPM0PCB013		○
②	NUVOTON WS2813B IO V3 PCB ASS'Y	2813 PCB	1	AZZZ0PCB224		○
③	POWER SMPS	LRS 350_5	1	MELE0SMP154		○
④	POWER SMPS	LRS 350-12V	1	MELE0SMP148		○
⑤	POWER SMPS	LRS-150F-24	1	MELE0SMP085		○
⑥	SETUP LCD PCB ASS'Y	-	1	AZZZ0PCB113		○
⑦	VOLUME PCB ASS'Y	1 VOLUME	1	AHM20PCB016		○
⑧	FND PCB ASS'Y	6390-4(STRAIGHT)	1	AFND0PCB011		○
⑨	PHOTO INT-2 PCB ASS'Y	-	2	AWIW0PCB009		○
⑩	MOTOR_BLDC	KGV2-0500-NB3640S1	1	MZZZ0MOT160	○	
⑪	STM BLDC IO PCB ASS'Y	SHOOTER BLDC MT IO	1	ASPM0PCB001		○
⑫	SENSOR_R PCB ASS'Y	-	2	MEIF0PAR014		○
⑬	SENSOR_T PCB ASS'Y	KEL5008A / 560Ω	2	AAV20PCB011		○
⑭	PHOTO INT-1 PCB ASS'Y	ANGLE TYPE	1	AZZZ0PCB103		○
⑮	MOTOR_BLDC	KGV2-0350-NB3640S1	1	MZZZ0MOT152	○	
⑯	MOTOR	KGE-0615-3657-NB1 DC12V 6000RPM	1	MZZZ0MOT100	○	
⑰	GAME BOARD MAIN UPPER	GAME BOARD LED PCB	1	ASPM0PCB017		○
⑱	GAME BOARD SUCCESS LED PCB ASS'Y	SUCCESS LED PCB	1	ASPM0PCB016		○
⑲	CHECKER REAR UPPER LED PCB ASS'Y	REAR UPPER LED PCB	1	ASPM0PCB015		○
⑳	CHECKER REAR LED PCB ASS'Y	CHECKER LED PCB	1	ASPM0PCB004		○
㉑	CHECKER SENSOR RX PCB ASS'Y	CHECKER SEN_RECEIVER	1	ASPM0PCB002		○
㉒	FND PCB ASS'Y	2941-1(STRAIGHT)	1	AFND0PCB036		○
㉓	FND PCB ASS'Y	2941-1(STRAIGHT)	1	AFND0PCB004		○
㉔	MOTOR	KGE 3657-240-U1 (F-TYPE,20RPM)	1	MZZZ0MOT130	○	
㉕	CHECKER SENSOR TX PCB ASS'Y	CHECKER SEN	1	ASPM0PCB003		○
㉖	MOTOR	KGE-0116-ND3657 U1	2	MZZZ0MOT155	○	
㉗	MOTOR	BLDC_K8XS50N2	1	MZZZ0MOT180	○	
㉘	FND PCB ASS'Y	2029-3(STRAIGHT)	1	AFND0PCB028		○

12. TROUBLE SHOOTING

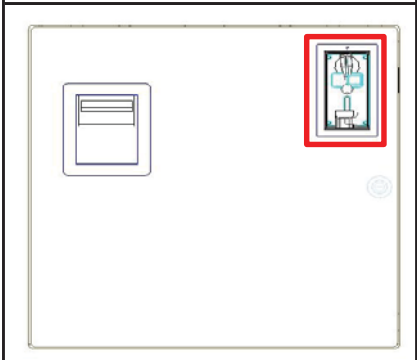
12-1. REGION ERROR (Er01)

ERROR or LOCATION	▶ SOLUTION	
	1. CHECK : 1) Check the location of MAIN PCB DIP SW 3 2) Recheck after factory set 3) MAIN PCB replacement	
	PART NAME	CODE
	MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013

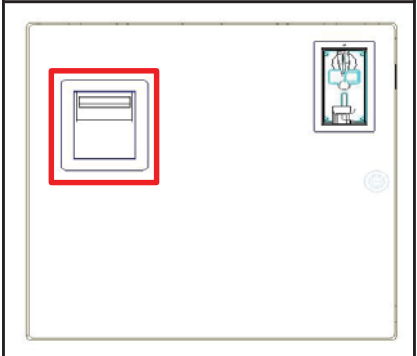
12-2. SYSTEM ERROR (Er02, Er03)

ERROR or LOCATION	▶ SOLUTION	
	1. CHECK : 1) Recheck after power off/on 2) Recheck after factory set 3) MAIN PCB replacement	
	PART NAME	CODE
	MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013

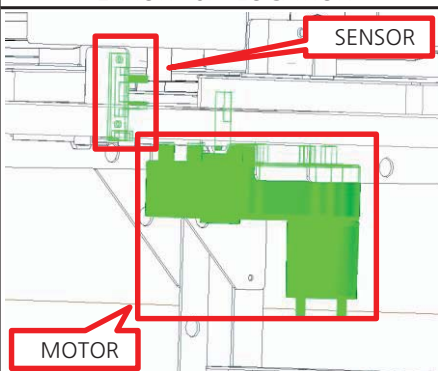
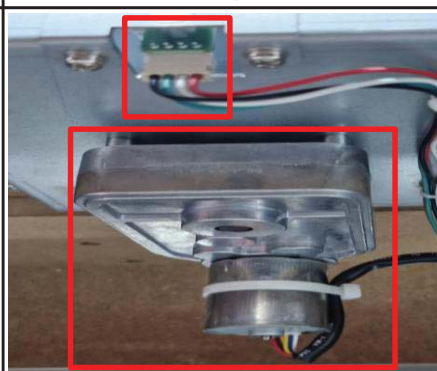

12-3. COIN MACHINE ERROR (Er.11)

ERROR or LOCATION	▶ SOLUTION			
	1. TEST MODE → COIN TEST 2. CHECK : 1) Check whether COIN JAM 2) Check the cable connection status 3) REPLACE COIN MACHINE 4) MAIN PCB replacement			
	PART NAME	CODE	PART NAME	CODE
	COIN SELECTOR	MZZZOCOS052	MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013

12-4. BILL ACCEPTOR ERROR (Er.13)

ERROR or LOCATION	▶ SOLUTION	
	1. TEST MODE → BILL TEST 2. CHECK : 1) Check whether BILL JAM 2) Check the cable connection status 3) REPLACE BILL ACCEPTOR 4) MAIN PCB replacement	
	PART NAME	CODE
	MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013

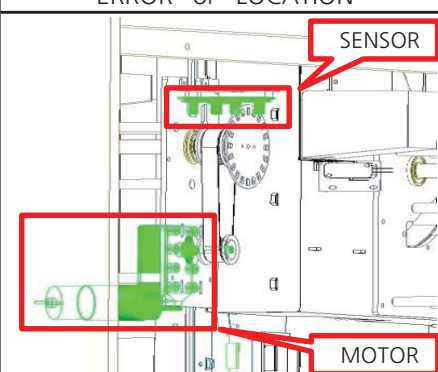
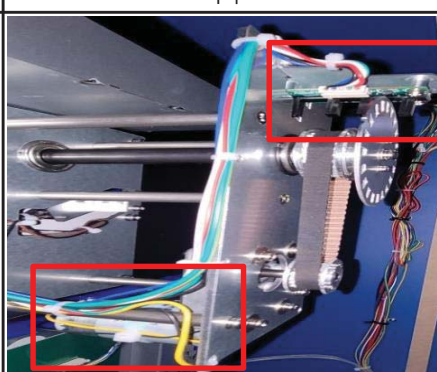
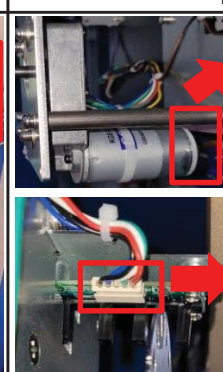
12-5. PUSHER MOTOR & SENSOR ERROR (Er.41)

ERROR or LOCATION	P1	P2																								
		 <table border="1" data-bbox="1021 313 1332 492"> <tr> <td>4</td> <td>3</td> <td>2</td> <td>1</td> </tr> <tr> <td>1</td> <td>Over 4.5V</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>Below 0.1V</td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>Over 4.5V</td> <td>detect</td> <td></td> </tr> <tr> <td></td> <td>Below 0.1V</td> <td>undetected</td> <td></td> </tr> <tr> <td>4</td> <td>GND</td> <td></td> <td></td> </tr> </table>	4	3	2	1	1	Over 4.5V			2	Below 0.1V			3	Over 4.5V	detect			Below 0.1V	undetected		4	GND		
4	3	2	1																							
1	Over 4.5V																									
2	Below 0.1V																									
3	Over 4.5V	detect																								
	Below 0.1V	undetected																								
4	GND																									

