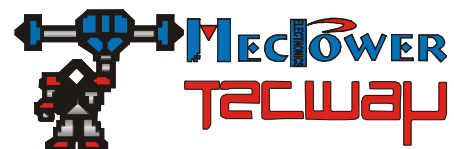


To prevent all kinds of problems caused by incorrect operation, you need to read this manual earnestly before install the machine, especially pay attention -to the items that marked with “notice”.

Please keep this manual careffly for reading in need.

Content Summary

- ✧ safety working means and attentions of transportation, installation and movement operation;
- ✧ installation and operation means of this machine;
- ✧ adjust fuction and regulation means of this machine;
- ✧ maintenance ways of this machine;
- ✧ normal failure session and solutions of this machine;
- ✧ main accessories diagram of this machine;
- ✧ Circuit connection diagram of this machine;

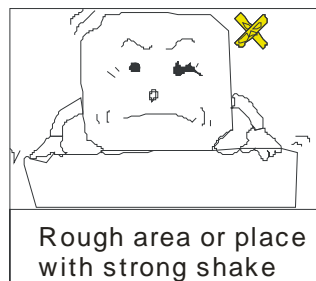
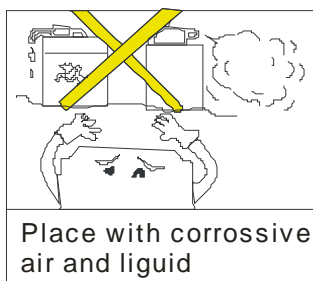
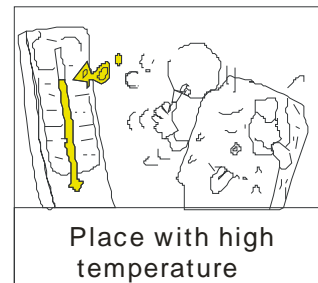
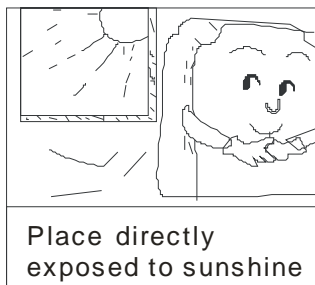


Attention

- 1) There's high voltage inside the machine, the adjustment of the machine must be operated by the technicians, those non-professional technician mustn't do the inspection and maintenance, so as not to hurt the people and damage the machine causing improper operation.
- 2) Before you inspect and maintain the machine, please be sure to cut off the power first.
- 3) Please shut every doors at any time, and please turn off the power before you close the face plate.
- 4) To prevent abnormal disaster, the machine must be installed near the fire protection facilities.

Installation precaution

In order to use the machine safely and prevent the abnormal damage of the machine, the machine must be installed at appropriate position. The unsuitable install place are as below:



precautions for use

- 1) Voltage Applicable of the machine is 105V ~ 115V/215V ~ 225V, rated usage voltage is 110V/220V, concrete usage voltage is as the data plate that nailed on the machine. The usage voltage of the machine must be correct, otherwise it'll make beyond repair to the machine.
- 2) The input power must be plugged tightly, and do not pull the power line too tightly or make it damaged, which prevent the personal injury and power short circuit and electric leakage.
- 3) When first use the machine, please set the coin mech and game contents, to bring it into normal business.
- 4) During the business, need to check every function of the machine regularly, to prevent that the game function incomplete and affects the game.

maintenance and repair precaution

- 1) Be sure to inspect and maintain the machine termly, to prevent the enlargement of the failure range of the machine and make sure that every function of the machine can be used normally.
- 2) When replace the spare parts you need to cut off the power of the machine, which to prevent the body injury that cause by the operating machine.
- 3) When replacing the spare parts, need to use the same model, otherwise the part can cause damage for other accessories of the machine
- 4) After replace the power supply, need to inspect whether the the wiring is correct and whether the out put voltage is normal, otherwise it'll damage the circuit system of the machine.
- 5) The usage voltage of the PCB board must in stipulated range, which is between 5.1V ~ 5.4V, otherwise it'll damage the circuit system or make the machine can not operate normally.

- 6) Before you send the PCB board to repair, please do the electric leak and internal power voltage inspection, only if you confirm it's ok, can you send the PCB board to repair.

cleaning maintainance notice

- 1) Please wipe the machine with the clean and soft dishcloth.
- 2) to prevent the damage of the surface of the machine, please do not use the below res to wipe the machine:
 - the alterative lotion;
 - the cleaning agent that with acidity;
 - Pesticide、 disinfectant fluid、 alcohol or other chemicals.

