

SERVICE MANUAL

DRAGONS



[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: Apr. 9, 2026

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:



WARNING

Disregarding could result in serious injury.



CAUTION

Disregarding could result in injury or product damage.

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



Indicates a care should be taken.



Forbidden.



Indicates a matter which must be performed.

- Precautions to be followed:

Certain procedures require a qualified in-shop maintenance person or industry specialist.

For such instructions, a qualified person must take care of the jobs.

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

Qualified in-shop maintenance person

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

Industry specialist

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

PRECAUTIONS FOR USE

WARNING

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.**
- * **Please wear gloves when assembling or disassembling to avoid cutting your hands on sharp parts inside the product.**

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.

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, faites 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 conseiller 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.

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.

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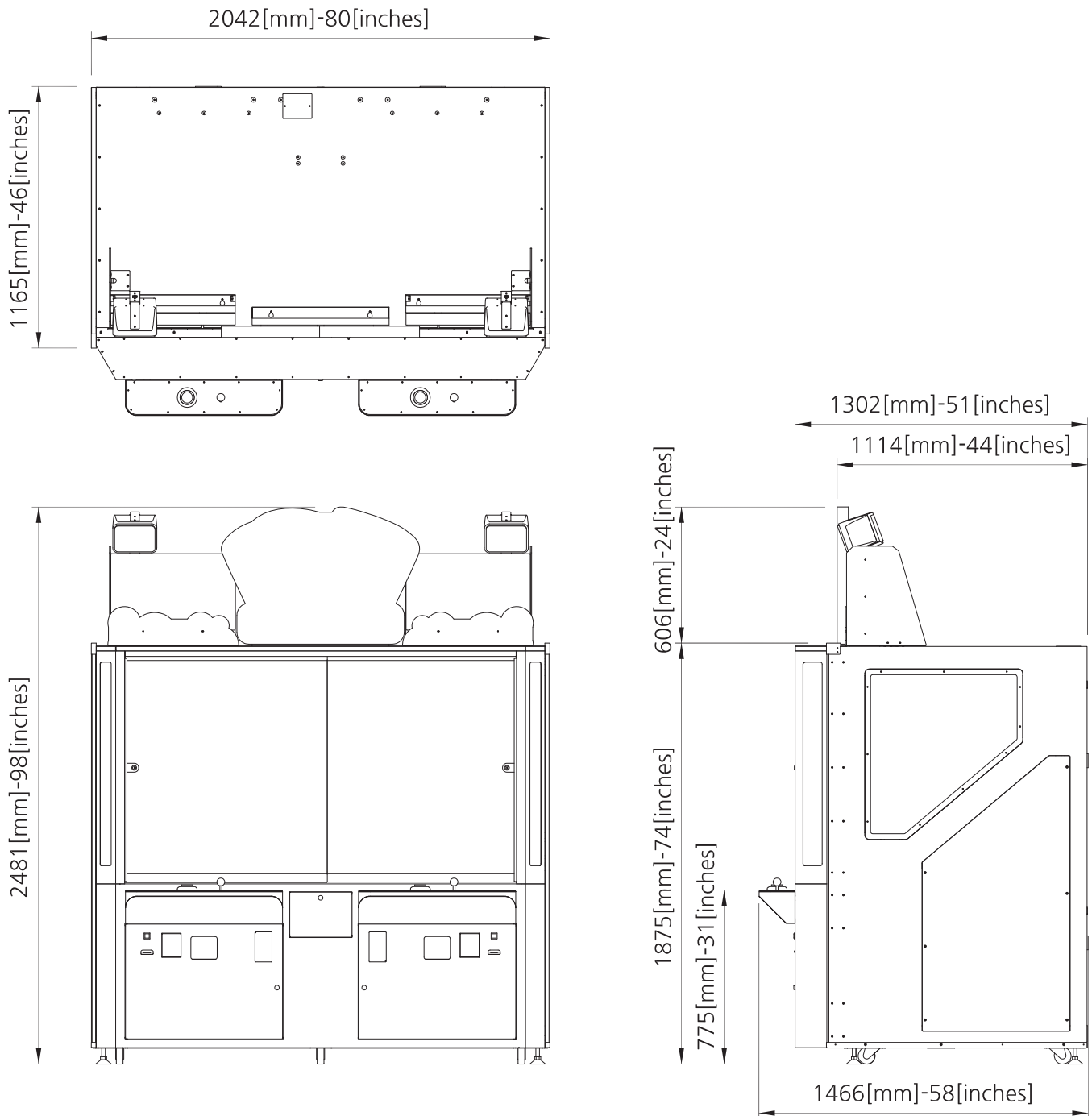
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1. SPECIFICATION AND DIMENSION

1-1. DIMENSION

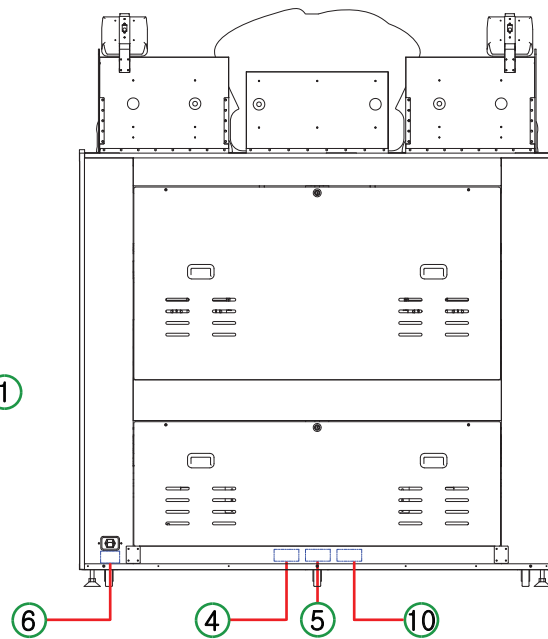
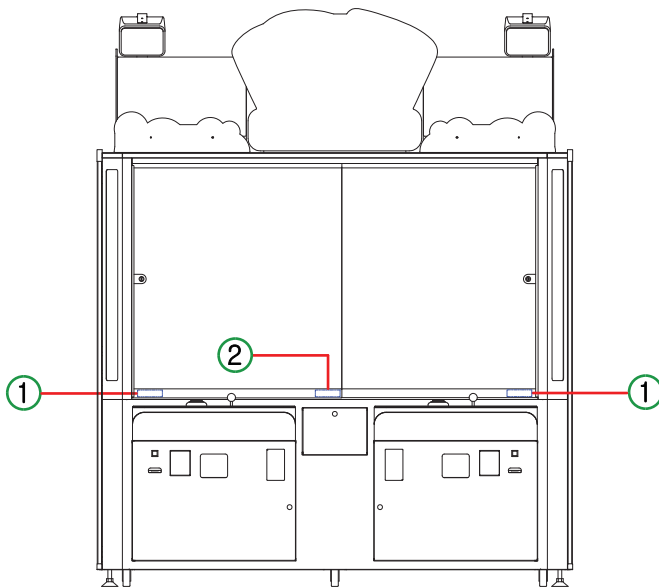
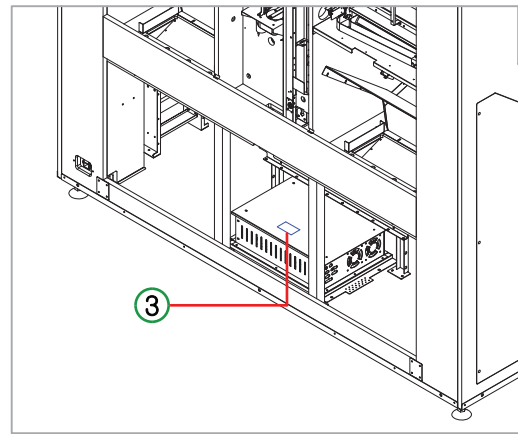
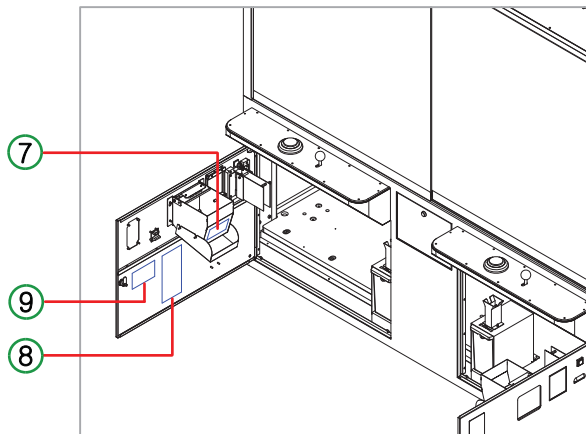


1-2. SPECIFICATION

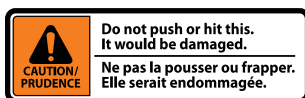
DIMENSIONS (W x D x H)	2042 x 1466 x 2481 (mm)	
PACKING DIMENSIONS (W x D x H)	- x - x - (mm)	
WEIGHT (kg)	- kg [WEIGHT INCLUDING : - kg] PACKAGING	
VOLTAGE	AC 120V	AC 230V
FREQUENCY RANGE	60Hz	50/60Hz
CONSUMPTION	600W	
CERTIFICATION	-	

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

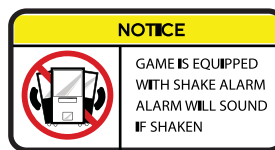
1-3. STICKER LOCATION



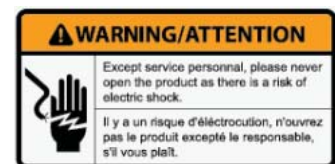
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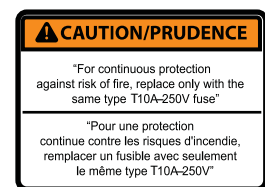
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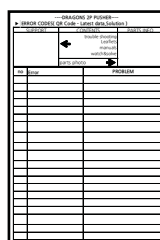
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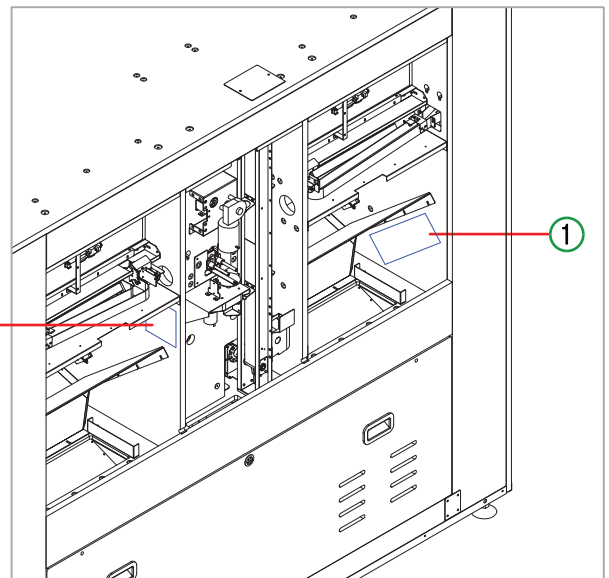
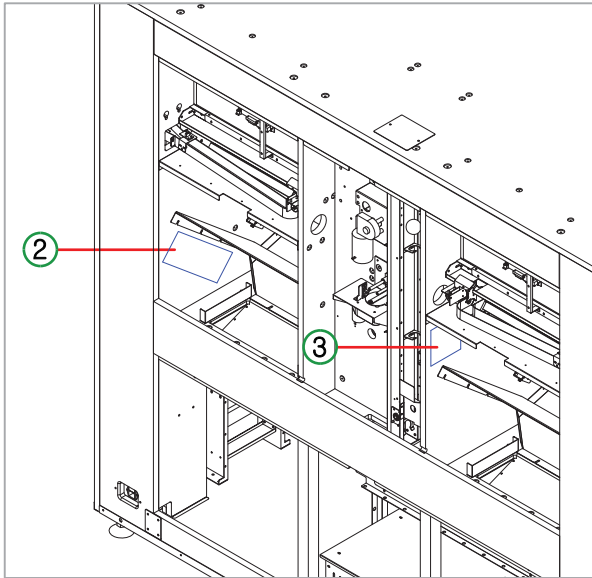
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MODEL NAME	DRAGONS 2P PUSHER
PRODUCT S/NO	XX-XXXXXX-XXX-XXX
MAIN BOARD S/NO	ANDA MAIN VX.XX

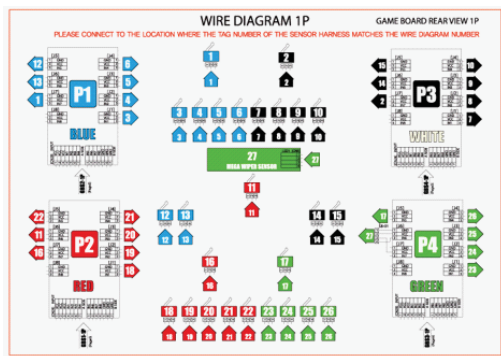
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MODEL NAME	DRAGONS 2P PUSHER
POWER REQUIREMENTS	AC - V / - HZ
POWER CONSUMPTION	- W
WEIGHT (kg)	- kg
CODE NO	-
MADE IN KOREA Goyang-si, Gyeonggi-do, Korea Phone 82-31-909-2114	

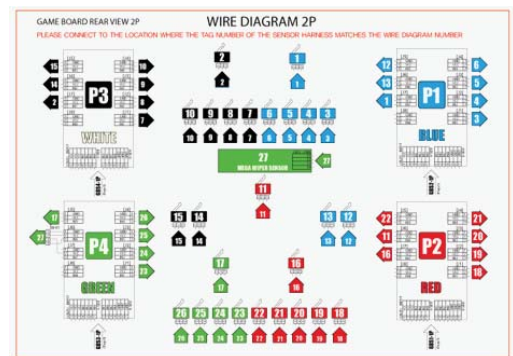
1-4. WIRE DIAGRAM STICKER LOCATION



1



2



3 4



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

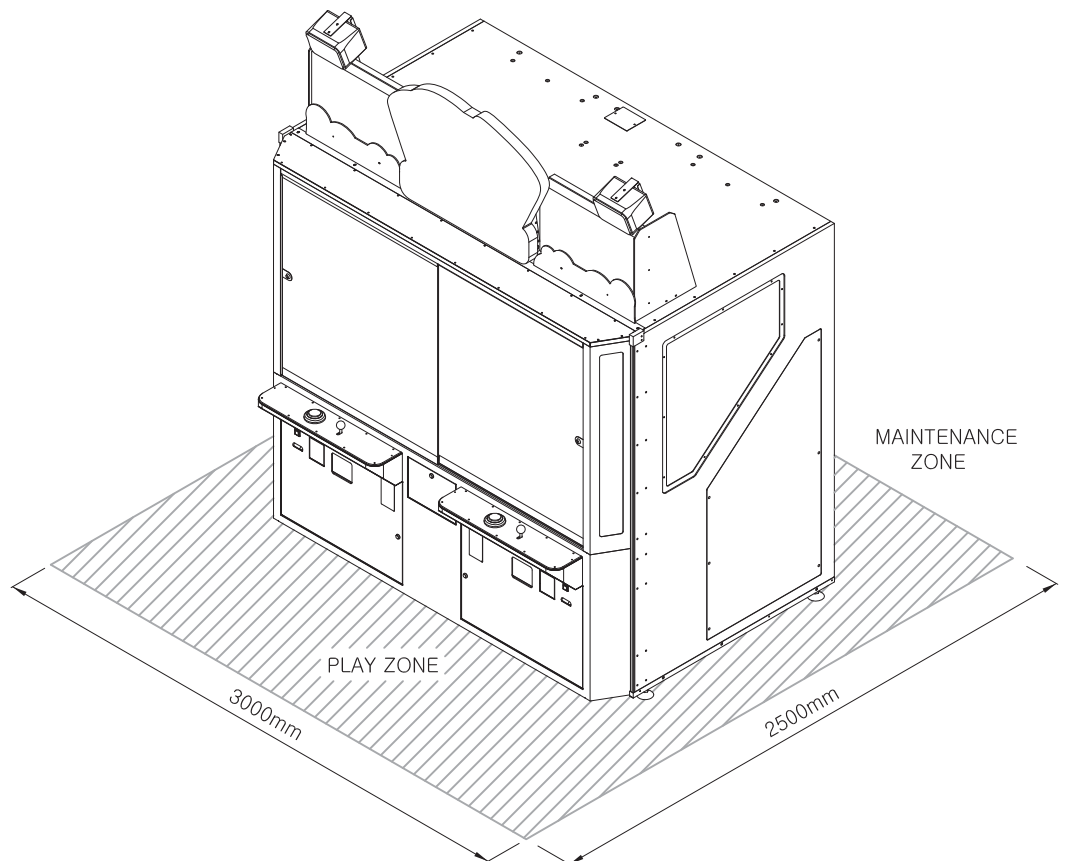
- ※ Maintenance zone & Play zone should have at least 3000mm(118inch) * 2500mm(99inch) each

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



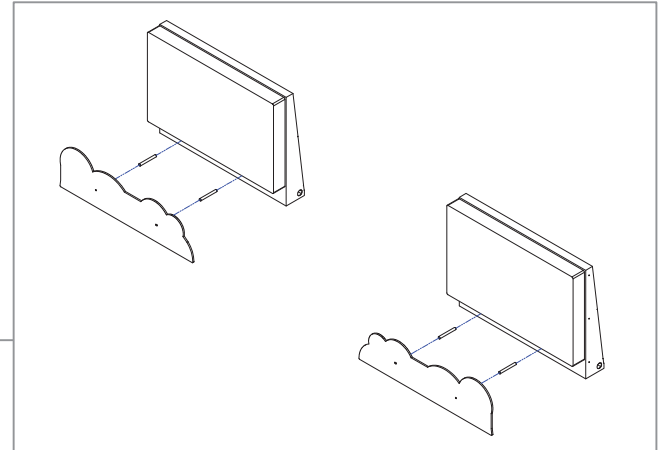
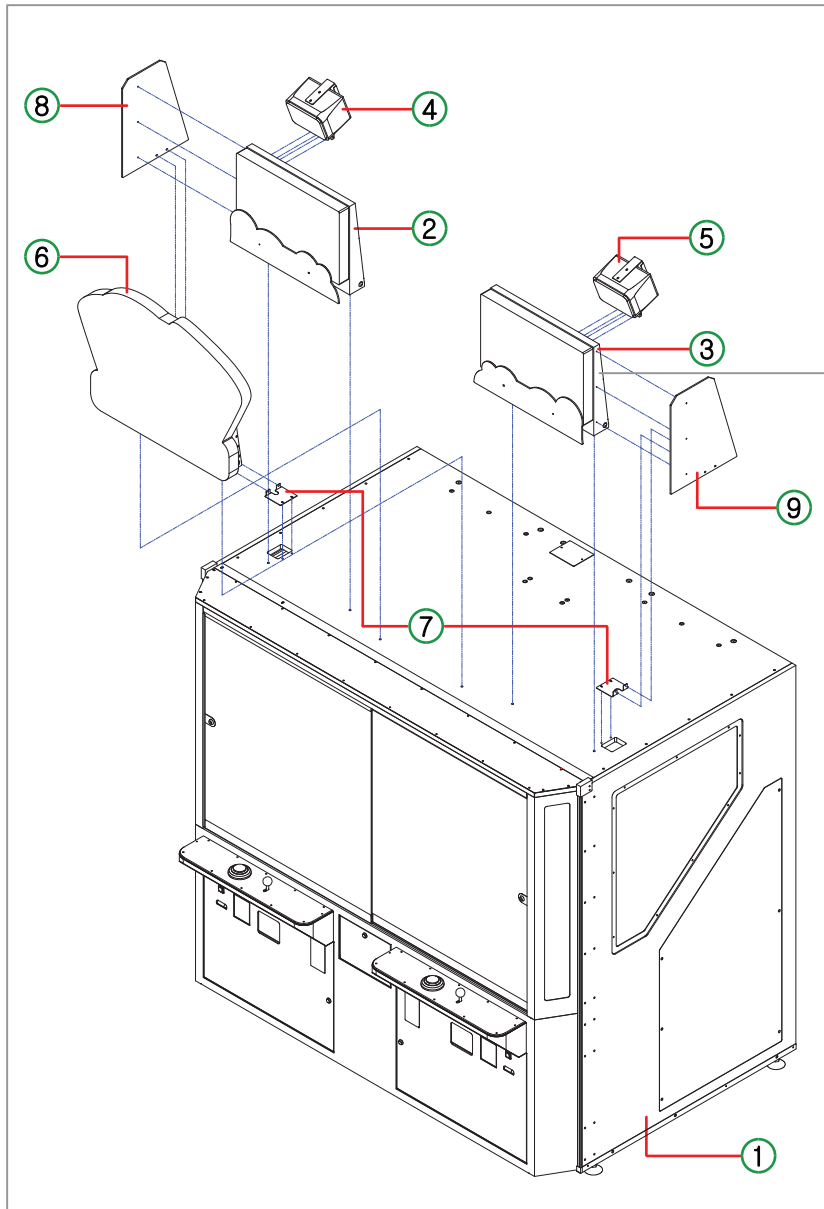
3. COMPONENTS

NO	PART NAME	Q'TY	SPARE	NO	PART NAME	Q'TY
1	AC POWER CORD	1		13	BALL_ Ø15, BLUE	2100 / 1050 per P
2	KEY 7001	2		14	BALL_ Ø30, RED	50
3	KEY 6001	1		15	MEGA BALL_ Ø42, BLUE, 30	2
4	TH NI [M4x10L]	4	4	16	MEGA BALL_ Ø42, BLUE, 50	2
5	TH NI [M4x20L]	2	4	17	MEGA BALL_ Ø42, BLUE, 70	2
6	SEMS [M4x10L]	8	4	18	MEGA BALL_ Ø42, BLUE, 100	1
7	SEMS [M6x25L]	6	4	19	MEGA BALL_ Ø42, BLUE, 120	1
8	RENCH [2.5mm]	1		20	MEGA BALL_ Ø42, BLUE, 150	1
9	RENCH [3mm]	1		21	MEGA BALL_ Ø42, BLUE, 150	1
10	RENCH [4mm]	1		22	MEGA BALL_ Ø42, BLUE, 170	1
11	RENCH [5mm]	1		23	MEGA BALL_ Ø42, BLUE, 200	1
12	CARD HEAVY PUSH BKT	4		24	MEGA BALL_ Ø42, BLUE, 250	1
				25	MEGA BALL_ Ø42, RED, WC	5
				26	BILLBOARD CLOUD FIX SHAFT	4
				27	CABINET TOP HARNESS COVER BKT	2
				28	CARD DISPENSER SETTING JIG	1
				29	MANUAL	1

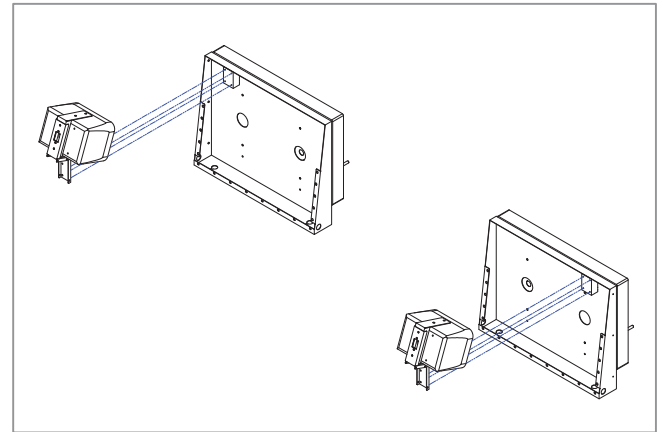
▼ 1	▼ 2,3	▼ 4,5	▼ 6,7	▼ 8,9,10,11	▼ 12
					
▼ 13	▼ 14	▼ 15~25	▼ 26	▼ 27	▼ 28
					
▼ 29					
					

4. INSTALL

4-1. HOW TO INSTALL BILLBOARD



* BILLBOARD FLAG TITLE ASS'Y + SHAFT + FOMAX
[M4 x L, EA]



* REAR FIXED VIEW

NO	PROCESS	ITEM	Q'TY	BOLT	SPEC	Q'TY
1		MAIN CABINET	1			
2	ASSEMBLE	BILLBOARD CLOUD TITLE PART-L	1	SEMS	M6*25L	2
3	ASSEMBLE	BILLBOARD CLOUD TITLE PART-R	1	SEMS	M6*25L	2
4	ASSEMBLE	BILLBOARD SPEAKER ASS'Y	1	SEMS	M4*10L	4
5	ASSEMBLE	BILLBOARD SPEAKER ASS'Y	1	SEMS	M4*10L	4
6	ASSEMBLE	BILLBOARD CENTER TITLE PART	1	SEMS	M6*25L	2
7	ASSEMBLE	CABINET TOP HARNESS COVER BKT	2	TH NI	M4*20L	2
8	ASSEMBLE	BILLBOARD SIDE DECO FOMAX-L	1	TH NI	M4*10L	2
9	ASSEMBLE	BILLBOARD SIDE DECO FOMAX-R	1	TH NI	M4*10L	2

* Regarding the assembly of BKT No. 7, we will proceed after the wiring connection is complete.

* WIRING CONNECTION

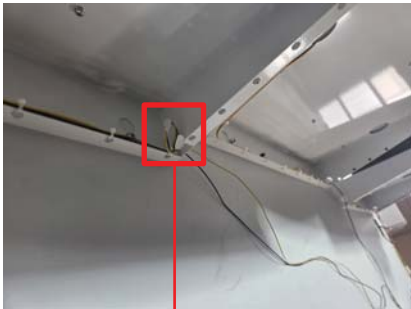


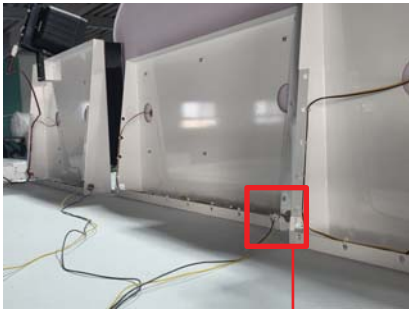
[Cabinet internal wiring]

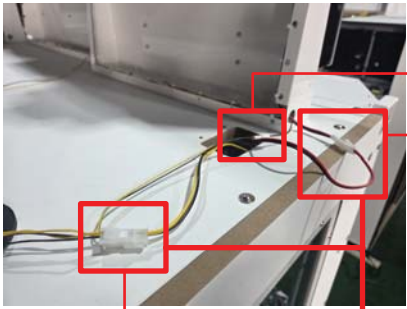


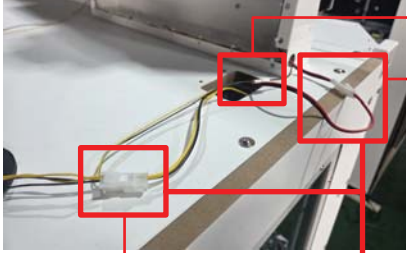


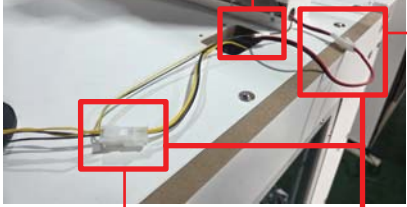




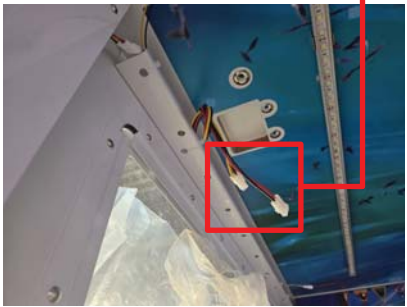


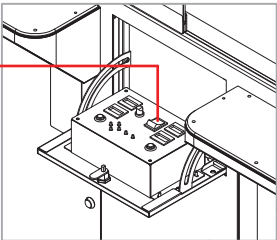


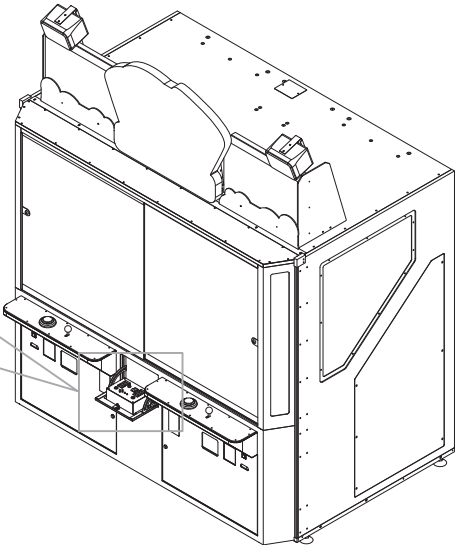




[Cabinet internal wiring]





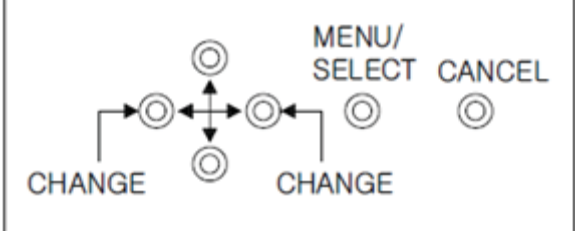
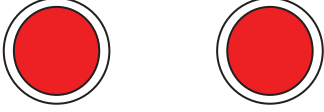


NO	PROCESS	EXPLANATION
10~17	CONNECTION	BILLBOARD CONNECTOR
18	POWER ON	The voltage of this product is (120V or 230V)

5. SETUP SETTING

5-1. MACHINE SETUP

- SETUP BUTTON LAYOUT

	1) [↑ ↓] Up/Down : Move menu up/down 2) [← →] Left/Right : Change setting left/right 3) MENU/SELECT : Enter and select menu 4) CANCEL : Exit
 1P SERVICE / RESET 2P SERVICE / RESET	Normally used as SERVICE IN, and as an ERROR disable button in case of an ERROR. * Each time you press SERVICE IN, it increases by the number set in PLAYS/COIN.

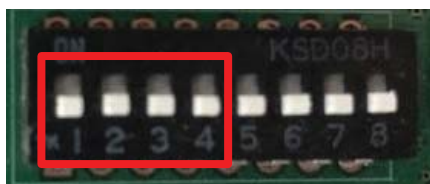
OPERATING OPTIONS	
Press the MENU button. [MENU/SELECT button: Enter]	
PROGRAM SETTINGS	Game setting
CLEAR MODE	Data clear
BOOKKEEPING DATA	Game data records
FACTORY SETTING	Factory setting
TEST MODE	Test mode
EXIT	Exit

* To apply DRAGON CHANCE and DRAGON BONUS, please set DRAGON CHANCE to [DIP8 -> OFF] and DRAGON BONUS to [DIP8 -> ON].

< DIP S/W TYPE SETTING OPTIONS >

* If you wish to change the scent based on the DIP S/W settings, please select one of the items below to proceed.

1. Run FACTORY SETTING after changing the DIP S/W scent
2. If an error occurs after changing the DIP S/W scent and turning the power OFF → ON, proceed with FACTORY SETTING.



	A	D	E
DIP 1	OFF	ON	ON
DIP 2	OFF	ON	ON
DIP 3	OFF	OFF	ON
DIP 4	OFF	OFF	ON

5-2. PROGRAM SETTINGS

PROGRAM SETTINGS			
LCD DISPLAY	EXPLANATION	RANGE	DEFAULT
PLAYS / COIN [->sub menu]	Set PLAYS per COIN usage. Differentiated payments are made based on the number of consecutive uses of COIN or SWIPE cards.	=> (sub menu) (See Table #1 below)	
PLAYS / BILL [->sub menu]	Set PLAYS(CREDITS) per BILL usage. If you use your BILL or SWIPE card consecutively, you will receive differentiated payments based on the number of consecutive uses.	=> (sub menu) (See Table #2 below)	
WHEEL EVENT SET [->sub menu]	Set the winning details for each zone of the WHEEL EVENT	=> (sub menu) (See Table #3 below)	
HOLE SCORE SET [->sub menu]	Setting each HOLE PUSHER BALLS	=> (sub menu) (See Table #4 below)	
WIPER SET [->sub menu]	WIPER SERVO MOTOR SETTINGS	=> (sub menu) (See Table #5 below)	
PAYMENT TYPE	COIN and CARD SWIPE input settings related to screen display - COIN : COIN input settings - CARD : CARD SWIPE input settings	COIN CARD	COIN
MAX GAME BALL	Maximum number of balls that can be dropped at once	3 ~ 10 (increase by 1 unit)	6
BALL FOR CHANCE	The percentage of balls entering the DRAGON CHANCE HOLE. Ex) 12: 1 out of 12 game balls	5 ~ 20 (increase by 1 unit)	12
BALL PER CARD	Number of pusher balls that eject cards	100 ~ 300 (increase by 10 unit)	130
BALL PER CREDIT	Number of pusher balls per swipe (approximated number)	100 ~ 300 (increase by 10	180

		unit)	
DRAGON GAME	Set game continue or game pause during DREAM CHANCE	RUN STOP	RUN
COLLECT TICKET	BALL COLLECTION BONUS TICKET	100 ~ 900 (increase by 50 unit)	300
1P SHOOT SPEED	1P PUSHER BALL SHOOTER SPEED (* when the ball-out speed becomes slow, increase the speed)	60 ~ 80 (increase by 1 unit)	65
2P SHOOT SPEED	2P PUSHER BALL SHOOTER SPEED (* when the ball-out speed becomes slow, increase the speed)	60 ~ 80 (increase by 1 unit)	65
TICKET/SCORE	Set the TICKET ratio per SCORE. NONE: Automatically reduces the number of tickets without using TICKET ejection.	NONE, 1/1, 1/2, 1/3, 1/4, 1/5	1/1
ATTRACT VOL	Use DEMO sound and set volume OFF : no sound 10 ~ 100 : Sound Volume Ratio (%)	OFF, 10 ~ 100 (increase by 10 unit)	60
SAVE & EXIT	Save and exit	Press the SELECT button to move the cursor to [YES] or [NO] and execute.	
CANCEL & EXIT	Cancel and exit		

< Table #1 >

● PROGRAM SETTINGS -> PLAYS / COIN

- ✧ Set PLAYS per COIN or SWIPE usage
- ✧ If you use COIN or SWIPE continuously without playing after using (scrapping) COIN or SWIPE once, the value will increase to the setting value below up to 5 times, and from the 6th time onwards, the 1st COIN value will be applied again and increase in order. (Based on 5 times)
- ✧ When saving after changes, GAME DATA and BOOKKEEPING DATA are cleared
- ✧ FACTORY SET maintains the settings

LCD DISPLAY	EXPLANATION	RANGE	DEFAULT		
			A	D	E
MINIMUM COIN		FREE, 1 ~ 10	1	1	1
1st COIN	Set the number of PLAYS per CREDIT input.	1 ~ 400 (Increase by 1 unit, increase by 10 units if held down)	12	12	12
2nd COIN	Set the number of PLAYS per CREDIT input.		26	26	26
3rd COIN	Set the number of PLAYS per CREDIT input.		42	42	42
4th COIN	Set the number of PLAYS per CREDIT input.		60	60	60
5th COIN	Set the number of PLAYS per CREDIT input.		75	75	75
SAVE & EXIT	Save and exit	Press the SELECT button to move the cursor to [YES] or [NO] and execute.			
CANCEL & EXIT	Cancel and exit				

< Table #2>

● PROGRAM SETTINGS -> PLAYS / BILL

- ✧ Set PLAYS per BILL or SWIPE use.
- ✧ It increases by the setting value below in conjunction with the signal from BILL COLLECT.
- ✧ When saving after changes, GAME DATA and BOOKKEEPING DATA are cleared
- ※ FACTORY SET maintains the settings

LCD DISPLAY	EXPLANATION	RANGE	DEFAULT		
			A	D	E
1 BILL	Set the number of PLAYS per BILL used.	1 ~ 500 (Increase by 1 unit, increase by 10 units if held down)	12	12	12
2 BILLS	Set the number of PLAYS per 2 BILLS used.		26	26	26
3 BILLS	Set the number of PLAYS per 3 BILLS used.		42	42	42
4 BILLS	Set the number of PLAYS per 4 BILLS used.		60	60	60
5 BILLS	Set the number of PLAYS per 5 BILLS used.		75	75	75
10 BILLS	Set the number of PLAYS per 10 BILLS used.		175	175	175
20 BILLS	Set the number of PLAYS per 20 BILLS used.		400	400	400
SAVE & EXIT	Save and exit	Press the SELECT button to move the cursor to [YES] or [NO] and execute.			
CANCEL & EXIT	Cancel and exit				

< Table #3>

● PROGRAM SETTINGS -> WHEEL EVENT SET					
✧ Set the WHEEL EVENT winning value					
LCD DISPLAY	EXPLANATION	RANGE	DEFAULT		
			A	D	E
WHEEL 01	Set the WHEEL EVEN PLAYS value	1 ~ 50 (increase by 1 unit)	20	20	20
WHEEL 02			4	4	4
WHEEL 03			12	12	12
WHEEL 04			2	2	2
WHEEL 05			10	10	10
WHEEL 06			8	8	8
WHEEL 07			16	16	16
WHEEL 08			2	2	2
WHEEL 09			20	20	20
WHEEL 10			4	4	4
WHEEL 11			12	12	12
WHEEL 12			2	2	2
WHEEL 13			10	10	10
WHEEL 14			8	8	8
WHEEL 15			16	16	16
WHEEL 16			2	2	2
SAVE & EXIT	Save and exit	Press the SELECT button to move the cursor to [YES] or [NO] and execute.			
CANCEL & EXIT	Cancel and exit				

< Table #4>

● PROGRAM SETTINGS -> HOLE SCORE SET ✧ Set the quantity of each HOLE PUSHER BALL.								
LCD DISPLAY	EXPLANATION	RANGE	DEFAULT					
			A	D	E			
TOP HOLE	TOP LEFT and RIGHT HOLE's pusher ball quantity	1 ~ 30 (increase by 1 unit)	5	5	5			
BOTTOM HOLE	BOTTOM LEFT and RIGHT HOLE's pusher ball quantity	1 ~ 30 (increase by 1 unit)	5	5	5			
RED X4 HOLE	RED X4 HOLE's pusher ball quantity	1 ~ 30 (increase by 1 unit)	15	15	15			
BLUE X4 HOLE	BLUE X4 HOLE's pusher ball quantity	1 ~ 30 (increase by 1 unit)	10	10	10			
RED FLIP HOLE	RED FLIP HOLE's pusher ball quantity	1 ~ 30 (increase by 1 unit)	20	20	20			
BLUE FLIP HOLE	BLUE FLIP HOLE's pusher ball quantity	1 ~ 30 (increase by 1 unit)	15	15	15			
LOWER HOLE	Number at the bottom holes (1,3,5,7,9)	0 ~ 30 (increase by 1 unit)	1	1	1			
LOWER TYPE	Select hole type at the bottom holes(1,3,5,7,9)	BALL, TICKET	TICKET					
SAVE& EXIT	Save and exit	Press the SELECT button to move the cursor to [YES] or [NO] and execute.						
CANCEL & EXIT	Cancel and exit							

< Table #5>

● PROGRAM SETTINGS -> WIPER SET ✧ WIPER SERVO MOTOR direction and angle setting ✧ FACTORY SET maintains the settings			
LCD DISPLAY	EXPLANATION	RANGE	DEFAULT
1P DIRECTION	1P WIPER MOTOR direction setting LEFT BUTTON : Set LEFT MOTOR direction RIGHT BUTTON : Sets the RIGHT MOTOR direction	0, 1	0 0
1P LEFT	1P LEFT angle setting LEFT button : Increase angle (move to the left) RIGHT button: Decrease angle (move to the right)	0 ~ 150 (increase by 1 unit)	0

1P RIGHT	1P RIGHT angle setting LEFT button : Increase angle (move to the left) RIGHT button: Decrease angle (move to the right)	0 ~ 150 (increase by 1 unit)	0
2P DIRECTION	2P WIPER MOTOR direction setting LEFT BUTTON : Set LEFT MOTOR direction RIGHT BUTTON: Sets the RIGHT MOTOR direction	0, 1	0 0
2P LEFT	2P LEFT angle setting LEFT button : Increase angle (move to the left) RIGHT button: Decrease angle (move to the right)	0 ~ 150 (increase by 1 unit)	0
2P RIGHT	2P RIGHT angle setting LEFT button : Increase angle (move to the left) RIGHT button: Decrease angle (move to the right)	0 ~ 150 (increase by 1 unit)	0
SAVE & EXIT	Save and exit	Press the SELECT button to move the cursor to [YES] or [NO] and execute.	
CANCEL & EXIT	Cancel and exit		

5-3. CLEAR MODE

● CLEAR MODE ✧ You can erase GAME DATA and BOOKKEEPING		
LCD DISPLAY	EXPLANATION	EXECUTION
CLEAR TICKETS	Clear currently due tickets	Press the SELECT button to move the cursor to [YES] or [NO] and execute.
CLEAR PLAYS	Clear all remaining PLAYS (CREDITS) and BONUS BALL. (All cards and tokens that need to be ejected are also erased)	
CLEAR GAME DATA	Erase all GAME DATA and BOOKKEEPING DATA. (All game-related data, including credits and tickets, will be deleted.)	
EXIT	EXIT	