► SOLUTION

<p>1. TEST MODE → MOT PUSHER, INPUT TEST</p> <p>► TICKET FND</p> <p>Ⓐ 1st and 2nd digits : Sensor count display</p> <p>Ⓑ Third and fourth digits : Displays the maximum number of sensor counts</p> <p>► BIG BALL STOCK FND</p> <p>Ⓐ Sensor status display : ON → "1" / OFF → "0"</p>		<p>2. CHECK :</p> <p>1) Check motor assembly status (P1)</p> <p>2) Check wiring connection status (P1)</p> <p>3) Motor replacement</p> <p>4) MAIN PCB replacement</p> <p>5) Check in sensor voltage measurement (P2) / INPUT TEST</p> <p>7) Sensor PCB replacement</p> <p>8) MAIN PCB replacement</p>	
PART NAME	CODE	PART NAME	CODE
MOTOR_BLDC	MZZZ0MOT152	PHOTO INT-1 PCB ASS'Y	AZZZ0PCB103
MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013		

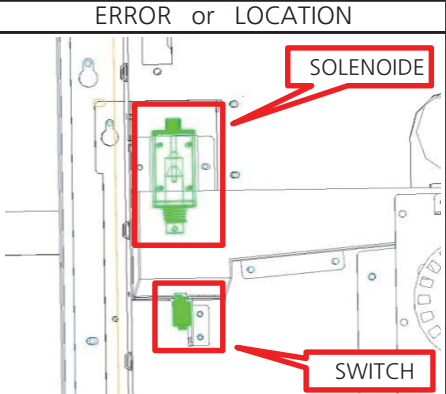
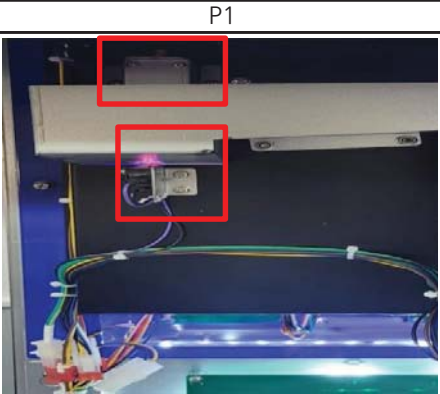
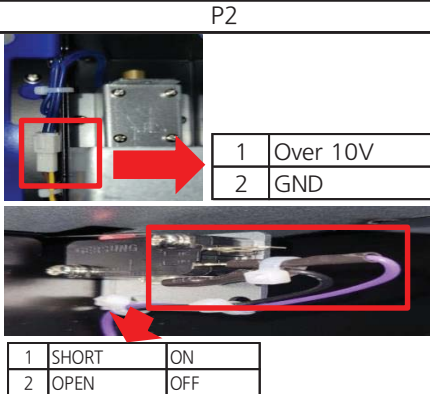
12-6. BIG BALL GAME MOTOR & SENSOR ERROR (Er.51, Er.52)

ERROR or LOCATION	P1	P2																																																
		 <table border="1" data-bbox="1244 1164 1460 1523"> <tr> <td>1</td> <td>Over 7.5V</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>GND</td> <td></td> <td></td> </tr> </table> <table border="1" data-bbox="1244 1344 1460 1523"> <tr> <td>5</td> <td>4</td> <td>3</td> <td>2</td> <td>1</td> </tr> <tr> <td>1</td> <td>Over 4.5V</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>Below 0.2V</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>Over 4.5V</td> <td>detect</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Below 0.1V</td> <td>undetected</td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>Over 4.5V</td> <td>detect</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Below 0.1V</td> <td>undetected</td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>GND</td> <td></td> <td></td> <td></td> </tr> </table>	1	Over 7.5V			2	GND			5	4	3	2	1	1	Over 4.5V				2	Below 0.2V				3	Over 4.5V	detect				Below 0.1V	undetected			4	Over 4.5V	detect				Below 0.1V	undetected			5	GND			
1	Over 7.5V																																																	
2	GND																																																	
5	4	3	2	1																																														
1	Over 4.5V																																																	
2	Below 0.2V																																																	
3	Over 4.5V	detect																																																
	Below 0.1V	undetected																																																
4	Over 4.5V	detect																																																
	Below 0.1V	undetected																																																
5	GND																																																	

► SOLUTION

<p>1. TEST MODE → MOT BNS GAME, INPUT TEST</p> <p>► SUPER BONUS FND</p> <p>Ⓐ First digit : 1P motor origin encoder sensor status (0,1)</p> <p>Ⓑ Second digit : 1P motor origin encoder check count (0,9)</p> <p>Ⓒ Third digit : 2P motor origin encoder sensor status (0,1)</p> <p>Ⓓ 4th digit: 2P motor origin encoder check count (0,9)</p> <p>► TICKET FND</p> <p>Ⓐ First digit : Encoder sensor status indication(0,1)</p> <p>Ⓑ Second and third digits : Encoder sensor check count (01~20)</p> <p>Ⓒ Third digit : 2P motor origin encoder sensor status (0,1)</p>		<p>2. CHECK :</p> <p>1) Check motor assembly status</p> <p>2) Check wiring connection status (P1)</p> <p>3) Motor voltage measurement (P2)</p> <p>4) Motor replacement</p> <p>5) MAIN PCB replacement</p> <p>6) Check in sensor voltage measurement (P2) / INPUT TEST</p> <p>7) Sensor PCB replacement</p> <p>8) MAIN PCB replacement</p>	
PART NAME	CODE	PART NAME	CODE
MOTOR	MZZZ0MOT130	PHOTO INT-2 PCB ASS'Y	AWIW0PCB009
MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013		

12-7. BIG BALL GAME START SWITCH & SOLENOIDE ERROR (Er.53)

ERROR or LOCATION	P1	P2										
		 <table border="1" style="margin-top: 10px;"> <tr> <td>1</td> <td>Over 10V</td> </tr> <tr> <td>2</td> <td>GND</td> </tr> </table> <table border="1" style="margin-top: 10px;"> <tr> <td>1</td> <td>SHORT</td> <td>ON</td> </tr> <tr> <td>2</td> <td>OPEN</td> <td>OFF</td> </tr> </table>	1	Over 10V	2	GND	1	SHORT	ON	2	OPEN	OFF
1	Over 10V											
2	GND											
1	SHORT	ON										
2	OPEN	OFF										

► SOLUTION

1. TEST MODE → MOT BNS GAME

► BIG BALL STOCK FND

ⓐ "0" : No ball monitoring status

ⓑ "1" : Ball start switch detected

► SPIDER SENSE LAMP

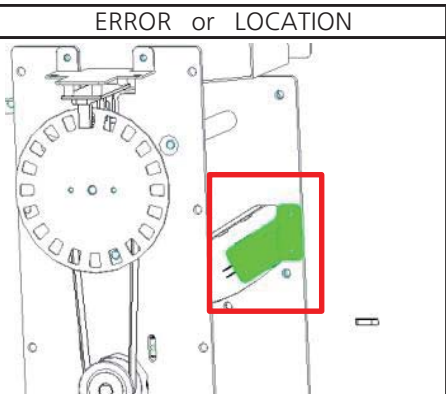
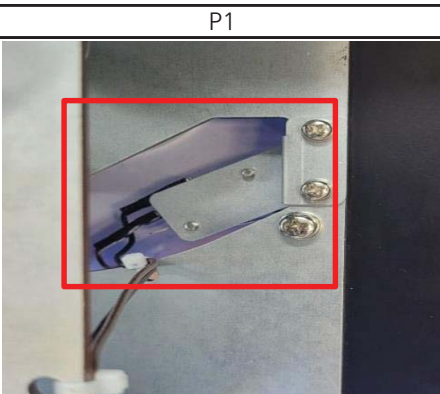
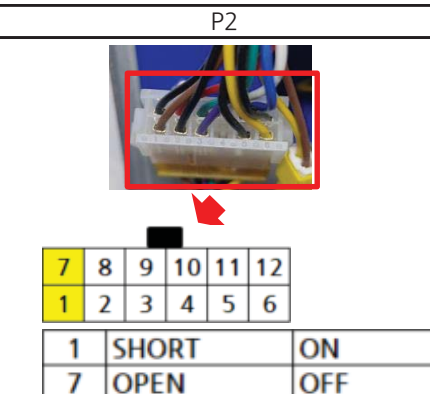
: Ball start switch status indication (ON,OFF)

