



EASEPAL 厦门蒙发利电子有限公司客户服务部

EC-8606A massage chair service guide





Table of Contents

- 一、 Product introduction**
- 二、 Massage chair tools and use**
- 三、 Circuit working principle**
- 四、 Massage chair removal instructions**
- 五、 Massage chair fault judgment**



EASEPAL

厦门蒙发利电子有限公司客户服务部

一、Product introduction

1、Product appearance size





2、specifications of the products:

Model	Hlux	
Rate Voltage	110 -120V 60Hz	
Power	195W	
Working time	15min	
Guide	L Shape 52.8"	
4D Massage Roller	Forward distance	8 level Approx 3.9"
	Strength	5 level
	Speed	5 level
Airbag	Intensity	5 level
Angle Adjustment	Backrest	Approx 128°- 155° (Ground Angle)
	Footrest	Approx 9°- 75° (Wall Angle)
size	Upright	61.8"x31.9"x47.6"
	Reclined	76.8"x31.9"x41.7"
Extension of Footrest	Approx 7.1"	
Dimensions of Packing (L*W*H)	BOX1: 52.4"x33.5"x49.6" BOX2: 23.2"x20.1"x21.7"	
N.W/ G.W.	BOX1: 210.5/246.9 lbs BOX2: 48.5/55.1 lbs	
Weight of Chair	Approx 244.6 lbs	
Usage Condition	Environment temperature :32°F-95°F	
	Contrasting humidity :20-80RH	
Storage Condition	Storage temperature :23°F-95°F	
	Storage humidity :20-80RH	
Maximum body weight of user	260 lbs	



3、Appearance of the whole machine:





EASEPAL

厦门蒙发利电子有限公司客户服务部

4、 position of air massage:



