Heli Copter

Instruction

⚠ Warning

Before using or installing this machine, be sure to read this manual thoroughly.

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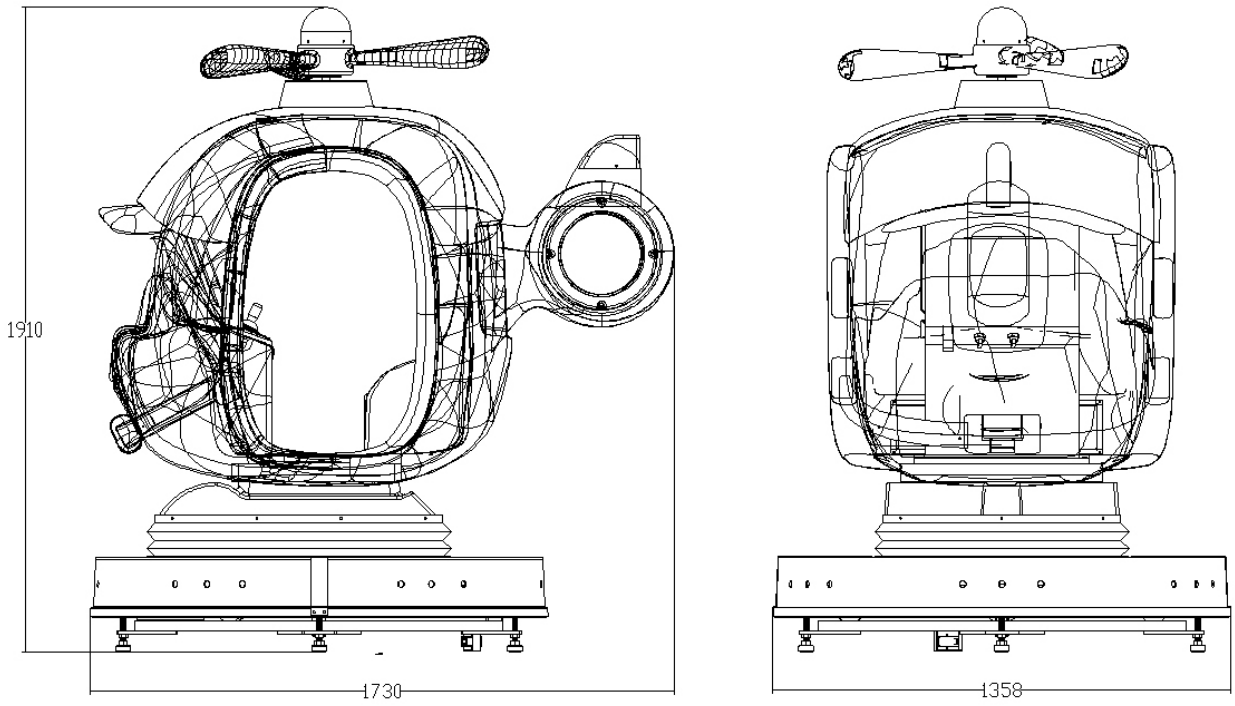
1、Spec and technical parameters

Unit：mm



1) Working voltage： AC 220V±10% 50Hz

2) Power consumption：mix110 W ～ max515 W

3) Dimension：L1730×W1358×H1910（mm）

4) Weight ：Around 205 kg

5) Environmental conditions：Temp.(indoor)：-10℃～+40℃；

Humidity：≤90%；

Atmospheric pressure：86Pa～106Pa。

⚠ **Warning：** After turning off machine, please wait for 1 min and re-start.

2、Parts list

To use machine properly, please check the parts list below.

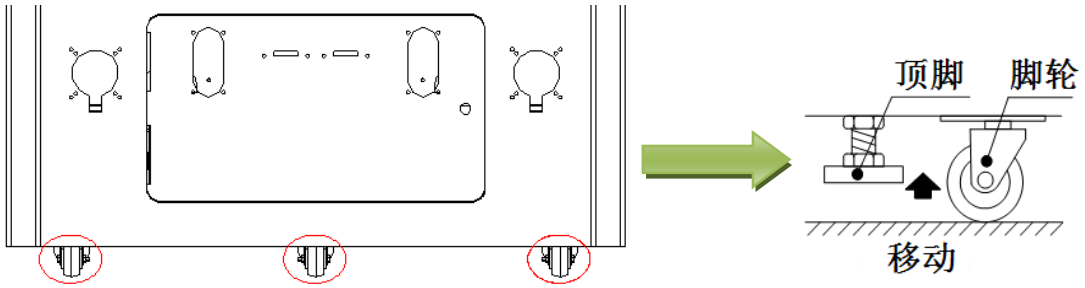
No.	Name	Spec/Material	Qty.	Unit	Picture	Remark
1	Manual	A4	1	PC		Per shipment request
2	Key	1285	1	PC		Ticket door, coin door, repair door
		1396	1	PC		Coin box door
3	Fuse	6.3A	1	PC		
4	Power cable	1.5M	1	PC		
5	H-type optocoupler		1	PC		

If there is anything missing, please contact us.

3、Movement and placement

3-1 Movement method

The machine is equipped with caster below. Move the machine for short distance by adjusting the foundation, so that the caster wheel can be touched to the ground to move the machine. When the foundation touches the barrier on the ground, there is a risk of falling over. Therefore, when moving machine along the ground, move the foundation upward to the maximum extent and pay attention to the obstacles and the uneven places on the road.



Move the machine for short distance by adjusting the foundation, so that the caster wheel can be touched to the ground to move the machine.

When moving the machine and passing uneven floor or stepped position, 4 or more people are required to lift the machine to ensure safety.

When moving for a long distance, please pack or bundle to fix machine, and need a layer of protection on the surface of the machine to avoid any scratch.

注 意

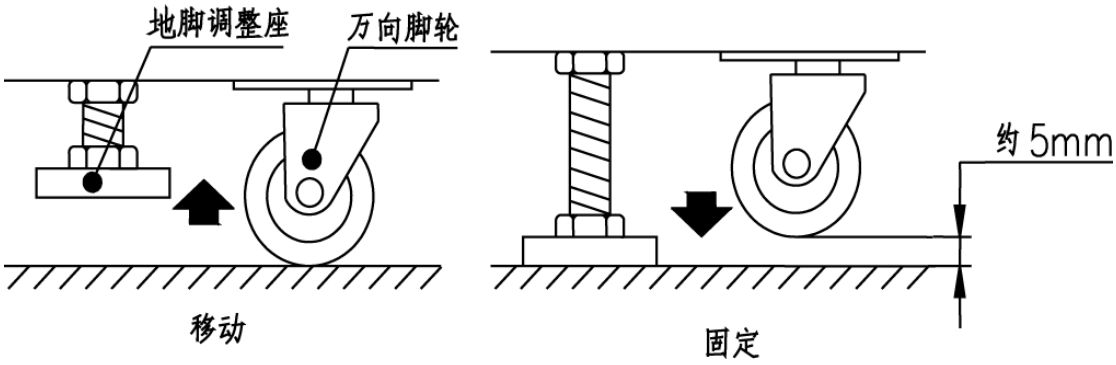
To avoid any accidence and damage, please unplug the power before moving.
To avoid any accidence and damage, please do not damage the power cable and move the foundation upward to the maximum.
At least over 2 people to move machine to avoid any accidence.

3-2 How to fix the machine

- Please be placed on a flat and not easy to slide the ground.
- Please use the foundations to fix machine. (refer to the photos below)

① Loosen the nut of foundation and tighten the screw to make the castor about 5mm from the ground.

② Tighten the lock nut clockwise and fix.