5-4. BOOKKEEPING DATA

● BOOKKEEPING DATA	
LCD DISPLAY 1P : 1 Player 2P : 2 Player TOTAL : Total sum of 1P and 2P	EXPLANATION
- COIN IN - 1P : 0 2P : 0 TOTAL : 0	1P, 2P each player and total COIN IN. Number of inputs
- BILL IN - 1P : 0 2P : 0 TOTAL : 0	1P, 2P each player and total BILL IN. number
- SERVICE IN - 1P : 0 2P : 0 TOTAL : 0	1P, 2P, each player, and the total number of SERVICE IN. PLAYS (SERVICE BUTTON increases by 10 PLAYS)
- GAME BALL - 1P : 0 2P : 0 TOTAL : 0	1P, 2P Number of balls fired for each player and the entire GAME PLAY.
- TICKET OUT - 1P : 0 2P : 0 TOTAL : 0	The number of times the ball went into the right and left sides of the top hole
- CARD OUT - 1P : 0 2P : 0 TOTAL : 0	1P, 2P each player and total number of CARD OUT.
- DRAGON CHANCE - 1P : 0 2P : 0 TOTAL : 0	1P, 2P each player and total number of DRAGONS CHANCE
- WHEEL EVENT - 1P : 0 2P : 0 TOTAL : 0	1P, 2P each player and total number of WHEEL EVENTS

- PUSHER BALL - 1P : 0 2P : 0 TOTAL : 0	1P, 2P each player and total number of PUSHER BALL outputs
- TOP HOLE - LEFT RIGHT 1P : 0 0 2P : 0 0	The number of times the ball went into the right and left sides of the TOP HOLE
- BOTTOM HOLE - LEFT RIGHT 1P : 0 0 2P : 0 0	The number of times the ball went into the right and left sides of the BOTTOM HOLE
- 1P FLIP HOLE - 0 0 0 0 0 0 0 0	Number of passes through 1P FLIP HOLE (8 pieces) RED HOLE1, RED HOLE2, RED HOLE3, RED HOLE4 BLUE HOLE1, BLUE HOLE2, BLUE HOLE3, BLUE HOLE4
- 2P FLIP HOLE - 0 0 0 0 0 0 0 0	Number of passes through 2P FLIP HOLE (8 pieces) RED HOLE1, RED HOLE2, RED HOLE3, RED HOLE4 BLUE HOLE1, BLUE HOLE2, BLUE HOLE3, BLUE HOLE4
- OPEN HOLE - 0 0 0 0 0 0 0 0	Number of times passing through the 1P and 2P OPEN HOLE 1P : Top row RED OPEN, RED 20, BLUE 15, BLUE OPEN 2p : Bottom row RED OPEN, RED 20, BLUE 15, BLUE OPEN
- 1P LOWER HOLE - 0 0 0 0 0	Number of times passing through the 5 BOTTOM HOLES in 1P
- 2P LOWER HOLE - 0 0 0 0 0	Number of times passing through the 5 BOTTOM HOLES in 2P
- DRAGON - 1P 2P 30P : 0 0 50P : 0 0 70P : 0 0	Number of wins per ball in Dragon Chance 1P : Left 2P : Right

- DRAGON - 1P 2P 100P : 0 0 120P : 0 0 150P : 0 0	
- DRAGON - 1P 2P 170P : 0 0 200P : 0 0 250P : 0 0	Number of wins per ball in Dragon Chance 1P : Left 2P : Right
- DRAGON - 1P 2P RED BALL: 0 0	
- COLLECTION BONUS – 1P : 0 2P : 0 TOTAL : 0	1P, 2P each player and total number of COLLECTION BONUS
- VER INFO - DRAGONS Ver X.XX Sep. 19. 2025	Display version information and program compilation date
- VIDEO VER INFO -" VIDEO BOARD 1P Ver X.XX 2P Ver X.XX	Display Android board version information
- WS2813 VER INFO -" WS2813 BOARD Ver X.X	Display WS2813 board version information
CANCEL button : Exit	

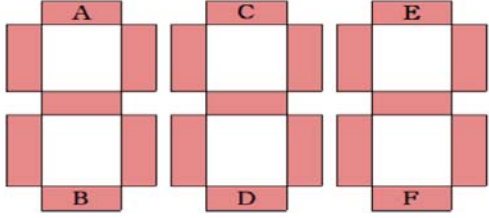
5-5. FACTORY SETTING

● FACTORY SETTING Reset to factory settings (clear all data and set game setup to default values)	
LCD DISPLAY (Execution)	LCD DISPLAY (Execution)
FACTORY-SETTING ARE YOU SURE? YES or [NO] Move cursor to execute	FACTORY-SETTING REALLY ? YES or [NO] Move cursor to execute

RECHECK

5-6. TEST MODE

● TEST MODE		
LCD DISPLAY	SETTING	EXPLANATION
INPUT TEST	(See table below)	Input signal test
FND & LED OFF	STEP ON OFF	FND & LED operation test Check the operating status of FND and LED. STEP order 1 : Game board SIDE LEFT 2 : Game board SIDE RIGHT 3 : BLUE FLIP HOLE 4 : RED FLIP HOLE 5 : DROP THE BALL above 6 : CEILING LED 7 : DRAGON CHANCE
PUSHER MOTOR TEST ALL TEST 1P TEST OFF 2P TEST OFF	OFF ON	PUSHER MOTOR OPERATION TEST Select items using the UP and DOWN buttons OFF, ON with the SELECT button PUSHER BALL FND1 : Encoder sensor displays '0', '1' PUSHER BALL FND2: Home sensor displays '0', '1'
SOLENOID TEST 1P 2P DROP OFF OFF RED FLIP OFF OFF BLUE FLIP OFF OFF DRAGON BALL OFF OFF	OFF MANUAL AUTO	Solenoid operation test Select solenoid using the UP and DOWN buttons Select mode with SELECT button LEFT button 1P solenoid operation RIGHT button 2P solenoid operation Select solenoid with BALL DROP button
BALL HOPPER TEST ALL TEST 1P TEST 3 OFF 2P TEST 3 OFF	OFF/ON Number of balls printed	Pusher ball output test. When running, it will automatically stop after 3 balls are ejected PUSHER BALL FND : Number of balls printed PUSHER BALL FND1 DOT : SHOOTER OUTPUT SENSOR PUSHER BALL FND2 DOT : SHOOTER ENCODER SENSOR

BALL SUPPLY TEST			BALL SUPPLY operation test
1P TEST	1 OFF	OFF/ON	When executed, it automatically stops after supplying 1 BALL.
2P TEST	1 OFF	Quantity of balls supplied	Drop Solenoid operation with BALL DROP JOYSTICK. Supply up to a maximum of 6 and supply again when DROP SOLENOID is activated. PUSHER BALL FND1: Game ball supply sensor displayed as '0', '1' PUSHER BALL FND2 : RAIL OUT SENSOR displayed as '0', '1' PUSHER BALL FND3: Number of balls supplied
BALL ELEVATOR TEST			Game ball elevator motor test.
1P TEST	OFF	OFF/ON/FULL	Automatically turns OFF and displays "FULL" when the game ball is FULL.
2P TEST	OFF		PUSHER BALL FND1 : MOTOR ENCODER SENSOR displayed as '0', '1' PUSHER BALL FND2: Top LIMIT SWITCH displayed as '0', '1' PUSHER BALL FND3: RAIL IN SENSOR. Displayed as '0', '1'
WIPER TEST			BALL SUPPLY operation test
1P TEST	OFF	OFF/HOME/ OPEN/SWING	HOME : Move to origin, OPEN : Spread out
2P TEST	OFF		SWING : Automatic testing
DRAGON MOTOR TEST			DRAGON CHANCE MOTOR test
SPIN MOTOR	OFF	OFF/ON	Operate the DRAGON solenoid with the LEFT
MOVE MOTOR	OFF	Coin input	 button A : SPIN MOTOR HOME SENSOR B : SPIN MOTOR ENCODER SENSOR C : MOVING MOTOR HOME SENSOR D : MOVING MOTOR ENCODER SENSOR E : ELEVATOR MOTOR HOME SENSOR F : ELEVATOR MOTOR ENCODER SENSOR
ELEV MOTOR	OFF	display	

DRAGON CHANCE TEST			NUMBER OF TESTS	DRAGON CHANCE Test
TEST	OFF		OFF/ON	When a ball appears, the corresponding quantity is displayed
BALL	100		Display winning ball score	When you press the RIGHT button, AUTO is displayed and continues to operate
RFID : 0			Number of recognized RFID chips	Press the RIGHT button, AUTO is displayed, and it continues to operate.
COIN TEST				Coin test
1P TEST	1	OFF	OFF/ON	Turn coin machine ON/OFF with SELECT button
			Amount of coins entered	PUSHER BALL FND1 : COIN SENSOR displayed as '0', '1'
2P TEST	1	OFF		PUSHER BALL FND2,FND3: Entered coin quantity
BILL TEST				Bill test
1P TEST	1	OFF	OFF/ON	Turn the bill machine ON/OFF with the SELECT button
			Input quantity of bills	PUSHER BALL FND1 : BILL SENSOR '0', '1' displayed
2P TEST	1	OFF		PUSHER BALL FND2, FND3 : Entered number of bills
TICKET TEST				Ticket Emission Test
1P TEST	1	OFF	OFF/ON	When you run it, it will emit 3 chapters and automatically stop
			Number of tickets printed	PUSHER BALL FND1 : TICKET SENSOR '0', '1'
2P TEST	1	OFF		PUSHER BALL FND2, FND3 : Number of tickets printed
CARD DISPEN TEST				CARD DISPENSER TEST
LEFT		RIGHT	OFF/ON	LEFT, BALL button: Remove 1 card from the left side
1P TEST	OFF 0	OFF 0	Display the number of cards printed	RIGHT, BALL-DROP button, eject 1 card from the right
2P TEST	OFF 0	OFF 0		PUSHER BALL FND1 : Discharged quantity and sensor (DOT) on the left
				PUSHER BALL FND3 : Right discharge quantity and sensor (DOT)
COUNTER TEST				COUNTER TEST
[COIN]		TICKET		LEFT, RIGHT buttons: Select COIN, TICKET
1P	0	0	Display the counted quantity	SELECT button : 1,2P COUNTER 1 UP
2P	0	0		BALL button : COIN COUNTER UP 1
				BALL-DROP button : Increases the ticket counter by 1
				PUSHER BALL FND1 : COIN COUNTER Quantity
				PUSHER BALL FND3 : TICKET COUNTER Quantity

MONITOR TEST	OFF	OFF, GRID COLOR, RED GREEN, BLUE, WHITE	MONITOR TEST : Run on video board Select mode with SELECT and BALL buttons
SOUND TEST	CH	OFF, ON	Sound Test : Running on Video Board Select mode with LEFT and RIGHT buttons Select sound type with UP and DOWN
Exit test mode with the CANCEL button			

● TEST MODE -> INPUT TEST

LCD DISPLAY (Simultaneous display of 1P, 2P)		SOUND	EXPLANATION
INPUT TEST	1P 2P		Select items using the UP and DOWN buttons
BALL BTN	OFF OFF	0	BALL BUTTON
DROP BTN	OFF OFF	1	BALL DROP
TICKET BTN	OFF OFF	2	TICKET BUTTON
SERVICE BTN	OFF OFF	3	SERVICE BUTTON
COIN	OFF OFF	4	COIN
BILL	OFF OFF	5	BILL
RAIL IN	OFF OFF	6	RAIL IN SENSOR
RAIL OUT	OFF OFF	7	RAIL OUT SENSOR
BALL DROP	OFF OFF	8	BALL DROP SENSOR
LIFT SWITCH	OFF OFF	9	BALL LIFT UP SWITCH
LIFT ECODER	OFF OFF	10	BALL LIFT ECODER SENSOR
SHOOTER SEN	OFF OFF	11	SHOOTER SENSOR
SHOOTER ENC	OFF OFF	12	SHOOTER ENCODER SENSOR
PUSHER HOME	OFF OFF	13	PUSHER HOME SENSOR
UP LF HOLE	OFF OFF	14	UP LEFT HOLE SENSOR
UP RI HOLE	OFF OFF	15	UP RIGHT HOLE SENSOR
BOT LF HOLE	OFF OFF	16	BOTTOM LEFT HOLE SENSOR
BOT RI HOLE	OFF OFF	17	BOTTOM RIGHT HOLE SENSOR
BLUE HOLE1	OFF OFF	18	BLUE HOLE1 SENSOR
BLUE HOLE2	OFF OFF	19	BLUE HOLE2 SENSOR
BLUE HOLE3	OFF OFF	20	BLUE HOLE3 SENSOR
BLUE HOLE4	OFF OFF	A	BLUE HOLE4 SENSOR
RED HOLE1	OFF OFF	B	RED HOLE1 SENSOR
RED HOLE2	OFF OFF	C	RED HOLE2 SENSOR
RED HOLE3	OFF OFF	D	RED HOLE3 SENSOR
RED HOLE4	OFF OFF	E	RED HOLE4 SENSOR
BLUE OPEN	OFF OFF	F	BLUE OPEN HOLE SENSOR
BLUE 15	OFF OFF	G	BLUE 15 HOLE SENSOR
RED OPEN	OFF OFF	H	RED OPEN HOLE SENSOR
RED 20	OFF OFF	I	RED 20 HOLE SENSOR
DR-CHANCE	OFF OFF	J	DRAGON CHANCE HOLE SENSOR

LOW HOLE1	OFF OFF	K	LOW HOLE 1 SENSOR
LOW HOLE2	OFF OFF	L	LOW HOLE 2 SENSOR
LOW HOLE3	OFF OFF	M	LOW HOLE 3 SENSOR
LOW HOLE4	OFF OFF	N	LOW HOLE 4 SENSOR
LOW HOLE5	OFF OFF	O	LOW HOLE 5 SENSOR
LOW HOLE6	OFF OFF	P	LOW HOLE 6 SENSOR
LOW HOLE7	OFF OFF	Q	LOW HOLE 7 SENSOR
LOW HOLE8	OFF OFF	R	LOW HOLE 8 SENSOR
LOW HOLE9	OFF OFF	S	LOW HOLE 9 SENSOR
BALL MOVE	OFF OFF	T	BALL MOVE HOME SENSOR
SPIN HOME	OFF OFF	U	SPIN HOME SENSOR
SPIN ENC	OFF OFF	V	SPIN ENCODER SENSOR
ELEV SWITCH	OFF OFF	W	BALL ELEV UP LIMIT SWITCH
ELEV ENCODER	OFF OFF	X	BALL ELEV ENCODER SENSOR
BALL SENSOR	OFF OFF	Y	DRAGON CHANCE BALL SENSOR
TILT SENSOR	OFF OFF	Z	TILT SENSOR

5-7. ERROR CODE

CODE	ERROR TYPE	DESCRIPTION	EXPLANATION
E01	LOCAL TYPE	Local stored data CRC error	If the issue persists even after turning the power off and on, replace the CPU board
E02	SYSTEM	Setup save data CRC error	If the issue persists even after turning the power off and on, replace the CPU board
E03		Game save data CRC error	If the issue persists even after turning the power off and on, replace the CPU board
E11	COIN ACCEPTOR	Coin sensor signal remains active	COIN ACCEPTOR CHECK
E13	BILL ACCEPTOR	Bill acceptor sensor signal remains active	BILL ACCEPTOR CHECK
E31	REGARDING GAME BALLS (RED BALLS)	Insufficient number of game balls	1. Check game ball quantity 2. Game ball LIFT and LIMIT SW check
E32		The game ball is stuck, so the supply is not working	1. Check if the game ball is stuck on the game board 2. Game ball LIFT and LIMIT SW check
E33		RAIL IN sensor error	RAIL IN sensor check
E34		Game Ball Drop Solenoid error	Check Game Ball Drop Solenoid
E35		GAME BALL SUPPLY error	Game ball supply motor and gear ENC sensor check
E36		Game ball rail output error	RAIL OUT sensor check
E41	DRAGON CHANCE	DRAGON SPIN error	1. Check DRAGON MOVE MOTOR 2. Check DRAGON MOVE HOME sensor 3. RFID Board Check
E43		DRAGON CHANCE MOVE HOME	1. Check DRAGON MOVE MOTOR 2. Check DRAGON MOVE HOME sensor
E45		DRAGON CHANCE BALL ID	DRAGON CHANCE BALL RFID Tag Check
E46		DRAGON CHANCE SOLENOID	1. Check DRAGON CHANCE SOLENOID 2. Check DRAGON BALL sensor
E51	PUSHER	PUSHER BLDC HOLE sensor	Pusher BLDC motor check
E52		MAIN PUSHER HOME sensor	1. Check PUSHER BLDC motor 2. Check PUSHER HOME INT sensor
E61	BALL SHOOTER	BALL SHOOTER	1. Check ball shooter motor 2. Check for ball jamming 3. Check ball output sensor
E62		BALL SHOOTER ENCODER	1. Check ball shooter motor 2. Check ball shooter encoder sensor
E71	GAME BALL ELEVATOR	GAME BALL LIFT ENCODER	1. Check Game Ball Lift Motor 2. Check Game Ball LIFT Encoder Sensor
E72		GAME BALL LIFT LIMIT SWITCH	1. Check Game Ball Lift Motor 2. Check Game Ball UP LIMIT SWITCH
E73	DRAGON BALL ELEVATOR	DRAGON BALL LIFT ENCODER	1. Check Dragon Ball Lift Motor 2. Check DRAGON BALL LIFT encoder sensor
E74		DRAGON BALL LIFT	1. Check Dragon Ball Lift Motor 2. Check DRAGON BALL LIFT UP LIMIT SWITCH

EC1	CARD DISPENSOR	CARD DISPENSOR	1. Check card quantity 2. Check card dispenser
EC2		CARD DISPENSOR IO BOARD	Card dispenser IO BOARD check
TL	TILT	TILT error	Maintain for 15 seconds

* ERROR DETECTION METHOD

CODE	ERROR TYPE	DESCRIPTION	ERROR OCCURRENCE CONDITIONS
E01	LOCAL TYPE	Local stored data CRC error	
E02	SYSTEM	Setup save data CRC error	
E03		Game save data CRC error	
E11	COIN ACCEPTOR	Coin sensor signal remains active	When INHIBIT ON and the sensor is detecting for more than 1 second
E13	BILL ACCEPTOR	Bill acceptor sensor signal remains active	When INHIBIT ON and the sensor is detecting for more than 1 second
E31	REGARDING GAME BALLS (RED BALLS)	Insufficient number of game balls	Occurs when the game ball is not filled for a certain period of time (20 seconds + alpha) upon booting.
E32		The game ball is stuck, so the supply is not working	If the LIFT LIMIT SWITCH and RAIL SENSOR fail to detect for more than 60 seconds after ejecting the game ball 6 times and then ejecting it again 6 times. However, if the 6th maximum dispense is performed again after 6 dispenses and either the LIFT LIMIT SWITCH or RAIL SENSOR is detected, no error will occur, and the accumulated quantity will be cleared to 0.
E33		RAIL IN sensor error	When RAIL IN SENSOR is not detected after lifting 3 to 4 or more balls on the game ball lift
E34		Game Ball Drop Solenoid error	This occurs when the phenomenon where no balls are detected by the game board sensor for 5 seconds after a game ball passes through the DROP SOLENOID persists until 12 game balls have been launched. If even one game ball is detected by the game board sensor, the accumulated quantity is set to 0 (CLEAR).
E35		GAME BALL SUPPLY error	When the encoder detecting motor rotation is not detected during motor rotation for game ball DROP Forward rotation 1.5 seconds -> Reverse rotation 0.3 seconds -> Stop 0.8 seconds Occurs after performing the above process 3 times
E36		Game ball rail output error	When the game ball supply motor operates normally 16 times but the sensor does not detect Forward rotation 1.5 seconds -> Stop 0.2 seconds

E41	DRAGON CHANCE	DRAGON SPIN error	DRAGON CHANCE: When the spin motor and feed motor are operating normally but the ball is not detected by the RFID 1. Spin motor operates 2. After 4.5 seconds + alpha, the feed motor moves backward 3. After the feed motor stops, the feed motor moves forward and backward after 6 seconds 4. Repeat forward and backward movement 3 times
E43		DRAGON CHANCE MOVE HOME	DRAGON CHANCE: When the transfer motor attempts 3 times but the HOME SENSOR is not detected Forward rotation 8 seconds -> Reverse rotation 1.5 seconds 1. When going to HOME - When the HOME sensor is not detected after operating for 8 seconds - If the motor encoder sensor does not detect anything for 0.25 seconds, stop for 0.5 seconds, then rotate in reverse (1.5 seconds), and repeat the cycle of stopping for 0.5 seconds and rotating in forward 3 times. 2. When going backward - When the HOME sensor is detected even after 5 seconds of operation - When the encoder sensor does not input the desired number of times even after operating for 5 seconds 3. When shaking - When it operated for 5 seconds but the encoder sensor did not receive input the desired number of times ※ Even if you perform error clearing, normal operation will not occur due to a problem with the sensor location information, so you must turn POWER OFF -> ON to complete the boot process.
E45		DRAGON CHANCE BALL ID	When the ball ID detected by the RFID is an error during DRAGON CHANCE
E46		DRAGON CHANCE SOLENOID	When the DRAGON CHANCE ends normally and the ball retrieval solenoid activates, but the ball is not detected by the bottom sensor When retrying 3 times during each DRAGON CHANCE and repeating 3 times
E51	PUSHER	PUSHER BLDC HOLE sensor	When the pusher motor hole sensor is not checked for 1 second
E52		MAIN PUSHER HOME sensor	When the pusher motor home sensor is not checked for 6 seconds

E61	BALL SHOOTER	BALL SHOOTER	When the ball shooter motor repeats 4-second operation followed by 0.3-second pause 5 times but no ball output is detected
E62		BALL SHOOTER ENCODER	When the ball shooter motor is operating and the branch sensor does not detect anything 4 times in 2 seconds
E71	GAME BALL ELEVATOR	GAME BALL LIFT ENCODER	When the game ball lift motor branch sensor fails to detect 3 times in 1 second
E72		GAME BALL LIFT LIMIT SWITCH	If the Game Ball Rail-In sensor detects 6 times but the Limit Switch does not, the game stops if the Rain-In sensor detects something regardless of the Limit Switch, and an error occurs if the Rain-In sensor detects 6 times again.
E73	DRAGON BALL ELEVATOR	DRAGON BALL LIFT ENCODER	When the DRAGON CHANCE ELEVATOR motor branch sensor does not detect anything for 0.5 seconds
E74		DRAGON BALL LIFT	When the DRAGON CHANCE ELEVATOR motor is operating normally but the upper LIMIT SW is not detected after 5 attempts
EC1	CARD DISPENSOR	CARD DISPENSOR	When the card ejection sensor continuously detects (no card) for 14 seconds Occurs only when there is a left/right mode error
EC2		CARD DISPENSOR IO BOARD	When the card ejection signal is turned ON but the card ejection sensor does not detect it within 0.1 seconds (CARD IO-board error)
TL	TILT	TILT error	When the TILT sensor detects 4 times within 2 seconds

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

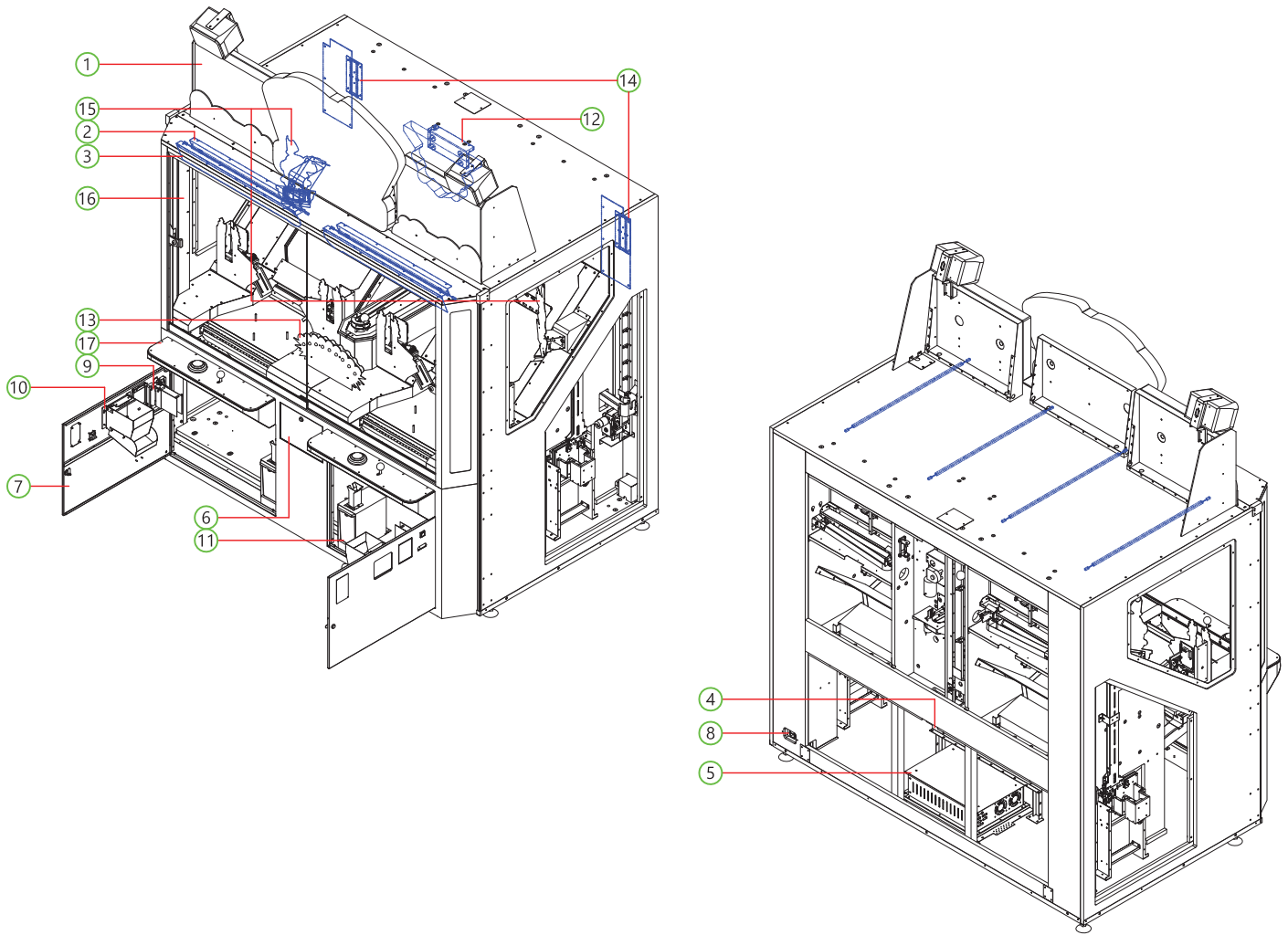
: Dust removal on the main board will be carried out once a month.

6-4. Basic product management : Clean it regularly

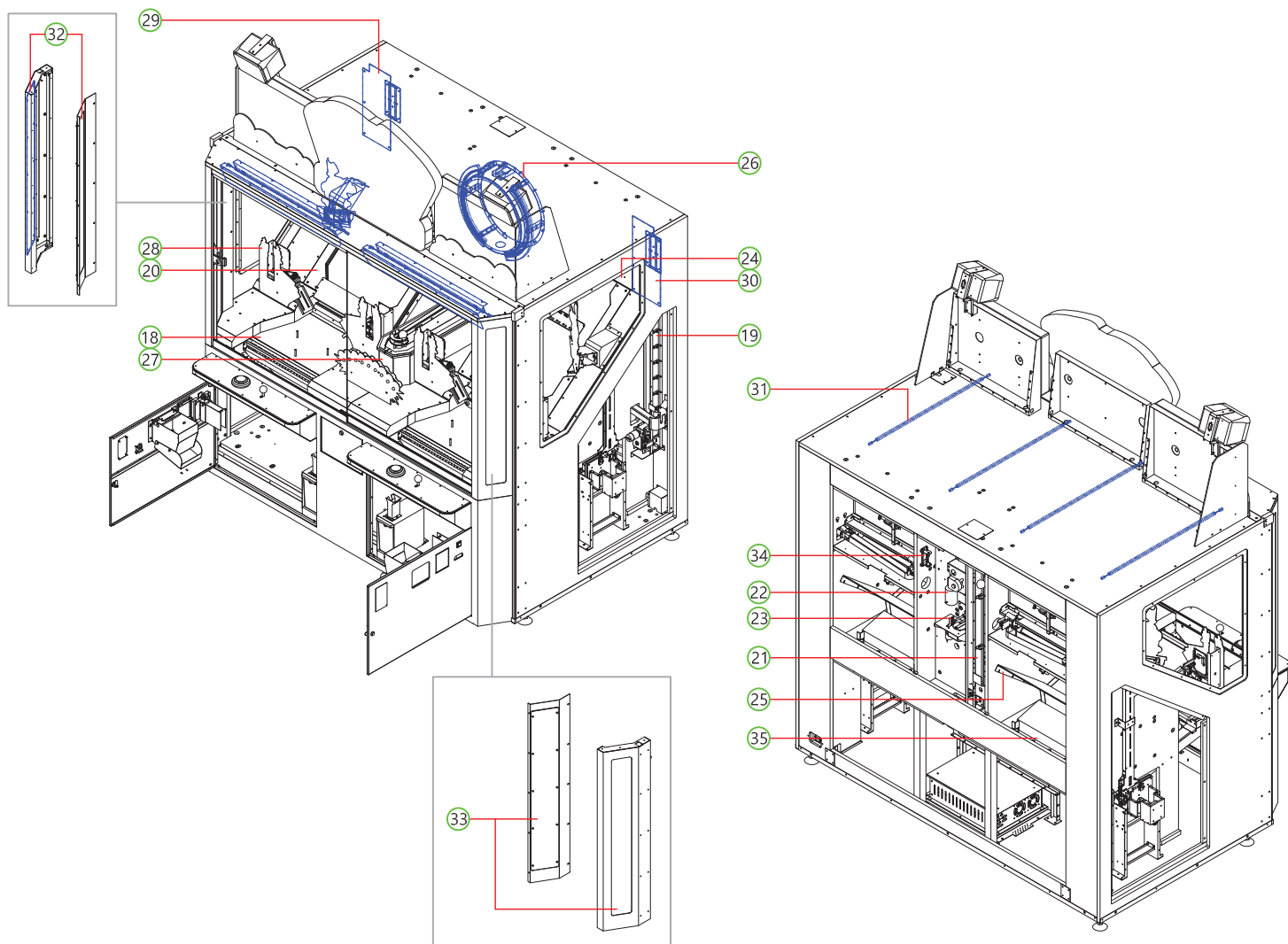
6-5. This product should only be used for indoor use

7. EXPLODE VIEW

7-1. MAIN CABINET PART

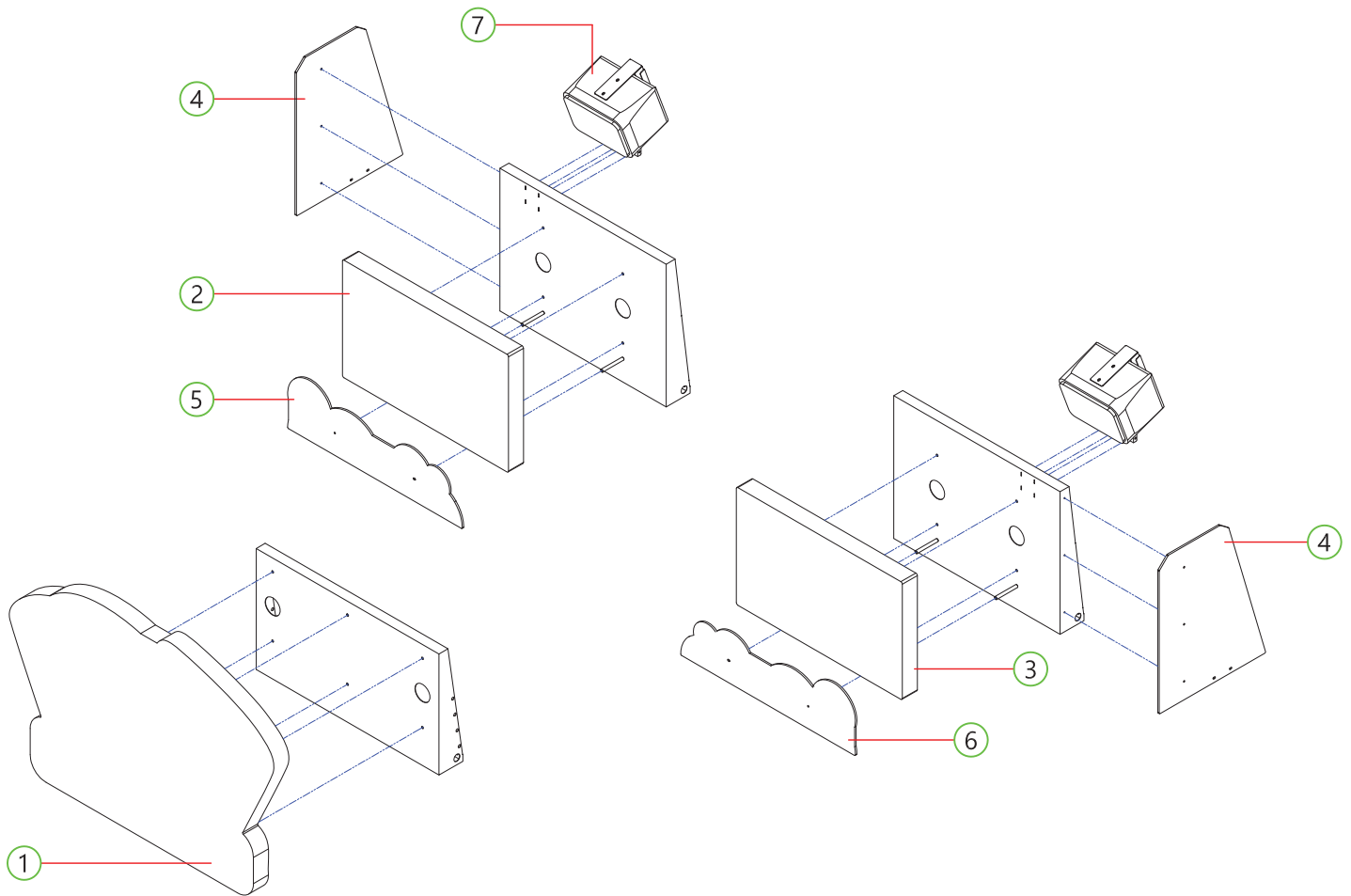


NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BILLBOARD PART	-	1	-
2	CARD COLLECTION LED PART	-	2	-
3	CARD COLLECTION DECO PART-L, R	-	2	-
4	MAIN BOARD PART	-	1	-
5	POWER PART	-	1	-
6	CONTROL PANEL DOOR PART	-	1	-
7	DOOR PART	-	2	-
8	AC INPUT PART	-	1	-
9	TICKET DISPENSER PART	-	2	-
10	CARD DROP CASE PART	-	2	-
11	COIN BOX PART	-	2	-
12	DRAGON CHANCE PART	-	1	-
13	BALL COLLECTION PART	-	1	-
14	MONITOR DECO LIGHT PART	-	2	-
15	PUSHER BALL FND PART PART	-	2	-
16	WINDOW GLASS DOOR PART	-	2	-
17	BUTTON PLATE ASS'Y PART	-	2	-



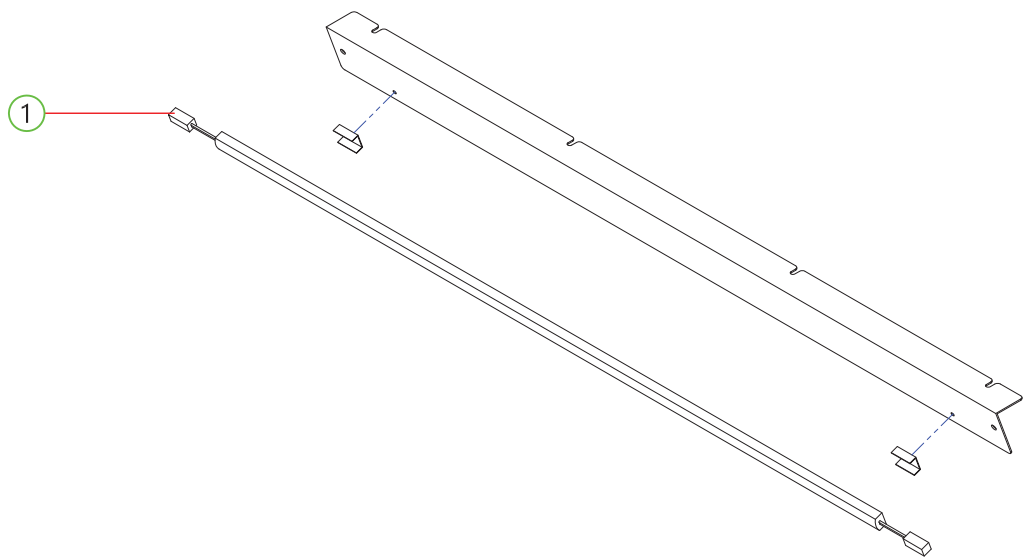
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
18	PUSHER PART	-	2	-
19	SMALL BALL ELEVATOR PART	-	2	-
20	TOTAL GAME BOARD ASS'Y PART	-	2	-
21	BALL ELEVATOR PART	-	1	-
22	MEGA WHEEL MOTOR PART	-	1	-
23	DROP SLIDE MOVE PART	-	1	-
24	MONITOR PART	-	2	-
25	BALL PROTECT PART	-	2	-
26	MEGA BALL PART	-	1	-
27	MEGA BALL CENTER PART	-	1	-
28	CARD DISPENSER PART	-	4	-
29	MONITOR SIDE COVER ACRYL-L	ACRYL-3t	1	ADRG0ACP025
30	MONITOR SIDE COVER ACRYL-R	ACRYL-3t	1	ADRG0ACP026
31	LED BAR 12V ASS'Y_V2	710mm	4	AZZZ0PCB241
32	SIDE DECO LED BACK COVER ACRYL-L	ACRYL-3t	2	ADRG0ACP033
33	SIDE DECO LED BACK COVER ACRYL-R	ACRYL-3t	2	ADRG0ACP032
34	TILT	-	1	MWIC0PAR100
35	BALL BACK COVER-C	PET-1.0t	2	MDRG0ACR063

7-2. BILLBOARD PART



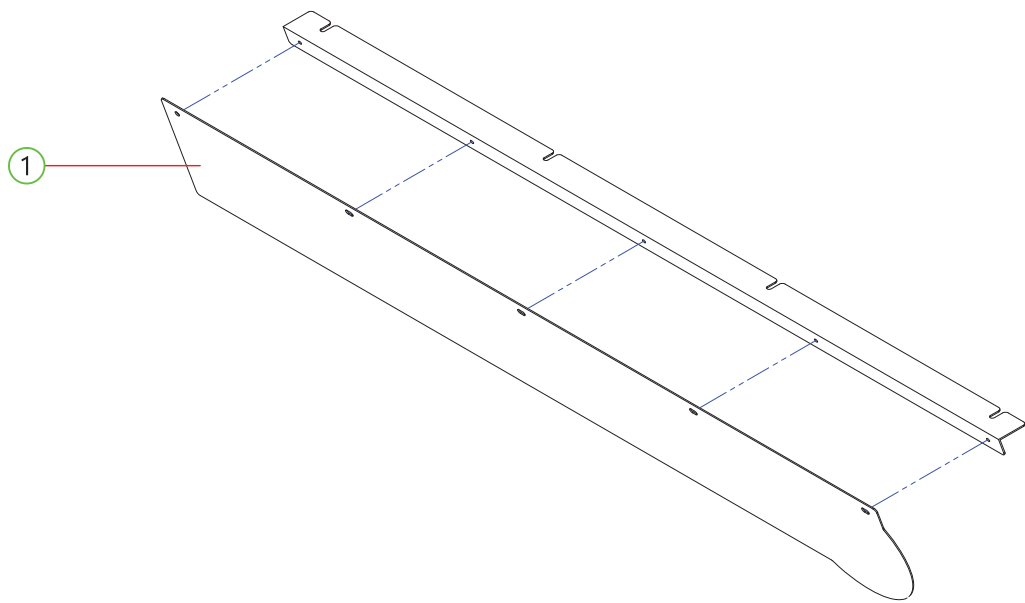
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BILLBOARD CENTER TITTLE	LED BOX	1	ADRG0ACP035
2	BILLBOARD FLAG TITTLE-L	LED BOX	1	ADRG0ACP036
3	BILLBOARD FLAG TITTLE-R	LED BOX	1	ADRG0ACP037
4	BILLBOARD SIDE DECO FOMAX-L, R	FOMAX-5t	2	ADRG0ACP004, 005
5	BILLBOARD CLOUD FOMAX-L	FOMAX-5t	1	ADRG0ACP002
6	BILLBOARD CLOUD FOMAX-R	FOMAX-5t	1	ADRG0ACP003
7	SPEAKER BOX	S00110D1_4OHM 40W	2	MZZZ0SPE048

7-3. CARD COLLECTION LED PART



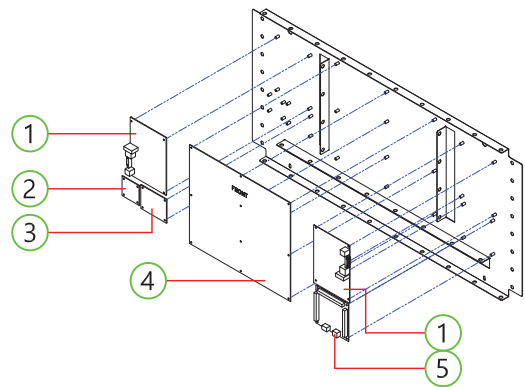
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	LED BAR 12V ASS'Y_V2	710mm	1	AZZZ0PCB241

