



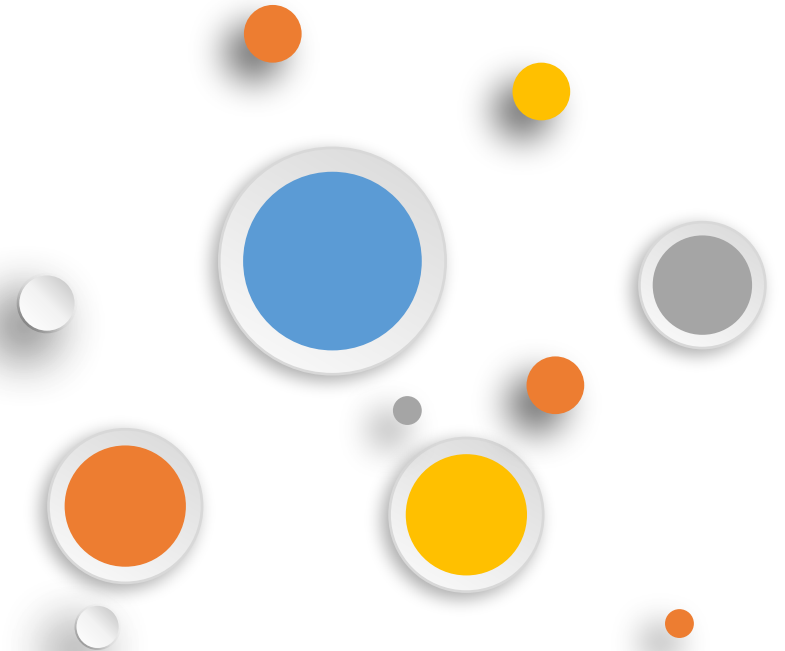
**EASEPAL**. 厦门蒙发利电子有限公司客户服务部

# EC-3622A massage chair service



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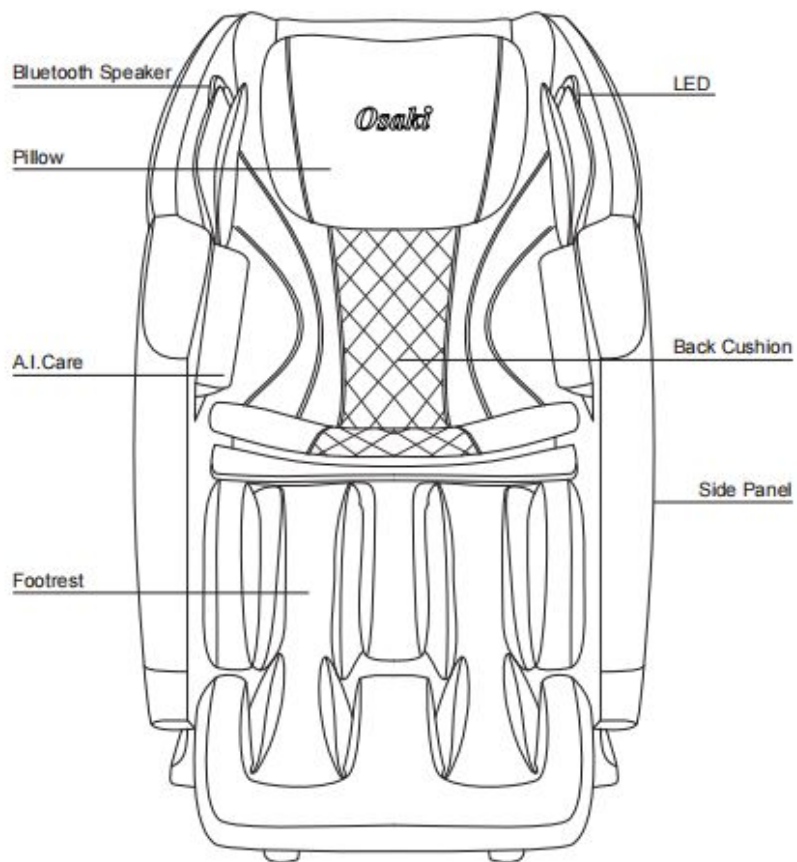




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## 1、Product Introduction





## 2、Massage chair tools and use

### 1.tools

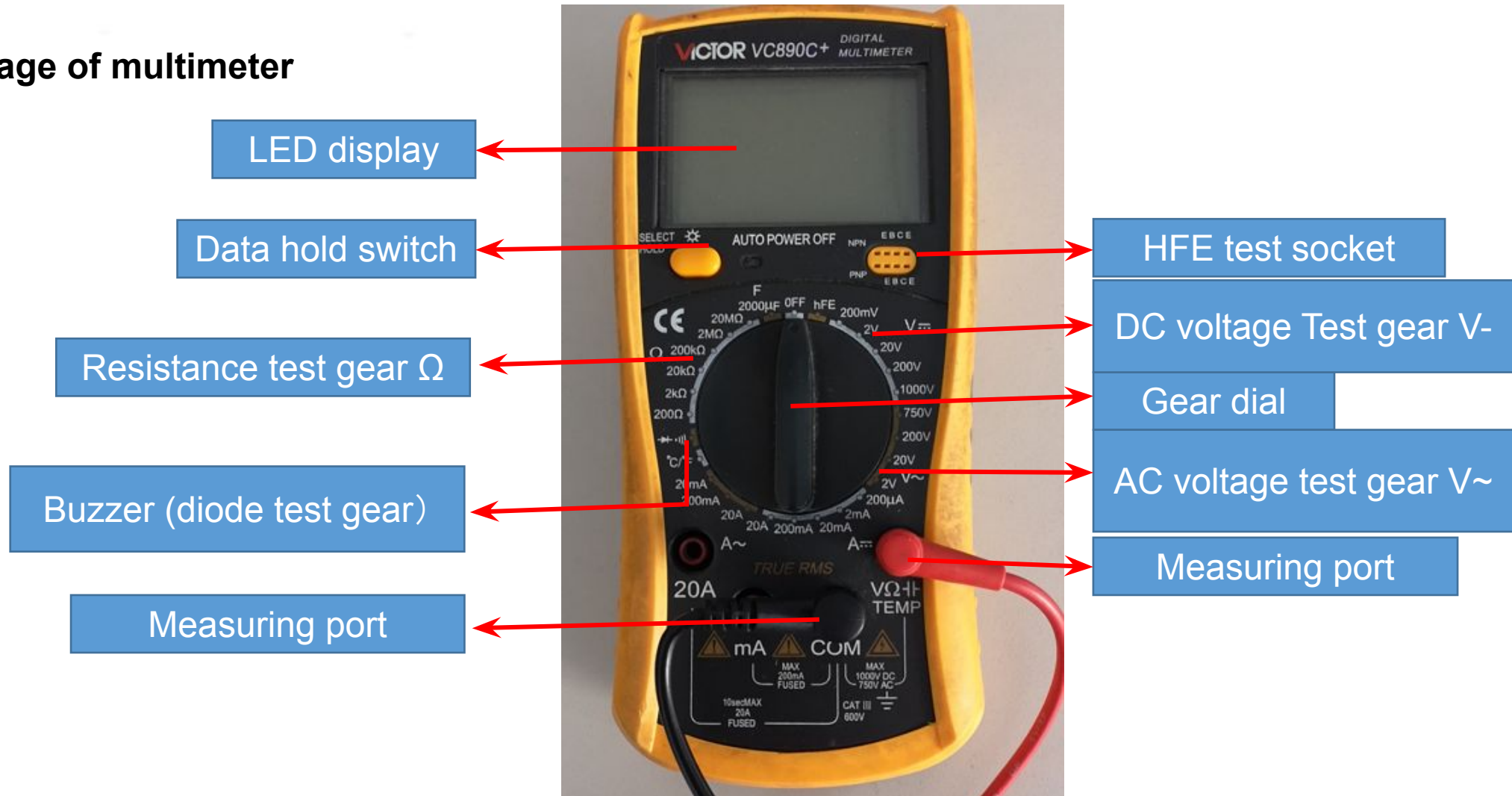
					
Screwdriver size 1,2,3	Diagonal cutter and long nose pliers	Soldering Kit	Spanner tools Kit	Test pen	Allen Key set
					
Ratchet Tools Set	24V/DC power	Electric Driver	electrical adhesive tape	Cable Ties	WIRE ONECTORS



## 1、Product Introduction

Description	Specifications
Model No.	OS-3D Aspire
Rated Voltage	110-120V~
Rated Frequency	60Hz
Rated current	0.83A
Timer	5/10/15/20/25/30 minutes
Dimension (L x W x H)	Product carton: 73" x 30.5" x 34.4"
Weight	Product gross weight: 217.2 lbs
	Product net weight: 184.1 lbs
Length of the wire	Controller wire: 59"
	Power supply wire: 71"
	Audio wire: 25,6"
Usage condition	Environment temperture: 50°F -104°F
	Contrasting humidity: 30-85RH
Storage condition	Storage temperature: 68°F - 140°F
	Storage humidity level: 30-85RH
Safety feature	Equipped with overheated and power surge safety protection.
Using benefits	Increasing blood circulation; Relieving muscular fatigue

## 2、Usage of multimeter





## 2.1、Function of the test gears

**Data hold switch** : Memorize the measured data for comparison。

**Buzzer (diode test gear)** : Measure the quality of diode, the on-off and alarm function of circuit

**Resistance gear test gear** : Measure the quality and value of resistance

**DC voltage Test gear V-** : Measure DC voltage

**AC voltage test gear V~** : Measure AC voltage

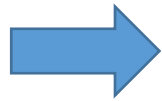
**VΩ / COM** : VΩ Red pen port (+ pole) during test, black pen port (- pole) during com test

**Note**: when carrying out resistance or voltage test, it is necessary to select a suitable range. If the range is too small to be measured, and the range is too large, the test error range is large; if the voltage is not known, it is necessary to select a range measurement with a large windlass.

## 2.2、On / off measurement of lines



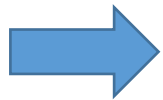
**open circuit**



As shown in the left picture, first set the multimeter to the buzzer and power it. When the switch is on, the multimeter will display "0."; then contact the two probes with the ends of the red wire. At this time, the multimeter still shows "1." there is no change, which means there is an open circuit in the middle of the wire, that is, the line is open.



**close circuit**



As shown in the picture on the left, if the multimeter shows the number of ". 002" or ". 00n" and gives an alarm, it means that the wire is connected.

### 2.3、Measurement of AC voltage



As shown in the picture above: measure the household plug-in board power supply (220V), select the range of 750, and the test result shows "224", indicating that the actual voltage of this group of sockets is 224v at the moment (the switch is pressed down, so there is power, and the light is on).



As shown in the above picture: measure the power supply (220V) of our household plug-in board, select the range of 750, and the test result is displayed as "001", indicating that the actual voltage of this group of sockets is 0V at the moment (the switch is not pressed down, so there is no power, and the light is not on).

## 2.4、DC voltage measurement



As shown in the picture above: the test result is "1.58", indicating that the voltage at both ends of the battery is 1.58v, and the red lead is connected to the "+" pole of the battery, and the black lead is connected to the "-" pole of the electromagnetic.