3-3 Do not use machine in the following places

- The place which will cause condensation on machine or condensed place with high humidity.
- The place close to high-temperature objects;
- The place close to dangerous objects;
- Slippery or unstable place;
- The place near the equipment that is prone to sparking;
- The place in severe vibration;
- Dusty environment

3-4 Placement

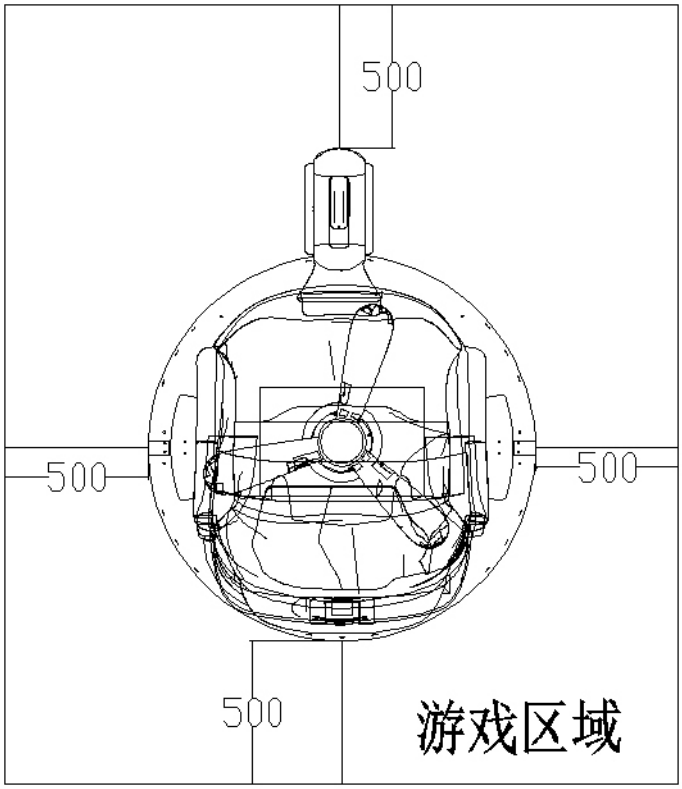
⚠ **Warning: This machine is only suitable for indoor use, not outdoor.**

⚠ **Warning: Do not use a forklift to move machine, which may result in damage to the machine.**

3-5 The range of placement

Machine should be placed in the following dimensions to make enough space for running the machine and ensure customer safety.

Unit：mm



⚠ **Attention：Do not place on a sloping position, that may easily lead to accidents.**

⚠ **Attention：Division of game area depends on label of machine.**

3-6 Notes before starting the machine

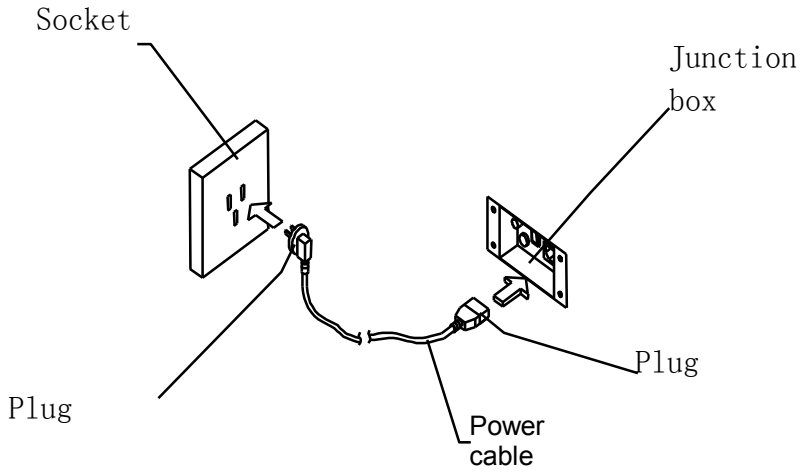
1) Check the parameters of the power supply voltage. Make sure the machine's electrical parameters are consistent with the machine's requirements, or may cause burning the machine or a fire.
2) Connecting too many wires to the same power jack may cause the connector to overheat and cause a fire.

⚠ Warning

◎ When installing the machine do not change or replace the parts to avoid fire or short circuit.

4、Wiring

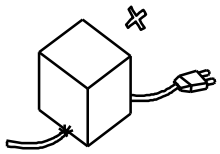
- Connect one end of the power cable to the junction box and the other end connects to a power outlet.
- Please refer to the suggested voltage, or may cause any damage.
- To avoid unnecessary damage, be sure to check whether the socket has grounding function.
- If grounding is not possible through the socket, use another route to ground.



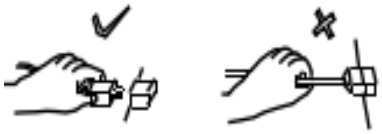
⚠ **Warning: Working voltage of machine is 220V, please refer to the suggested voltage to connect, or may cause any damage.**

Attention:

- Do not put heavy stuff on the power cable. That could cause a short circuit, even a fire.



- When unplugging the power cable from the socket, please pull out by holding the plug, do not hold the wire.



- Do not pull the plug with wet hands.

- The wire cannot be forced to stretch and bend. Do not expose the wire to near the stuff with high temp.

- Do not put wire where to be kicked or touched easily.

- Use the right voltage and fuse (refer to technical parameters)

5、Installation and maintenance

Install and adjust

- Before installation, please check the parts list and do the assembly.
- The using site must be flat and firm. After the machine is placed, the adjustment seat should be adjusted horizontally to the ground.
- After installation, plug in the power cord and turn on the power to check the machine can work properly. If any problem, stop the machine in time and check troubleshooting.

Visual inspection

To ensure the using safety, please check the followings before start the machine:

- "Warning signs" are intact, clearly visible, paste the correct location.
- Connected power parameters are consistent with the machine.
- Check if the screws or steering wheel assembly are loose or not.
- Check if each connector or terminal is loose or not.
- Machine is placed stable. Casters and foundations are adjusted appropriately.
- The area of placing machine is appropriate.

Operation check

- Speaker can work properly.
- All lights can work.
- The image is clear and normal.

Maintenance

- Test machine can work properly every day before the business.
- Use soft cotton cloth with detergent to wipe clean the dirt on machine.
- After running new machine for a month, check all the components are normal.
- Check the machine frequently.

Clean

- Machine appearance

  Use soft cotton cloth to clean the stains on machine.

- Exhaust fan

Exhaust fan is one of main tools for cooling the machine, must keep the fan clean and work properly.

⚠ Warning:

- **Machine must be powered off when it is under maintenance or repair.**

  In order to avoid short circuit, the personnel should turn off the power before touching the internal components of the machine. If this operation requires the power to be turned on, the operation must meet the requirements on manual.

- **Ensure use proper parts when exchanging.**

Use incorrect parts may cause electrical short circuits, damage to main board and its components.

- **Do not disassemble, assemble, change the equipment**

  This may cause electrical short circuit, mechanical failure, etc., serious cases may result in fire.

- **Do not place vases, cups, containers on the machine, and also do not place chemicals and heavy objects.**

  Spilled liquid can cause short circuits in the appliance to damage the device, and falling objects can damage the human body and damage the machine.

- **Do not place any objects on the exhaust port of the machine**

  Exhaust vents are blocked will cause the internal temperature of the machine increases, affecting the game operation, or even damage the device.

- **Do not repair the machine at will.**

  This may cause short circuits or uncontrolled malfunctions.