上部气压按摩

中部气压按摩

下部气压按摩



EASEPAL

厦门蒙发利电子有限公司客户服务部

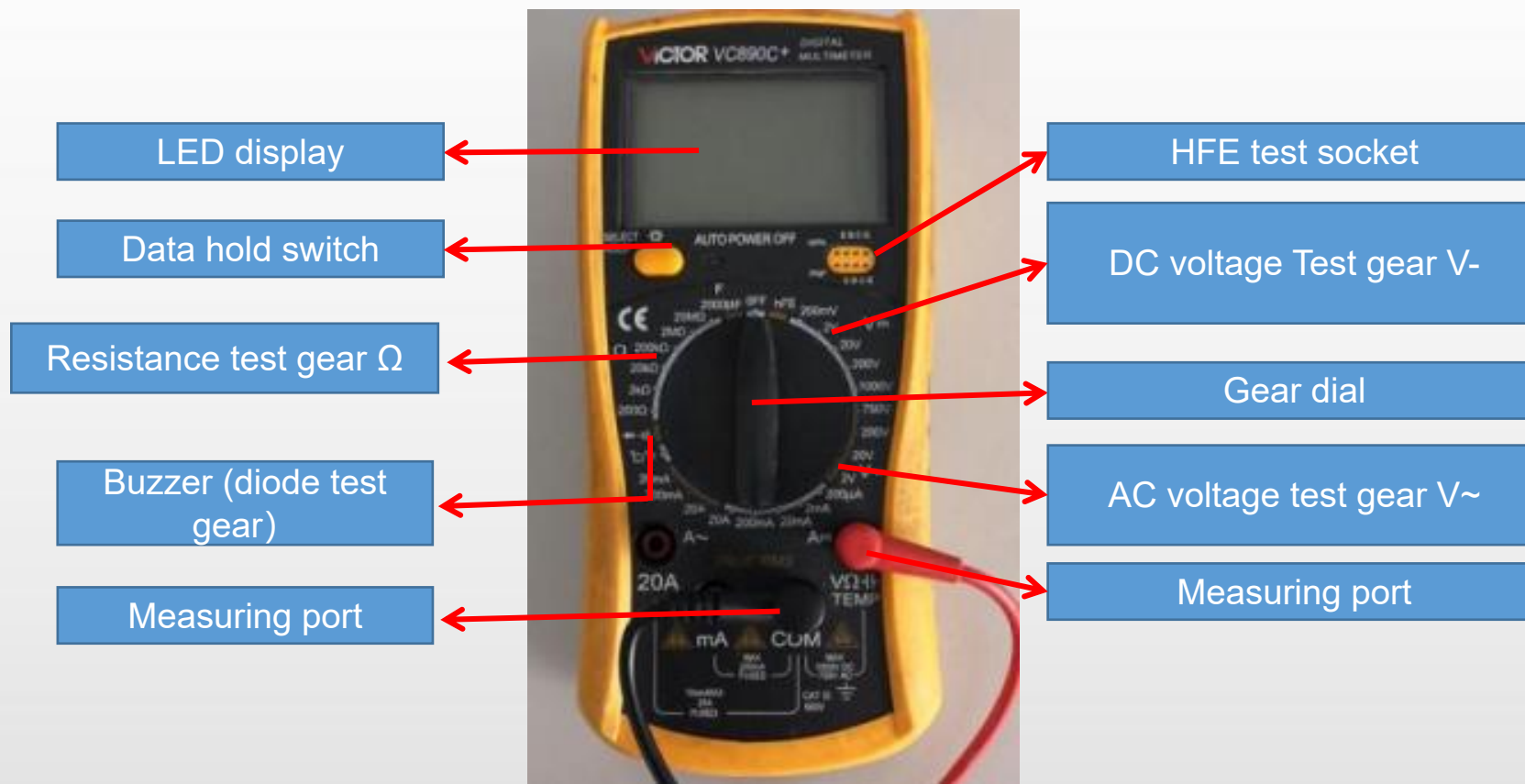
二、Massage chair tools and use

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



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.

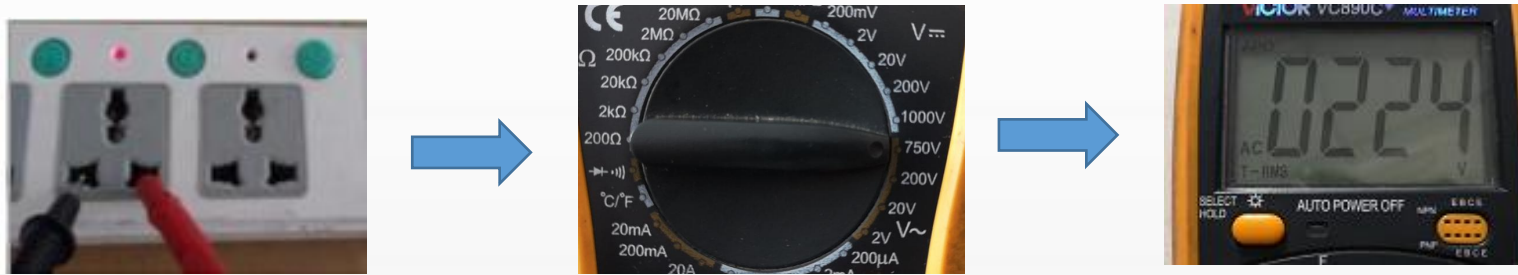


close circuit

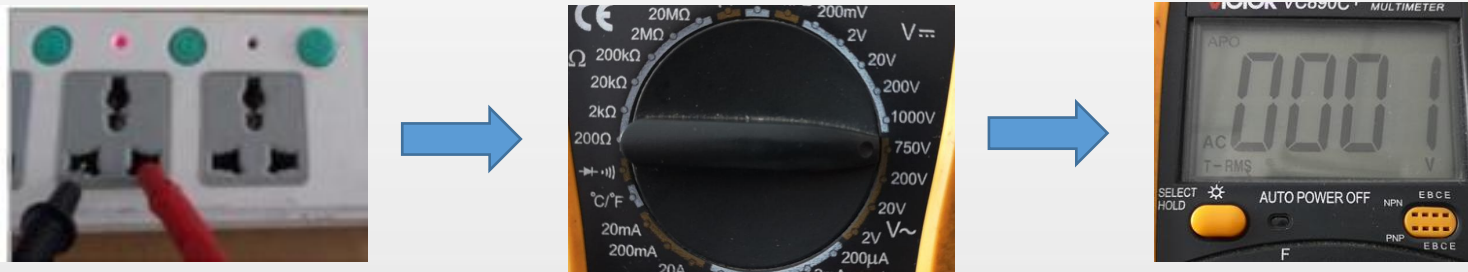


As shown in the picture on the left, if the multimeter shows the number of ". 002" or ". 00n" and gives an alarm, it means that the wire is connected.