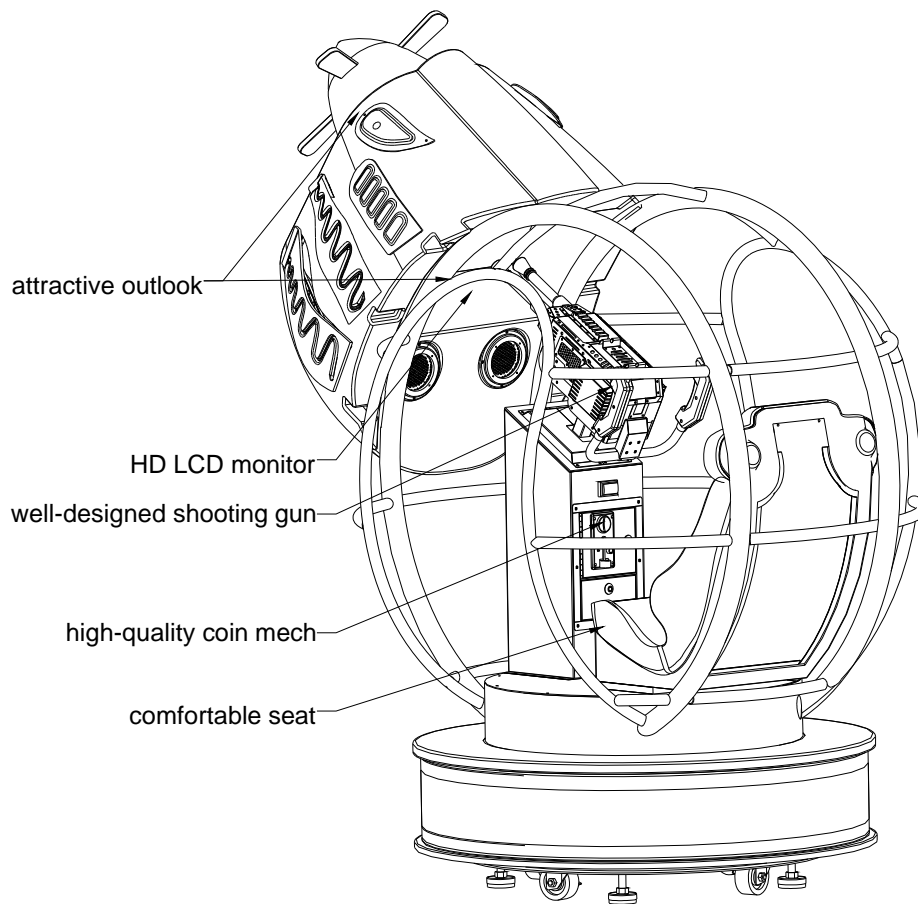
notice of movement or transportation

- 1) Please pay attention to the disassembly method when moving or transport the machine, which to prevent the damage that caused by the improper disassembly way.
- 2) Please prevent to impact the machine when moving the machine, otherwise will cause serious damage to the appearance and structure of the machine.
- 3) When moving the machine, please pay attention to the moving method and appearance protection measure, otherwise it'll cause damage to the machine.

CONTENTS

1、	GAME INTRODUCTION	错误！未定义书签。
2、	GAME CONTROLS	错误！未定义书签。
3、	TECHNICAL DATA	错误！未定义书签。
4、	INSTALL	错误！未定义书签。
5、	INSPECTIONS BEFORE RUNING BUSINESS	错误！未定义书签。
6、	DAILY BUSINESS	12
7、	GAME SETTING CONTROL WAYS.....	错误！未定义书签。
8、	ADJUSTMENT	错误！未定义书签。
9、	INSPECTION AND MAINTAINANCE.....	18
10、	FAILURE AND COUNTERMEASURE	19
11、	SPARE PART BREAKDOWN DRAWING AND SPARE PARTLIST	.20
12、	SCHEMATIC DIAGRAM	28

Game Introduction

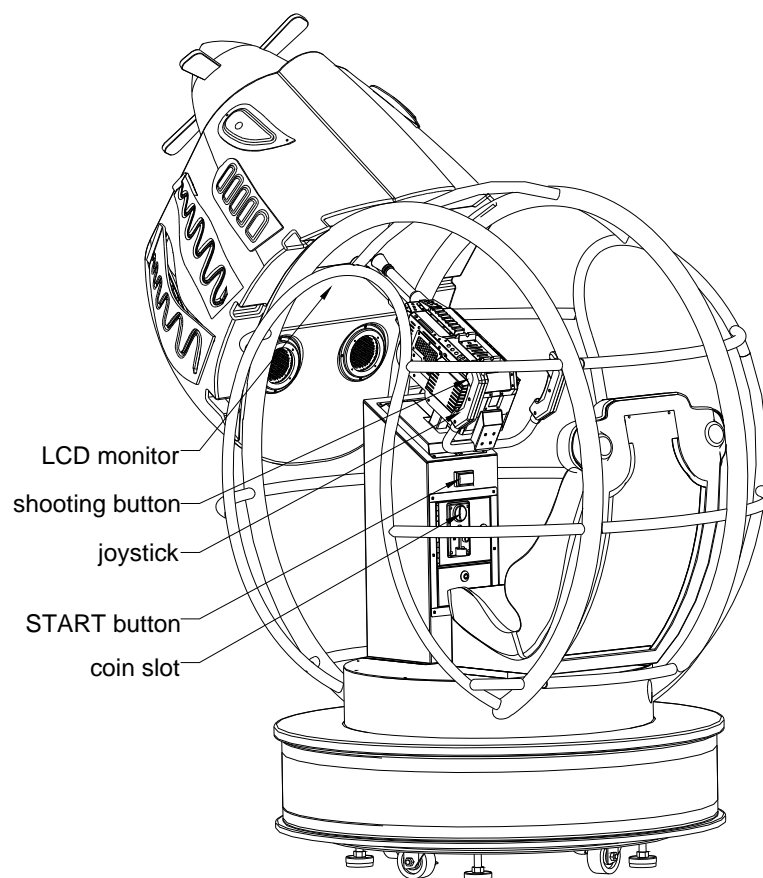


Game Operation

How to play:

Sit on the machine, insert coins to the coin mech, press the start button to start the game.

After the game begins, turn the steering wheel to aim at the enemy war planes that shows on the monitor and press the shooting button of the steering wheel to shoot them down.



Technical Parameters

Service voltage: AC220V/110V (50/60HZ)

Maximum amperage: 2.5A/5A (Note: actual voltage, current refers to the nameplate of the machine)

Maximum power: 550W

Coin size range: $\phi 21\text{mm} \sim \phi 30\text{mm}$

Coin thickness range: 1.2mm \sim 2.5mm

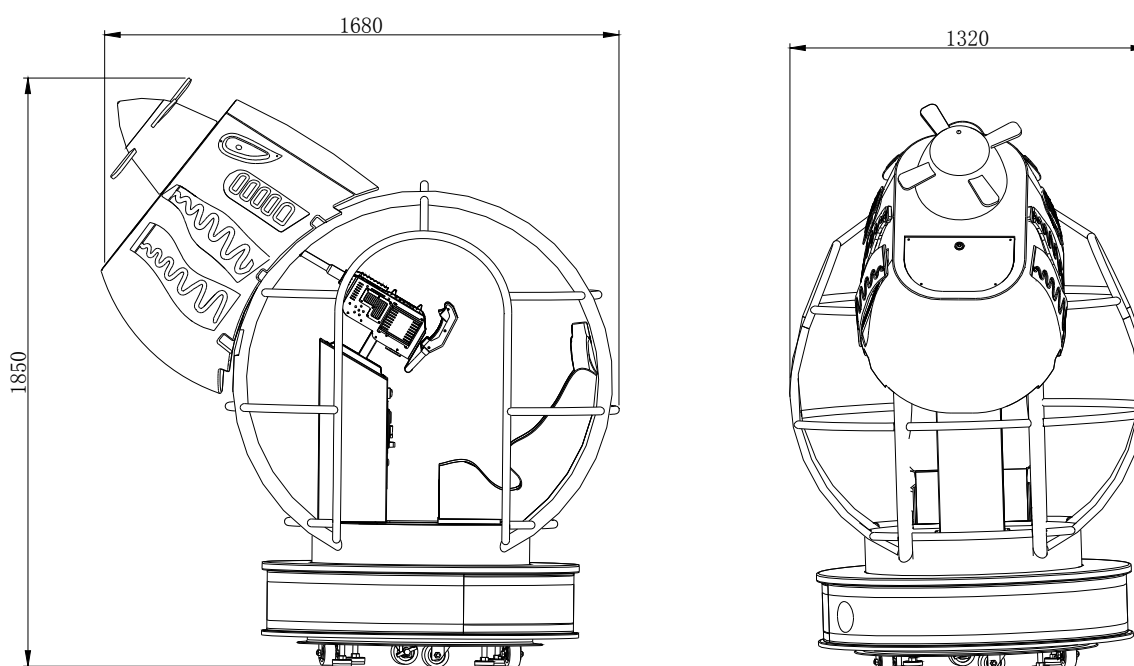
Coin box capability: $\phi 25\text{mm} * 1.5\text{mm}$ about 1300pcs coins