7-4. CARD COLLECTION DECO PART - L, R



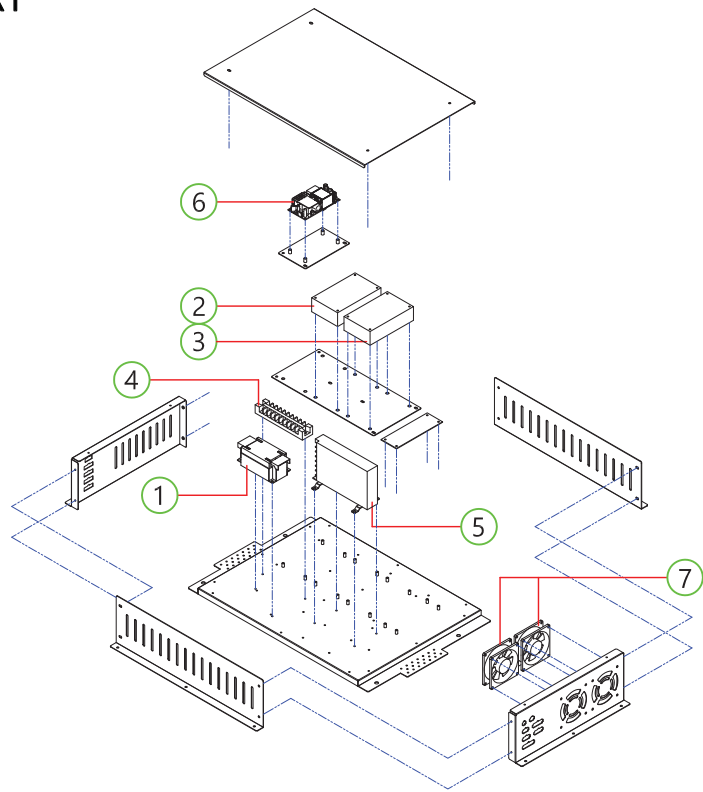
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	CARD COLLECTION PET-L, R	PET-1.0t	1	ADRG0ACP009, 010

7-5. MAIN BOARD PART



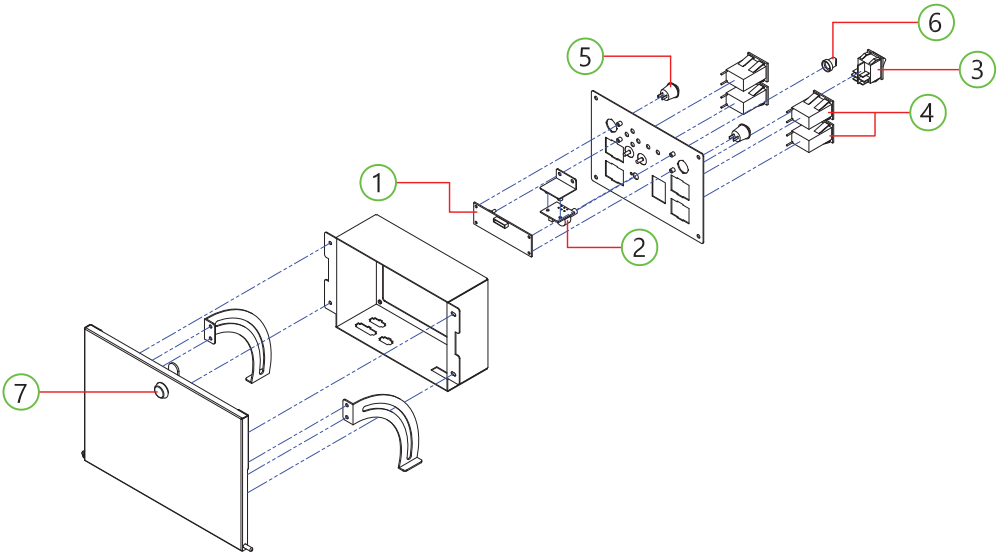
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	ANDROID MAIN PCB ASS'Y	RK3399B-A DRAGONS	2	ADRG0PCB002
	ANDROID MAIN PCB ASS'Y	CK-3576A 4+32 ANDROID_14	2	AZZZ0PCB272
2	SOL FET 4CH PCB ASS'Y	POLY FUSE_2.2A/ 2920L100	1	AKZB0PCB008
3	AUDIO AMP 12-24V PCB ASS'Y	-	1	AZZZ0PCB263
4	MAIN BOARD ASS'Y	WITH TOP	1	ADRG0PCB001
5	F407_WS2813B_IO PCB ASS'Y	DRAGONS	1	ADRG0PCB012

7-6. POWER PART



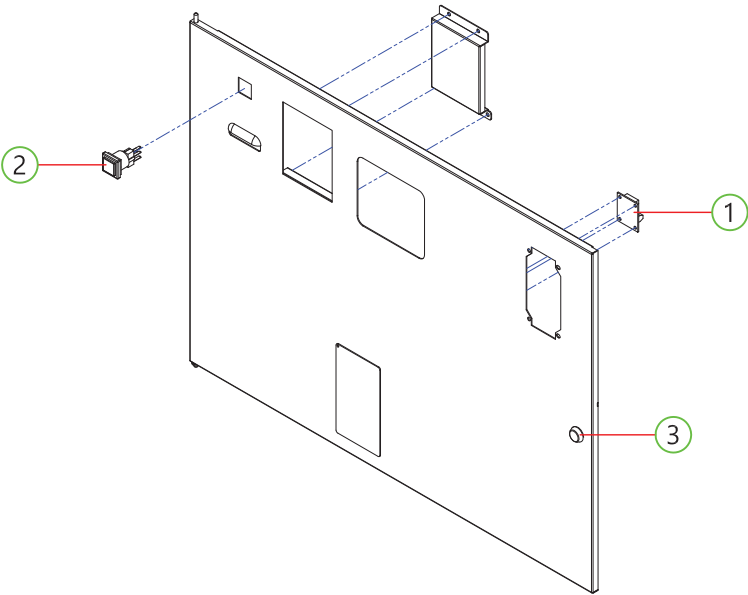
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	NOISE FILTER	TB1-10A0D0	1	MELE0NOI012
2	POWER SMPS	LOP-600-24V	1	MELE0SMP159
3	POWER SMPS	LOP-600-12V	1	MELE0SMP160
4	TERMINAL BLOCK	250V 10P	1	MELE0TEB003
5	POWER SMPS	LRS 150F-5V	1	MELE0SMP096
6	POWER SMPS	LOP-200-12V	1	MELE0SMP162
	[COMPATIBLE] POWER SMPS	LOP-300-12V	1	MELE0SMP161
7	DC FAN	80x80x25	2	MZZZ0FAN037

7-7. CONTROL PANEL DOOR PART



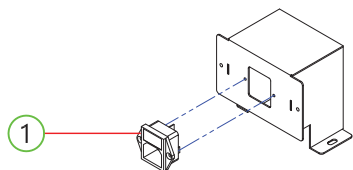
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	VIDEO SETUP BUTTON ASS'Y	-	1	AZZZ0PCB264
2	VOLUMN PCB ASS'Y	1 VOLUME	1	AHM20PCB016
3	ROCKER SWITCH	R595KDF	1	MELE0SWI021
4	COUNTER	OA127CL W/2P CONNECTOR 20CM WIRE	4	MZZZ0COU002
5	PUSH BUTTON SWITCH	DS-412R ROSH	2	MELE0PUS006
6	VOLUME KNOB	CAP BLUE	1	MELE0VOL007
7	KEY ASS'Y 7001	7001 ONLY BODY	1	MZZZ0KEY076

7-8. DOOR PART

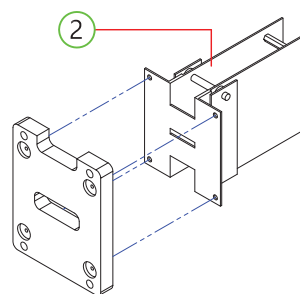


NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	COIN JOIN PCB ASS'Y	-	1	AZZZ0PCB137
2	BUTTON SWITCH	TICKET AM1PB-26SH R12D	1	MMUM0BUT002
3	KEY ASS'Y 7001	7001 ONLY BODY	1	MZZZ0KEY076

7-9. AC INPUT PART

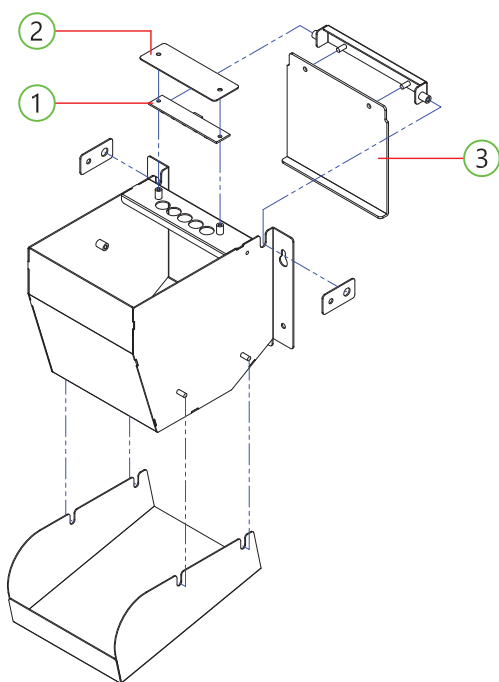


7-10. TICKET DISPENSER PART

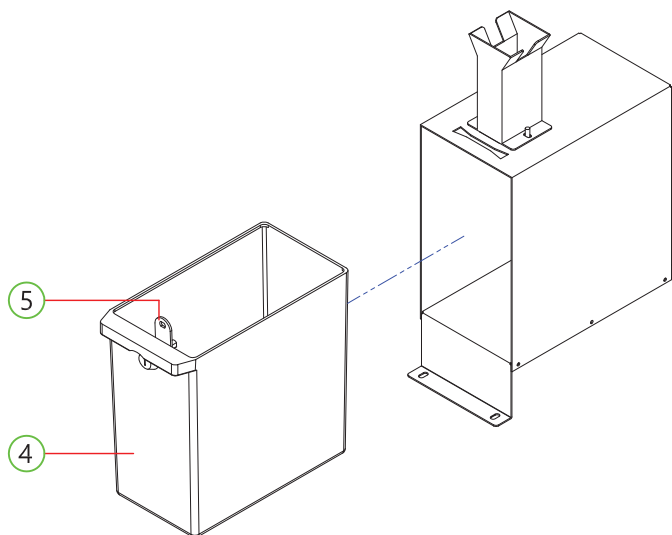


NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	AC INPUT	DAC-13H	1	MELE0SWI015
2	TICKET DISPENSER	CLE CL-002Q_270 HIGH SPEED	1	MZZZ0TID010

7-11. CARD DROP CASE PART

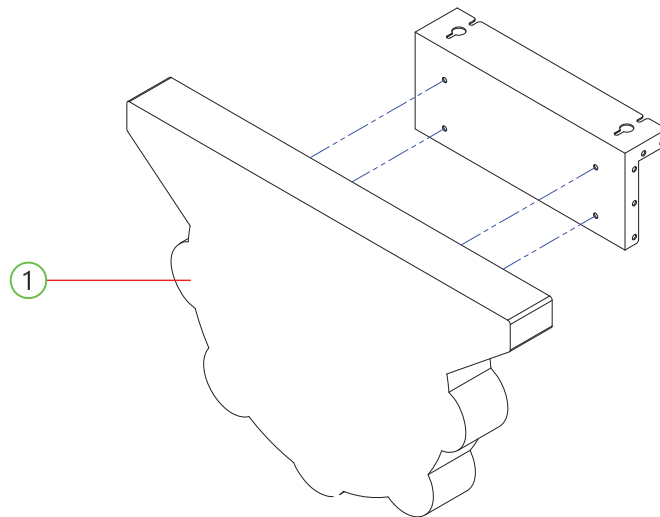


7-12. COIN BOX PART



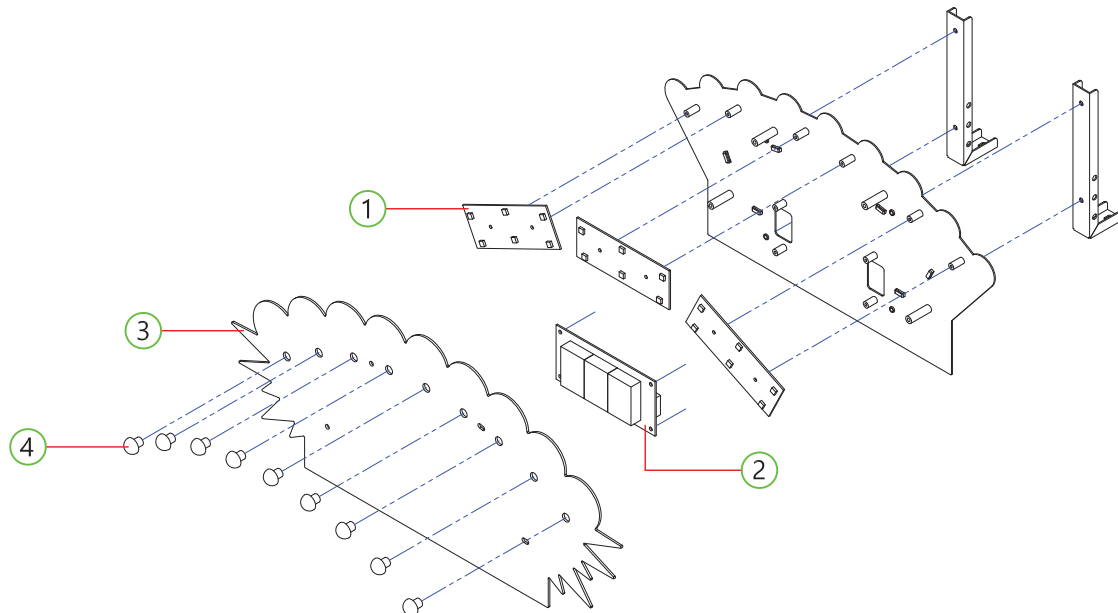
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	LED PCB ASS'Y	-	1	AMUM0PCB005
2	PCB PROTECT ACRYL	PET-1t	1	MDRG0ACR039
3	CARD DROP COVER ACRYL	PC-2t	1	ADRG0ACP013
4	COIN BOX	BLACK	1	MDRE0PLA007
5	KEY ASS'Y 6001	6001 ONLY BODY	1	MZZZ0KEY075

7-13. DRAGON CHANCE PART



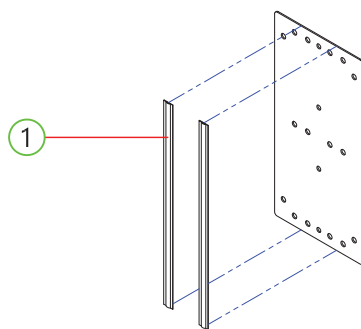
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	DRAGON CHANCE LED PART	LED BOX	1	ADRG0ACP038

7-14. BALL COLLECTION PART



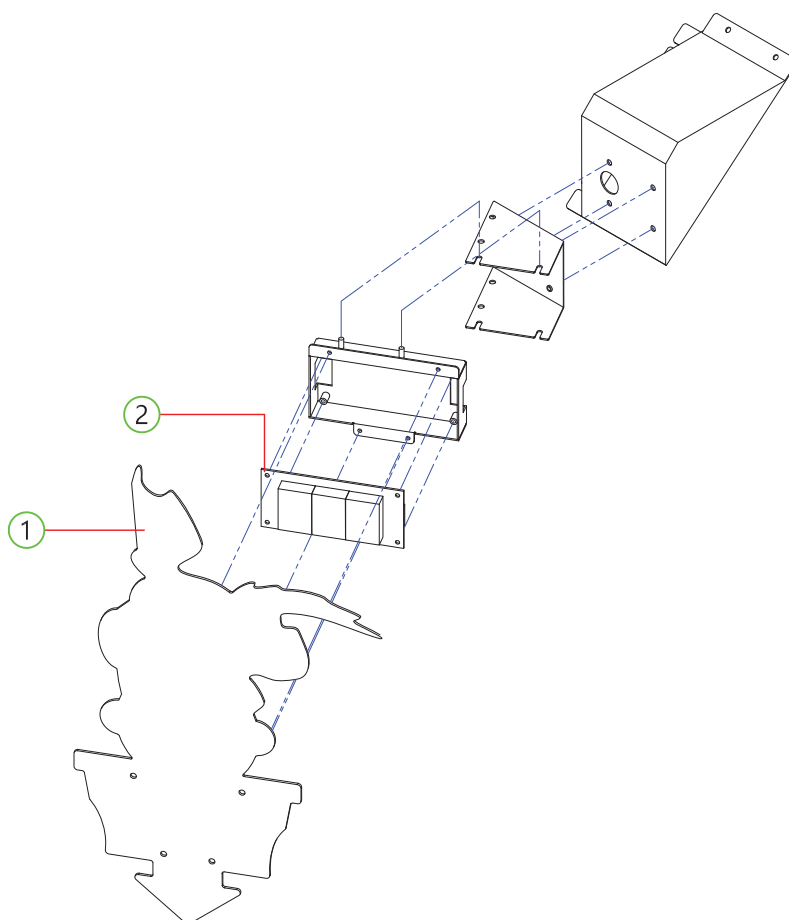
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BALL COLLECTION LED PCB ASS'Y	DRAGONS	3	ADRG0PCB008
2	FND PCB ASS'Y	2941-3(STRAIGHT)	1	AFND0PCB037
3	BONUS COLLECTION COVER ACRYL	ACRYL-2t	1	ADRG0ACP006
4	LED CAP	10mm, CLEAR	9	MWOL0PLA002

7-15. MONITOR DECO LIGHT PART



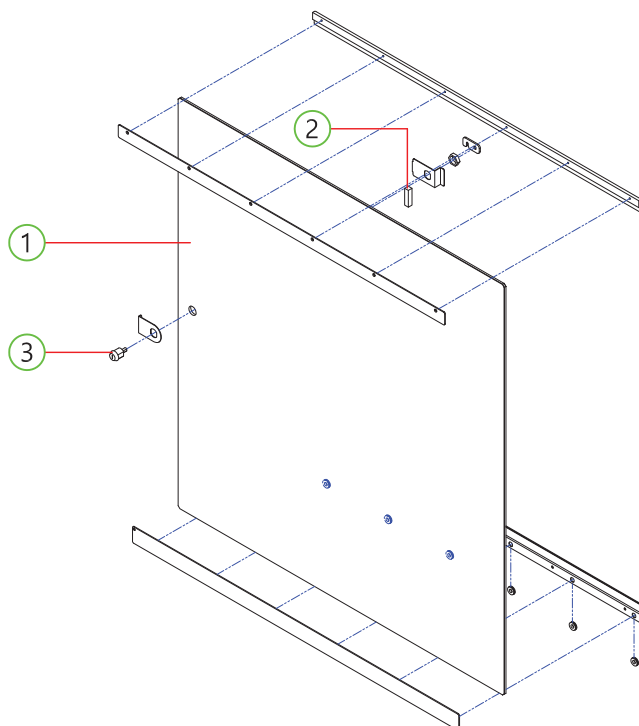
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	FLEX_COB480_8_W5000_184_LR_11_NODE	-	2	AELE0COB074

7-16. PUSHER BALL FND PART



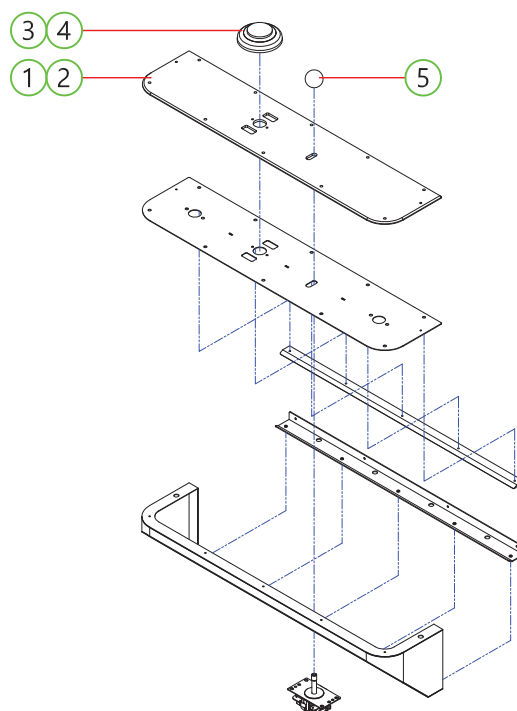
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	FND PCB ASS'Y	2941-3(STRAIGHT)	1	AFND0PCB037
2	FRONT MONITOR MASK ACRYL	ACRYL-5.0T	1	AKI20ACP002

7-17. WINDOW GLASS DOOR PART



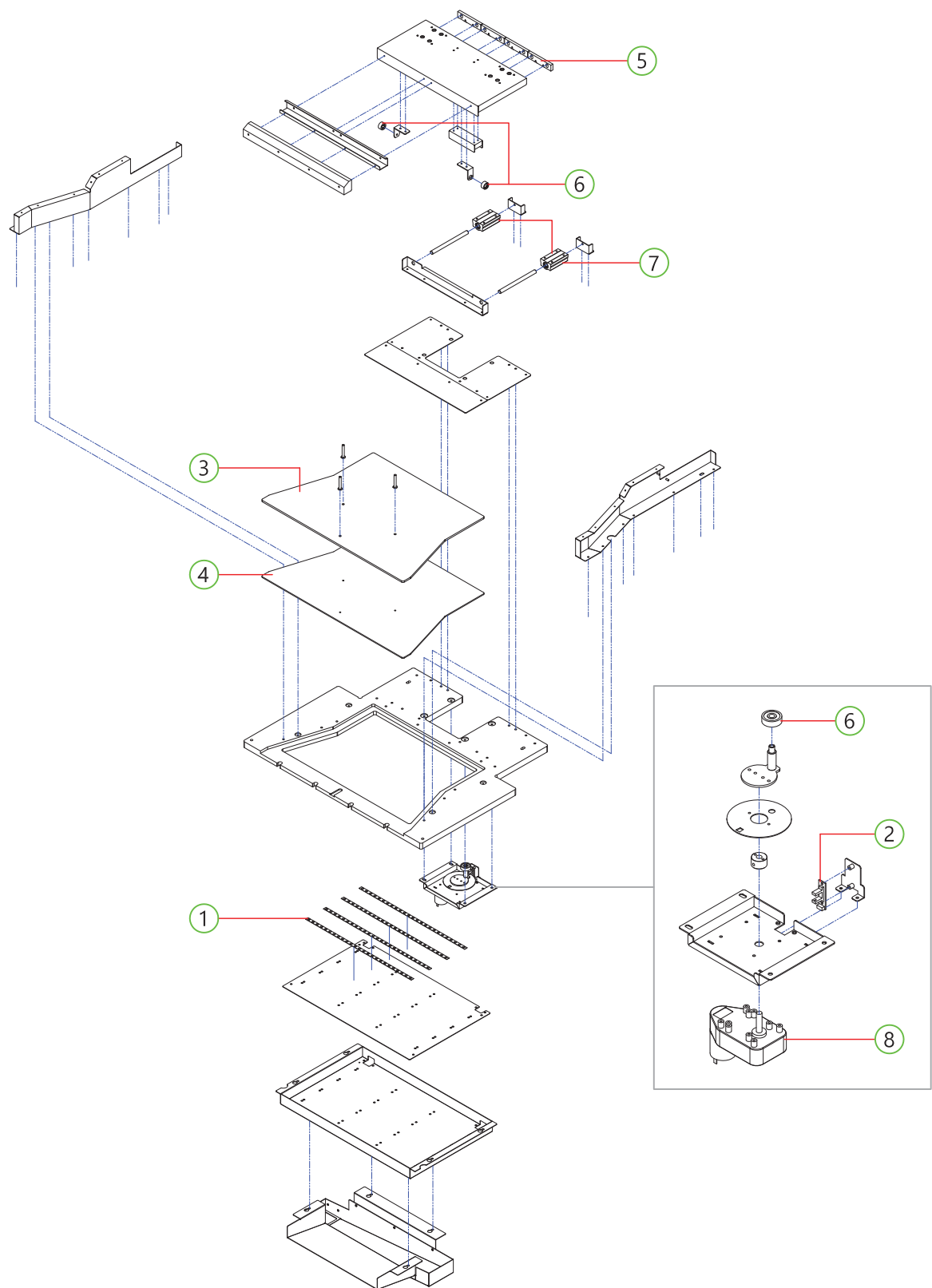
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	WINDOW GLASS DOOR	GLASS-5t	1	MDRG0GLA001
2	WINDOW GLASS DOOR SPONGE-A	SPONGE-10t	1	MTP20SPO001
3	KEY ASS'Y 7001	7001 ONLY BODY	1	MZZZ0KEY076

7-18. BUTTON PLATE PART



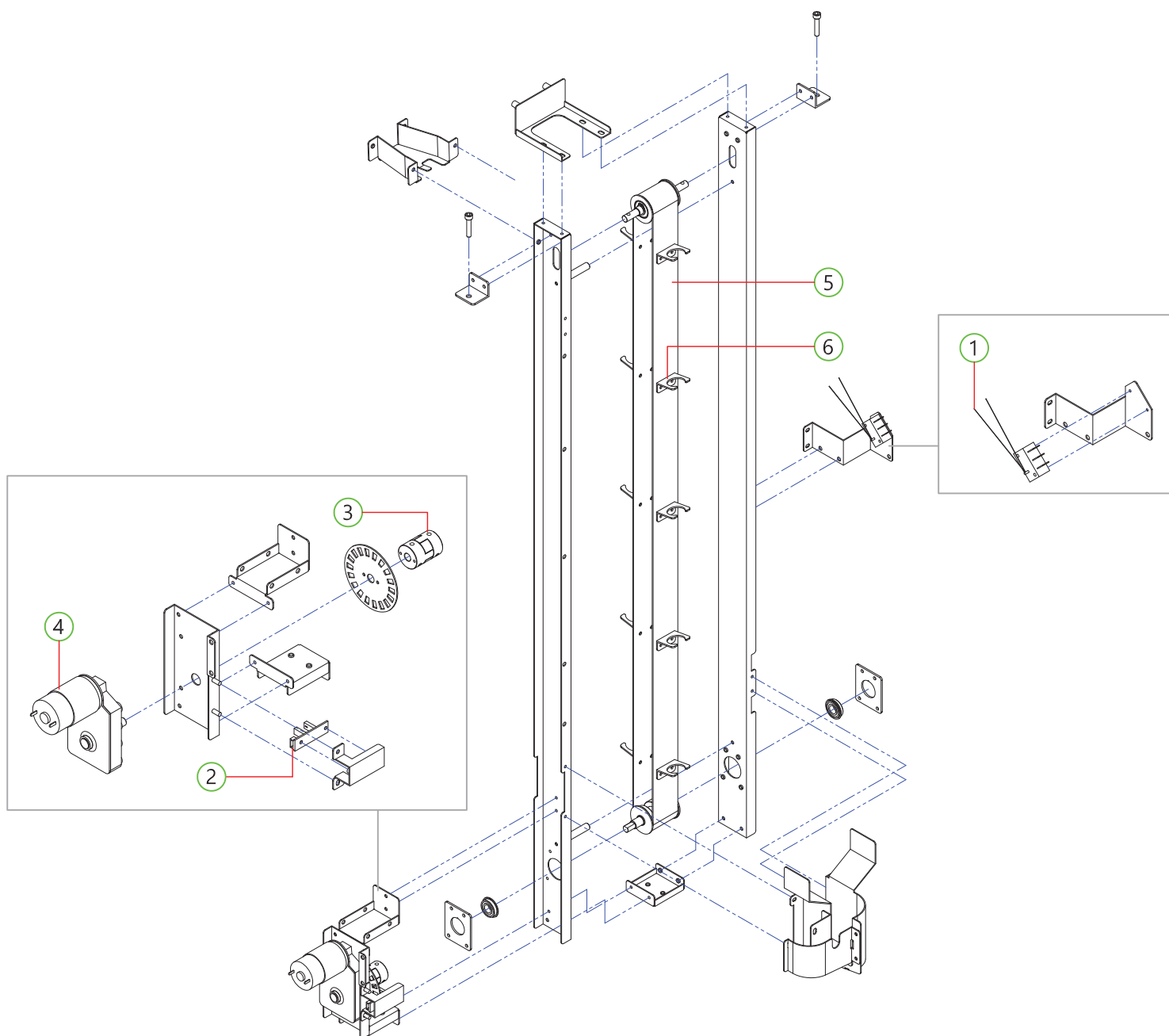
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BUTTON PLATE COVER ACRYL-1P	ACRYL-4.5t	1	ADRG0ACP007
2	BUTTON PLATE COVER ACRYL-2P	ACRYL-4.5t	1	ADRG0ACP008
3	BUTTON ASS'Y	CL-2020 65 WITH LED	1	AZZZ0BUT009
4	BUTTON LED HOUSING	-	1	MZZZ0PLA038
5	JOY STICK	RED	1	MZZZ0JOY017

7-19. PUSHER PART



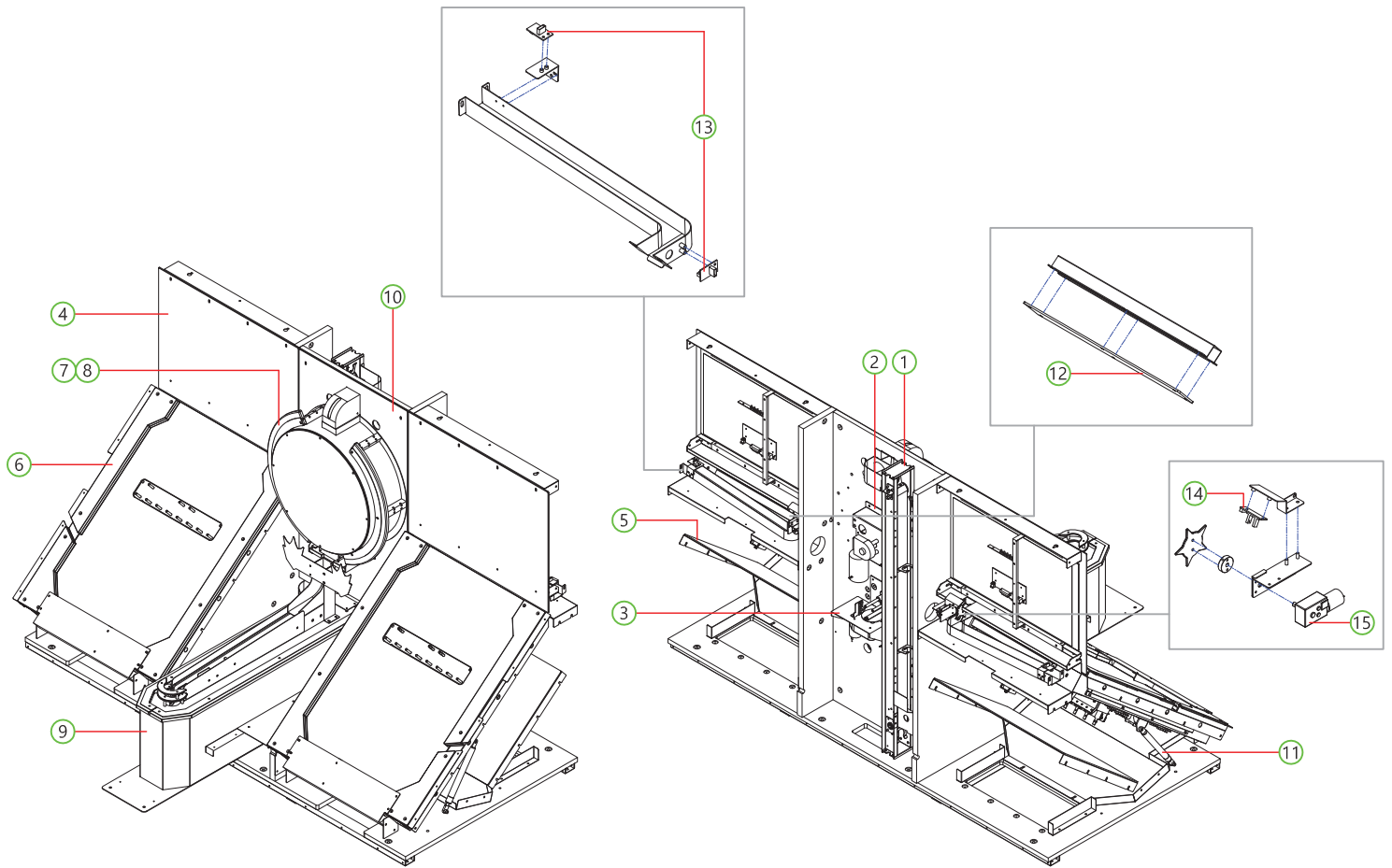
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	FLEX_WS2813B_400_NWP_LR_24	WS2813 V5 TOP300, 24	4	MELE0LED116
2	PHOTO INT-1 PCB ASS'Y	ANGLE TYPE	1	AZZZ0PCB103
3	PUSHER FRONT BOTTOM ACRYL	ACRYL-5t	1	MDRG0ACR043
4	PUSHER FRONT BASE ACRYL	ACRYL-3t	1	MDRG0ACR042
5	PUSHER CHIP FENCE BLOCK	ACETAL-8t	4	MSPG0PRO021
6	BEARING	638ZZ	3	MZZZ0BEA064
7	LM BEARING	SL10UU	2	MZZZ0BEA152
8	MOTOR	KGV2-0350-NB3640S1	1	MZZZ0MOT152

7-20. SMALL BALL ELEVATOR PART



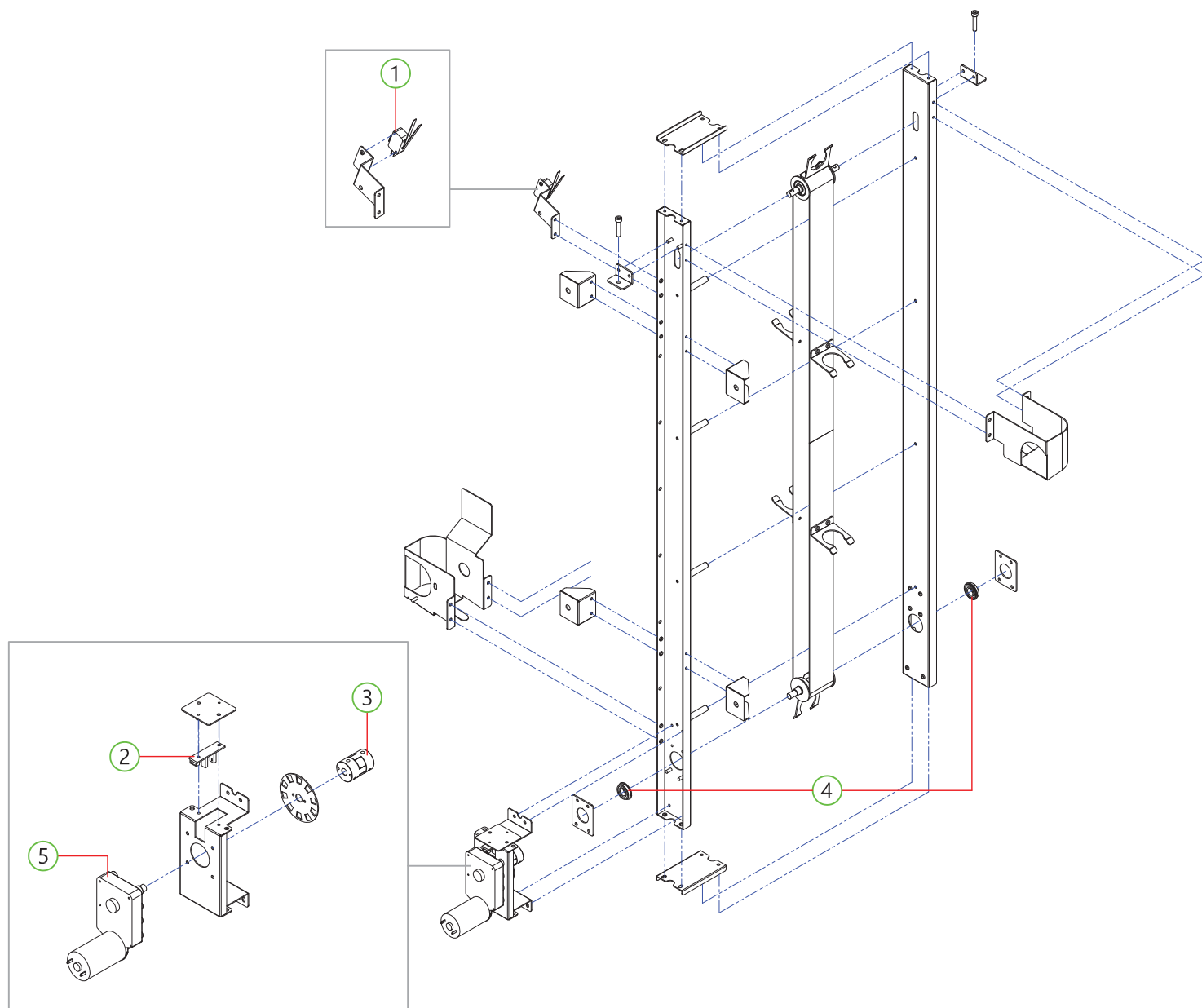
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	MICRO SWITCH	CNR-05H-03 ZIPPY-FOR COIN	1	MELE0MIC002
2	PHOTO INT-1 PCB ASS'Y	ANGLE TYPE	1	AZZZ0PCB103
3	COUPLING ASS'Y	CR050	1	AZZZ0COP003
4	MOTOR	KGE-0116-ND3657 U1	1	MZZZ0MOT155
5	SMALL BALL CONVEYOR BELT	URETHANE-1.4t	1	MDRG0BEL002
6	SMALL BALL ELEVATOR LIFT BKT	GI-1.6t	1	MDRG0MEP217

7-21. TOTAL GAME BOARD ASS'Y PART



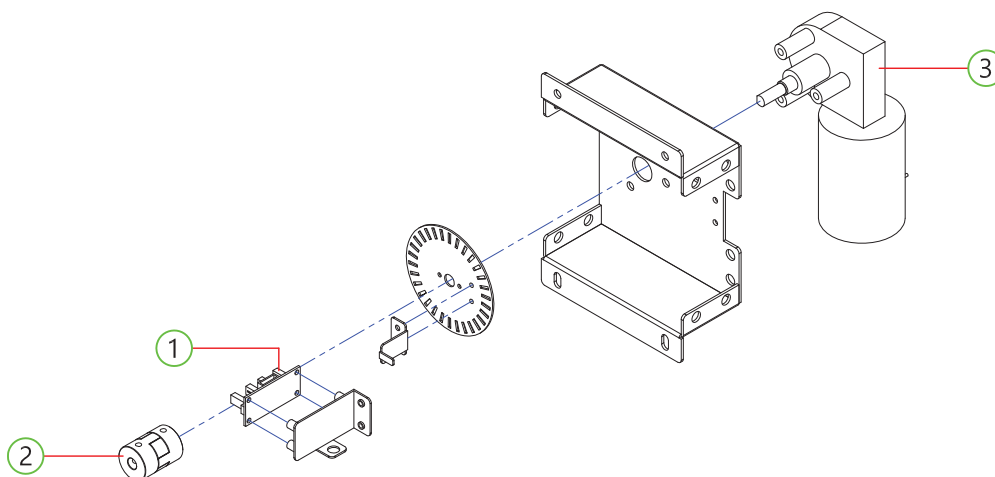
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BALL ELEVATOR PART	-	1	-
2	MEGA WHEEL MOTOR PART	-	1	-
3	DROP SLIDE MOVE PART	-	1	-
4	MONITOR PART	-	2	-
5	BALL PROTECT PART	-	2	-
6	TOTAL GAME BOARD PART	-	2	-
7	MEGA BALL ROUND PART	-	1	-
8	MEGA BALL MAGIC MIRROR PART	-	1	-
9	MEGA BALL CENTER PART	-	1	-
10	MEGA SPIN AREA COVER ACRYL	ACRYL-3t	1	ADRG0ACP024
11	GAS SPRING	GS18*365 5KG	2 (per set)	MZZZ0SHO018
12	DROP BALL LIGHT COVER ACRYL L, R	ACRYL-3t	2	ADRG0ACP015, 016
13	IR SENSOR PCB VR ASS'Y_R_ 2.2CM	38KHZ_CONNECTOR RED	2 (per set)	ASBT0PCB008
14	PHOTO INT-1 PCB ASS'Y	STRIGHT_CIRCLE RAMA	1 (per set)	ACIR0PCB011
15	MOTOR	KWA-0150-KD2531U1	1 (per set)	MZZZ0MOT170

7-22. BALL ELEVATOR PART



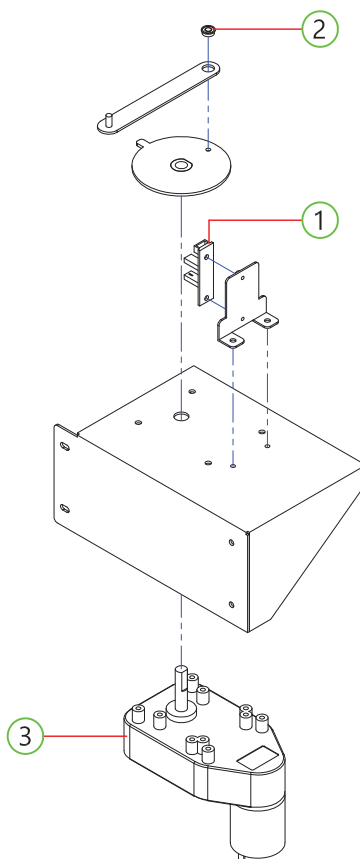
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	MICRO SWITCH	GSMV16_31A1	1	MELE0MIC022
2	PHOTO INT-1 PCB ASS'Y	ANGLE TYPE	1	AZZZ0PCB103
3	COUPLING ASS'Y	CR050	1	AZZZ0COP003
4	BEARING	6900ZZNR	2	MZZZ0BEA129
5	MOTOR	KGE-0116-ND3657 U1	1	MZZZ0MOT155