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、 Measurement of dc voltag



As shown in the figure above: the test result shows "1.58", indicating that the voltage at both ends of the battery has 1.58V, and the red watch pen is connected to the battery's "+" pole, while the black pen is connected to the electromagnetic "-" pole.

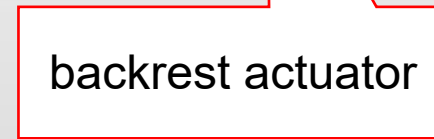
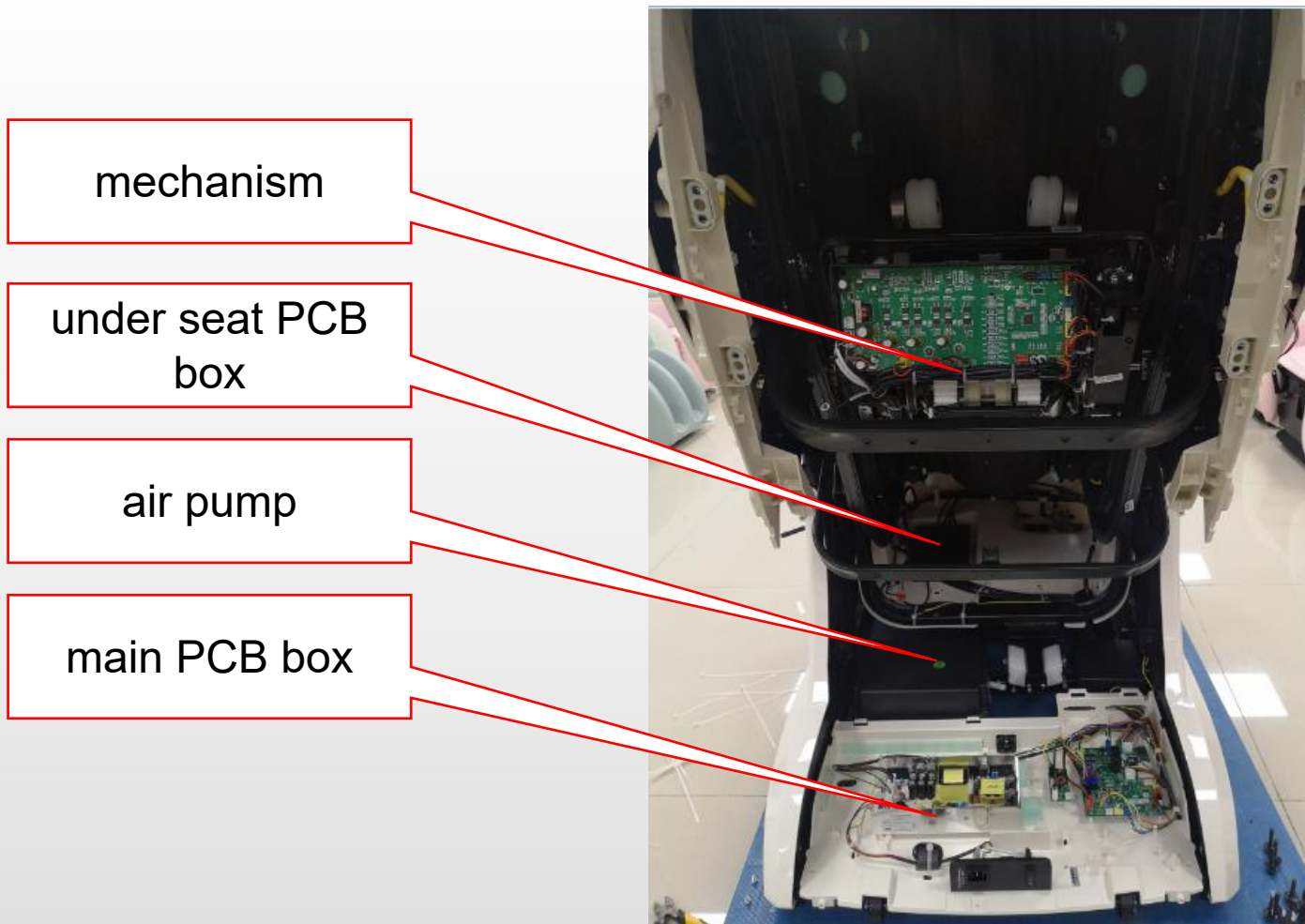