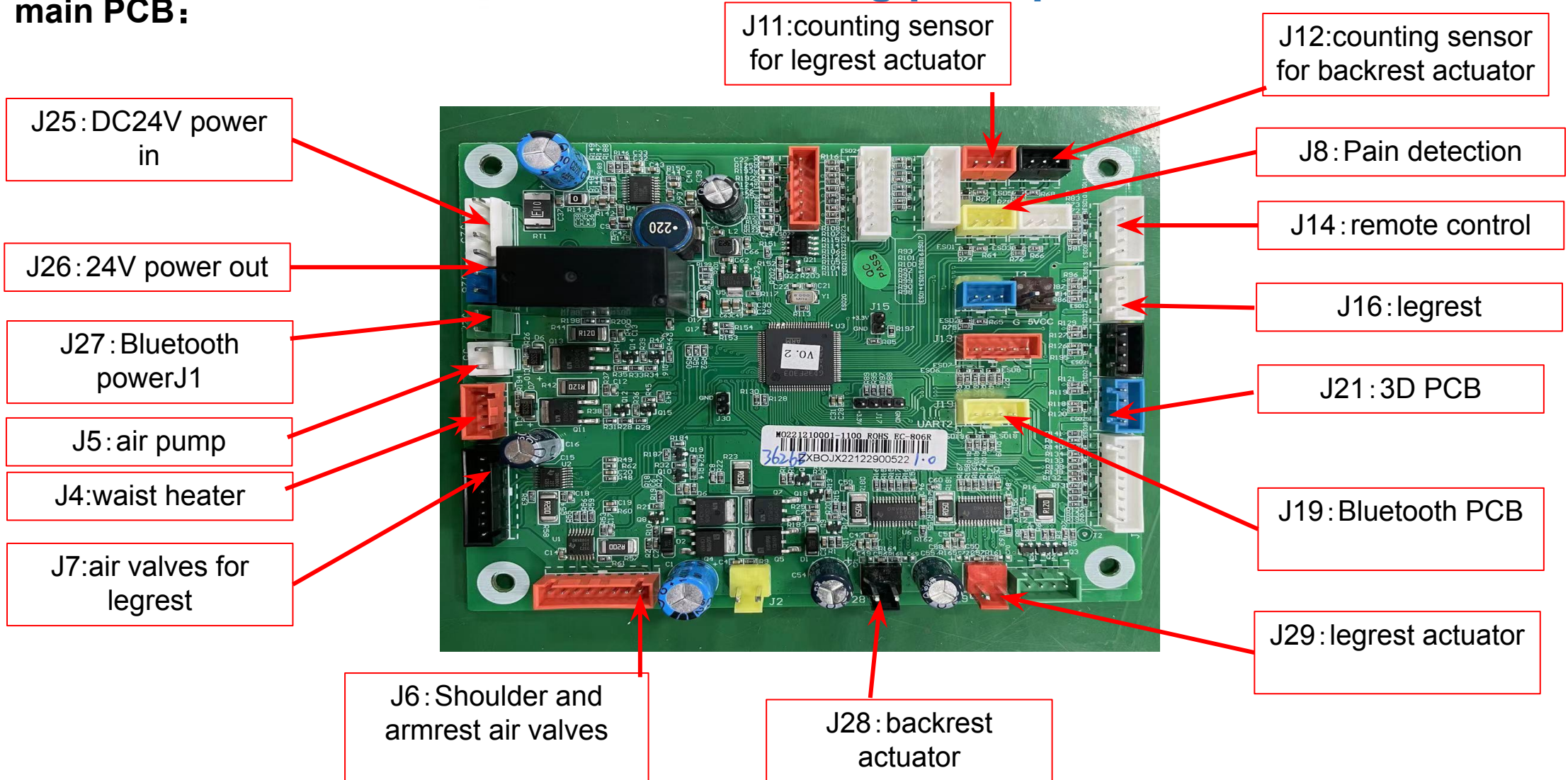


As shown in the above picture: the test result is "- 1.58", indicating that the voltage at both ends of the battery is 1.58v, and the red lead is connected to the "-" pole of the battery, and the black lead is connected to the "+" pole of the electromagnetic



### 3、Circuit working principle

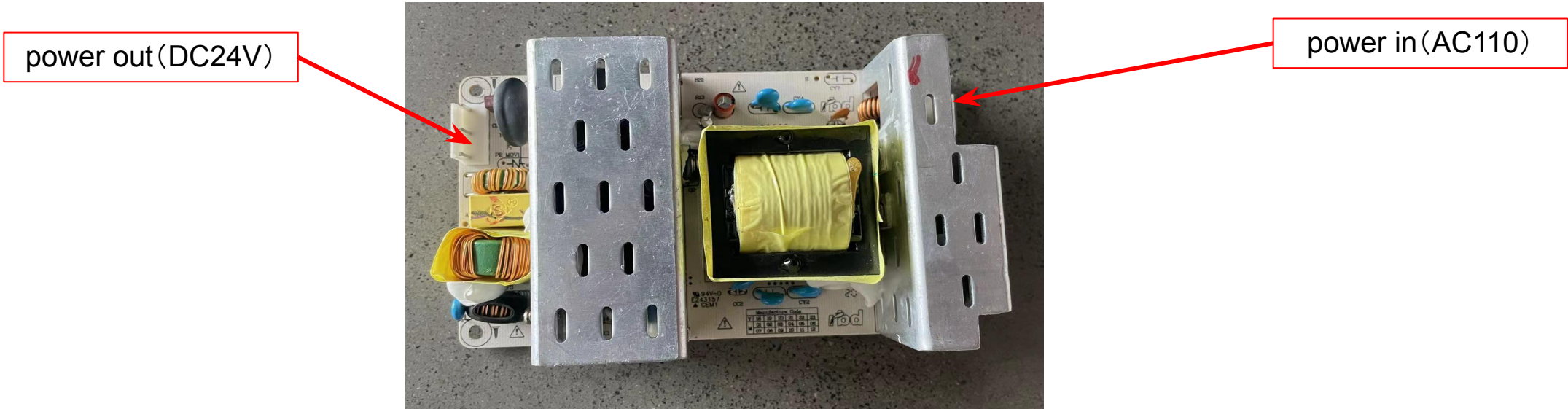
#### 1、main PCB:





### 3、Circuit working principle

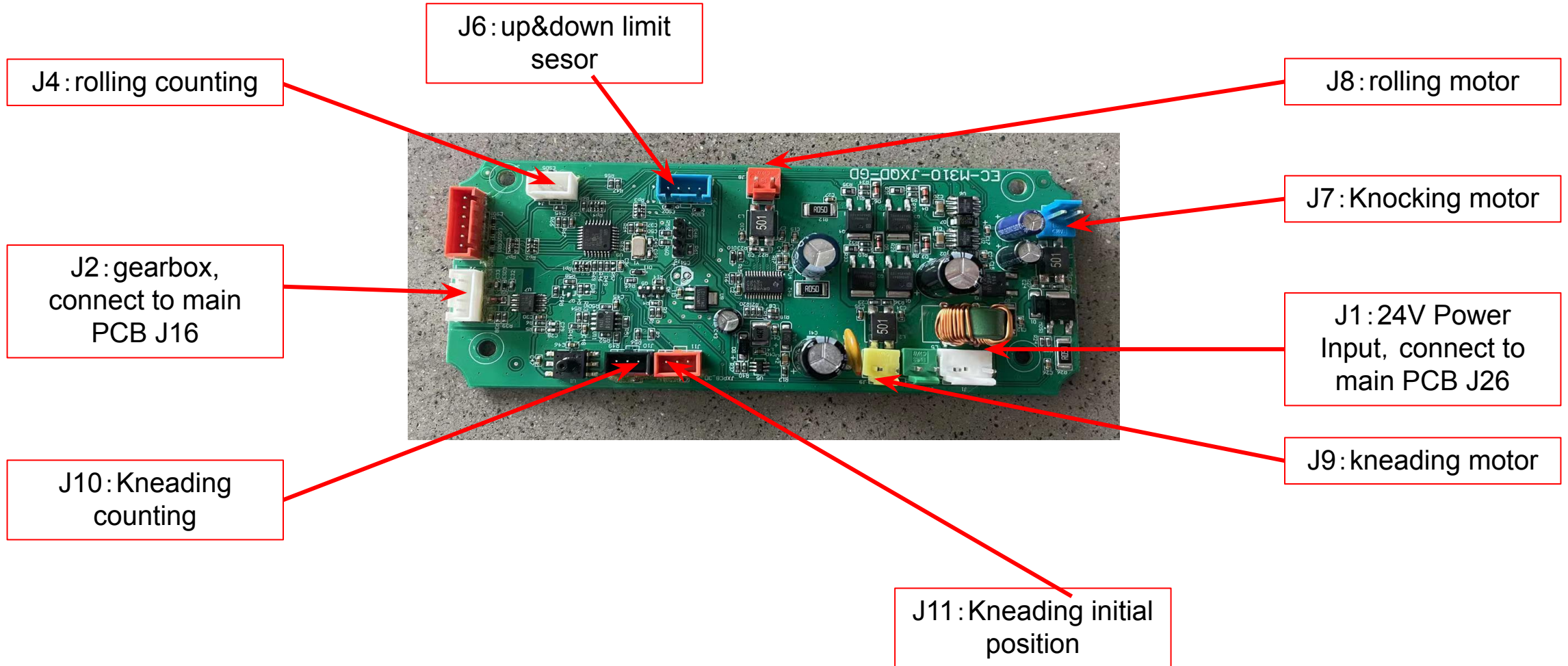
#### 2、power PCB:





### 3、Circuit working principle

#### 3、3D PCB:





## 4、Massage chair removal instructions

### 1.1、Internal structure diagram (overall)



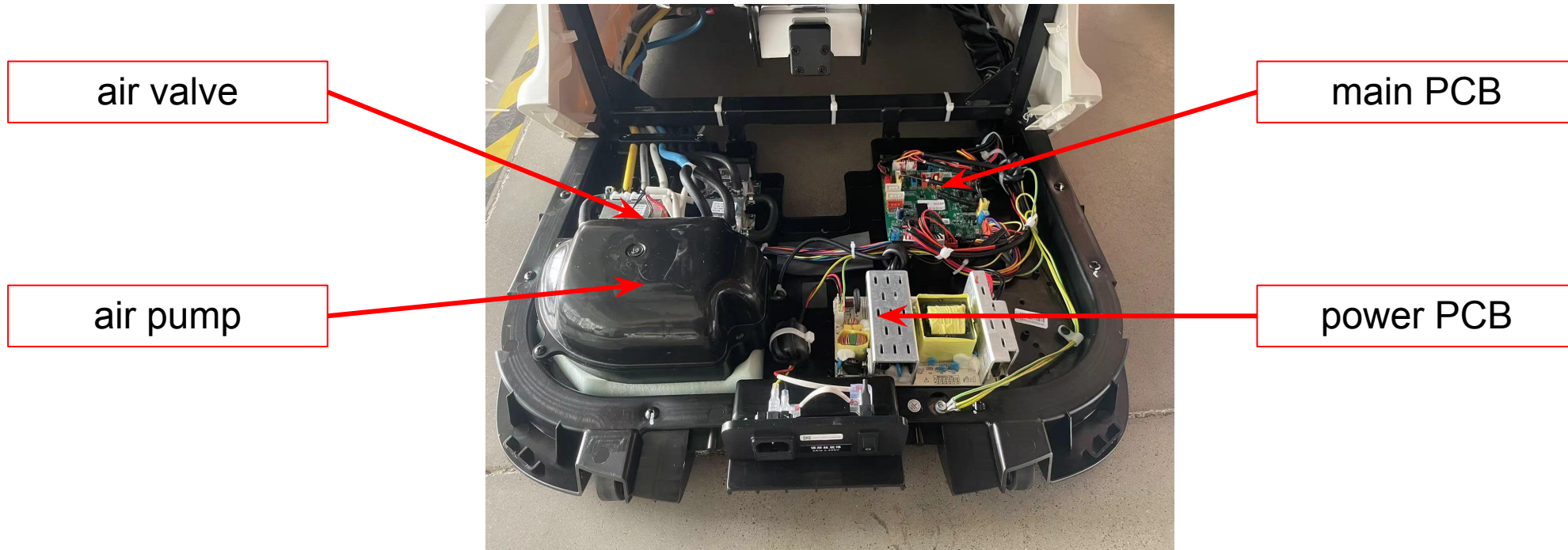
gearbox

main PCB box

backrest actuator

legrest actuator

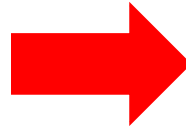
**1.2、Internal structure diagram  
(main PCB box) :**



