

SERVICE MANUAL



Ver 1.1



ISSUE DATE: Dec. 21, 2021



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

PRECAUTIONS FOR USE

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

For safety reasons.

- The following suggestions should be adhered to:



WARNING

Disregarding could result in serious injury.



CAUTION

Disregarding could result in injury or product damage.

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



Indicates a care should be taken.



Forbidden.



Indicates a matter which must be performed.

- Precautions to be followed:

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

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

Qualified in-shop maintenance person

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

Industry specialist

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

PRECAUTIONS FOR USE

WARNING

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



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

In case of abnormality

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

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



- Doing so could result in the power cord being damaged periodically.

CAUTION

Do not use this product anywhere other than industrial areas.



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

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

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



In handling the power cord, follow the instructions below.



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

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

PRECAUTIONS FOR USE

WARNING

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

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

The machine for indoor usage only does not install outside.



Do not set the game machine up near emergency exits.



Protect the game machine from:

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



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



Do not place objects near the ventilating holes.



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



Never plug or unplug the power cord with wet hands.



Never unplug the game machine by pulling the power cord.



CAUTION

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

Be sure to use the attached power cord.

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



Do not lay the power cord where people walk through.



Be sure to ground this product.



Do not exert excessive force when moving the machine.



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

Do not alter the system related dipswitch settings.

PRECAUTIONS FOR USE

WARNING

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



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



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



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



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



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

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

CAUTION

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



Be sure not to let the machine tip over.

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



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

Avoid excessive force while moving the machine.

PRECAUTIONS IN HANDLING

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

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.

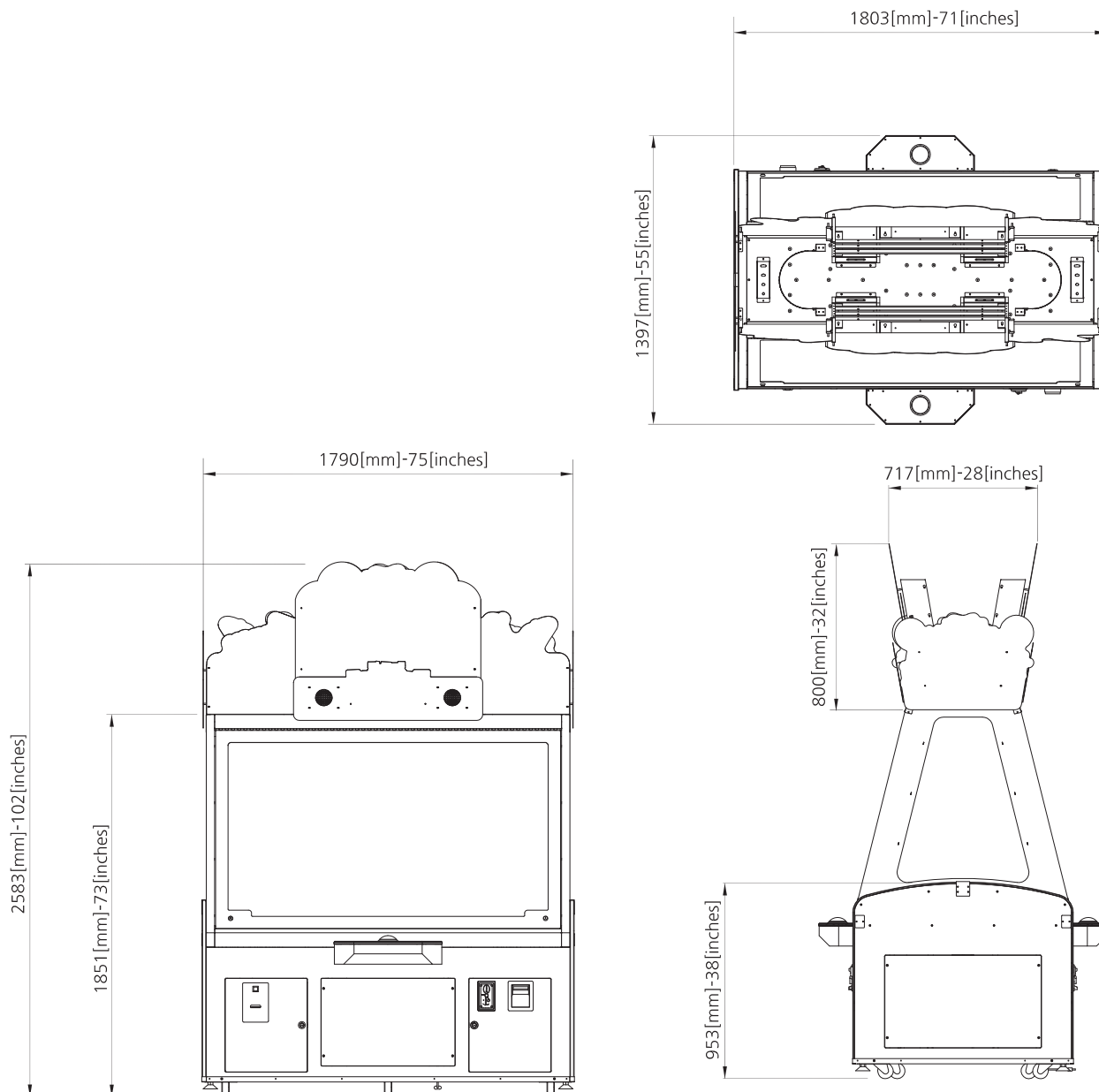
CONTENTS

1. SPECIFICATION AND DIMENSION	P03
1-1. DIMENSION	P03
1-2. SPECIFICATION	P03
1-3. STICKER LOCATION	P04
1-4. COMPONENTS	P05
2. INSTALLATION	P06
2-1. INSTALLATION SPACE	P06
2-2. HOW TO INSTALL [BILLBOARD]	P07
3. SETUP SETTINGS	P09
3-1. MACHINE SETUP	P09
3-2. PROGRAM SETTING	P10
3-3. CLEAR MODE	P13
3-4. TEST MODE	P16
3-5. ERROR CODE	P20
4. TROUBLESHOOTING	P23
4-1. MAIN(TRAIN) MOTOR PROBLEM [Er.31]	P23
4-2. MAIN(TRAIN) SEQUENCE CHECK SENSOR PROBLEM [Er.32]	P23
4-3. TRAIN SPEED SONTROL START SENSOR PROBLEM [Er.33]	P24
4-4. TRAIN SPEED CONTROL END SENSOR PROBLEM [Er.34]	P24
4-5. BALL ELEVATOR MOTOR PROBLEM [Er.41]	P25
4-6. BALL RETURN SENSOR PROBLEM [Er.42]	P25
4-7. BALL SHOOTER SENSOR PROBLEM [Er.51]	P26
4-8. BALL IN SENSOR PROBLEM [Er.61]	P26
4-9. BALL OUT SENSOR PROBLEM [Er.62]	P27
4-10. BALL RAIL SENSOR PROBLEM [Er.63]	P27
4-11. BALL SUCCESS SENSOR PROBLEM [Er.64]	P28

5. EXPLODED VIEW	P29
5-1. BILLBOARD TOTAL PART	P31
5-2. ASS'Y-BILLBOARD TITLE PART	P32
5-3. ASS'Y-BILLBOARD BIGWIN SPEAKER PART	P33
5-4. ASS'Y-BILLBOARD BOTTOM PLATE PART	P34
5-5. ASS'Y-GAME PLAYFIELD TOTAL PART	P35
5-6. ASS'Y-TRAIN SIDE FENCE PART	P36
5-7. ASS'Y-BALL RETURN CHUTE PART	P36
5-8. ASS'Y-BALL LIFT SCREW PART	P37
5-9. ASS'Y-BALL LIFT SCREW TRAIN LED PART	P38
5-10. BALL LIFT SCREW SCORE FND PART	P38
5-11. BALL LIFT SCREW MOTOR PART	P38
5-12. ASS'Y-UPPER RAIL PART	P39
5-13. ASS'Y-BALL SCREW PIPE PART	P40
5-14. ASS'Y-CHAIN MAIN PLATE PART	P41
5-15. ASS'Y-TRAIN TOTAL PART	P42
5-16. ASS'Y-CABINET DOOR TOTAL PART	P43
5-17. ASS'Y-CABINET SIDE FRAME TOTAL PART	P44
5-18. ASS'Y-BUTTON TOTAL PART	P45
5-19. ASS'Y-POWER SMPS BOX PART	P46
5-20. ASS'Y-BOTTOM LED PART	P46
5-21. ASS'Y-CONTROL PANEL TOTAL PART	P47
5-22. ASS'Y-MAIN BOARD PART	P47
5-23. ASS'Y-CABINET COIN DOOR PART	P48
5-24. ASS'Y-CABINET TICKET DOOR PART	P49
5-25. ASS'Y-COIN BOX PART	P49
6. BLOCK DIAGRAM	P50

1. SPECIFICATION AND DIMENSION

1-1. DIMENSION

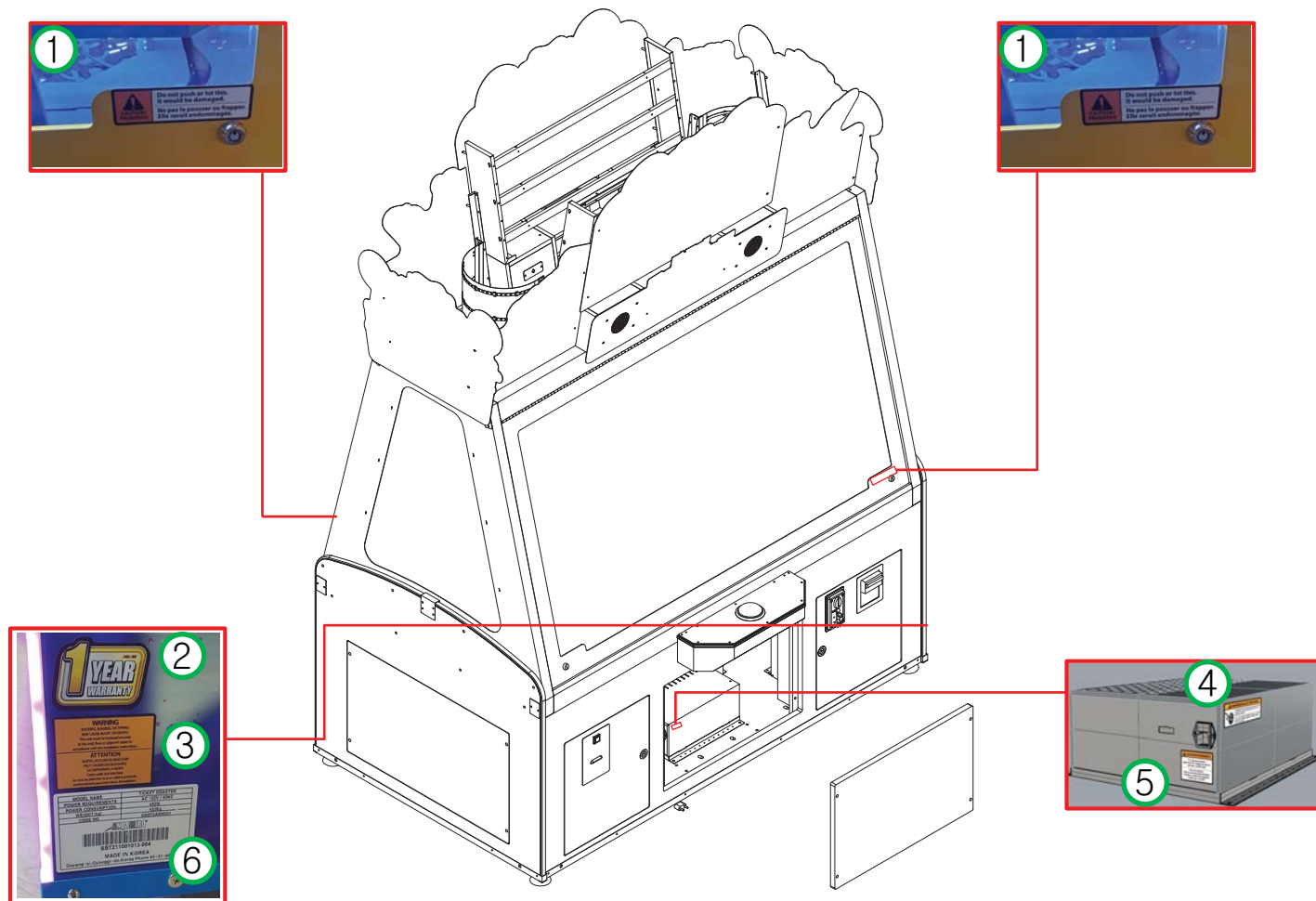


1-2. SPECIFICATION

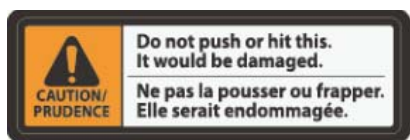
DIMENSION (W x D x H)	1397 x 1803 x 2583 (mm)
PACKING DIMENSION (W x D x H)	1900 x 1190 x 2250 (mm)
WEIGHT (kg)	432 kg [WEIGHT INCLUDING : 460 kg] PACKAGING
VOLTAGE	AC 120V
FREQUENCY RANGE	60Hz
CONSUMPTION	450 W
CERTIFICATION	-

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

1-3. STICKER LOCATION



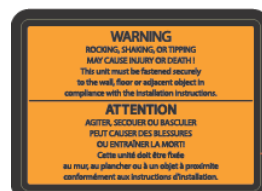
1



2



3



4



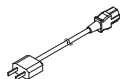





5



6

Certification Label

1-4. COMPONENTS

NO.	PART NAME	SPEC.		QTY	ADDITIONAL DESCRIPTION
1	AC POWER CORD	-		1	
2	KEY	7001		2	
3	MANUAL	-		1	
4	WRENCH	3,4,5 mm		1 EACH	
5	BALL	Φ38_WHITE		10	
6	ERROR CODE	-		1	
7	SCREW	TH_NI_M4x8L		52	FOR BILLBOARD
8	SCREW	TH_NI_M4x16L		24	FOR BILLBOARD
9	SCREW	TH_NI_M4x20L		8	FOR BILLBOARD
10	SCREW	TH_NI_M4x10L WRENCH		12	FOR BUTTON TOTAL PART
11	STICKER	-		2 EACH	
12	SCREW	4 TYPES OF SPARE		-	

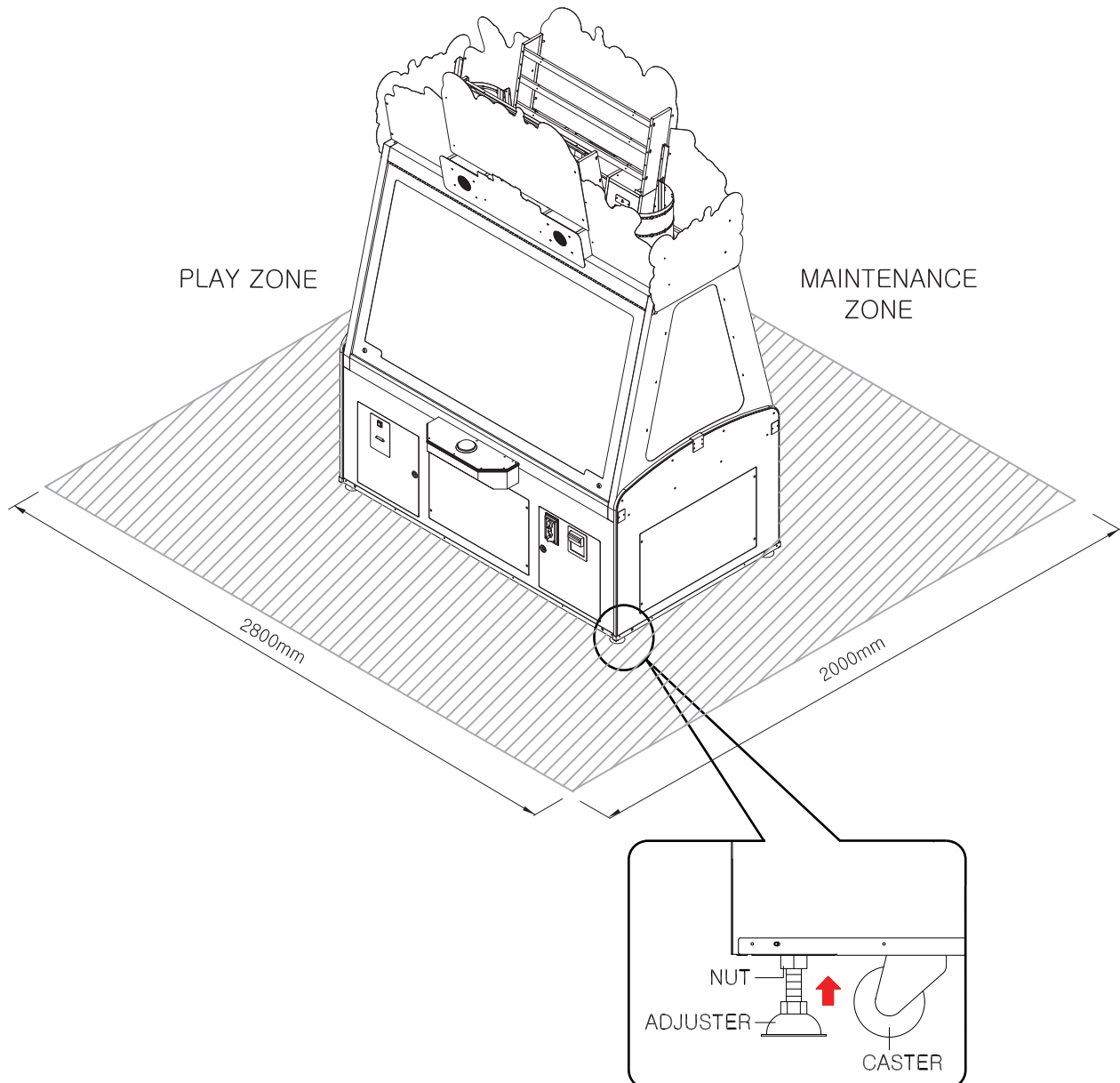
2. INSTALLATION

2-1. INSTALLATION SPACE





- Need to have installation place.
Maintenance zone & Play zone should have at least 2800mm x 2000mm each.

***IMPORTANT**

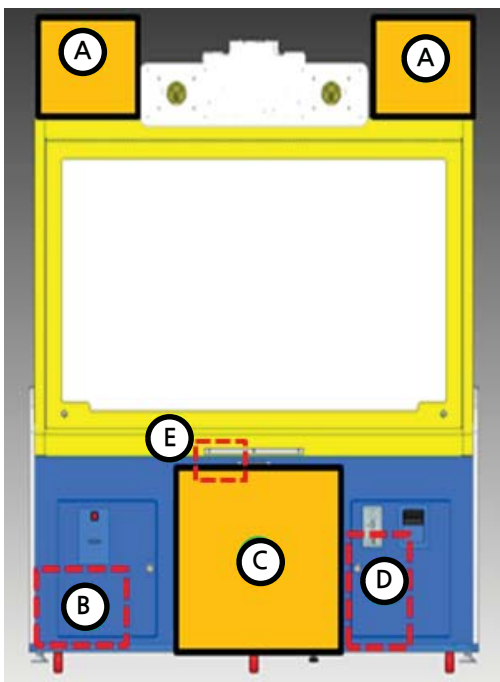
- Once you set up the machine with required game-play area, when installing this product, set the 4 leg levelers evenly on the floor and make sure that the product is installed stably in a horizontal position.
- This product is for indoor use, you should avoid sunny places.



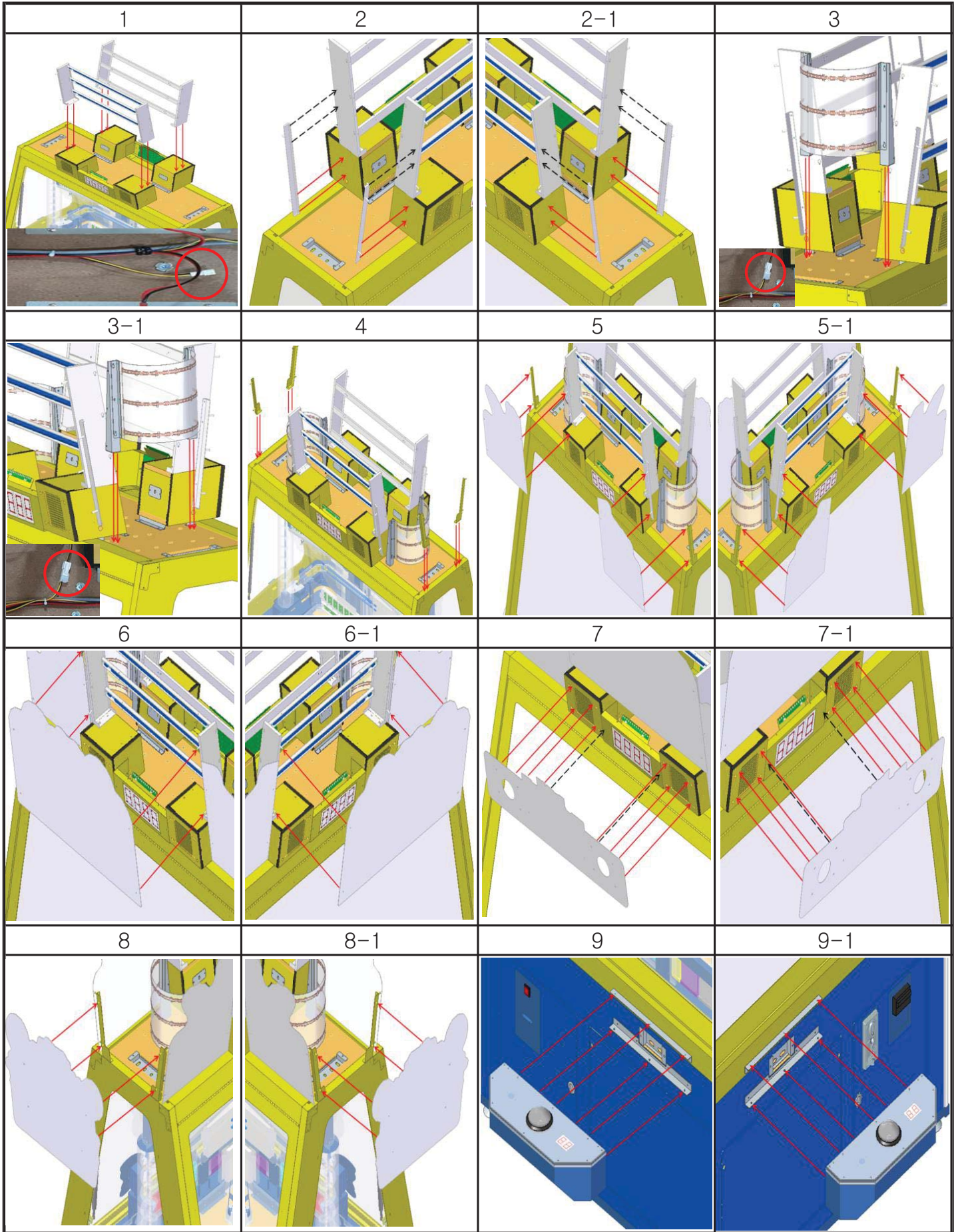
2-2. HOW TO INSTALL [BILLBOARD]