As shown in the figure above: the test result shows "-1.58", indicating that the voltage at both ends of the battery has 1.58V, and the red watch pen is connected to the battery "-" pole, and the black pen is connected to the electromagnetic "+" pole.



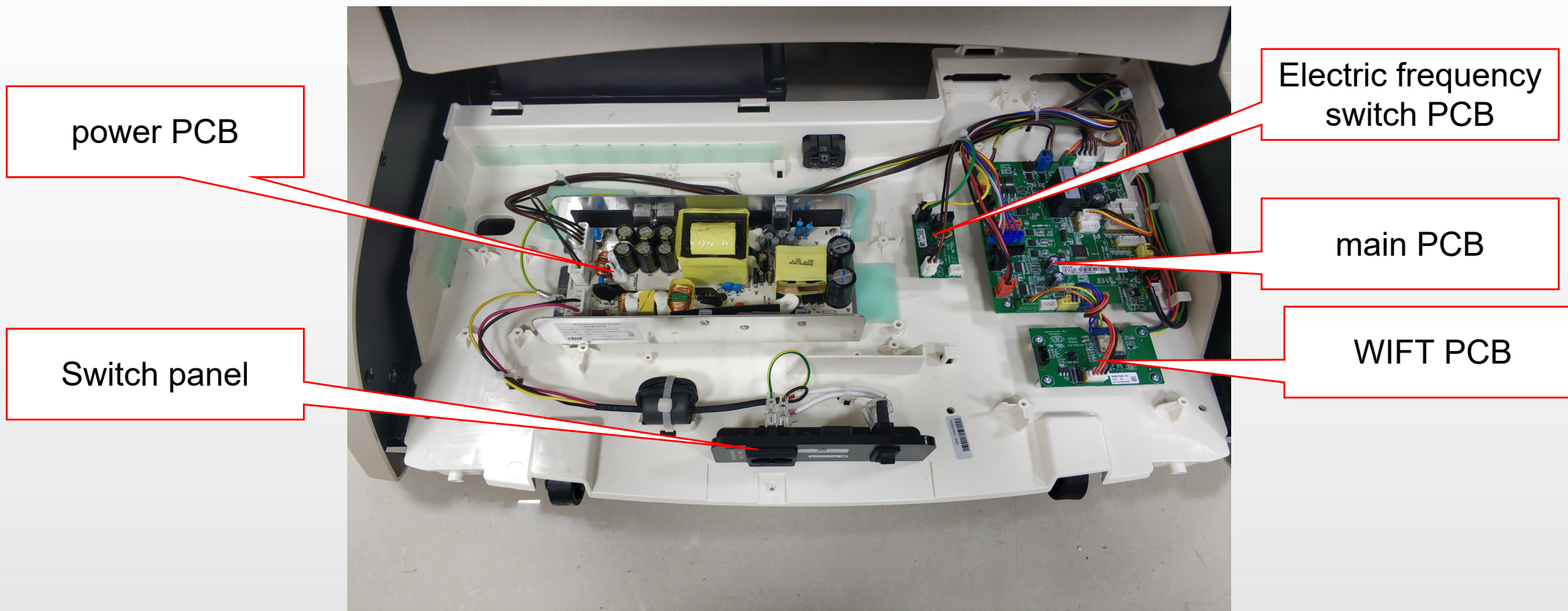
三、Circuit working principle

1.1、 Internal structure diagram (overall):