Environmental Conditions: room temperature should be in $-5 \sim 40^{\circ}\text{C}$,

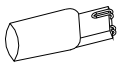





Environment Humidity $> 90\%$, no direct contact with corrosivity liquid and too much oil mist and dust.

Overall dimensions: L2300mm*1150mm*H2000mm

Overall dimensions: L1680mm*1320mm*H1850mm



Random attached spare parts list:

#	DRAWING	NAME	SPEC./MODEL	QTY
1		fuse		2
2		micro switch		2
3		key	1285 #	2
4		key	1396 #	2
5		power cord		1
6		manual		1

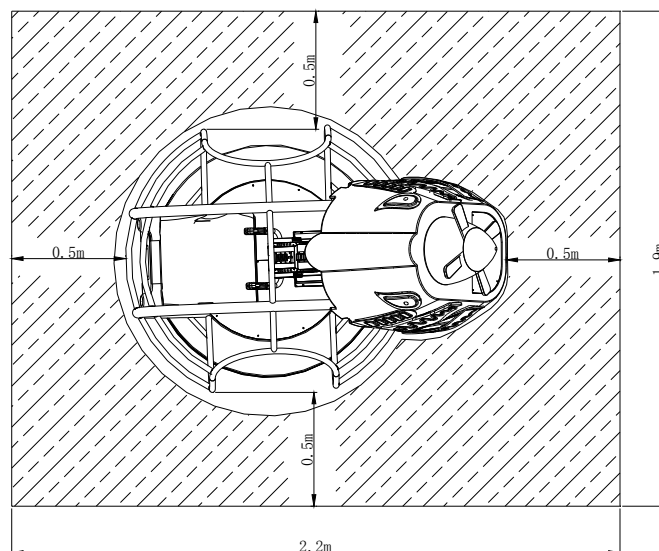
Installation

Please proceed installation according to below methods when the first time install the machine.

Install position chosen:

Assort the machine according to the play method, put the machine among the kiddie rides which has monitor, and select the lay out position according to the shape of the machine.

Please retain the area to put the machine which size as below picture. This can make sure the machine operate normally in enough area, and make the customers play cosily.



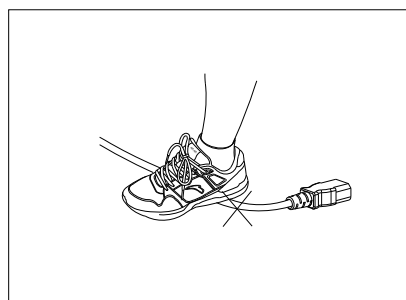
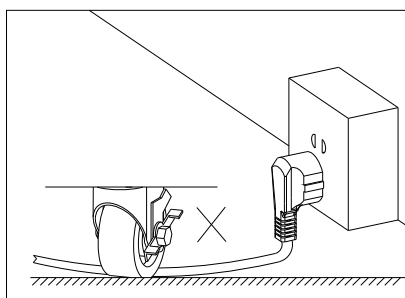
Note: this machine must be put in level ground.

Checking before power input and power cables.

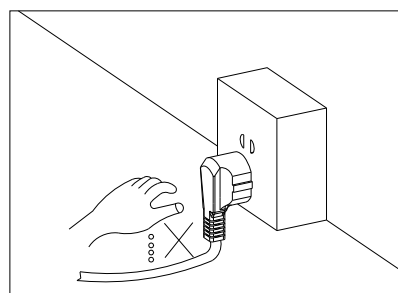
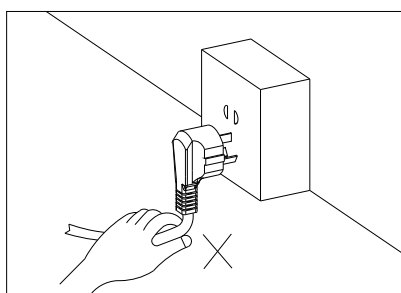
- 1) Please check whether the internal structure of the machine is loosen up because of the transportation shaking, and whether the wiring joint drops out of the port.
- 2) The machine should be earthing.
- 3) Check the impedance of the earth line of the two sides of the power input, make sure it's large than 100mega OM.
- 4) Adjust the coin mech to make it use normally.
- 5) Connect the power line

Power line connecting precaution

A. When pull out the power line, you must grab the plug and pull it out, but not pull it out by grabing the line. If your hands are with water drop, please do not pull the plug directly.



B. You must grab the plug but not the line to pull out from the power socket. And you must not pull out the plug when your hands are with water drop.



Input power and check

1. Make sure the input voltage is the same as that marked on the nameplate.
2. Input power then turn on the power
3. Insert coins into the coin mech, make sure the coin insert is normal.
4. Check and confirm the screen and light are both shine.
5. Open the process setting and game play setting (include coin number, game time etc.)
6. Insert coins and try to play. Make sure the direction operation, body up and down and swing are all normal.
7. Check the voice and make sure it's normal.

Inspection before business

Before open business, must check the machine.

checking items:

1. Make sure the power input line is firmly insert and in good condition.
2. Make sure the machine fixed in correct and secure position.
3. Make sure the housing of the machine is not damaged and make sure it can not scrap your hands.
4. Make sure that there's no dirty mark on the case and the marking stick correctly.

Daily business

1. Input power and start business
2. Turn on the power switch to start the machine
3. Check and confirm if the screen displays images.
4. Check and confirm if the background sound is normal.
5. Check and confirm whether the coin insert, direction operation and the body lifting swing are normal.

Notes: only make sure that above items are ok can use the machine to put into business.