NO	PROCESS	ITEM	POSITION	TYPE	SCREW	Q'ty
1	ASSEMBLE	ASS'Y-BILLBOARD TITLE PART		TH_NI	M4x16L	8
1-1	CONNECT	WIRING 1P 2P				2
2	ASSEMBLE	BILLBOARD DECO FIX BKT	L 	TH_NI	M4x8L	4
				TH_NI	M4x16L	4
2-1	ASSEMBLE	BILLBOARD DECO FIX BKT	R 	TH_NI	M4x8L	4
				TH_NI	M4x16L	4
3	ASSEMBLE	ASS'Y-B_SIDE LIGHT LED PART	L	TH_NI	M4x20L	4
	CONNECT	WIRING				1
3-1	ASSEMBLE	ASS'Y-B_SIDE LIGHT LED PART	R	TH_NI	M4x20L	4
	CONNECT	WIRING				1
4	ASSEMBLE	BILLBOARD SIDE POP FIX BKT R(L)		TH_NI	M4*8L	8
5	ASSEMBLE	BILLBOARD DECO ACRYL-R(L)	1P	TH_NI	M4*8L	8
5-1	ASSEMBLE	BILLBOARD DECO ACRYL-R(L)	2P	TH_NI	M4*8L	8
6	ASSEMBLE	BILLBOARD TITLE COVER ACRYL	1P	TH_NI	M4*8L	4
6-1	ASSEMBLE	BILLBOARD TITLE COVER ACRYL	2P	TH_NI	M4*8L	4
7	ASSEMBLE	BILLBOARD BIGWIN FND COVER ACRYL	1P 	TH_NI	M4x16L	8
				TH_NI	M4*8L	2
7-1	ASSEMBLE	BILLBOARD BIGWIN FND COVER ACRYL	2P 	TH_NI	M4x16L	8
				TH_NI	M4*8L	2
8	ASSEMBLE	BILLBOARD SIDE POP COVER ACRYL	L	TH_NI	M4*8L	4
8-1	ASSEMBLE	BILLBOARD SIDE POP COVER ACRYL	R	TH_NI	M4*8L	4
9	ASSEMBLE	ASS'Y-BUTTON TOTAL PART	1P	TH_WRENCH	M4*10L	6
9-1	ASSEMBLE	ASS'Y-BUTTON TOTAL PART	2P	TH_WRENCH	M4*10L	6

※ PACKAGING LOCATION



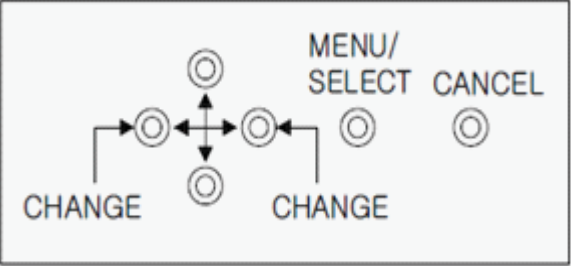


NO	NAME	PART NAME	Q'TY
A	BILLBOARD	ASS'Y-BILLBOARD SIDE LIGHT LED	2
		ASS'Y-BILLBOARD TITLE	2
		BILLBOARD SIDE POP FIX BKT-R	2
		BILLBOARD SIDE POP FIX BKT-L	2
		BILLBOARD DECO FIX BKT	4
B	BUTTON PANEL	ASS'Y- BUTTON	2
C	BILLBOARD ACRYL	BILLBOARD TITLE COVER ACRYL	2
		BILLBOARD DECO ACRYL-L	2
		BILLBOARD DECO ACRYL-R	2
		BILLBOARD BIGWIN FND COVER ACRYL	2
		BILLBOARD SIDE POP COVER ACRYL	2
D	MANUAL		1
	COMPONENTS	SCREW - TH_NI_M4x8L	52
		SCREW - TH_NI_M4x16L	24
		SCREW - TH_NI_M4x20L	8
		SCREW - TH_NI_M4x10L WRENCH	12
		SCREW - 4 TYPES OF SPARE	
		WRENCH 3, 4, 5 MM	1 EACH
		AC POWER CORD	1
		BALL	10
E	KEY		2



3. SETUP SETTING

3-1. MACHINE SETUP

1.SETUP BUTTON LAYOUT

	<p>1) [↑ ↓] UP/DOWN KEY: MENU UP/DOWN MOVE 2) [← →] LEFT/RIGHT KEY: CHANGE SETTING VALUE 3) MENU/SELECT KEY: SET UP MENU MODE, SELECT AND PERFORM 4) CANCEL KEY: EXIT</p>
<div> 1P SERVICE / RESET</div> <div> 2P SERVICE / RESET</div>	<p>NORMALLY SERVICE IN, IN CASE OF ERROR, USE THIS BUTTON TO CLEAR ERROR * 1 CREDIT INCREASE BY PRESSING ONE SERVICE IN.</p>

[OPERATION MENU]

PRESS MENU BUTTON. [MENU/SELECT BUTTON : TO ENTER]	
# OPERATING OPTIONS #	
PROGRAM SETTINGS	PROGRAM SETTING
CLEAR MODE	CLEAR MODE
BOOKKEEPING DATA	BOOKKEEPNIG
FACTORY SETTING	FACTORY SETTING
TEST MODE	TEST MODE
EXIT	EXIT

3-2. PROGRAM SETTING

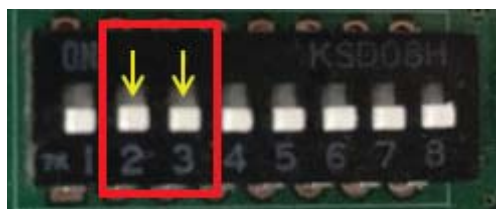
PROGRAM SETTINGS			
LCD DISPLAY	DESCRIPTION	RANGE	DEFAULT
CREDIT/COIN	SETTING NUMBER OF CREDIT PER COIN	“FREE”, 1/1, 1/2, 1/3, 1/4, 2/1, 3/1, 4/1, 5/1, 6/1, 7/1, 8/1, 9/1, 10/1	1/1
PLAYS / BILL	SETTING NUMBER OF PLAYS PER BILL	1,2,3,4,5,6,7,8,9,10	1
GAME TIME	SETTING FOR GAME TIME OVER	10~99(SECONDS)	30
LIFT TIME	SETTING TRAIN MOVING IN DEMO ON : TRAIN RUNS ALL THE TIME. OFF : TRAIN ALWAYS STOPS. INT : MEANS INTERVAL. TRAIN WAITS FOR THE SET TIME. (AFTER WAITING TIME, DO 3 LAPS AND WAIT AGAIN)	“ON”, “OFF”, “INT 1MIN”, “INT 5MIN”, “INT 10MIN”, “INT 30MIN”, “INT 1HRS”, “INT 3HRS”	“INT 10MIN”
LED COUNT	IF ALL OF THE LAMPS OF TRAIN SCORE BOARD ARE “OFF”, THE LAMPS ARE RANDOMLY “ON” ACCORDING TO THIS SETTING VALUE AT THE BEGINNING (THIS SETTING IS AVAILABLE IN SINGLE MODE OF GAME TYPE ONLY)	0 ~ 5	2
SUPER BONUS	SETTING FIRST STARTING VALUE (NUMBER) OF SUPER BONUS	30~9999 (INCREASES BY 10)	1000
SUPER LIMIT	SETTING LIMIT VALUE(NUMBER) OF SUPER BONUS	30~9999 (INCREASES BY 10)	2000
SB-INCREMENT	SETTING INCREASING VALUE(NUMBER) OF SUPER BONUS(PER 1 PLAY)	0 ~ 50 (INCREASES BY 1)	0
TRAIN TYPE	SET TRAIN SPEED NONE : DEFAULT SPEED. SLOW : SET SLOW SPEED. MIDDLE : SET MIDDLE SPEED. FAST : SET FAST SPEED. RANDOM : AT EASY OR HARD MODE IN DIFFICULTY, SET RANDOM SPEED. (NOT IN NORMAL MODE)	“NONE”, “SLOW”, “MIDDLE”, “FAST”, “RANDOM”	NONE
DIFFICULTY	SETTING GAME DIFFICULTY EASY : NO CONTROL OF PROBABILITY NORMAL : CONTROL PROBABILITY OF RED ZONE ONLY. HARD : CONTROL PROBABILITY OF RED AND GREEN ZONE.	EASY NORMAL HARD	NORMAL
TARGET SCORE	SETTING TICKET SCORE OF EACH CABIN	=> (SUB MENU) (PEFER TO BELOW TABLE #1)	
MERCY TICKET	SETTING NUMBER OF TICKETS TO BE DISPENSED IN CASE OF TRY AGIN	0 ~ 20 (INCREASES BY 1)	2

TICKET/SCORE	SETTING TICKET RATIO PER SCORE NONE : AUTOMATICALLY REDUCING TICKET COUNTS WITHOUT DISPENSING TICKETS.	"NONE", "1/1", "1/2"	1/1
ATTRACT VOLUME	USE OF DEMO SOUND AND SETTING VOLUME. "OFF" : NO SOUND 10 ~ 100 : RATIO OF SOUND VOLUME(%)	"OFF" , 10 ~ 100	60
SAVE AND EXIT	SAVE AND EXIT	BY PRESSING SELECT BUTTON, PERFORM BY MOVING THE CURSOR TO [YES] or [NO]	
CANCEL AND EXIT	CANCEL AND EXIT		

<TABLE #1>

PROGRAM SETTINGS -> TARGET SCORE SETTING TICKET SCORE FOR EACH TRAN CABIN					
LCD DISPLAY	DESCRIPTION	RANGE	DEFAULT		
			INT	NJ	CEC
TYPE	REFER TO THE SCORE TABLE BELOW	0 ~ 1 (INCREASED BY 1)	0	0	0
TARGET 1 SCORE	SETTING SCORE 1 CABIN OF TRAIN	0 ~ 200 (INCREASED BY 1)	50	50	8
TARGET 2 SCORE	SETTING SCORE 2 CABIN OF TRAIN	0 ~ 200 (INCREASED BY 1)	20	20	4
TARGET 3 SCORE	SETTING SCORE 3 CABIN OF TRAIN	0 ~ 200 (INCREASED BY 1)	30	30	6
TARGET 4 SCORE	SETTING SCORE 4 CABIN OF TRAIN	0 ~ 200 (INCREASED BY 1)	10	10	2
TARGET 5 SCORE	SETTING SCORE 5 CABIN OF TRAIN	0 ~ 200 (INCREASED BY 1)	100	100	10
TARGET 6 SCORE	SETTING SCORE 6 CABIN OF TRAIN	0 ~ 200 (INCREASED BY 1)	10	10	2
TARGET 7 SCORE	SETTING SCORE 7 CABIN OF TRAIN	0 ~ 200 (INCREASED BY 1)	30	30	6
TARGET 8 SCORE	SETTING SCORE 8 CABIN OF TRAIN	0 ~ 200 (INCREASED BY 1)	20	20	4
TARGET 9 SCORE	SETTING SCORE 9 CABIN OF TRAIN	0 ~ 200 (INCREASED BY 1)	50	50	8
SAVE AND EXIT	SAVE AND EXIT	BY PRESSING SELECT BUTTON, PERFORM BY MOVING THE CURSOR TO [YES] or [NO]			
CANCEL AND EXIT	CANCEL AND EXIT				

<MAIN BOARD DIP S/W SETTING>



<DEFAULT VALUE AFTER DIP S/W 2, 3 ON AND DO FACTORY SETTING>

	INT		NJ		CEC	
DIP 2	OFF		ON		OFF	
DIP 3	OFF		OFF		ON	
SCORE TYPE	DEFAULT		DEFAULT		DEFAULT	
	TYPE	0	TYPE	0	TYPE	0
	AVERAGE	33	AVERAGE	33	AVERAGE	10
	TARGET 1	50	TARGET 1	50	TARGET 1	8
	TARGET 2	20	TARGET 2	20	TARGET 2	4
	TARGET 3	30	TARGET 3	30	TARGET 3	6
	TARGET 4	10	TARGET 4	10	TARGET 4	2
	TARGET 5	100	TARGET 5	100	TARGET 5	10
	TARGET 6	10	TARGET 6	10	TARGET 6	2
	TARGET 7	30	TARGET 7	30	TARGET 7	6
	TARGET 8	20	TARGET 8	20	TARGET 8	4
	TARGET 9	50	TARGET 9	50	TARGET 9	8
	MERCY	2	MERCY	2	MERCY	1
BIG - WIN VALUE	1000		1000		500	
BIG - WIN LIMIT VALUE	2000		2000		1000	
BIG - WIN INCREMENT	0		0		0	

SCORE TABLE PER TYPE	INT		N TYPE		C TYPE	
TYPE	0	1	0	1	0	1
AVERAGE	33	46	33	46	10	15
BIG WIN	1000	1000	1000	1000	500	500
BIG WIN LIMIT	2000	2000	2000	2000	1000	1000
BIG WIN INCREMENT	0	0	0	0	0	0
TARGET 1	50	70	50	70	8	14
TARGET 2	20	30	20	30	4	10
TARGET 3	30	50	30	50	6	12
TARGET 4	10	20	10	20	2	8
TARGET 5	100	150	100	150	10	20
TARGET 6	10	20	10	20	2	8
TARGET 7	30	50	30	50	6	12
TARGET 8	20	30	20	30	4	10
TARGET 9	50	70	50	70	8	14
MERCY TICKET	2	2	2	2	1	2

★ INITIALIZING TO FACTORY SETTING VALUE, TARGET SCORE SET TO DEFAULT VALUE.

3-3. CLEAR MODE

CLEAR MODE GAME DATA AND BOOKKEEPING CAN BE DELETED		
LCD DISPLAY	DESCRIPTION	EXECUTION
CLEAR TICKETS	DELETE REMAINING TICKETS TO BE DISPENSED NOW	BY PRESSING SELECT BUTTON, PERFORM BY MOVING THE CURSOR TO [YES] or [NO]
CLEAR PLAYS	DELETE REMAINING PLAYS (CREDITS)	
CLEAR DATA	GAME ALL GAME DATA AND BOOKKEEPING DATA INCLUDING CREDITS AND TICKETS	
EXIT	EXIT	

BOOKKEEPING	
LCD DISPLAY 1P : 1 Player 2P : 2 Player TOTAL : 1P,2P GRAND TOTAL	DESCRIPTIONS
-- COIN IN -- 1P : 0 2P : 0 TOTAL : 0	NUMBER OF COIN IN (1P, 2P, TOTAL)
-- BILL IN -- 1P : 0 2P : 0 TOTAL : 0	NUMBER OF BILL IN (1P, 2P, TOTAL)
-- SERVICE IN -- 1P : 0 2P : 0 TOTAL : 0	NUMBER OF SERVICE IN AND PLAYS (1P, 2P, TOTAL) (SERVICE BUTTON INCREASES BY 1 PLAYS)
-- GAME PLAYS -- 1P : 0 2P : 0 TOTAL : 0	NUMBER OF GAME PLAY (1P, 2P, TOTAL)
-- TICKET OUT -- 1P : 0 2P : 0 TOTAL : 0	NUMBER OF TICKET OUT (1P, 2P, TOTAL)
-- SUPER BONUS -- 1P : 0 2P : 0 TOTAL : 0	NUMBER OF WINNING SUPER BONUS (1P, 2P, TOTAL)

-- TRY AGAIN -- 1P : 0 2P : 0 TOTAL : 0	NUMBER OF TRY AGAIN (1P, 2P, TOTAL)
-- TARGET 1 WIN -- 1P : 0 2P : 0 TOTAL : 0	NUMBER OF WINNING 1 CABIN (1P, 2P, TOTAL)
-- TARGET 2 WIN -- 1P : 0 2P : 0 TOTAL : 0	NUMBER OF WINNING 2 CABIN (1P, 2P, TOTAL)
-- TARGET 3 WIN -- 1P : 0 2P : 0 TOTAL : 0	NUMBER OF WINNING 3 CABIN (1P, 2P, TOTAL)
-- TARGET 4 WIN -- 1P : 0 2P : 0 TOTAL : 0	NUMBER OF WINNING 4 CABIN (1P, 2P, TOTAL)
-- TARGET 5 WIN -- 1P : 0 2P : 0 TOTAL : 0	NUMBER OF WINNING 5 CABIN (1P, 2P, TOTAL)
-- TARGET 6 WIN -- 1P : 0 2P : 0 TOTAL : 0	NUMBER OF WINNING 6 CABIN (1P, 2P, TOTAL)
-- TARGET 7 WIN -- 1P : 0 2P : 0 TOTAL : 0	NUMBER OF WINNING 7 CABIN (1P, 2P, TOTAL)
-- TARGET 8 WIN -- 1P : 0 2P : 0 TOTAL : 0	NUMBER OF WINNING 8 CABIN (1P, 2P, TOTAL)
-- TARGET 9 WIN -- 1P : 0 2P : 0 TOTAL : 0	NUMBER OF WINNING 9 CABIN (1P, 2P, TOTAL)
---- VER INFO ----	VERSION INFORMATION
CANCEL BUTTON : EXIT	

FACTORY-SETTING	
INITIALIZE TO FACTORY SETTING VALUE (DELETE DATA AND SET TO GAME DEFAULT VALUE)	
LCD DISPLAY (PERFORM)	LCD DISPLAY (PERFORM)
<p>FACTORY-SETTING</p> <p>ARE YOU SURE?</p> <p>YES or [<u>NO</u>]</p> <p>PERFORM BY MONING THE CURSER</p>	<p>FACTORY-SETTING</p> <p>REALLY ?</p> <p>YES or [<u>NO</u>]</p> <p>PERFORM BY MOVING THE CURSER</p>



3-4. TEST MODE

TEST MODE		
TEST ITEMS	SETTING ITEMS	DESCRIPTIONS
INPUT TEST	[=>]	ENTER INTO THE CHECK MODE OF INPUT STATUS
	DISPLAY OF INPUT STATUS OF EACH ITEMS AT LCD WINDOW	
	(BUTTON, COIN, TICKET, SENSOR... ETC)	
	EACH SENSOR CAN BE CHECKED BY 1-9 SOUND (BOTH 1P, 2P) #SOUND 1 : BALL SHOOTING MOTOR SENSOR #SOUND 2 : BALL IN SENSOR #SOUND 3 : BALL OUT SENSOR #SOUND 4 : BALL RETURN CHECK SENSOR #SOUND 5 : TRAIN CABIN POSITION CHECK SENSOR #SOUND 6 : TRAIN CABIN BALL CHECK SENSOR #SOUND 7 : BALL RAIL CHECK SENSOR #SOUND 8 : TRAIN SPEED CONTROL START POSITION SENSOR #SOUND 9 : TRAIN SPEED CONTROL END POSITION SENSOR #SOUND 10 : TRAIN MAIN MOTOR ENCODER DIVIDING POINT SENSOR #SOUND 11 : BALL ELEVATOR MOTOR ENCODER DIVIDING POINT SENSOR	
FND & LAMP	OPERATION TEST FOR LAMP, FND, LED	
	"OFF"	TOTALLY TURN OFF
	<u>"STEP"</u>	LAMP ► OVERALL ON/OFF FLICKERING ► 1P/2P TICKET LAMP ON ► 1P/2P BUTTON LAMP ON ► SCORE LAMP ON ► 1P/2P ELEVATOR SIDE LAMP ON ► 1P/2P BILLBOARD SPOT LAMP ON ► 1P/2P CENTER SUPER BONUS LAMP ON ► BILLBOARD LAMP ON OPERATION TEST WILL BE REPEATED IN ABOVE SEQUENCE
		FND ► OVERALL ON/OFF FLICKERING ► CREDIT 1P [00] / 2P [00] ► TICKET 1P [1111] / 2P [1111] ► BIGWIN [2222] ► TOTAL NUMBER COUNT [0000] ~ [9999] DISPLAY WILL BE REPEATED IN ABOVE SEQUENCE
		LED ► OVERALL WHITE ON/OFF FLICKERING ► LIGHTS ON IN SEQUENCE OF RED ► GREEN ► BLUE ► WHITE
	"ON"	TOTALLY LIGHT ON (FOR REFERENCE, THE ON-STATE SHALL BE MAINTAINED IN OTHER TEST MODE)
	"ON/OFF"	OVERALL ON/OFF REPETITION

MOT TRAIN	TRAIN MAIN MOTOR OPERATION TEST ◎ RUN BY SELECT BUTTON (ALSO BY GAME BUTTON)	
	"OFF"	STOP TRAIN MAIN
	"ON"	START TRAIN MAIN MOTOR
	BIGWIN FND [■ ■ ■ ■] : DISPLAY THE TIME TAKEN FOR ONE LAP OF THE TRAIN TICKET FND [■ □ □ □] : DISPLAY COUNTS OF MAIN MOTOR DIVIDING POINT SENSOR (0 ~ F) [□ ■ □ □] : DISPLAY COUNTS OF TRAIN SPEED CONTROL STARTING POINT SENSOR (0 ~ F) [□ □ ■ □] : DISPLAY COUNTS OF TRAIN SPEED CONTROL END SENSOR (0 ~ F) [□ □ □ ■] : DISPLAY COUNTS OF TRAIN CAR CHECK SENSOR (0 ~ F) CREDIT FND [■ ■] : DISPLAY COUNTS OF MAIN MOTOR DIVIDING POINT SENSOR	
MOT ELEVATOR	BALL ELEVATOR MOTOR OPERATION TEST ◎ RUN BY SELECT BUTTON (ALSO BY GAME BUTTON)	
	"OFF"	STOP BALL ELEVATOR MOTOR
	"ON"	START BALL ELEVATOR MOTOR
	BIGWIN FND [■ ■ ■ ■] : DISPLAY MOTOR STATUS "On" "OFF" TICKET FND [■ □ □ □] : DISPLAY STATUS OF BALL RETURN SENSOR (0, 1) [□ □ □ ■] : DISPLAY STATUS OF BALL ELEVATOR MOTOR DIVIDING POINT SENSOR (0, 1) CREDIT FND [■ ■] : DISPLAY COUNTS OF BALL ELEVATOR MOTOR DIVIDING POINTSENSOR	
MOT SHOOTER	BALL SHOOTER MOTOR OPERATION TEST ◎ AFTER SELECTING THE MOTOR BY LEFT, RIGHT BUTTON AND RUN BY SELECT BUTTON (ALSO BY GAME BUTTON)	
	"ALL"	1P, 2P BALL SHOOTER MOTOR ON
	"1P"	1P BALL SHOOTER MOTOR ON
	"2P"	2P BALL SHOOTER MOTOR ON
	BIGWIN FND [■ ■ ■ ■] : DISPLAY MOTOR STATUS "On" "OFF" TICKET FND [■ □ □ □] : DISPLAY STATUS OF BALL SHOOTER MOTOR SENSOR (0, 1) [□ ■ □ □] : DISPLAY STATUS OF BALL IN SENSOR (0, 1) [□ □ ■ □] : DISPLAY STATUS OF BALL OUT SENSOR (0, 1) [□ □ □ ■] : DISPLAY STATUS OF BALL RAIL SENSOR (0, 1) CREDIT FND [■ ■] : DISPLAY CHECK COUNTS OF BALL SHOOTER MOTOR SENSOR	