6、Troubleshooting

Situation	Caused reason	Troubleshooting
Can not insert the coin	Coin selector is not adjusted well. There's a fake coin stuck in coin selector	Adjust coin selector, token tolerance Take out the fake coin
No sound	Volume is adjusted too low Sound output signal wire is disconnected Speaker fault Sound amplifier failure Circuit board failure Audio connector is loose or damaged The speaker is connected or not	Adjust the volume higher Re-connect the wire Change the speaker Change the main board Change the circuit board Reconnect the audio connector Turn on the speaker switch and connect to the power
Machine has no reaction	No input The power switch is not turned on Fuse burn out No voltage output from power supply No power supply voltage on main board Main board fault	Turn on the power switch and plug in the power cord Turn on the power switch Exclude short circuits and replace with new fuses. Change the power supply Connect the power connection Change main board

7、Game instruction

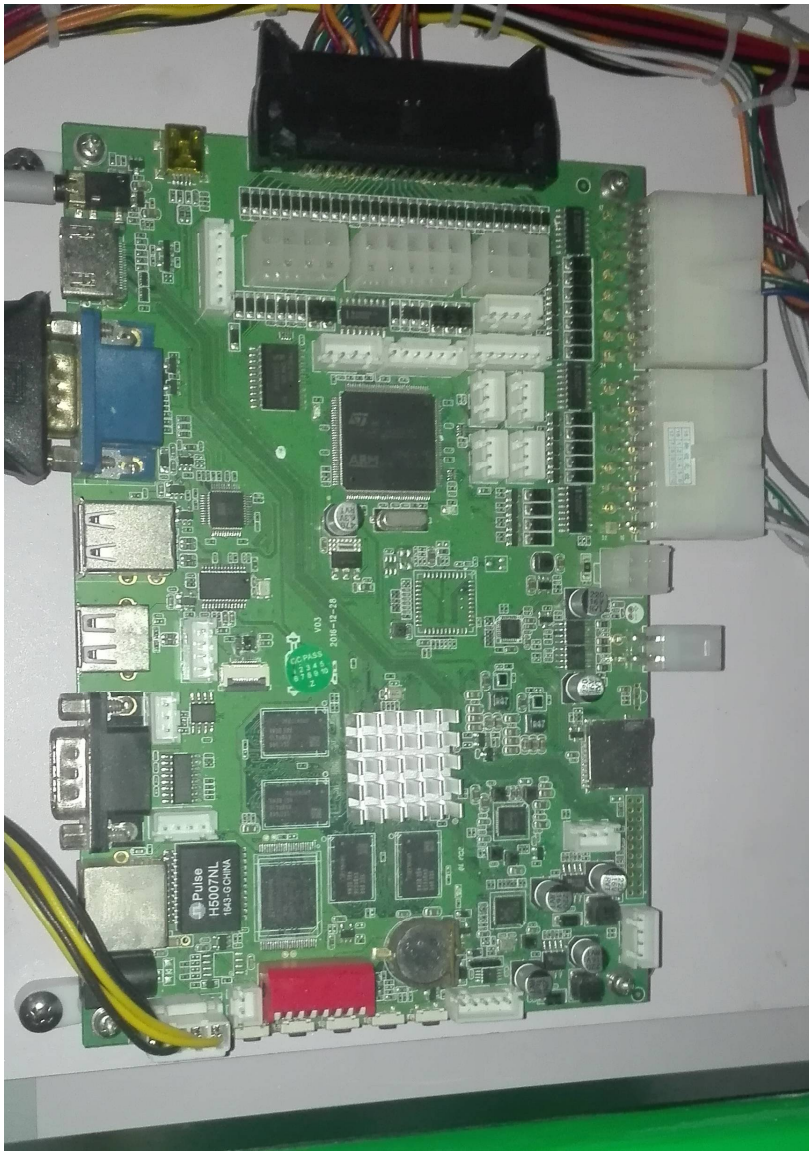
7-1 How to play

1. Insert the coin, press button to start the game.
2. Machine swings, player complete a variety of trigger events to get score.
3. Within required time, get more scores.

7-2 Interface

7-3 Control signals and instruction

1. Check the attached IO table, schematic diagram and the main board plan to see machine input and output corresponding to the wiring position.
2. DIP adjustment refer to IO table. Capital letters are for the factory settings, users can adjust their own operating conditions.
3. Main board plan:



7-4 Use and repair

1. The machine must be powered off while it is being serviced and repaired.

In order to avoid short circuit, the personnel need to turn off the machine before touching the device.

If this operation requires power-on, it must comply with the operating instructions.

2. Use proper component when exchanging the parts.

Using improper component may caused short circuit, the damage of main board and component.

3. Do not disassemble, assemble, change equipment.

This may cause electrical short circuit, mechanical failure, etc., serious cases may result in fire.

4. Do not place vases, cups, containers on the machine, and also do not place chemicals and heavy objects.

Spilled liquid can cause short circuits in the appliance to damage the device, and falling objects can damage the human body and damage the machine.

5. Do not place any objects on the exhaust port of the machine

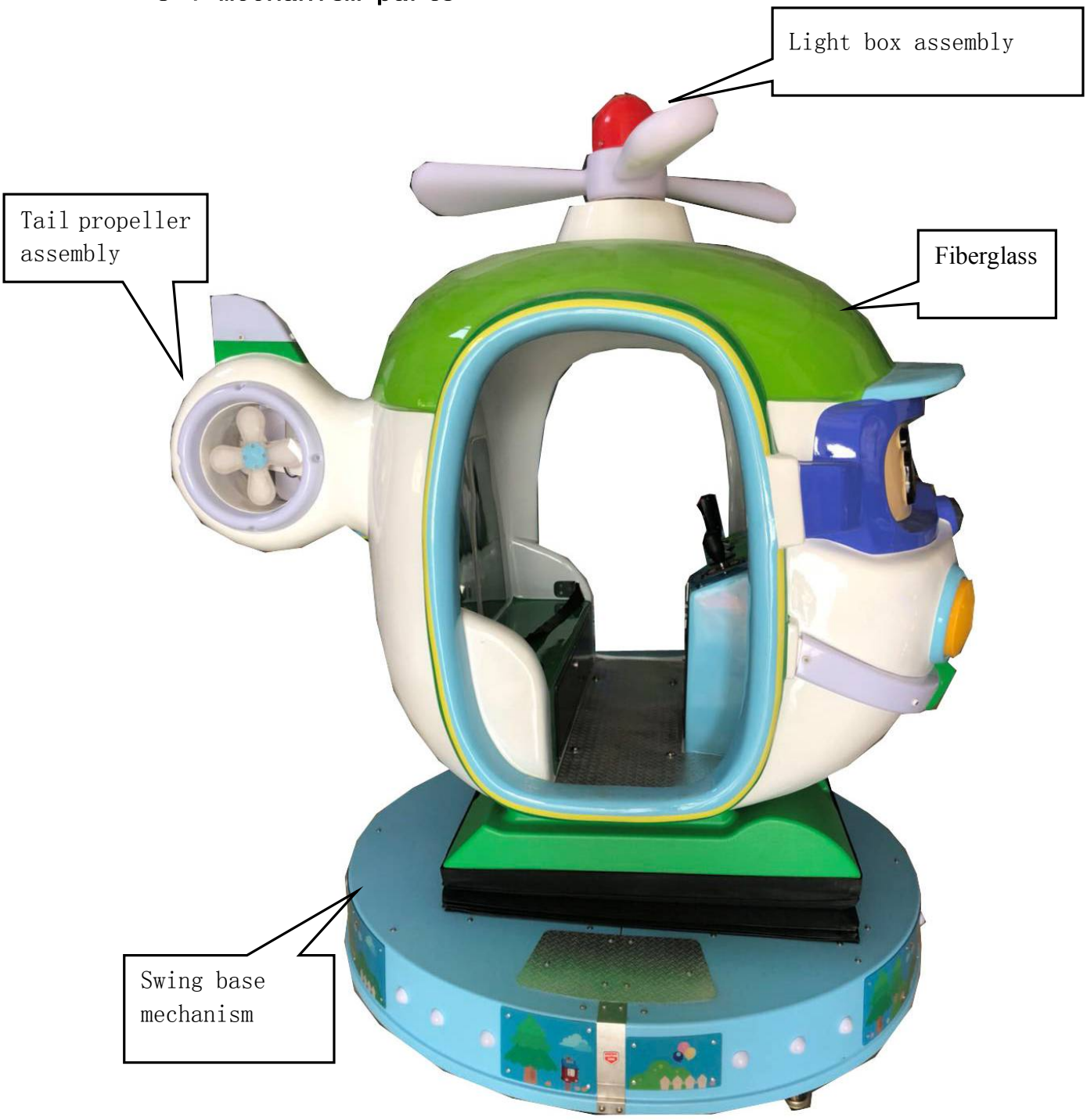
Exhaust vents are blocked will cause the internal temperature of the machine increases, affecting the game operation, or even damage the device.