2. CHECK :

- 1) Check switch assembly status and solenoid assembly status (P1)
- 2) Check wiring condition (P1)
- 3) Switch resistance measurement (P2)
- 4) Switch replacement
- 5) MAIN PCB replacement
- 6) Solenoid voltage measurement (P2)
- 7) Solenoid replacement
- 8) MAIN PCB replacement

PART NAME	CODE	PART NAME	CODE
MICRO SWITCH	MELE0MIC032	SOLENOIDE	MELE0SOL012
MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013		

12-8. BIG BALL GAME SUCCESS SWITCH ERROR (Er.54)

ERROR or LOCATION	P1	P2																		
		 <table border="1" style="margin-top: 10px;"> <tr> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td>11</td> <td>12</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> </tr> </table> <table border="1" style="margin-top: 10px;"> <tr> <td>1</td> <td>SHORT</td> <td>ON</td> </tr> <tr> <td>7</td> <td>OPEN</td> <td>OFF</td> </tr> </table>	7	8	9	10	11	12	1	2	3	4	5	6	1	SHORT	ON	7	OPEN	OFF
7	8	9	10	11	12															
1	2	3	4	5	6															
1	SHORT	ON																		
7	OPEN	OFF																		

► SOLUTION

1. TEST MODE → MOT BNS-GAME

► BIG BALL STOCK FND

ⓐ "0" : Ball goal inspection switch detected

ⓑ "2" : Ball goal inspection switch detected

► GAME BOARD LED LAMP

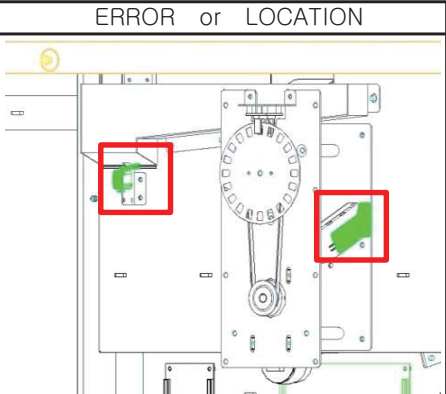
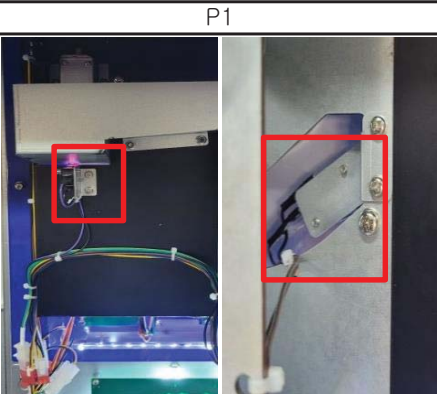


: Ball goal inspection switch status display (all ON, OFF)

2. CHECK :

- 1) Check switch assembly status (P1)
- 2) Check wiring condition (P1)
- 3) Switch resistance measurement (P2)
- 4) Switch replacement
- 5) MAIN PCB replacement

PART NAME	CODE	PART NAME	CODE
MICRO SWITCH	MELE0MIC032	MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013

12-9. BIG BALL GAME START SWITCH & SUCCESS SWITCH ERROR (Er.55)

ERROR or LOCATION	P1	P2																								
		 <table border="1" data-bbox="1252 235 1460 302"> <tr> <td>1</td> <td>SHORT</td> <td>ON</td> </tr> <tr> <td>2</td> <td>OPEN</td> <td>OFF</td> </tr> </table>  <table border="1" data-bbox="1252 436 1460 504"> <tr> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td>11</td> <td>12</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> </tr> </table> <table border="1" data-bbox="1220 504 1460 548"> <tr> <td>1</td> <td>SHORT</td> <td>ON</td> </tr> <tr> <td>7</td> <td>OPEN</td> <td>OFF</td> </tr> </table>	1	SHORT	ON	2	OPEN	OFF	7	8	9	10	11	12	1	2	3	4	5	6	1	SHORT	ON	7	OPEN	OFF
1	SHORT	ON																								
2	OPEN	OFF																								
7	8	9	10	11	12																					
1	2	3	4	5	6																					
1	SHORT	ON																								
7	OPEN	OFF																								

► SOLUTION

1. TEST MODE → MOT BNS-GAME

► BIG BALL STOCK FND

- Ⓐ "0" : No ball monitoring status
- Ⓑ "1" : Ball start switch detected
- Ⓒ "2" : Ball goal inspection switch detected

► SPIDER SENSE LAMP

: Ball start switch status indication (ON,OFF)

► GAME BOARD LED LAMP

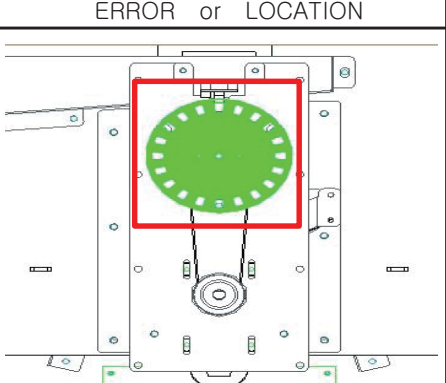
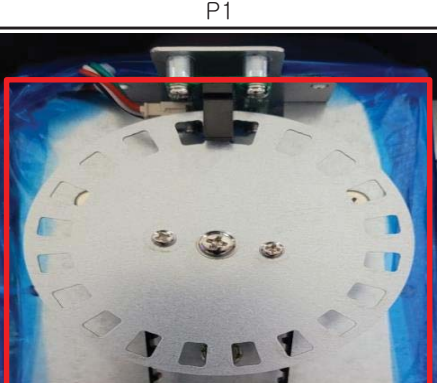
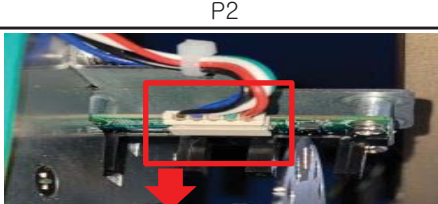
: Ball goal inspection switch status display (all ON, OFF)

2. CHECK :

- 1) Check start/inspection switch assembly condition (P1)
- 2) Check wiring condition (P1)
- 3) Start switch resistance measurement (P2)
- 4) Start switch replacement
- 5) MAIN PCB replacement
- 6) Test switch resistance measurement (P2)
- 7) Inspection Switch Replacement
- 8) MAIN PCB replacement

PART NAME	CODE	PART NAME	CODE
MICRO SWITCH	MELE0MIC032	MICRO SWITCH	MELE0MIC032
MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013		

12-10. BIG BALL GAME MOTOR SUB ENCODER COUNT ERROR (Er.56)

ERROR or LOCATION	P1	P2																				
		 <table border="1" data-bbox="1029 1433 1236 1478"> <tr> <td>5</td> <td>4</td> <td>3</td> <td>2</td> <td>1</td> </tr> </table> <table border="1" data-bbox="1029 1478 1420 1601"> <tr> <td>1</td> <td>Over 4.5V</td> <td></td> </tr> <tr> <td>2</td> <td>Below 0.2V</td> <td></td> </tr> <tr> <td>4</td> <td>Over 4.5V</td> <td>detect</td> </tr> <tr> <td></td> <td>Below 0.1V</td> <td>undetected</td> </tr> <tr> <td>5</td> <td>GND</td> <td></td> </tr> </table>	5	4	3	2	1	1	Over 4.5V		2	Below 0.2V		4	Over 4.5V	detect		Below 0.1V	undetected	5	GND	
5	4	3	2	1																		
1	Over 4.5V																					
2	Below 0.2V																					
4	Over 4.5V	detect																				
	Below 0.1V	undetected																				
5	GND																					