COIN	COIN MACHINE TEST ◎ BY SELECT BUTTON BOTH OF 1P, 2P ON AND OFF ◎ BY 1P, 2P GAME BUTTON ON AND OFF SEPARATELY	
	"ON", "OFF"	COIN MACHINE ON, OFF
	BIGWIN FND [■ ■ ■ ■] : DISPLAY STATUS OF COIN MACHINE "On", "OFF", "Err" TICKET FND [■ □ □ □] : DISPLAY STATUS OF POWER OF COIN SENSOR (0 or 1) [□ □ □ ■] : DISPLAY STATUS OF COIN SENSOR (0 or 1) CREDIT FND [■ ■] : DISPLAY CHECK COUNTS OF COIN SENSOR (REPEATLY COUNTING 00 ~ 99)	
BILL	BILL ACCEPTOR TEST ◎ BY SELECT BUTTON BOTH OF 1P, 2P ON AND OFF ◎ BY 1P, 2P GAME BUTTON ON AND OFF SEPARATELY	
	"ON", "OFF"	BILL ACCEPTOR ON, OFF
	BIGWIN FND [■ ■ ■ ■] : DISPLAY STATUS OF BILL ACCEPTOR "On", "OFF" TICKET FND [■ □ □ □] : DISPLAY STATUS OF POWER OF BILL ACCEPTOR (0 or 1) [□ □ □ ■] : DISPLAY STATUS OF BILL ACCEPTOR SENSOR (0 or 1) CREDIT FND [■ ■] : DISPLAY CHECK COUNTS OF BILL ACCEPTOR SENSOR (REPEATLY COUNTING 00 ~ 99)	
TICKET	TICKET MACHINE TEST ◎ AFTER SELECTING TICKET MACHINES BY LEFT, RIGHT BUTTON AND TEST BY SELECT BUTTON ◎ BY 1P, 2P SERVICE AND GAME BUTTON ON AND OFF SEPARATELY (3 TICKETS DISPENSING)	
	"ALL"	TEST ALL TICKET MACHINES (3 TICKETS DISPENSING)
	"1P", "2P"	SEPARATE TEST 1P AND 2P TICKET MACHINES (3 TICKETS DISPENSING)
	BIGWIN FND [■ ■ ■ ■] : DISPLAY STATUS OF TICKET MACHINE "On", "OFF", "Err" TICKET FND [□ □ □ ■] : DISPLAY COUNTS OF DISPENSED TICKETS CREDIT FND : [■ □] : DISPLAY STATUS OF BUTTON OF TICKET MACHINE (0, 1) [□ ■] : DISPLAY STATUS OF SENSOR OF TICKET MACHINE (0, 1)	
COUNTER	COUNTER MACHINE TEST ◎ AFTER SELECTING COUNTER MACHINES BY LEFT, RIGHT BUTTON AND 1 COUNT UP BY SELECT BUTTON	
	"COIN"	TEST ALL COIN COUNTERS 1 COUNT UP EACH IN ORDER OF 1P ► 2P
	"TICKET"	TEST ALL TICKET COU 1 COUNT UP EACH IN ORDER OF 1P ► 2P

SOUND TEST	SOUND TEST ◎ AFTER SELECTING SPEAKERS BY LEFT, RIGHT BUTTON AND TEST BY SELECT BUTTON (PLAY, STOP)	
	"CH"	PLAY VOICE One ~ Eight BY EACH SPEAKER CHANNEL 1P LEFT : 1, 5 1P RIGHT : 2, 6 2P LEFT : 3, 7 2P RIGHT : 4, 8
	"BGM"	BGM SOUND TEST
	"SFX"	SOUND EFFECT TEST
	"VOC"	VOICE SOUND TEST
EXIT	EXIT TO OPERATING OPRTIONS	

3-4. ERROR CODE

ERROR CODE	TYPE OF ERROR	CONTENTS	CEHCK ITEMS
Er.02	SYSTEM	Setup save data problem	1. Check and save setup settings 2. FACTORY SET 3. Check power ON and OFF 4. If the problem continues, replace the motherboard
Er.03		Game save data problem	1. CLEAR DATA in CLEAR MODE 2. Check power ON and OFF 3. If the problem continues, replace the motherboard
Er.11	COIN MACHINE	Player coin sensor signal steady on	Check the sensor input of the player that has a problem
Er.13	BILL ACCEPTOR	Player bill acceptor signal steady on	Check the sensor input of the player that has a problem
Er.31	MAIN(TRAIN) MOTOR	No encoder dividing point signal or steady on	1. Check the motor status 2. Check the sensor input status
Er.32	MAIN(TARIN) SEQUENCE CHECK SENSOR	Train sequence check sensor signal problem (No signal or steady on)	1. Check the sensor input status
Er.33	TRAIN SPEED CONTROL START SENSOR	Train speed control start sensor signal problem (No signal or steady on)	1. Check the sensor input status
Er.34	TRAIN SPEED CONTROL END SENSOR	Train speed control start sensor signal problem (No signal or steady on)	1. Check the sensor input status
Er.41	BALL ELEVATOR MOTOR	Encoder dividing point signal problem	1. Check the motor status 2. Check encoder sensor input status
Er.42	BALL RETURN SENSOR	Elevator entry sensor problem (When the signal continues for more than 3 seconds while the elevator motor is running and the game is in progress, or when there is no signal for more than a certain number of games)	1. Check the sensor input status
Er.51	BALL SHOOTER SENSOR	No sensor signal after ball launch	1. Check the ball shooter status 2. Check the sensor input status
Er.61	BALL IN/OUT SENSOR	Ball IN sensor signal problem (No signal)	1. Check the sensor input status
Er.62		Ball OUT sensor signal problem (No signal or steady on)	1. Check the sensor input status
Er.63	BALL RAIL SENSOR	Ball rail sensor signal problem (No signal or steady on)	1. Check the sensor input status
Er.64	BALL SUCCESS SENSOR	Ball success sensor signal problem (No signal or steady on)	1. Check the sensor input status
HELP	TICKET ERROR	No tickets	1. Check ticket qty 2. Check ticket motor 3. Check the ticket dispensing sensor
※ NORMALLY ERROR CODE WILL BE DISPLAYED AT PLAYER'S TICKETS FND / BIGWIN FND. (REFER TO TEST MODE EXPLANATION FOR ERROR CODE DISPLAY OF TEST MODE)			

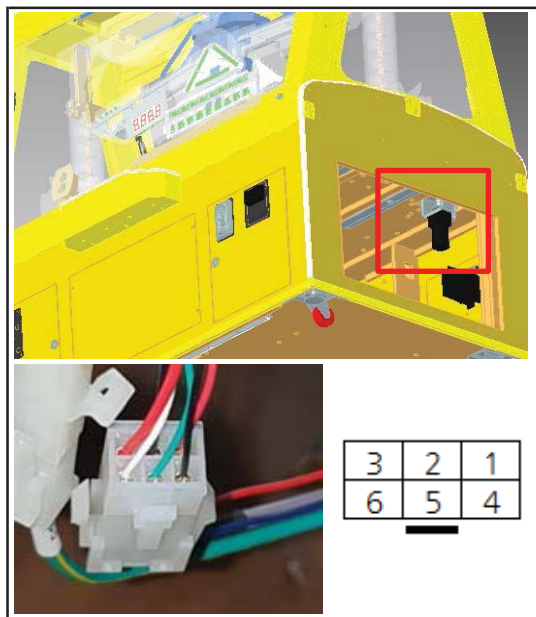
ERROR CODE DETECTION METHOD

ERROR CODE	TYPE OF ERROR	CONTENTS	ERROR DETECTION CONDITION
Er.02	SYSTEM	Setup save data problem	Power on and check the backup memory related to the motherboard setup
Er.03		Game save data problem	
Er.11	COIN MACHINE	Player coin sensor signal steady on	When INHIBIT is ON, there is a signal for more than 2 seconds
Er.13	BILL ACCEPTOR	Player bill acceptor signal steady on	Signal is still on for more than 2 seconds
Er.31	MAIN(TRAIN) MOTOR	No encoder dividing point signal or steady on	No encoder dividing point sensor signal for more than 0.2 seconds during motor operation.(Error after 1 reverse rotation process)
Er.32	MAIN(TARIN) SEQUENCE CHECK SENSOR	Train sequence check sensor signal problem (No signal or steady on)	No signal for more than 30 seconds or signal is on more than 3 seconds while the train motor is running
Er.33	TRAIN SPEED CONTROL START SENSOR	Train speed control start sensor signal problem (No signal or steady on)	
Er.34	TRAIN SPEED CONTROL END SENSOR	Train speed control end sensor signal problem (No signal or steady on)	
Er.41	BALL ELEVATOR MOTOR	Encoder dividing point signal problem	No encoder dividing point sensor signal for more than 0.2 seconds during motor operation. (Error after 1 reverse rotation process)
Er.42	BALL RETURN SENSOR	Elevator entry sensor problem (When the signal continues for more than 3 seconds while the elevator motor is running and the game is in progress, or when there is no signal for more than a certain number of games)	After starting the game, the elevator entry sensor signal is on for more than 3 seconds or no signal during the game more than 3 times
Er.51	BALL SHOOTER SENSOR	No sensor signal after ball launch	No sensor signal for more than 3 seconds after ball launch
Er.61	BALL IN SENSOR	Ball IN sensor signal problem (No signal)	No sensor signal for more than 40 seconds

Er.62	BALL OUT SENSOR	Ball OUT sensor signal problem (No signal or steady on)	No sensor signal for more than 5 seconds after the ball is launched, or sensor signal is on for more than 5 seconds
Er.63	BALL RAIL SENSOR	Ball rail sensor signal problem (No signal or steady on)	(check 3 times only when there is no sensor signal)
Er.64	BALL SUCCESS SENSOR	Ball success sensor signal problem (No signal or steady on)	No sensor signal for more than 10 seconds after the ball is launched, or sensor signal is on for more than 5 seconds (check 3 times only when there is no sensor signal)
HELP	TICKET ERROR	No tickets	No ticket sensor signal for more than 1 second during ticket dispensing
※ NORMALLY ERROR CODE WILL BE DISPLAYED AT PLAYER'S TICKETS FND / BIGWIN FND. (REFER TO TEST MODE EXPLANATION FOR ERROR CODE DISPLAY OF TEST MODE)			

4. TROUBLESHOOTING

4-1. MAIN(TRAIN) MOTOR PROBLEM [Er.31]

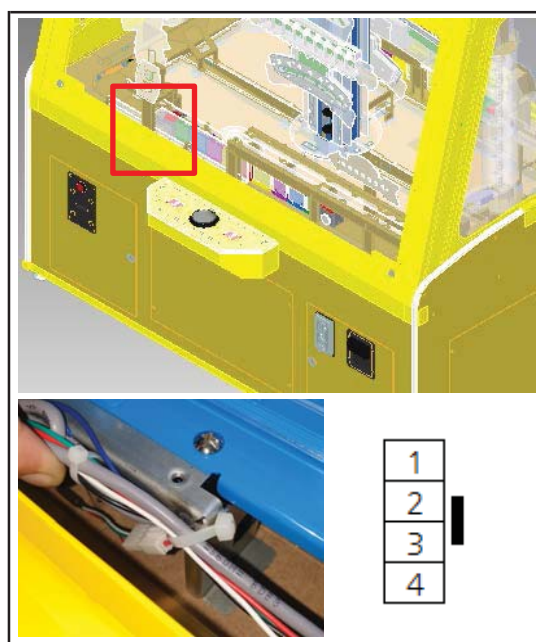


1	4.5V	VCC
2	GND	

Troubleshooting

- ※ HOW TO TEST
TEST MODE → MOT TRAIN TEST
 ► TICKET FND : Check first digit change
 ► CREDIT FND : Display dividing point sensor
- ※ CHECK LIST
 A.Check motor assembly → B.Cable & connector
 → C.Chain & train equipments → D.Motor
 → E.Sensor PCB → F.Main PCB
- A) Check the assembly status of couplings and other motor connection devices
 B) Check cable and connector connection status
 C) Check chain and train equipment deformation
 D) Check motor voltage
 E) Check sensor PCB voltage
 F) Replace Main PCB

4-2. MAIN(TRAIN) SEQUENCE CHECK SENSOR PROBLEM [Er.32]

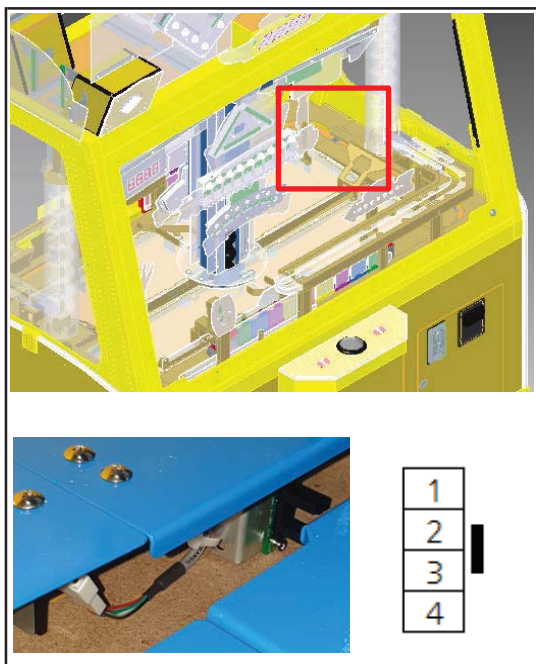


1	Over 4.5V	Input voltage
2	Over 4.5V	Operation signal
3	Under 0.1V	Detection signal
4	GND	

Troubleshooting

- ※ HOW TO TEST
TEST MODE - MOT TRAIN TEST
 ► TICKET FND : Check 4th digit change
- ※ CHECK LIST
 A.Train assembly - B.Cables & connectors -
 C.Equipment - D.Sensor PCB - E.Main PCB
- A) Check chain and plastic part assembly status
 B) Check cable and connector connections
 C) Check equipment deformation
 D) Check sensor PCB voltage
 E) Replace Main PCB

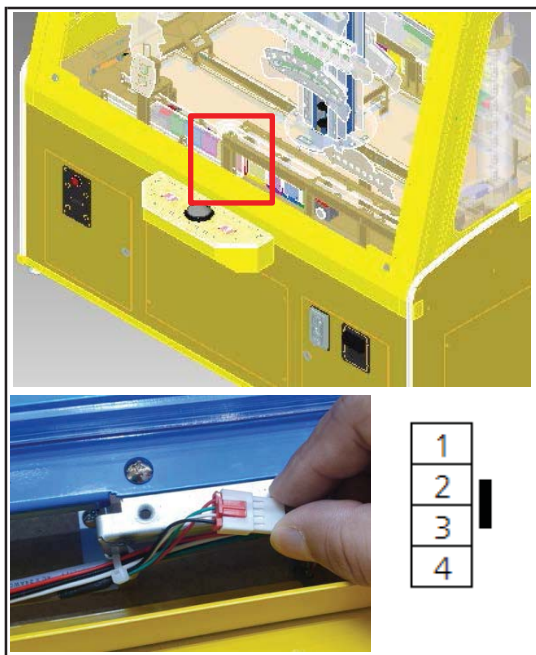
4-3. TRAIN SPEED CONTROL START SENSOR PROBLEM [Er.33]



1	Over 4.5V	Input voltage
2	Over 4.5V	Operation signal
3	Under 0.1V	Detection signal
4	GND	

Troubleshooting
<p>※ HOW TO TEST</p> <p>TEST MODE - MOT TRAIN TEST</p> <p>▶ TICKET FND : Check second digit change</p> <p>※ CHECK LIST</p> <p>A.Train assembly - B.Cable & connectors - C.Equipment - D.Sensor PCB - E.Main PCB</p> <p>A) Check chain and plastic part assembly status</p> <p>B) Check cable and connector connections</p> <p>C) Check equipment deformation</p> <p>D) Check sensor PCB voltage</p> <p>E) Replace Main PCB</p>

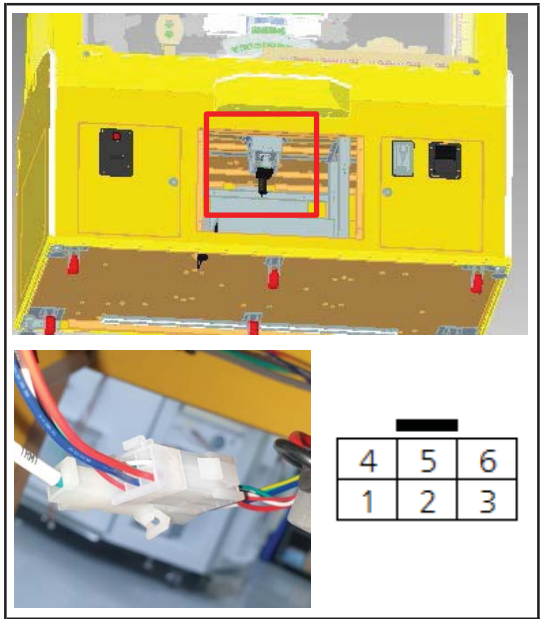
4-4. TRAIN SPEED CONTROL END SENSOR PROBLEM [Er.34]



1	Over 4.5V	Input voltage
2	Over 4.5V	Operation signal
3	Under 0.1V	Detection signal
4	GND	

Troubleshooting
<p>※ HOW TO TEST</p> <p>TEST MODE - MOT TRAIN TEST</p> <p>▶ TICKET FND : Check 3rd digit change</p> <p>※ CHECK LIST</p> <p>A.Train assembly - B.Cable & connectors - C.Equipment - D.Sensor PCB - E.Main PCB</p> <p>A) Check chain and plastic part assembly status</p> <p>B) Check cable and connector connections</p> <p>C) Check equipment deformation</p> <p>D) Check sensor PCB voltage</p> <p>E) Replace Main PCB</p>

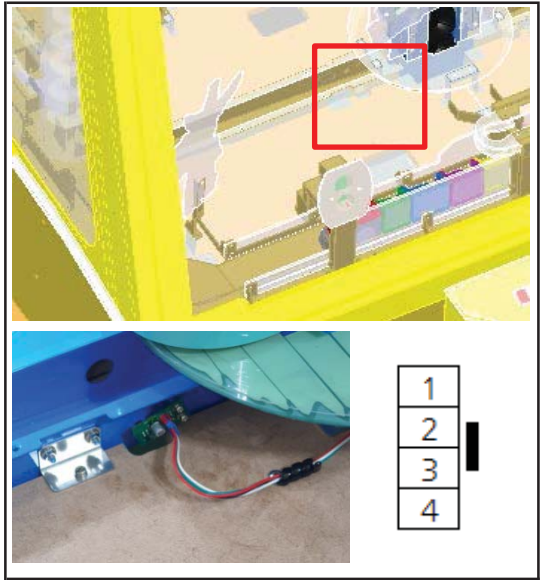
4-5. BALL ELEVATOR MOTOR PROBLEM [Er.41]



4	Over 11V	Input voltage
5	GND	

Troubleshooting
※ HOW TO TEST TEST MODE - MOT ELEVATOR TEST ▶ BIGWIN FND : Check display "ON" ▶ TICKET FND : Check 4th digit change ▶ CREDIT FND : Display dividing point sensor
※ CHECK LIST A.Check motor assembly → B.Cable & connector → C.Equipments → D.Motor → E.Sensor PCB → F.Main PCB
A) Check the assembly status of couplings and other motor connection devices B) Check cable and connector connection status C) Check equipment deformation D) Check motor voltage E) Check sensor PCB voltage F) Replace Main PCB

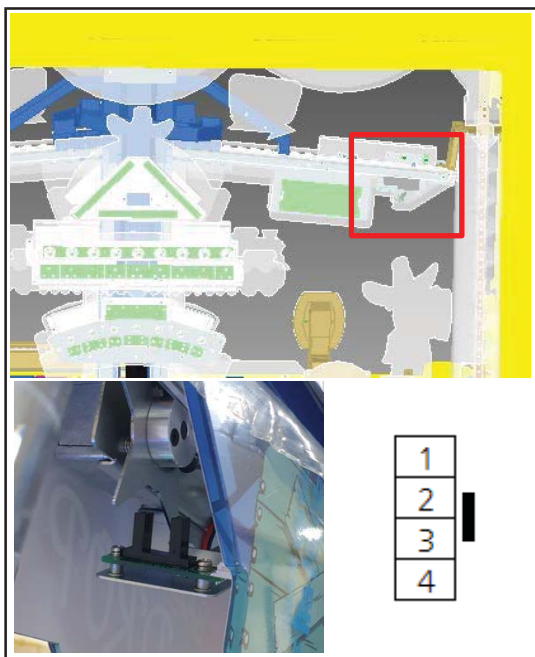
4-6. BALL RETURN SENSOR PROBLEM [Er.42]



1	Over 4.5V	Input voltage
2	Over 4.5V	Operation signal
3	Under 0.1V	Detection signal
4	GND	

Troubleshooting
※ HOW TO TEST TEST MODE - INPUT TEST ▶ Speaker sound when sensor is recognized : 4
※ CHECK LIST A.Ball - B.Cable & connector - C.Equipment - D.Sensor PCB - E.Main PCB
A) Check ball jam & ball qty B) Check cable and connector connections C) Check equipment deformation D) Check sensor PCB voltage E) Replace Main PCB

4-7. BALL SHOOTER SENSOR PROBLEM [Er.51]



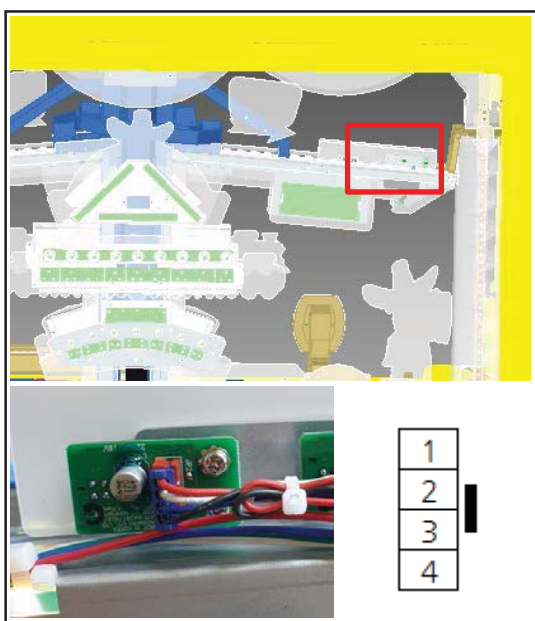
1	Over 4.5V	Input voltage
2	Over 4.5V	Operation signal
3	Under 0.1V	Detection signal
4	GND	

Troubleshooting	
※ HOW TO TEST	
TEST MODE - MOT TRAIN TEST	
▶ BIGWIN FND : Check display "ON"	
▶ TICKET FND : Check first digit change	
▶ CREDIT FND : Check the ball count	
※ CHECK LIST	
A.Motor - B.Cable & connector - C.Equipment -	
D.Motor voltage - E.Sensor PCB - F.Main PCB	
A) Check the motor assembly	
B) Check cable and connector connections	
C) Check equipment deformation	
D) Check motor voltage	
E) Check sensor PCB voltage	
F) Replace Main PCB	



1	Over 4V	Input voltage
2	GND	

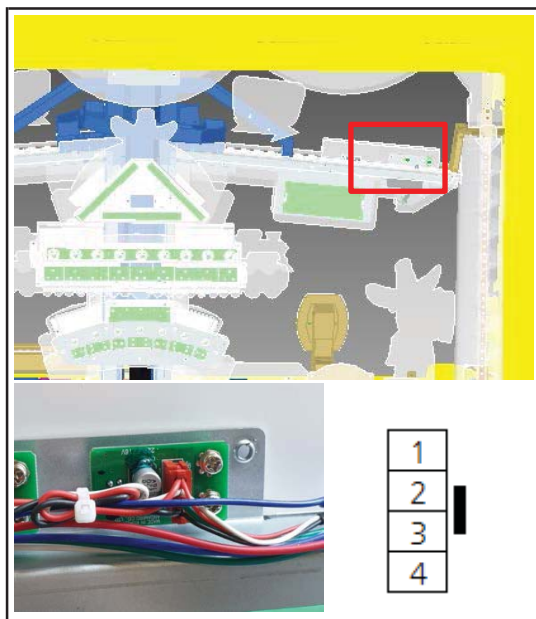
4-8. BALL IN SENSOR PROBLEM [Er.61]



1	Over 4.5V	Input voltage
2	Over 4.5V	Operation signal
3	Under 0.1V	Detection signal
4	GND	

Troubleshooting	
※ HOW TO TEST	
TEST MODE - MOT SHOOTER TEST	
▶ TICKET FND : Check second digit change	
※ CHECK LIST	
A.Ball - B.Cable & connector - C.Sensor PCB -	
D.Main PCB	
A) Check ball jam & ball qty	
B) Check cable and connector connections	
C) Check sensor PCB voltage	
D) Replace Main PCB	

4-9. BALL OUT SENSOR PROBLEM [Er.62]