7-23. MEGA WHEEL MOTOR PART



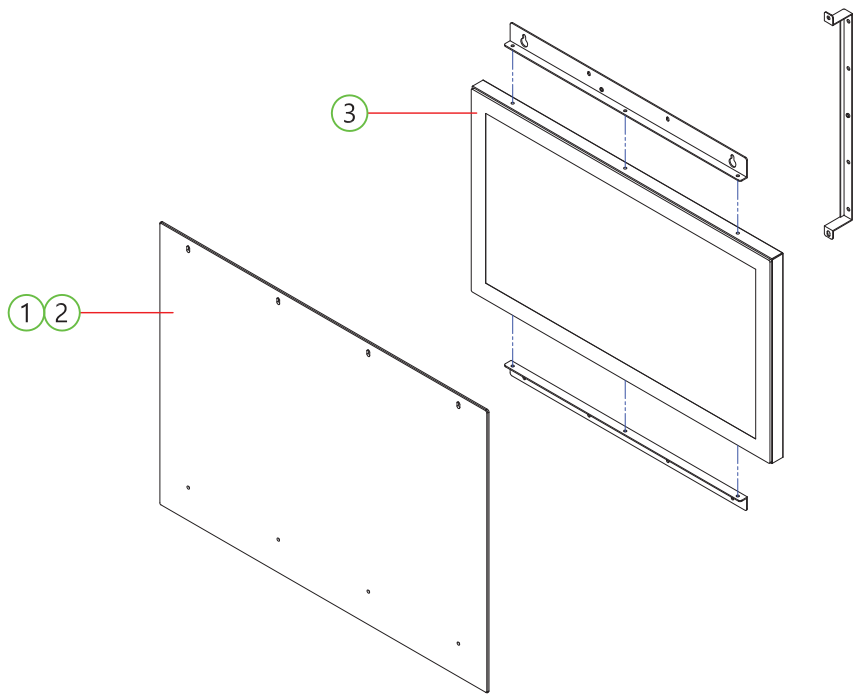
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	PHOTO INT2 PCB ASS'Y	-	1	AWIW0PCB009
2	COUPLING ASS'Y	CR050	1	AZZZ0COP003
3	MOTOR	HM37-SA1264A-HS434	1	MZZZ0MOT113

7-24. DROP SLIDE MOVE PART



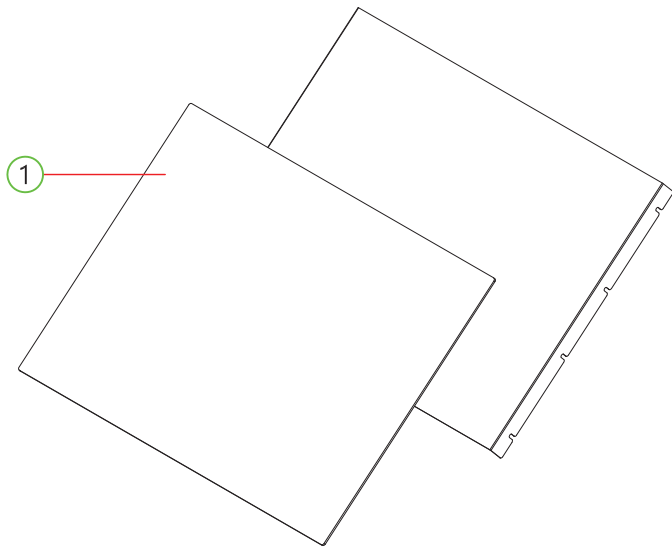
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	PHOTO-INT-1 PCB ASS'Y	-	1	AZZZ0PCB103
2	BEARING	MF84ZZ	1	MZZZ0BEA110
3	MOTOR	KGV2-0350-NB3640S1	1	MZZZ0MOT152

7-25. MONITOR PART



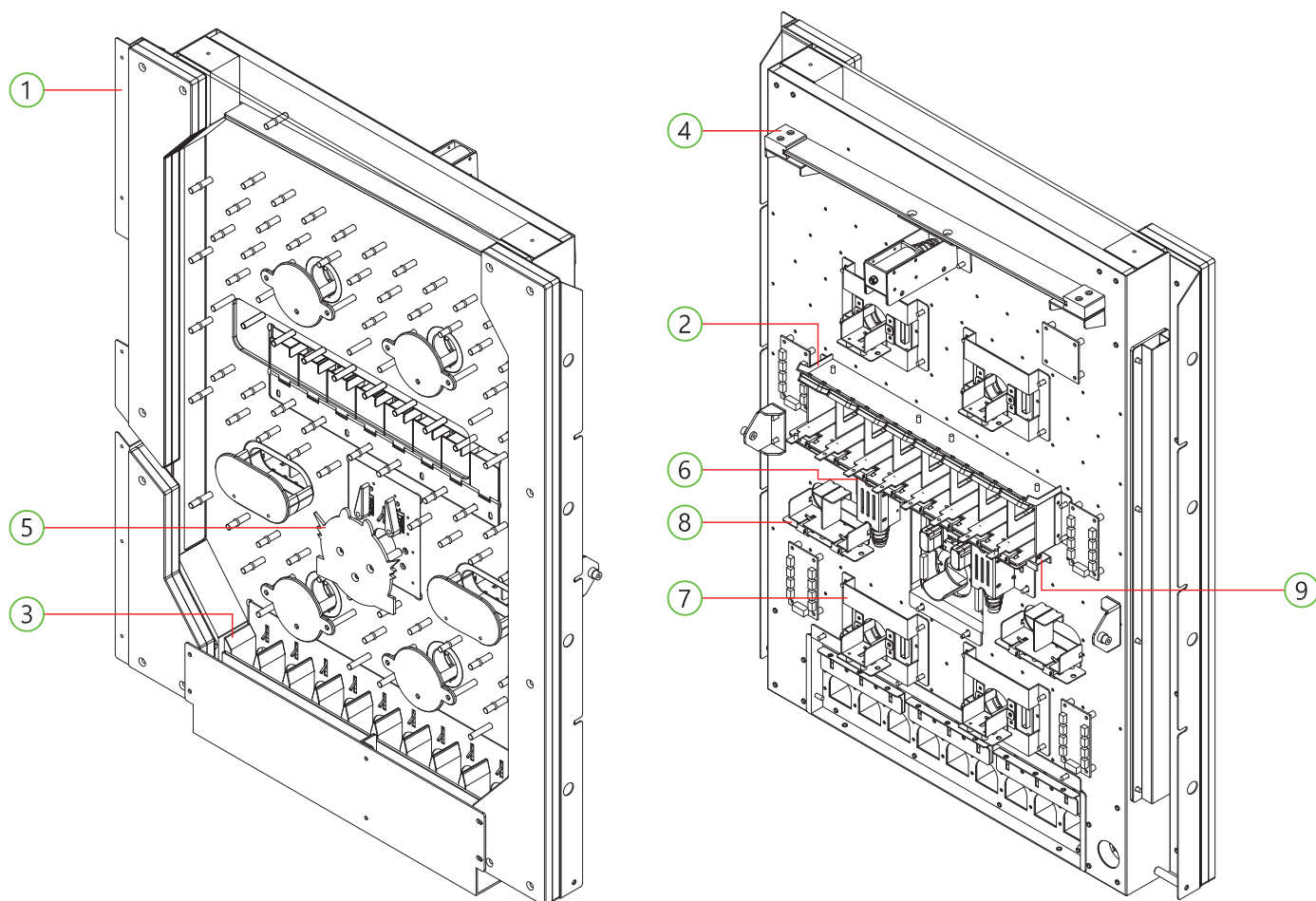
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	MONITOR COVER ACRYL-L	ACRYL-3t	1	ADRG0ACP041
2	MONITOR COVER ACRYL-R	ACRYL-3t	1	ADRG0ACP042
3	MONITOR	21.5 (22")	1	AZZZ0MON014

7-26. BALL PROTECT PART



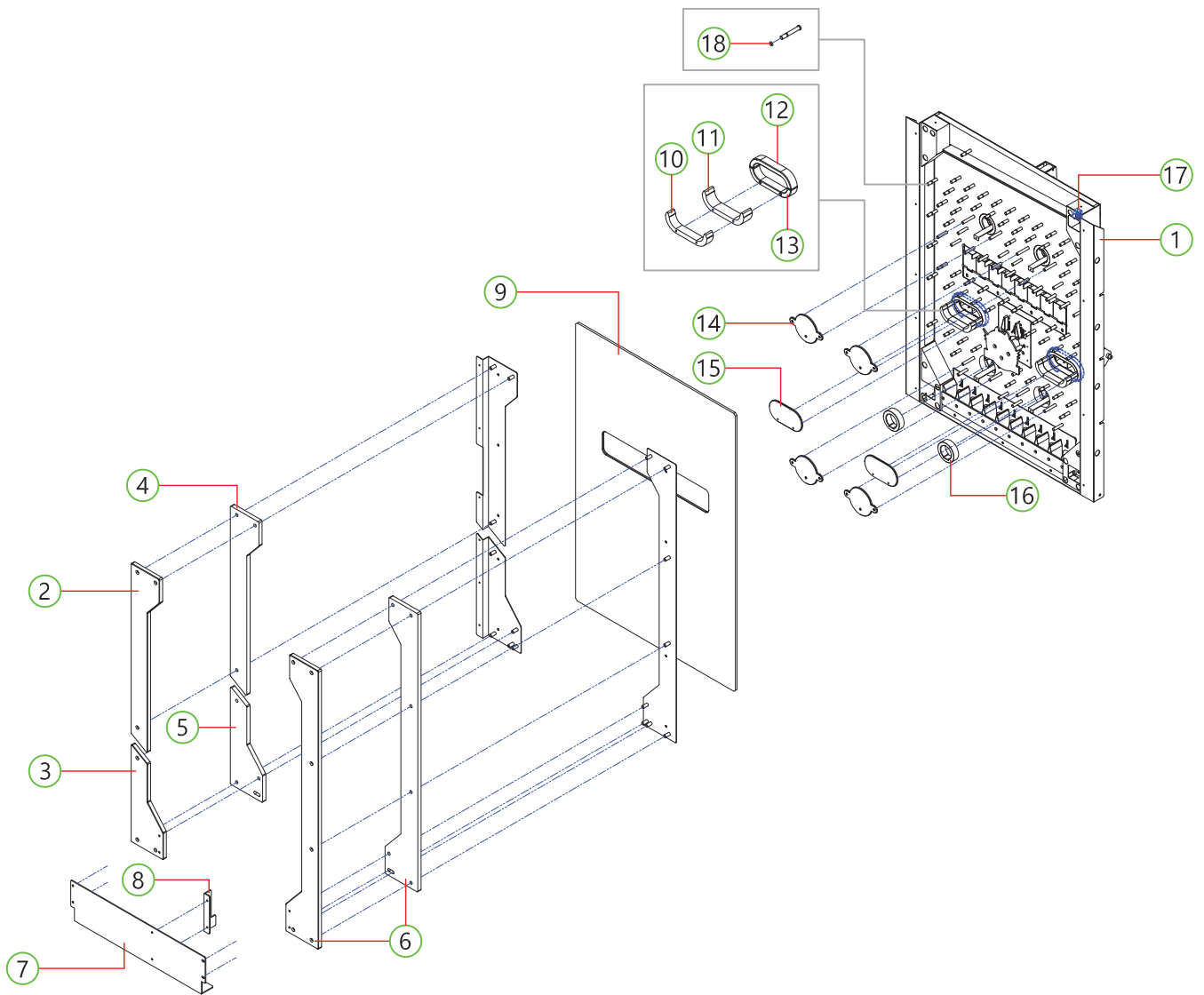
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	DROP BALL SPONGE (HIGH)	SPONGE-3t, 345*940	1	MDRG0SPO001

7-27. GAME BOARD ASS'Y PART



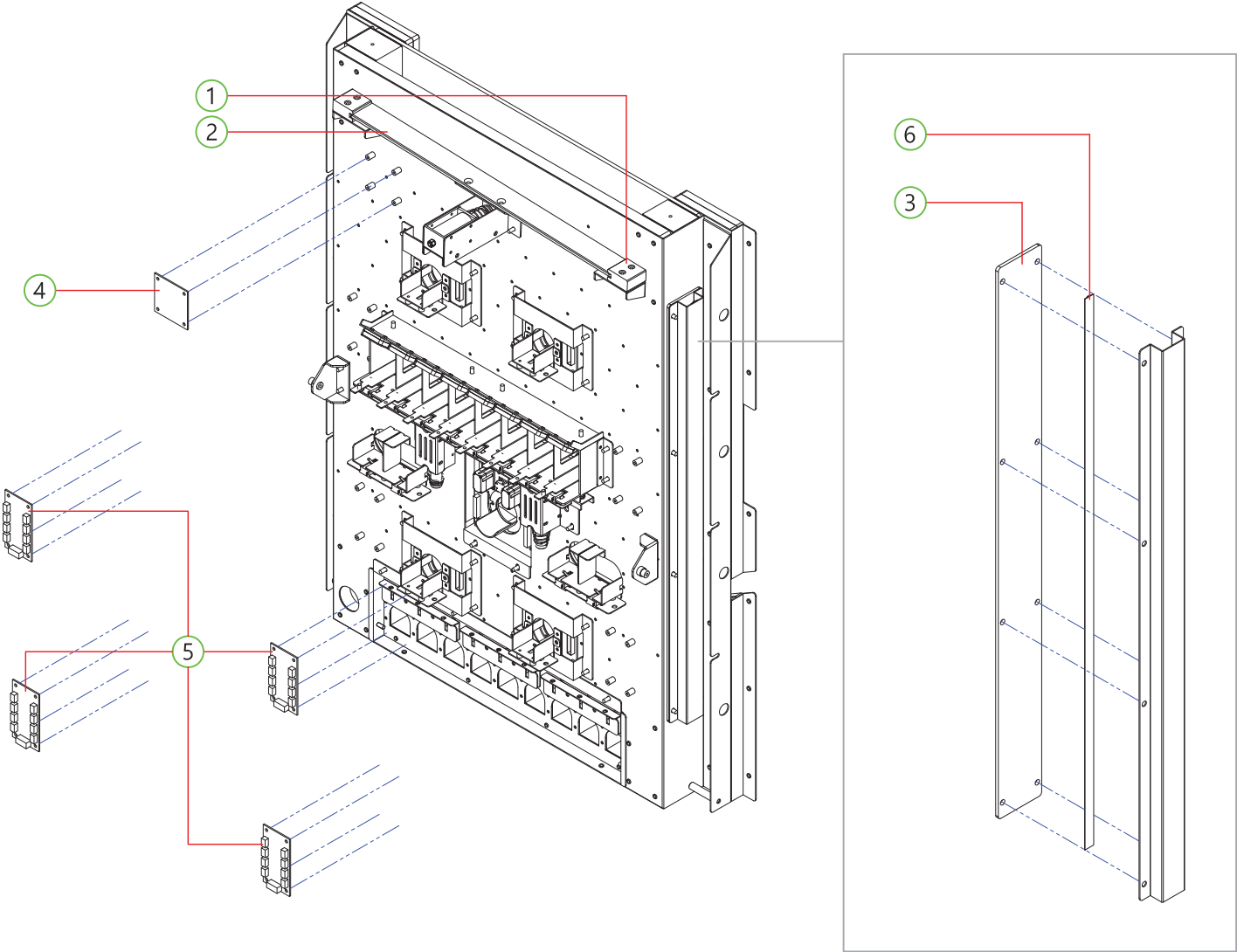
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	GAME BOARD PART	-	1	-
2	BALL CHECK ANGLE COVER PART	-	1	-
3	BOTTOM SCORE PART	-	1	-
4	BALL DROP SLIDE SOL PART	-	1	-
5	MEGA BALL PART	-	1	-
6	PUSH SOLENOID PART	-	2	-
7	BONUS BALL HOLE LED PART	-	4	-
8	FLIP HOLE SENSOR PART	-	2	-
9	BALL CHECK PUSH BKT PART	-	2	-

(1) GAME BOARD PART - 1



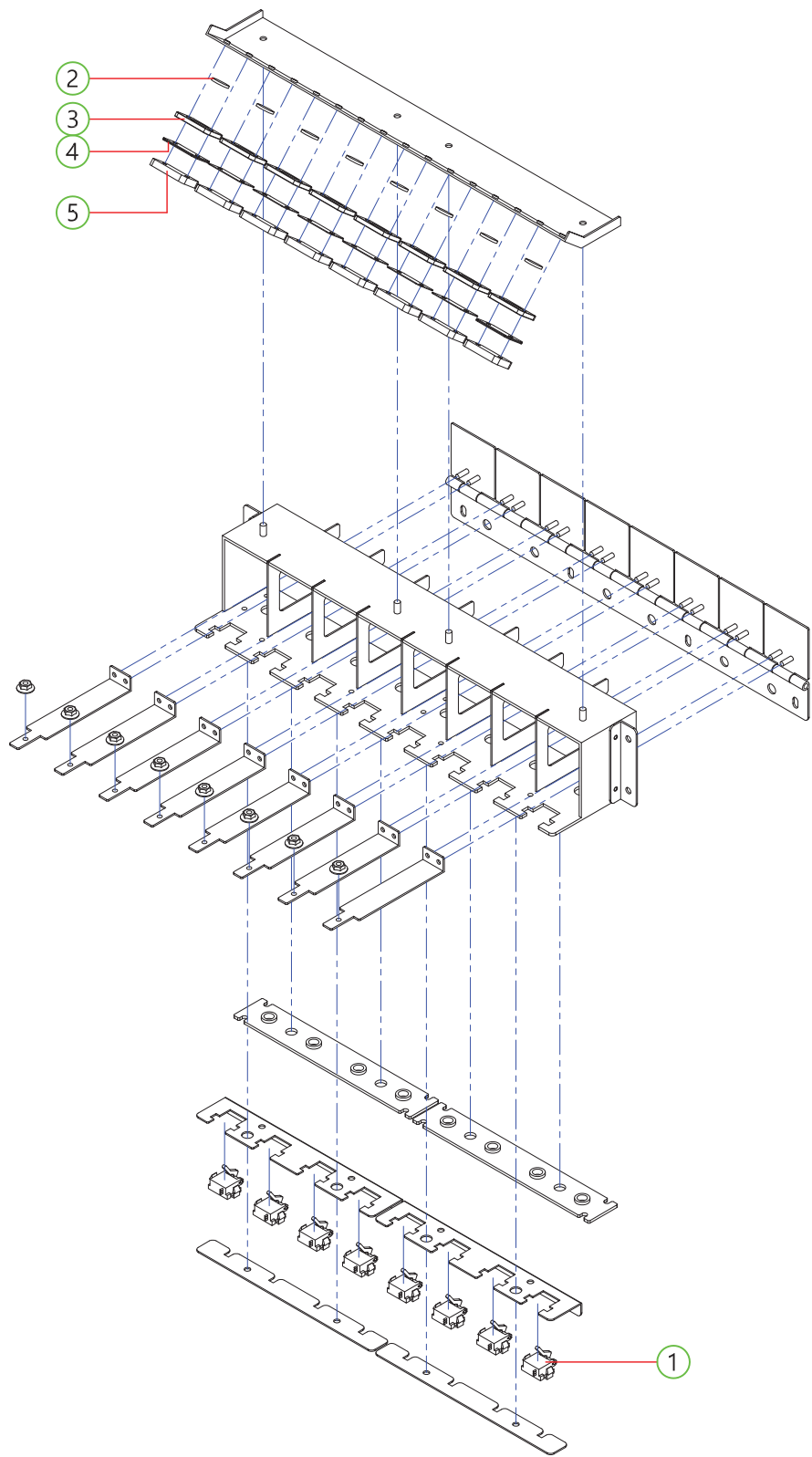
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	GAME BOARD PART	-	1	-
2	GAME BOARD UPPER COVER ACRYL-L (TOP)	ACRYL-10t	1	ADRG0ACP021
3	GAME BOARD COVER BTM ACRYL-L (TOP)	ACRYL-10t	1	ADRG0ACP019
4	GAME BOARD UPPER COVER ACRYL-R (TOP)	ACRYL-10t	1	ADRG0ACP022
5	GAME BOARD COVER ACRYL-L	ACRYL-10t	1	MDRG0ACR018
6	GAME BOARD COVER ACRYL-R	ACRYL-10t	2	MDRG0ACR019
7	BONUS BALL COVER ACRYL	PET-2t	1	MDRG0ACR011
8	PUSHER BALL PROTECT PET-L	PET-2t	1	MDRG0ACR040
9	GAME BOARD GLASS	ACRYL-5t	1	MDRG0ACR020
10	FLIP LED ACRYL-MID_2	ACRYL-15t	1	MDRG0ACR017
11	FLIP LED ACRYL-MID_1	ACRYL-20t	1	MDRG0ACR016
12	ASS'Y-FLIP LED ACRYL PART-TOP	ACRYL-15t	1	MDRG0ACR003
13	ASS'Y-FLIP LED ACRYL PART-BTM	ACRYL-15t	1	MDRG0ACR002
14	SCORE HOLE ACRYL	ACRYL-3t	4	ADRG0ACP029
15	OPEN HOLE	ACRYL-3t	2	ADRG0ACP030
16	ASS'Y-BONUS BALL HOLE LED ACRYL PART	ACRYL-15t	2	MDRG0ACR001
17	BALL SLIDE ROUND BLOCK	ACRYL-10t	1	MDRG0ACR009
18	O-RING	AN008 AN-008 O-RING (4.47X1.78), RED	85	MZZZ0ORI010

(1) GAME BOARD PART - 2



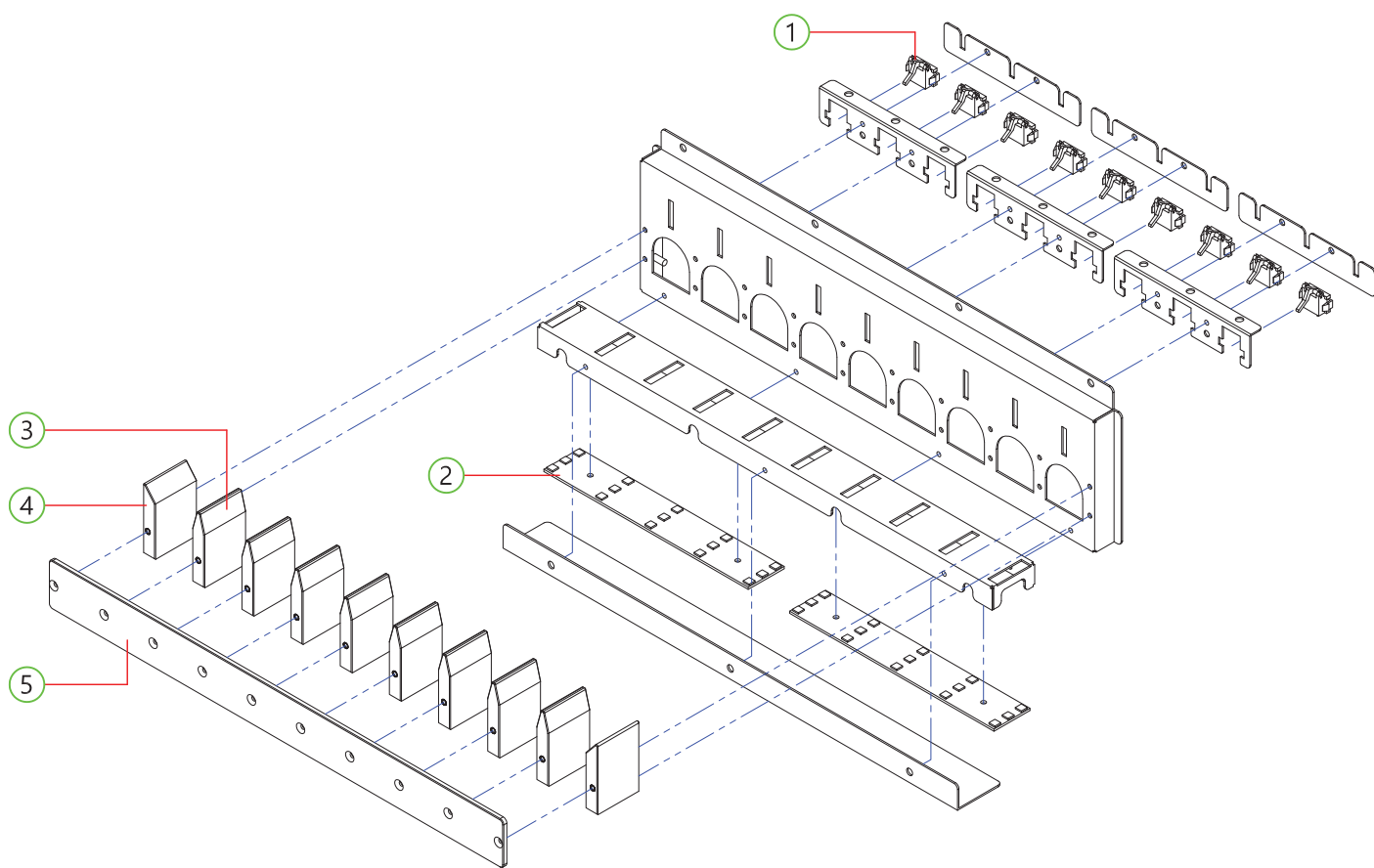
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	GUIDE BLOCK	ACETAL	2	MDRG0PRO025
2	BALL DROP SLIDE ACRYL	ACRYL-5t	1	MDRG0ACR007
3	GAME BOARD SIDE COVER ACRYL	ACRYL-3t	2	MDRG0ACR021
4	SOLENOID_4CH_PCB ASS'Y	POLY FUSE_2.2A/ 2920L100	1	AKZB0PCB008
5	SENSOR JOIN PCB ASS'Y	-	4	ADRG0PCB010
6	FLEX_WS2813B_550_NWP_LR_33	WS2813 V5 TOP300, 33	2	MELE0LED142

(2) BALL CHECK ANGLE COVER PART



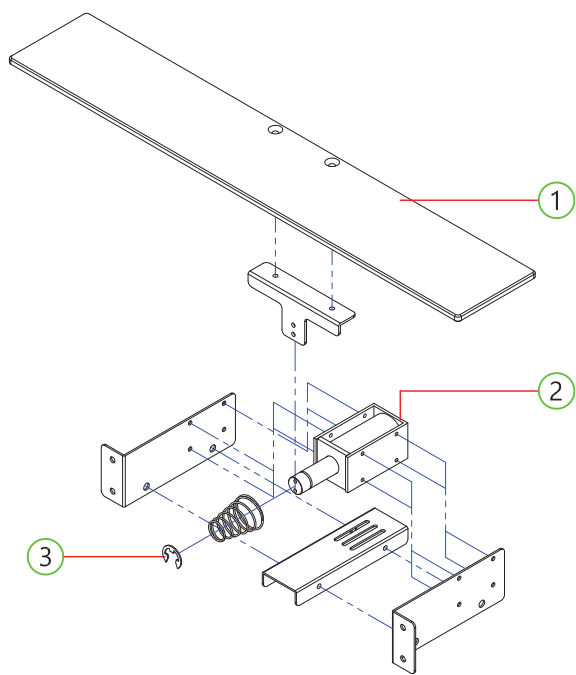
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	PHOTO SENSOR	SG405CD_KODENSHI	8	MELE0PHO035
2	MAGNETIC BLOCK	N35SH D12*1.5	8	MDCC0ZZZ001
3	MAGNETIC ACRYL	ACRYL-3t	8	MDRG0ACR023
4	MAGNETIC GAP SHEET	SHEET-0.15mm	12	MDRG0SHE019
5	MAGNETIC GAP BLOCK	ACRYL-4.5t	8	MDRG0ACR024

(3) BOTTOM SCORE PART



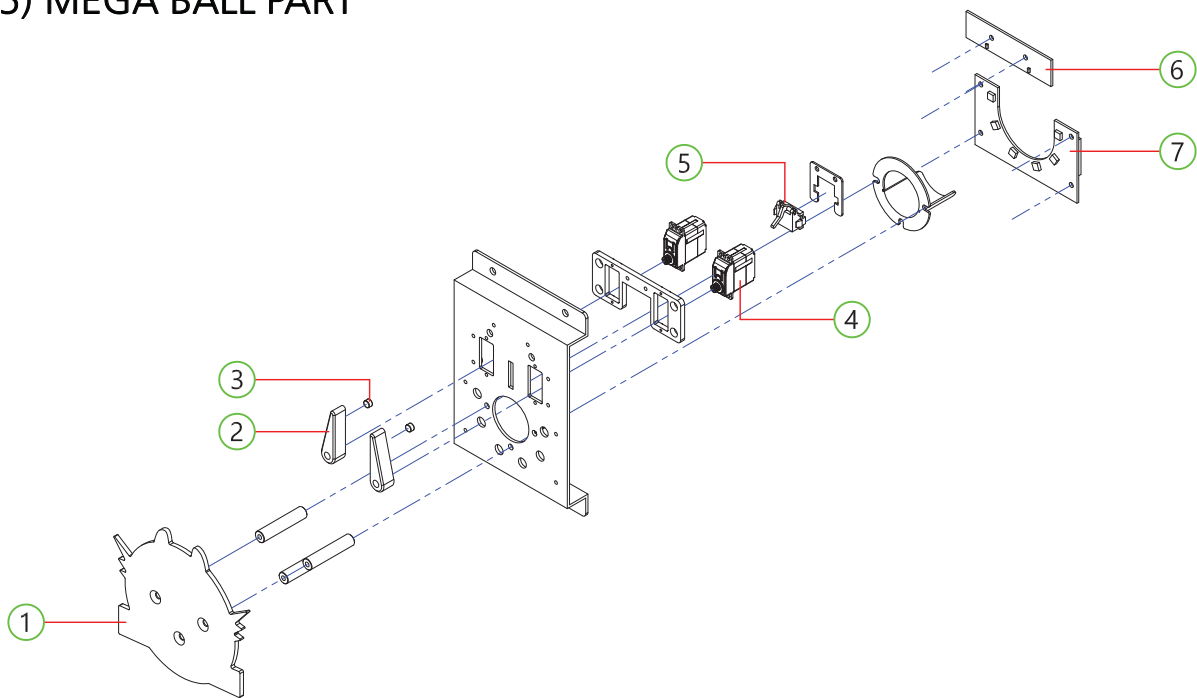
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	PHOTO SENSOR	SG405CD_KODENSHI	9	MELE0PHO035
2	GAME BALL BOTTOM_LED_PCB ASS'Y	-	2	ADRG0PCB004
3	BALL CHECKER BLOCK ACRYL	ACRYL-10t	8	MDRG0ACR005
4	BALL CHECKER BLOCK ACRYL_B-L	ACRYL-10t	2	MDRG0ACR006
5	BALL CHECKER COVER ACRYL	ACRYL-3t	1	ADRG0ACP001

(4) BALL DROP SLIDE SOL PART



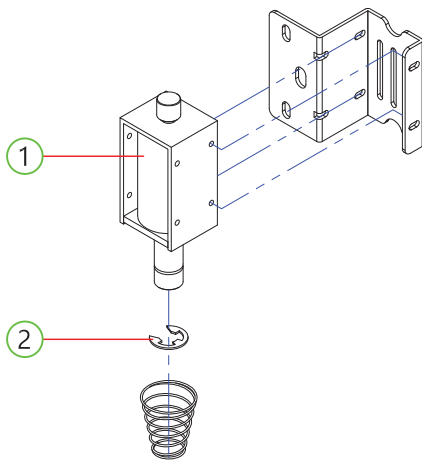
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BALL DROP SLIDE ACRYL	ACRYL-5t	1	MDRG0ACR007
2	SOLENOID ASS'Y_V2	DS12ES24V	1	ADRG0SOL002
3	SNAP RING	Ø8	1	WSNR0100003

(5) MEGA BALL PART

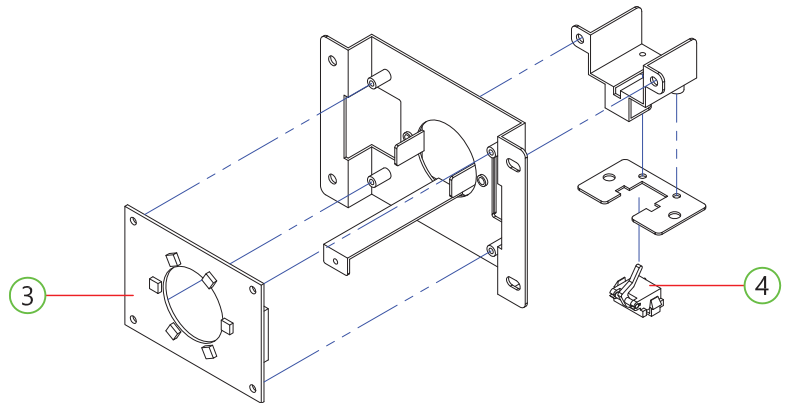


NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	DRAGON HOLE ACRYL	ACRYL-3t	1	ADRG0ACP014
2	MEGA BALL IN WIPER ACRYL-L, R	ACRYL-10t	2	MDRG0ACR031
3	MAGNET	5x3	2	MZZZ0000802
4	SERVO MOTOR	DS-S009A , 6Kg CORE LESS PWM SERVO	2	MZZZ0MOT186
5	PHOTO SENSOR	SG405CD_KODENSHI	1	MELE0PHO035
6	MAGNETIC SENSOR PCB ASS'Y	DRAGONS	1	ADRG0PCB009
7	MEGA BALL IN LED PCB ASS'Y	DRAGONS	1	ADRG0PCB005

(6) PUSH SOLENOID PART

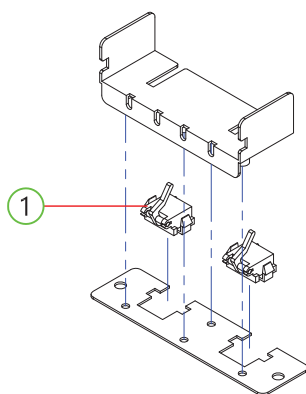


(7) BONUS BALL HOLE LED PART

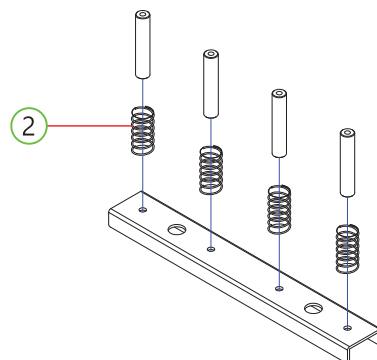


NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	SOLENOID ASS'Y	DS12ES24V	1	ADRG0SOL001
2	SNAP RING	Ø8	1	WSNR0100003
3	BONUS BALL HOLE LED PCB ASS'Y	-	1	ADRG0PCB003
4	PHOTO SENSOR	SG405CD_KODENSHI	1	MELE0PHO035

(8) FLIP HOLE SENSOR PART

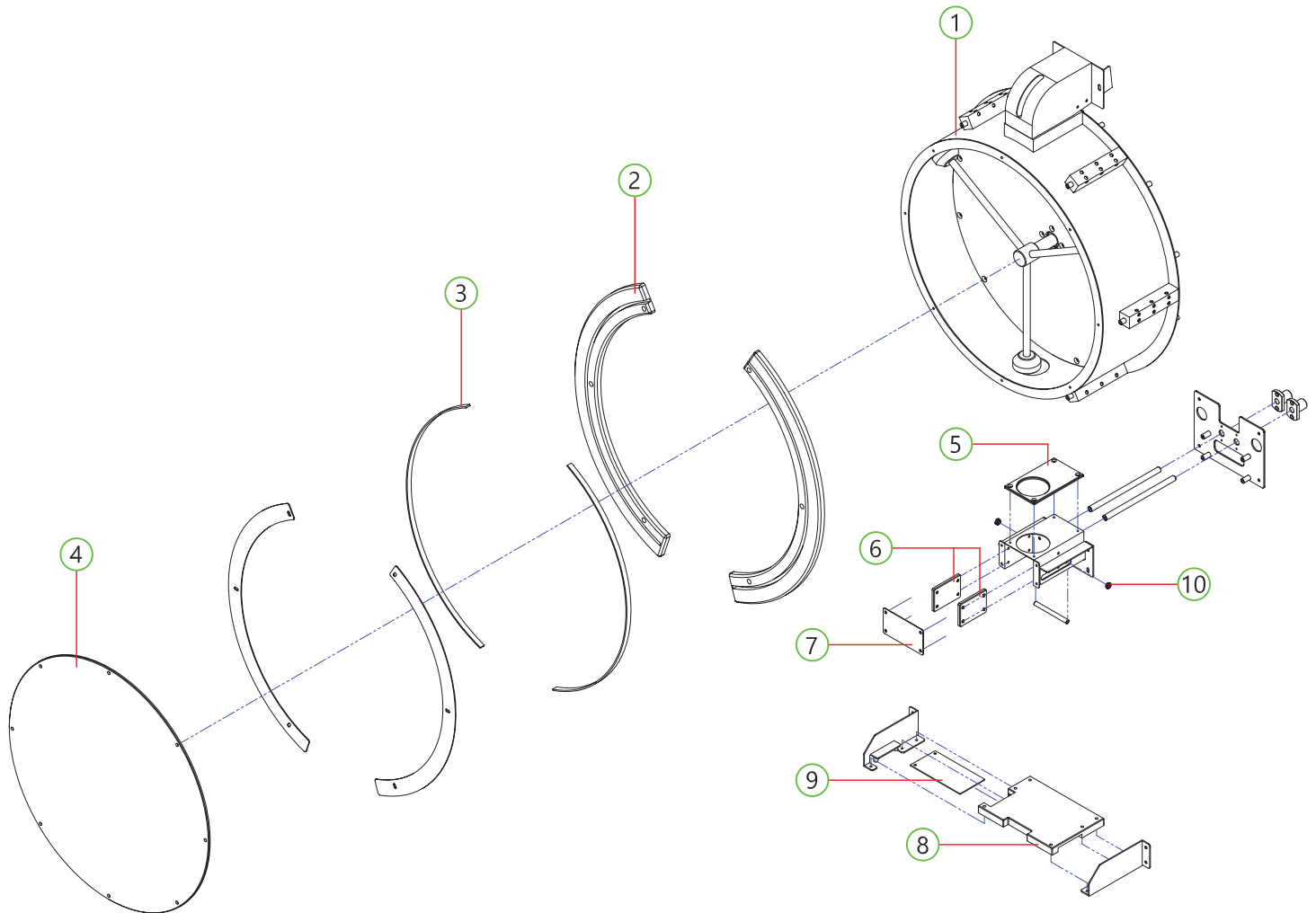


(9) BALL CHECK PUSH BKT PART



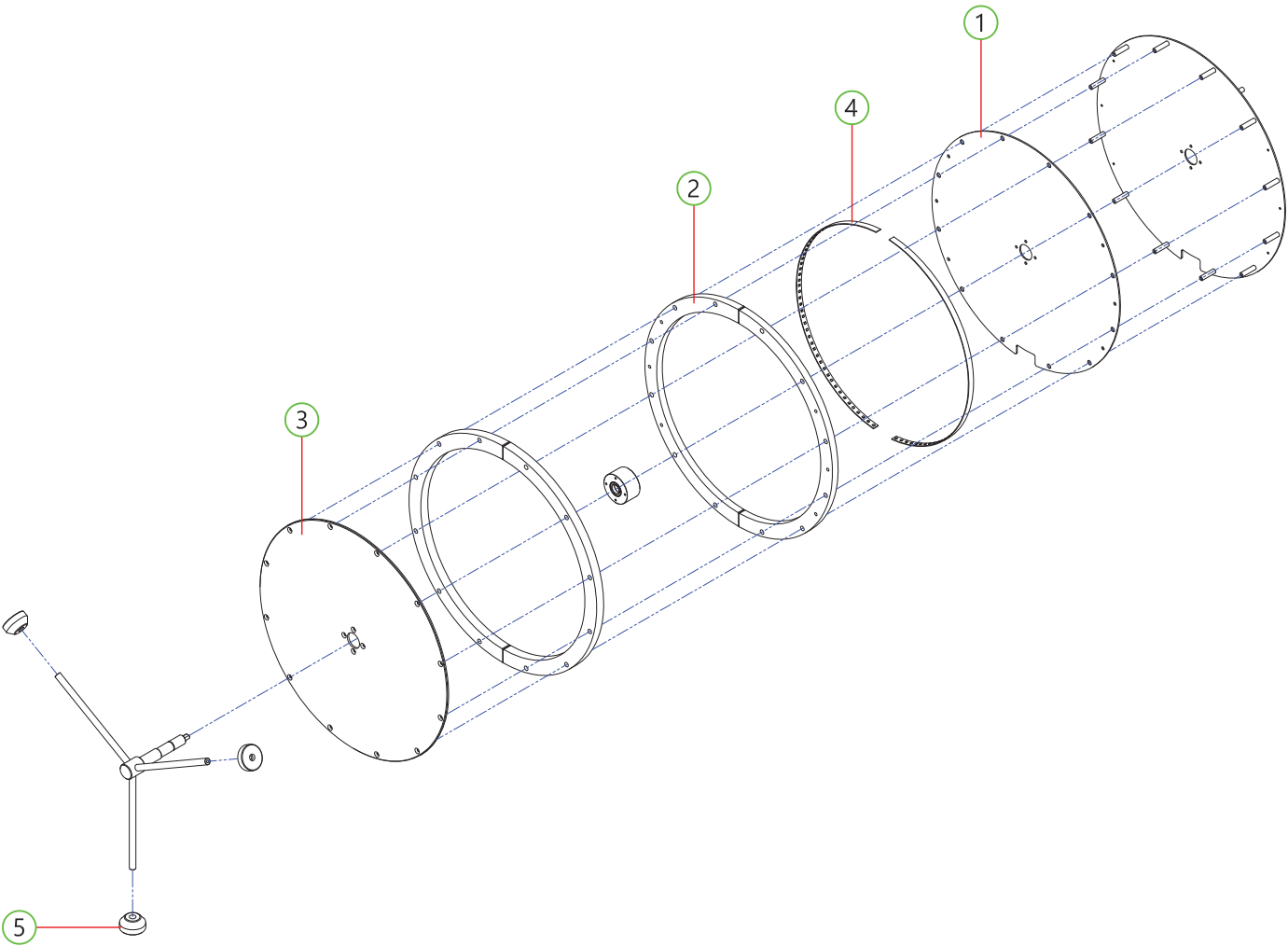
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	PHOTO SENSOR	SG405CD_KODENSHI	2	MELE0PHO035
2	Z MOTOR PART TENSION SPRING	PW-Ø0.55	4	MWID0SPR001