6. Do not repair the machine at will.

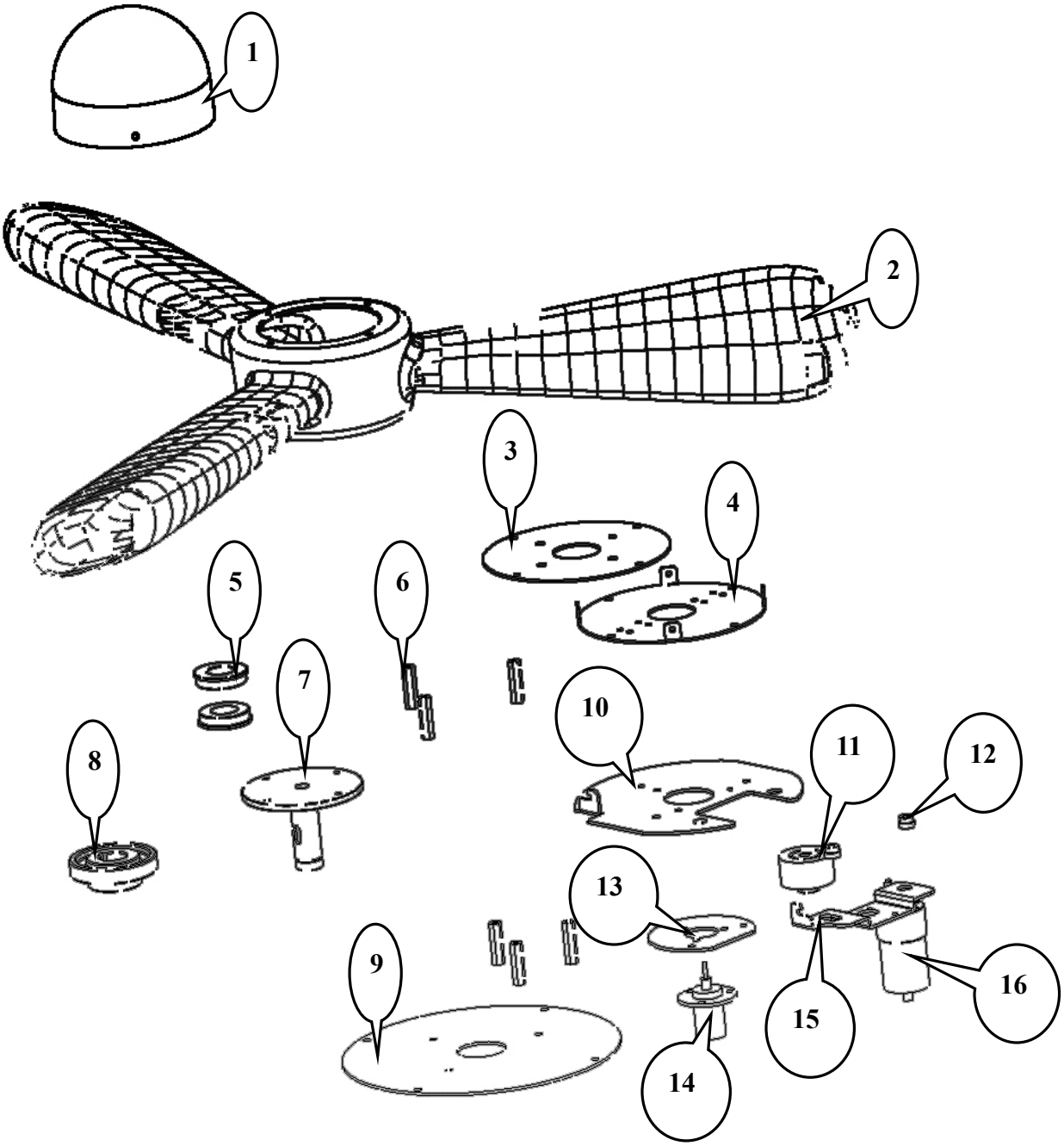
This may cause short circuits or uncontrolled malfunctions.