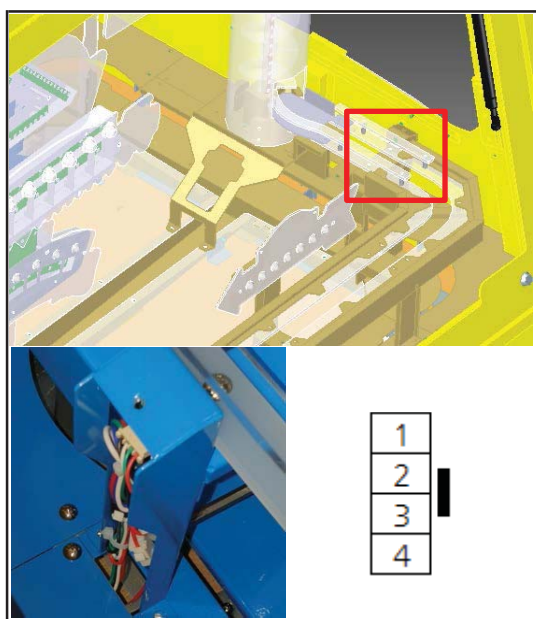
1	Over 4.5V	Input voltage
2	Over 4.5V	Operation signal
3	Under 0.1V	Detection signal
4	GND	

Troubleshooting

- ※ HOW TO TEST
TEST MODE - MOT SHOOTER TEST
▶ TICKET FND : Check 3rd digit change
- ※ CHECK LIST
A.Ball - B.Cable & connector - C.Sensor PCB
- D.Main PCB

A-1) Check ball jam & ball qty
A-2) If there is no ball, put a ball on it, clear the error and test again
B) Check cable and connector connections
C) Check sensor PCB voltage
D) Replace Main PCB

4-10. BALL RAIL SENSOR PROBLEM [Er.63]



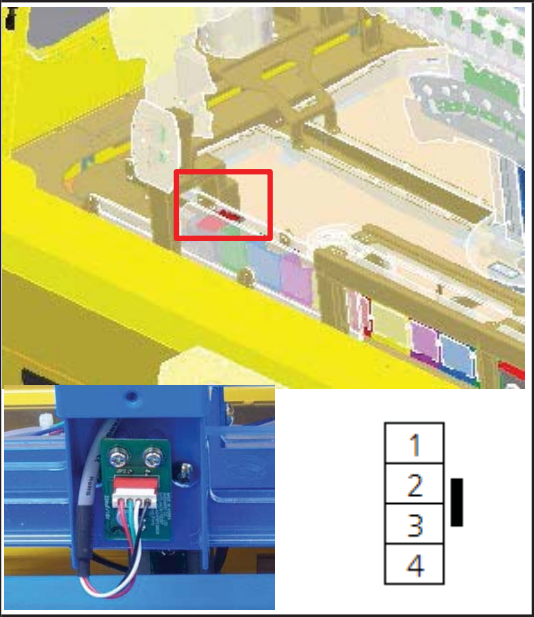
1	Over 4.5V	Input voltage
2	Over 4.5V	Operation signal
3	Under 0.1V	Detection signal
4	GND	

Troubleshooting

- ※ HOW TO TEST
TEST MODE - INPUT TEST
▶ Speaker sound when sensor is recognized : 7
- ※ CHECK LIST
A.Ball - B.Cable & connector - C.Equipment -
D.Sensor PCB - E.Main PCB

A) Check ball jam & ball qty & foreign body
B) Check cable and connector connections
C) Check equipment deformation
D) Check sensor PCB voltage
E) Replace Main PCB

4-11. BALL SUCCESS SENSOR PROBLEM [Er.64]



1	Over 4.5V	Input voltage
2	Over 4.5V	Operation signal
3	Under 0.1V	Detection signal
4	GND	

Troubleshooting

※ HOW TO TEST

TEST MODE - INPUT TEST

▶ Speaker sound when sensor is recognized: 6

※ CHECK LIST

A.Ball - B.Cable & connector - C.Equipment - D.Sensor PCB - E.Main PCB

A) Check ball jam & ball qty

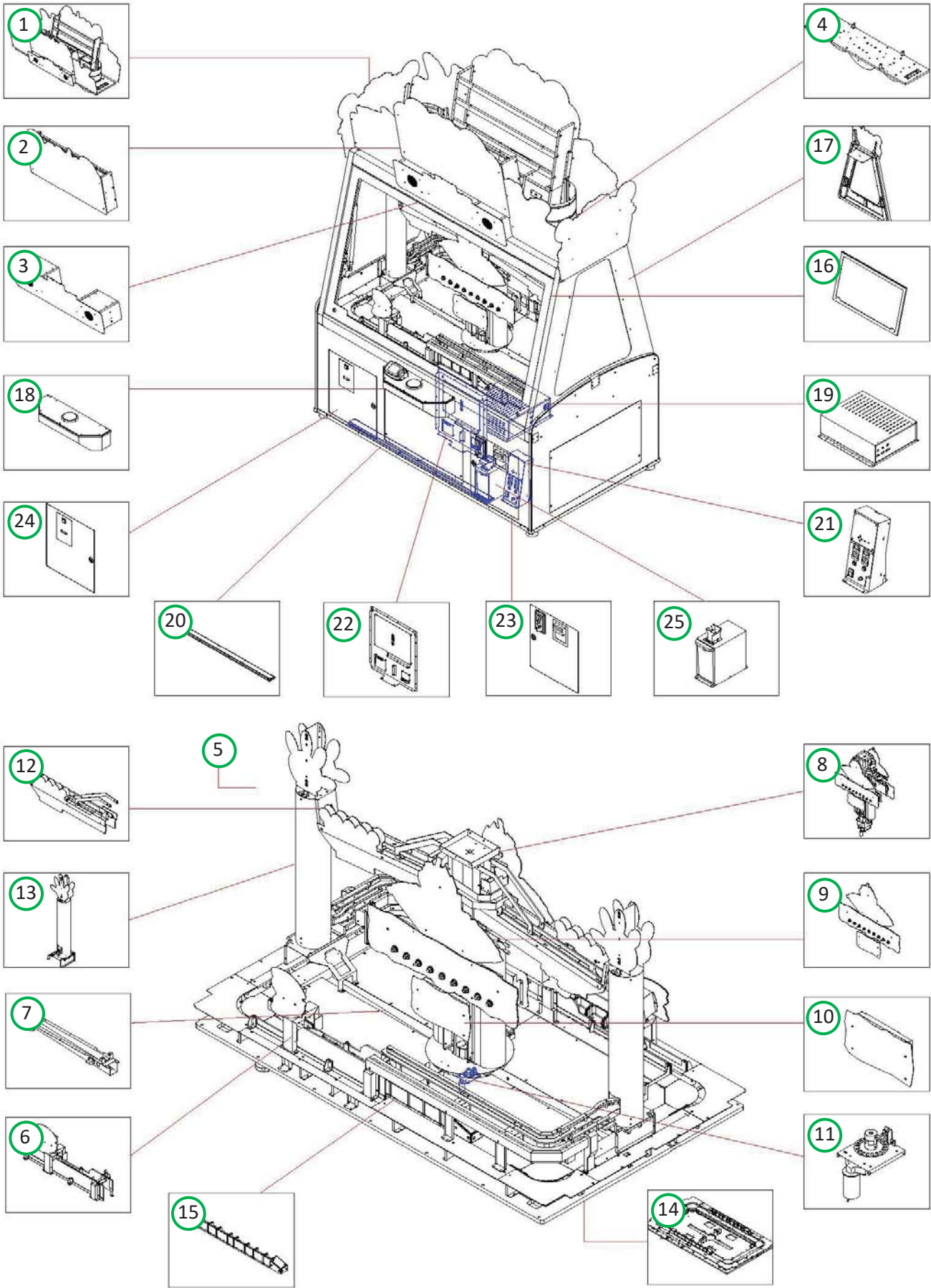
B) Check cable and connector connections

C) Check equipment deformation

D) Check sensor PCB voltage

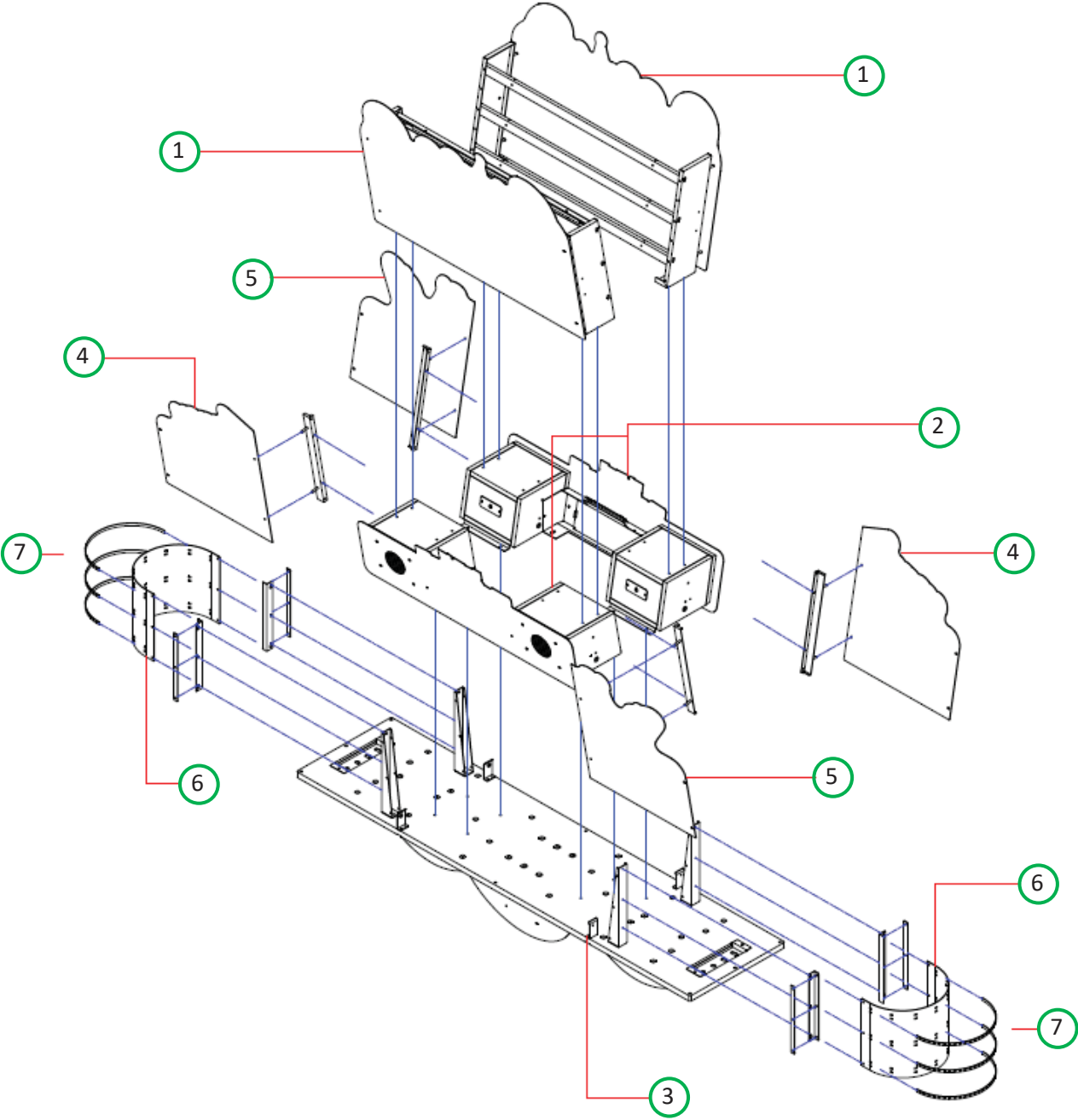
E) Replace Main PCB

5. EXPLODED VIEW



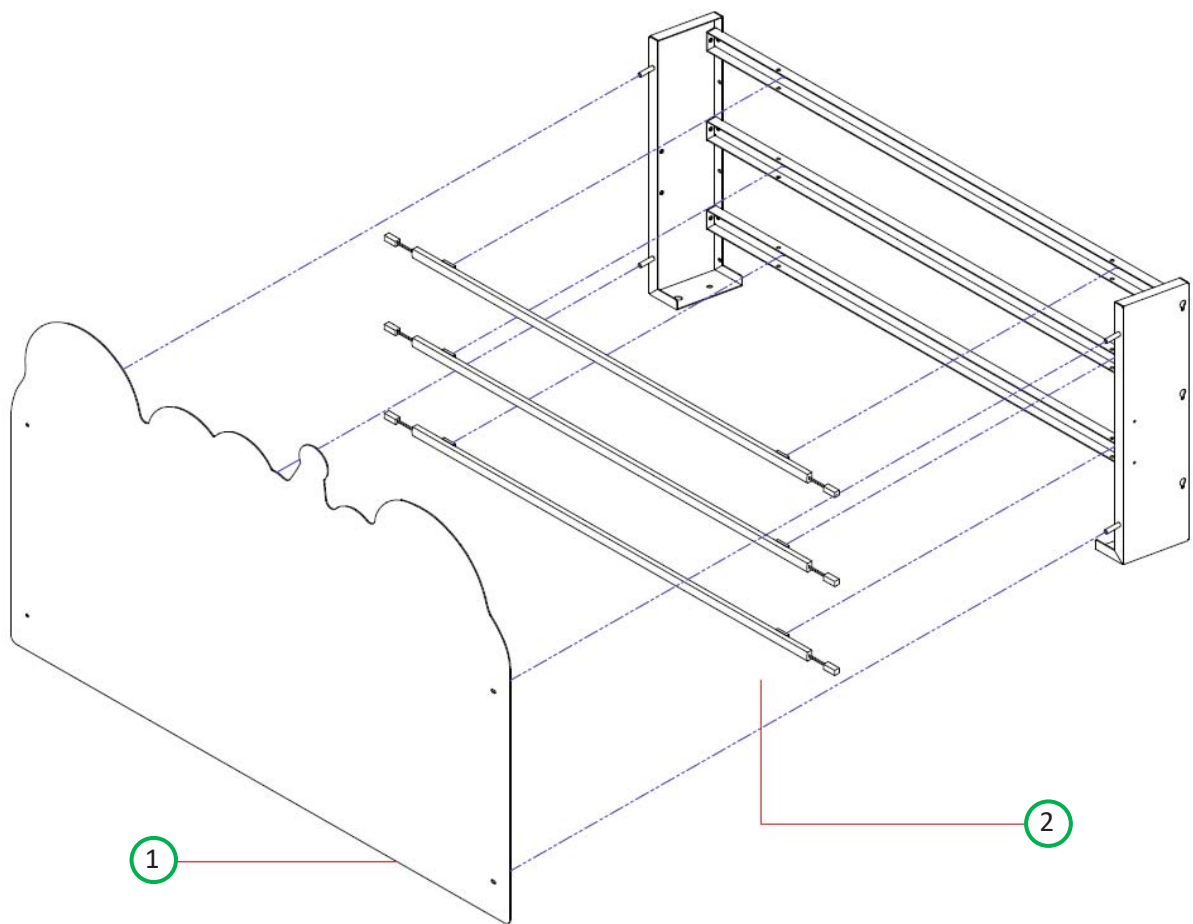
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BILLBOARD TOTAL PART	-	1	-
2	ASS'Y BILLBOARD TITLE PART	-	2	-
3	ASS'Y-BILLBOARD BIGWIN SPEAKER PART	-	2	-
4	ASS'Y-BILLBOARD BOTTOM PLATE PART	-	2	-
5	ASS'Y-GAME PLAYFIELD TOTAL PART	-	1	-
6	ASS'Y-TRAIN SIDE FENCE PART	-	2	-
7	ASS'Y-BALL RETURN CHUTE PART	-	2	-
8	ASS'Y-BALL LIFT SCREW PART	-	2	-
9	ASS'Y-BALL LIFT SCREW TRAIN LED PART	-	2	-
10	BALL LIFT SCREW SCORE FND PART	-	2	-
11	BALL LIFT SCREW MOTOR PART	-	1	-
12	ASS'Y-UPPER RAIL PART	-	2	-
13	ASS'Y-BALL SCREW PIPE PART	-	2	-
14	ASS'Y-CHAIN MAIN PLATE PART	-	1	-
15	ASS'Y-TRAIN TOTAL PART	-	2	-
16	ASS'Y-CABINET DOOR TOTAL PART	-	2	-
17	ASS'Y-CABINET SIDE FRAME TOTAL PART	-	2	-
18	ASS'Y-BUTTON TOTAL PART	-	2	-
19	ASS'Y-POWER SMPS BOX PART	-	1	-
20	ASS'Y-BOTTOM LED PART	-	2	-
21	ASS'Y-CONTROL PANEL TOTAL PART	-	1	-
22	ASS'Y-MAIN BOARD PART	-	1	-
23	ASS'Y-CABINET COIN DOOR PART	-	2	-
24	ASS'Y-CABINET TICKET DOOR PART	-	2	-
25	ASS'Y-COIN BOX PART	-	1	-

5-1. BILLBOARD TOTAL PART



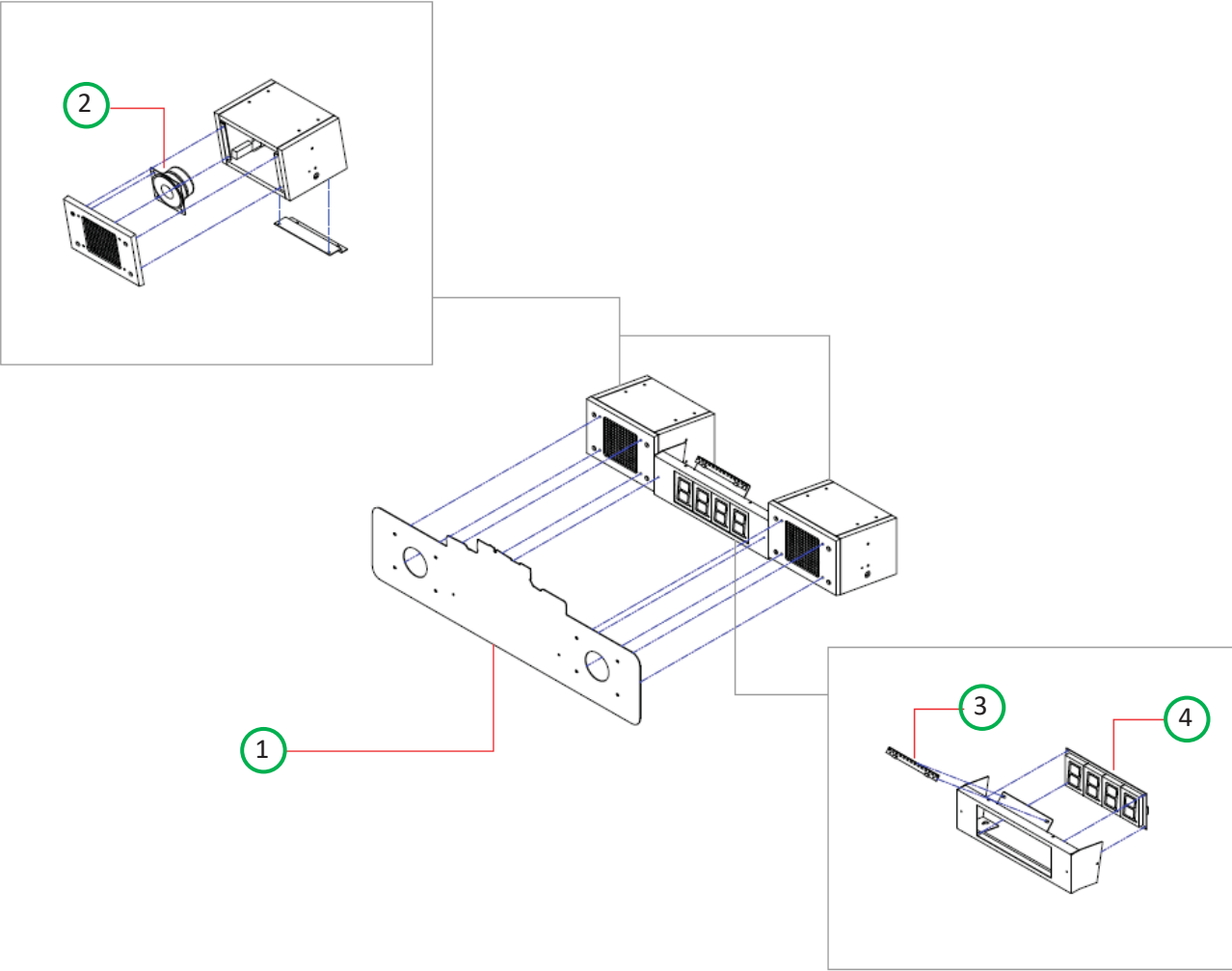
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	ASS'Y-BILLBOARD TITLE PART	-	2	-
2	ASS'Y-BILLBOARD BIGWIN SPEAKER PART	-	2	-
3	ASS'Y-BILLBOARD BOTTOM PLATE PART	-	1	-
4	BILLBOARD DECO ACRYL-L	PET 1.5t	2	MSBT0ACR042
5	BILLBOARD DECO ACRYL-R	PET 1.5t	2	MSBT0ACR043
6	BILLBOARD SIDE FLEXIBLE LED PET ACRYL	PET 1.0t	2	MSBT0ACR011
7	BILLBOARD FLEX_LED PCB	LR_27	6	MELE0LED095

5-2. ASS'Y-BILLBOARD TITLE PART



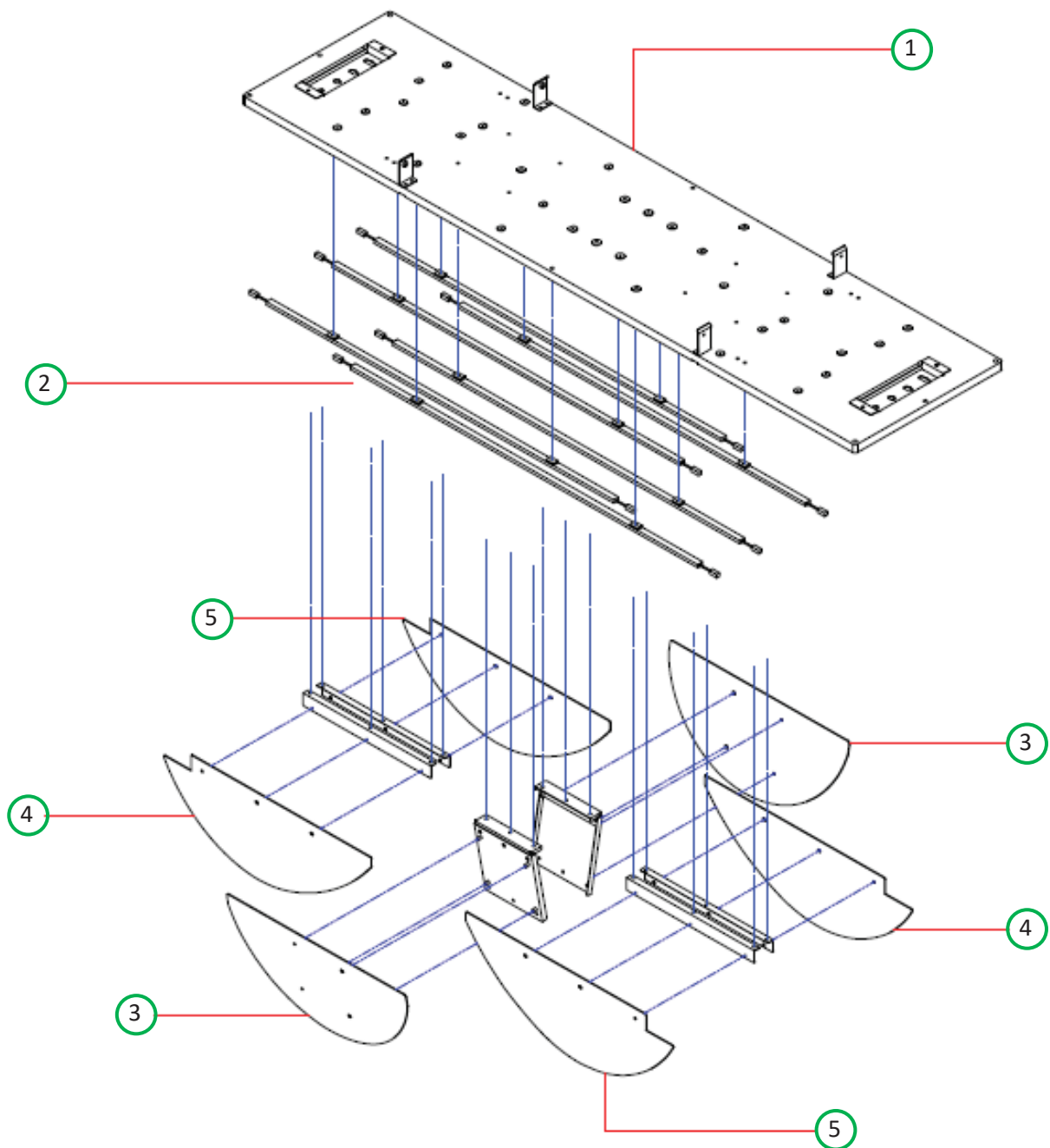
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BILLBOARD TITLE COVER ACRYL	-	1	MSBT0ACR045
2	LED BAR 12V ASS'Y	710MM	3	AZZZ0PCB165