► SOLUTION

1. TEST MODE → MOT BNS-GAME, INPUT TEST

► TICKET FND

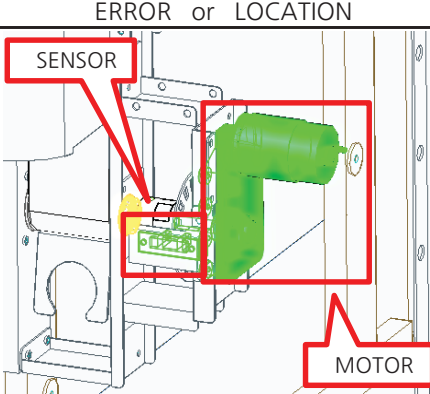
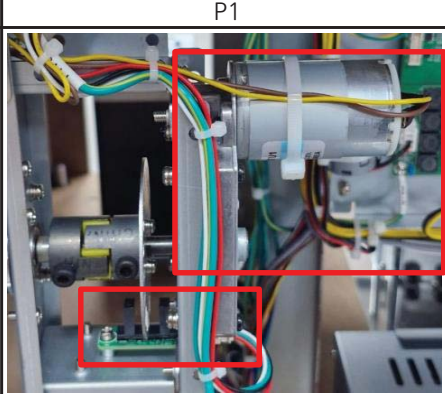
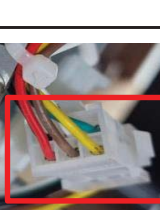


- Ⓐ First digit : Encoder sensor status indication (0,1)
- Ⓑ Second and third digits : Encoder sensor check count display (01~20)

2. CHECK :

- 1) Check the assembly status of the encoder sensor and equipment (P1)
- 2) Check whether the odd number of encoder brackets is 20 (P1)
- 3) Check wiring connection status
- 4) Check sensor voltage (P2) / Check in INPUT TEST
- 5) Sensor PCB replacement
- 6) MAIN PCB replacement

PART NAME	CODE	PART NAME	CODE
PHOTO INT-2 PCB ASS'Y	AWIW0PCB009	MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013

12-11. BIG BALL ELEVATOR MOTOR & SENSOR ERROR (Er.61)

ERROR or LOCATION	P1	P2																																	
		 <table border="1" style="margin-top: 10px;"> <tr> <td>6</td><td>5</td><td>4</td></tr> <tr> <td>3</td><td>2</td><td>1</td></tr> <tr> <td>1</td><td colspan="2">Over -9.0V</td></tr> <tr> <td>2</td><td colspan="2">GND</td></tr> </table> <div style="text-align: right; margin-top: 5px;">  </div> <table border="1" style="margin-top: 10px;"> <tr> <td>6</td><td>5</td><td>4</td></tr> <tr> <td>3</td><td>2</td><td>1</td></tr> <tr> <td>3</td><td colspan="2">Over 4.5V</td></tr> <tr> <td>4</td><td colspan="2">Below 0.1V</td></tr> <tr> <td>5</td><td>Over 4.5V</td><td>detect</td></tr> <tr> <td></td><td>Below 0.1V</td><td>undetected</td></tr> <tr> <td>6</td><td colspan="2">GND</td></tr> </table> <div style="text-align: right; margin-top: 5px;">  </div>	6	5	4	3	2	1	1	Over -9.0V		2	GND		6	5	4	3	2	1	3	Over 4.5V		4	Below 0.1V		5	Over 4.5V	detect		Below 0.1V	undetected	6	GND	
6	5	4																																	
3	2	1																																	
1	Over -9.0V																																		
2	GND																																		
6	5	4																																	
3	2	1																																	
3	Over 4.5V																																		
4	Below 0.1V																																		
5	Over 4.5V	detect																																	
	Below 0.1V	undetected																																	
6	GND																																		

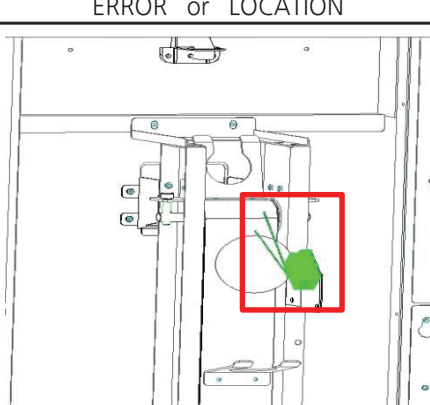
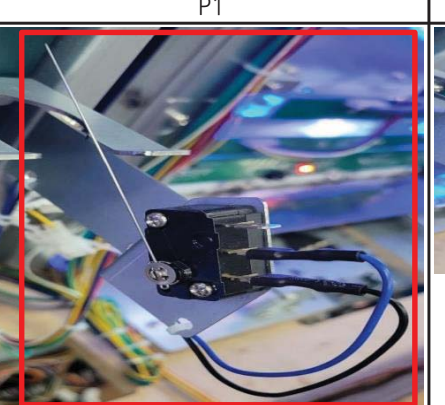
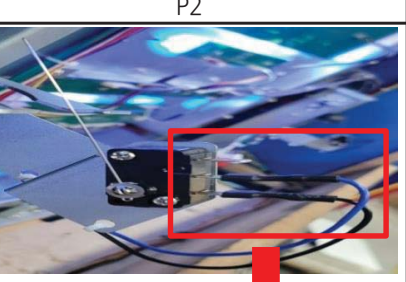
► SOLUTION

1. TEST MODE → MOT BIG-ELEV , INPUT TEST
 ► TICKET FND
 ㊦ First digit : Encoder sensor status indication (0,1)
 ㊦ Third and fourth digits : Encoder sensor check count display (00~99)

2. CHECK :
- 1) Check the assembly status of motor and encoder equipment (P1)
 - 2) Check wiring connection status (P1)
 - 3) Check motor voltage (P2)
 - 4) Motor replacement
 - 5) MAIN PCB replacement
 - 6) Check sensor voltage (P2) / Check in INPUT TEST
 - 7) Sensor PCB replacement
 - 8) MAIN PCB replacement

PART NAME	CODE	PART NAME	CODE
MOTOR	MZZZ0MOT155	PHOTO INT-1 PCB ASS'Y	AZZZ0PCB103
MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013		

12-12. BIG BALL ELEVATOR UPPER SWITCH ERROR (Er.62)

ERROR or LOCATION	P1	P2						
		 <table border="1" style="margin-top: 10px;"> <tr> <td>1</td><td>SHORT</td><td>ON</td></tr> <tr> <td>2</td><td>OPEN</td><td>OFF</td></tr> </table>	1	SHORT	ON	2	OPEN	OFF
1	SHORT	ON						
2	OPEN	OFF						

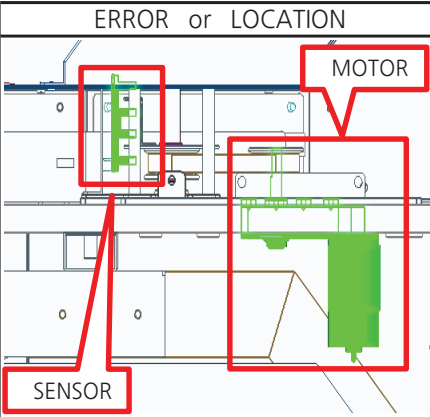
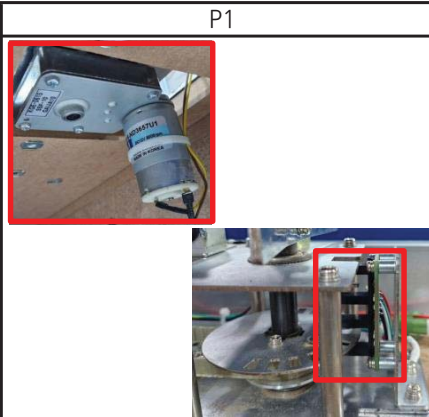
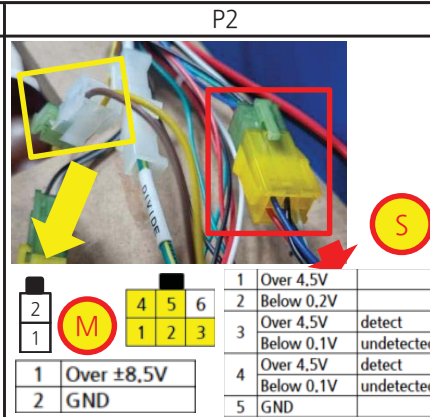
► SOLUTION

1. TEST MODE → MOT BIG-ELEV , INPUT TEST
 ► GAME BOARD LED LAMP
 ㊦ Second digit (BIG BALL) : Switch detection status display (ON,OFF)

2. CHECK :
- 1) Check the assembly condition of the switch mechanism (P1)
 - 2) Check wiring connection status (P1)
 - 3) Check switch resistance value (P2)
 - 4) Switch replacement
 - 5) MAIN PCB replacement