8、Parts list

8-1 Mechanism parts



Light box assembly



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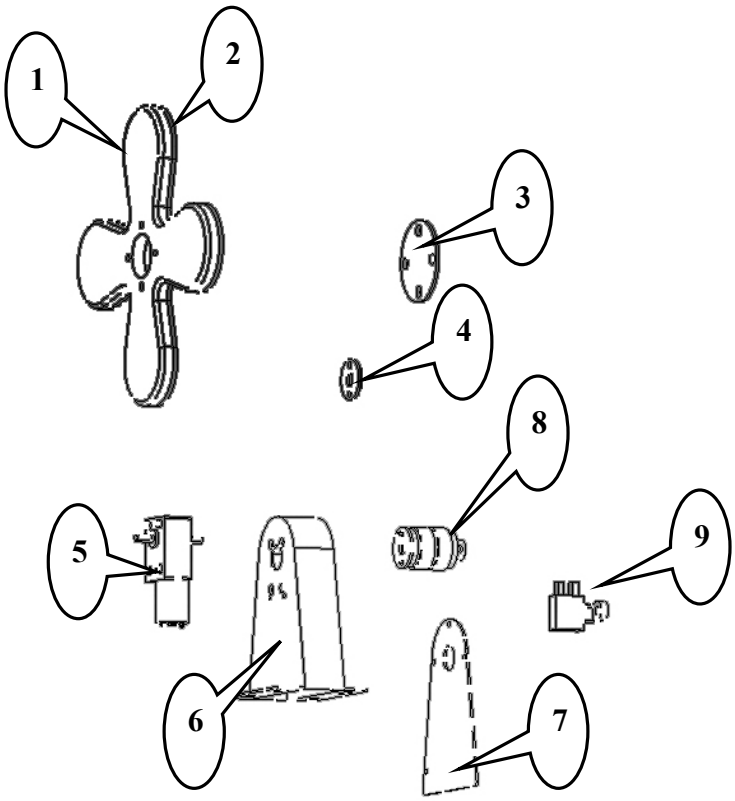
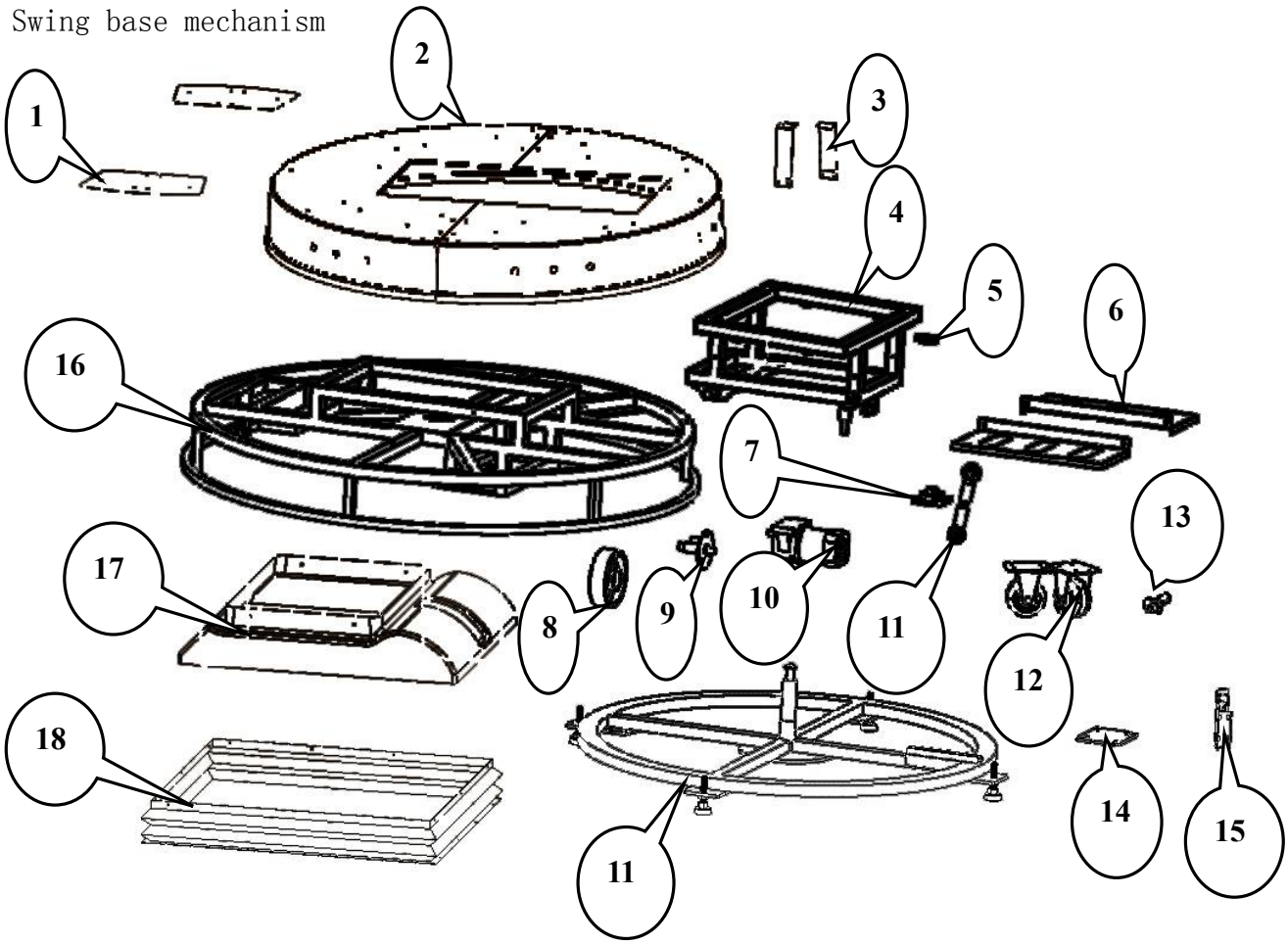
No	Name	Spec/Material	Qty.
1	Top light cover	Red ABS	1
2	Propeller	White ABS	1
3	Plate D	Q235	1
4	Plate E	Stainless steel 201	1
5	Rib bearing	F6904	2
6	Pillar	Q235	6
7	Propeller shaft	45#	1
8	Big friction wheel	Aluminum alloy	1
9	Plate B	Stainless steel 201	1
10	Plate C	Stainless steel 201	1
11	Friction wheel	Polyurethane	1
12	Fixed shaft	Stainless steel 201	2
13	Plate A	Stainless steel 201	1
14	Conductive slip ring	MODEL:SNF-4P 4路10A	1
15	Motor board	Stainless steel 201	1
16	Motor	38G12V20RPM shaft length 14mm	1

Tail propeller assembly



No	Name	Spec/Material	Qty
1	Tail propeller plastic slice	Translucent white plastic	2
2	Tail propeller’s cover	white plastic	2
3	Tail propeller’s front cover	white plastic	2
4	Plate of tail propeller	Q235	2
5	Dual output shaft motor	12V10RPM	1
6	Fixing base	Q235	1
7	Cover plate of motor	Q235	1
8	Rear axle	Stainless steel 201	2
9	Conductive ring	Φ15XΦ31X42	2

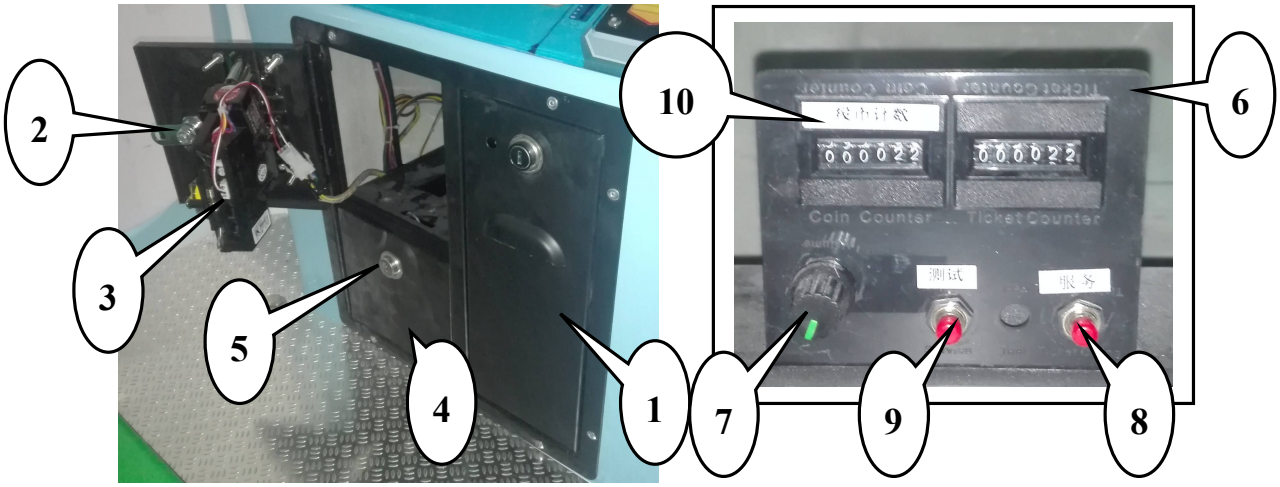
Swing base mechanism



No	Name	Spec/Material	Qty
1	Pedal A	Pattern aluminum(δ1.0)	2
2	Plastic base	Blue ABS	bilateral symmetry
3	Base connector	Stainless steel 201	2
4	Swing frame		1
5	H-type optocoupler		1
6	Fixed angle iron	Electrolysis board	2
7	Bearing with base	UCFU204	1
8	Polyurethane wheels	Φ150X51mm	1
9	Connecting flange		1
10	Joint bearing	M20 teeth	2
11	Base 1		

12	Directional castors	Φ100X31mm)Total height 130 with bearing	2
13	Shaft	45#	1
14	Motor pad	Q235	1
15	Limit switch holder	Stainless steel 201	Each for left, right side
16	Base 2		1
17	Neck blister	Green ABS	1
18	Organ cover	Black cloth	1

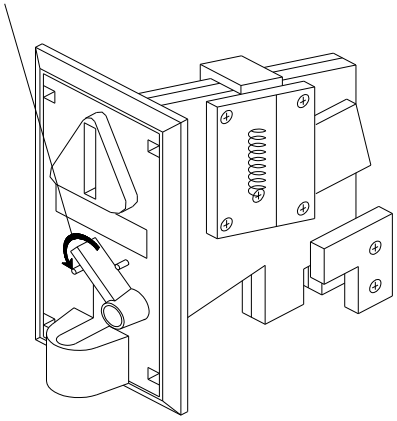
8-2 Coin selector assembly



No	Name	Spec/Material	Qty
1	3 in 1 coin door	Iron	1
2	#1285 Lock		3
3	Coin selector	LK-100BL	1
4	Coin box	Iron	1
5	#1396 Lock		1
6	Counter bracket	Black plastic	1
7	Sound regulator	Black plastic	1
8	Service button	Red button	1
9	Test button	Red button	1
10	6 bit counter	C-012	1

8-3 Coin selector instruction

When the coin stuck in coin selector, pull button as shown in photo, the coin will be withdrawn from it. If the coin can not be withdrawn, it is necessary to open the coin acceptor and remove the coin.