7-28. MEGA BALL ROUND PART



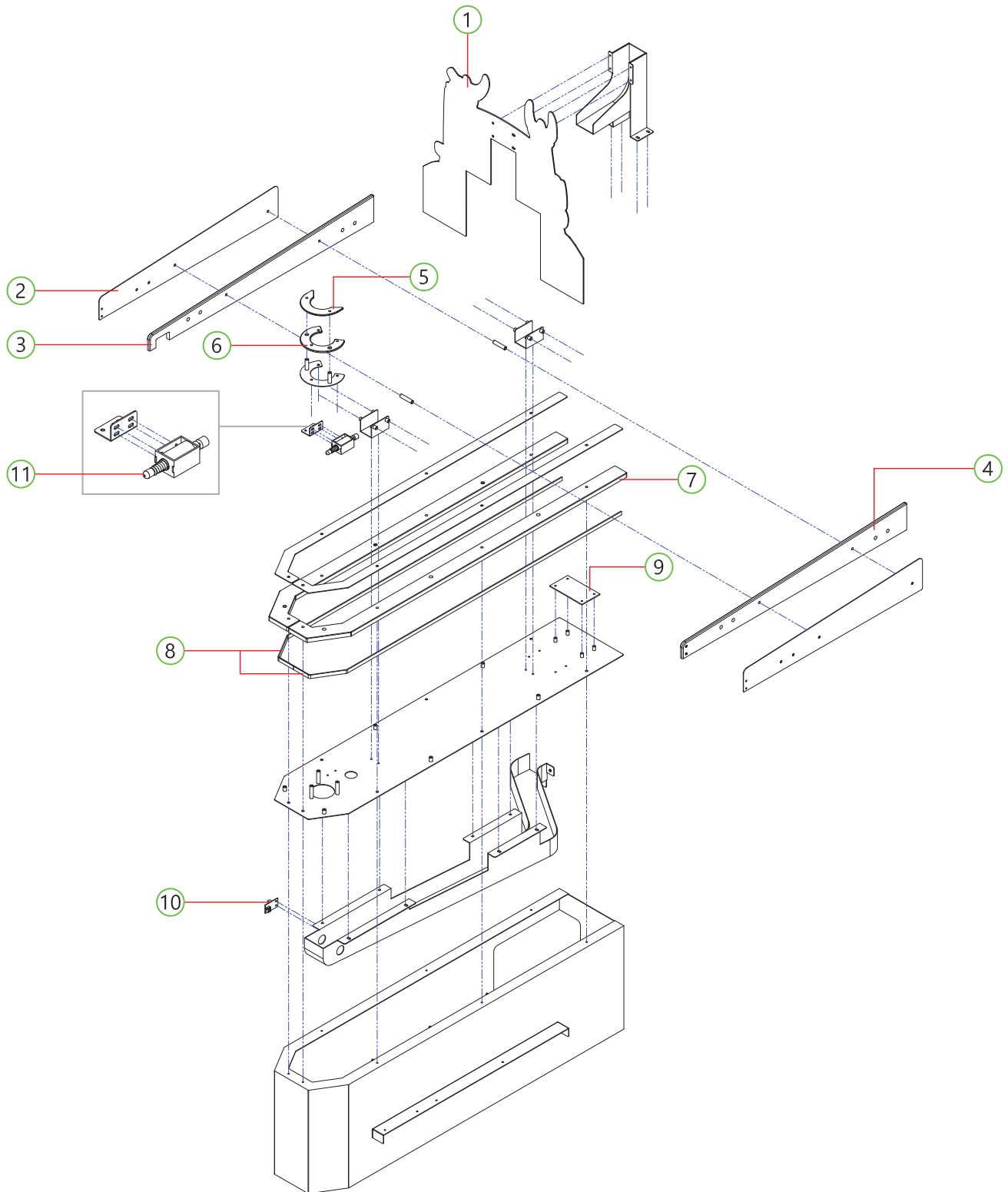
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	MEGA BALL MAGIC MIRROR PART	-	1	-
2	MEGA BALL ROUND LED ACRYL-L	ACRYL-10t	2	MDRG0ACR035
3	FLEX_WS2813B_500_NWP_LR_30	WS2813 V5 TOP300, 30	2	MELE0LED156
4	MEGA BALL FRONT COVER ACRYL	ACRYL-3t	1	MDRG0ACR028
5	MEGA BALL DROP SLIDE COVER ACRYL	PC-3t	1	MDRG0ACR027
6	MEGA BALL POSITION ACRYL ASS'Y	ACRYL-5t	2	MDRG0ACR004
7	MEGA BALL PROTECT PET	PET-1.0t	1	MDRG0ACR032
8	RFID FIX ACRYL	ACRYL-12t	1	MDRG0ACR044
9	4CH_RFID	DRAGONS / RFID ANTENA	1	ADRG0PCB007
10	BEARING	MF84ZZ	2	MZZZ0BEA110

7-29. MEGA BALL MAGIC MIRROR PART



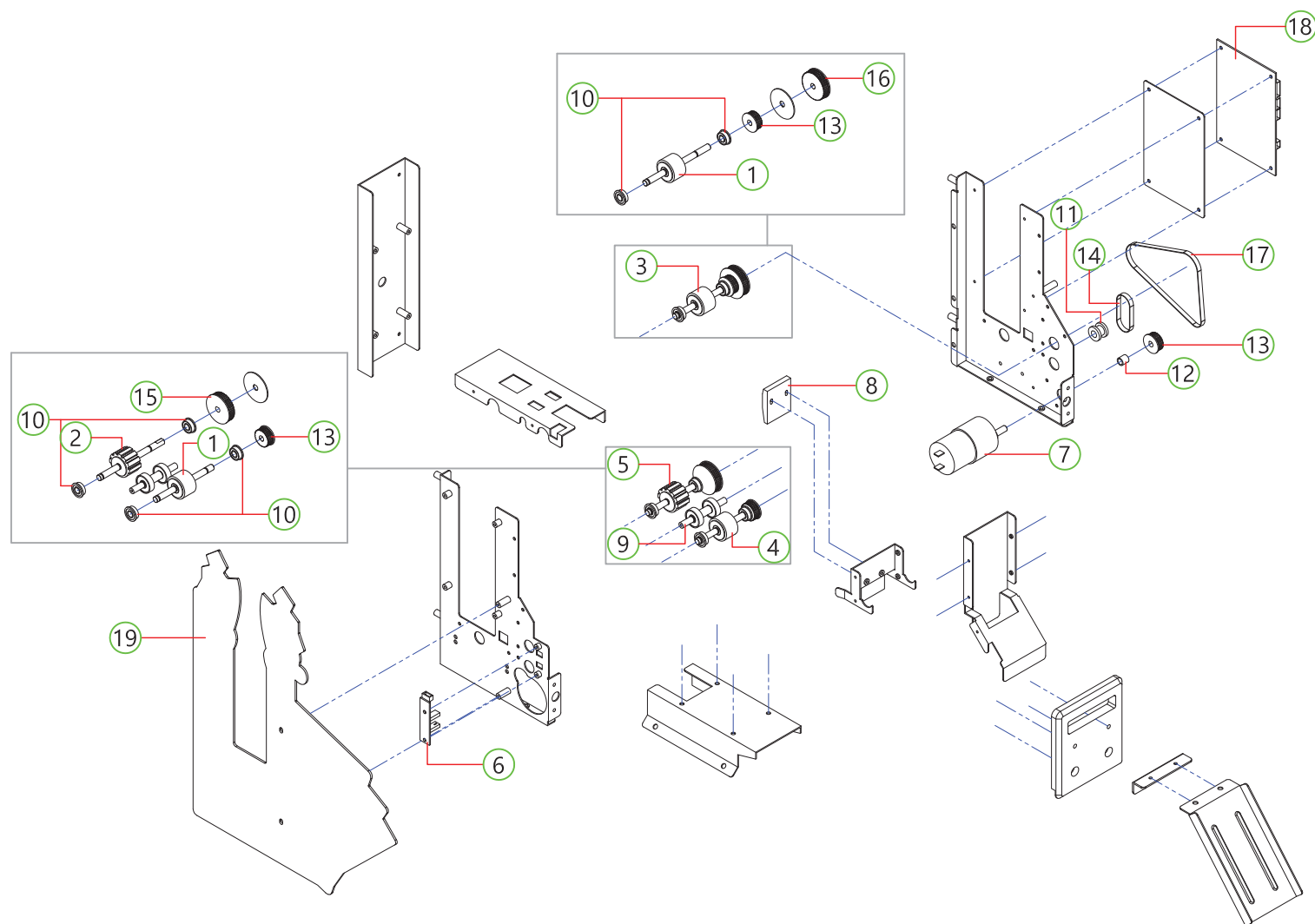
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	MIRROR ACRYL	ACRYL-2t	1	MDRG0ACR037
2	MB MAGIC MIRROR LIGHTING SIDE ACRYL-L	ACRYL-12t	2	MDRG0ACR025
3	MEGA WHEEL COVER ACRYL	ACRYL-3t	1	MDRG0ACR036
4	FLEX_WS2813B_1100_NWP_LR_66	WS2813 V5 TOP300, 66	2	MELE0LED183
5	MEGA BALL RUBBER FOOT	URETHAN	3	MDRG0PRO013

7-30. MEGA BALL CENTER PART



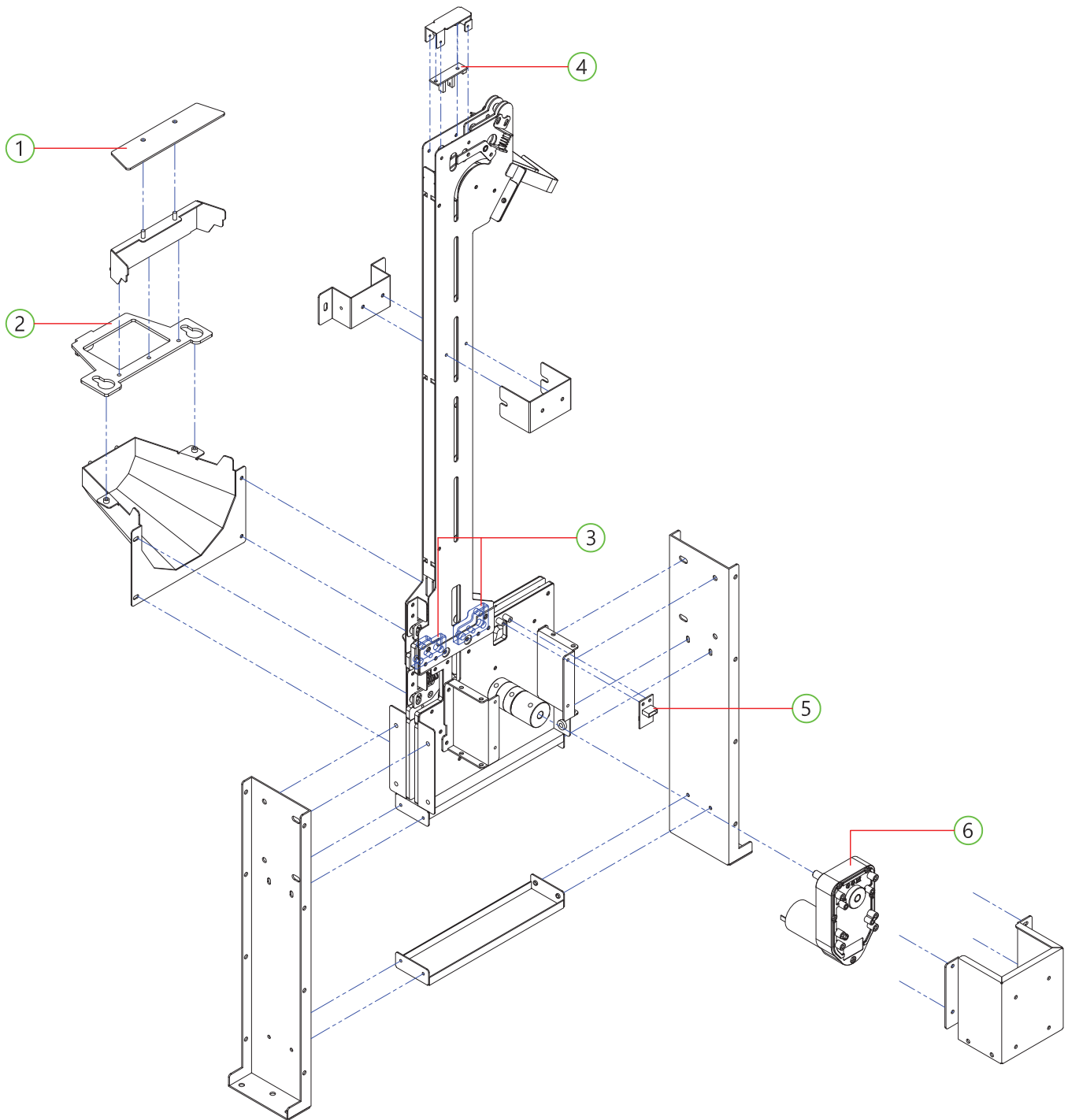
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	MEGA BALL DECO PET	PET-1.0t	1	ADRG0ACP023
2	BALL GAURD PET	PET-1.0t	2	MDRG0ACR008
3	MEGA BALL RAIL ACRYL-L ASS'Y	ACRYL-8.0t	1	MDRG0ACR033
4	MEGA BALL RAIL ACRYL-R ASS'Y	ACRYL-8.0t	1	MDRG0ACR034
5	MEGA BALL HOLE IN SHIELD ACRYL	ACRYL-3.0t	1	MDRG0ACR030
6	MEGA BALL HOLE IN ACRYL	ACRYL-3.0t	1	MDRG0ACR029
7	MEGA BALL CENTER LINE ACRYL-R	ACRYL-10t	1	MDRG0ACR026
8	FLEX_WS2813B_850_NWP_LR_51	WS2813 V5 TOP300, 51	2	MELE0LED182
9	RFID MAIN_PCB ASS'Y	DRAGONS	1	ADRG0PCB006
10	IR SENSOR PCB VR ASS'Y_R_2.2CM	38KHZ_CONNECTOR RED	1	ASBT0PCB008
11	SOLENOID ASS'Y	DS-08AS12V	1	ATP20ASS010

7-31. CARD DISPENSER PART



NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	CARD DISPENSER RUBBER HOUSING-A	SILICON	2	MZZZ0RUB017
2	CARD DISPENSER RUBBER HOUSING-B	SILICON	1	MZZZ0RUB018
3	CARD ROLLER SHAFT-A ASS'Y	-	1	-
4	CARD ROLLER SHAFT-B ASS'Y	-	1	-
5	CARD ROLLER SHAFT-C ASS'Y	-	1	-
6	PHOTO INT-1 PCB ASS'Y	ANGLE TYPE	1	AZZZ0PCB103
7	MOTOR	KGC-3429(KD1-3429-075), 1/40(163RPM)	1	MZZZ0MOT089
8	CARD OUTLET GUIDE BLOCK	ABS	1	MZZZ0PLA042
9	BEARING GUIDE SHAFT ASS'Y	-	1	MSBP0PRO009
10	BEARING	F686ZZ	6	MZZZ0BEA094
11	TIMMING BELT TENSION ROLLER	ACETAL	1	MSBP0PRO017
12	DU-BUSH	0608DU	1	MZZZ0BEA096
13	MOLD_TIMMING PULLEY-A	MXL-29_ABS	3	MZZZ0PLA040
14	CARD DISPENSER TIMMING BELT-A	52MXL	1	MZZZ0BEL018
15	MOLD_TIMMING PULLEY-B	MXL-47	1	MZZZ0PLA039
16	MOLD_TIMMING PULLEY-B	MXL-47	1	MZZZ0PLA039
17	CARD DISPENSER TIMMING BELT-B	147MXL	1	MZZZ0BEL019
18	CARD DISPENSOR I/O PCB ASS'Y	-	1	AZZZ0PCB258
19	CARD DISPENSER COVER PET-L, R	PET-2t	1	ADRG0ACP011, 012

7-32. BSE TOTAL PART



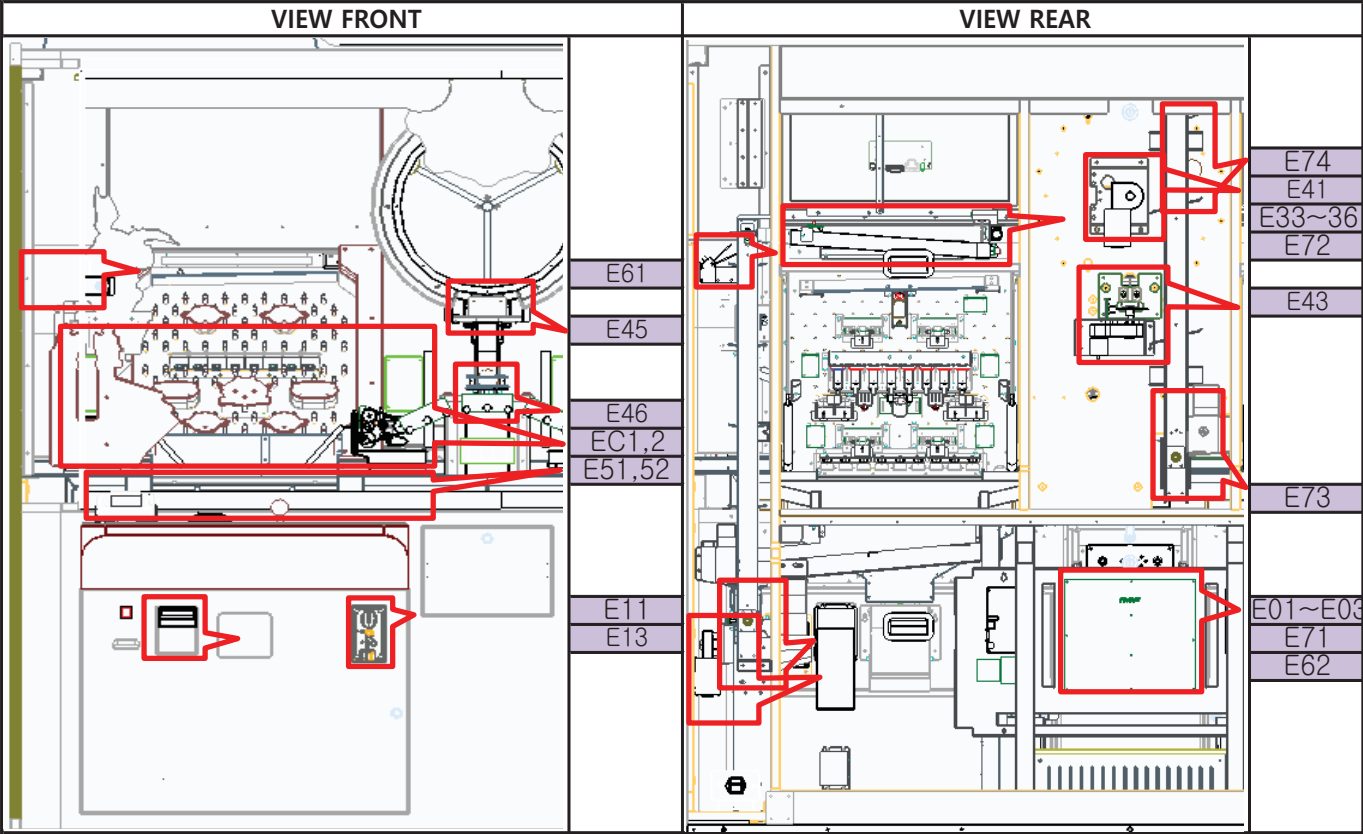
NO.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BSE HOUSING UPPER COVER ACRYL	PET-2.0t	1	MDRG0ACR013
2	BSE HOUSING COVER ACRYL	PC-3.0t	1	MDRG0ACR012
3	BSE MOVEMENT SPACER ACRYL	ACRYL-8.0t	2	MDRG0ACR014
4	PHOTO-INT1 PCB ASS'Y	-	1	AZZZ0PCB103
5	ELEVATOR DISK SENSOR PCB ASS'Y	-	1	AGHP0PCB020
6	MOTOR	KGV2-0105-KD3657U1 (12V, 6000RPM), R-TYPE	1	MZZZ0MOT191

8. SOLUTION

* ERROR CODES

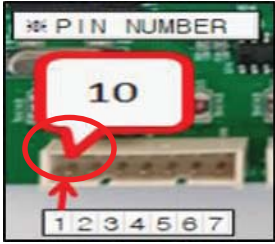
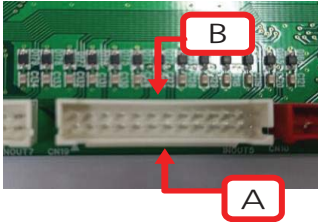
CODE	ERROR TYPE	DESCRIPTION	EXPLANATION
E01	LOCAL TYPE	Local stored data CRC error	If the issue persists even after turning the power off and on, replace the CPU board
E02	SYSTEM	Setup save data CRC error	If the issue persists even after turning the power off and on, replace the CPU board
E03		Game save data CRC error	If the issue persists even after turning the power off and on, replace the CPU board
E11	COIN ACCEPTOR	Coin sensor signal remains active	COIN ACCEPTOR CHECK
E13	BILL ACCEPTOR	Bill acceptor sensor signal remains active	BILL ACCEPTOR CHECK
E31	REGARDING GAME BALLS (RED BALLS)	Insufficient number of game balls	1. Check game ball quantity 2. Game ball LIFT and LIMIT SW check
E32		The game ball is stuck, so the supply is not working	1. Check if the game ball is stuck on the game board 2. Game ball LIFT and LIMIT SW check
E33		RAIL IN sensor error	RAIL IN sensor check
E34		Game Ball Drop Solenoid error	Check Game Ball Drop Solenoid
E35		GAME BALL SUPPLY error	Game ball supply motor and gear ENC sensor check
E36		Game ball rail output error	RAIL OUT sensor check
E41	DRAGON CHANCE	DRAGON SPIN error	1. Check DRAGON MOVE MOTOR 2. Check DRAGON MOVE HOME sensor 3. RFID Board Check
E43		DRAGON CHANCE MOVE HOME	1. Check DRAGON MOVE MOTOR 2. Check DRAGON MOVE HOME sensor
E45		DRAGON CHANCE BALL ID	DRAGON CHANCE BALL RFID Tag Check
E46		DRAGON CHANCE SOLENOID	1. Check DRAGON CHANCE SOLENOID 2. Check DRAGON BALL sensor
E51	PUSHER	PUSHER BLDC HOLE sensor	Pusher BLDC motor check
E52		MAIN PUSHER HOME sensor	1. Check PUSHER BLDC motor 2. Check PUSHER HOME INT sensor
E61	BALL SHOOTER	BALL SHOOTER	1. Check ball shooter motor 2. Check for ball jamming 3. Check ball output sensor
E62		BALL SHOOTER ENCODER	1. Check ball shooter motor 2. Check ball shooter encoder sensor
E71	GAME BALL ELEVATOR	GAME BALL LIFT ENCODER	1. Check Game Ball Lift Motor 2. Check Game Ball LIFT Encoder Sensor
E72		GAME BALL LIFT LIMIT SWITCH	1. Check Game Ball Lift Motor 2. Check Game Ball UP LIMIT SWITCH
E73	DRAGON BALL ELEVATOR	DRAGON BALL LIFT ENCODER	1. Check Dragon Ball Lift Motor 2. Check DRAGON BALL LIFT encoder sensor
E74		DRAGON BALL LIFT	1. Check Dragon Ball Lift Motor 2. Check DRAGON BALL LIFT UP LIMIT SWITCH
EC1	CARD DISPENSOR	CARD DISPENSOR	1. Check card quantity 2. Check card dispenser
EC2		CARD DISPENSOR IO BOARD	Card dispenser IO BOARD check
TL	TILT	TILT error	Maintain for 15 seconds

※ Reset button after taking actions

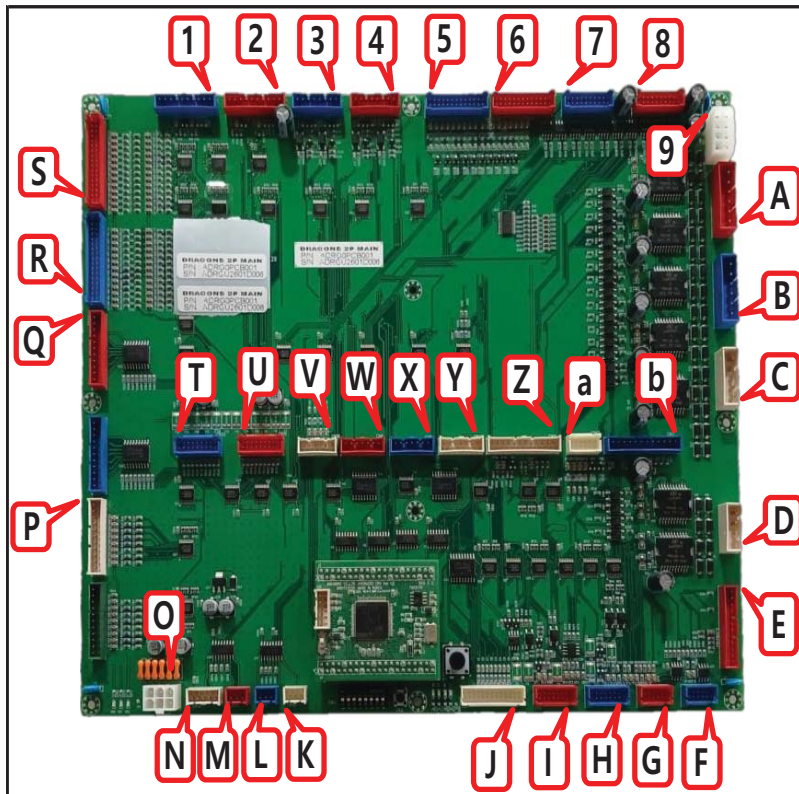


9. PCB CONNECTOR LOCATION

* PIN INFORMATION

1	2	PIN DESCRIPTION
		1. The arrow point means the contact pin number 1 2. direction of hirose connector

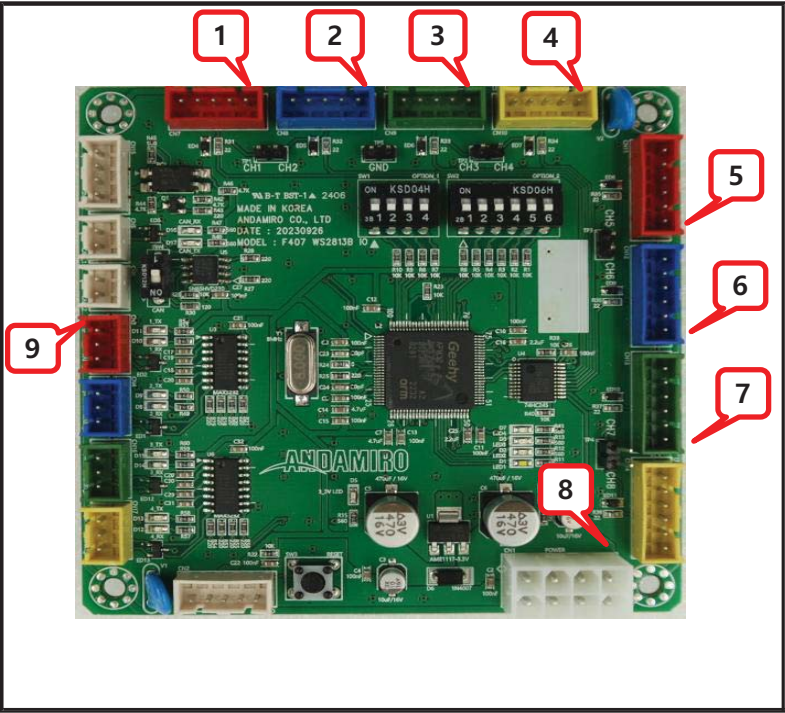
9-1. MAIN PCB ASS'Y



n o	FUNCTION	LOCATI ON	PIN
1	2P PUSHER MT & SENSOR	CN31	10
2	1P PUSHER MT & SENSOR	CN30	10
3	2P CARD DISPENSER LEFT, RIGHT	CN29	8
4	1P CARD DISPENSER LEFT, RIGHT	CN28	8
5	2P BALL ELV SW & SENSOR, SHOOTER SENSOR, DROP RAIL SENSOR	CN25	26
6	1P BALL ELV SW & SENSOR, SHOOTER SENSOR, DROP RAIL SENSOR	CN24	26
7	2P GAMEBOARD & CEILING LED	CN27	20
8	1P GAMEBOARD & CEILING LED	CN26	20
9	MOTOR POWER 12V	CN39	8
A	1P BALL ELV& SHOOTER MOTOR	CN22	6
B	2P BALL ELV& SHOOTER MOTOR	CN23	6
C	BALL RAIL DROP MOTOR	CN21	5
D	CHANCE BALL ELV & SPIN MOTOR	CN16	4
E	1P CHANCE BALL WIPER MOTOR	CN6	12
F	2P BT LAMP & JOYSTICK	CN5	12
G	1P BT LAMP & JOYSTICK	CN4	12
H	2P COIN, BILL, TICKET	CN3	16
I	1P COIN, BILL, TICKET	CN2	16
J	SETUP BT,COUNTER,SERVICE	CN1	26
K	WS2813 IO PCB	CN15	3
L	2P ANDROID BOARD	CN14	3
M	1P ANDROID BOARD	CN13	3
N	RFID MAIN PCB	CN12	5
O	MAIN POWER 5V, 12V	CN38	6
P	CHANCE BALL RAIL SENSOR	CN36	11
Q	RFID MAIN PCB	CN34	11
R	2P GAMEBOARD HOLESSENSOR	CN33	34
S	1P GAMEBOARD HOLESSENSOR	CN32	34
T	2P GAMEBOARD, BUTTON LED	CN20	18
U	1P GAMEBOARD,BALL COLLECTION LED&FND, BUTTON LED	CN19	18
V	TILT & DOOR SW	CN18	6
W	1P GAMEBOARD FET IO PCB	CN8	7

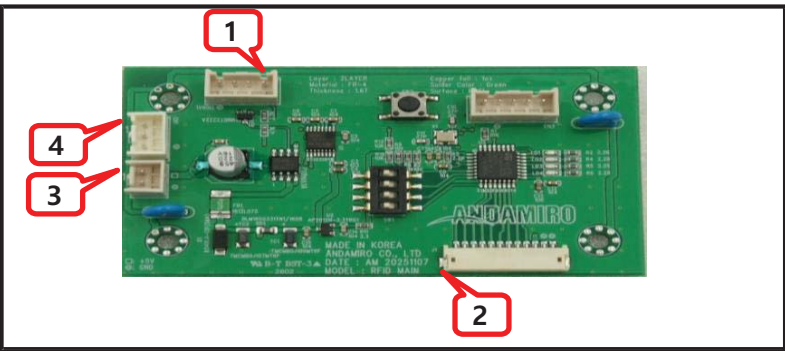
X	2P GAMEBOARD FET IO PCB	CN9	7
Y	CHANCE BALL FET IO PCB	CN10	7
Z	CHANCE BALL DROP MT&SENSOR	CN11	12
a	CHANCE BALL SPIN SENSOR, ELV SW & SENSOR	CN17	12
b	2P CHANCE BALL WIPER MOTOR	CN7	12

9-2. F407_WS2813B_IO PCB ASS'Y



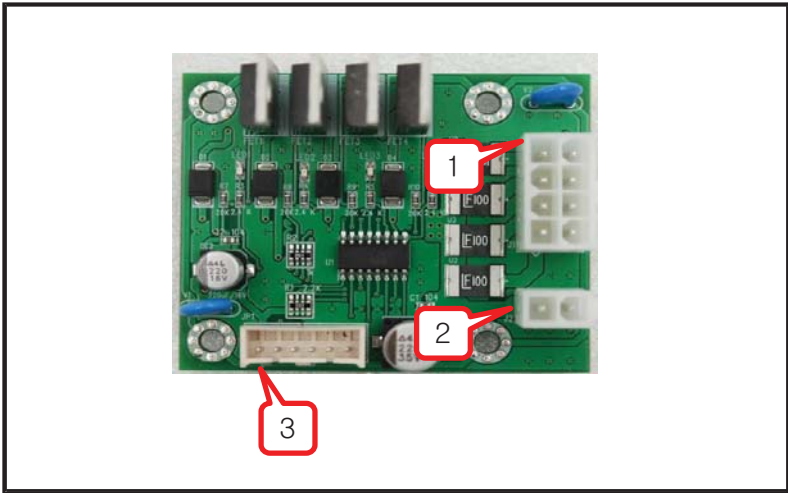
n o	FUNCTION	LOCATI ON	PIN
1	1P PUSHER	LED1	5
2	2P PUSHER	LED2	5
3	CHANCE BALL CENTER LINE LEFT	LED3	5
4	CHANCE BALL CENTER LINE RIGHT	LED4	5
5	CHANCE BALL SPIN INSIDE	LED5	6
6	CHANCE BALL SPIN OUTSIDE L	LED6	6
7	CHANCE BALL SPIN OUTSIDE R	LED7	6
8	POWER 5V	CN1	8
9	MAIN PCB CN15	UART1	3

9-3. RFID MAIN PCB ASS'Y



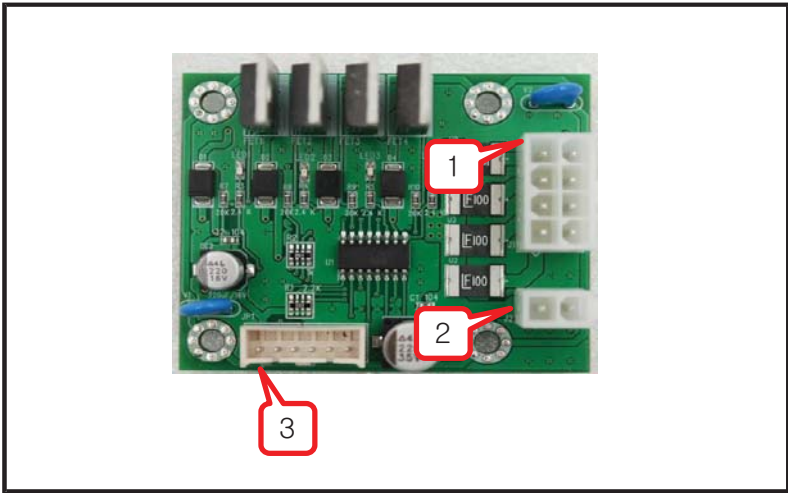
n o	FUNCTION	LOCATI ON	PIN
1	MAIN PCB CN34	CN4	4
2	ANTENA PCB	CJ1	12
3	POWER 5V	CN2	2
4	MAIN PCB CN12	CN1	3

9-4. SOLENOID 4CH PCB ASS'Y (1P, 2P GAME BOARD)

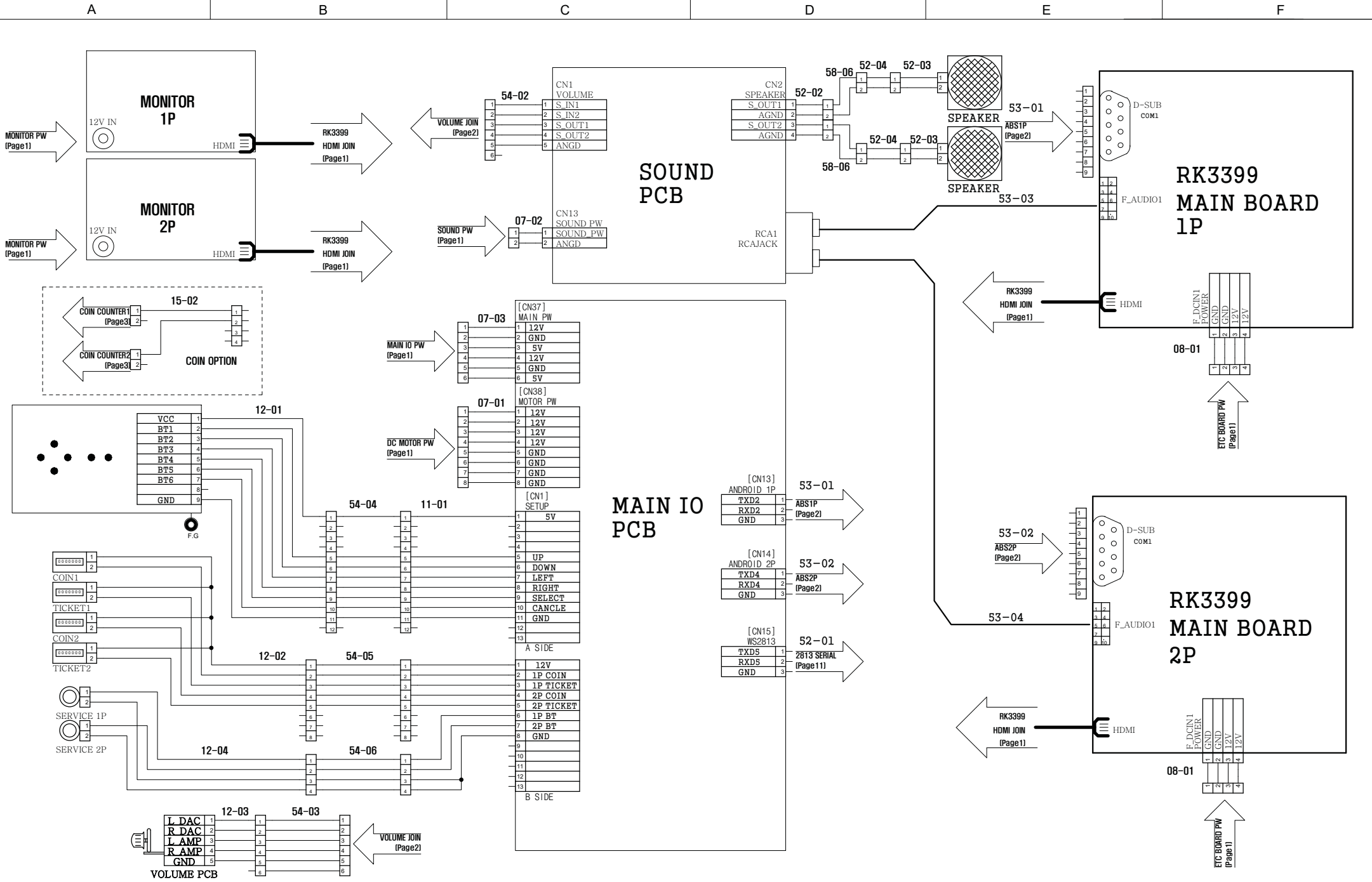


n o	FUNCTION	LOCATI ON	PIN
1	SOLENOID	J1	6
2	POWER 24V	J2	2
3	MAIN PCB	JP1	6

9-5. SOLENOID 4CH PCB ASS'Y (MAIN BOARD PANEL)



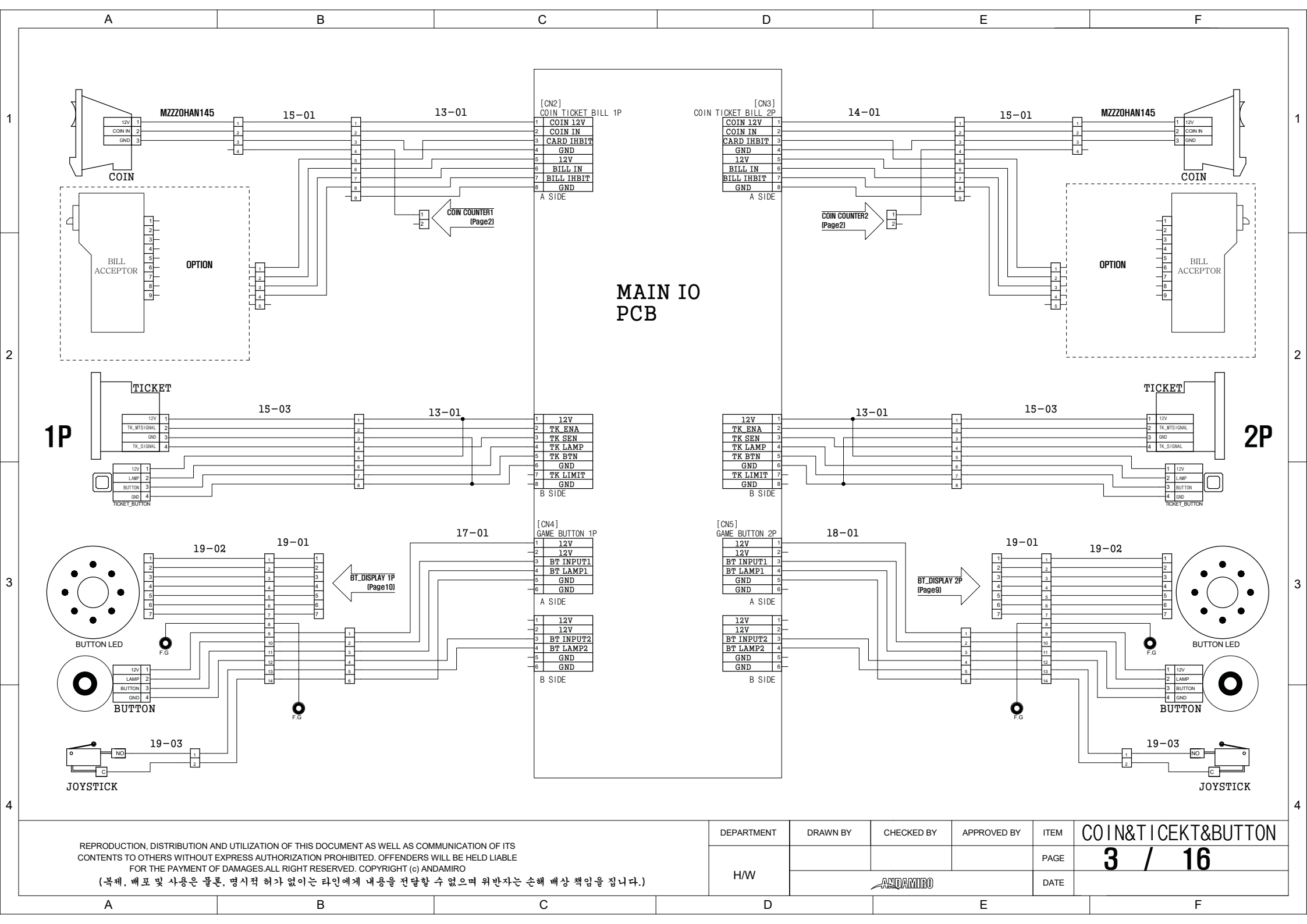
n o	FUNCTION	LOCATI ON	PIN
1	SOLENOID	J1	6
2	POWER 12V	J2	2
3	MAIN PCB	JP1	6