PART NAME	CODE	PART NAME	CODE
MICRO SWITCH	MELE0MIC002	MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013

12-13. BIG BALL FEEDING MOTOR & SENSOR ERROR (Er.63)

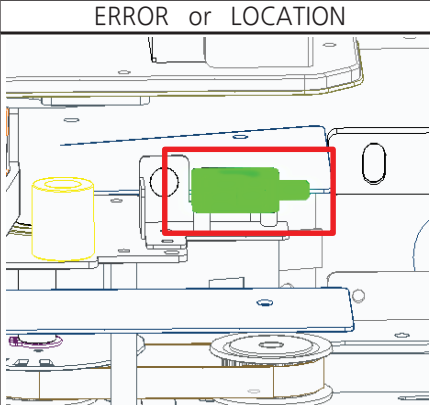
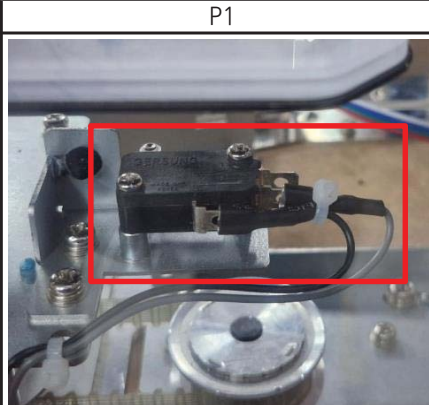
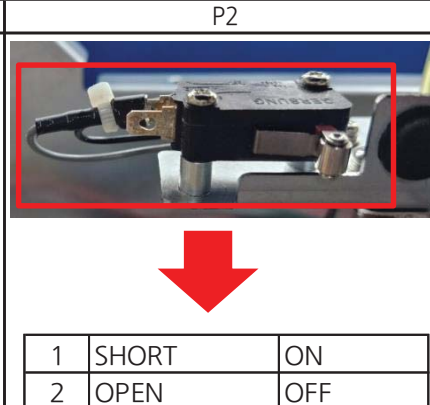
ERROR or LOCATION	P1	P2																					
																							
		<table border="1"> <tr> <td>1</td> <td>Over 4.5V</td> <td></td> </tr> <tr> <td>2</td> <td>Below 0.2V</td> <td></td> </tr> <tr> <td>3</td> <td>Over 4.5V</td> <td>detect</td> </tr> <tr> <td></td> <td>Below 0.1V</td> <td>undetected</td> </tr> <tr> <td>4</td> <td>Over 4.5V</td> <td>detect</td> </tr> <tr> <td></td> <td>Below 0.1V</td> <td>undetected</td> </tr> <tr> <td>5</td> <td>GND</td> <td></td> </tr> </table>	1	Over 4.5V		2	Below 0.2V		3	Over 4.5V	detect		Below 0.1V	undetected	4	Over 4.5V	detect		Below 0.1V	undetected	5	GND	
1	Over 4.5V																						
2	Below 0.2V																						
3	Over 4.5V	detect																					
	Below 0.1V	undetected																					
4	Over 4.5V	detect																					
	Below 0.1V	undetected																					
5	GND																						

► SOLUTION

- | | |
|--|--|
| <p>1. TEST MODE → MOT BIG-DROP, INPUT TEST</p> <ul style="list-style-type: none"> ► 1P TICKET FND <ul style="list-style-type: none"> Ⓐ First digit : Point encoder sensor status display (0,1) Ⓑ Third and fourth digits : Branch encoder sensor check count display (00~99) ► 2P TICKET FND <ul style="list-style-type: none"> Ⓐ First digit : Origin encoder sensor status display (0,1) Ⓑ Third and fourth digits : Origin encoder sensor check count display (00~99) | <p>2. CHECK :</p> <ol style="list-style-type: none"> 1) Check the assembly status of motor and encoder equipment (P1) 2) Check wiring connection status (P1) 3) Check motor voltage (P2) 4) Motor replacement 5) MAIN PCB replacement 6) Check sensor voltage (P2) / Check in INPUT TEST 7) Sensor PCB Replacement 8) MAIN PCB replacement |
|--|--|

PART NAME	CODE	PART NAME	CODE
MOTOR	MZZZ0MOT100	PHOTO INT-2 PCB ASS'Y	AWIW0PCB009
MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013		

12-14. BIG BALL FEEDING LIMIT SWITCH ERROR (Er.65)

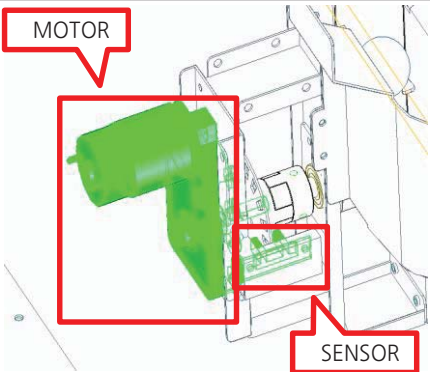
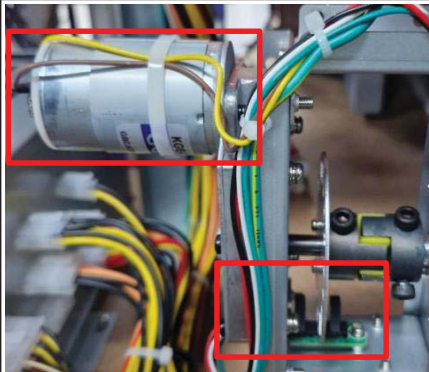

ERROR or LOCATION	P1	P2						
								
		<table border="1"> <tr> <td>1</td> <td>SHORT</td> <td>ON</td> </tr> <tr> <td>2</td> <td>OPEN</td> <td>OFF</td> </tr> </table>	1	SHORT	ON	2	OPEN	OFF
1	SHORT	ON						
2	OPEN	OFF						

► SOLUTION

- | | |
|--|---|
| <p>1. TEST MODE → MOT BIG-DROP</p> <ul style="list-style-type: none"> ► BIG BALL STOCK FND 1st digit <ul style="list-style-type: none"> Ⓐ "0" : No signal Ⓑ "1" : LEFT SWITCH position detection Ⓒ "2" : RIGHT SWITCH Position detection Ⓓ "3" : Detect both LEFT and RIGHT SWITCH | <p>2. CHECK :</p> <ol style="list-style-type: none"> 1) Check the assembly condition of the switch mechanism (P1) 2) Check wiring connection status (P1) 3) Check switch resistance value (P2) 4) Switch replacement 5) MAIN PCB replacement |
|--|---|

PART NAME	CODE	PART NAME	CODE
MICRO SWITCH	MELE0MIC021	MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013

12-15. SMALL BALL ELEVATOR MOTOR & SENSOR ERROR (Er.71)

ERROR or LOCATION	P1	P2																																
		 <table border="1" style="margin-top: 10px;"> <tr> <td colspan="2" style="text-align: right;">M</td> </tr> <tr> <td>1</td> <td>Over 10V</td> </tr> <tr> <td>2</td> <td>GND</td> </tr> </table> <table border="1" style="margin-top: 10px;"> <tr> <td colspan="2" style="text-align: right;">S</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> <tr> <td>1</td> <td>Over 4.5V</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>Below 0.1V</td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>Over 4.5V</td> <td>detect</td> <td></td> </tr> <tr> <td></td> <td>Below 0.1V</td> <td>undetected</td> <td></td> </tr> <tr> <td>4</td> <td>GND</td> <td></td> <td></td> </tr> </table>	M		1	Over 10V	2	GND	S		1	2	3	4	1	Over 4.5V			2	Below 0.1V			3	Over 4.5V	detect			Below 0.1V	undetected		4	GND		
M																																		
1	Over 10V																																	
2	GND																																	
S																																		
1	2	3	4																															
1	Over 4.5V																																	
2	Below 0.1V																																	
3	Over 4.5V	detect																																
	Below 0.1V	undetected																																
4	GND																																	