Electronic operated coin selector instruction:

A. Please first remove the plastic coins in the coin slot and replace with the coin you want to use.

B. Loosen the screws on the back of the coin slot and adjust the fixing tabs on the back of the coin slot according to the diameter of the coin.

C. Select N.O (normally open) and N.C (normally closed) switch; the general use is N.O (normally open).

D. Select COIN length / speed switch (TIMER SWITCH): 30MS (short fast signal) /50MS (middle fast signal) /100MS (long slow signal), general use is 50MS.

E. The VR knob is used to adjust the sensitivity of the coin selection. Adjusting clockwise (+), the range of acceptable coin tolerances is large and the counterclockwise adjustment (-) allows for a smaller range of tolerances for coins, which means the screening is more stringent.

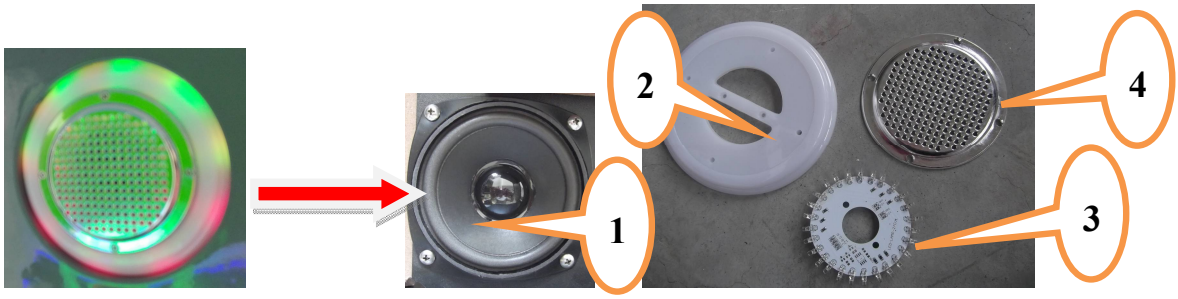
F. Wiring instruction:

1. Gray wire
   Red wire-DC+12V
2. White wire-COIN Signal

meter

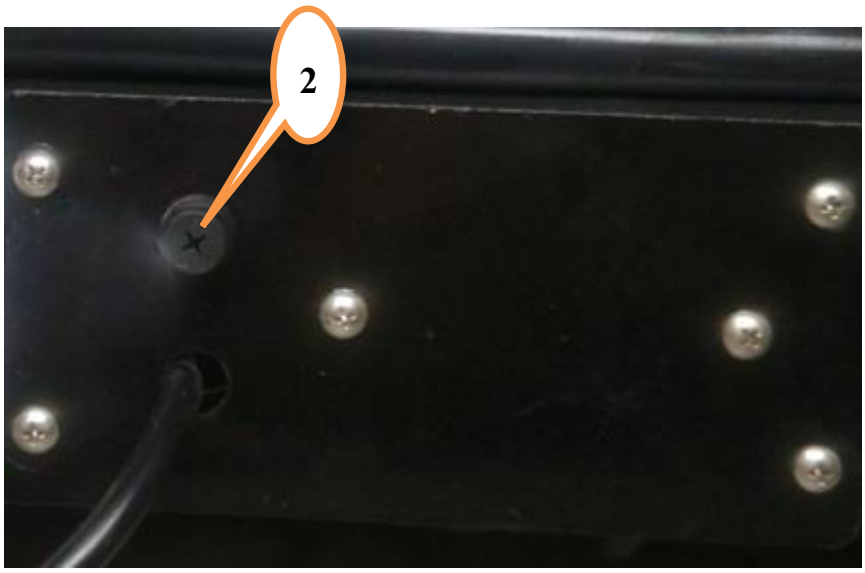
3. Black wire-ground wire
4. Gray wire

8-4 Speaker assembly



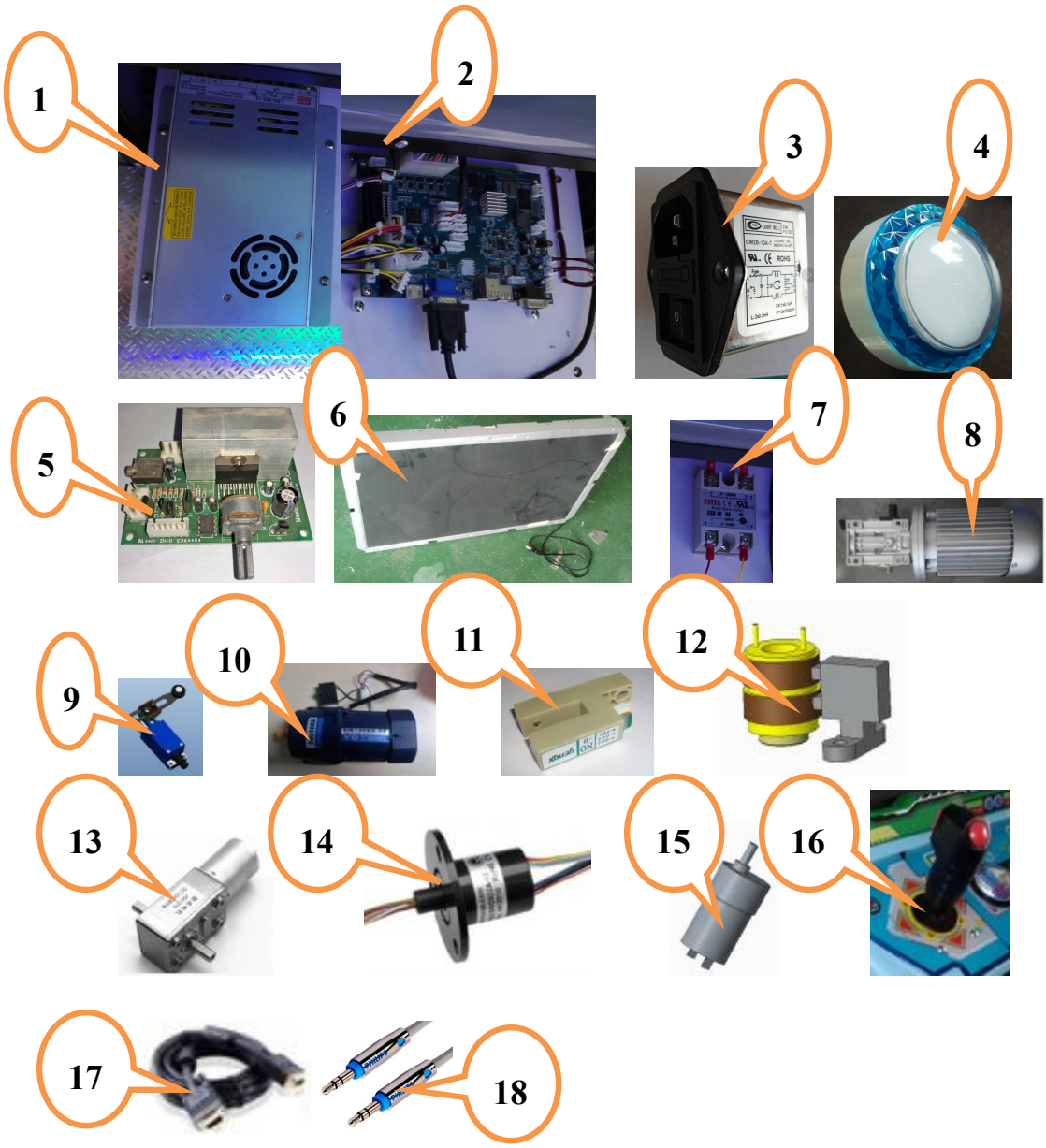
No	Item No.	Name	Spec/Material	Qty
1	1.42.0001	Round speaker	4 inch 8Ω15W	2
2		White plastic cover	Plastic	2
3	1.22.0018	Speaker light board	12V RGB	2
4		Speaker net	Silver	2