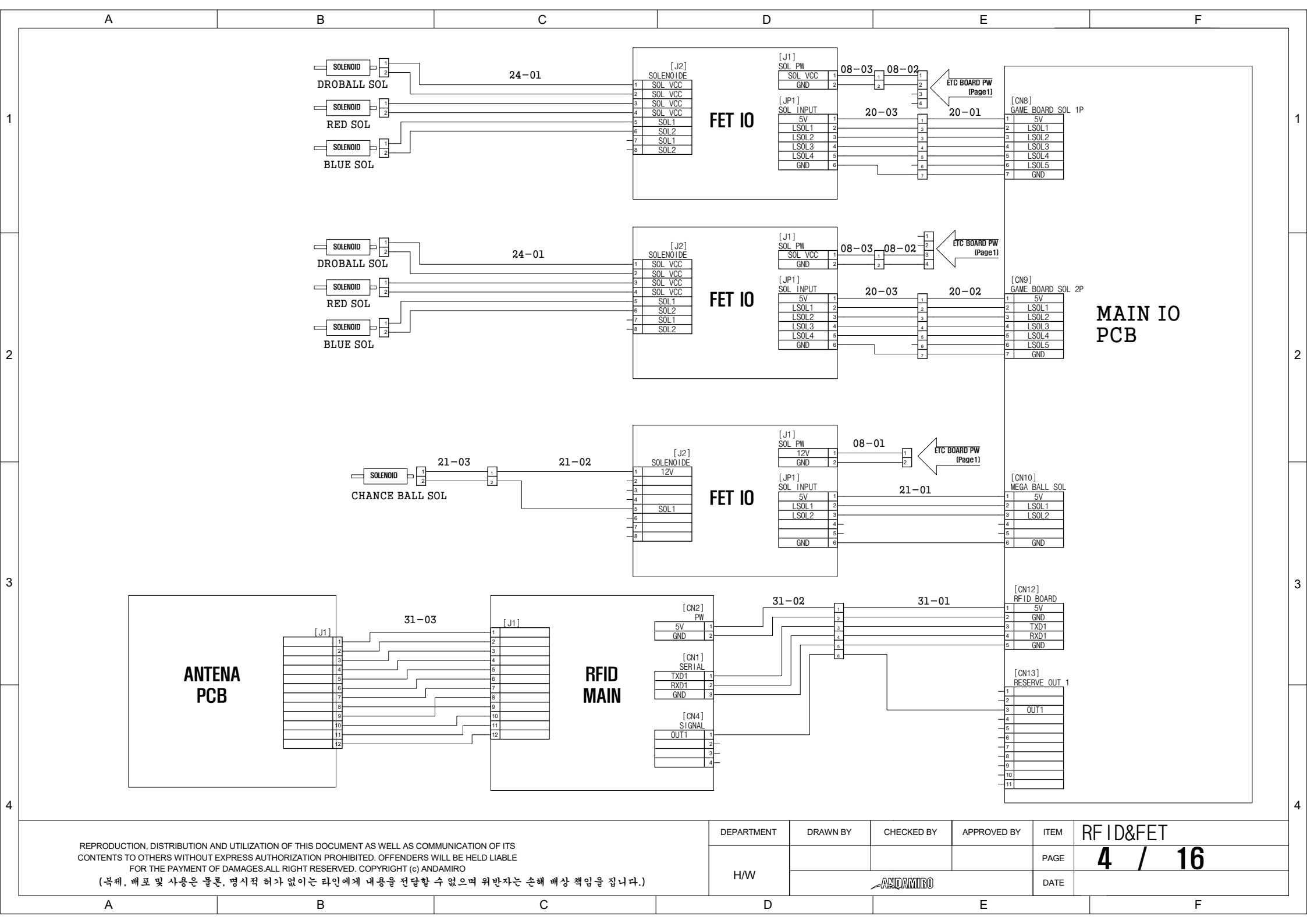


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H/W				PAGE	2 / 16
				DATE	

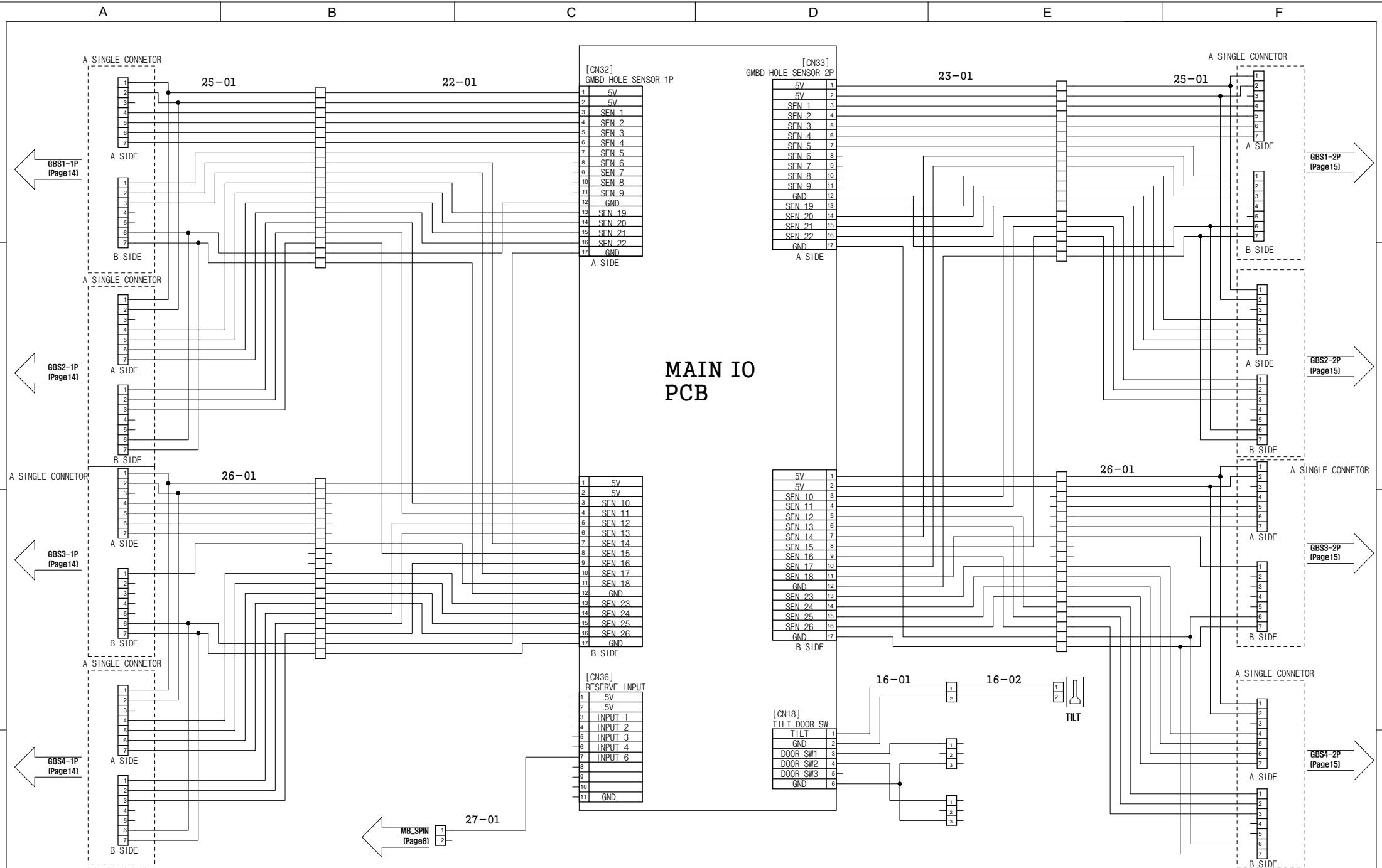
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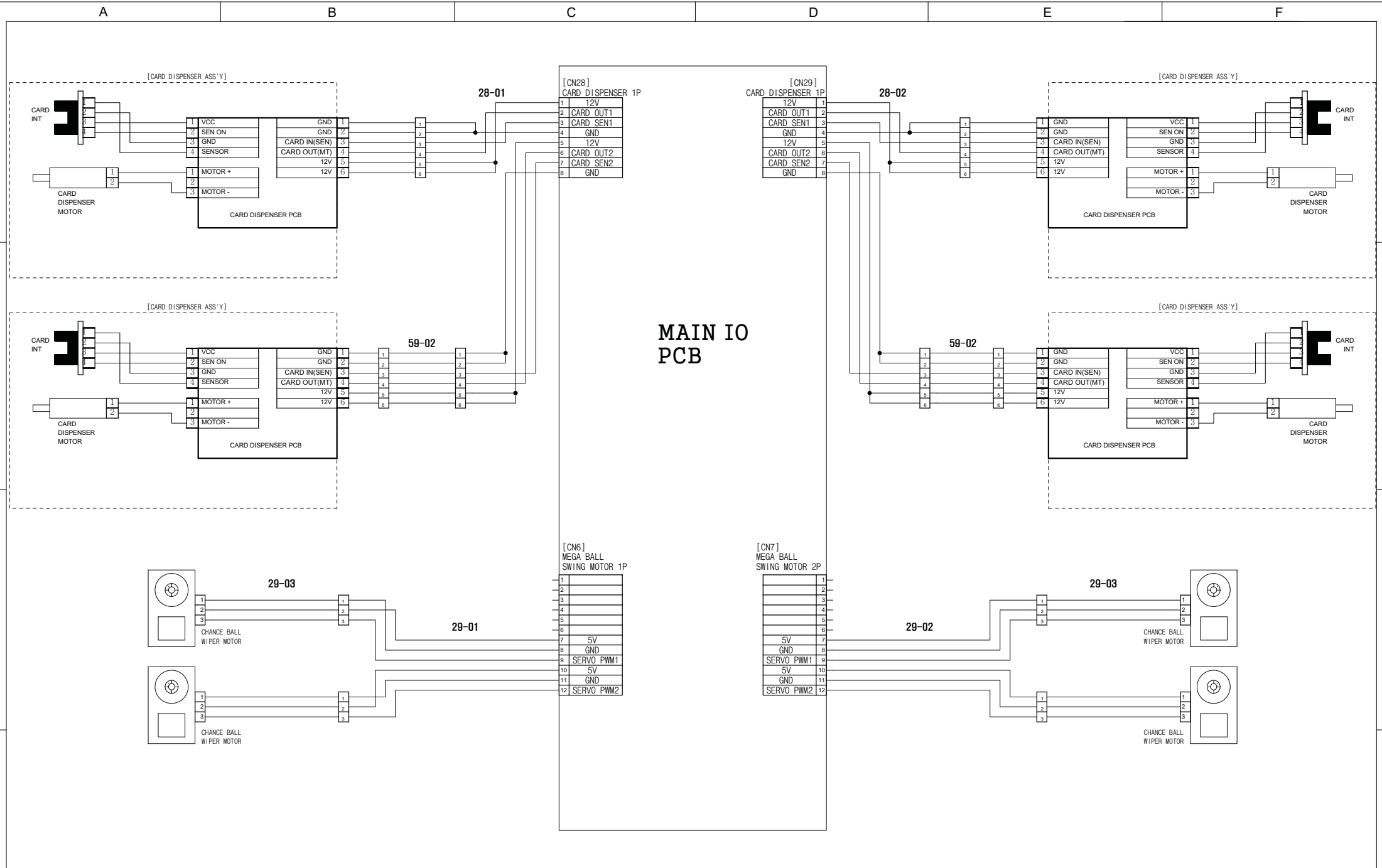
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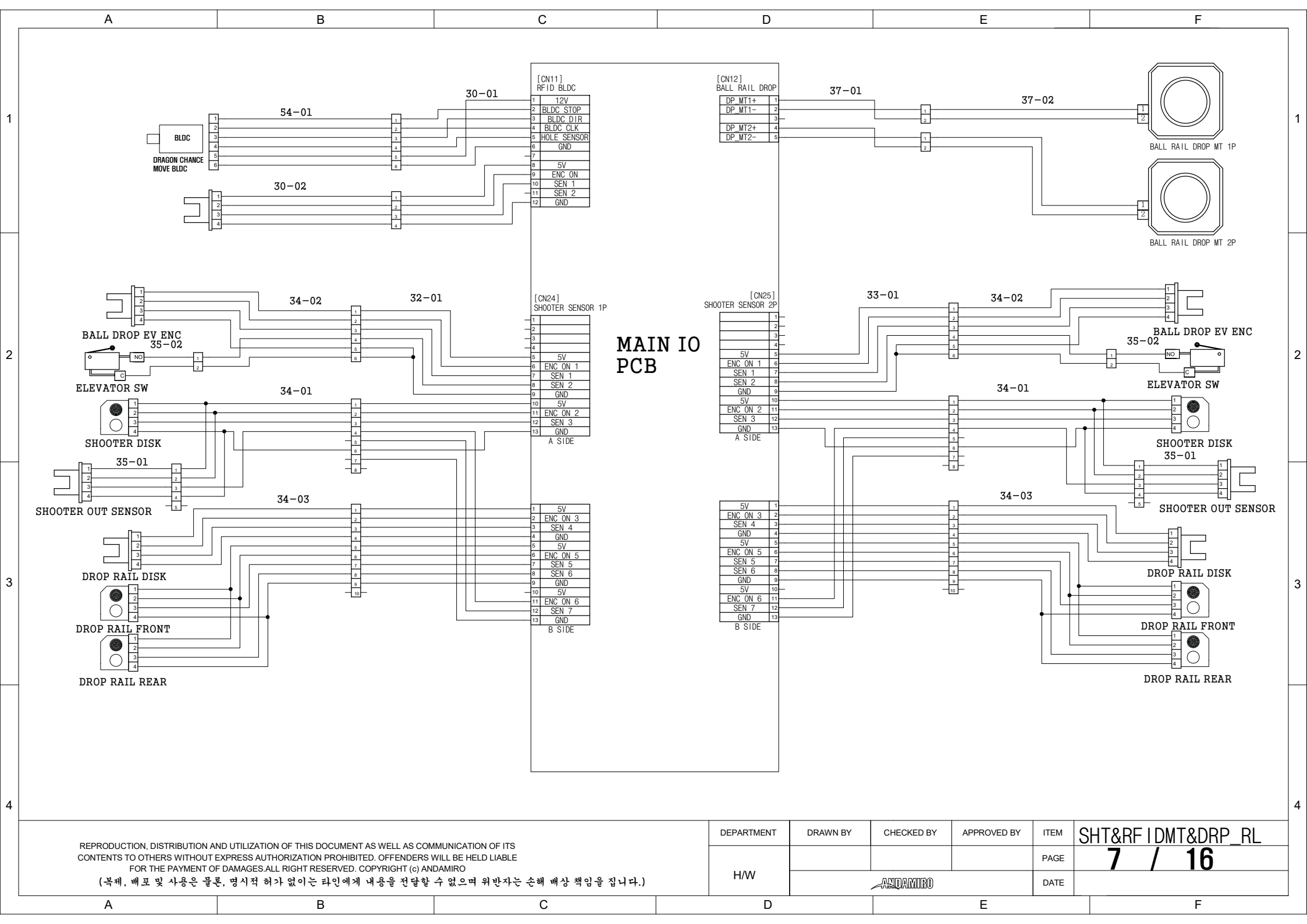
DEPARTMENT	DRAWN BY	CHECKED BY	APPROVED BY	ITEM	GAME&BOARD
H/W				PAGE	5 / 16
				DATE	



MAIN IO PCB

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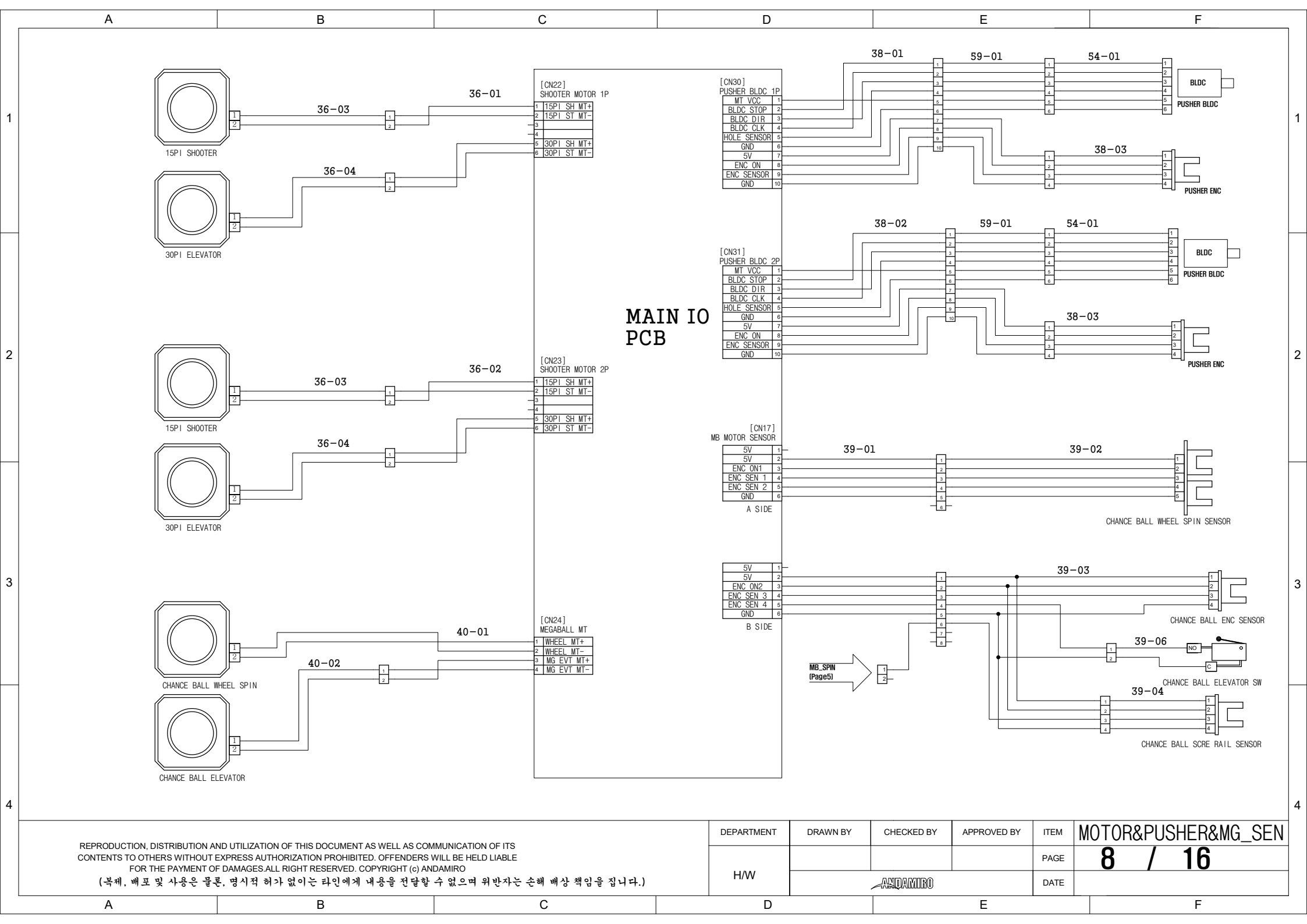
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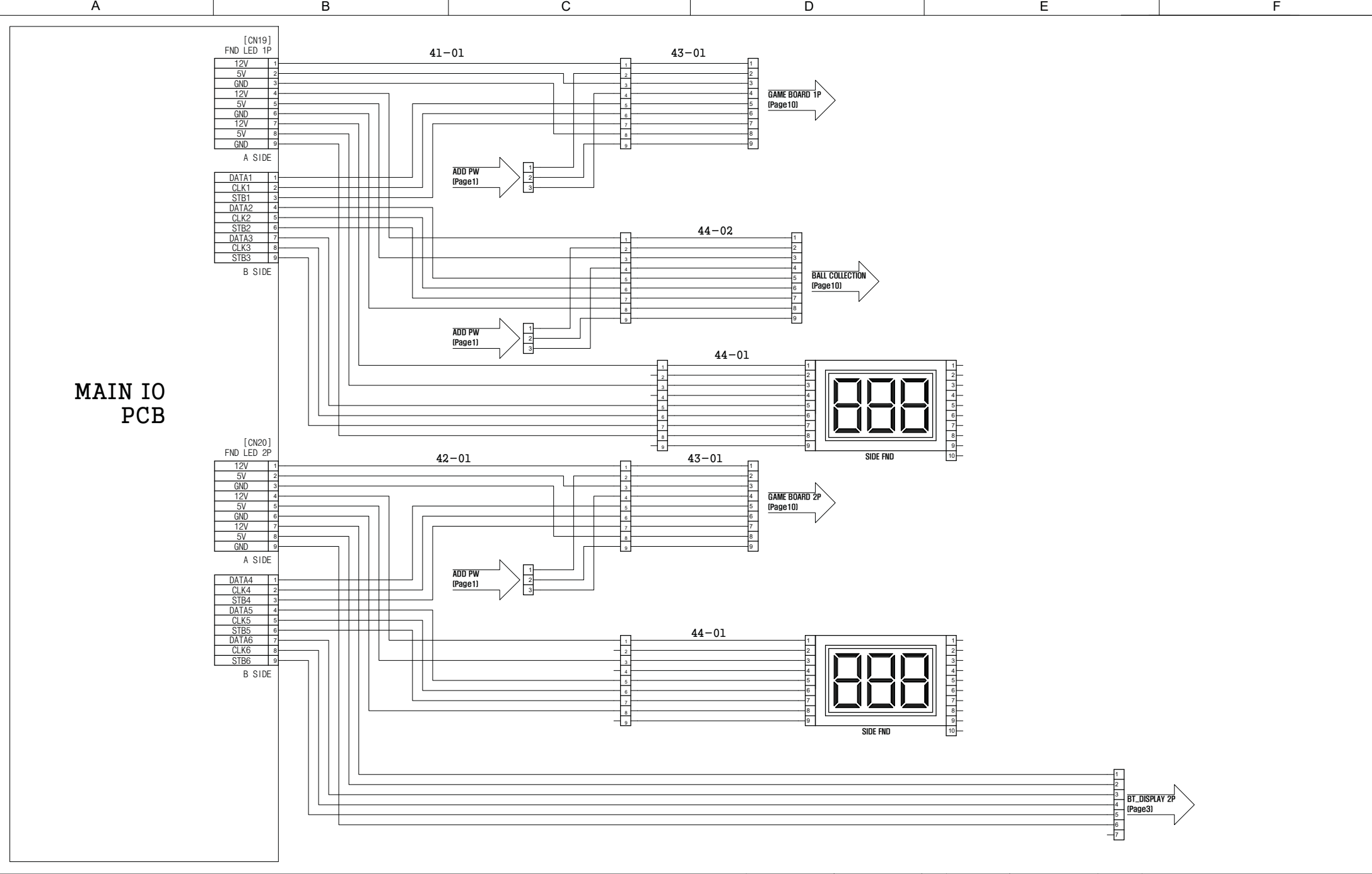
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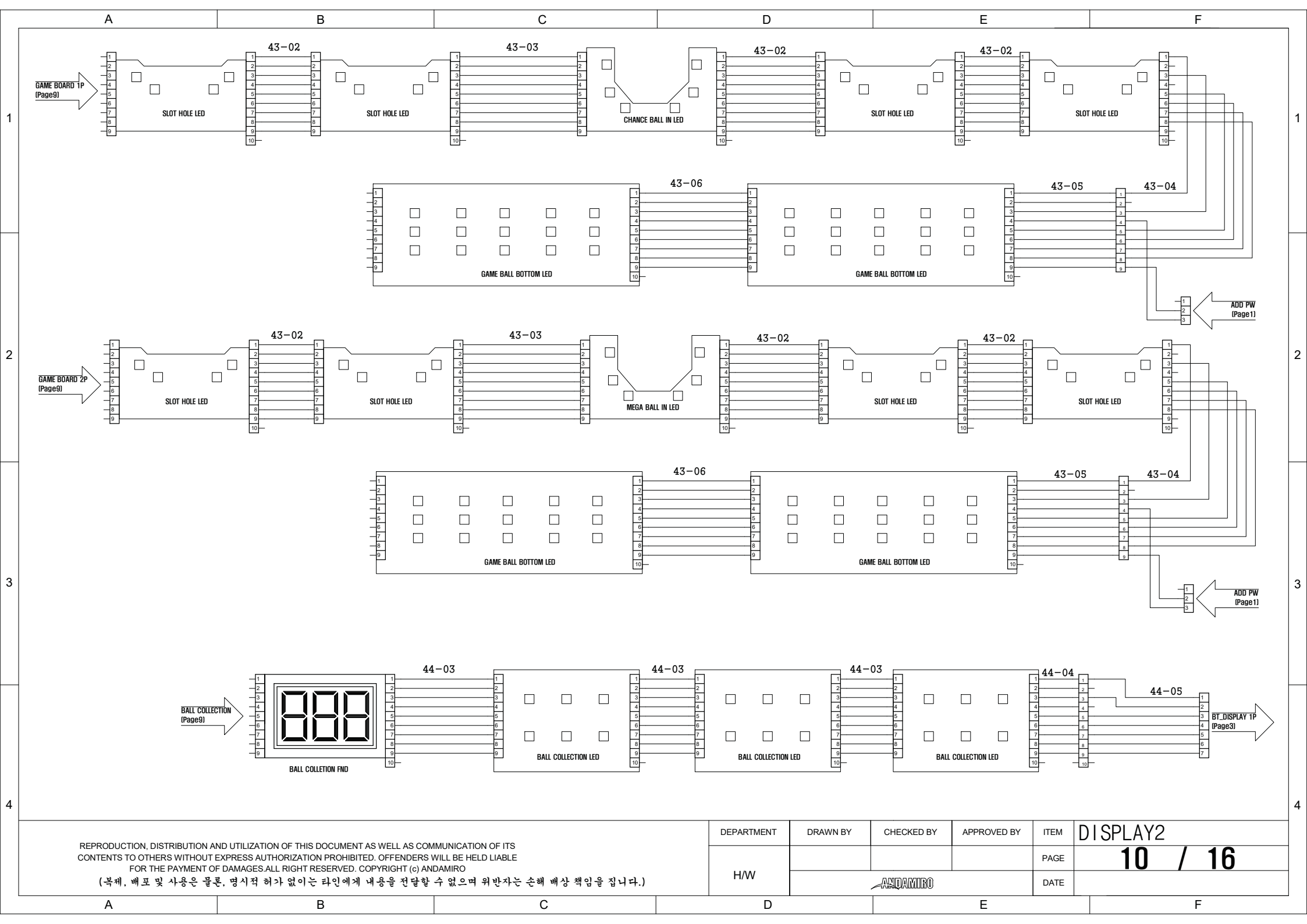




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DEPARTMENT	DRAWN BY	CHECKED BY	APPROVED BY	ITEM	DISPLAY1
H/W				PAGE	9 / 16
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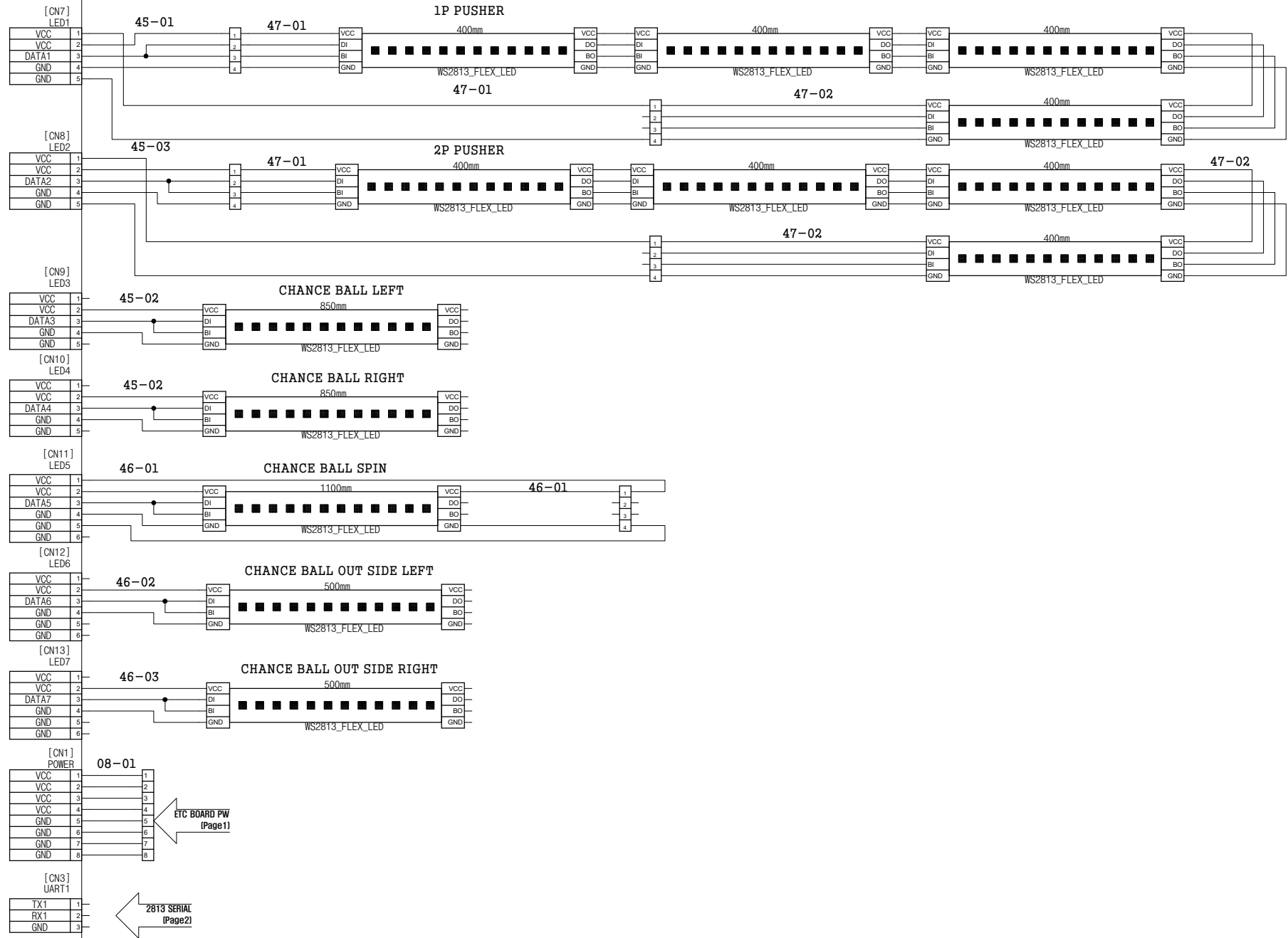


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DEPARTMENT	DRAWN BY	CHECKED BY	APPROVED BY	ITEM	DISPLAY2
H/W				PAGE	10 / 16
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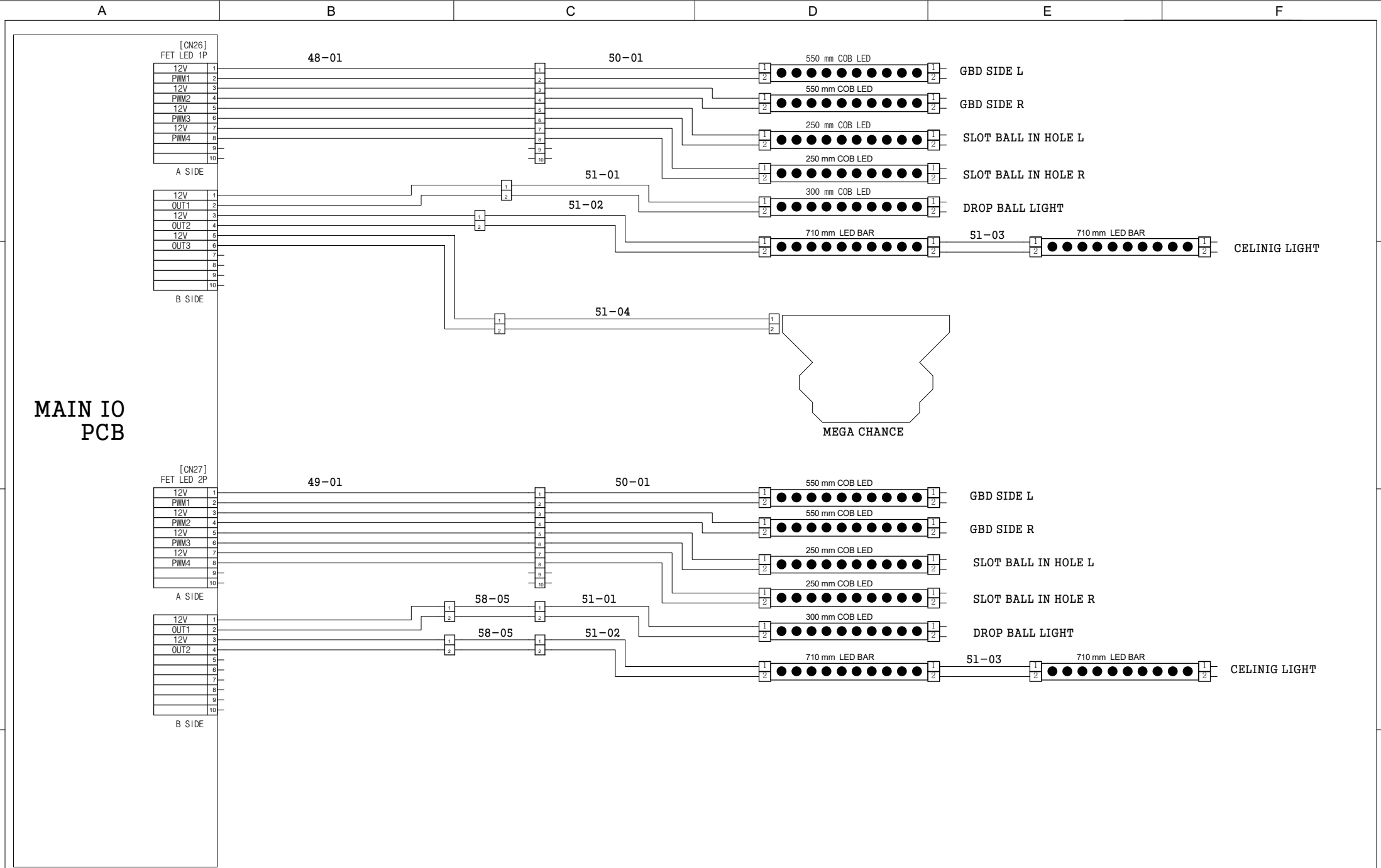
2813 IO PCB



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DEPARTMENT	DRAWN BY	CHECKED BY	APPROVED BY	ITEM	WS2813
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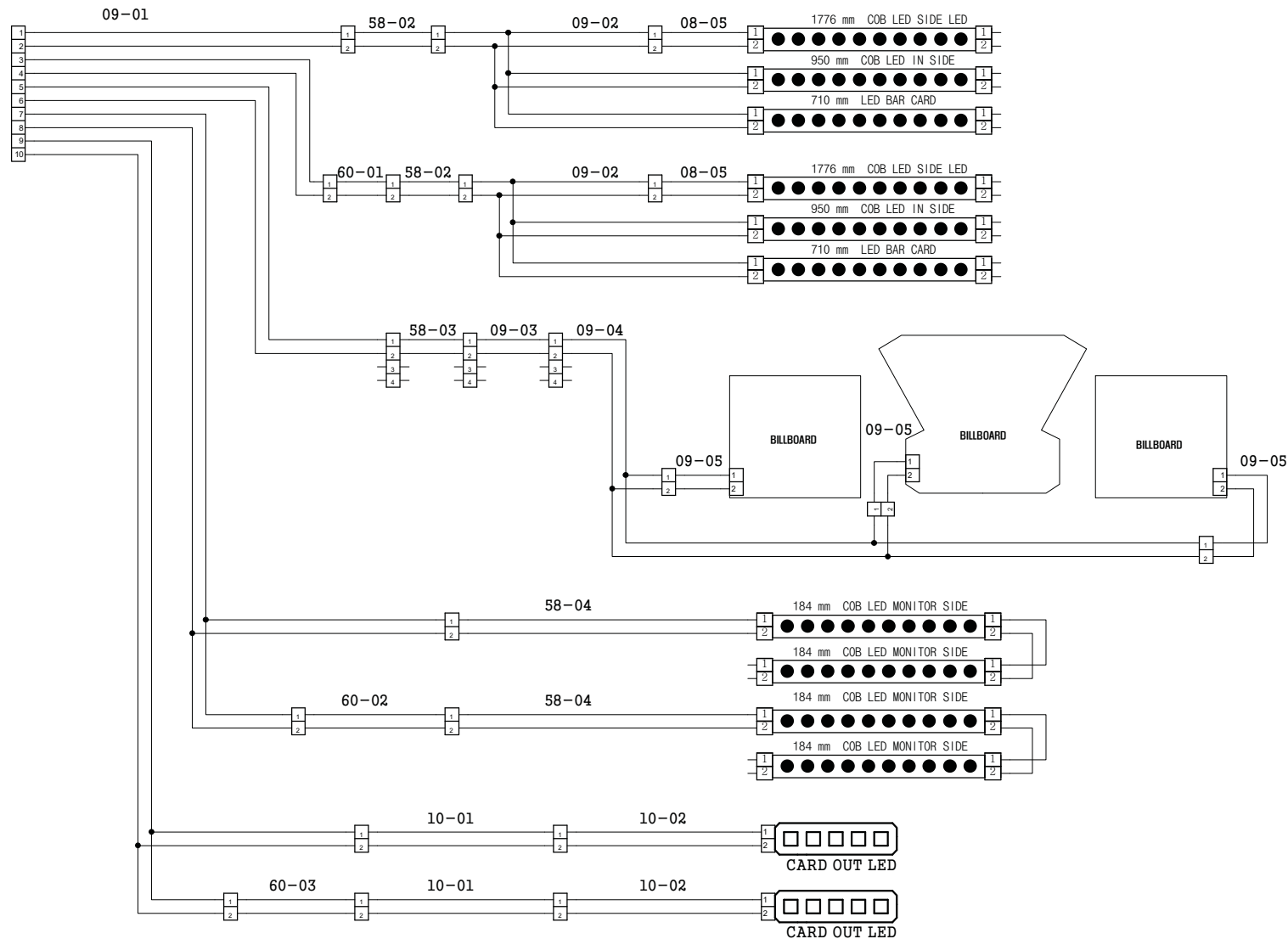
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LIGHT PW
(Page1)