Inspection of the machine before close business

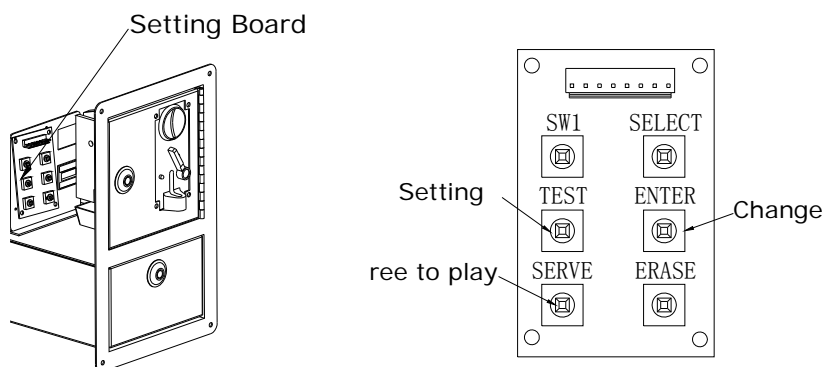
1. Check and make sure the monitor display is normal.
2. Double check the coin insert, direction operation, body up and down and swing, if they're abnormal, please solve as per the failure countermeasure.

Collect coins, record the stopwatch

1. When close business, need to open the coin box to collect the coins after turn off the power.
2. Check and record the amount of the stop watch

Game setting operation way

Game setting button instruction



TEST button: Enter the game setting menu or jump into the next game setting item.

SELECT BUTTON: select the item that you need to setup.

ENTER/modify button: modify the item contents of the setting

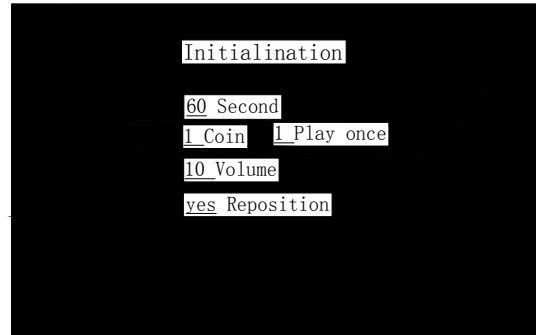
SERVE/ Free button: free play

Operation way setting

operation way: Press the “TEST” button that on the setting board, enter the game content setting menu, press “TEST” button, select the item that you would like to alter, press “ENTER” button to alter the game content.

Setting instruction:

Game setting:



Setting description:

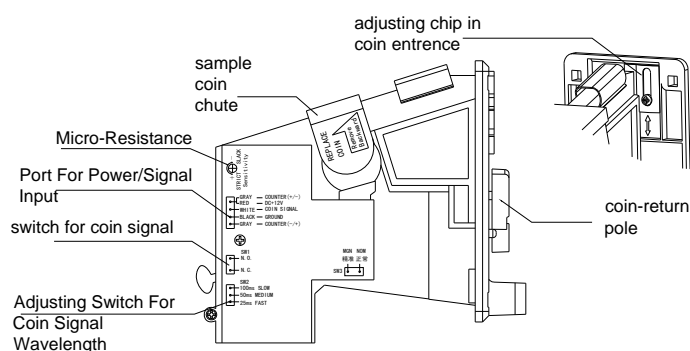
60 seconds: This settin is for setting how many seconds for one game, if set for “60”, that means 60 sec/game.

coin quantity: This settin is for setting how many coin for one game, if set for “1”, that means 1 coin/game.

Volume: it’s for setting the output volume. The bigger the value is, the louder the volume is.

ADJUSTMENT

ADJUST THE COIN MECH

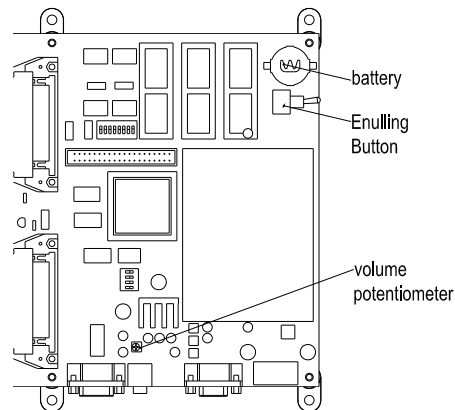


Descriptions:

- 1): Please take out the plastic coin from the sample coin chute and replace it with a token.
- 2): Remove the screws on the back of the coin entrance. Adjust the fixing chip on the back of the coin entrance according to the token's diameter, which prevents blocking the coin mechanism as inserting the large coin in by mistake.
- 3): Turn the COIN Switch to "NO" (COIN Signal wire and GND should be disconnected at usual time). Turning the switch can be used as the coin mechanism switch when the game is powered on.
- 4): Adjust the adjusting switch of COIN Signal wave length to 50MS.
- 5): Adjust the micro-adjusting resistance of token tolerance. Clockwise: increasing the sensitivity of token tolerance, that is, the range of accepting the token tolerance will be larger. Counterclockwise: decrease the sensitivity, that is, the range will be smaller and choose the token more strictly.

Mainboard adjustment

mainboard adjustable marking.



Descriptions:

Enulling Button: pressing this button can set the Game Setting to default and clear the data of Coin and Ticket saved in PCB.

Volume Adjustment: Use a flat screwdriver to twist the volume potentiometer to adjust the volume level of the machine. Turning clockwise will increase the volume; counterclockwise will decrease the volume.

warning

The battery can save the data of game settings and coin number when the the power off. Please replace the battery when the machine can not save the game setting.

Inspection and maintainance

! warning

Please check and maintain the game by technicians.

Please power off the game when check and maintain.

Please do not put any tools into cabinet, otherwise it will cause problem.