► SOLUTION

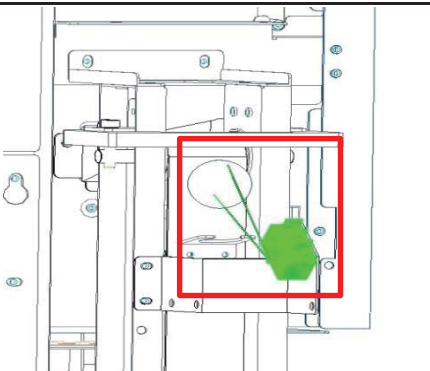
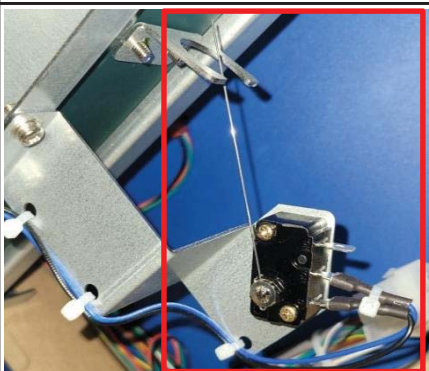

1. TEST MODE → MOT SMB-ELEV, INPUT TEST
 ► TICKET FND
 Ⓐ First digit : Encoder sensor status indication (0,1)
 Ⓑ Third and fourth digits : Encoder sensor check count display (00~99)

2. CHECK :

- 1) Check the assembly status of motor and encoder equipment (P1)
- 2) Check wiring connection status (P1)
- 3) Check motor voltage (P2)
- 4) Motor replacement
- 5) MAIN PCB replacement
- 6) Check sensor voltage (P2) / Check in INPUT TEST
- 7) Sensor PCB Replacement
- 8) MAIN PCB replacement

PART NAME	CODE	PART NAME	CODE
MOTOR	MZZZ0MOT155	PHOTO INT-1 PCB ASS'Y	AZZZ0PCB103
MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013		

12-16. SMALL BALL ELEVATOR UPPER SWITCH ERROR (Er.72)

ERROR or LOCATION	P1	P2						
		 <table border="1" style="margin-top: 10px;"> <tr> <td>1</td> <td>SHORT</td> <td>ON</td> </tr> <tr> <td>2</td> <td>OPEN</td> <td>OFF</td> </tr> </table>	1	SHORT	ON	2	OPEN	OFF
1	SHORT	ON						
2	OPEN	OFF						

► SOLUTION

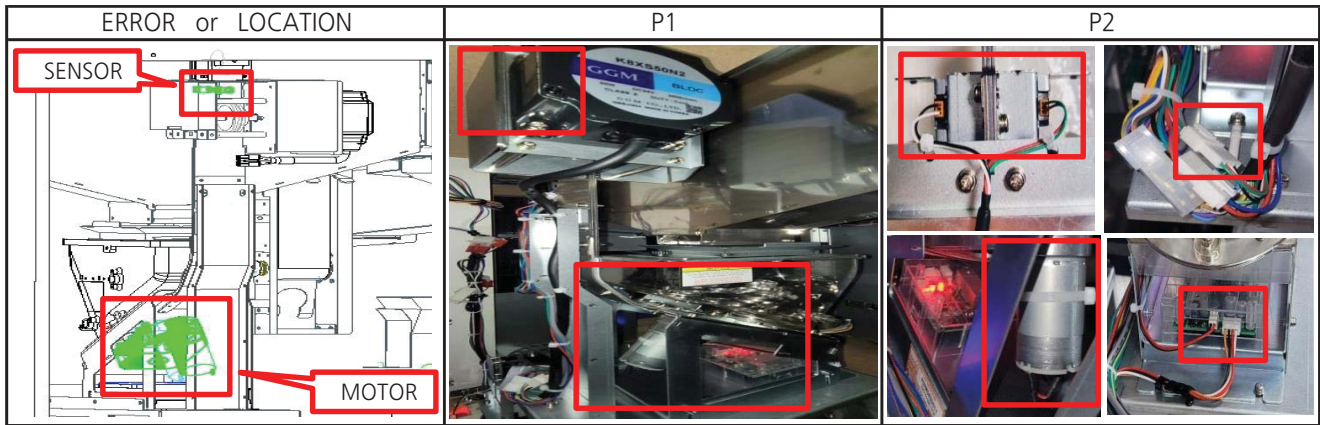
1. TEST MODE → MOT SMB-ELEV
 ► GAME BOARD LED LAMP
 Ⓐ First digit (TICKETS) : Switch detection status display (ON,OFF)

2. CHECK :

- 1) Check the assembly condition of the switch mechanism (P1)
- 2) Check wiring connection status (P1)
- 3) Check switch resistance value (P2)
- 4) Switch replacement
- 5) MAIN PCB replacement

PART NAME	CODE	PART NAME	CODE
MICRO SWITCH	MELE0MIC002	MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013

12-17. SHOOTER HOPPER MOTOR & SENSOR ERROR (Er.81)



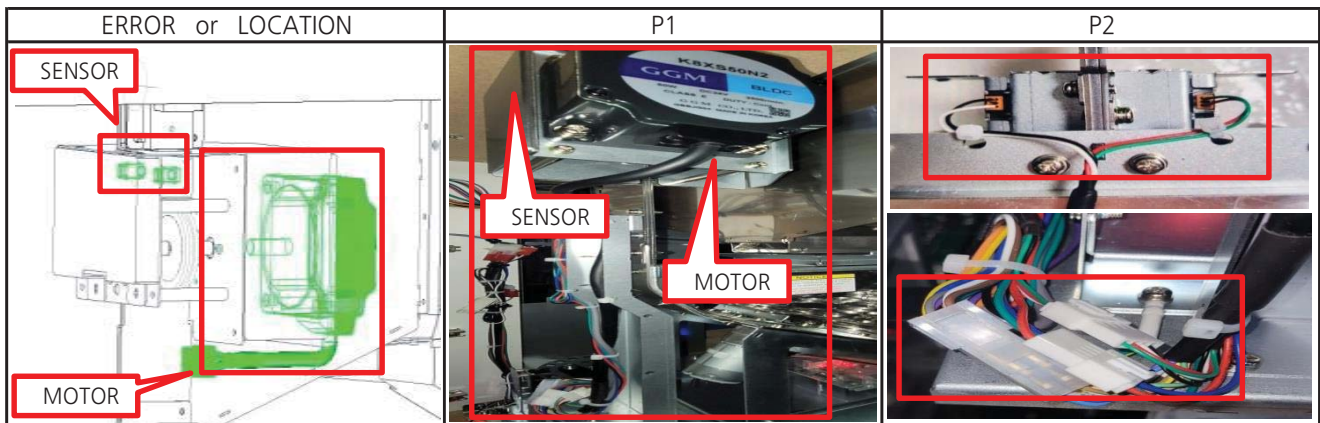
► SOLUTION

1. TEST MODE → MOT SHOT-SHOT
- ▶ BIG BALL STOCK FND
 - : SHOOTER sensor detection status display (0,1)
 - ▶ TICKETS FND
 - : Count the number of medals launched (0000~9999)

2. CHECK :
- 1) Check assembly status of motor and sensor equipment (P1)
 - 2) Check wiring connection status (P2)
 - 3) Motor replacement (P2)
 - 4) MAIN PCB replacement
 - 5) Sensor PCB Replacement (P2)
 - 6) MAIN PCB replacement

PART NAME	CODE	PART NAME	CODE
MOTOR	MZZZ0MOT181	PHOTO SENSOR G310_RX	PSEN0PHO013
PHOTO SENSOR ST310_TX	PSEN0PHO014	MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013

12-18. SHOOTER MOTOR & SENSOR ERROR (Er.82)



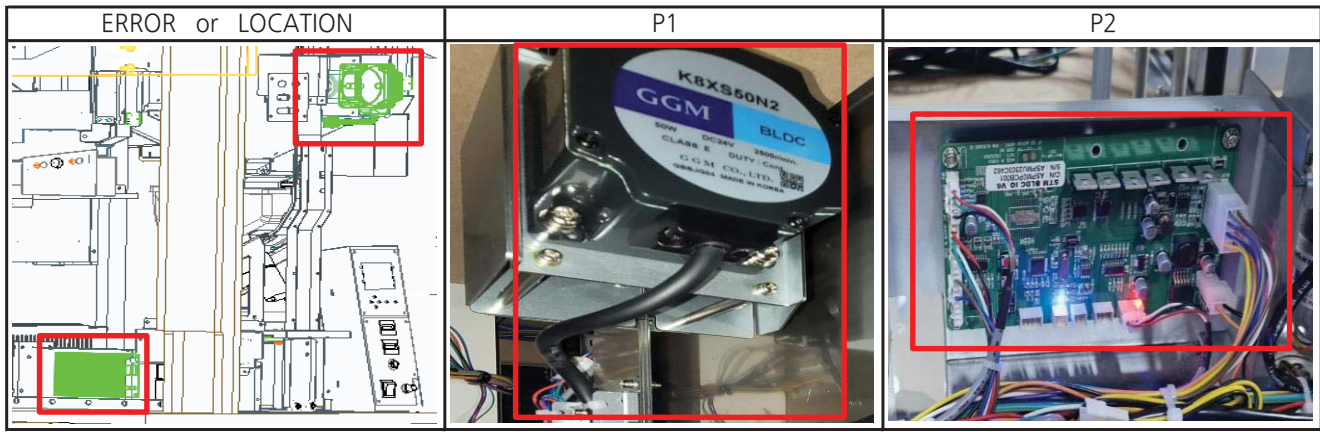
► SOLUTION

1. TEST MODE → MOT SHOT-SHOT
- ▶ BIG BALL STOCK FND
 - : Shooter sensor detection status display (0,1)
 - ▶ TICKETS FND
 - : Count the number of medals launched (0000~9999)