5-3. ASS'Y-BILLBOARD BIGWIN SPEAKER PART



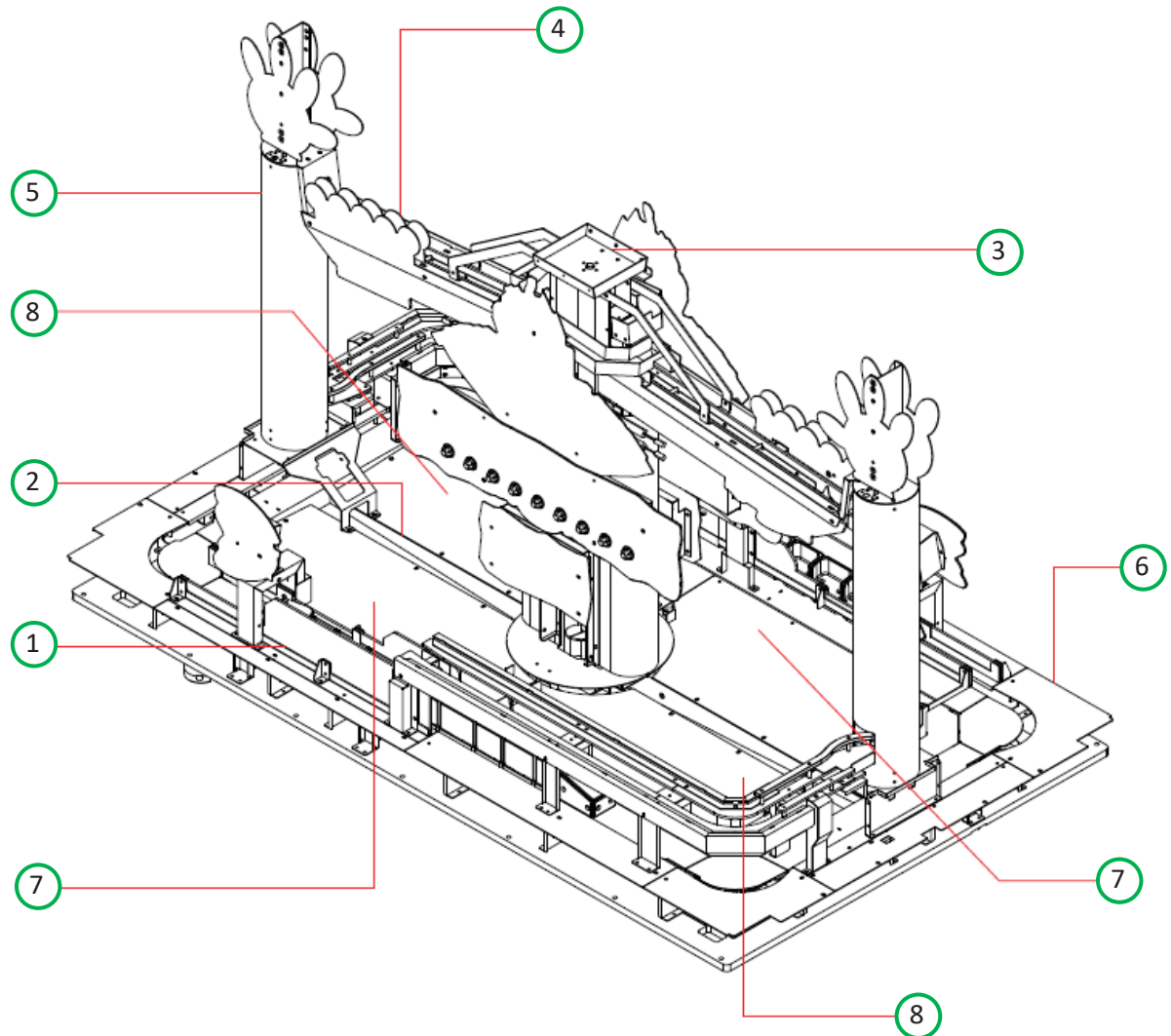
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BILLBOARD BIGWIN FND COVER ACRYL	PET 1.5t	1	MSBT0ACR038
2	SPEAKER	4.5INCH	2	MZZZ0SPE021
3	JWIE LED PCB	-	1	AJIE0PCB006
4	FND PCB	6390-04	1	AFND0PCB011

5-4. ASS'Y-BILLBOARD BOTTOM PLATE PART



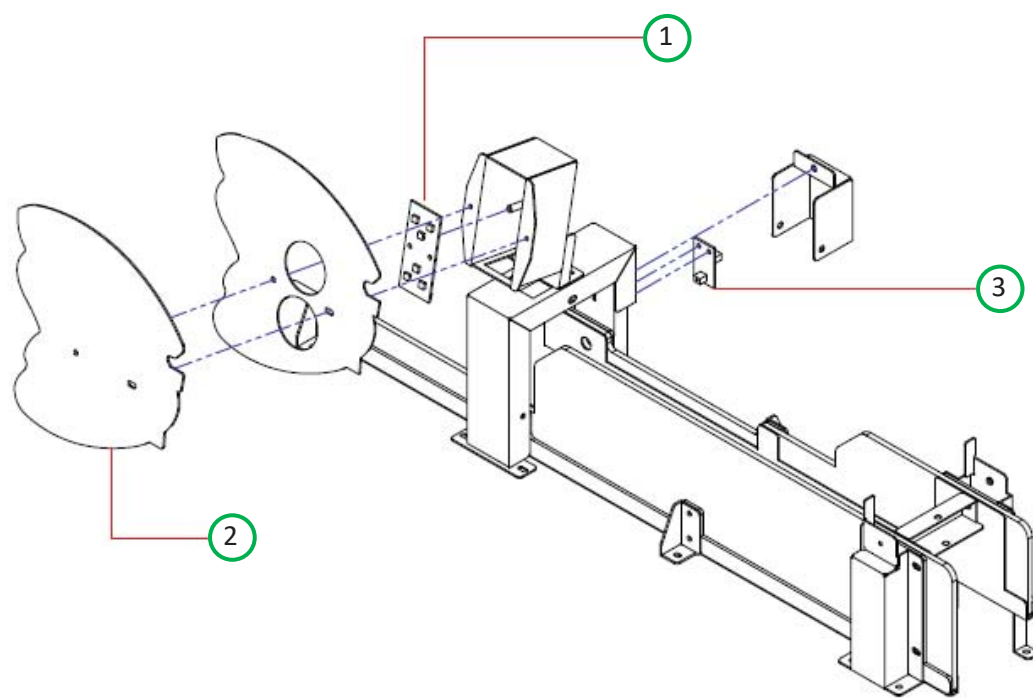
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BILLBOARD BOTTOM PLATE	MDF-20t, YELLOW SHEET	1	MSBT0WOO001
2	LED BAR 12V ASS'Y	910MM	6	AZZZ0PCB128
3	BILLBOARD BLS TOP COVER ACRYL	PET 1.5t	2	MSBT0ACR039
4	BILLBOARD CENTER DECO ACRYL-L	PET 1.5t	2	MSBT0ACR040
5	BILLBOARD CENTER DECO ACRYL-R	PET 1.5t	2	MSBT0ACR041

5-5. ASS'Y-GAME PLAYFIELD TOTAL PART



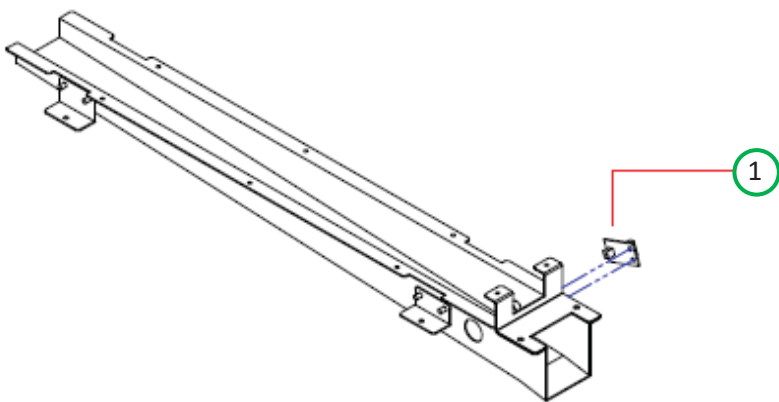
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	ASS'Y-TRAIN SIDE FENCE PART	-	2	-
2	ASS'Y-BALL RETURN CHUTE PART	-	2	-
3	ASS'Y-BALL LIFT SCREW PART	-	1	-
4	ASS'Y-UPPER RAIL PART	-	2	-
5	ASS'Y-BALL SCREW PIPE PART	-	2	-
6	ASS'Y-CHAIN MAIN PLATE PART	-	1	-
7	PLAYFIELD INNER COVER ACRYL-L	PET 1.5t	2	MSBT0ACR049
8	PLAYFIELD INNER COVER ACRYL-R	PET 1.5t	2	MSBT0ACR050

5-6. ASS'Y-TRAIN SIDE FENCE PART



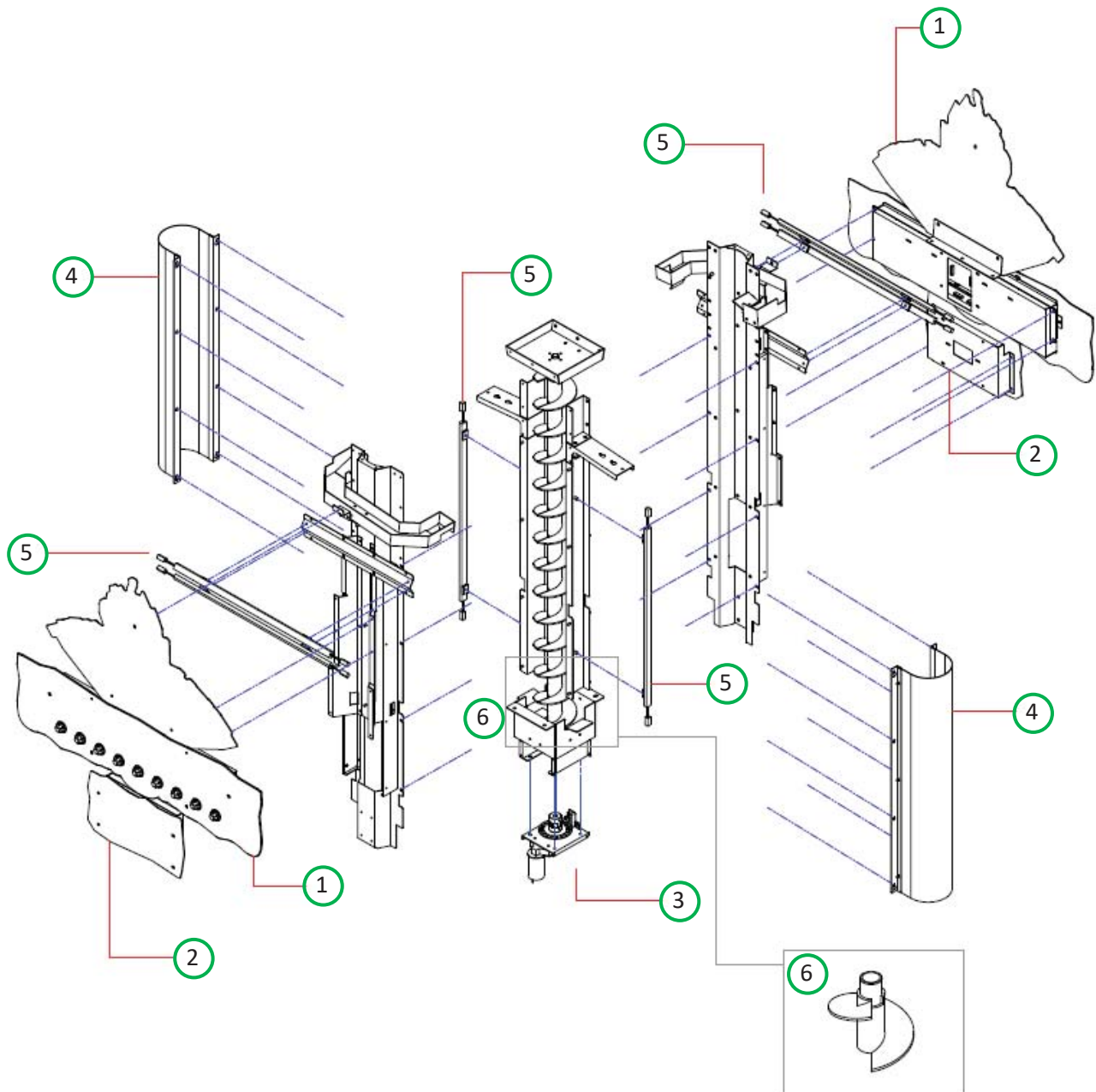
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	TRAIN BALL CHECK UPPER LED PCB	-	1	ATTT0PCB009
2	BILLBOARD BIGWIN FND COVER ACRYL	ACRYL-2.7t	1	MSBT0ACR023
3	ELEVATOR DISK SENSOR PCB	-	1	AGHP0PCB020

5-7. ASS'Y-BALL RETURN CHUTE PART



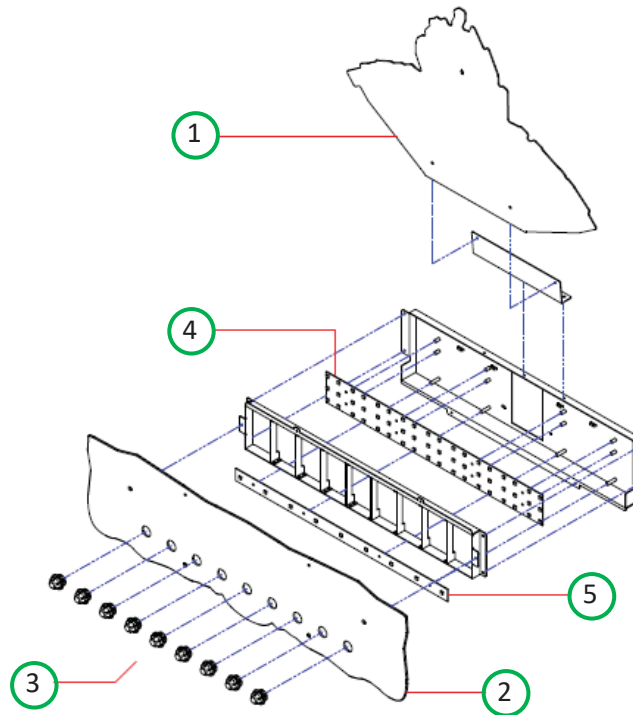
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	ELEVATOR DISK SENSOR PCB	-	1	AGHP0PCB020

5-8. ASS'Y-BALL LIFT SCREW PART



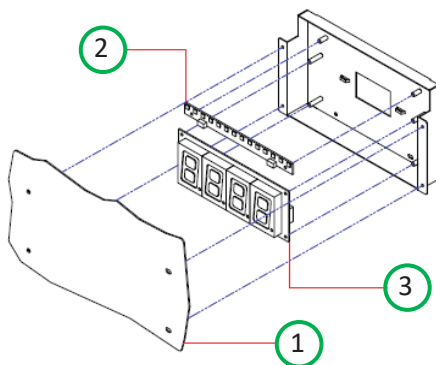
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	ASS'Y-BALL LEFT SCREW TRAIN LED PART	-	2	-
2	ASS'Y-BALL LEFT SCREW SCORE FND PART	-	2	-
3	ASS'Y-BALL LIFT SCREW MOTOR PART	-	1	-
4	BILLBOARD BIGWIN FND COVER ACRYL	-	1	
5	LED BAR 12V ASS'Y	460MM	6	AZZZ0PCB124
6	SCREW	PC ABS BLACK	13	MDOS0PLA001

5-9. ASS'Y-BALL LIFT SCREW TRAIN LED PART

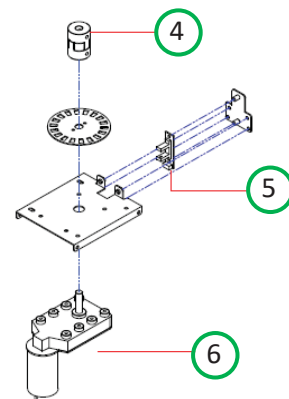


No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BALL LIFT SCREW SUPER BONUS COVER ACRYL	PET-1.5t	1	MSBT0ACR033
2	BALL LIFT SCREW TRAIN LED COVER ACRYL	ACRYL-2.7t	1	MSBT0ACR034
3	LED CAP	Φ20	9	MZZZ0PLA037
4	TRAIN SCORE LED PCB	-	1	ASBT0PCB002
5	TRAIN SCORE CAP LED PCB	-	1	ASBT0PCB003

5-10. BALL LIFT SCREW SCORE FND PART

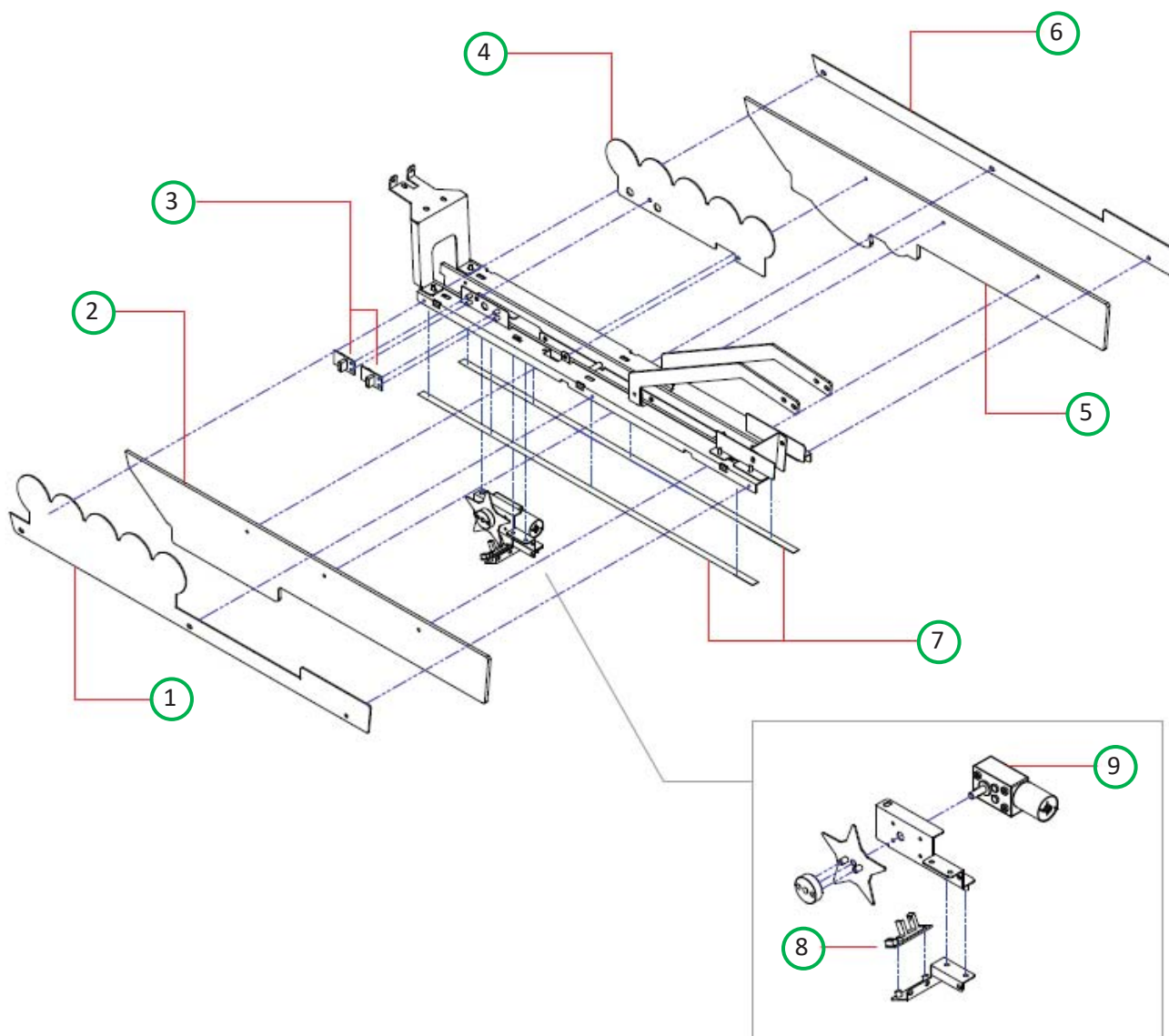


5-11. BALL LIFT SCREW MOTOR PART



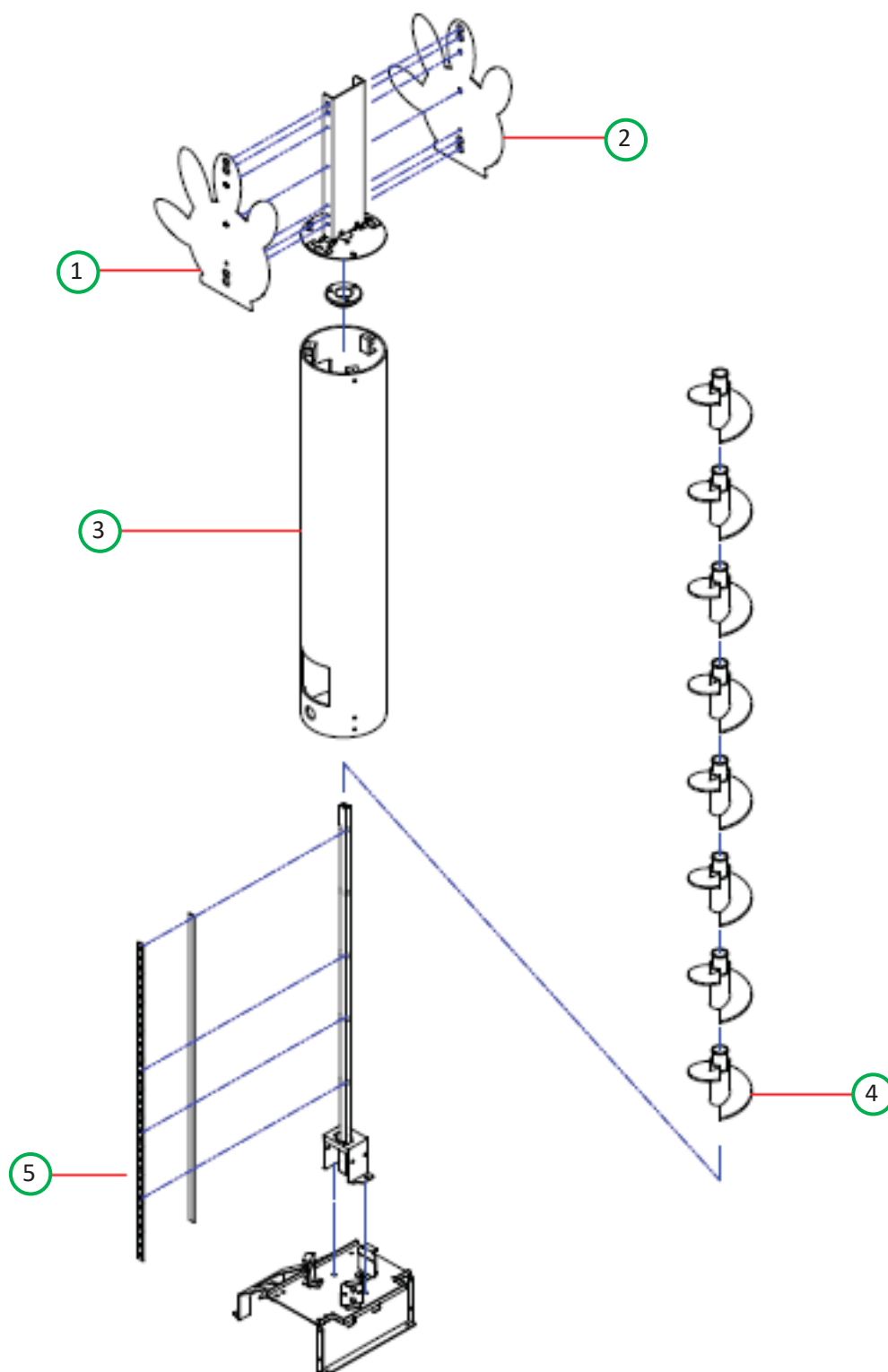
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BALL LIFT SCREW SCORE FND COVER ACRYL	PET-1.5t	1	MSBT0ACR032
2	JWIE LED PCB	-	1	AJIE0PCB006
3	FND PCB	3856-4	1	AFND0PCB007
4	COUPLING	CR050	1	AZZZ0COP003
5	PHOTO-INT1 PCB	ANGLE TYPE	1	AZZZ0PCB103
6	MOTOR	KGE-062-KD3657U1	1	MZZM0MOT008