After checking, please tightly screw the screws and close the door.

routine inspection

ITEM	DESCRIPTION
COIN MECH	Check whether the coin mech canwork proper.
Handle of the direction	Check whether the handle of the direction can control the Kiddie Missle's forward direction normally
Shoot Button	Check if the button can work properly.
Movement	Check if the Kiddie Missle can move properly.
sound	Check whether the sound and the volume are ok.
display	Check if the displayed colors are proper.
Temperature、humidity	Check if the temperature and humidity is proper

daily maintenance

ITEM	DESCRIPTION
THE CABINET	Clean the cabinet with water and soft paper.
MONITOR	Clean the monitor with water and soft paper.
PCB	Sweep the dust and dirty in the board with small brush

Failure and solutions

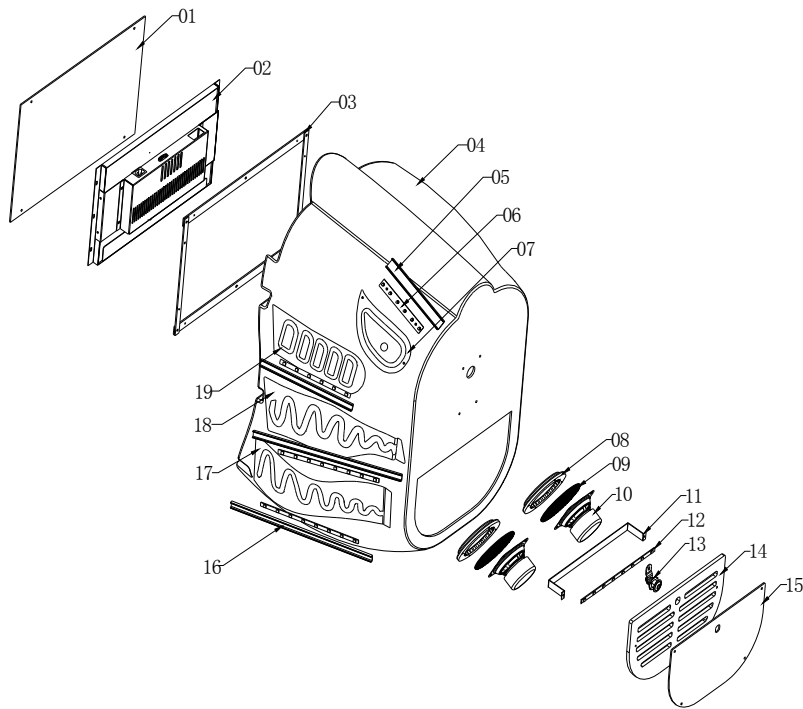
If you meet any problem during installation or using the machine, we suggest you to read this sheet to find out the failure and solutions before you seek help from technical support services.

troubleshooting:

PROBLEMS	CAUSES	SOLUTIONS
Can not insert coin	no sample coin	insert sample coin
	Sensitivity for coin was adjusted too high	adjust the sensitivity
	coin mech is bad	replace the coin mech
Lights do not light up	The wire of light is loose.	Check the connection of light board.
	The light is bad.	Replace the light.
	The light's driver board is bad.	Repair or replace the driver board.
Button invalid	The connection of button is bad.	Reconnect the wire of button.
	The button is bad.	Replace the button.
The gun does not have vibration.	The connection of vibration motor is bad.	Reconnect the wire of motor.
	The relay for vibration is bad.	Replace the relay.
	The vibration motor is bad.	Replace the motor.
Control directions improperly.	The connection of direction potentiometer is bad.	Reconnect the wire of potentiometer.
	The direction potentiometer is bad.	Replace the potentiometer.
The seat does not have vibration.	The connection of vibration motor is bad.	Reconnect the wire of motor.
	The vibration motor is bad.	Replace the motor.
No display.	the monitor power line is loose	reconnect the monitor power line
	Monitor signal cable was not connected	reconnect the monitor signal cable
	the monitor is bad	replace the monitor
	The main board is bad.	Replace the main board.
No sound.	The wire of sound signal is loose.	Reconnect the wires of speaker.
	The volume is too low.	Increase the volume.
	The amplifier is bad.	Replace the amplifier.
	The speaker is bad.	Replace the speaker.
No movement after powering on the game	No AC110V/220V input	Check the connection
	The fuse is burnt.	Replace the fuse.
	No output voltage of power supply.	Repair or replace the power supply.
	The main board is bad.	Replace the main board.

Elements distribution diagram and accessory list

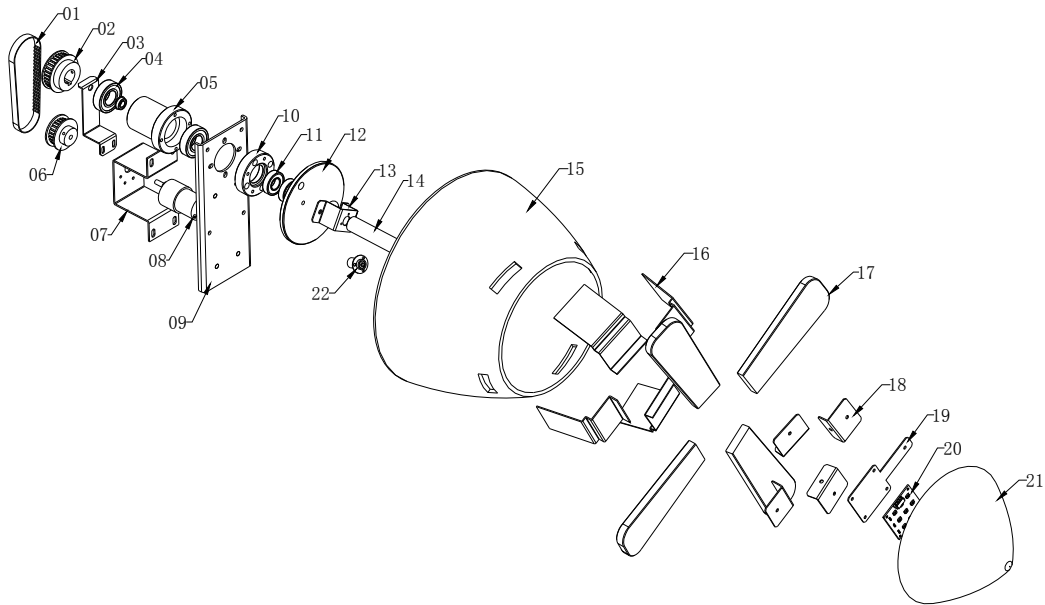
machine elements distribution diagram and accessory list



NO.	Name / model#	Qty
01	monitor protective cover	1
02	19" LCD monitor	1
03	bracket frame for monitor	1
04	fiberglass	1
05	light bracket	2
06	chase light strip (1/2)	2
07	blister A	2
08	acrylic for speaker	2
09	speaker light board	2
10	speaker 4.5"	2

NO.	Name / model#	Qty
11	light bracket	1
12	light strip 300mm	7
13	lock 1285	1
14	service door	1
15	acrylic for service door	1
16	wire chute	8
17	blister B	2
18	blister C	2
19	blister D	2