8-5 Fuse and power components



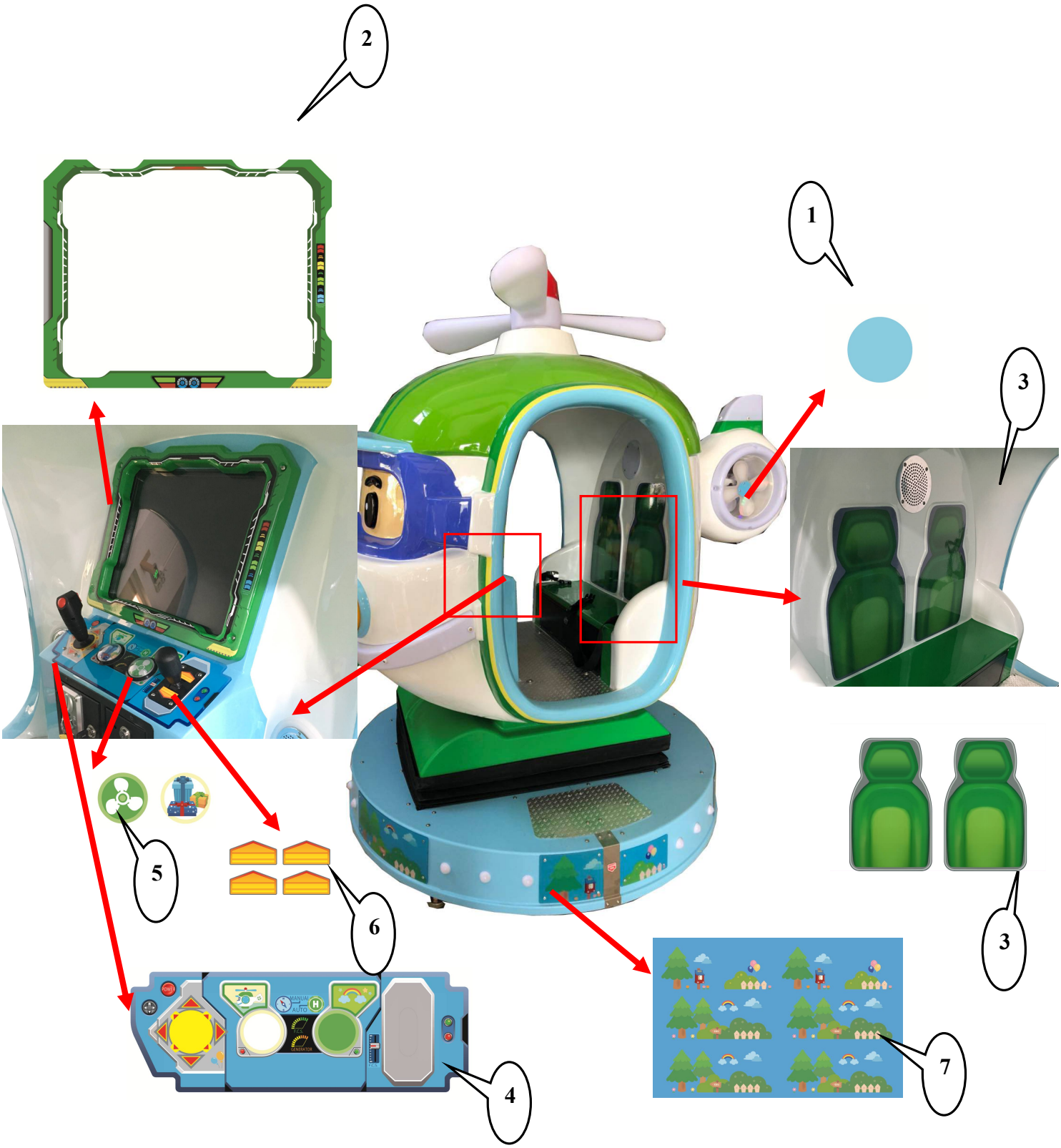
No	Item No.	Name	Spec/Material	Qty
1	1.26.0001	wire	6.3A	1