1.2、 Internal structure diagram (main PCB box) :





4、 main PCB:

J16: mechanism signal, connect under seat PCB J1)

J19:PS-on signal connected to switch power con3 (DC5V)

J17: backrest count (DC5V)

J23: power input CON2 (DC24V)

J18: legrest count, connect under seat PCB J2 (DC5V)

J25: power output to under seat PCB J4 (DC24V)

J15: WIFT PCB J2

J24: Electric frequency switch PCB J1 (DC24V)

J8: connect under seat PCB J1 (5VDC)

J9:Bluetooth, connect under seat PCB J2 (DC5V)

J7:LED connect under seat PCB J3 (DC24V)

J22:air pump (AC20.5V)

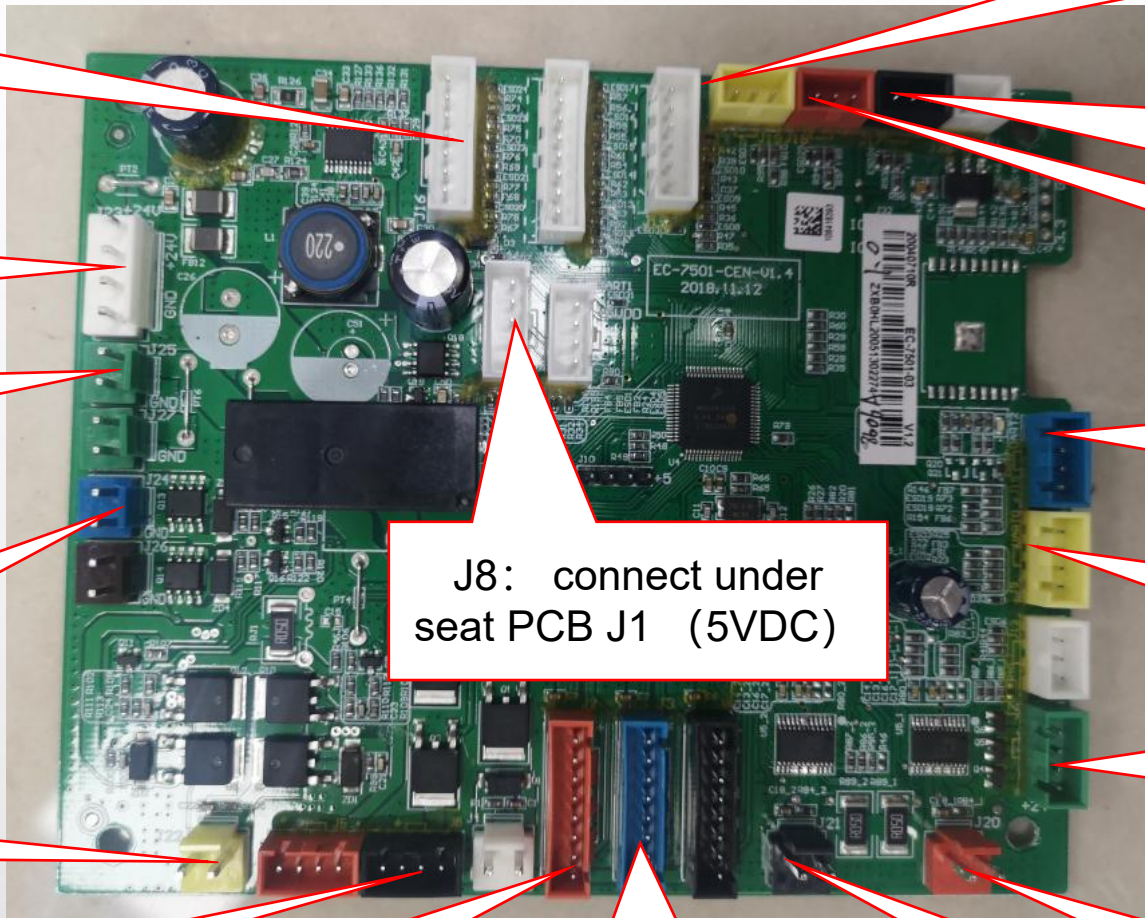
J6: heater,connect under seat PCB J3 (24DC)