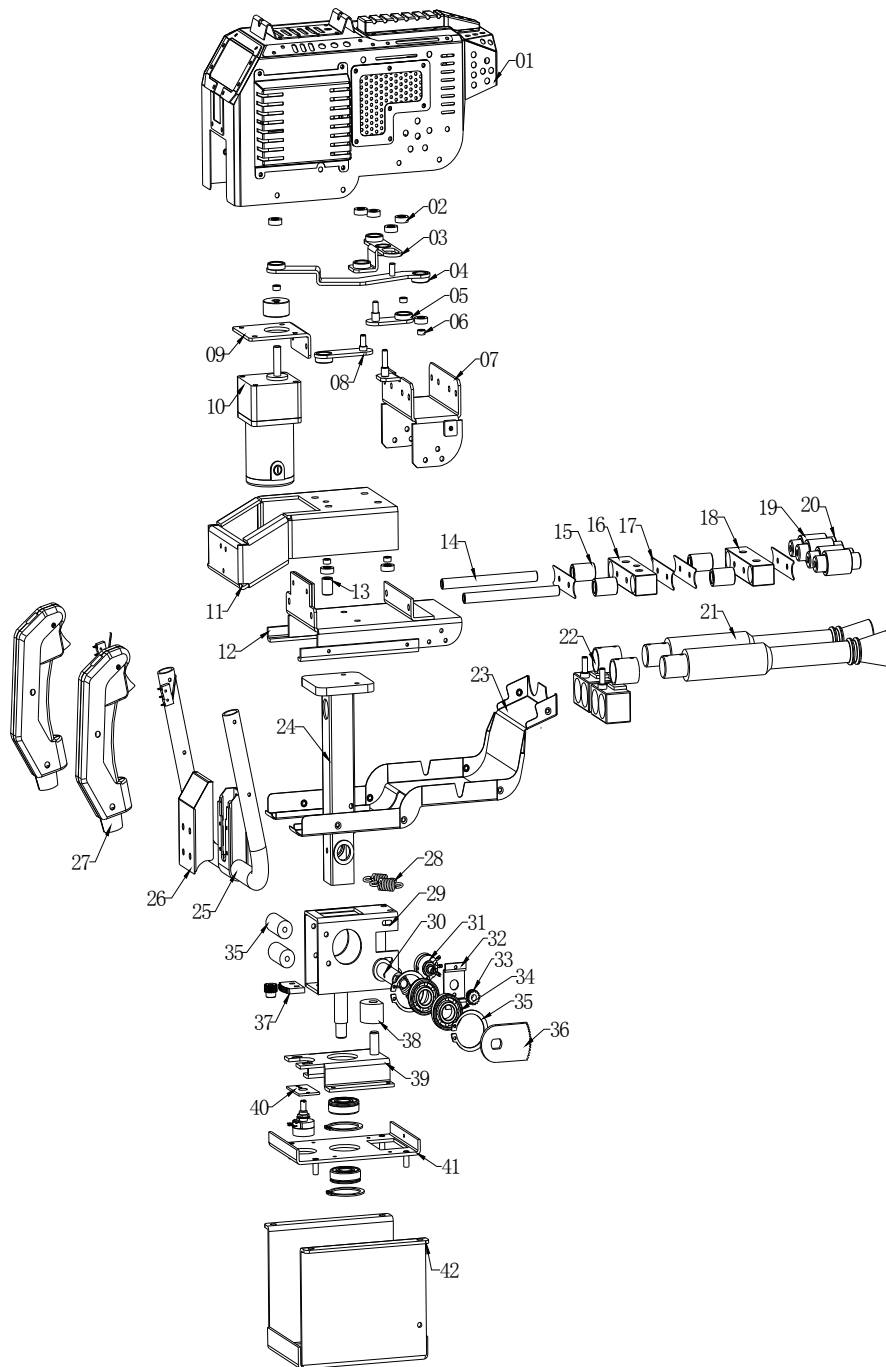
plane head light accessories explodedview and spare part list



NO.	Name / model#	Qty
01	synchronous belt	1
02	drive wheel 30-gear	1
03	drive wheel holder	1
04	bearing 6004	2
05	bush	1
06	drive wheel 23-gear	1
07	small motor holder	1
08	motor 12V 180k	1
09	small motor chassis	1
10	rolling balls installing pieces	1
11	bearing 6203	2

NO.	Name / model#	Qty
12	holder plate	1
13	bracket for slip ring	1
14	drive shaft	1
15	fiberglass	1
16	propeller holder	4
17	propeller	4
18	light frame for propeller	4
19	light holder	1
20	LED light board	1
21	cone blister	1
22	slip ring	1