8-6 Electrical installation components

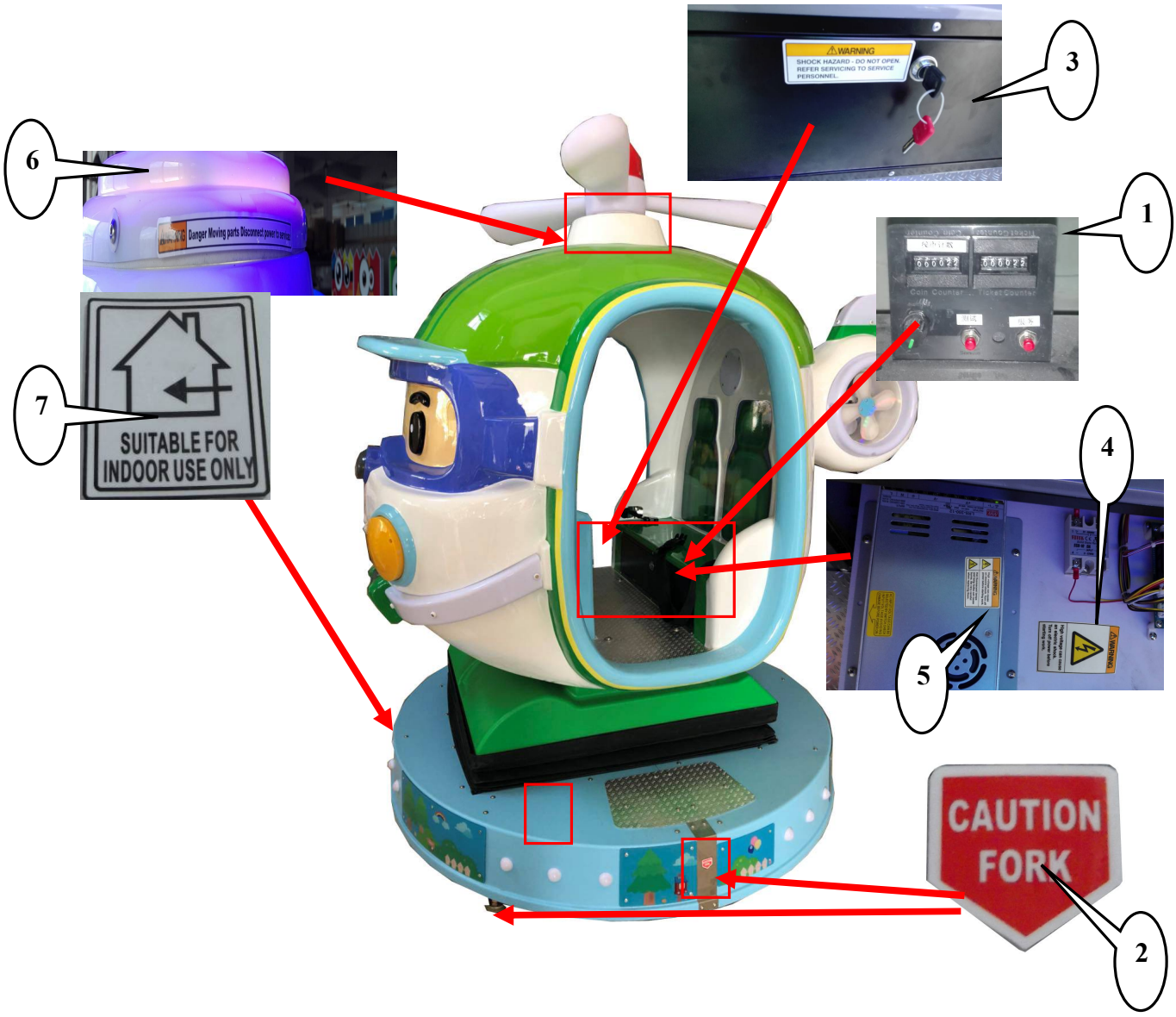


No.	Item No.	Name	Spec/Material	Qty	Unit
1		Power supply	12V 150W	1	PC
2		Main board	V03	1	PC
3		Triple filter	CW2B-10A-T	1	PC
4		Middle size button	Transparent ⌀54mm Convex	2	SETS
5		Amplifier board	Music amplifier.PCB V1.0	1	PC
6		Monitor	32 inch 90-250V	1	PC
7		Solid relay	SSR-10AD	1	PC
8		Motor	YL7124 0.37KW 220V 1400RPM 1:100	1	PC
9		Limit switch	AZ-8108	2	PCS
10		Motor	41K120GU-CF(120W220V1300RPM) -5GU100KB	1	PC
11		h-type sensor		3	PCS
12		Conductive ring	Φ15XΦ31X42	2	PCS
13		Dual output shaft motor	12V10RPM	1	PC
14		Conductive slip ring	MODEL:SNF-4P 4路10A	1	PC
15		Motor	38G12V20RPM shaft length 14mm	1	PC
16		Handle		1	PC
17		VGA cable	3m	1	PC
18		3.5 audio cable	1m	1	PC

8-7 Artwork

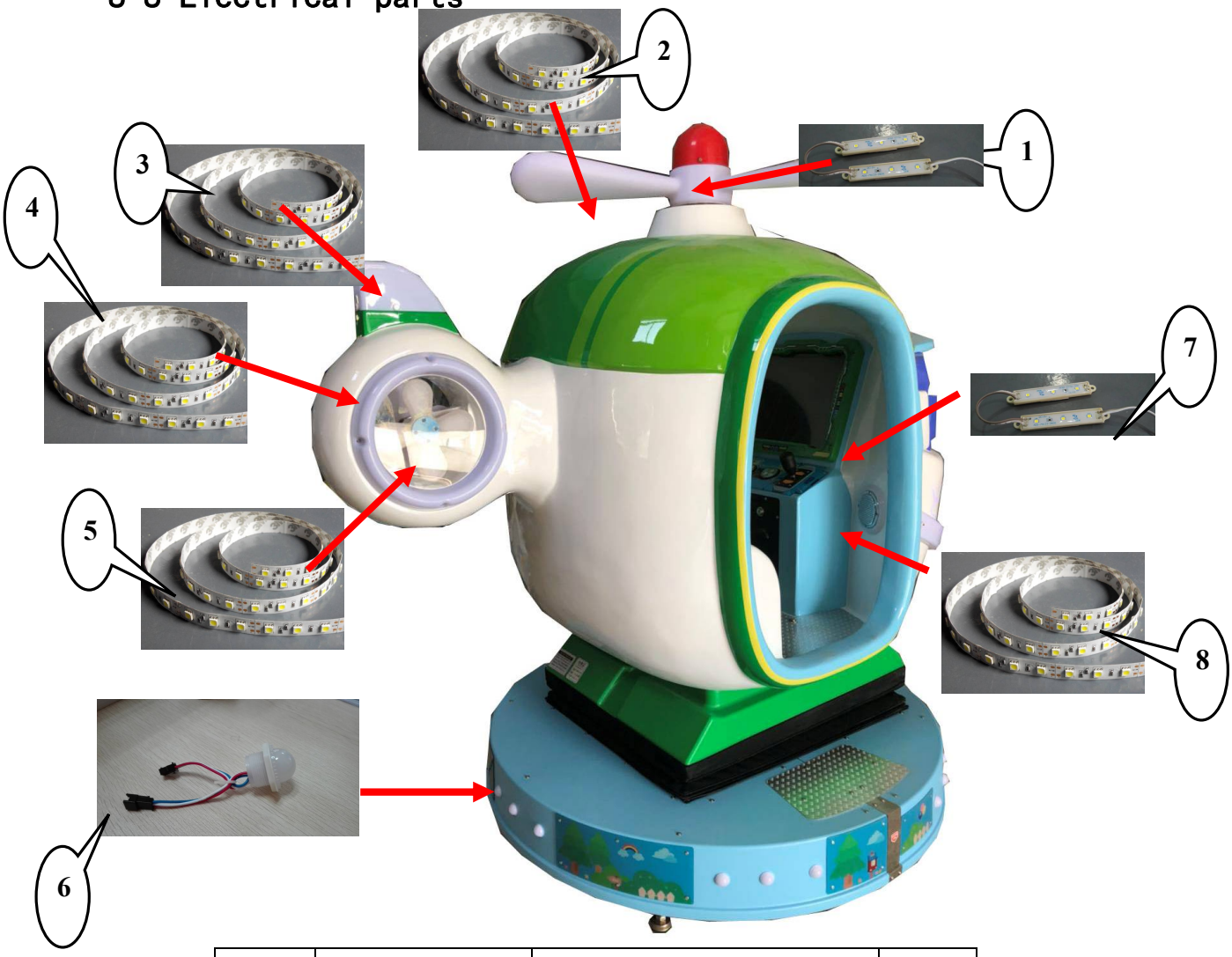


No.	Name	Spec/Material	Qty
1	Propeller	sticker	2
2	Monitor	sticker	1
3	Seat	sticker	1
4	Control panel	sticker	1
5	Button A	sticker	1
6	Button B	sticker	1
7	Sticker on base	Spray painting	1



No	Name	Spec/Material	Qty
1	Counter label	White sticker	1
2	Fork label	White sticker	4
3	Repair door label	White sticker	1
4	High voltage label	White sticker	1
5	High temp./voltage label	White sticker	1
6	Repair label	White sticker	2
7	Indoor use label	White sticker	1

8-8 Electrical parts



No	Name	Spec/Material	Qty
1	Dome lights of top propeller	ADS-75123-2835	3
2	Lights of top propeller	12V/5050 blue light 0.75m	2
3	Dome lights of tail propeller	12V/5050 blue light 0.15m	1
4	Frame light of tail propeller	12V/5050 blue light 1.0m	2
5	light of tail propeller	12V/1206 light belt green light Width 6mm Length 0.8m	2
6	Circle light	L-198 white 12V 3 lights	18
7	Headlights Large LED module	ADS-75123-2835	6
8	Microphone light	12V/5050 blue light 0.5m	2