2. CHECK :
- 1) Check assembly status of motor and sensor equipment (P1)
 - 2) Check wiring connection status (P2)
 - 3) Motor replacement (P2)
 - 4) MAIN PCB replacement
 - 5) Sensor PCB Replacement (P2)
 - 6) MAIN PCB replacement

PART NAME	CODE	PART NAME	CODE
MOTOR	MZZZ0MOT180	PHOTO SENSOR G310_RX	PSEN0PHO013
PHOTO SENSOR ST310_TX	PSEN0PHO014	MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013

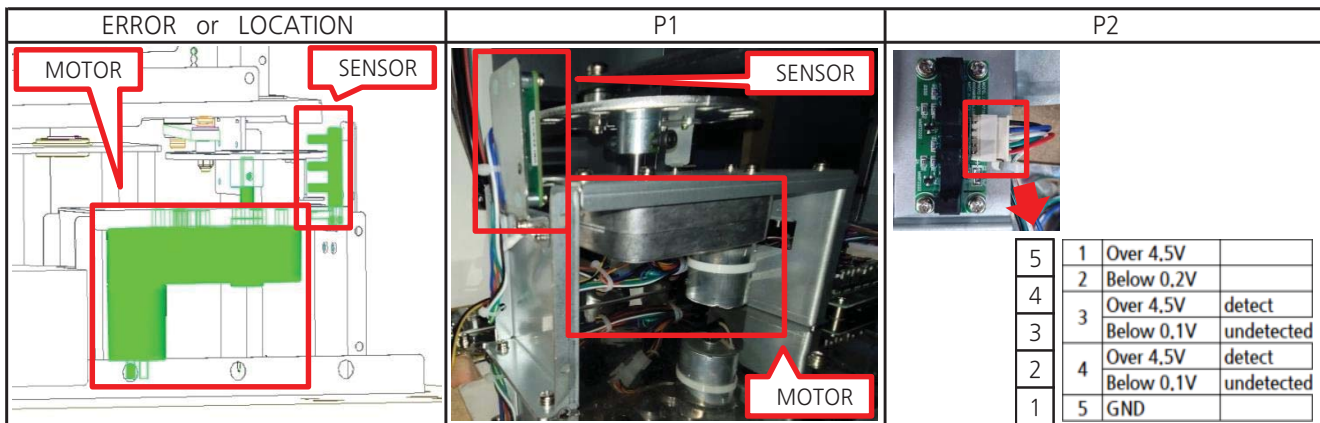
12-19. SHOOTER BLDC ROLLER MOTOR ERROR (Er.83)



► SOLUTION

<p>1. TEST MODE → MOT SHOT-SHOT</p> <p>► PLAYS FND</p> <p>: Medal firing BLDC roller motor speed indication</p>		<p>2. CHECK :</p> <ol style="list-style-type: none"> 1) Check motor and mechanism assembly status (P1) 2) Check wiring connection status (P1) 3) Check BLDC I/O PCB assembly status (P1) 4) Check BLDC I/O PCB wiring connection status (P1) 5) BLDC I/O PCB replacement 6) MAIN PCB replacement 	
PART NAME	CODE	PART NAME	CODE
STM BLDC IO PCB ASS'Y	ASPM0PCB001	MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013

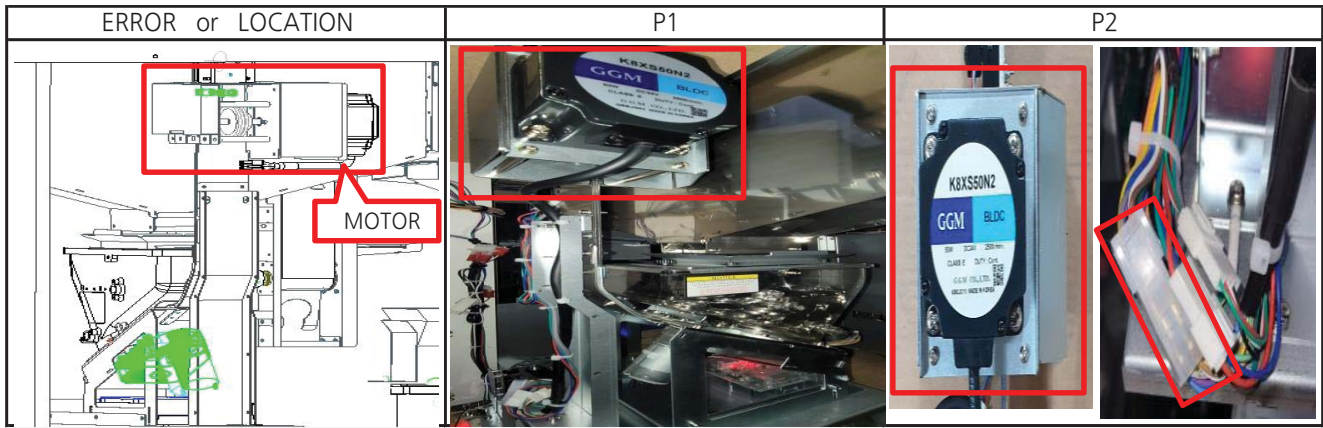
12-20. SHOOTER MOVE MOTOR & SENSOR ERROR (Er.84)



► SOLUTION

<p>1. TEST MODE → MOT SHOT-MOVE , INPUT TEST</p> <p>► SUPER BONUS FND</p> <p>ⓐ First digit : 1P motor origin encoder sensor status (0,1)</p> <p>ⓑ Second digit : 1P motor origin encoder sensor check counter(0~9)</p> <p>ⓒ Third digit : 2P motor origin encoder sensor status (0,1)</p> <p>ⓓ Second digit : 1P motor origin encoder sensor check counter(0~9)</p> <p>► TICKET FND</p> <p>ⓐ First digit : Encoder sensor status indication</p> <p>ⓑ Third and fourth digits : Encoder sensor check count display</p>		<p>2. CHECK :</p> <ol style="list-style-type: none"> 1) Check assembly status of motor and sensor equipment (P1) 2) Check wiring connection status (P1) 3) Motor replacement 4) MAIN PCB replacement 5) Check in sensor voltage measurement (P2) / INPUT TEST 6) Sensor PCB Replacement 7) MAIN PCB replacement 	
PART NAME	CODE	PART NAME	CODE
MOTOR_BLDC	MZZZ0MOT160	PHOTO INT-2 PCB ASS'Y	AWIW0PCB009
MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013		

12-21. SHOOTER BLDC ROLLER MOTOR SPEED ERROR (Er.87)