### 3.1 Disassembly of the pillow:



unzip the zipper



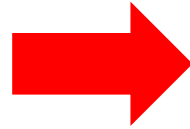
pillow



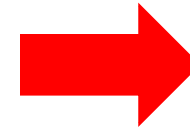
### 3.2 Disassembly of the backrest pad:



unzip the zipper



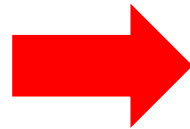
unzip the zipper



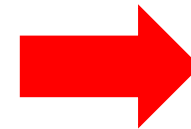
unzip the zipper



Cut off the buckle and disconnect the heating terminal



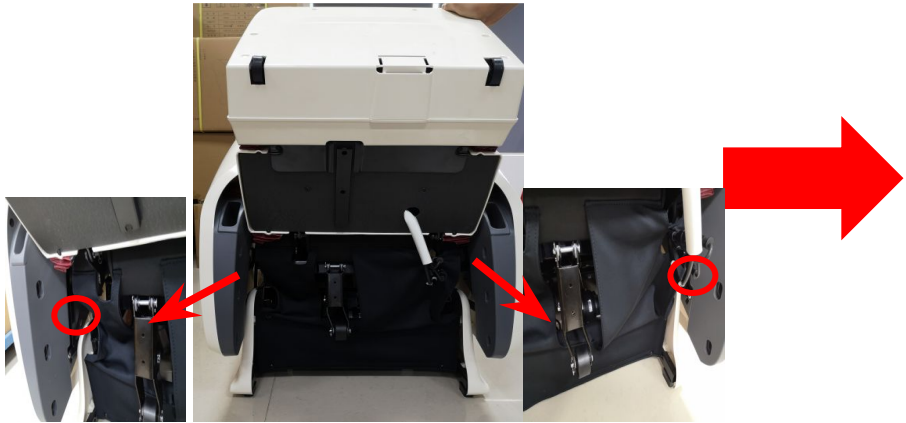
unzip the zipper



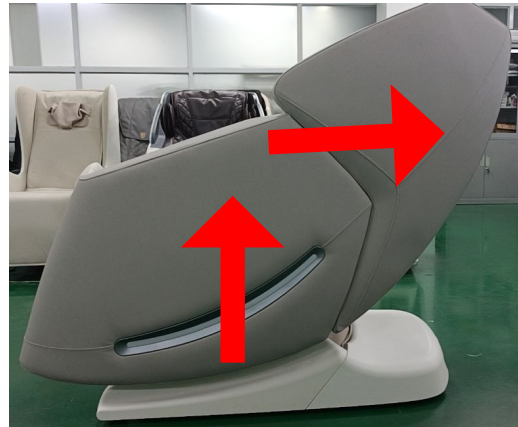
backrest pad



### 3.3 disassembly of the side panel:



Lift up the footrest and remove 2 screws



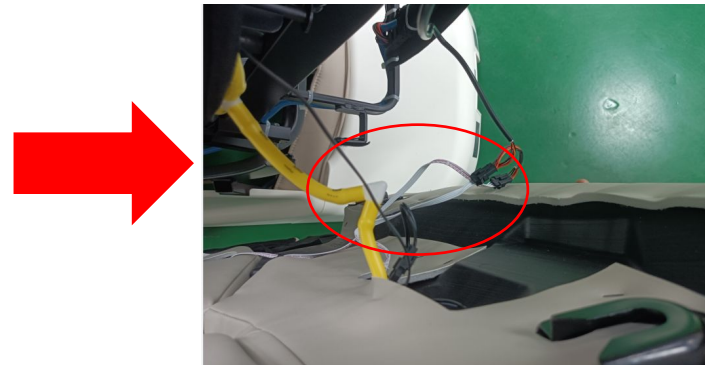
Lift up the side panel according to the arrow direction



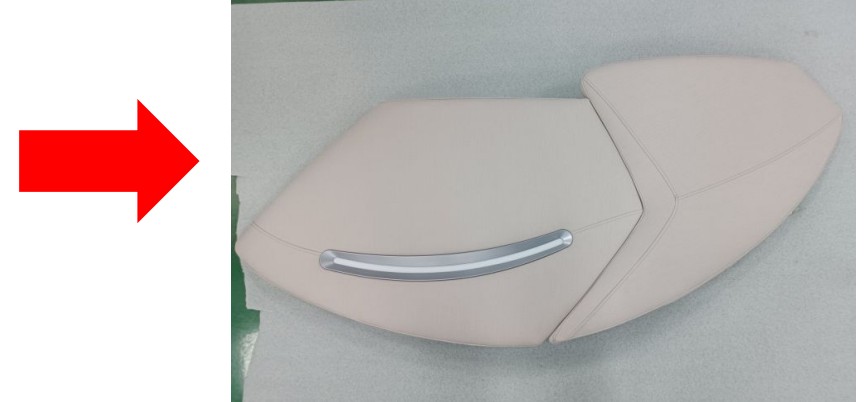
Disconnect the terminal and the gas hose connection.



remove 1 screws



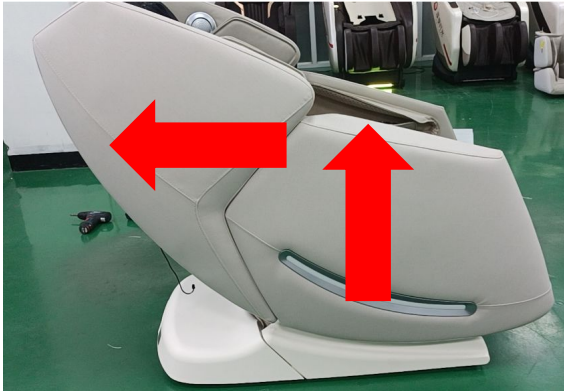
Disconnect the three terminals and the gas hose connection.



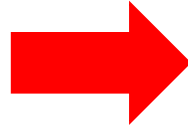
Left side Panel



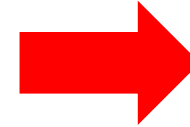
### 3.3 disassembly of the side panel:



Lift up the right side panel according to the arrow direction



Disconnect the shoulder terminal and gas hose



Disconnect the terminal and gas hose

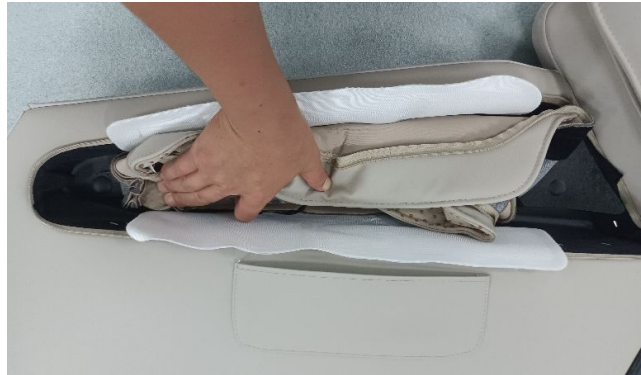
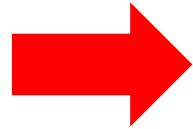


Right side Panel

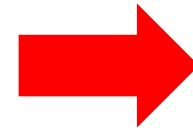
3.4 Inside view of the side panel assembly showing the removal instructions for the handrail cover and airbag. Dismantling of the right side panel components is demonstrated, consistent with the procedure for removing the left side panel components.



unzip the zipper



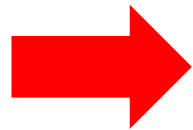
Lift the airbag and remove the fabric tab.



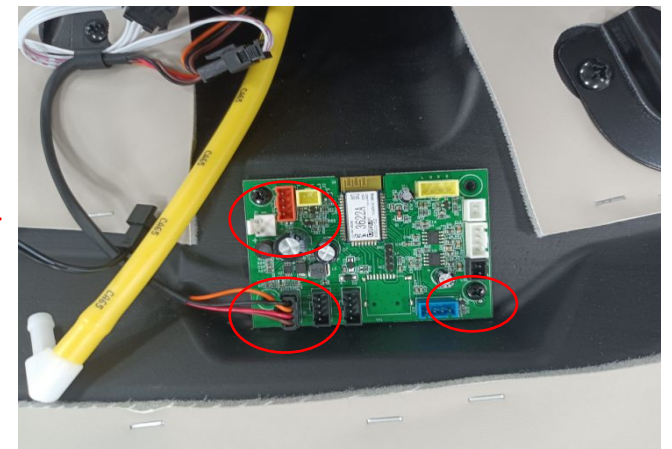
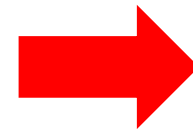
Remove 4 screws.



Cut off the buckle and pull out the air hose.



Arm airbag



Remove 2 screws and disconnect the terminal



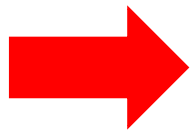
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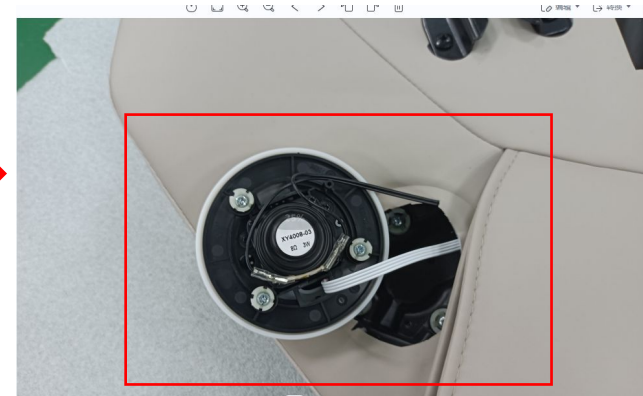
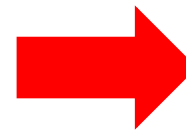
3.4 Inside view of the side panel assembly showing the removal instructions for the armrest cover and airbag. Dismantling of the right side panel components is demonstrated, consistent with the procedure for removing the left side panel components. The method for removing the armrest cover and speaker is the same.



Bluetooth PCB



Remove the speaker cover



Remove 4 screws and pull out 2 terminals.



speaker



Remove 3 screws



Replace the LED strip light.



3.4 Interior Disassembly Instructions for the Side Panel Assembly: Explanation of the Side Panel Controller and Side Panel Cover. Demonstration of the Left Side Panel Assembly, Right Side Panel Follows Similarly.



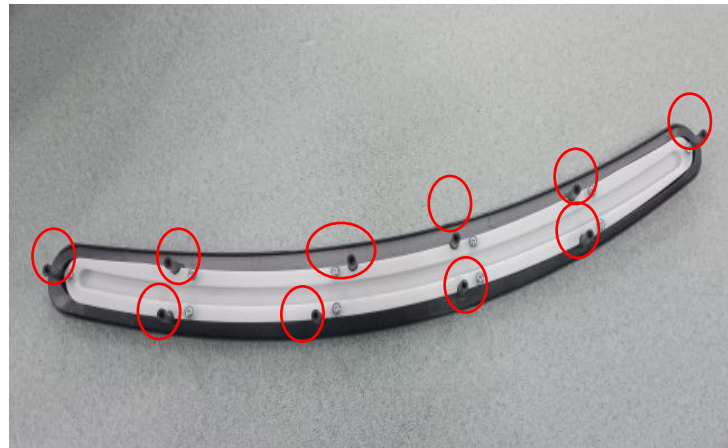
Remove 4 screws



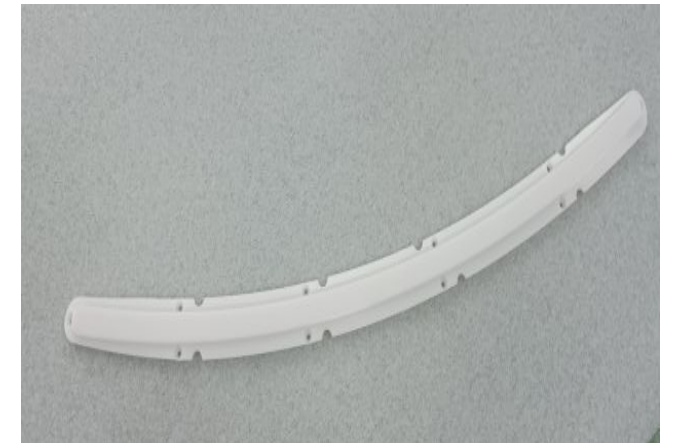
Remove 2 metal clips and uninstall the pain detection component



Remove 10 screws



Remove 10 screws



Translucent strip

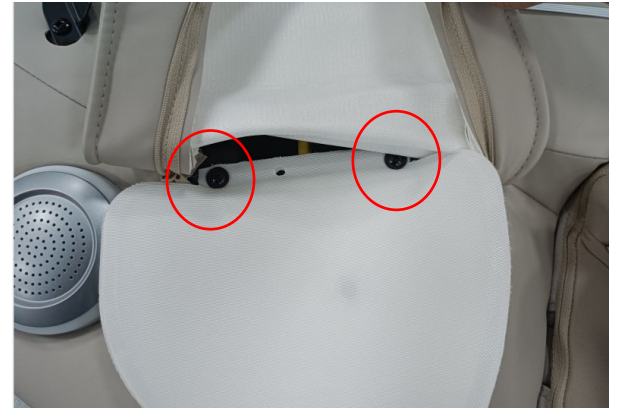
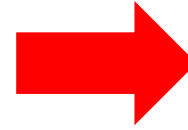
### 3.5 Left and right shoulder airbag removal instructions :



unzip the zipper



Clip the buckle



Remove 2 screws



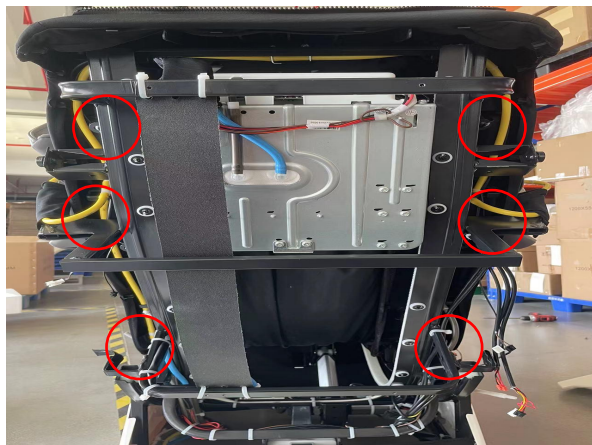
shoulder airbag



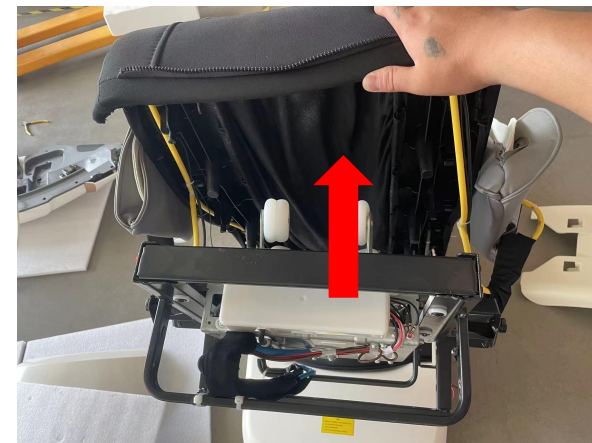
### 3.6 gearbox disassembly instructions:



Remove 4 screws



Remove 6 screws



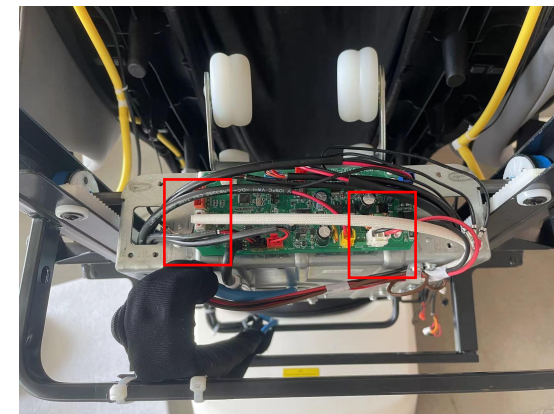
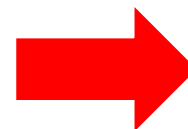
Push the front backrest forward to a certain angle to ensure enough space to remove the movement.