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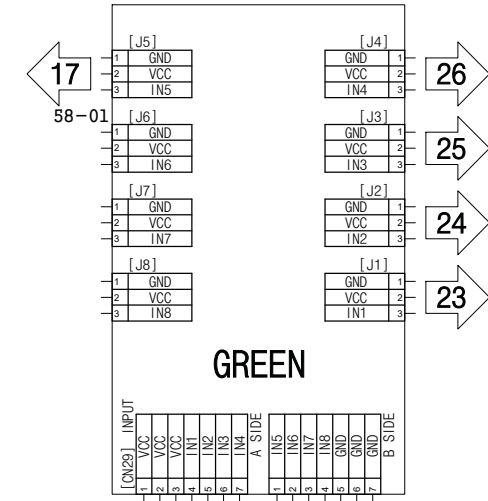
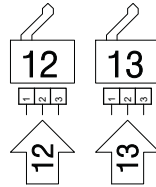
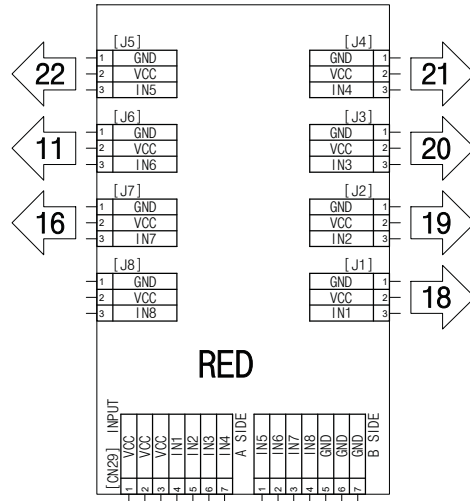
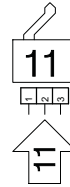
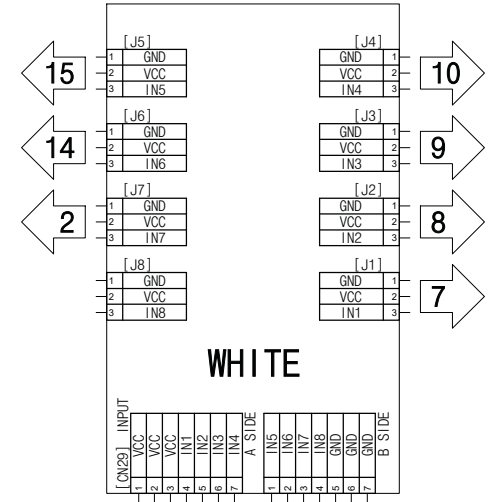
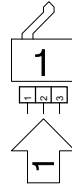
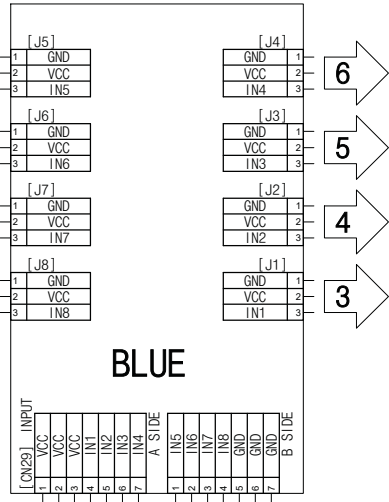
GAME BOARD REAR VIEW 1P

BLUE

WHITE

RED

GREEN



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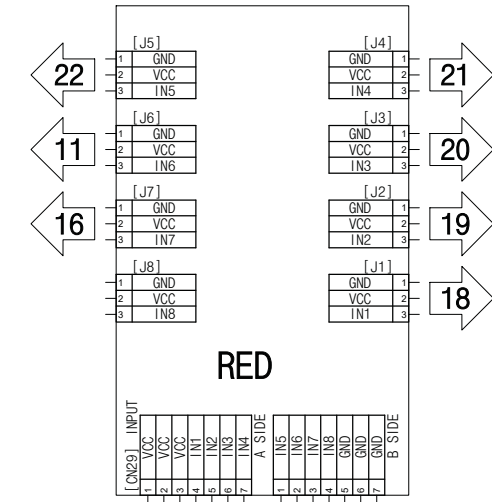
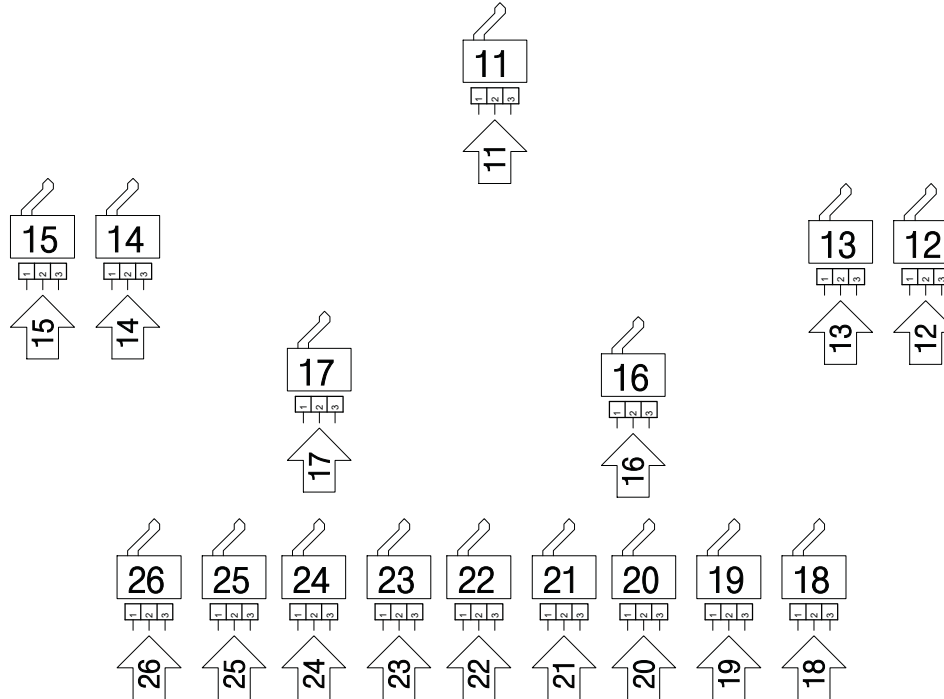
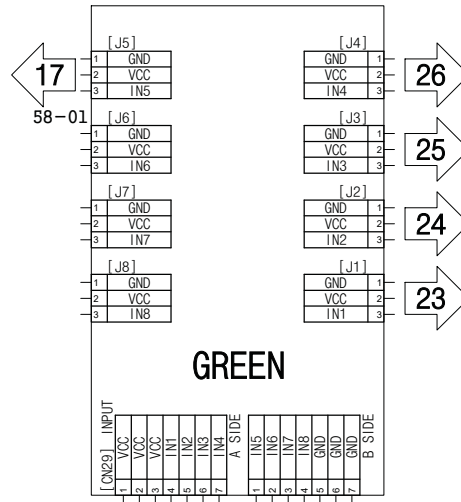
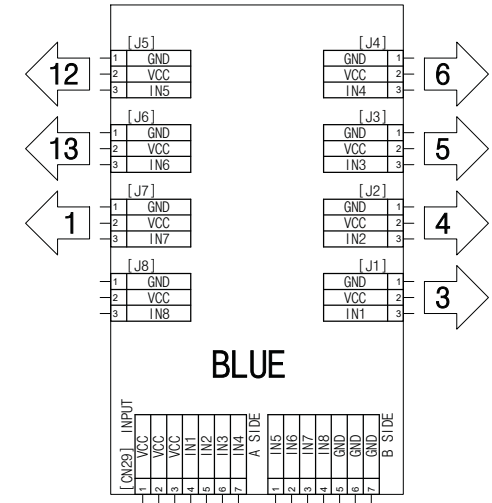
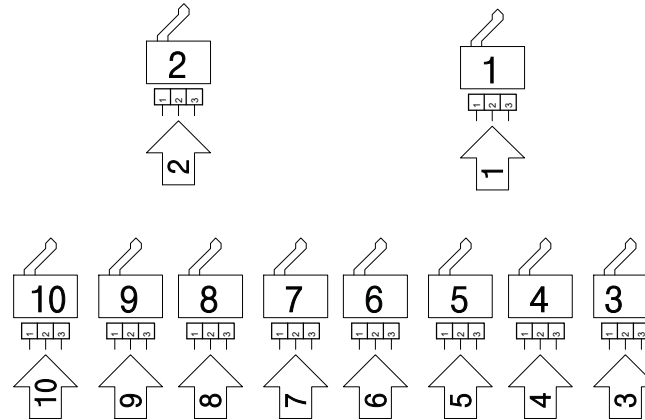
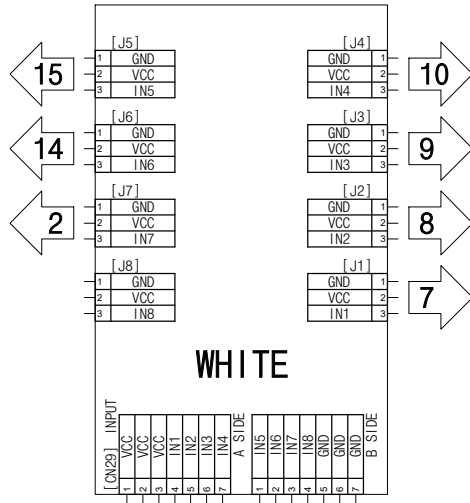
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GAME BOARD REAR VIEW 2P



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GBS-2P

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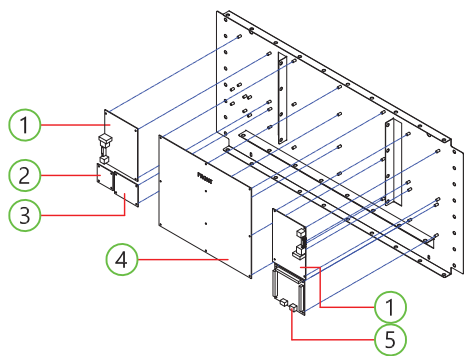
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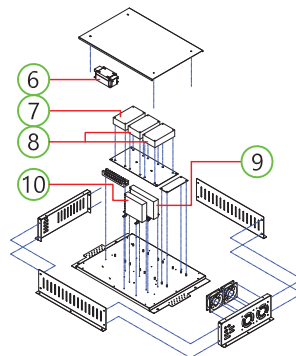
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11. WARRANTY ITEM

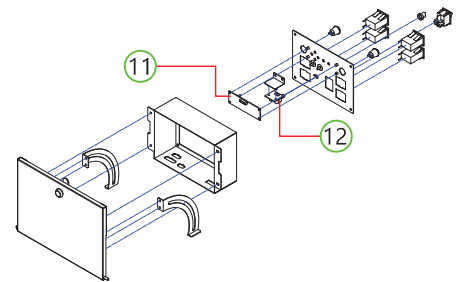
- MAIN BOARD PART



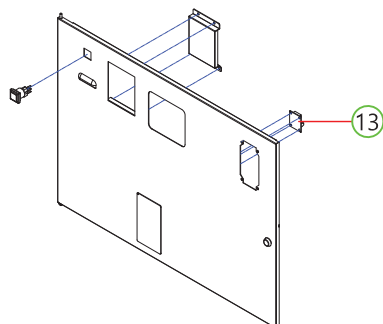
- POWER PART



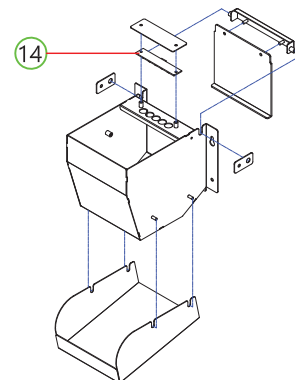
- CONTROL PANEL DOOR PART



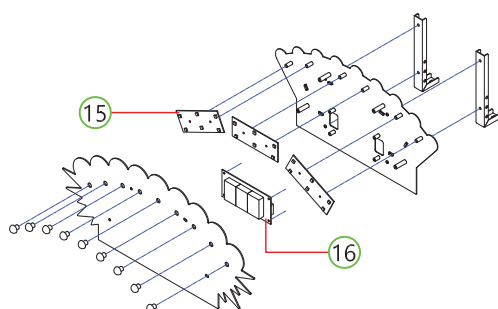
- FND IO EXT PCB BASE PANEL PART



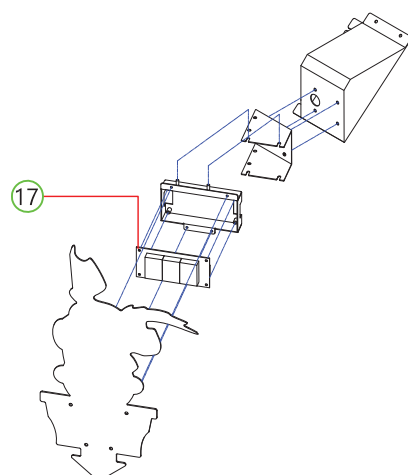
- CARD DROP CASE PART



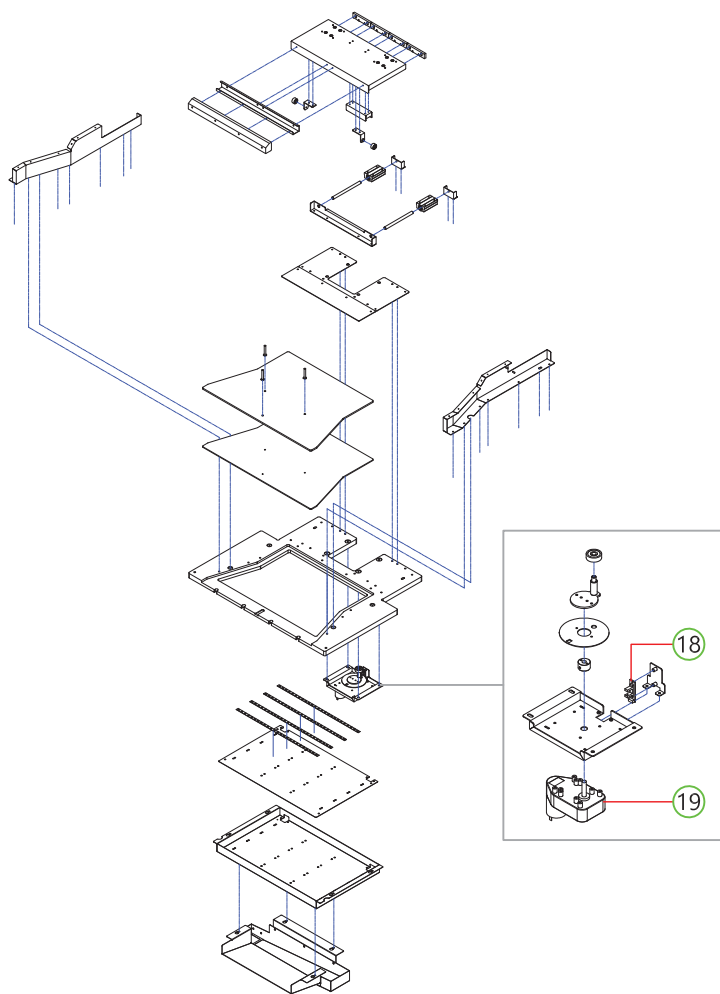
- BALL COLLECTION PART



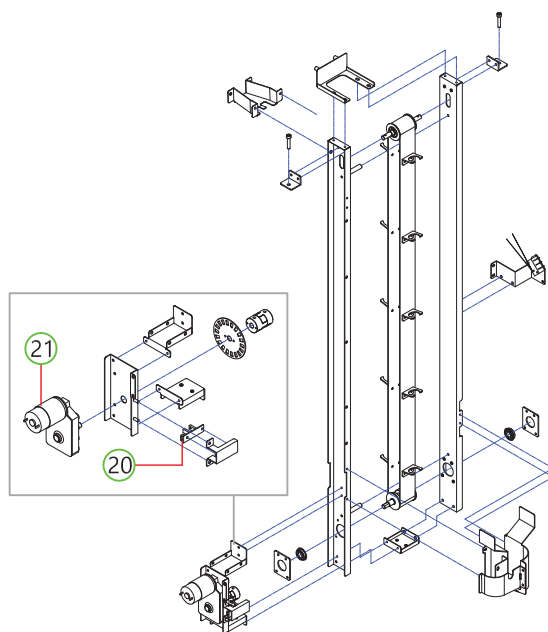
- PUSHER BALL FND PART



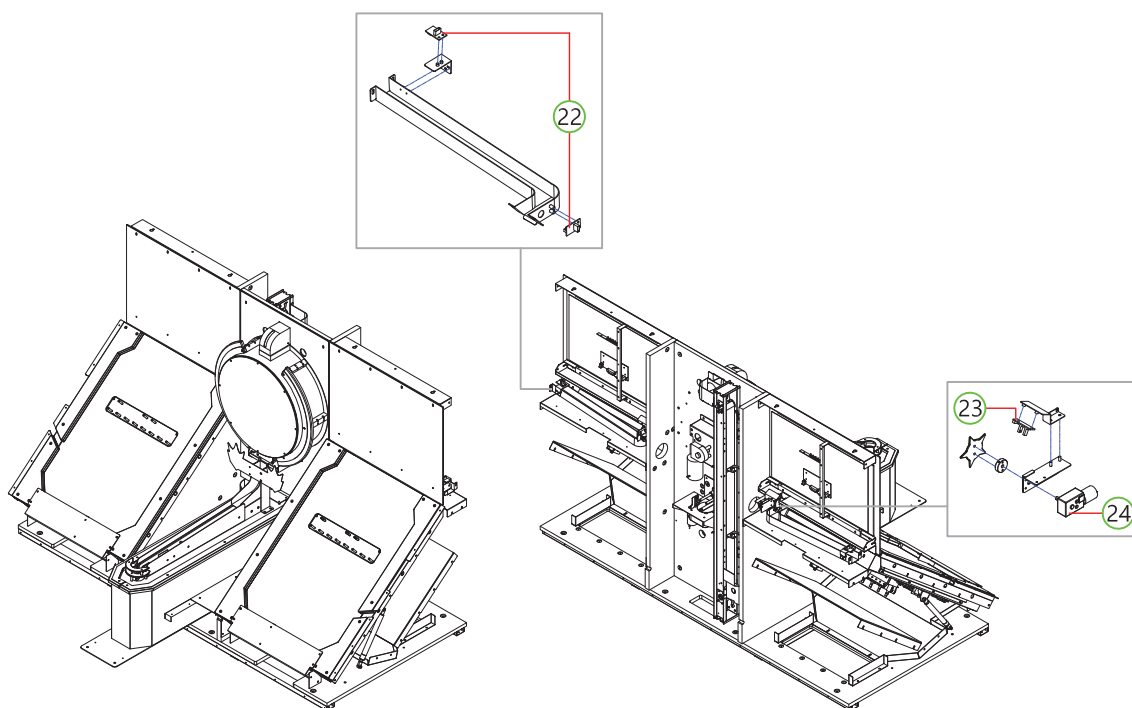
- PUSHER PART



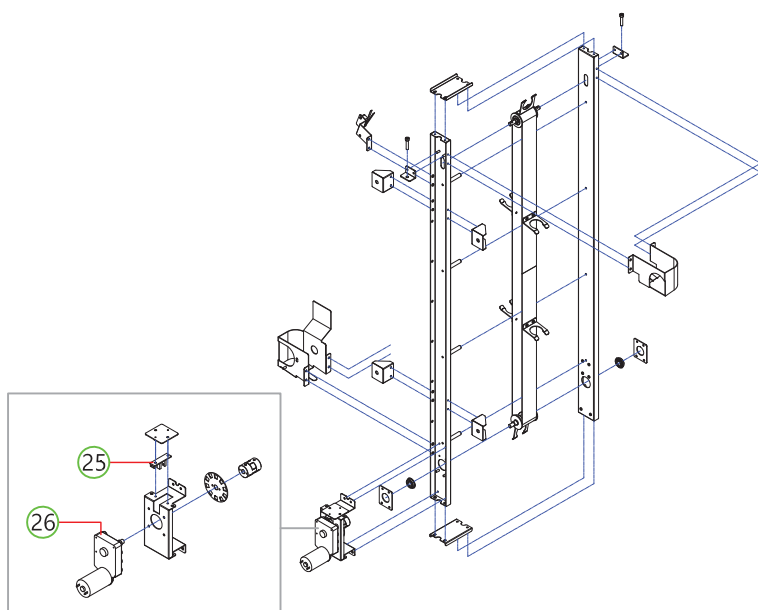
- SMALL BALL ELEVATOR PART



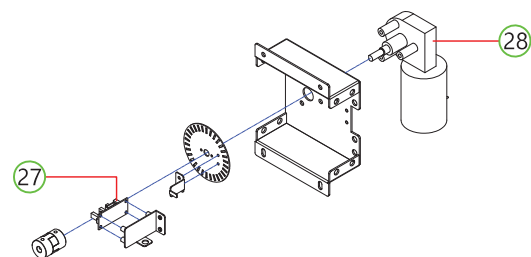
- TOTAL GAME BOARD ASS'Y PART



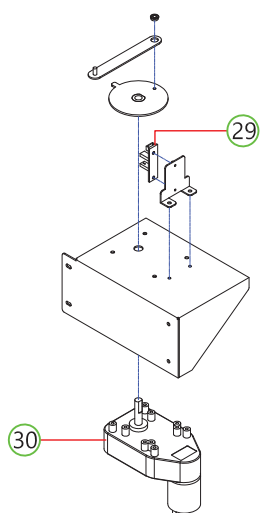
- BALL ELEVATOR PART



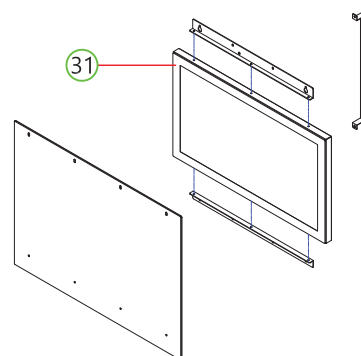
- MEGA WHEEL MOTOR PART



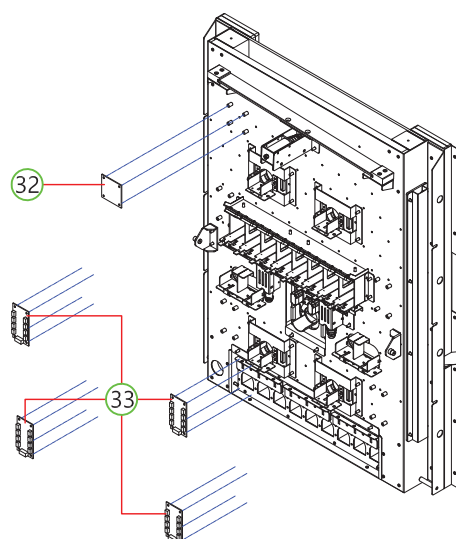
-DROP SLIDE MOVE PART



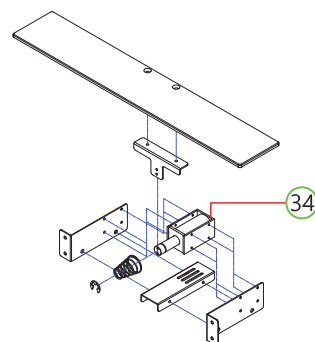
-MONITOR PART



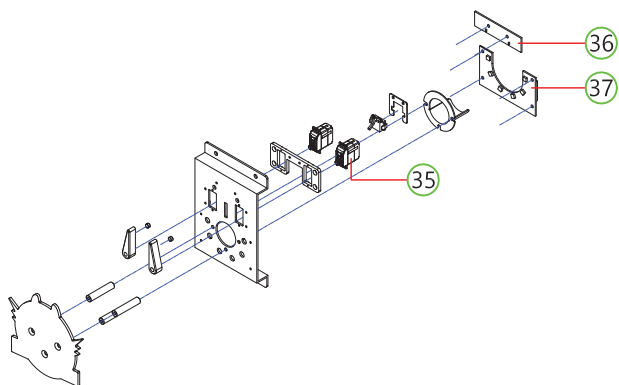
- GAME BOARD PART - 2



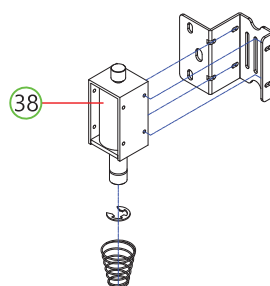
- BALL DROP SLIDE SOL PART



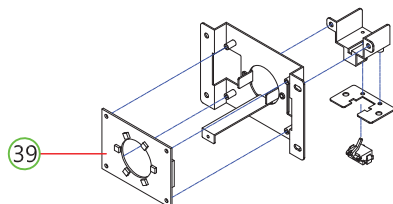
- MEGA BALL PART



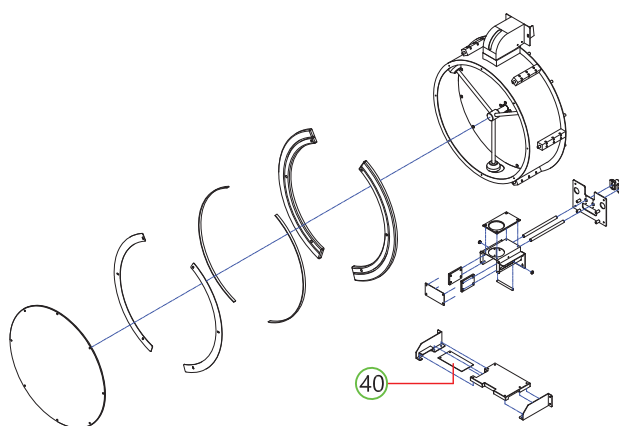
- PUSH SOLENOID PART



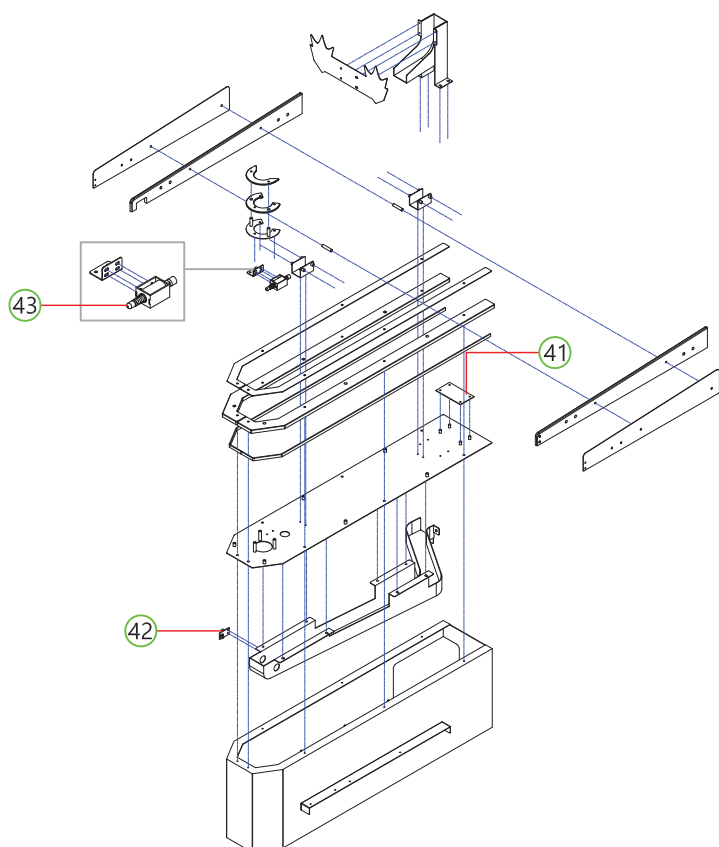
- BONUS BALL HOLE LED PART



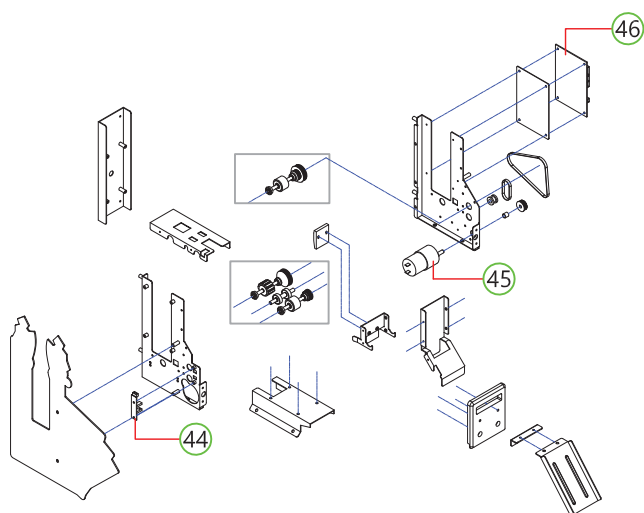
- MEGA BALL ROUND PART



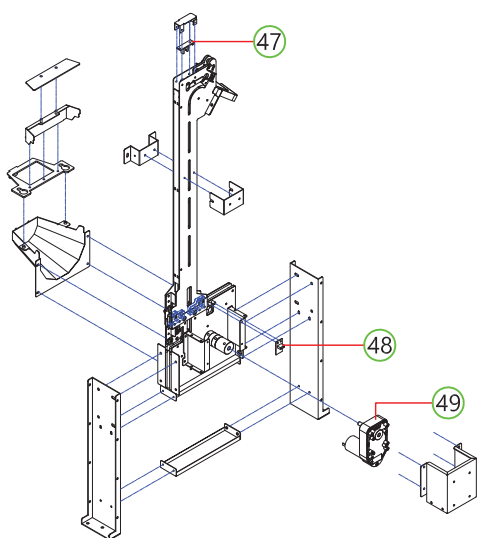
- MEGA BALL CENTER PART



- CARD DISPENSER PART



- BASE TOTAL PART

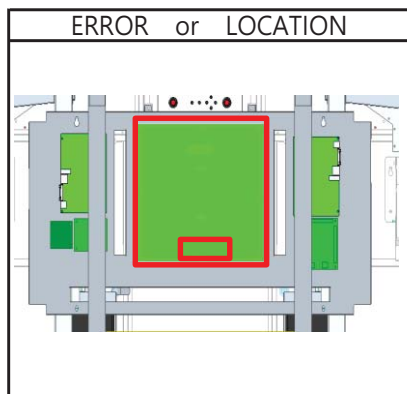


NO.	PART NAME	SPEC.	CODE NO.	WARRANTY	
				6 Month	One Year
①	ANDROID MAIN PCB ASS'Y	RK3399B-A DRAGONS	ADRG0PCB002		○
②	SOL FET 4CH PCB ASS'Y	POLY FUSE_2.2A/ 2920L100	AKZB0PCB008		○
③	AUDIO AMP 12-24V PCB ASS'Y	-	AZZZ0PCB263		○
④	MAIN BOARD ASS'Y	WITH TOP	ADRG0PCB001		○
⑤	F407_WS2813B_IO PCB ASS'Y	DRAGONS	ADRG0PCB012		○
⑥	POWER SMPS	LOP-200-12V / LOP-300-12V	MELE0SMP162/161		○
⑦	POWER SMPS	LOP-600-24V	MELE0SMP159		○
⑧	POWER SMPS	LOP-600-12V	MELE0SMP160		○
⑨	POWER SMPS	LRS 150F-5	MELE0SMP096		○
⑩	NOISE FILTER	TB1-10A0D0	MELE0NOI012		○
⑪	VIDEO SETUP BUTTON ASS'Y	-	AZZZ0PCB264		○
⑫	VOLUMN PCB ASS'Y	1 VOLUME	AHM20PCB016		○
⑬	COIN JOIN PCB ASS'Y	-	AZZZ0PCB137		○
⑭	LED PCB ASS'Y	-	MZZZ0FAN037		○
⑮	BALL COLLECTION LED PCB ASS'Y	DRAGONS	ADRG0PCB008		○
⑯	FND PCB ASS'Y	2941-3(STRAIGHT)	AFND0PCB037		○
⑰	FND PCB ASS'Y	2941-3(STRAIGHT)	AFND0PCB037		○
⑱	PHOTO INT-1 PCB ASS'Y	ANGLE TYPE	AZZZ0PCB103		○
⑲	MOTOR	KGV2-0350-NB3640S1	MZZZ0MOT152	○	
⑳	PHOTO INT-1 PCB ASS'Y	ANGLE TYPE	AZZZ0PCB103		○
㉑	MOTOR	KGE-0116-ND3657 U1	MZZZ0MOT155	○	
㉒	IR SENSOR PCB VR ASS'Y_R_ 2.2CM	38KHZ_CONNECTOR RED	ASBT0PCB008		○
㉓	PHOTO INT-1 PCB ASS'Y	STRIGHT_CIRCLE RAMA	ACIR0PCB011		○
㉔	MOTOR	KWA-0150-KD2531U1	MZZZ0MOT170	○	
㉕	PHOTO INT-1 PCB ASS'Y	ANGLE TYPE	AZZZ0PCB103		○
㉖	MOTOR	KGE-0116-ND3657 U1	MZZZ0MOT155	○	
㉗	PHOTO INT2 PCB ASS'Y	-	AWIW0PCB009		○
㉘	MOTOR	HM37-SA1264A-HS434	MZZZ0MOT113	○	
㉙	PHOTO-INT-1 PCB ASS'Y	-	AZZZ0PCB103		○
㉚	MOTOR	KGV2-0350-NB3640S1	MZZZ0MOT152	○	
㉛	MONITOR	21.5 (22")	AZZZ0MON014		○
㉜	SOLENOID_4CH_PCB ASS'Y	POLY FUSE_2.2A/ 2920L100	AKZB0PCB008		○
㉝	SENSOR JOIN PCB ASS'Y	-	ADRG0PCB010		○
㉞	SOLENOID ASS'Y_V2	DS12ES24V	ADRG0SOL002	○	
㉟	SERVO MOTOR	DS-S009A , 6Kg CORE LESS PWM SERVO	MZZZ0MOT186	○	
㊱	MAGNETIC SENSOR PCB ASS'Y	DRAGONS	ADRG0PCB009		○
㊲	MEGA BALL IN LED PCB ASS'Y	DRAGONS	ADRG0PCB005		○
㊳	SOLENOID ASS'Y	-	ADRG0SOL001	○	
㊴	BONUS BALL HOLE LED PCB ASS'Y	-	ADRG0PCB003		○
㊵	4CH_RFID	DRAGONS / RFID ANTENA	ADRG0PCB007		○
㊶	RFID MAIN_PCB ASS'Y	DRAGONS	ADRG0PCB006		○
㊷	IR SENSOR PCB VR ASS'Y_R_ 2.2CM	38KHZ_CONNECTOR RED	ASBT0PCB008		○

NO.	PART NAME	SPEC.	CODE NO.	WARRANTY	
				6 Month	One Year
43	SOLENOID ASS'Y	DS-08AS12V	ATP20ASS010	○	
44	PHOTO INT-1 PCB ASS'Y	ANGLE TYPE	AZZZ0PCB103		○
45	MOTOR	KGC-3429(KD1-3429-075), 1/40(163RPM)	MZZZ0MOT089	○	
46	CARD DISPENSOR I/O PCB ASS'Y	-	AZZZ0PCB258		○
47	PHOTO INT-1 PCB ASS'Y	-	AZZZ0PCB103		○
48	ELEVATOR DISK SENSOR PCB ASS'Y	-	AGHP0PCB020		○
49	MOTOR	KGV2-0105-KD3657U1 (12V, 6000RPM) , R-TYPE	MZZZ0MOT191	○	

12. TROUBLE SHOOTING

12-1. MEMORY ERROR (E001)



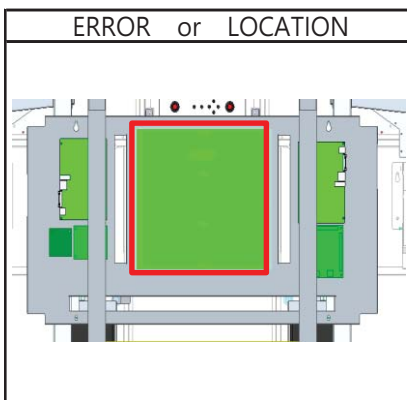
► SOLUTION

1. CHECK :

- 1) Check Dip sw settings
- 2) Recheck after power off/on
- 3) Recheck after factory set
- 4) MAIN PCB replacement
- 5) MAIN TOP PCB replacement

PART NAME	CODE	PART NAME	CODE
MAIN BOARD ASS'Y	ADRG0PCB001		

12-2. SETUP DATA ERROR (E02)



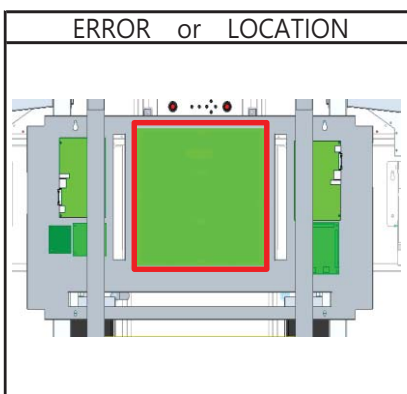
► SOLUTION

1. CHECK :

- 1) Recheck after power off/on
- 2) Recheck after factory set
- 3) MAIN PCB replacement
- 4) MAIN TOP PCB replacement

PART NAME	CODE	PART NAME	CODE
MAIN BOARD ASS'Y	ADRG0PCB001		

12-3. GAME DATA ERROR (E03)



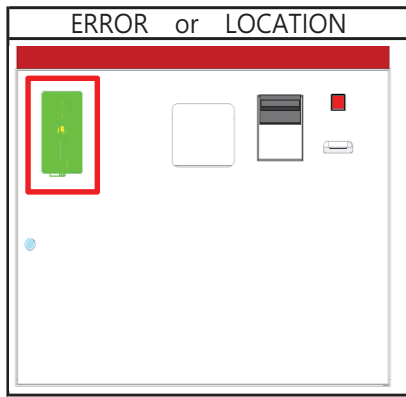
► SOLUTION

1. CHECK :

- 1) Recheck after power off/on
- 2) Recheck after factory set
- 3) MAIN PCB replacement
- 4) MAIN TOP PCB replacement

PART NAME	CODE	PART NAME	CODE
MAIN BOARD ASS'Y	ADRG0PCB001		

12-4. COIN MACHINE ERROR (E11)



► 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	MZZZ0COS052	MAIN BOARD ASS'Y	ADRG0PCB001

12-5. BILL ACCEPTOR ERROR (E13)

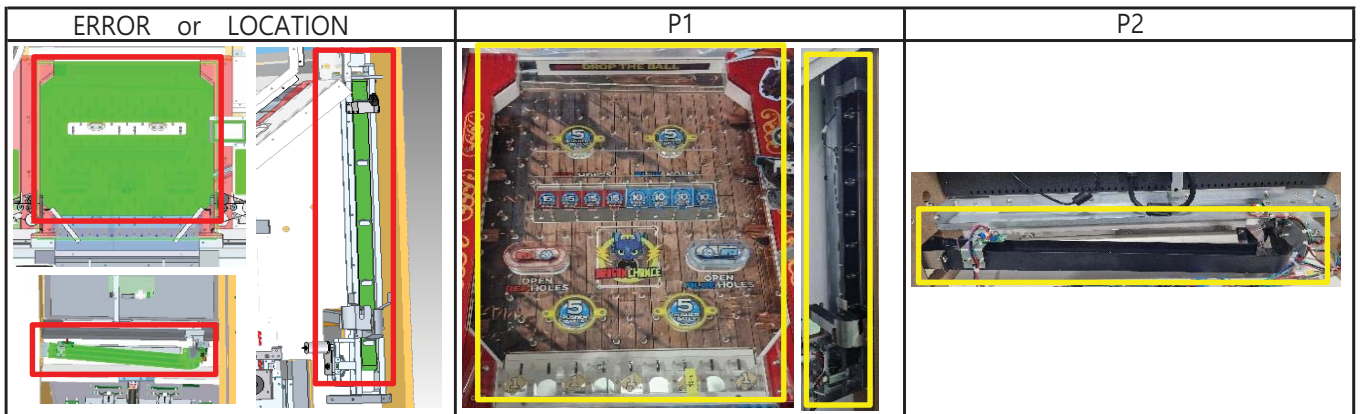


► SOLUTION

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	PART NAME	CODE
MAIN BOARD ASS'Y	ADRG0PCB001		

12-6. NO GAME BALL (E31)

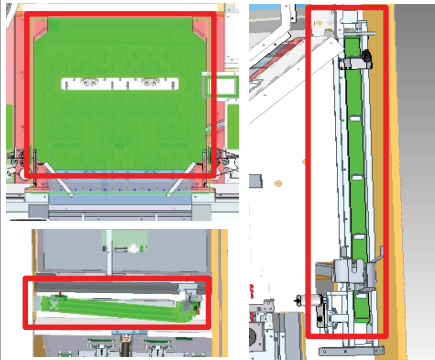
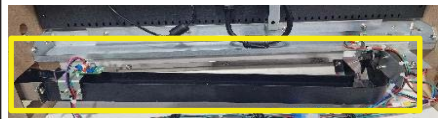


► SOLUTION

1. CHECK :
 - 1) Check if the game board is fun to watch (P1)
 - 2) Check for the presence of the ball in the Game Ball Elevator (P1)
 - 3) Check for the presence of a ball on the rear ball rail (P2)
 - 4) Confirm total viewing quantity is 25
 - 5) If ball supply is insufficient, add new balls

PART NAME	CODE	PART NAME	CODE
BALL-Ø30 RED	MZZZ0BLL043		

12-7. GAME BALL JAM (E32)

ERROR or LOCATION	P1	P2
		

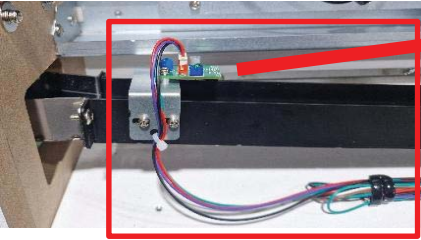
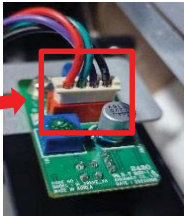
► SOLUTION

1.CHECK :

- 1) Check if the game board is fun to watch (P1)
- 2) Check for ball jams in the Game Ball Elevator (P1)
- 3) Check for ball jams on the rear ball rail (P2)
- 4) Confirm total viewing quantity is 25
- 5) If ball supply is insufficient, add new balls

PART NAME	CODE	PART NAME	CODE
BALL-Ø30 RED	MZZZ0BLL043		

12-8. GAME BALL RAIL IN SENSOR ERROR (E033)

ERROR or LOCATION	P1	P2																			
SENSOR 		<table><tr><td>1</td><td>2</td><td>3</td><td>4</td></tr></table><table><tr><td>1</td><td>Over 4.0V</td><td></td></tr><tr><td>2</td><td>Below 0.2V</td><td></td></tr><tr><td>3</td><td>Below 0.2V</td><td>detect</td></tr><tr><td>4</td><td>Over 4.0V</td><td>undetected</td></tr><tr><td></td><td>GND</td><td></td></tr></table>	1	2	3	4	1	Over 4.0V		2	Below 0.2V		3	Below 0.2V	detect	4	Over 4.0V	undetected		GND	
1	2	3	4																		
1	Over 4.0V																				
2	Below 0.2V																				
3	Below 0.2V	detect																			
4	Over 4.0V	undetected																			
	GND																				