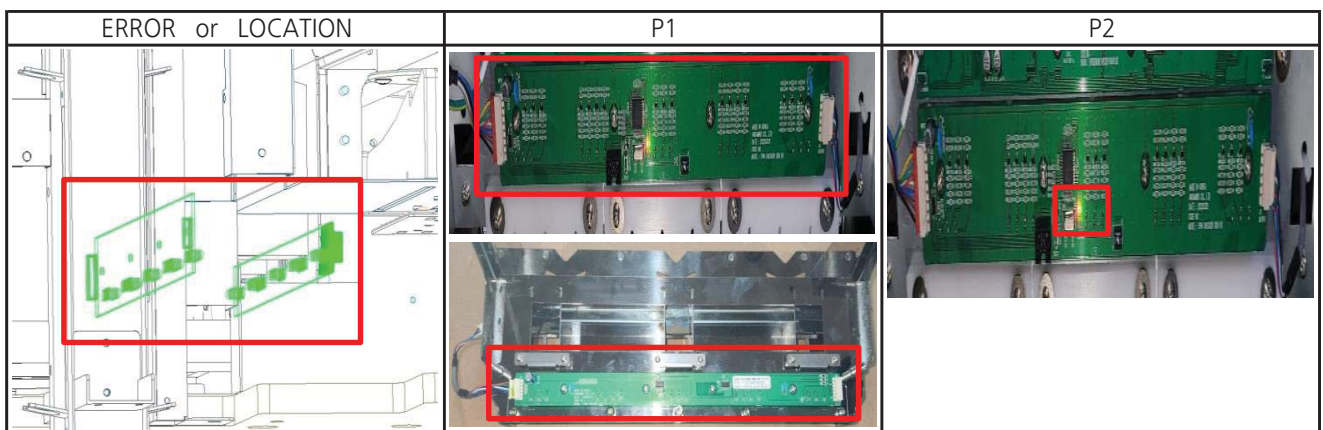
► SOLUTION

1. TEST MODE → MOT SHOT-SHOT
- BIG BALL STOCK FND
 - : Medal Shooter BLDC IO status display
 - Ⓐ "0" : No action
 - Ⓑ "3" : Checking speed
 - Ⓒ "5" : Motor operation and speed check completed

2. CHECK :
- 1) Check the assembly condition of the motor mechanism (P1,P2)
 - 2) Check wiring connection status (P2)
 - 3) Reassembly of motor mechanism
 - 4) Motor replacement
 - 5) BLDC IO PCB replacement

	CODE	PART NAME	CODE
MOTOR	MZZZ0MOT180	STM BLDC IO PCB ASS'Y	ASPM0PCB001

12-22. CHECKER SENSOR ERROR (Er.91,Er92)



► SOLUTION

1. TEST MODE → MOT SHOT-SHOT
- CHECKER HOLE LED
 - Ⓐ RED LED ON : Checker sensor signal present
 - Ⓑ OFF : No checker sensor signal

2. CHECK :
- 1) Check assembly condition of equipment (P1)
 - 2) Check PCB assembly status (P1)
 - 3) Check wiring connection status (P1)
 - 4) Check whether the LED on the back of the PCB is on (P2)
(RED : ON, GREEN : LIGHTS UP)
 - 5) CHECKER SENSOR RX PCB Replacement
 - 6) CHECKER SENSOR TX PCB Replacement
 - 7) MAIN PCB replacement

PART NAME	CODE	PART NAME	CODE
CHECKER SENSOR RX PCB ASS'Y	ASPM0PCB002	CHECKER SENSOR TX PCB ASS'Y	ASPM0PCB003
MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013		

12-23. PUSHER PLATE SMALL BALL DROP SENSOR ERROR (Er.93)

ERROR or LOCATION	P1	P2																				
		<table border="1"> <tr> <td>4</td> <td>1</td> <td>Over 4.5V</td> <td></td> </tr> <tr> <td>3</td> <td>2</td> <td>Below 0.2V</td> <td></td> </tr> <tr> <td>2</td> <td>3</td> <td>Over 4.5V</td> <td>detect</td> </tr> <tr> <td>1</td> <td>4</td> <td>Below 0.1V</td> <td>undetected</td> </tr> <tr> <td></td> <td></td> <td>4</td> <td>GND</td> </tr> </table>	4	1	Over 4.5V		3	2	Below 0.2V		2	3	Over 4.5V	detect	1	4	Below 0.1V	undetected			4	GND
4	1	Over 4.5V																				
3	2	Below 0.2V																				
2	3	Over 4.5V	detect																			
1	4	Below 0.1V	undetected																			
		4	GND																			

► SOLUTION

1. TEST MODE → MOT PUSHER , INPUT TEST
- SUPER BONUS FND
 - ⓐ 1st digit : 1P small ball drop sensor check status display (0,1)
 - ⓑ Third digit : 2P small ball drop sensor check status display (0,1)
 - GAME BOARD LED LAMP
 - ⓐ First digit(TICKETS) : ON when small ball is detected

2. CHECK :
- 1) Check assembly condition of equipment (P1)
 - 2) Check wiring connection status (P1)
 - 3) Check sensor voltage (P2)
 - 4) Sensor PCB Replacement
 - 5) MAIN PCB replacement

PART NAME	CODE	PART NAME	CODE
SENSOR_R PCB ASS'Y	MEIF0PAR014	SENSOR_T PCB ASS'Y	AAV20PCB011
MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013		

12-24. PUSHER PLATE BIG BALL DROP SENSOR ERROR (Er.94)

ERROR or LOCATION	P1	P2																												
		<table border="1"> <tr> <td>4</td> <td>3</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>1</td> <td></td> <td></td> </tr> <tr> <td>1</td> <td>1</td> <td>Over 4.5V</td> <td></td> </tr> <tr> <td>2</td> <td>2</td> <td>Below 0.2V</td> <td></td> </tr> <tr> <td>3</td> <td>3</td> <td>Over 4.5V</td> <td>detect</td> </tr> <tr> <td>4</td> <td>4</td> <td>Below 0.1V</td> <td>undetected</td> </tr> <tr> <td></td> <td></td> <td>4</td> <td>GND</td> </tr> </table>	4	3			2	1			1	1	Over 4.5V		2	2	Below 0.2V		3	3	Over 4.5V	detect	4	4	Below 0.1V	undetected			4	GND
4	3																													
2	1																													
1	1	Over 4.5V																												
2	2	Below 0.2V																												
3	3	Over 4.5V	detect																											
4	4	Below 0.1V	undetected																											
		4	GND																											

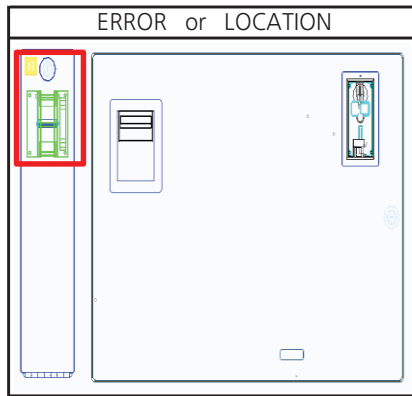
► SOLUTION

1. TEST MODE → MOT PUSHER , INPUT TEST
- SUPER BONUS FND
 - ⓐ Second digit : 1P big ball drop sensor check status display (0,1)
 - ⓑ Fourth digit : 2P big ball drop sensor check status display
 - GAME BOARD LED LAMP
 - ⓐ Second digit (BIG BALL) : ON when detecting big ball

2. CHECK :
- 1) Check assembly condition of equipment (P1)
 - 2) Check wiring connection status (P1)
 - 3) Check sensor voltage (P2)
 - 4) Sensor PCB Replacement
 - 5) MAIN PCB replacement

PART NAME	CODE	PART NAME	CODE
SENSOR_R PCB ASS'Y	MEIF0PAR014	SENSOR_T PCB ASS'Y	AAV20PCB011
MAIN PCB ASS'Y WITH CPU & MEMORY	ASPM0PCB013		

12-25. TICKET ERROR (HELP)



► SOLUTION

1. TEST MODE → TICKET TEST
2. CHECK :
 - 1) Check whether TICKET JAM
 - 2) Check the cable connection status
 - 3) REPLACE TICKET DISPENSER
 - 4) MAIN PCB replacement

PART NAME	CODE	PART NAME	CODE
MAIN I/O PCB ASS'Y	ASBT0ASS001	TICKET DISPENSER	MZZZ0TID010



ANDAMIRO WARRANTY POLICY



Andamiro warrants to the original purchaser that all of its products will be free from defects in material and workmanship.

Andamiro warrants the parts from date of shipment as follows.

- **One Year Limited Warranty : Electronic Boards**
- **6 Months Limited Warranty : Moving Parts**

For any key components within the warranty period, Andamiro will repair or replace defective components free of charge.

When placing a warranty request, the customer is requested to furnish the following information:

1. Name of the game.
2. Serial Number of the game.
3. A Detailed Description of the defect/s experienced.

This warranty does not apply to the defects caused due to misuse or abuse of the product.

Any alterations made to game or game parts will void this warranty.

For warranty details on our product range please visit our website, www.andamiro.com.

ANDAMIRO CO., LTD.
www.andamiro.com





ANDAMIRO CO., LTD.

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USA BRANCH

ANDAMIRO USA CORP.

TEL : 1-310-767-5800

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