stering wheel accessories explodedview and spare part list

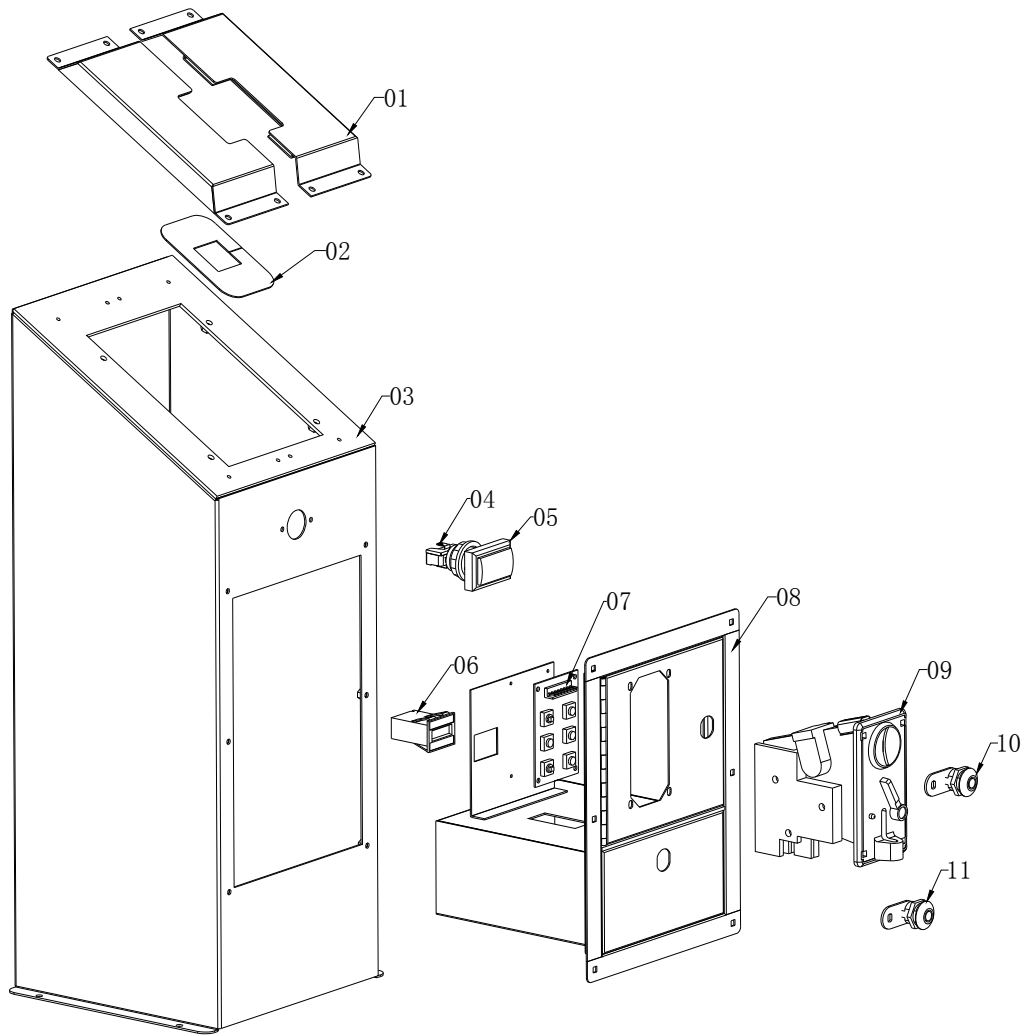


steering wheel accessories explodedview and spare part list

NO.	Name / model#	Qty
01	gun shell	1
02	bearing 696	8
03	driven medium 2	1
04	driven medium 4	1
05	driven medium 1	1
06	bearing pad	5
07	holder for short shaft	1
08	driven medium 3	1
09	bracket for gun motor	1
10	motor w/ gear box 552Y24-25	1
11	holder for handle	1
12	holder for gun body	1
13	pole	1
14	bearing (long shaft)	2
15	ball bearing	4
16	long shaft bush B	1
17	bearing barrier	4
18	long shaft bush A	1
19	ball bearing	4
20	short shaft	4
21	gun barrel	2
22	short shaft bush	2
23	gun base shell	1

NO.	Name / model#	Qty
24	pole for gun base	1
25	handle installing piece	1
26	cover for gun handle	1
27	handle	2
28	spring	3
29	rotating stand	1
30	front & back rotating shaft	1
31	VR B502	2
32	switch holder	1
33	gear for VR	2
34	bearing w/ spring 6202	4
35	spring	4
36	driving gear 1	1
37	driving gear 2	1
38	left & right locating part	1
39	left & right holder	1
40	VR bracket 2	1
41	chassis	1
42	installation base for gun	1
43	micro switch w/ chip	2

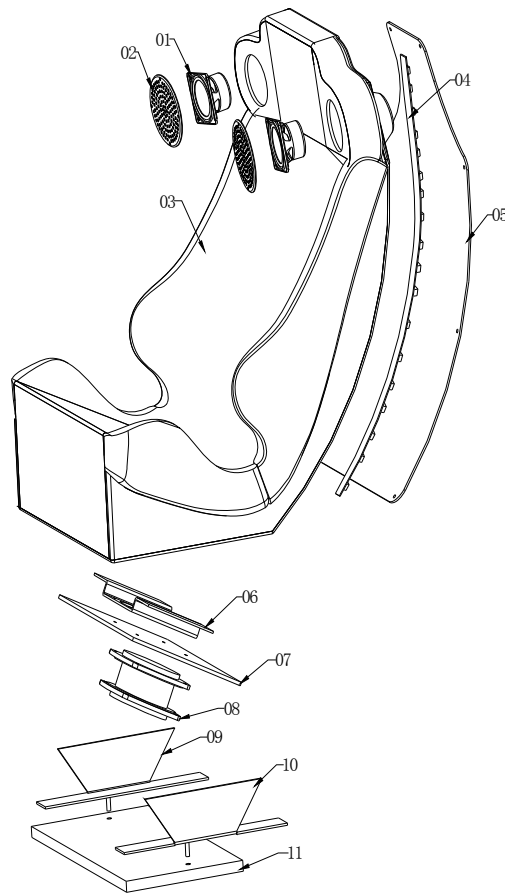
console accessories explodedview and spare part list



NO.	Name / model#	QTY
01	left,right gun base cover	1
02	boot	1
03	console	1
04	micro switch	1
05	button w/ light	1
06	meter	1

NO.	Name / model#	Qty
07	setting board	1
08	coin door	1
09	coin mech	1
10	lock 1285	1
11	lock 1396	1

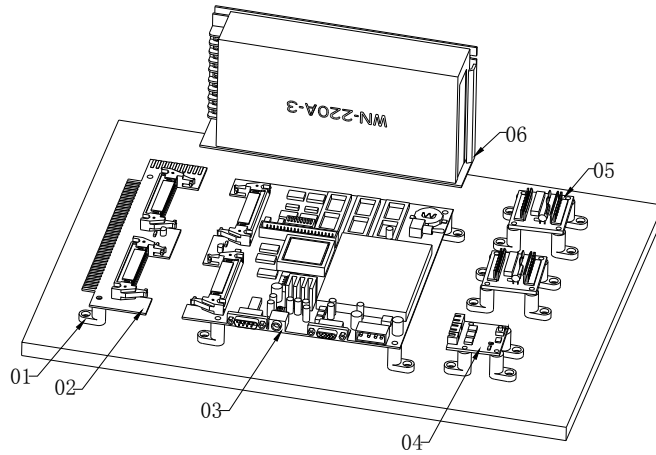
seat accessories explodedview and spare part list



NO.	Name / model#	Qty
01	3" speaker mesh	2
02	3" speaker	2
03	seat fiberglass	1
04	600mm light strip	2
05	transmitting chip	1
06	holder for speaker	1

NO.	Name / model#	Qty
07	coin door	1
08	bakelite plate	1
09	left seat holder	1
10	right seat holder	1
11	seat baseplate	1

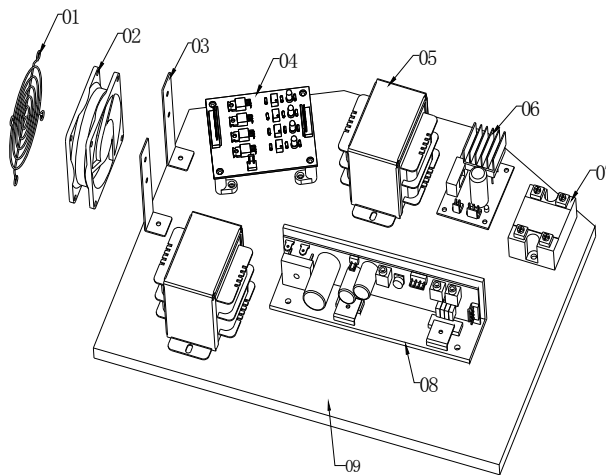
mainboard accessories explodedview and spare part list