Remove 3 screws on the right and 2 screws on the left



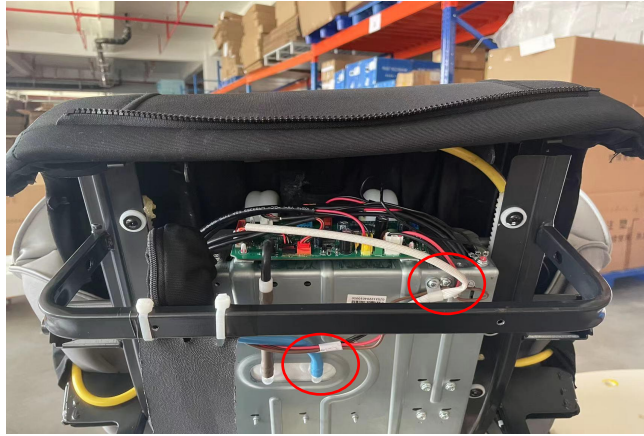
Remove 4 screws



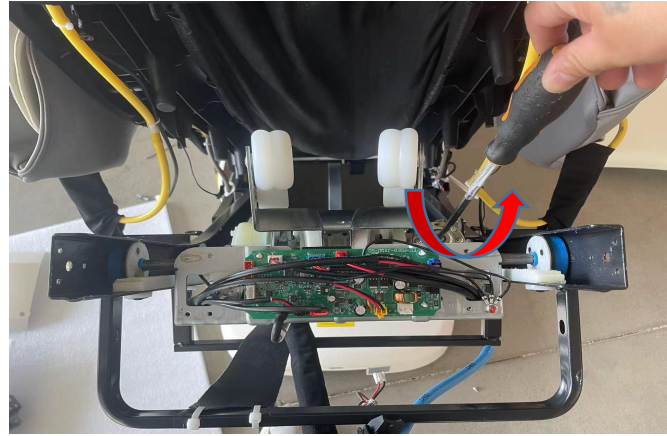
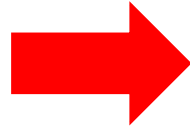
Pull out 2 terminals.



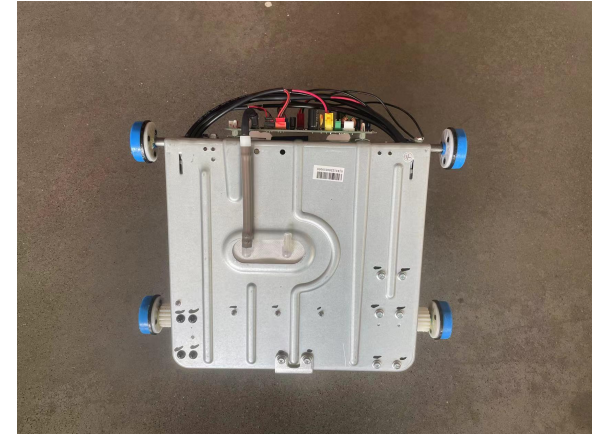
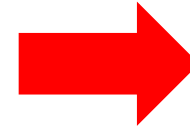
### 3.6 gearbox disassembly instructions :



Remove 2 grounding screws and pull out 1 air hose.



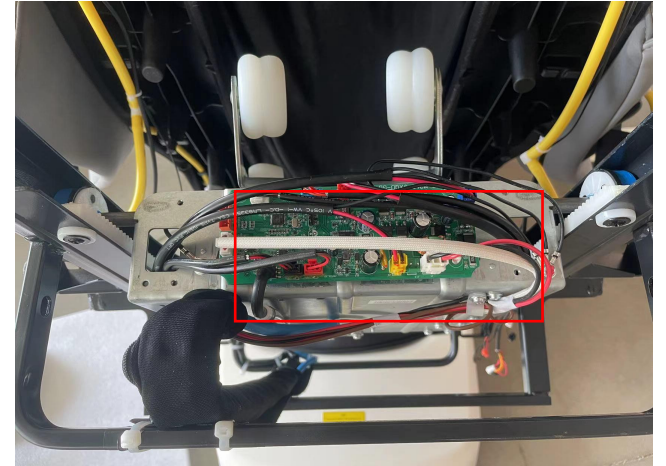
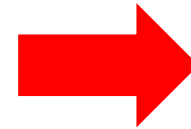
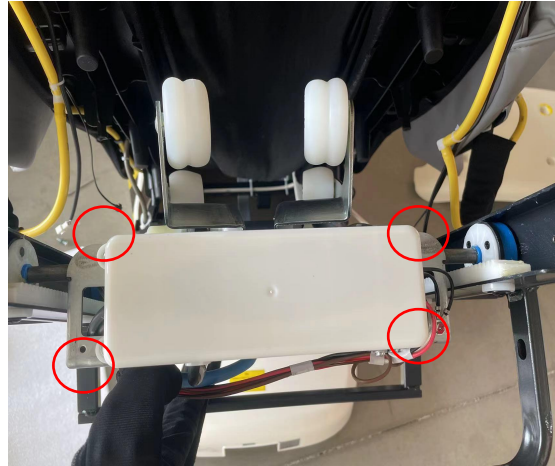
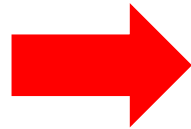
Use a flat-head screwdriver and turn counterclockwise to unscrew.



gearbox



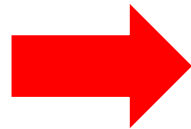
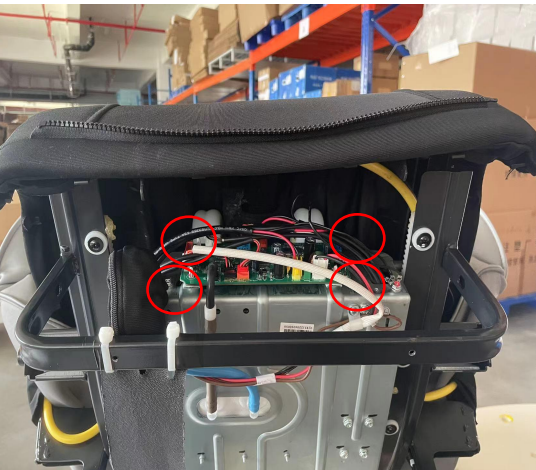
### 3.7 3D PCB disassembly instructions



Remove 4 screws

Remove 4 screws

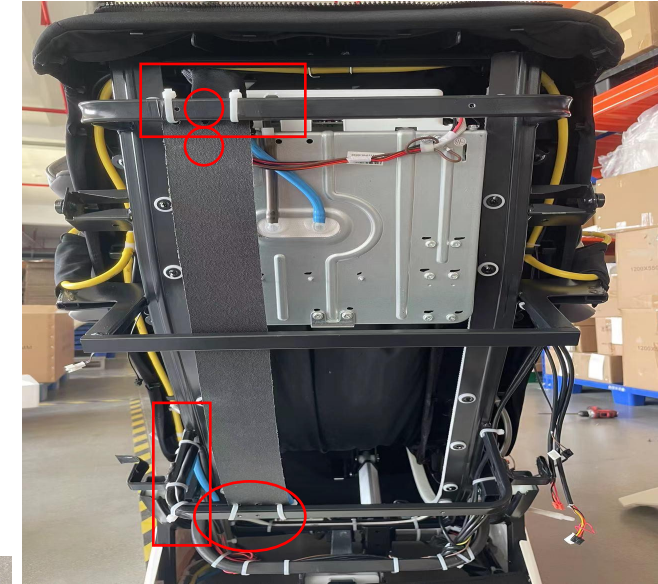
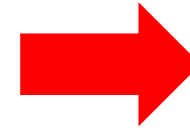
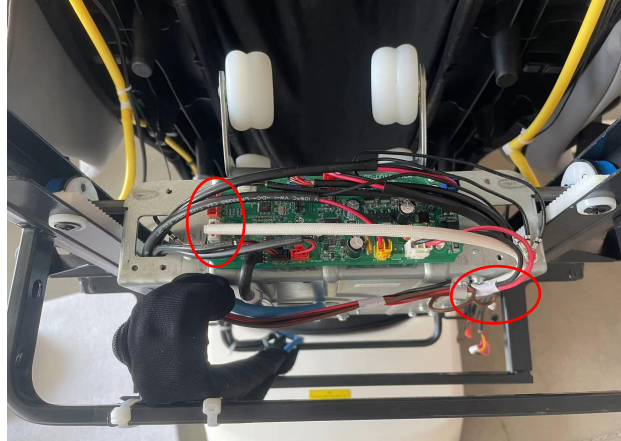
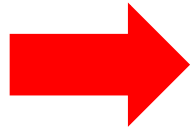
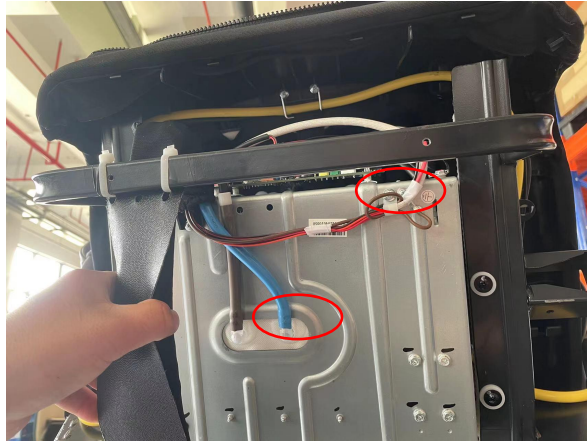
Pull out all terminals on the 3D PCB.



Pull out 4 PCB fasteners

3D PCB

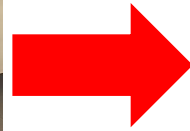
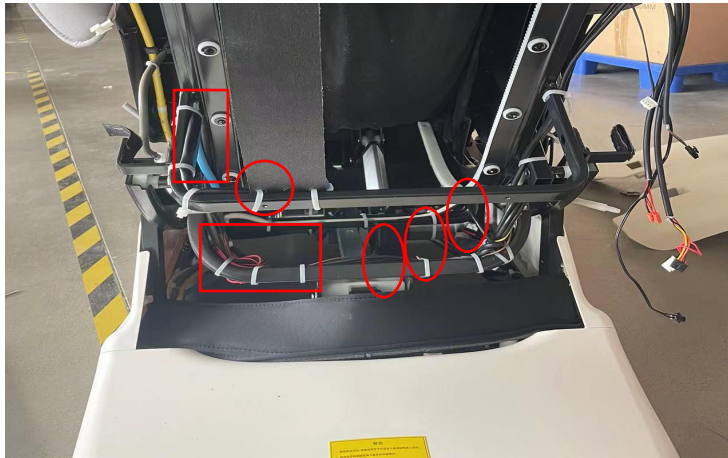
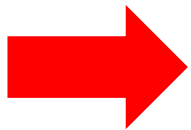
**3.8 Backrest core wire disassembly instructions: You need to first disassemble the plastic cover on the back, Refer to section 3.6**



Remove 2 grounding screws and pull out 1 air hose.

Pull out 2 terminals

Cut the buckle at the marked position and remove the 2 screws



Remove the screw, pull out the terminal, and cut off the buckle.