5-12. ASS'Y-UPPER RAIL PART



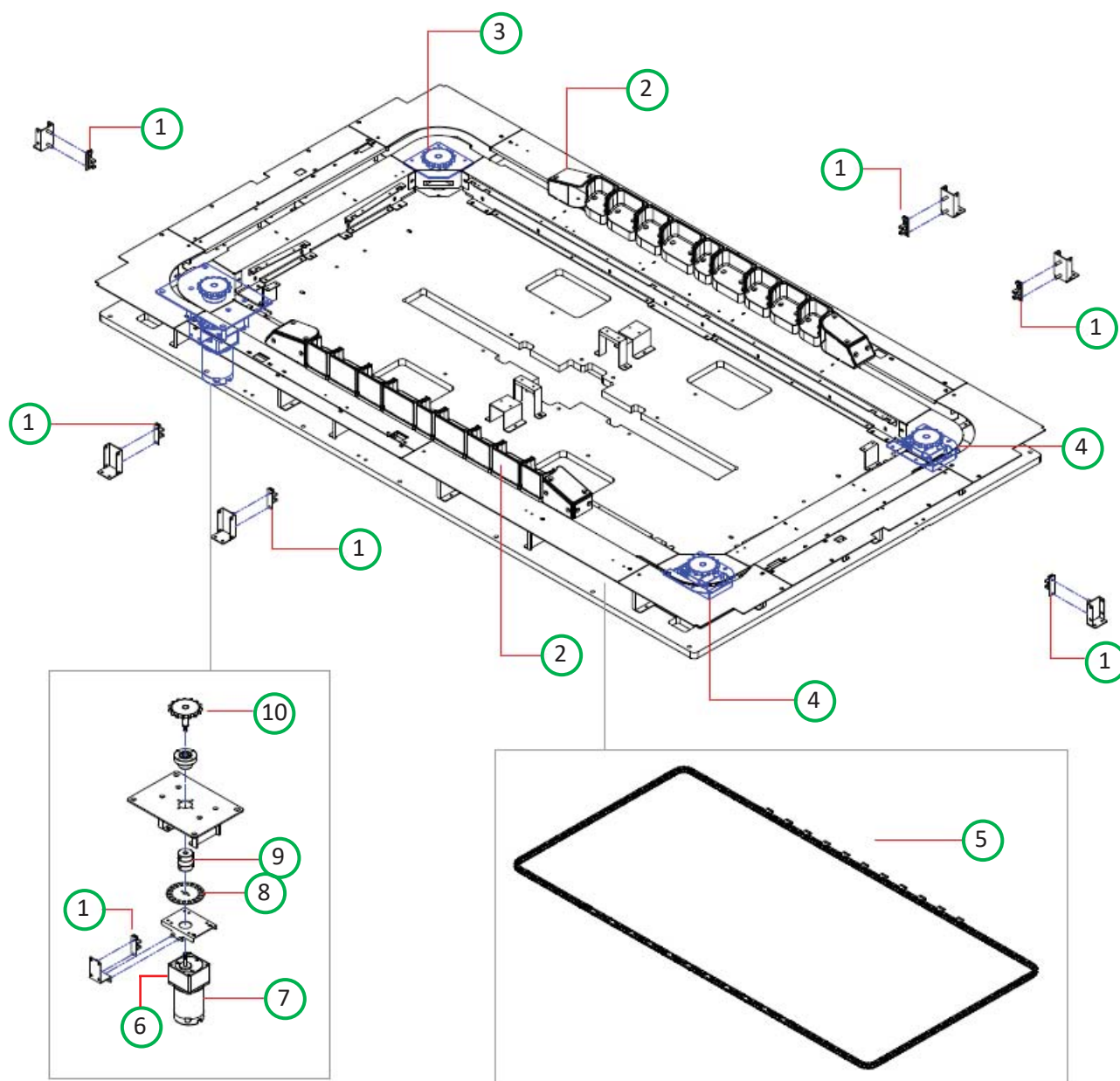
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	UPPER RAIL LED COVER ACRYL-R	PET-1.5t	1	MSBT0ACR062
2	UPPER RAIL LED DISPLAY ACRYL-L	ACRYL-4.7t	1	MSBT0ACR064
3	ELEVATOR DISK SENSOR PCB	-	2	AGHP0PCB020
4	UPPER RAIL SENSOR COVER ACRYL	PET-1.5t	1	MSBT0ACR066
5	UPPER RAIL LED DISPLAY ACRYL-R	ACRYL-4.7t	1	MSBT0ACR065
6	UPPER RAIL LED COVER ACRYL-L	PET-1.5t	1	MSBT0ACR061
7	FLEX_LED	LR_35	2	MELE0LED099
8	PHOTO-INT1 PCB	-	1	ACIR0PCB011
9	MOTOR	KWA-KD2531U1-0150	1	MZZZ0MOT170

5-13. ASS'Y-BALL SCREW PIPE PART



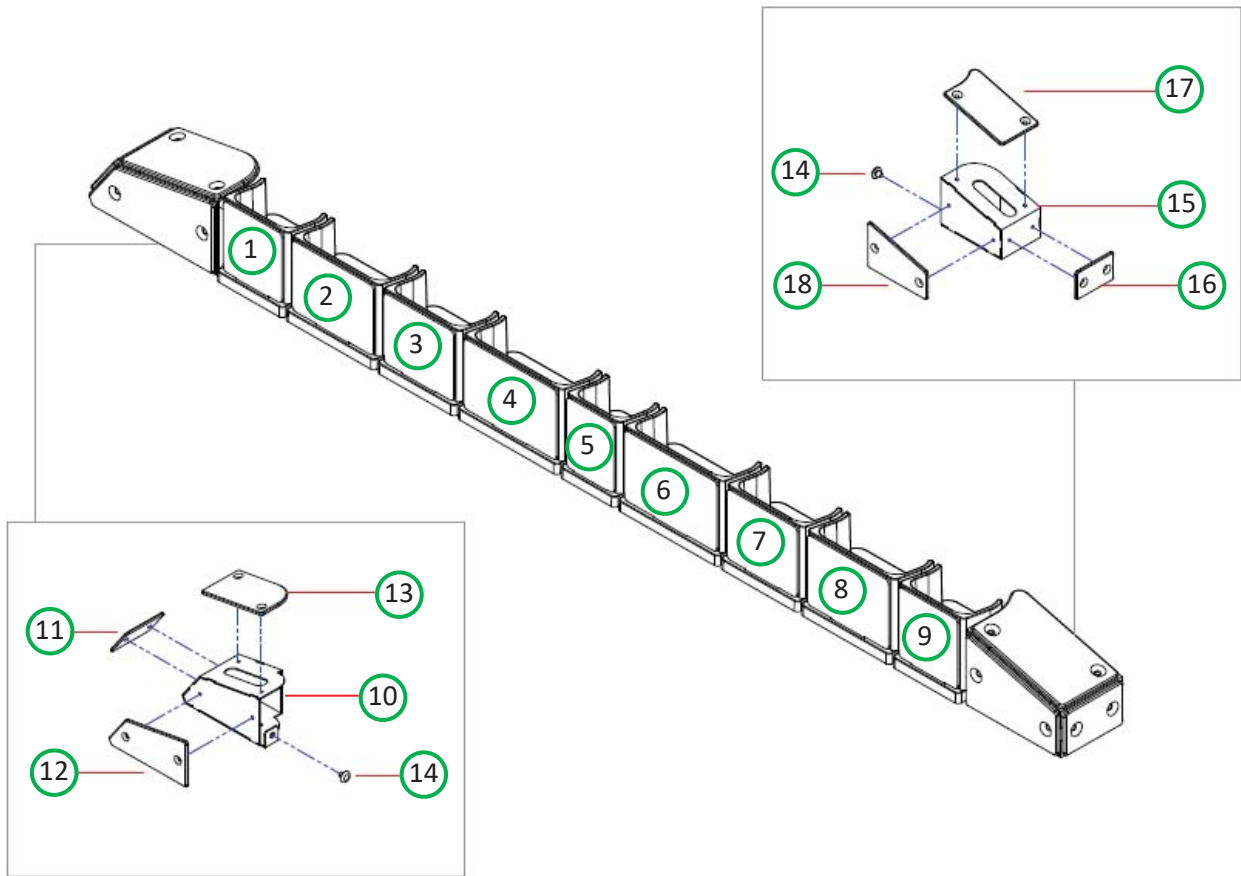
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BALL SCREW PIPE UPPER ACRYL-R	PET-1.5t	1	MSBT0ACR037
2	BALL SCREW PIPE UPPER ACRYL-L	PET-1.5t	1	MSBT0ACR036
3	BALL SCREW PIPE ACRYL	PC PIPE-3t	1	MSBT0ACR009
4	SCREW	ACETAL	8	MSBT0PLA001
5	FLEX_LED	LR_32	1	MELE0LED098

5-14. ASS'Y-CHAIN MAIN PLATE PART



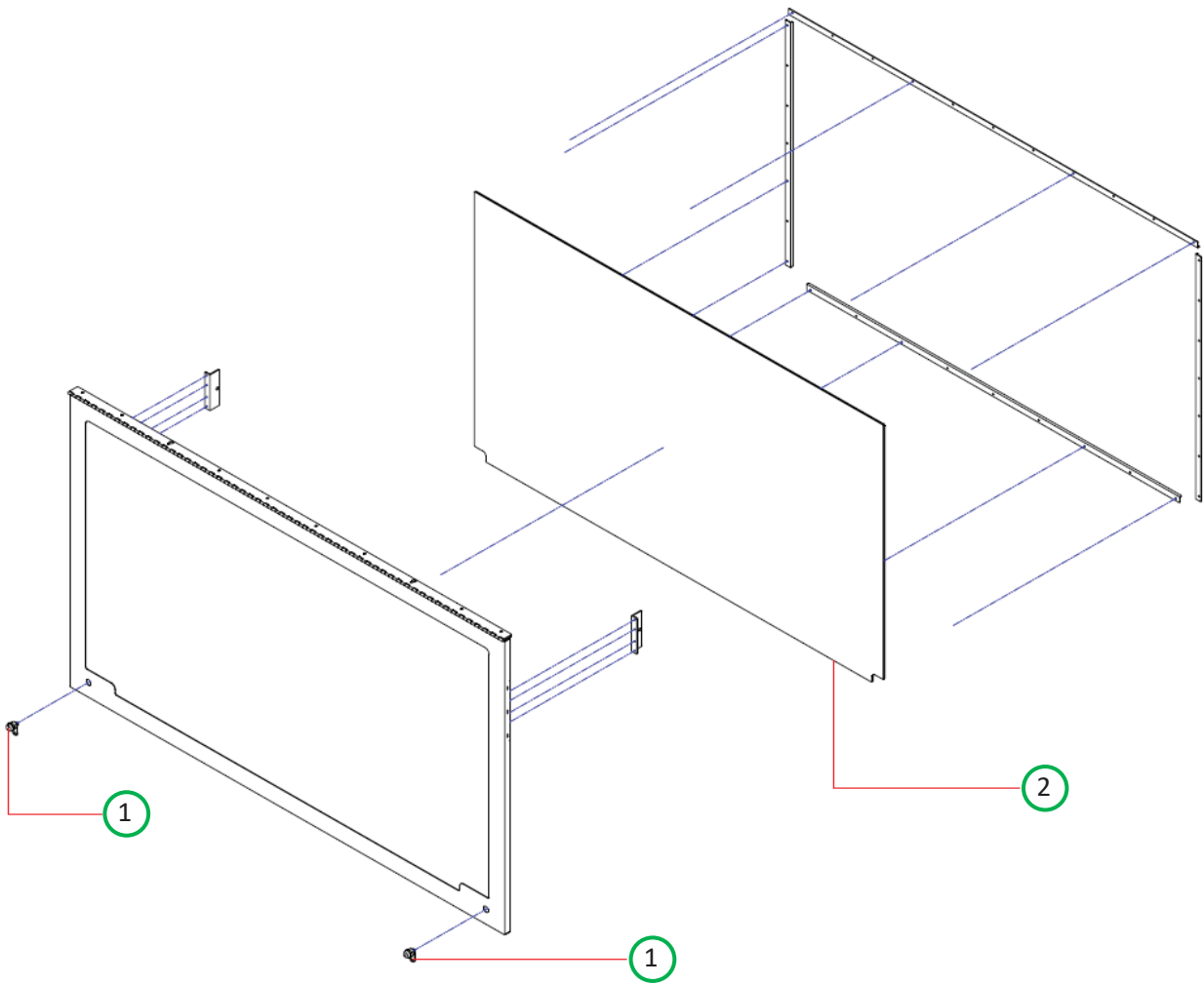
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	PHOTO-INT1 PCB	ANGLE TYPE	7	AZZZ0PCB103
2	ASS'Y-TRAIN TOTAL PART	-	2	-
3	ASS'Y-IDLE SPROCET PART	-	1	MSBT0PRO006
4	ASS'Y-TENSION SPROCET PART	-	2	MSBT0PRO012
5	CHAIN	RS40_328LINK	1	MSBT0CHA001
6	MOTOR GEAR HEAD	K6G30C	1	MZZM0MOT019
7	MOTOR	K6DG15N1	1	MZZM0MOT016
8	MOTOR SPROCKET ENCODER BKT	GI-1.2t	1	MSBT0MEP167
9	COUPLING	JOC30	1	MZZZ0COP002
10	SPROCKET_RS40_15t	-	1	MSBT0PRO006-01

5-15. ASS'Y-TRAIN TOTAL PART



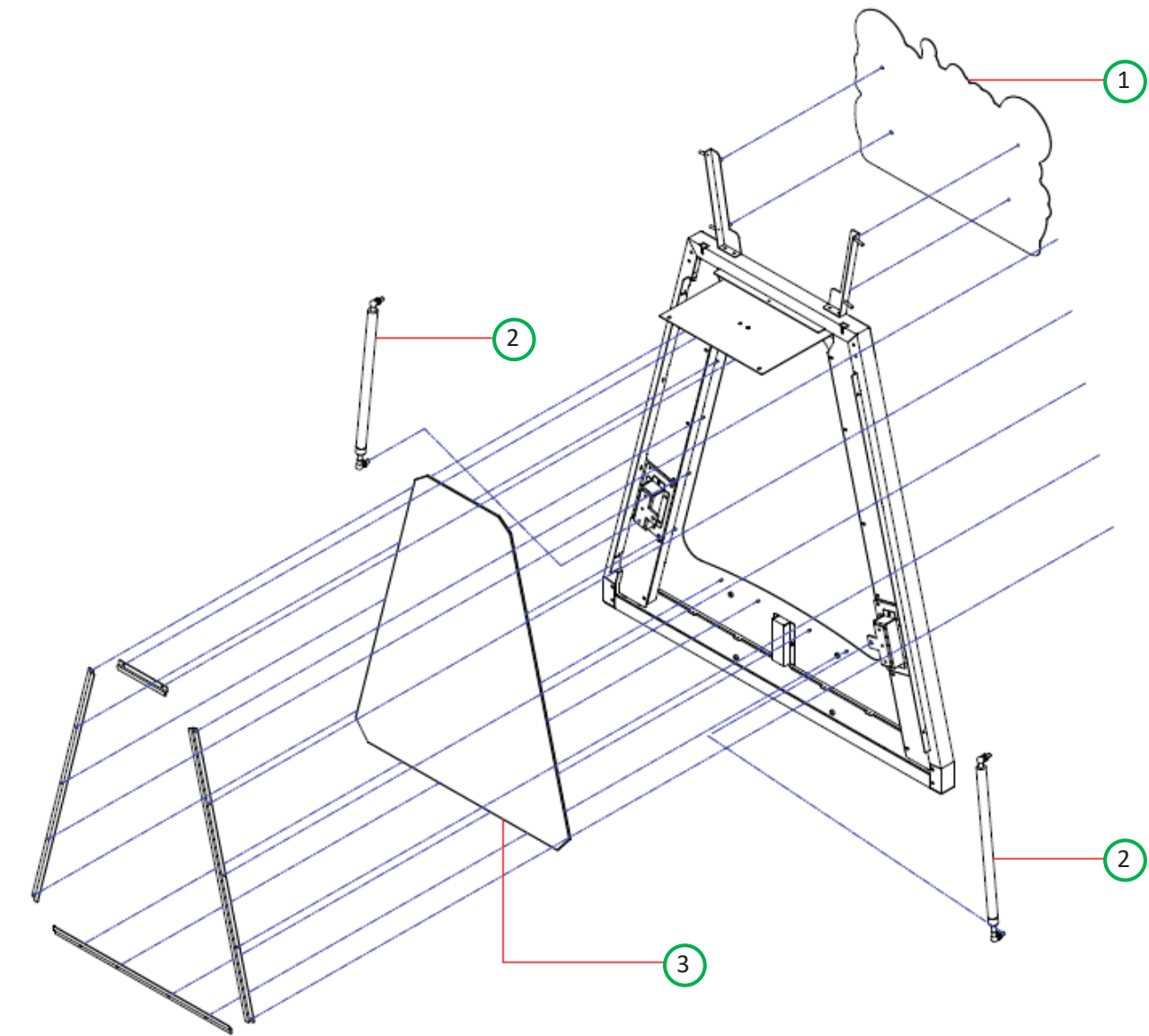
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	TRAN-A ASS'Y(RED)	-	1	ASBT0ASS002
2	TRAN-B ASS'Y(PINK)	-	1	ASBT0ASS004
3	TRAN-C ASS'Y(BLUE)	-	1	ASBT0ASS006
4	TRAN-D ASS'Y(CYAN)	-	1	ASBT0ASS008
5	TRAN-E ASS'Y(YELLOW)	-	1	ASBT0ASS010
6	TRAN-D ASS'Y(PURPLE)	-	1	ASBT0ASS009
7	TRAN-C ASS'Y(GRAY)	-	1	ASBT0ASS007
8	TRAN-B ASS'Y(IUMINESCENCE)	-	1	ASBT0ASS005
9	TRAN-A ASS'Y(GREEN)	-	1	ASBT0ASS003
10	TRAIN HEAD BKT-L	SPCC-1.2t	1	MSBT0MEP205
11	TRAIN HEAD FRONT ACRYL-L	ACRYL-2.7t	1	MSBT0ACR051
12	TRAIN HEAD SIDE ACRYL-L	ACRYL-2.7t	1	MSBT0ACR052
13	TRAIN HEAD TOP ACRYL-L	ACRYL-2.7t	1	MSBT0ACR054
14	PLUG CUSHION RUBBER	-	1	MCIR0RUB001
15	TRAIN HEAD BKT-R	SPCC-1.2t	1	MSBT0MEP231
16	TRAIN HEAD FRONT ACRYL-R	ACRYL-2.7t	1	MSBT0ACR068
17	TRAIN HEAD TOP ACRYL-R	ACRYL-2.7t	1	MSBT0ACR055
18	TRAIN HEAD SIDE ACRYL-R	ACRYL-2.7t	1	MSBT0ACR053

5-16. ASS'Y-CABINET DOOR TOTAL PART



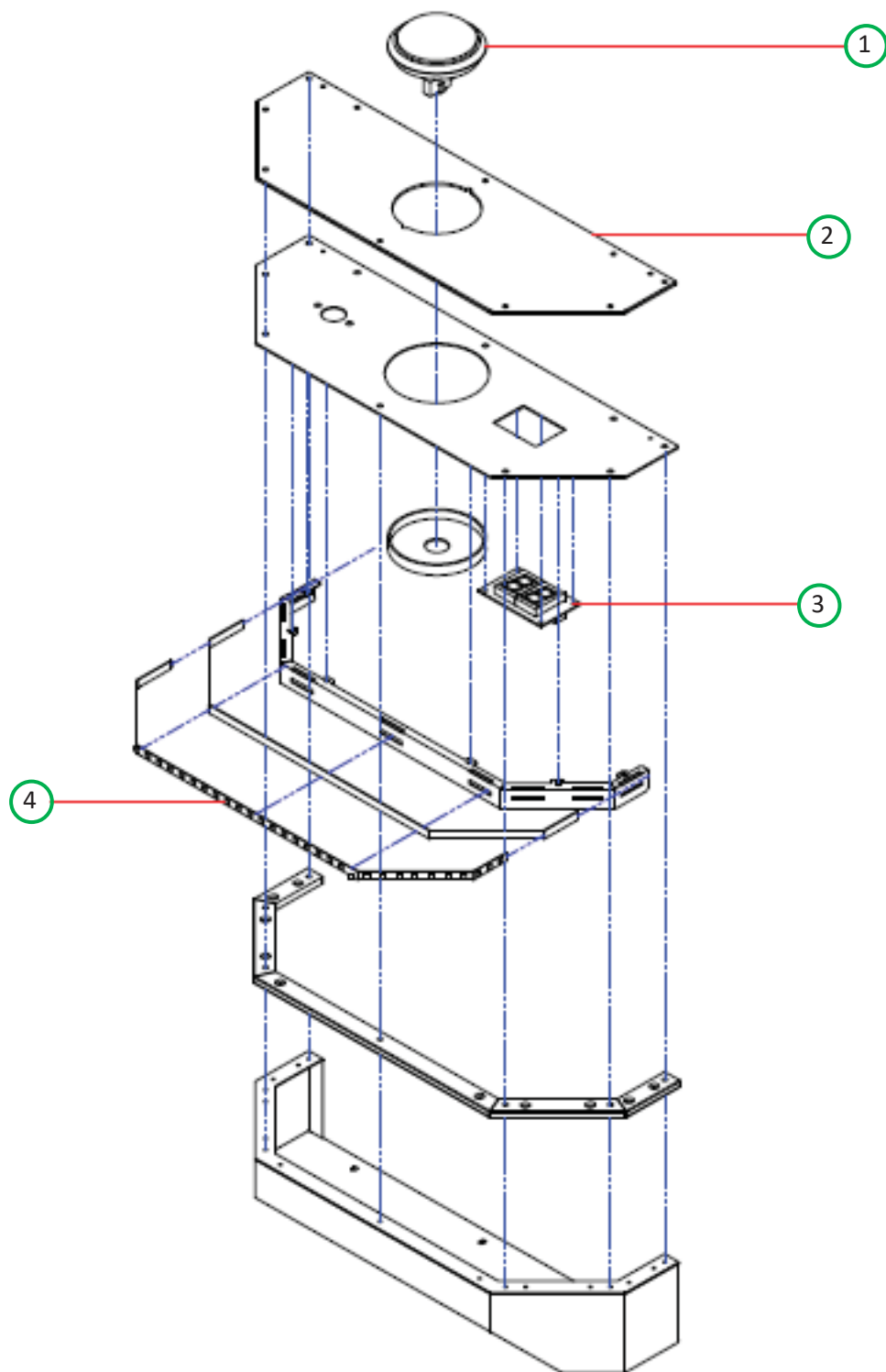
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	KEY ASS'Y	-	2	MZZZ0KEY076
2	CABINET DOOR GLASS	GLASS-5t	1	MSBT0GLA001