NO.	Name / model#	Qty
01	PCB plastic port	20
02	I/O board	1
03	main board (TCW09)	1

NO.	Name / model#	Qty
04	light control board	1
05	signal board	1
06	power supply	1

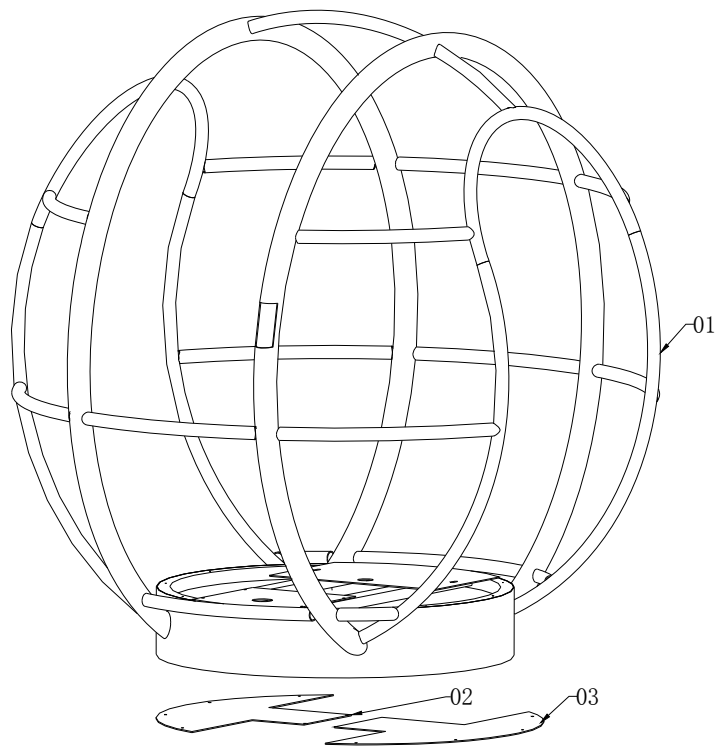
drive board accessories explodedview and spare part list



NO.	Name / model#	Qty
01	8X8 fan mesh	1
02	8X8 12V fan	1
03	fan holder	2
04	AC drive board	1
05	transformer 18V 80W	2

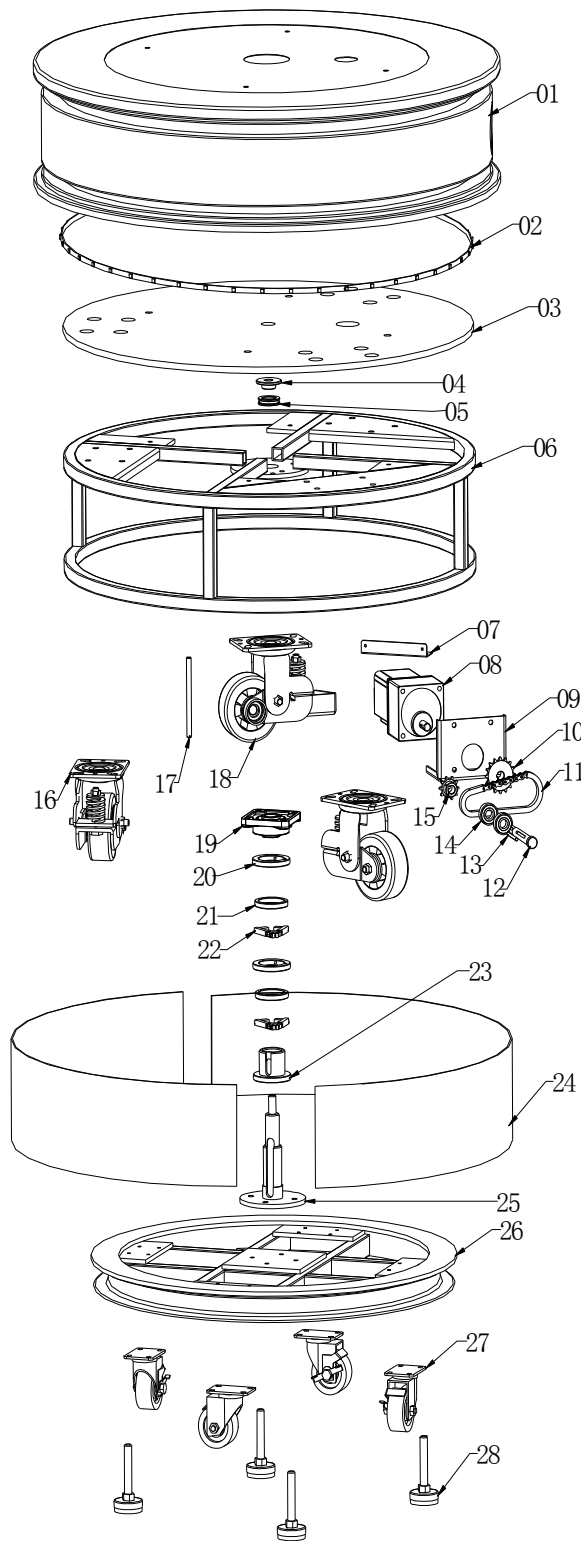
NO.	Name / model#	Qty
06	rectifier board	1
07	solid relay	1
08	amplifier	1
09	installation board	1

engine room accessories explodedview and spare part list



NO.	Name / model#	Qty
01	cabin	1
02	left cover	1
03	right cover	1

chassis accessories explodedview and spare part list



NO.	Name / model#	Qty
01	base fiberglass	1
02	900mm light strip	2
03	chassis board	1
04	bearing sleeve	1
05	bearing 51106	1
06	chassis	1
07	motor installation bracket	1
08	motor	1
09	motor bracket	1
10	chain wheel (big)	1
11	chain	1
12	poppethead	1
13	pulley key	1
14	bearing 6203Z	2
15	chain wheel (small)	1
16	PU holder wheel	2
17	holder shaft for carbon brush	1
18	pulley	1
19	bearing w/ base	4
20	conducting ring	2
21	dead ring	2
22	carbon brush	2
23	base for collecting ring	1
24	base acrylic	2
25	central shaft	1
26	base bracket	1
27	wheel w/ skid	4
28	foundation	4

Schematic Diagram