► SOLUTION

1.TEST MODE→BALL SUPPLY TEST,INPUT TEST

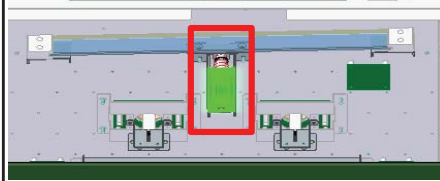
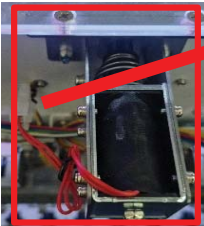
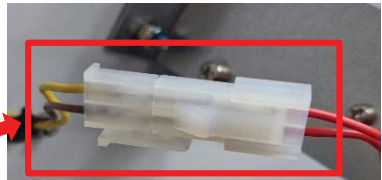
- When checked in BALL SUPPLY TEST,
PUSHER BALL FND1 : Displays sensor operation status
Game ball IN sensor : Upon recognition "1"
When not recognized "0"
- When checking in INPUT TEST
When Game Ball IN is detected by sensor :
"6" sound output

2.CHECK :

- 1) Checking the assembly status of the equipment (P1)
- 2) Check SENSOR assembly status (P1)
- 3) Check wiring connection status (P1)
- 4) Check SENSOR voltage (P2) /
Check INPUT MODE
- 5) SENSOR replacement
- 6) Main PCB replacement

PART NAME	CODE	PART NAME	CODE
IR SENSOR PCB VR ASS'Y_R_ 2.2CM	ASBT0PCB008	MAIN BOARD ASS'Y	ADRG0PCB001

12-9. GAME BALL DROP SOLENOID ERROR (E34)

ERROR or LOCATION	P1	P2								
	 	 <table><tr><td>1</td><td></td></tr><tr><td>2</td><td></td></tr></table> <table><tr><td>1</td><td>Over 20.0V</td></tr><tr><td>2</td><td>GND</td></tr></table>	1		2		1	Over 20.0V	2	GND
1										
2										
1	Over 20.0V									
2	GND									

► SOLUTION

1.TEST MODE→SOLENOID TEST

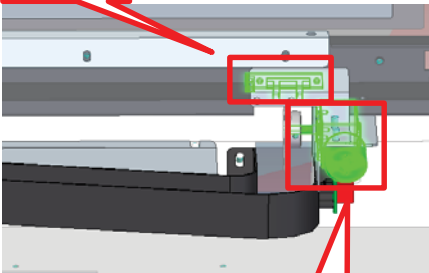
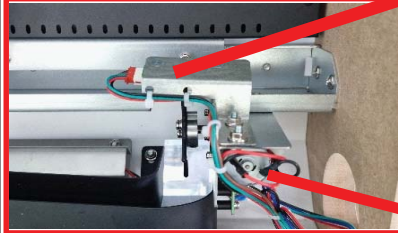
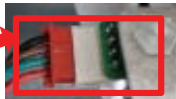
- Proceed with the test in Drop Mode
In MANUAL MODE, in SETUP PANEL
The LEFT button operates the 1P solenoid
The RIGHT button controls the 2P solenoid

2.CHECK :

- 1) Check SOLENOID assembly status (P1)
- 2) Check DROP acrylic operation status (P1)
- 3) Check wiring connection status (P1)
- 4) Check solenoid voltage (P2)
- 5) Solenoid replacement
- 6) Solenoid PCB replacement
- 7) Main PCB replacement

PART NAME	CODE	PART NAME	CODE
SOLENOID ASS'Y	ADRG0SOL002	SOLENOID_4CH_PCB ASS'Y	AKZB0PCB008
MAIN BOARD ASS'Y	ADRG0PCB001		

12-10. GAME BALL SUPPLY MOTOR & ENCODER SENSOR ERROR (E35)

ERROR or LOCATION	P1	P2																										
SENSOR  MOTOR		<table><tr><td>4</td><td>1</td><td>Over 4.0V</td><td></td></tr><tr><td>3</td><td>2</td><td>Below 0.1V</td><td></td></tr><tr><td>2</td><td>3</td><td>Over 4.0V</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>GND</td><td></td></tr></table><table><tr><td>2</td><td>1</td><td>Over 4.0V</td></tr><tr><td>1</td><td>2</td><td>GND</td></tr></table>	4	1	Over 4.0V		3	2	Below 0.1V		2	3	Over 4.0V	detect	1	4	Below 0.1V	undetected			GND		2	1	Over 4.0V	1	2	GND
4	1	Over 4.0V																										
3	2	Below 0.1V																										
2	3	Over 4.0V	detect																									
1	4	Below 0.1V	undetected																									
		GND																										
2	1	Over 4.0V																										
1	2	GND																										

► SOLUTION

1.TEST MODE→BALL SUPPLY TEST,INPUT TEST

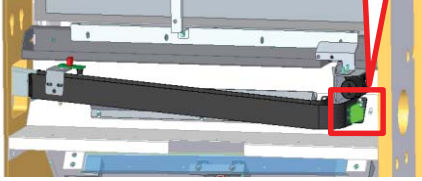
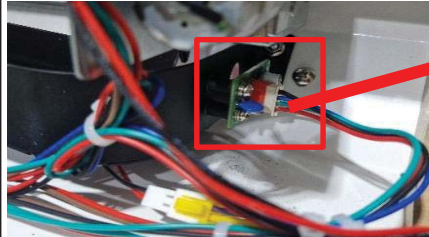
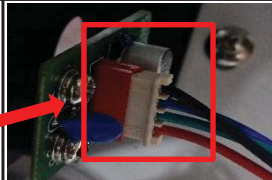
- When checking in BALL SUPPLY TEST
PUSHER BALL FND3 : Game ball supply quantity display
- When checking in INPUT TEST
When the Game Ball Drop sensor detects :
"8" sound output

2.CHECK :

- 1) Checking the assembly status of the equipment (P1)
- 2) Check MOTOR and SENSOR assembly status (P1)
- 3) Check wiring connection status (P1)
- 4) Check motor voltage (P2)
- 5) Motor replacement
- 6) Check ENCODER SENSOR voltage (P2)
/ Check INPUT MODE
- 7) ENCODER SENSOR replacement
- 8) Main PCB replacement

PART NAME	CODE	PART NAME	CODE
MOTOR	MZZZ0MOT170	PHOTO INT-1 PCB ASS'Y	AZZZ0PCB103
MAIN BOARD ASS'Y	ADRG0PCB001		

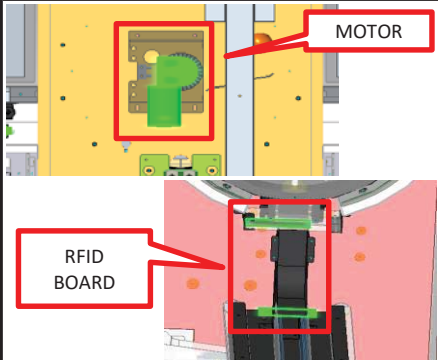
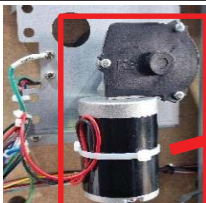
12-11. GAME BALL RAIL OUT SENSOR ERROR (E36)

ERROR or LOCATION	P1	P2															
 SENSOR		 <table><tr><td>4</td></tr><tr><td>3</td></tr><tr><td>2</td></tr><tr><td>1</td></tr></table>	4	3	2	1											
4																	
3																	
2																	
1																	
		<table><tr><td>1</td><td>Over 4.0V</td><td></td></tr><tr><td>2</td><td>Below 0.2V</td><td></td></tr><tr><td>3</td><td>Below 0.2V</td><td>detect</td></tr><tr><td></td><td>Over 4.0V</td><td>undetected</td></tr><tr><td>4</td><td>GND</td><td></td></tr></table>	1	Over 4.0V		2	Below 0.2V		3	Below 0.2V	detect		Over 4.0V	undetected	4	GND	
1	Over 4.0V																
2	Below 0.2V																
3	Below 0.2V	detect															
	Over 4.0V	undetected															
4	GND																

► SOLUTION

1.TEST MODE→BALL SUPPLY TEST,INPUT TEST ► When checking in BALL SUPPLY TEST PUSHER BALL FND2: Display Game Ball Supply Quantity ► When checking in INPUT TEST When Game Ball Drop is detected by sensor : "7" sound output		2.CHECK : 1) Checking the assembly status of the equipment (P1) 2) Check SENSOR assembly status (P1) 3) Check wiring connection status (P1) 4) Check SENSOR voltage (P2) / Check INPUT MODE 5) SENSOR replacement 6) Main PCB replacement	
PART NAME	CODE	PART NAME	CODE
IR SENSOR PCB VR ASS'Y_R_ 2.2CM	ASBT0PCB008	MAIN BOARD ASS'Y	ADRG0PCB001

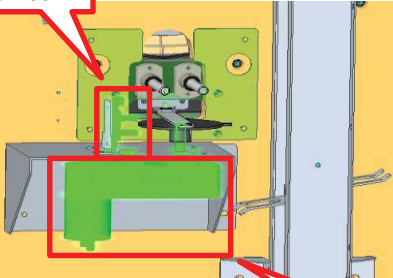
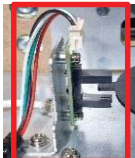
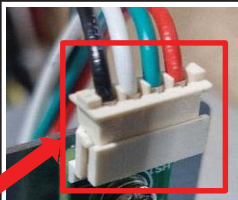
12-12. DRAGONS CHANCE SPIN MOTOR & RFID BOARD ERROR (E41)

ERROR or LOCATION	P1	P2																
 MOTOR RFID BOARD		 <table><tr><td>1</td><td>2</td></tr></table> <table><tr><td>1</td><td>Over -11V</td></tr><tr><td>2</td><td>GND</td></tr></table> <table><tr><td>6</td></tr><tr><td>5</td></tr><tr><td>4</td></tr><tr><td>3</td></tr><tr><td>2</td></tr><tr><td>1</td></tr></table> <table><tr><td>2</td><td>GND</td></tr><tr><td>1</td><td>Over 4.0V</td></tr></table>	1	2	1	Over -11V	2	GND	6	5	4	3	2	1	2	GND	1	Over 4.0V
1	2																	
1	Over -11V																	
2	GND																	
6																		
5																		
4																		
3																		
2																		
1																		
2	GND																	
1	Over 4.0V																	

► SOLUTION

1.TEST MODE→DRAGON MOTOR/DRAGON CHANCE TEST ► When conducting a spin motor test PUSHER BALL FND1 : Sensor operation status display Top bar : Origin sensor recognition status Upon recognition "-" When not recognized " " Bottom BAR : Branch sensor recognition status Upon recognition "-" When not recognized " " ► When conducting the DRAGON CHANCE TEST Display operation status on the MONITOR screen BALL score, RFID tag recognition count		2.CHECK : 1) Checking the assembly status of the equipment (P1) 2) Check MOTOR, RFID BOARD assembly status (P1) 3) Check wiring connection status (P1) 4) Check motor voltage (P2) 5) MOTOR replacement 6) Check RFID input voltage (P2) 7) RFID IO BOARD replacement 8) Main PCB replacement	
PART NAME	CODE	PART NAME	CODE
MOTOR	MZZZ0MOT164	RFID MAIN PCB ASS'Y	ADRG0PCB006
MAIN BOARD ASS'Y	ADRG0PCB001		

12-13. DRAGON CHANCE MOVE MOTOR & ENCODER SENSOR ERROR (E43)

ERROR or LOCATION	P1	P2																			
SENSOR  MOTOR	 	 <table><tr><td>4</td><td>3</td><td>2</td><td>1</td></tr></table> <table><tr><td>1</td><td>Over 4.0V</td><td></td></tr><tr><td>2</td><td>Below 0.1V</td><td></td></tr><tr><td>3</td><td>Over 4.0V</td><td>detect</td></tr><tr><td></td><td>Below 0.1V</td><td>undetected</td></tr><tr><td>4</td><td>GND</td><td></td></tr></table>	4	3	2	1	1	Over 4.0V		2	Below 0.1V		3	Over 4.0V	detect		Below 0.1V	undetected	4	GND	
4	3	2	1																		
1	Over 4.0V																				
2	Below 0.1V																				
3	Over 4.0V	detect																			
	Below 0.1V	undetected																			
4	GND																				

► SOLUTION

1.TEST MODE→DRAGON MOTOR TEST

- When conducting the MOVE MOTOR TEST
PUSHER BALL FND2 : Sensor operation status display

Top bar : HOME Sensor recognition status
Upon recognition "-"
When not recognized " "

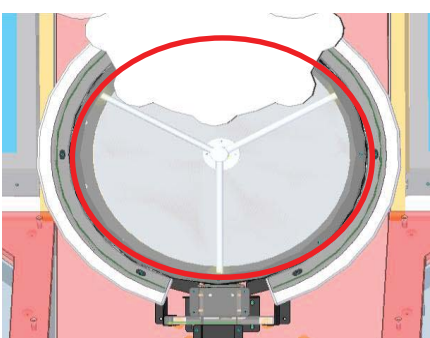
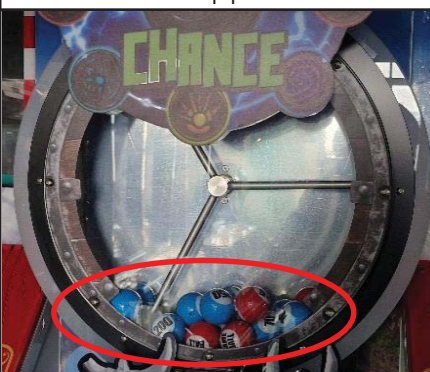
Bottom BAR : ENCODER sensor recognition status
Upon recognition "-"
When not recognized " "

2.CHECK :

- 1) Checking the assembly status of the equipment (P1)
- 2) Check MOTOR, SENSOR assembly status (P1)
- 3) Check wiring connection status (P1)
- 4) MOTOR replacement
- 5) Check ENCODER SENSOR voltage (P2)
/ Check INPUT MODE
- 6) ENCODER SENSOR replacement
- 7) Main PCB replacement

PART NAME	CODE	PART NAME	CODE
MOTOR_BLDC	MZZZ0MOT152	PHOTO INT-1 PCB ASS'Y	AZZZ0PCB103
MAIN BOARD ASS'Y	ADRG0PCB001		

12-14. DRAGONS CHANCE BALL RFID ERROR (E45)

ERROR or LOCATION	P1	P2
		

► SOLUTION

1.TEST MODE→DRAGON CHANCE TEST

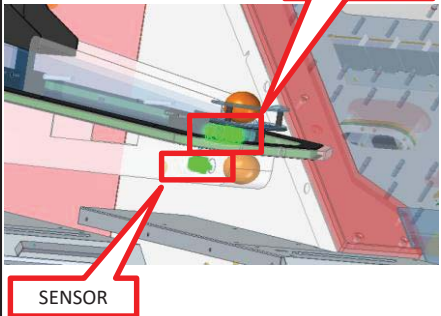
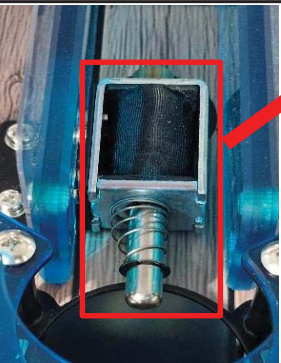
- Display operation status on the MONITOR screen
RFID : Display TAG recognition count (1 ~3)

2.CHECK :

- 1) Check for the presence of RFID balls(P1)
- 2) Remove defective TAG balls
- 3) New TAG Ball Added

PART NAME	CODE	PART NAME	CODE
MEGA BALL_BLUE_SCORE	MDRG0PLA001~1		

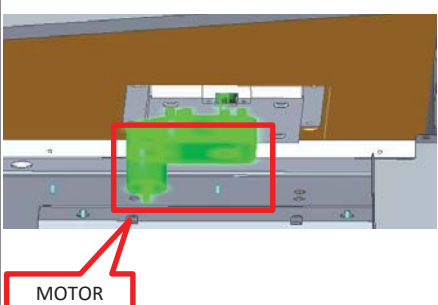
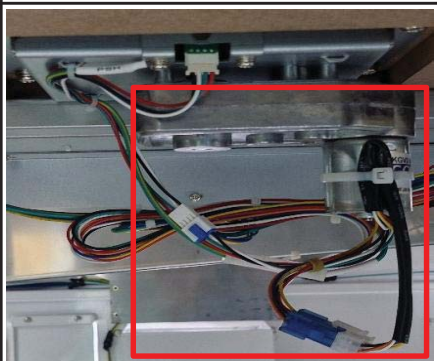
12-15. DRAGON CHANCE SOLENOID & ENCODER SENSOR ERROR (E46)

ERROR or LOCATION	P1	P2																									
		<table><tr><td>1</td><td>1</td><td>Over 11.0V</td></tr><tr><td>2</td><td>2</td><td>GND</td></tr></table> <table><tr><td>1</td></tr><tr><td>2</td></tr><tr><td>3</td></tr><tr><td>4</td></tr></table> <table><tr><td>1</td><td>Over 4.0V</td><td></td></tr><tr><td>2</td><td>Below 0.2V</td><td></td></tr><tr><td>3</td><td>Below 0.2V</td><td>detect</td></tr><tr><td></td><td>Over 4.0V</td><td>undetected</td></tr><tr><td>4</td><td>GND</td><td></td></tr></table>	1	1	Over 11.0V	2	2	GND	1	2	3	4	1	Over 4.0V		2	Below 0.2V		3	Below 0.2V	detect		Over 4.0V	undetected	4	GND	
1	1	Over 11.0V																									
2	2	GND																									
1																											
2																											
3																											
4																											
1	Over 4.0V																										
2	Below 0.2V																										
3	Below 0.2V	detect																									
	Over 4.0V	undetected																									
4	GND																										

► SOLUTION

1. TEST MODE→SOLENOID TEST,INPUT TEST ► When conducting the Solenoid test DRAGON BALL TEST : Operate in manual mode Check solenoid operation status ► When conducting an INPUT TEST When the DRAGON BALL SENSOR is detected : "Y" sound output (During the test, sending the RFID ball down into the front hole of the solenoid enables recognition sound output)		2. CHECK : 1) Check SOLENOID assembly status (P1) 2) Check wiring connection status (P1) 3) Check solenoid voltage (P2) 4) Solenoid replacement 5) Solenoid PCB replacement 6) ENCODER sensor voltage check (P2) / Check INPUT MODE 7) ENCODER sensor replacement 8) Main PCB replacement	
PART NAME	CODE	PART NAME	CODE
SOLENOID ASS'Y	ATP20ASS010	SOLENOID_4CH_PCB ASS'Y	AKZB0PCB008
PHOTO INT-1 PCB ASS'Y	AZZZ0PCB103	MAIN BOARD ASS'Y	ADRG0PCB001

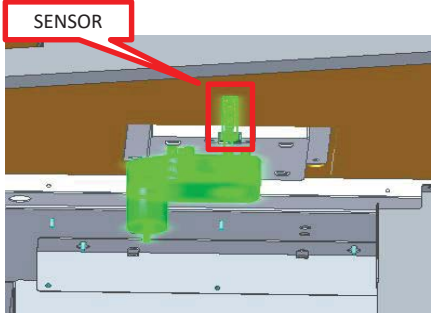
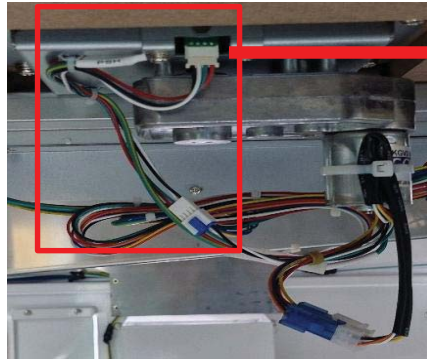
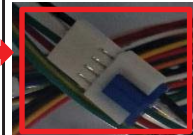
12-16. MAIN PUSHER MOTOR ERROR (E51)

ERROR or LOCATION	P1	P2
		

► SOLUTION

1.TEST MODE → PUSHER MOTOR TEST ► PUSHER BALL FND2 : HOME Sensor Operation status display Upon recognition "1" When not recognized "0"		2.CHECK : 1) Checking the assembly status of the equipment (P1) 2) Check MOTOR assembly status (P1) 3) Check wiring connection status (P1) 4) MOTOR replacement 5) Main PCB replacement	
PART NAME	CODE	PART NAME	CODE
MOTOR_BLDC	MZZZ0MOT152	MAIN BOARD ASS'Y	ADRG0PCB001

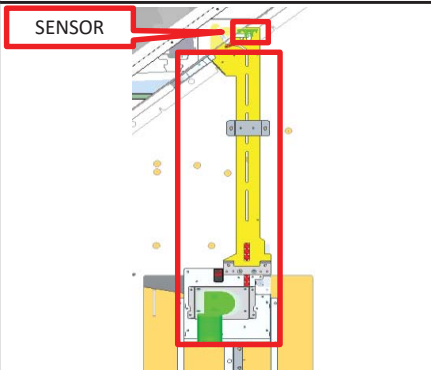
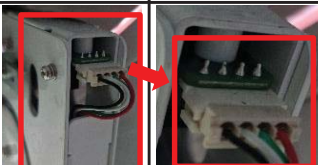
12-17. MAIN PUSHER ENCODER SENSOR ERROR (E52)

ERROR or LOCATION	P1	P2																			
		 <table data-bbox="1244 201 1452 257"><tr><td>1</td><td>2</td><td>3</td><td>4</td></tr></table> <table data-bbox="1019 313 1452 526"><tr><td>1</td><td>Over 4.0V</td><td></td></tr><tr><td>2</td><td>Below 0.2V</td><td></td></tr><tr><td>3</td><td>Below 0.2V</td><td>detect</td></tr><tr><td></td><td>Over 4.0V</td><td>undetected</td></tr><tr><td>4</td><td>GND</td><td></td></tr></table>	1	2	3	4	1	Over 4.0V		2	Below 0.2V		3	Below 0.2V	detect		Over 4.0V	undetected	4	GND	
1	2	3	4																		
1	Over 4.0V																				
2	Below 0.2V																				
3	Below 0.2V	detect																			
	Over 4.0V	undetected																			
4	GND																				

► SOLUTION

1.TEST MODE→PUSHER MOTOR TEST ► PUSHER BALL FND1 : ENCODER sensor Operation status display Upon recognition "1" When not recognized "0"		2.CHECK : 1) Checking the assembly status of the equipment (P1) 2) Check SENSOR assembly status (P1) 3) Check wiring connection status (P1) 4) Check SENSOR voltage (P2) / Check INPUT MODE 5) SENSOR replacement 6) Main PCB replacement	
PART NAME	CODE	PART NAME	CODE
PHOTO INT-1 PCB ASS'Y	AZZZ0PCB103	MAIN BOARD ASS'Y	ADRG0PCB001

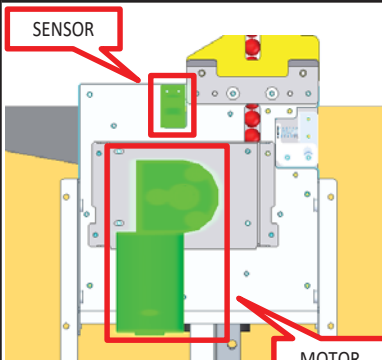
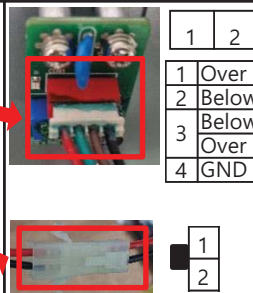
12-18. BALL SHOOTER BALL OUT SENSOR ERROR (E61)

ERROR or LOCATION	P1	P2																			
		 <table border="1" data-bbox="1212 1254 1434 1310"><tr><td>4</td><td>3</td><td>2</td><td>1</td></tr></table> <table border="1" data-bbox="1019 1366 1452 1570"><tr><td>1</td><td>Over 4.0V</td><td></td></tr><tr><td>2</td><td>Below 0.2V</td><td></td></tr><tr><td>3</td><td>Below 0.2V</td><td>detect</td></tr><tr><td></td><td>Over 4.0V</td><td>undetected</td></tr><tr><td>4</td><td>GND</td><td></td></tr></table>	4	3	2	1	1	Over 4.0V		2	Below 0.2V		3	Below 0.2V	detect		Over 4.0V	undetected	4	GND	
4	3	2	1																		
1	Over 4.0V																				
2	Below 0.2V																				
3	Below 0.2V	detect																			
	Over 4.0V	undetected																			
4	GND																				

► SOLUTION

1.TEST MODE→BALL HOPPER TEST,INPUT TEST ► When checking in the BALL HOPPER TEST PUSHER BALL FND1 DOT : Sensor operation status display Upon recognition "." When not recognized " " ► When checking in INPUT TEST When the BALL SHOOTER OUT SENSOR is detected : "11" sound output		2.CHECK : 1) Check whether it is fun or not (P1) 2) Checking the assembly status of the equipment (P1) 3) Check Sensor L assembly status (P1) 4) Check wiring connection status (P1) 5) Check SENSOR voltage (P2) / Check INPUT MODE 6) SENSOR replacement 7) Main PCB replacement	
PART NAME	CODE	PART NAME	CODE
PHOTO INT-1 PCB ASS'Y	AZZZ0PCB103	MAIN BOARD ASS'Y	ADRG0PCB001

12-19. BALL SHOOTER MOTOR & ENCODER SENSOR ERROR (E62)

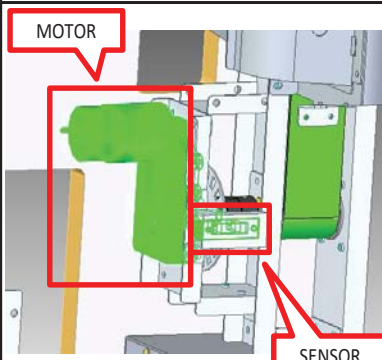
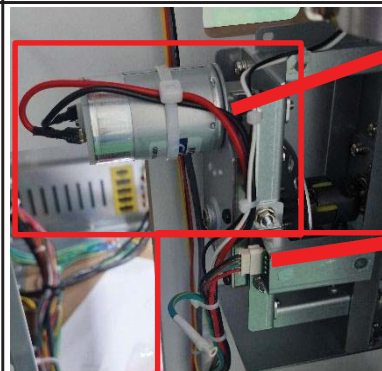
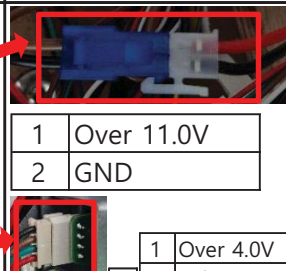
ERROR or LOCATION	P1	P2																														
 SENSOR MOTOR		 <table><tr><th>1</th><th>2</th><th>3</th><th>4</th></tr><tr><td>1</td><td>Over 4.0V</td><td></td><td></td></tr><tr><td>2</td><td>Below 0.2V</td><td></td><td></td></tr><tr><td>3</td><td>Below 0.2V</td><td>detect</td><td></td></tr><tr><td>4</td><td>Over 4.0V</td><td>undetected</td><td></td></tr><tr><td>4</td><td>GND</td><td></td><td></td></tr></table> <table><tr><th>1</th><th>2</th></tr><tr><td>1</td><td>Over 7.0V</td></tr><tr><td>2</td><td>GND</td></tr></table>	1	2	3	4	1	Over 4.0V			2	Below 0.2V			3	Below 0.2V	detect		4	Over 4.0V	undetected		4	GND			1	2	1	Over 7.0V	2	GND
1	2	3	4																													
1	Over 4.0V																															
2	Below 0.2V																															
3	Below 0.2V	detect																														
4	Over 4.0V	undetected																														
4	GND																															
1	2																															
1	Over 7.0V																															
2	GND																															

► SOLUTION

- | | |
|--|--|
| <p>1.TEST MODE→BALL HOPPER TEST,INPUT TEST</p> <p>► When checking in the BALL HOPPER TEST
PUSHER BALL FND1 DOT : Sensor operation status display</p> <p>Upon recognition "."
When not recognized " "</p> <p>► When checking in INPUT TEST
When recognizing BALL SHOOTER ENCODER
SENSOR : "12" sound output</p> | <p>2.CHECK :</p> <ol style="list-style-type: none"> 1) Checking the assembly status of the motor mechanism (P1) 2) Check BKT and sensor assembly status (P1) 3) Check wiring connection status (P1) 4) Check motor voltage (P2) 5) MOTOR replacement 6) Check SENSOR voltage (P2) / Check INPUT MODE 7) SENSOR replacement 8) Main PCB replacement |
|--|--|

PART NAME	CODE	PART NAME	CODE
MOTOR	MZZZ0MOT191	IR SENSOR PCB VR ASS'Y_R_ 2.2CM	ASBT0PCB008
MAIN BOARD ASS'Y	ADRG0PCB001		

12-20. GAME BALL ELEVATOR MOTOR & ENCODER SENSOR ERROR (E71)

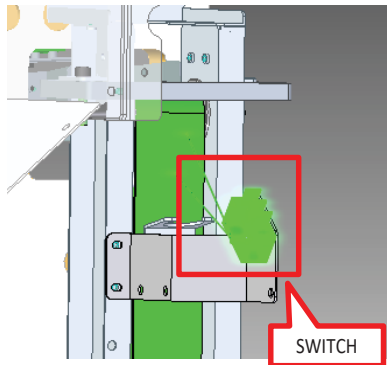
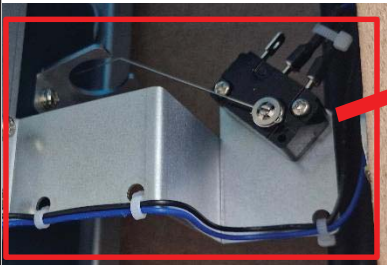
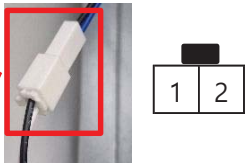
ERROR or LOCATION	P1	P2																														
 MOTOR SENSOR		 <table><tr><th>1</th><th>2</th></tr><tr><td>1</td><td>Over 11.0V</td></tr><tr><td>2</td><td>GND</td></tr></table> <table><tr><th>1</th><th>2</th><th>3</th><th>4</th></tr><tr><td>1</td><td>Over 4.0V</td><td></td><td></td></tr><tr><td>4</td><td>Below 0.2V</td><td></td><td></td></tr><tr><td>3</td><td>Below 0.2V</td><td>detect</td><td></td></tr><tr><td>2</td><td>Over 4.0V</td><td>undetected</td><td></td></tr><tr><td>1</td><td>4</td><td>GND</td><td></td></tr></table>	1	2	1	Over 11.0V	2	GND	1	2	3	4	1	Over 4.0V			4	Below 0.2V			3	Below 0.2V	detect		2	Over 4.0V	undetected		1	4	GND	
1	2																															
1	Over 11.0V																															
2	GND																															
1	2	3	4																													
1	Over 4.0V																															
4	Below 0.2V																															
3	Below 0.2V	detect																														
2	Over 4.0V	undetected																														
1	4	GND																														

► SOLUTION

- | | |
|---|---|
| <p>1.TEST MODE→BALL ELEVATOR TEST,INPUT TEST</p> <p>► When checking in the BALL ELEVATOR TEST
PUSHER BALL FND1 : Sensor operation status display</p> <p>Upon recognition "."
When not recognized " "</p> <p>► When checking in INPUT TEST
When recognizing BALL ELEVATOR ENCODER
SENSOR : "10" sound output</p> | <p>2.CHECK :</p> <ol style="list-style-type: none"> 1) Checking the assembly status of the motor mechanism (P1) 2) Check BKT and sensor assembly status (P1) 3) Check wiring connection status (P1) 4) Check motor voltage (P2) 5) MOTOR replacement 6) Check SENSOR voltage (P2) 7) SENSOR replacement 8) Main PCB replacement |
|---|---|

PART NAME	CODE	PART NAME	CODE
MOTOR	MZZZ0MOT155	PHOTO INT-1 PCB ASS'Y	AZZZ0PCB103
MAIN BOARD ASS'Y	ADRG0PCB001		

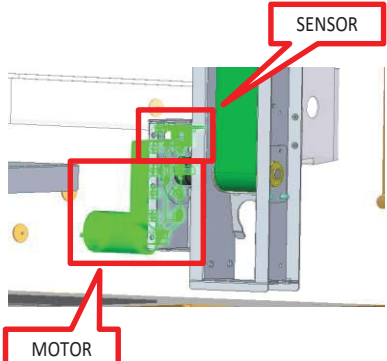
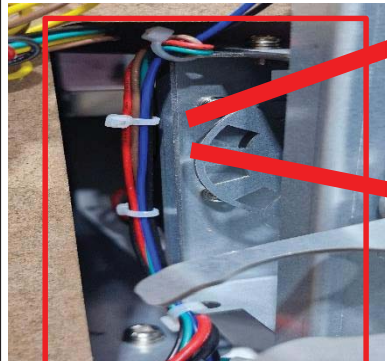
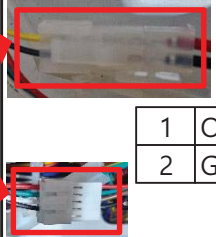
12-21. GAME BALL LIFT LIMIT SWITCH ERROR (E72)

ERROR or LOCATION	P1	P2						
		 <table border="1"> <tr> <td>1</td><td>WHITE</td><td>SHORT_ON</td></tr> <tr> <td>2</td><td>BLACK</td><td>OPEN_OFF</td></tr> </table>	1	WHITE	SHORT_ON	2	BLACK	OPEN_OFF
1	WHITE	SHORT_ON						
2	BLACK	OPEN_OFF						

► SOLUTION

1.TEST MODE→INPUT TEST ► When checking in INPUT TEST When recognizing BALL ELEVATOR LIFT SWITCH : "9" sound output		2.CHECK : 1) Checking the assembly status of the equipment (P1) 2) Check BKT and SWITCH assembly status (P1) 3) Check wiring connection status (P1) 4) Check SWITCH resistance value (P2) 5) SWITCH replacement 6) Main PCB replacement	
PART NAME	CODE	PART NAME	CODE
MICRO SWITCH	MELE0MIC002	MAIN BOARD ASS'Y	ADRG0PCB001

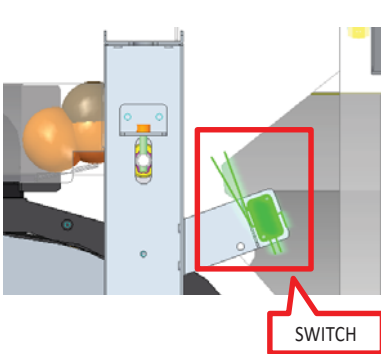
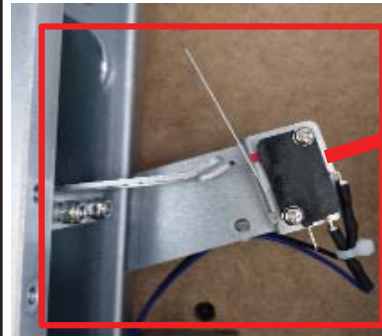
12-22. DRAGON CHANCE ELEVATOR MOTOR & ENCODER SENSOR ERROR (E73)

ERROR or LOCATION	P1	P2																					
		 <table border="1"> <tr> <td>1</td><td>Over -11V</td><td></td></tr> <tr> <td>2</td><td>GND</td><td></td></tr> </table> <table border="1"> <tr> <td>1</td><td>Over 4.0V</td><td></td></tr> <tr> <td>2</td><td>Below 0.2V</td><td></td></tr> <tr> <td>3</td><td>Below 0.2V</td><td>detect</td></tr> <tr> <td>4</td><td>Over 4.0V</td><td>undetected</td></tr> <tr> <td>5</td><td>GND</td><td></td></tr> </table>	1	Over -11V		2	GND		1	Over 4.0V		2	Below 0.2V		3	Below 0.2V	detect	4	Over 4.0V	undetected	5	GND	
1	Over -11V																						
2	GND																						
1	Over 4.0V																						
2	Below 0.2V																						
3	Below 0.2V	detect																					
4	Over 4.0V	undetected																					
5	GND																						

► SOLUTION

1.TEST MODE→DRAGON MOTOR TEST,INPUT TEST ► When conducting the ELEVATOR MOTOR TEST PUSHER BALL FND3 : Sensor operation status display Bottom BAR : ENCODER sensor recognition status Upon recognition "1" When not recognized "0" ► When checking in INPUT TEST When DRAGON CHANCE ELEVATOR ENCODER SENSOR is detected: "W" sound output		2.CHECK : 1) Checking the assembly status of the motor mechanism (P1) 2) Check BKT and sensor assembly status (P1) 3) Check wiring connection status (P1) 4) Check motor voltage (P2) 5) MOTOR replacement 6) Check sensor voltage (P2) 7) SENSOR replacement 8) Main PCB replacement	
PART NAME	CODE	PART NAME	CODE
MOTOR	MZZZ0MOT155	PHOTO INT-1 PCB ASS'Y	AZZZ0PCB103
MAIN BOARD ASS'Y	ADRG0PCB001		

12-23. DRAGON CHANCE ELEVATOR LIMIT SWITCH ERROR (E74)

ERROR or LOCATION	P1	P2						
 SWITCH		 <table><tr><td>1</td><td>WHITE</td><td>SHORT_ON</td></tr><tr><td>2</td><td>BLACK</td><td>OPEN_OFF</td></tr></table>	1	WHITE	SHORT_ON	2	BLACK	OPEN_OFF
1	WHITE	SHORT_ON						
2	BLACK	OPEN_OFF						

► SOLUTION

1.TEST MODE→INPUT TEST

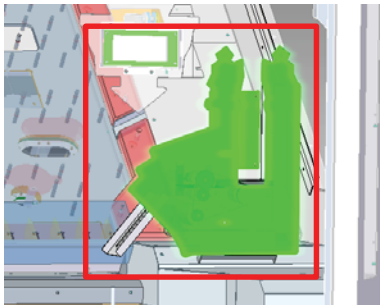
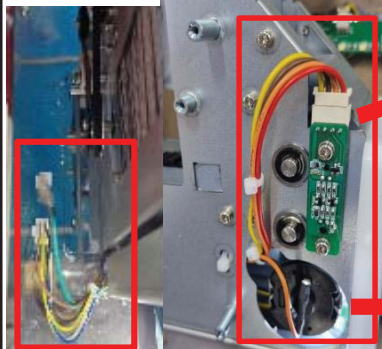
- When checking in INPUT TEST
When the DRAGON CHANCE LIFT SWITCH is recognized : "X" sound output

2.CHECK :

- 1) Checking the assembly status of the equipment (P1)
- 2) Check BKT and SWITCH assembly status (P1)
- 3) Check wiring connection status (P1)
- 4) Check SWITCH resistance value (P2)
- 5) SWITCH replacement
- 6) Main PCB replacement

PART NAME	CODE	PART NAME	CODE
MICRO SWITCH	MELE0MIC047	MAIN BOARD ASS'Y	ADRG0PCB001

12-24. CARD DISPENSER ERROR (EC1, EC2)

ERROR or LOCATION	P1	P2																									
		<table border="1" data-bbox="948 1218 1131 1263"><tr><td>1</td><td>2</td><td>3</td><td>4</td></tr></table> <table border="1" data-bbox="948 1274 1331 1464"><tr><td>1</td><td>Over 4.5V</td><td></td></tr><tr><td>2</td><td>Below 0.1V</td><td></td></tr><tr><td>3</td><td>Over 3.0V</td><td>detect</td></tr><tr><td></td><td>Below 0.1V</td><td>undetected</td></tr><tr><td>4</td><td>GND</td><td></td></tr></table> <table border="1" data-bbox="948 1476 1331 1554"><tr><td>1</td><td>Over 9.0V</td><td>ON</td></tr><tr><td>2</td><td>GND</td><td>OFF</td></tr></table>	1	2	3	4	1	Over 4.5V		2	Below 0.1V		3	Over 3.0V	detect		Below 0.1V	undetected	4	GND		1	Over 9.0V	ON	2	GND	OFF
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► SOLUTION

1.TEST MODE→CARD DISPEN TEST

- PUSHER BALL FND1 : Operation status display
Display of discharged quantity on the left
When sensor recognition : "."
When not recognized : " "
- PUSHER BALL FND3 : Operation status display
Display of discharged quantity on the right
When sensor recognition : "."
When not recognized : " "

2.CHECK :

- 1) Check for card presence and jamming (P1)
- 2) Checking the assembly status of the equipment
- 3) Check sensor assembly status (P1)
- 4) Check wiring connection status (P1)
- 5) Check SWITCH resistance value (P2)
- 6) Sensor PCB replacement
- 7) Main PCB replacement

PART NAME	CODE	PART NAME	CODE
PHOTO INT-1 PCB ASS'Y	AZZZ0PCB103	MAIN BOARD ASS'Y	ADRG0PCB001

DRAGONS

ANDAMIRO CO., LTD.

TEL : 82-31-909-2123~5

[ADDRESS OFFICE] 704-1 Techno Town, 138, Ilsan-ro, Ilsandong-gu, Goyang-si,
Gyeonggi-do, Republic of Korea 10442

[FACTORY] 72 Nochemgil, Ilsan-donggu Goyang-si, Gyeonggi-do, 410-834 korea

USA BRANCH

ANDAMIRO USA CORP.

TEL : 1-310-767-5800

[ADDRESS USA] 2222 Century Cir, Irving TX 75062 U.S.A

Homepage <http://www.andamiro.com/>