5-17. ASS'Y-CABINET SIDE FRAME TOTAL PART



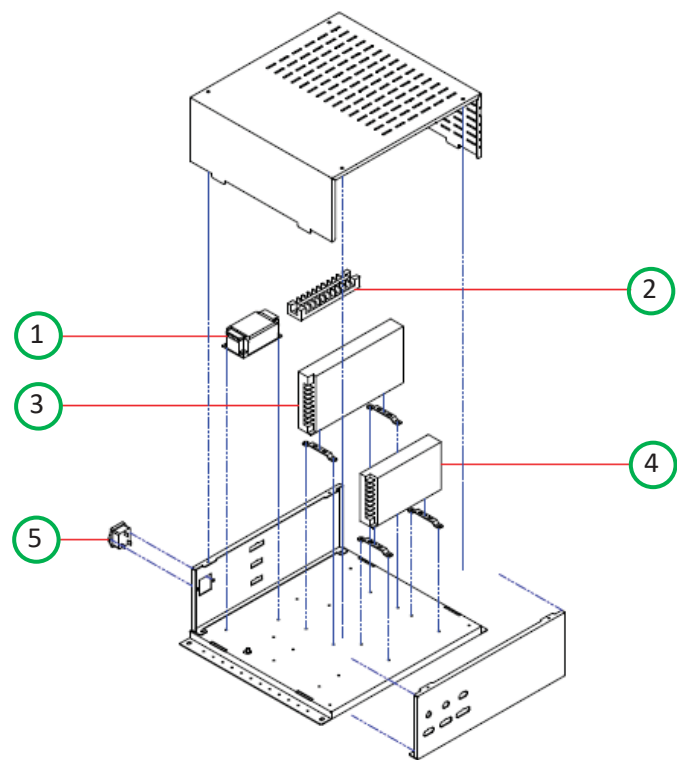
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BILLBOARD SIDE POP COVER ACRYL	PET-1.5t	1	MSBT0ACR044
2	GAS SPRING	GSB-22X761-30KG	2	MZZZ0SHO014
3	CABINET SIDE GLASS	GLASS-5t	1	MSBT0GLA002

5-18. ASS'Y-BUTTON TOTAL PART



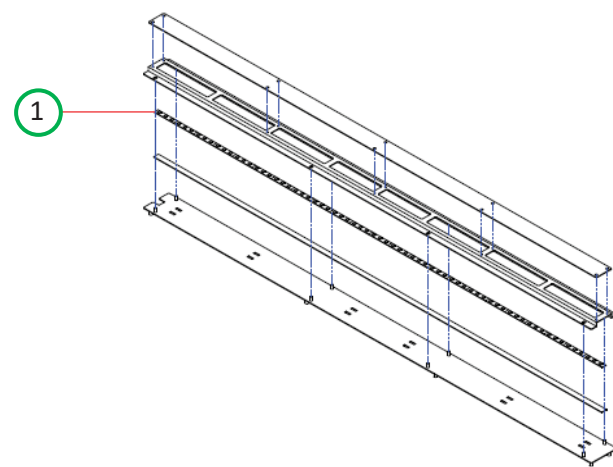
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	BUTTON SWITCH	CWB 401	1	MZZZ0BUT080
2	BUTTON LED COVER ACRYL	ACRYL-2.7t	1	MSBT0ACR046
3	FND PCB	2941-2	1	AFND0PCB003
4	FLEX__LED	LR_36	1	MELE0LED101

5-19. ASS'Y-POWER SMPS BOX PART



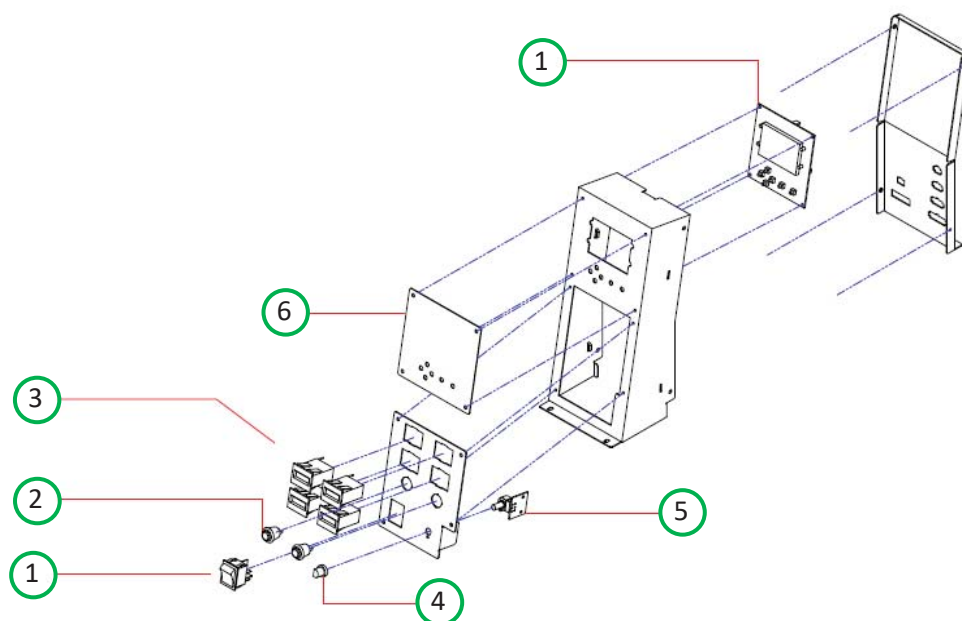
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	NOISE FILTER	RNS-2010	1	MELE0NOI009
2	TERMINAL BLOCK	250V 10P	1	MELE0TEB003
3	POWER SMPS	RSP-320-12V	1	MELE0SMP109
4	POWER SMPS	LRS-150F-5V	1	MELE0SMP096
5	ROCKER SWITCH	R595KDF	1	MELE0SWI021

5-20. ASS'Y-BOTTOM LED PART



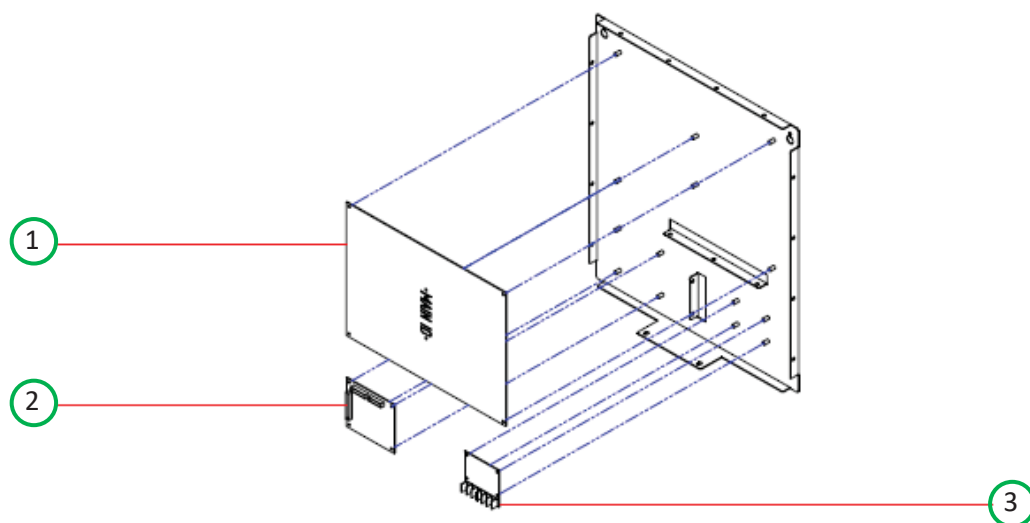
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	FLEX_LED	LR_69	1	MELE0LED102

5-21. ASS'Y-CONTROL PANEL TOTAL PART



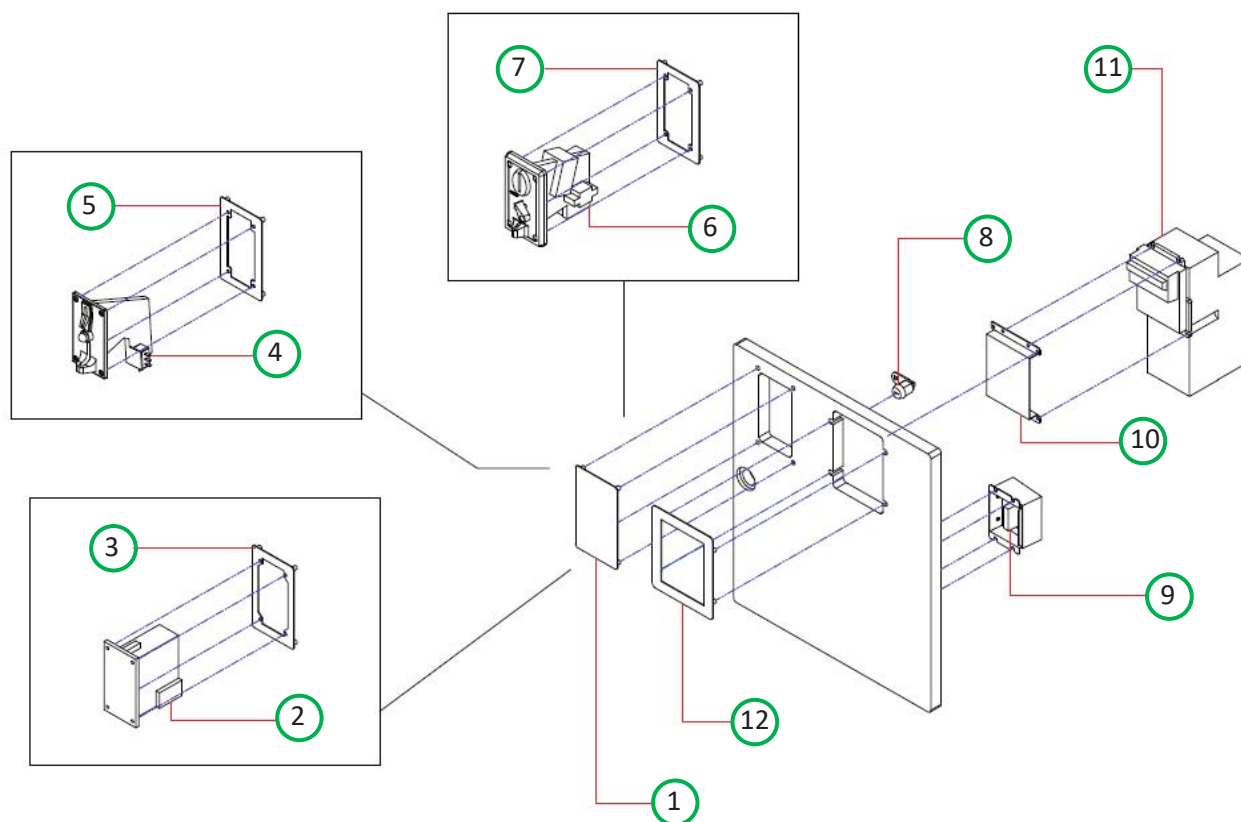
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	ROCKER SWITCH	R595KDF	1	MELE0SWI021
2	PUSH BUTTON SWITCH	DS-412R ROHS	2	MELE0PUS006
3	COUNTER	-	4	MZZZ0COU002
4	VOLUME KNOB	CAP BLUE	1	MELE0VOL007
5	VOLUME PCB	-	1	AHM20PCB016
6	CONTROL PANEL COVER ACRYL	6390-04	1	MSBT0ACR047
7	SETUP LCD	6390-04	1	AZZZ0PCB113

5-22. ASS'Y-MAIN BOARD PART



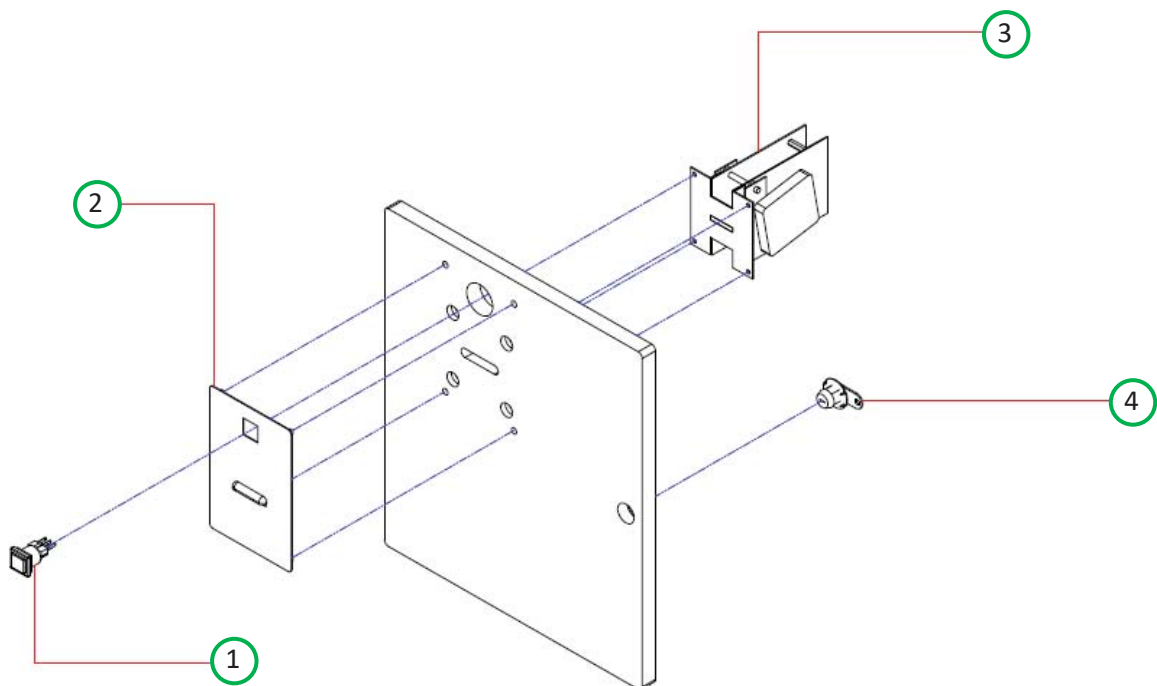
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	MAIN IO PCB	-	1	ASBT0PCB001
2	WS2812B IO PCB	-	1	ASBT0PCB004
3	RGB PWM PCB	RGB_CTRL-G2GSTC0131	1	MZZZ0000629

5-23. ASS'Y-CABINET COIN DOOR PART



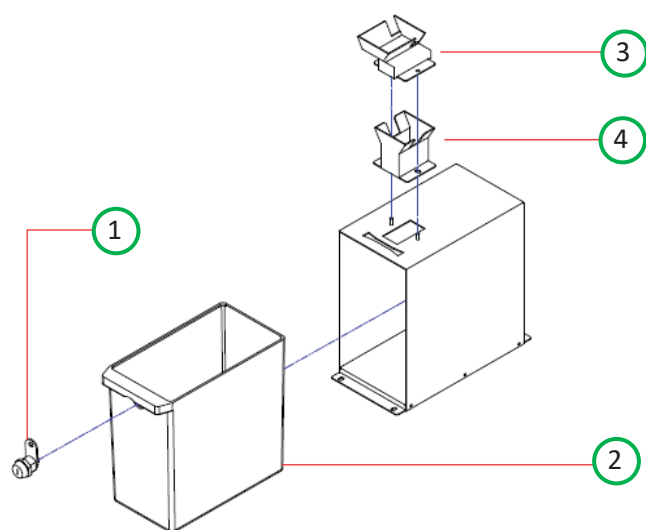
No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	COIN FIX COVER BKT	SPCC-1.2t	1	MSBT0MEP159
2	COIN SELECTOR	NAMCO	1	-
3	COIN FIX BKT-NAMCO	SPCC-1.2t	1	MSBT0MEP235
4	COIN SELECTOR	CEC	1	MZZZ0COS028
5	COIN FIX BKT-CEC	SPCC-1.2t	1	MSBT0MEP234
6	CONI SELECTOR	TW389	1	MZZZ0COS052
7	COIN FIX BKT-TW389	SPCC-1.2t	1	MSBT0MEP223
8	ASS'Y KEY	-	1	MZZZ0KEY092
9	MEI ACCEPTOR RELAY BKT	-	1	ASBP0ASS051
10	BILL ACCEPTOR COVER BKT	SPCC-1.2t	1	MSBT0MEP069
11	MEI BILL ASS'Y	-	1	ASBP0ASS051
12	BILL ACCEPTOR FIX BKT	SPCC-1.2t	1	MSBT0MEP070

5-24. ASS'Y-CABINET TICKET DOOR PART



No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	TICKET BUTTON SWITCH	-	1	MMUM0BUT002
2	TICKET DOOR BKT	SPCC-1.2t	1	MSBT0MEP186
3	TICKET DISPENSER	CLE	1	MZZZ0TID010
4	KEY ASS'Y	-	1	MZZZ0KEY092

5-25. ASS'Y-COIN BOX PART



No.	PART NAME	SPEC.	QUANTITY	CODE NO.
1	KEY ASS'Y	-	1	MZZZ0KEY076
2	COIN BOX	-	1	MDRE0PLA007
3	COIN CUHUTE BKT(NAMCO)	GI-1.2t	1	MSBT0MEP233
4	COIN CUHUTE BKT	GI-1.2t	1	MSBT0MEP158

1

2

3

4

1

2

3

4

A

B

C

D

E

F

AC S/W
250V / 10A
[MELE0SW021]

AC INLET
250V / 10A
[MELE0FUS002]

2 PAGE
1P AC
BILL JOIN

2 PAGE
2P AC
BILL JOIN

030-01
1
030-03
1
1P COIN

029-05
1
029-08
1
029-09
1
1P SHOOT
MOTOR

028-06
1
028-07
1
SETUP

028-02
1
028-03
1
2P TICKET

029-02
1
029-04
1
2P BUTTON

029-01
1
029-04
1
1P BUTTON

028-03
1
028-01
1
1P TICKET

028-04
1
028-05
1
MAIN I/O

029-06
1
029-08
1
029-09
1
2P SHOOT
MOTOR

030-02
1
030-03
1
2P COIN

030-04
1
030-05
1
MAIN TRAIN
MOTOR

030-06
1
030-07
1
ELEV
MOTOR

AC JUMPER
W : 002-01
GY : 002-02
BLA : 002-03

300V / 20A
[MELE0TEB003]

RNS2010
250V/10A
[MELE0NOI009]

NOISE
FILTER

AC 85-264VAC / 3.0A
LRS150F-5
SMPS
[MELE0SMP096]

AC 88-264V / 4.0A
RSP320-12
SMPS
[MELE0SMP109]

POWER BOX

004-03 12V 1
GND 2
5V 3
12V 4
GND 5
5V 6

004-05 5V 1
GND 2
5V 3
GND 4
5V 5
GND 6
5V 7
GND 8
10

004-01 12V 1
GND 2

004-02 12V 1
GND 2
3
4

007-01 12V 1
GND 2
12V 3
GND 4
12V 5
GND 6
12V 7
GND 8
9
10
11
12

004-04 12V 1
12V 2
12V 3
12V 4
GND 5
GND 6
GND 7
GND 8

005-03 1
2
3
4
5
6

005-05 1
2
3
4
5
6
7
8

005-01 1
2

005-02 1
2

007-02 1
2
3
4
5
6

008-01 1
2
3
4
5
6

005-04 1
2
3
4
5
6
7
8

MAIN I/O
POWER
JOIN 2 PAGE

WS2813B
POWER 2 PAGE

1P 2813
ADD
POWER 6 PAGE

2P 2813
ADD
POWER 6 PAGE

MAIN I/O
AUDIO PO
JOIN 2 PAGE

RGB PWM
MODULE
POWER 7 PAGE

1P
BILLBOARD
JOIN 7 PAGE

2P
BILLBOARD
JOIN 7 PAGE

MAIN I/O
DC MOT
PO JOIN 2 PAGE

REPRODUCTION, DISTRIBUTION AND UTILIZATION OF THIS DOCUMENT AS WELL AS COMMUNICATION OF ITS
CONTENTS TO OTHERS WITHOUT EXPRESS AUTHORIZATION PROHIBITED. OFFENDERS WILL BE HELD LIABLE
FOR THE PAYMENT OF DAMAGES.ALL RIGHT RESERVED. COPYRIGHT (c) ANDAMIRO

(복제, 배포 및 사용은 물론, 명시적 허가 없이는 타인에게 내용을 전달할 수 없으며 위반자는 손해 배상 책임을 집니다.)