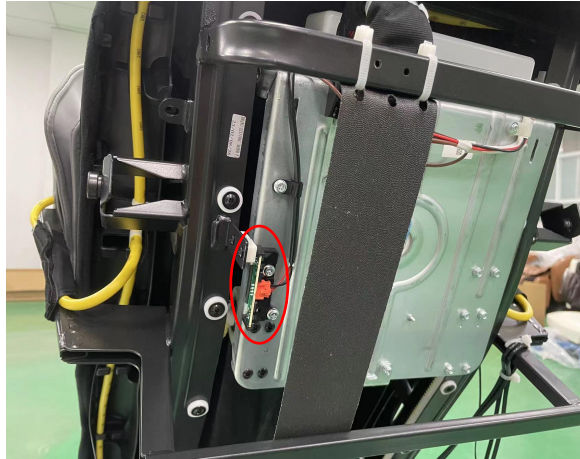
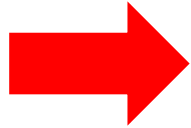
Backrest core wire



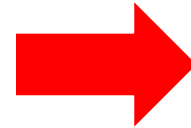
### 3.9 Sensor - Up/Down disassembly instructions :



Remove 4 screws



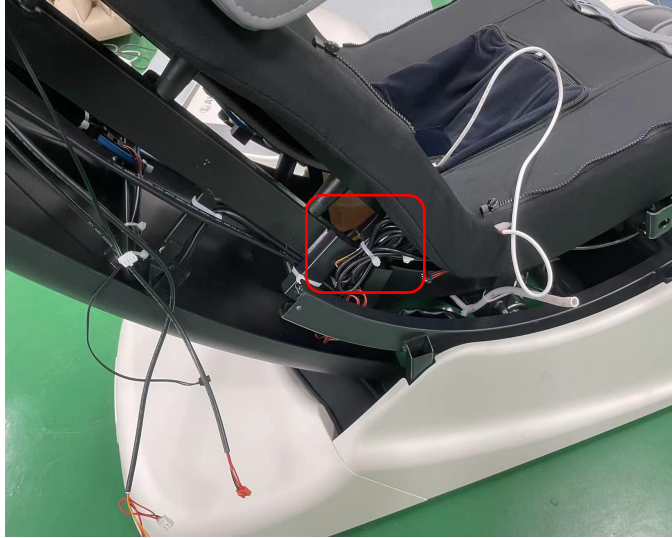
Remove 2 screws and pull out 1 terminal



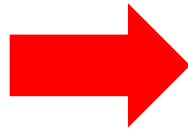
Sensor - Up/Down



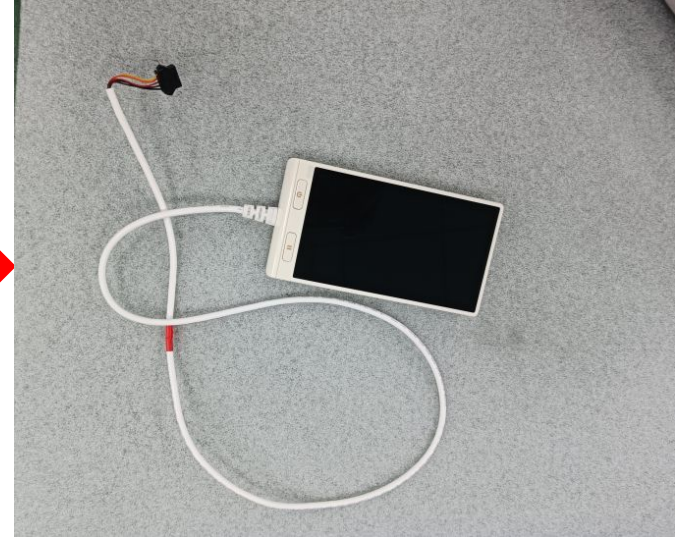
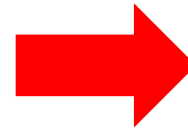
**4.0 remote controller disassembly instructions:** Refer to section 3.3, disassembly instructions for the right side panel



Cut off the buckle

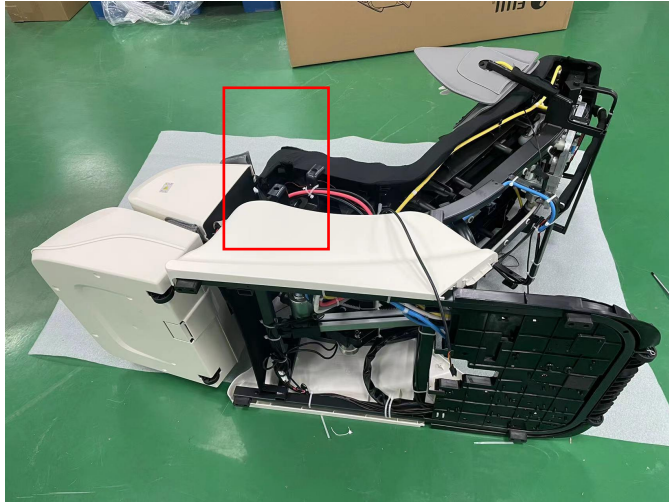


Pull out the terminal

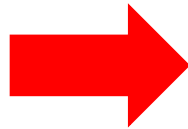


remote controller

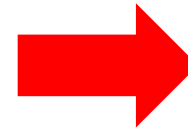
**4.1 Heartbeat detection PCB disassembly instructions**: Refer to section 3.3, disassembly instructions for the right side panel and Back plastic cover



Turn over the massage chair to the side



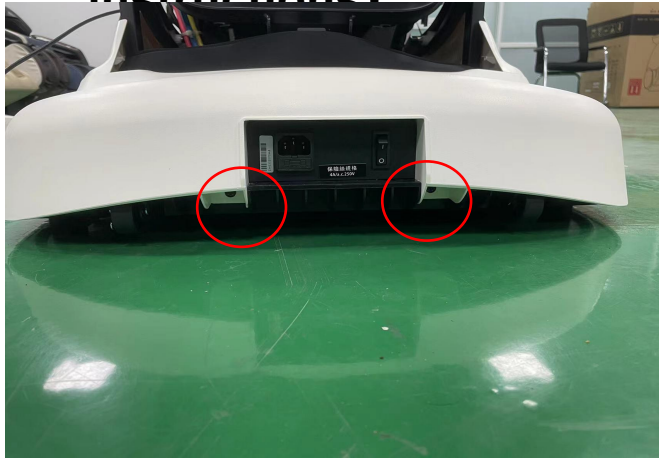
Remove 4 screws and pull out the terminal.



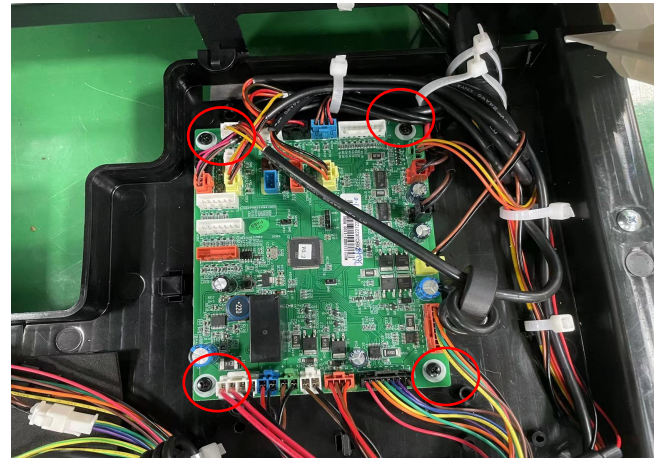
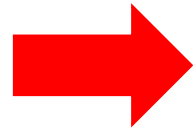
Heartbeat detection PCB



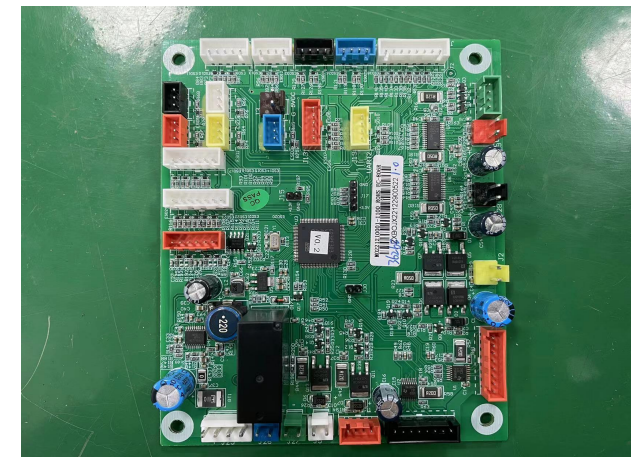
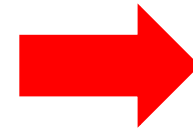
### 4.1 main PCB box disassembly instructions



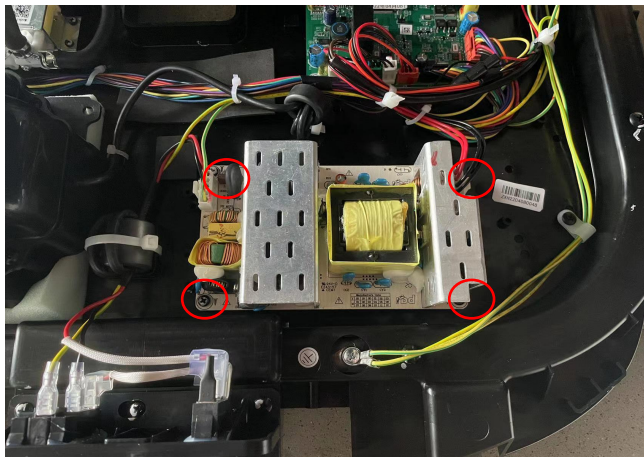
Remove 2 screws



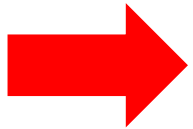
Pull out all terminals and remove 4 screws



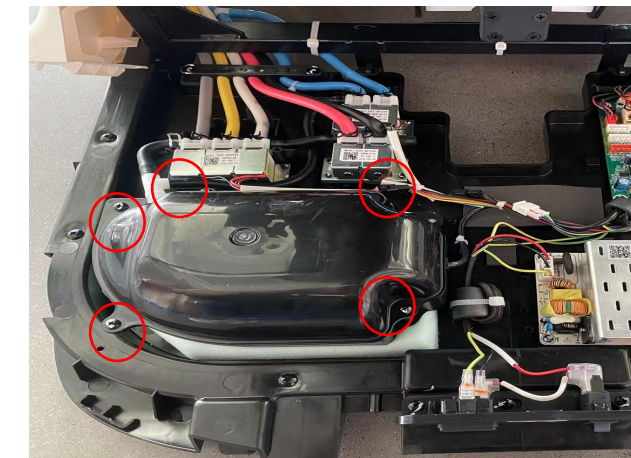
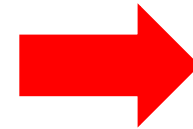
main PCB



Pull out 2 terminals and remove 4 screws

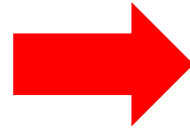
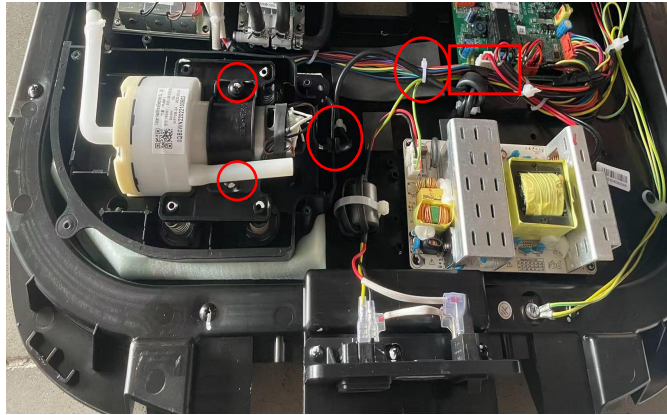


power PCB

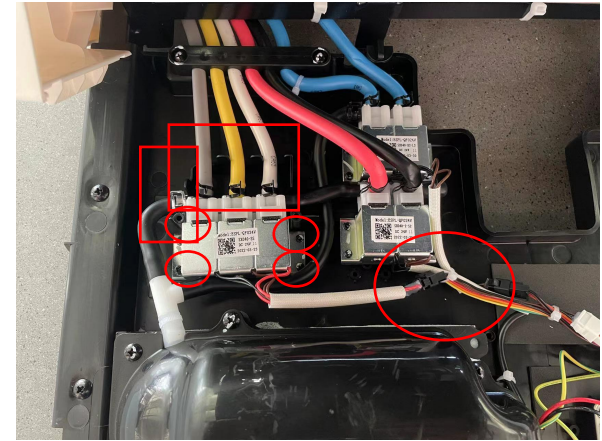
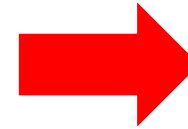


Remove 5 screws

### 4.1 main PCB box disassembly instructions



air pump

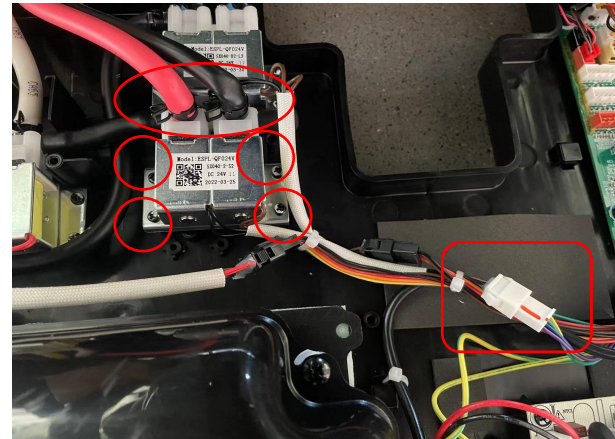
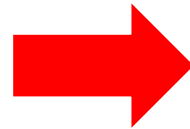


Pull out 4 air pipes and 1 terminal, and remove 4 screws

Remove 2 screws, cut off the buckle at the marked position, and pull out 1 terminal



3-way valve



Pull out 2 air pipes, cut off the buckle, pull out 1 terminal, and remove 4 screws.



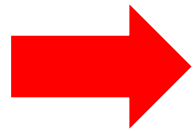
2-way valve



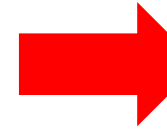
### 4.2 Legrest disassembly instructions:



unzip the zipper



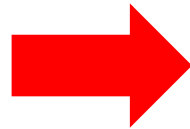
Remove two limiters



Follow the direction of the arrow to remove the legrest



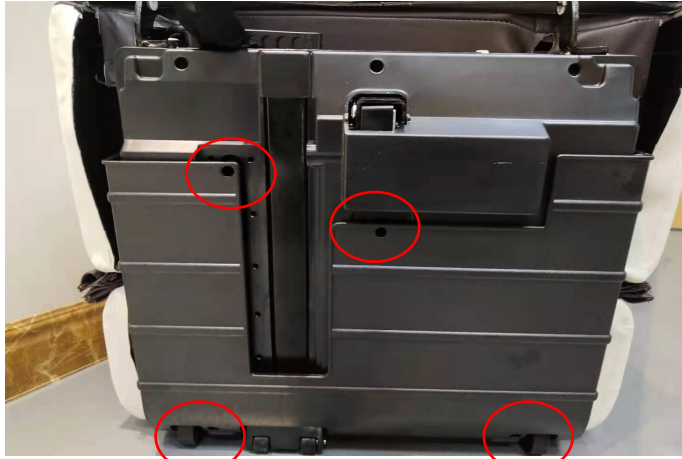
Cut off the buckle, pull out the terminal and air pipe.



Legrest



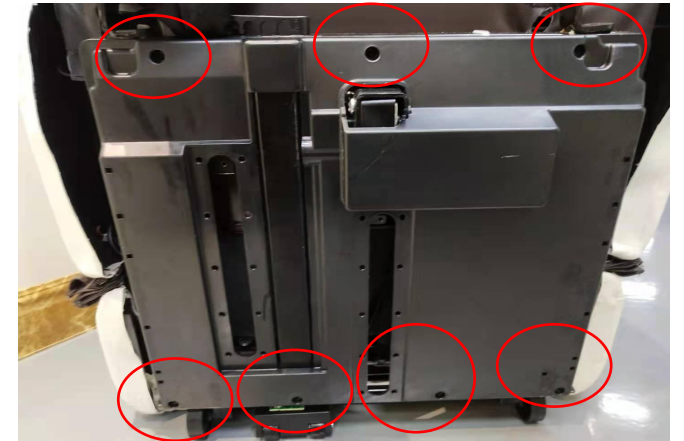
### 3.18 Upper legrest disassembly instructions:



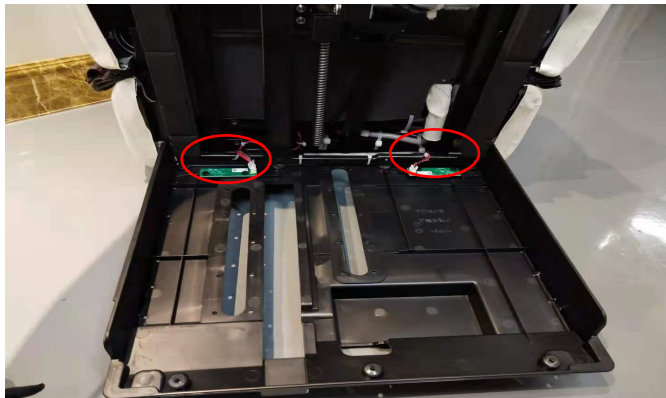
A.Remove 4 screws



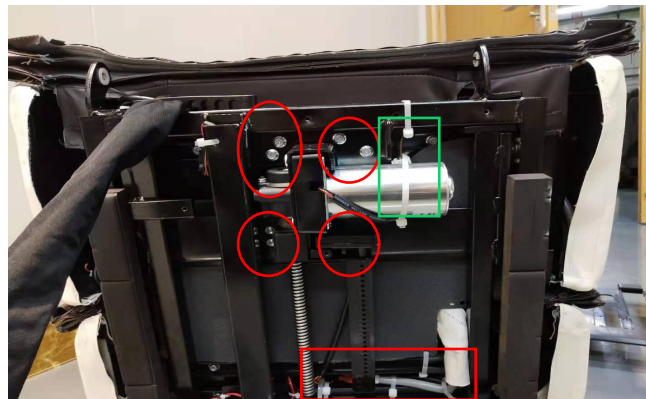
B.Remove the plastic shield on the rear of the legrest



C.Remove 7 screws



D.remove the second plastic cover and remove 2 terminals

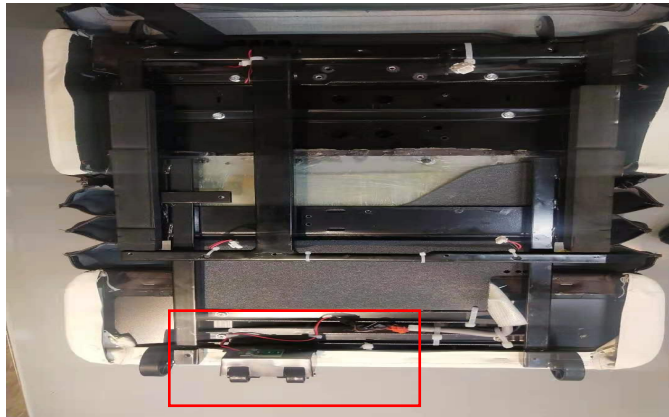


E.Remove 7 screws, cut off the buckle, pull out the terminal

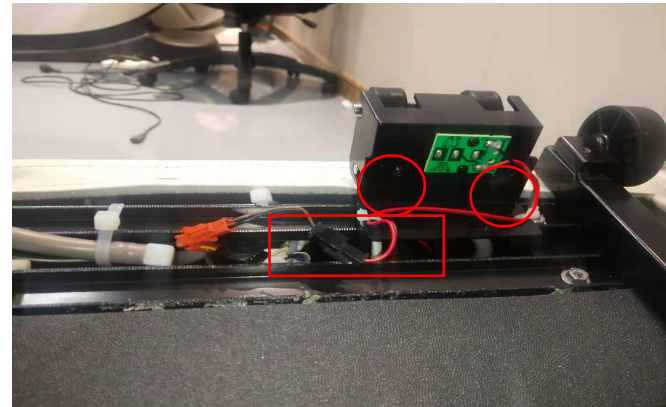


F.Footrest stretch actuator and counter

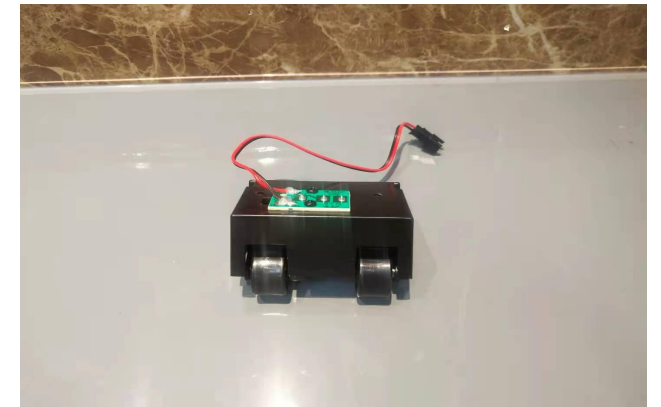
**3.18 Upper legrest disassembly instructions:**



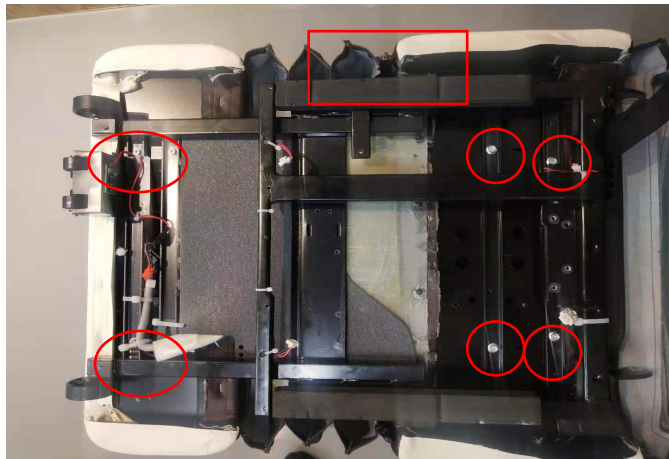
G.touch ground sensor unit



H.Remove 2 screws, cut off the buckle, and pull out the terminal



I.touch ground sensor unit



J.Remove 8 screws,unzip the zipper



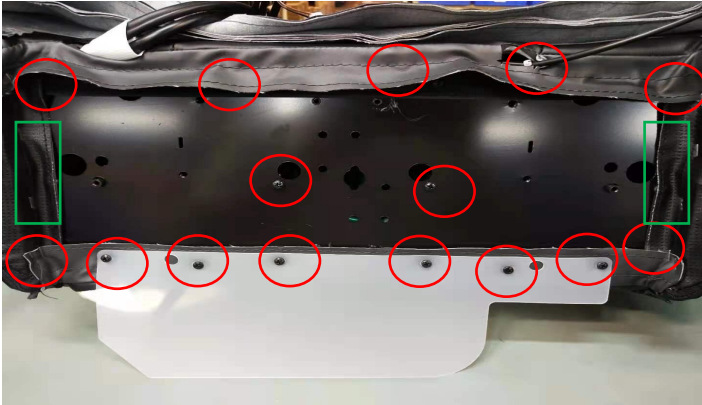
K.legrest iron frame assembly



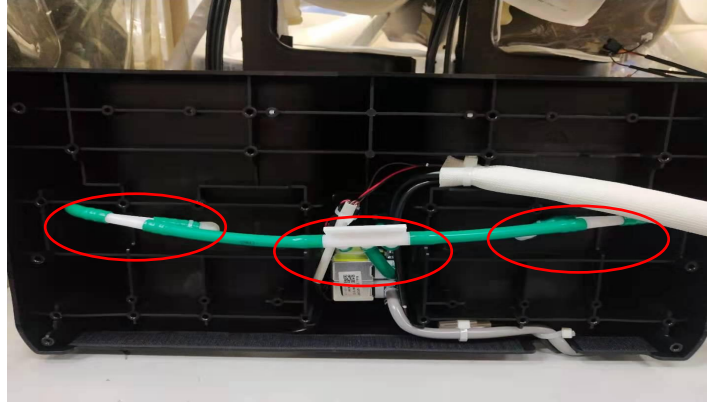
L.Upper legrest



3.18 Upper legrest disassembly instructions:



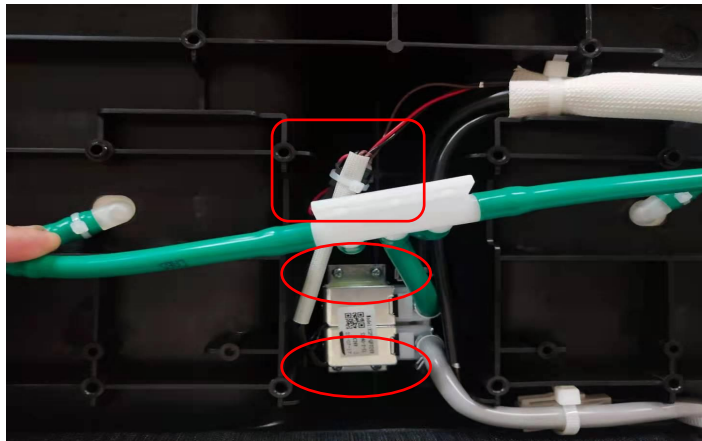
M.Remove 16 screws and pry open the U-shaped nails on both sides