DEPARTMENT	DRAWN BY	CHECKED BY	APPROVED BY	ITEM	SPONGEBOB TRAIN
H/W	H.B.KIM			PAGE	1
				DATE	2021.12.01

ANDAMIRO

A

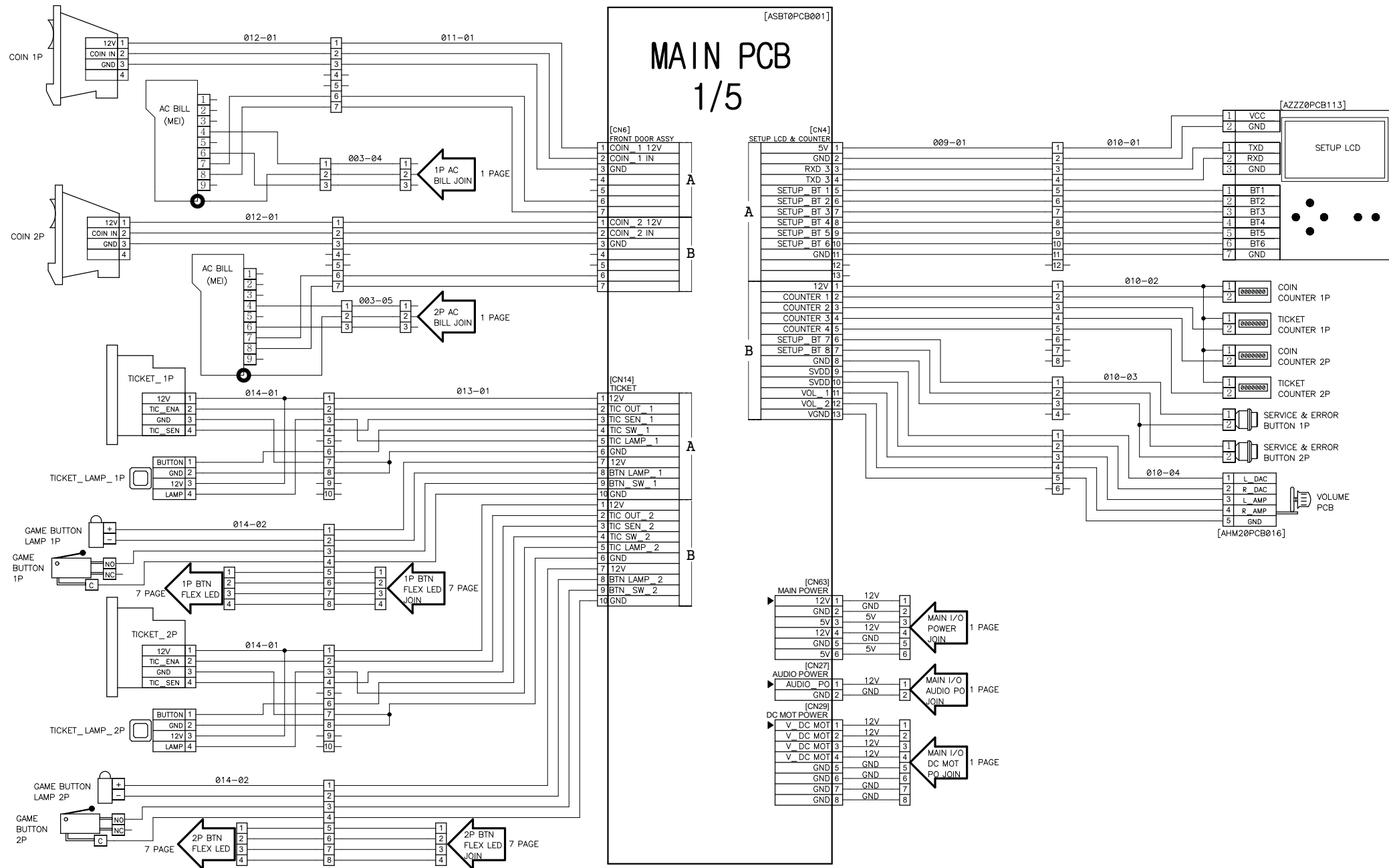
B

C

D

E

F



REPRODUCTION, DISTRIBUTION AND UTILIZATION OF THIS DOCUMENT AS WELL AS COMMUNICATION OF ITS CONTENTS TO OTHERS WITHOUT EXPRESS AUTHORIZATION PROHIBITED. OFFENDERS WILL BE HELD LIABLE FOR THE PAYMENT OF DAMAGES. ALL RIGHT RESERVED. COPYRIGHT (c) ANDAMIRO

(복제, 배포 및 사용은 물론, 명시적 허가 없이는 타인에게 내용을 전달할 수 없으며 위반자는 손해 배상 책임을 집니다.)

DEPARTMENT

DRAWN BY

CHECKED BY

APPROVED BY

ITEM SPONGEBOB TRAIN

H/W

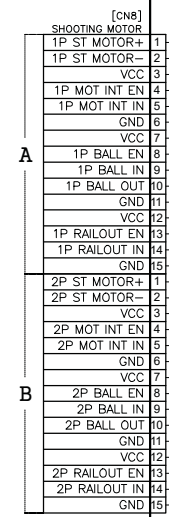
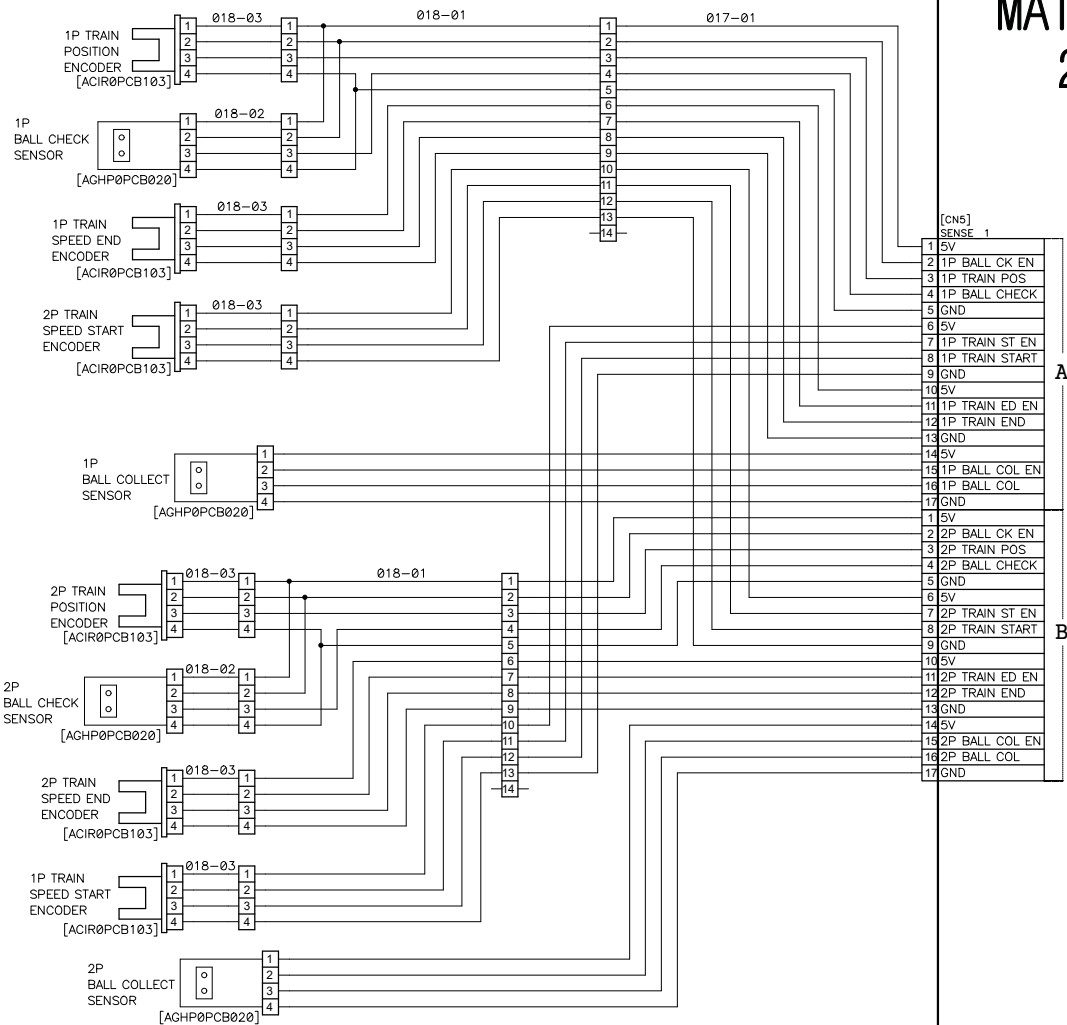
H.B.KIM

ANDAMIRO

PAGE 2

DATE 2021.12.01

MAIN PCB 2/5



REPRODUCTION, DISTRIBUTION AND UTILIZATION OF THIS DOCUMENT AS WELL AS COMMUNICATION OF ITS CONTENTS TO OTHERS WITHOUT EXPRESS AUTHORIZATION PROHIBITED. OFFENDERS WILL BE HELD LIABLE FOR THE PAYMENT OF DAMAGES. ALL RIGHT RESERVED. COPYRIGHT (c) ANDAMIRO

(복제, 배포 및 사용은 물론, 명시적 허가 없이는 타인에게 내용을 전달할 수 없으며 위반자는 손해 배상 책임을 집니다.)

DEPARTMENT

DRAWN BY

CHECKED BY

APPROVED BY

ITEM SPONGEBOB TRAIN

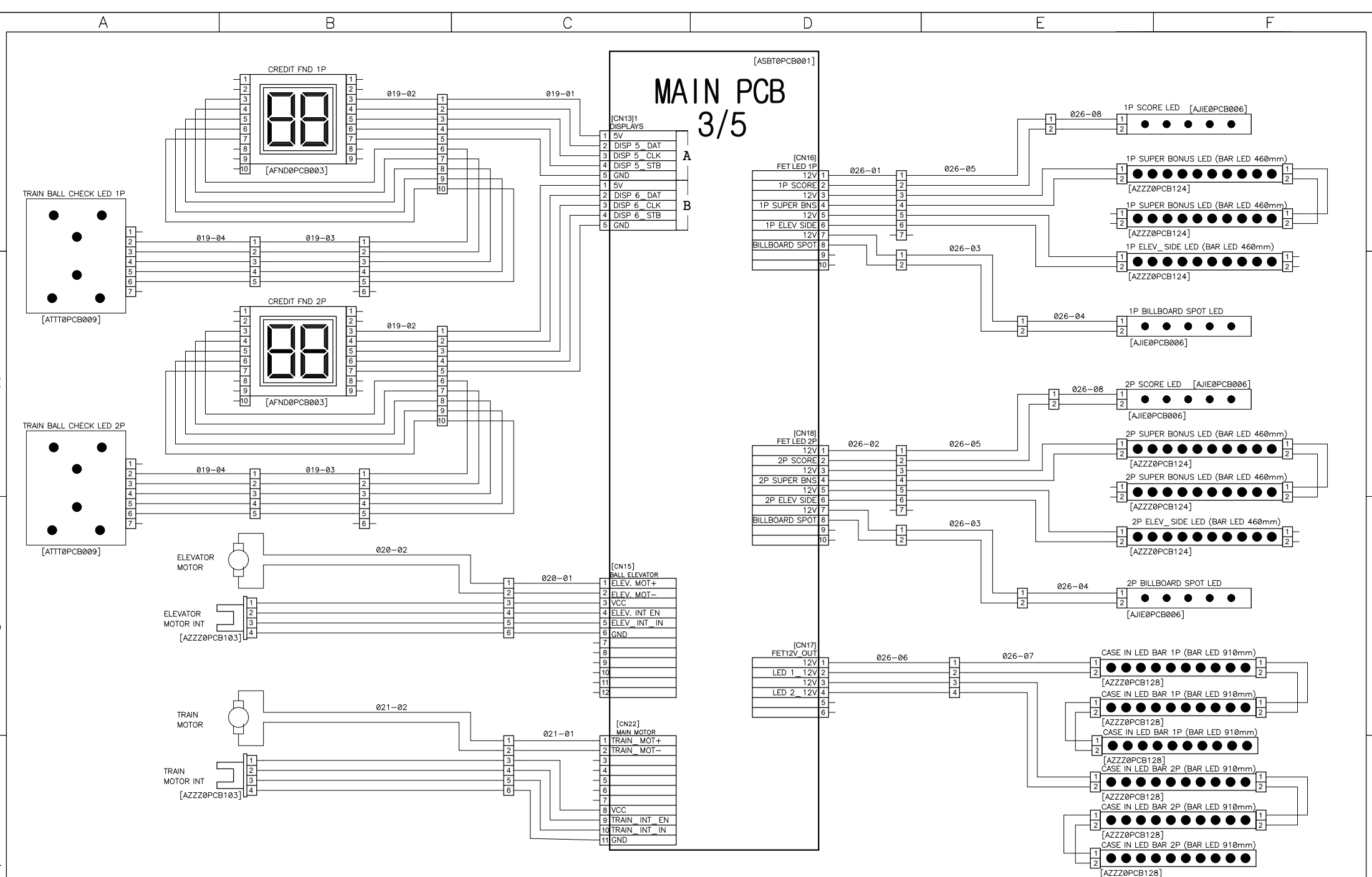
H/W

H.B.KIM

PAGE 3

ANDAMIRO

DATE 2021.12.01



REPRODUCTION, DISTRIBUTION AND UTILIZATION OF THIS DOCUMENT AS WELL AS COMMUNICATION OF ITS CONTENTS TO OTHERS WITHOUT EXPRESS AUTHORIZATION PROHIBITED. OFFENDERS WILL BE HELD LIABLE FOR THE PAYMENT OF DAMAGES. ALL RIGHT RESERVED. COPYRIGHT (c) ANDAMIRO

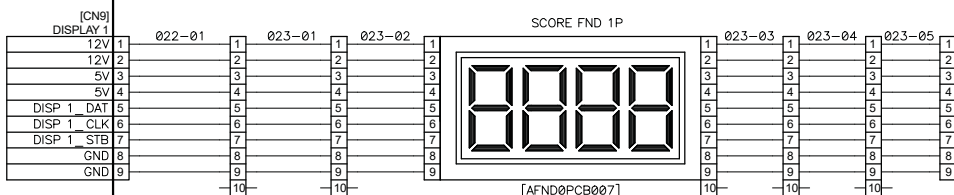
(복제, 배포 및 사용은 물론, 명시적 허가 없이는 타인에게 내용을 전달할 수 없으며 위반자는 손해 배상 책임을 집니다.)

DEPARTMENT	DRAWN BY	CHECKED BY	APPROVED BY	ITEM	SPONGEBOB TRAIN
H/W	H.B.KIM			PAGE	4
				DATE	2021.12.01



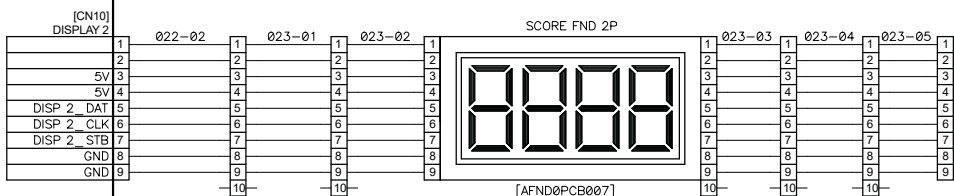
MAIN PCB 4/5

[ASBT0PCB001]



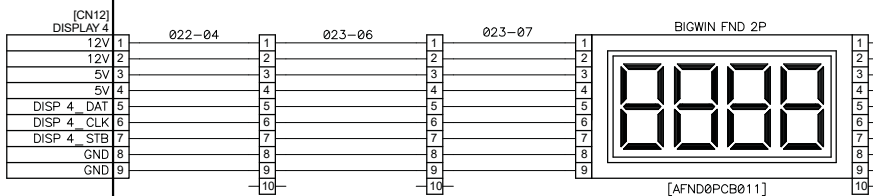
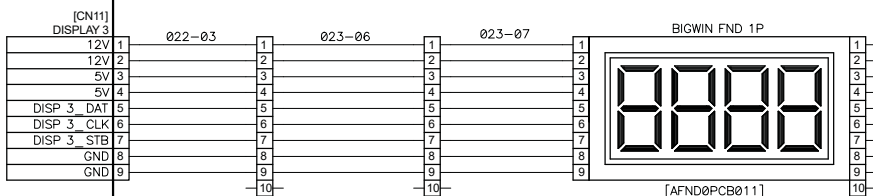
TRAIN SCORE LED

[ASBT0PCB002]



TRAIN SCORE LED

[ASBT0PCB002]



REPRODUCTION, DISTRIBUTION AND UTILIZATION OF THIS DOCUMENT AS WELL AS COMMUNICATION OF ITS CONTENTS TO OTHERS WITHOUT EXPRESS AUTHORIZATION PROHIBITED. OFFENDERS WILL BE HELD LIABLE FOR THE PAYMENT OF DAMAGES. ALL RIGHT RESERVED. COPYRIGHT (c) ANDAMIRO

(복제, 배포 및 사용은 물론, 명시적 허가 없이는 타인에게 내용을 전달할 수 없으며 위반자는 손해 배상 책임을 집니다.)

DEPARTMENT

H/W

DRAWN BY

H.B.KIM

CHECKED BY

APPROVED BY

ITEM

SPONGEBOB TRAIN

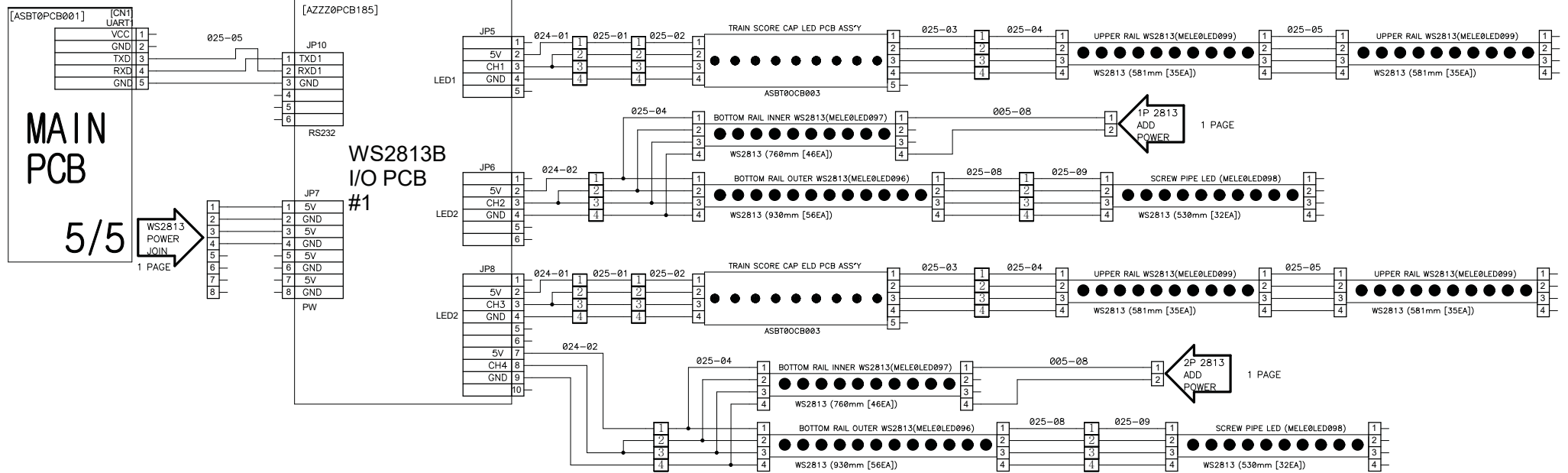
PAGE

5

DATE

2021.12.01

ANDAMIRO

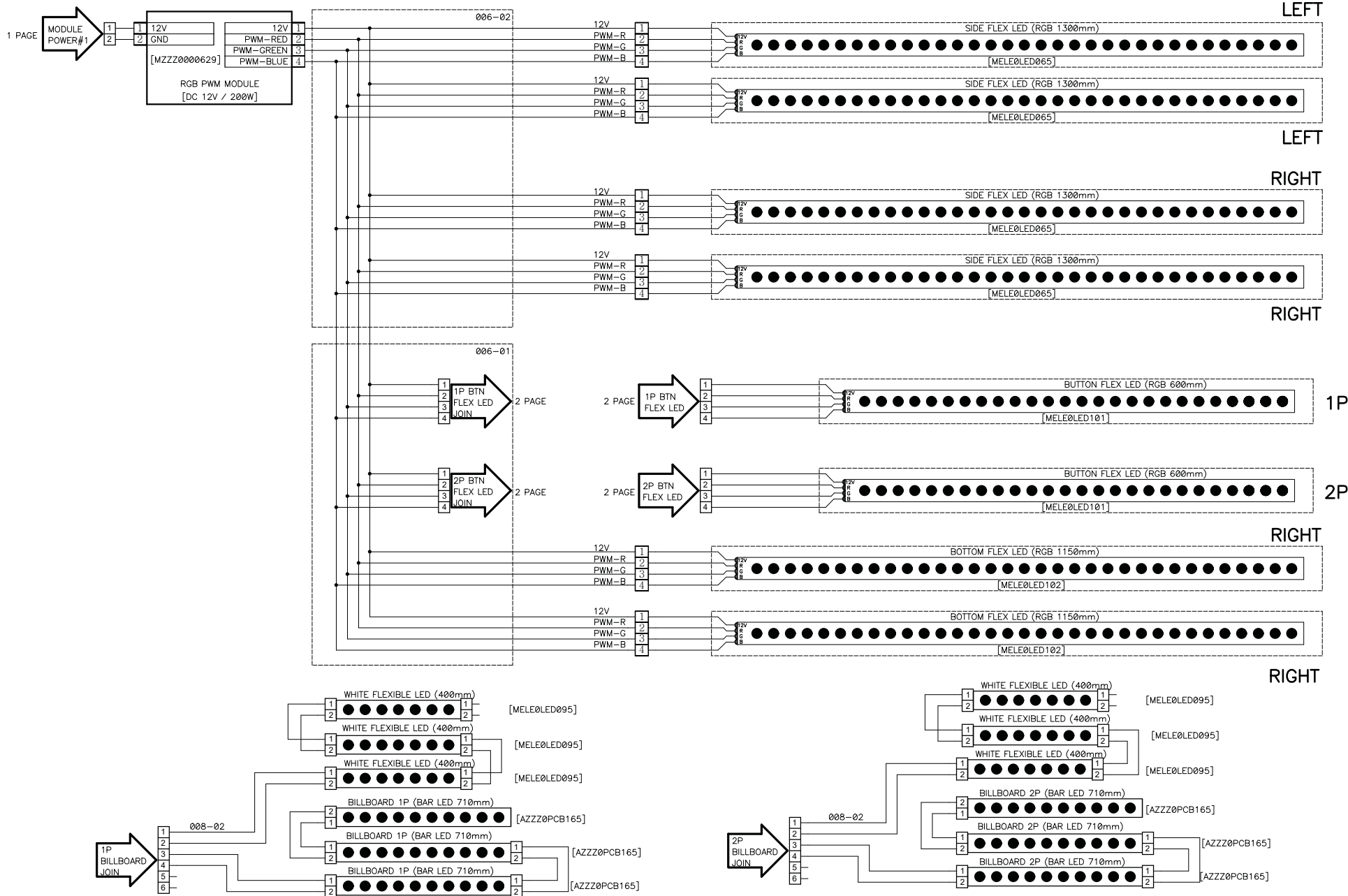


REPRODUCTION, DISTRIBUTION AND UTILIZATION OF THIS DOCUMENT AS WELL AS COMMUNICATION OF ITS CONTENTS TO OTHERS WITHOUT EXPRESS AUTHORIZATION PROHIBITED. OFFENDERS WILL BE HELD LIABLE FOR THE PAYMENT OF DAMAGES. ALL RIGHT RESERVED. COPYRIGHT (c) ANDAMIRO

(복제, 배포 및 사용은 물론, 명시적 허가 없이는 타인에게 내용을 전달할 수 없으며 위반자는 손해 배상 책임을 집니다.)

DEPARTMENT	DRAWN BY	CHECKED BY	APPROVED BY	ITEM	SPONGEBOB TRAIN
H/W	H.B.KIM			PAGE	6
				DATE	2021.12.01

ANDAMIRO



REPRODUCTION, DISTRIBUTION AND UTILIZATION OF THIS DOCUMENT AS WELL AS COMMUNICATION OF ITS [MELE0LED065] CONTENTS TO OTHERS WITHOUT EXPRESS AUTHORIZATION PROHIBITED. OFFENDERS WILL BE HELD LIABLE FOR THE PAYMENT OF DAMAGES. ALL RIGHT RESERVED. COPYRIGHT (c) ANDAMIRO

(복제, 배포 및 사용은 물론, 명시적 허가 없이는 타인에게 내용을 전달할 수 없으며 위반자는 손해 배상 책임을 집니다.)

DEPARTMENT

DRAWN BY

CHECKED BY

APPROVED BY

ITEM SPONGEBOB TRAIN

H/W

H.B.KIM

ANDAMIRO

PAGE

7

DATE

2021.12.01



ANDAMIRO WARRANTY POLICY



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

Andamiro warrants the parts from date of shipment as follows.

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

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

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

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

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

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

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

ANDAMIRO CO., LTD.
www.andamiro.com



Please complete the following request form to place a warranty request and send it to ANDAMIRO Korea either by fax (Fax No: +82-31-908-7548) or by e-mail. The e-mail address of the person in charge of each region is shown in our web-site, www.andamiro.com

For the on-line request, please visit our web-site, www.andamiro.com and click "Customer Service" and then click "Contact Us" in which you shall find the e-mail address of the person in charge of each region.

1. Company Name : _____

2. Mailing Address : _____

3. E-Mail Address : _____

4. Phone No : _____

5. Name of the person in charge : _____

6. Description of the product defects

6-1) Name of the Game : _____

6-2) Serial No : _____

6-3) Date of Purchase : _____

6-4) Detailed description of the product defects.

Remarks: If possible, please provide us with related photos and videos which will be greatly appreciated to verify the cause of the problem.



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

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