N.Cut off the buckle and pull out the air pipe



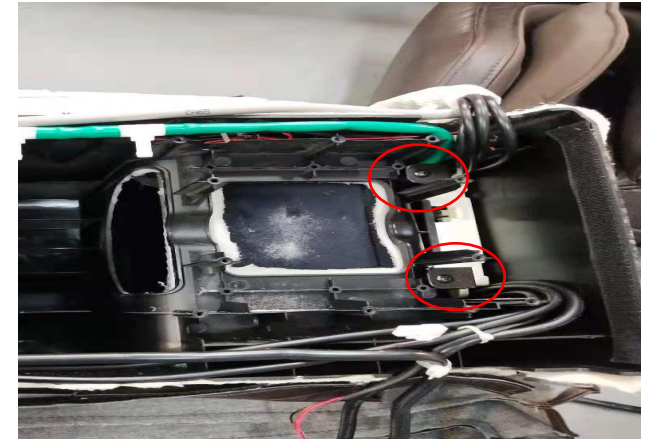
O.Upper legrest air bags



P.Remove 4 screws, cut off the buckle and pull out the terminal

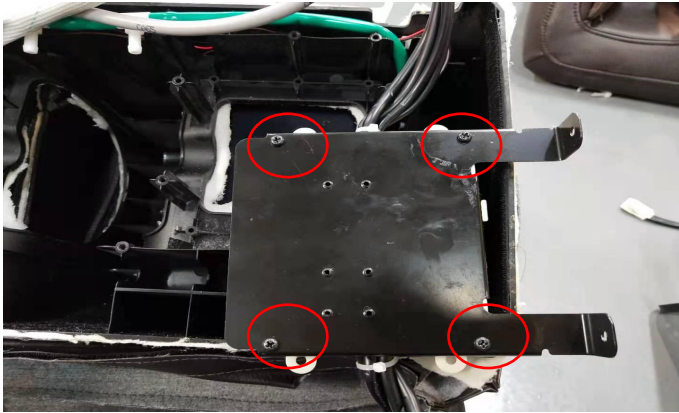


Q.2-way valve

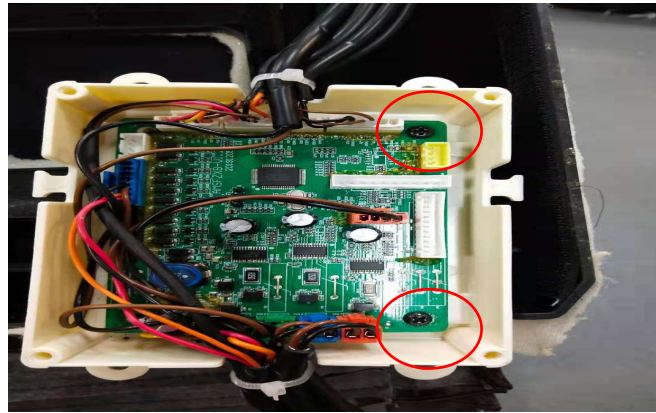


R.Remove 2 screws

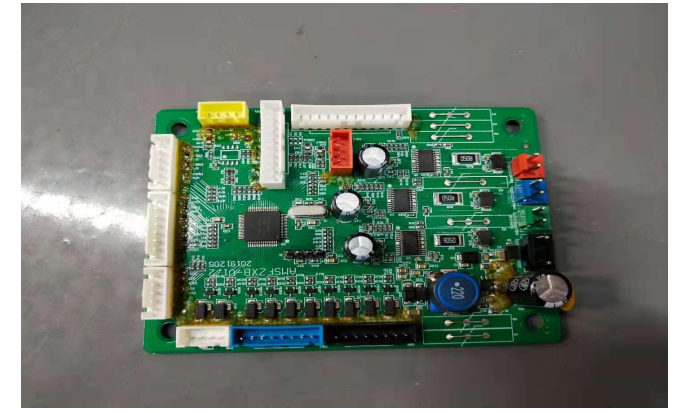
### 3.18 Upper legrest disassembly instructions:



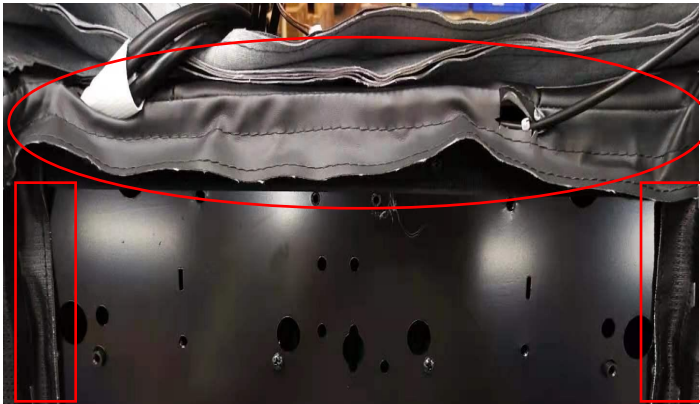
S.Remove 4 screws



T.Remove 2 screws, pull out all terminals



U.legrest PCB



V.Pull off the leather cover and pry open the U-shaped nails on both sides



W.Upper legrest cover



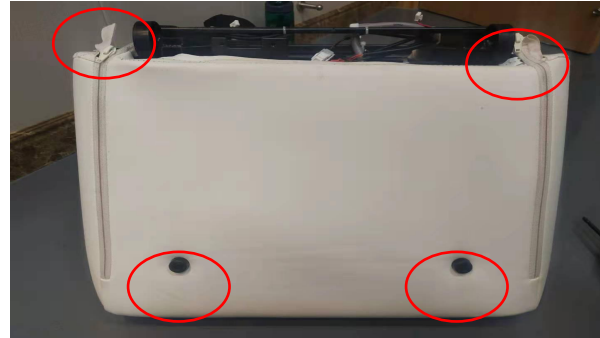
X.Upper legrest frame



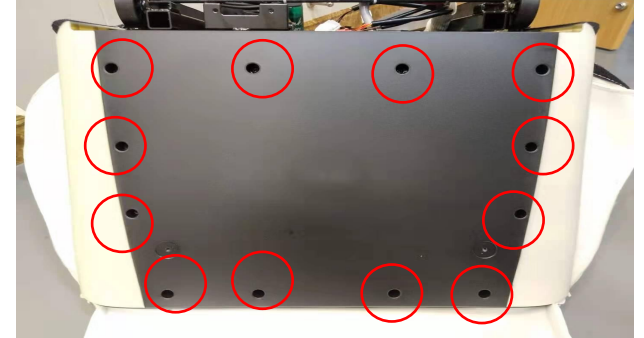
### 3.19 Lower legrest disassembly instructions:



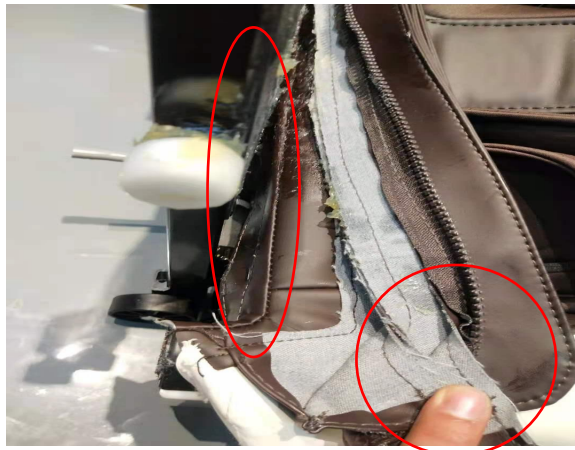
A. Lower legrest



B. Remove 2 screws, unzip the zipper



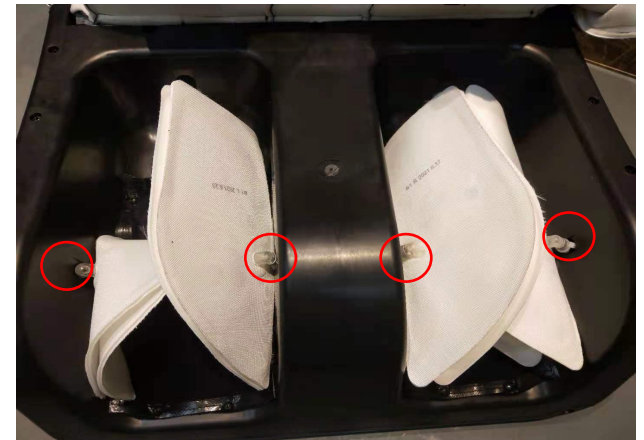
C. Remove 12 screws



D. Pry open the U-shaped nails and pull apart the lower legrest cover



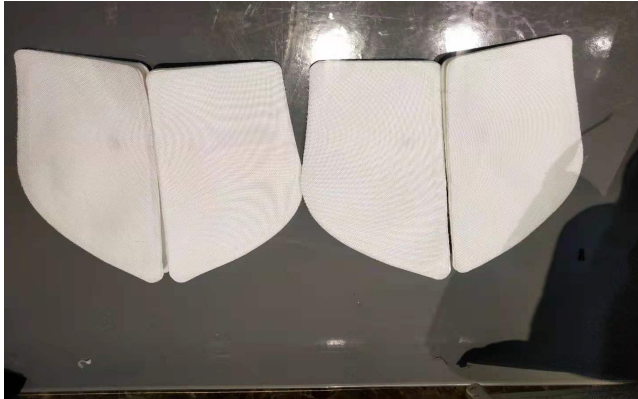
E. lower legrest cover



F. Cut off the buckle and pull out the air pipe



### 3.19 Lower legrest disassembly instructions:



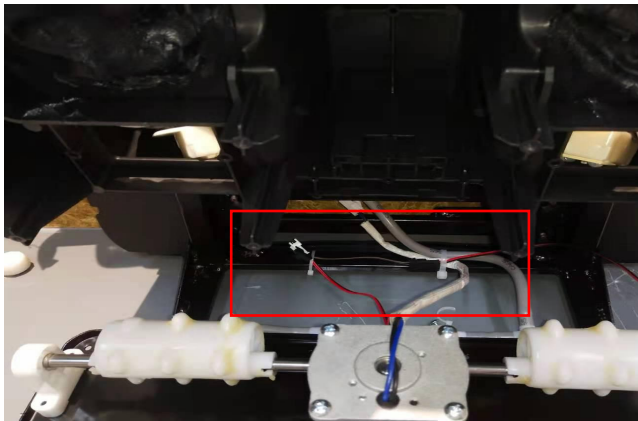
G.lower legrest air bags



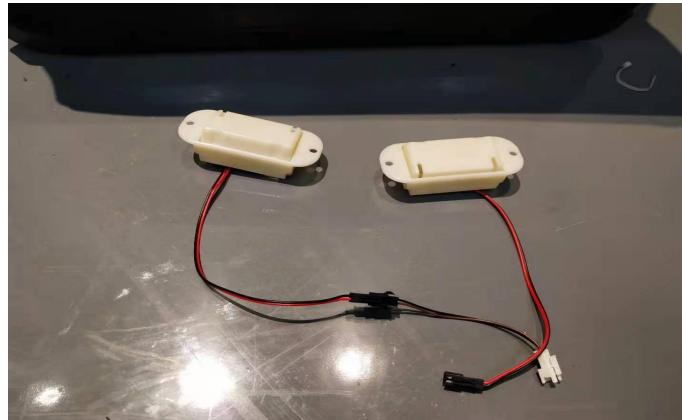
H.Remove 14 screws



I.Lower legrest shell



J.Cut off the buckle and pull out the terminal



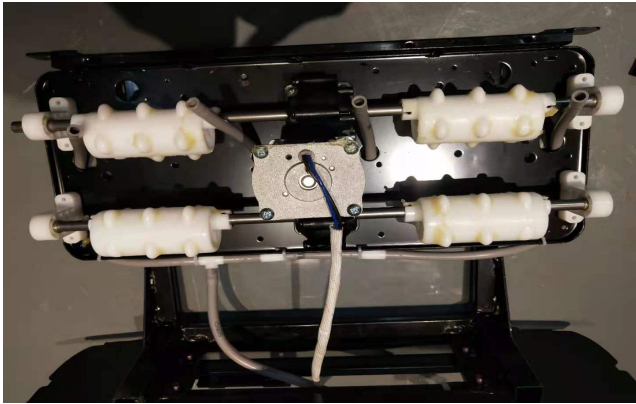
K.Footstep induction unit



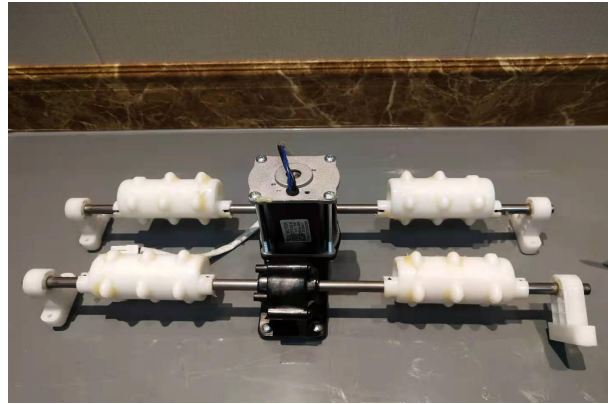
K.Remove 16 screws



3.19 Lower legrest disassembly instructions:



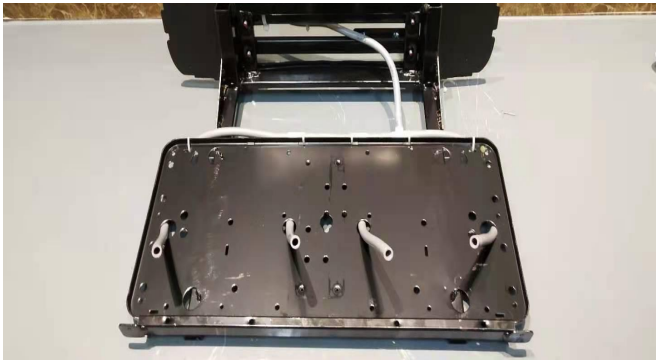
L. foot massage unit



B. foot massage unit



C. Lower legrest plastic frame



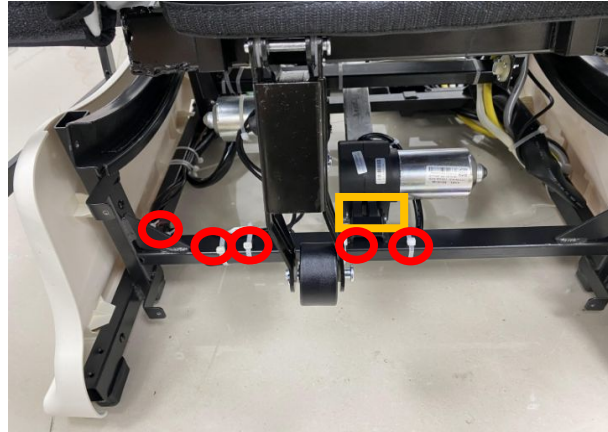
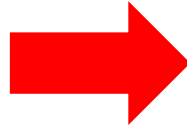
D. Lower legrest iron frame



**4.6 actuator-backrest disassembly instructions:** Refer to section 4.5 for the disassembly instructions of the legrest. **To remove the actuator-backrest, one person needs to hold the backrest from behind to prevent injury!**



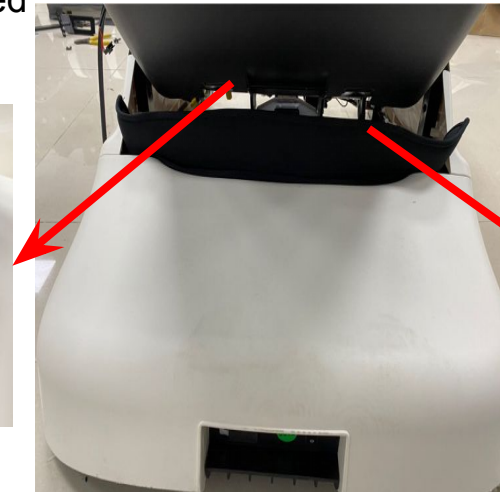
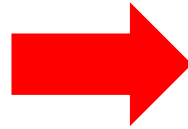
Remove 4 screws



Pull out the pin or bolt marked in yellow and cut off the buckle marked in red



Pull out two terminals



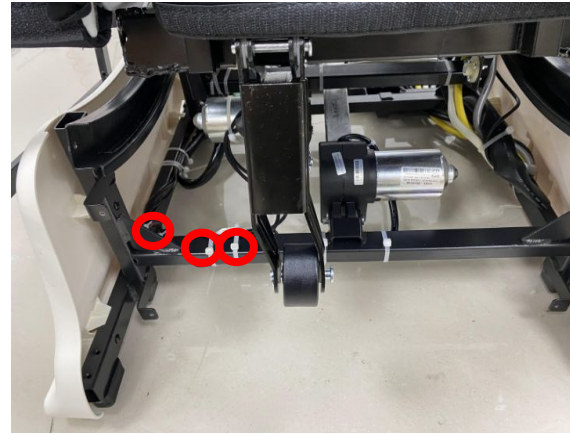
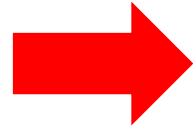
Remove 2 screws, Remove the actuator-backrest



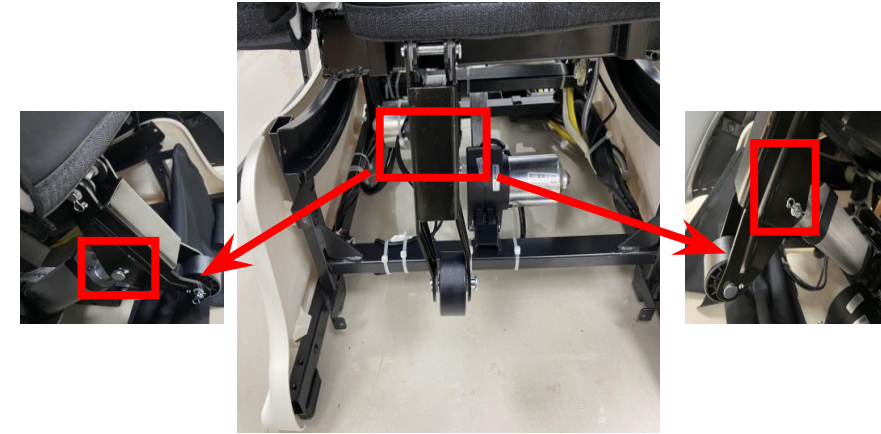
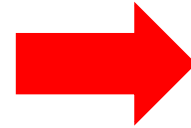
4.7 actuator-legrest disassembly instructions: Refer to (Section 4.5 - Legrest Disassembly Instructions, Section 3.2 - Backrest Pad Disassembly Instructions) Remove the legrest and backrest pad



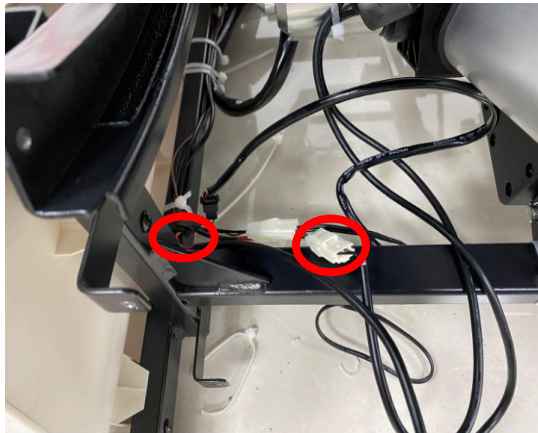
Remove 4 screws



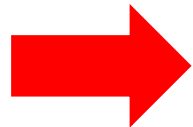
cut off the buckle



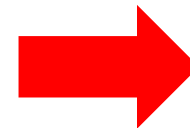
Pull out the socket and pin



Pull out two terminals.



unzip the zipper



Pull out the socket and pin, and remove the actuator-legrest



## 5、Massage chair fault judgment

开启/关闭：长按设置4秒，进入密码界，输入0592，进入工程模式界面



## 5、Massage chair fault code

Fault number		Fault description	Possible cause	Exclusion method	Remarks
28		The side panel detected that the button length was more than 45s.	1. There are buttons, card keys.	1. Check the side panel button	Real-time detection
01		The manual controller has detected that the button length is more than 40s.	1. There are buttons, card keys.	1. Check the manual control button	Real-time detection
02		The manual controller failed to communicate with the center board over 4S.	1. The manual controller is disconnected.	1. The method of eliminating the connection of changing the hand controller	Real-time detection

## 五、Massage chair fault code

03		The upper and lower limit sensors are valid at the same time	<ol style="list-style-type: none"> <li>1.The upper and lower limit sensor is broken.</li> <li>2.The connection of the back frame falls off.</li> </ol>	<ol style="list-style-type: none"> <li>1.Replace the upper and lower limit sensor</li> <li>2.Check the signal cable connection of the back frame</li> </ol>	Real-time detection
04		When the movement with walking function is turned on, abnormal walking count is detected.	<ol style="list-style-type: none"> <li>1.Poor contact of back frame signal to plug wire</li> <li>2.The stroke counting sensor is broken.</li> </ol>	<ol style="list-style-type: none"> <li>1.Check whether the back rack signal is plugged in.</li> <li>2.The stroke counting sensor is broken.</li> </ol>	Real-time detection when the movement has the walking function turned on
09		No counting signal of rotation circle of kneading motor was detected by 5s clock.	<ol style="list-style-type: none"> <li>1.Width detection board is broken</li> <li>2.Width detection board is broken</li> <li>3.The kneading motor is broken or the belt falls off</li> </ol>	<ol style="list-style-type: none"> <li>1.Replace the width detection board</li> <li>2.Replace the back frame signal cable</li> <li>3.Replace the motor</li> </ol>	Detect when entering self-test mode
10		No wide bit signal detected by 5s clock	<ol style="list-style-type: none"> <li>1.Width detection board is broken</li> <li>2.Width plate connection is abnormal</li> <li>3.The kneading motor is broken or the belt falls off</li> </ol>	<ol style="list-style-type: none"> <li>1.Replace the width detection board</li> <li>2.Replace the back frame signal cable</li> <li>3.Replace the motor</li> </ol>	Detect when entering self-test mode

## 五、Massage chair fault code

13		The upper and lower limit sensors are valid at the same time	1.The upper and lower limit sensor is broken. 2.The connection of the back frame falls off.	1.Replace the upper and lower limit sensor 2.Check the signal cable connection of the back frame	Detect when entering self-test mode
14		No upper limit sensor signal detected by 40s clock	1.The upper limit sensor is broken. 2.The connection of the back frame falls off. 3.The walking motor is broken or broken.	1.Replace the upper limit sensor board 2.Check the signal cable connection of the back frame 3.Replace the walking motor or connection	Detect when entering self-test mode
15		When the movement with walking function is turned on, abnormal walking count is detected.	1.Poor contact of back frame signal to plug wire 2.The stroke counting sensor is broken.	1.Check whether the back rack signal is plugged in. 2.The stroke counting sensor is broken.	Detect when entering self-test mode
16		After the upper limit sensor detected the signal, the lower limit sensor signal was detected in 2S.	1.The lower (upper) limit sensor is broken.	1.Replace the lower (upper) limit sensor board 2.Check the wire connection of the lower (upper) limit sensor	Detect when entering self-test mode

## 五、Massage chair fault code

17		No lower limit sensor signal detected by 40s clock	<ol style="list-style-type: none"> <li>1.The lower limit sensor is broken.</li> <li>2.The connection of the back frame falls off.</li> <li>3.The walking motor is broken or broken.</li> </ol>	<ol style="list-style-type: none"> <li>1.Replace the lower limit sensor board</li> <li>2.Check the back rack wire connection</li> <li>3.Replace the broken or connected walking motor</li> </ol>	Detect when entering self-test mode
18		After the lower limit bit sensor detects the signal, the upper limit bit sensor signal is detected in 2S.	<ol style="list-style-type: none"> <li>1.The upper (lower) limit sensor is broken.</li> </ol>	<ol style="list-style-type: none"> <li>1.Replace the upper (lower) limit sensor board</li> <li>2.Check the wire connection of the upper (lower) limit sensor</li> </ol>	Detect when entering self-test mode
19		No counting signal was detected when the calf putter opened 2.5s. (or 40s does not detect putter position signal)	<ol style="list-style-type: none"> <li>1.The crus push rod motor is broken.</li> <li>2.The connection of the calf push rod motor falls off</li> </ol>	<ol style="list-style-type: none"> <li>1.Replace the calf push rod motor</li> <li>2.Check the connection of the calf push rod motor</li> </ol>	Detect when entering self-test mode
21		There is no successful communication between the core board and the center board over 6S.	<ol style="list-style-type: none"> <li>1.The core board is disconnected.</li> </ol>	<ol style="list-style-type: none"> <li>1.Replace the movement board connection</li> </ol>	Real-time detection

## 五、Massage chair fault code

25		<b>No counting signal was detected when the back putter opened 2.5s. (or 40s does not detect putter position signal)</b>	<b>1.The back push rod motor is broken. 2.The connection of the back push rod motor falls off. 3.The back putter count line falls off.</b>	<b>1.Replace the back push rod motor 2.Check the connection of the back push rod motor 3.Check the back putter count connection</b>	<b>Detect when self-test is turned on</b>
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