J2:shoulder air, connect under seat PCB J5

J3:arm air, connect under seat PCB J3, J5 (24DC)

J21: backrest actuator (DC24V)

J20: legrest actuator (connect under seat PCB J4 DC24V)





5、underseat PCB:

J20: right side panel switch PCB J1 DC24V

J28: right side panel switch PCB J1

J15: DC24V legrest actuator

J13: DC24V output to mechanism

J9: legrest count

J23: Bluetooth, right side panel switch PCB J1

J21: DC24V output to legrest PCB J8

J10: left side panel switch PCB J1

J26: 3D PCB

J16: 肩部、座部充气接座下气阀 (白) DC24V

J14: DC24V output to left side panel switch PCB J1

J17: Calf driving PCB J2

J8: right side panel switch PCB J1

J3: L/R Palm, LOGOled main PCB J3 J7

J18: pad controller

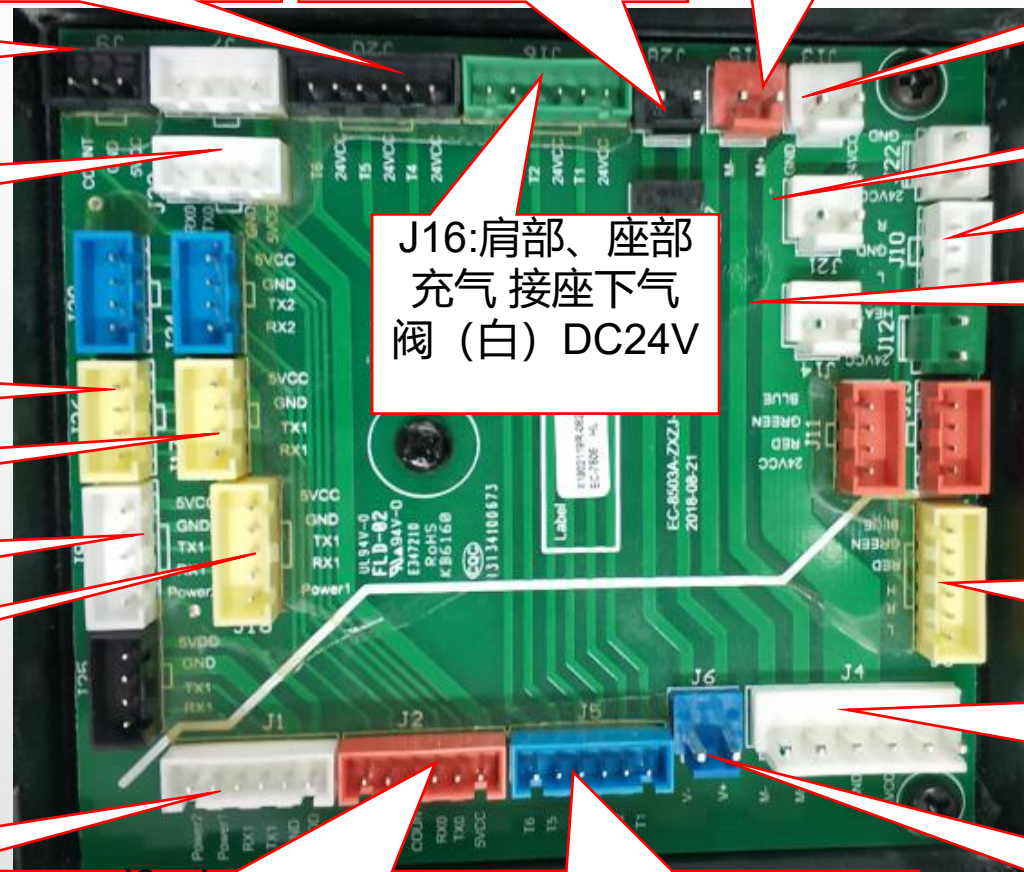
J4: DC24V output to mechanism, leg actuator main PCB J20 J25

J1: main PCB J8, J12

J2: leg actuator count, communication input, main PCB J9 J15

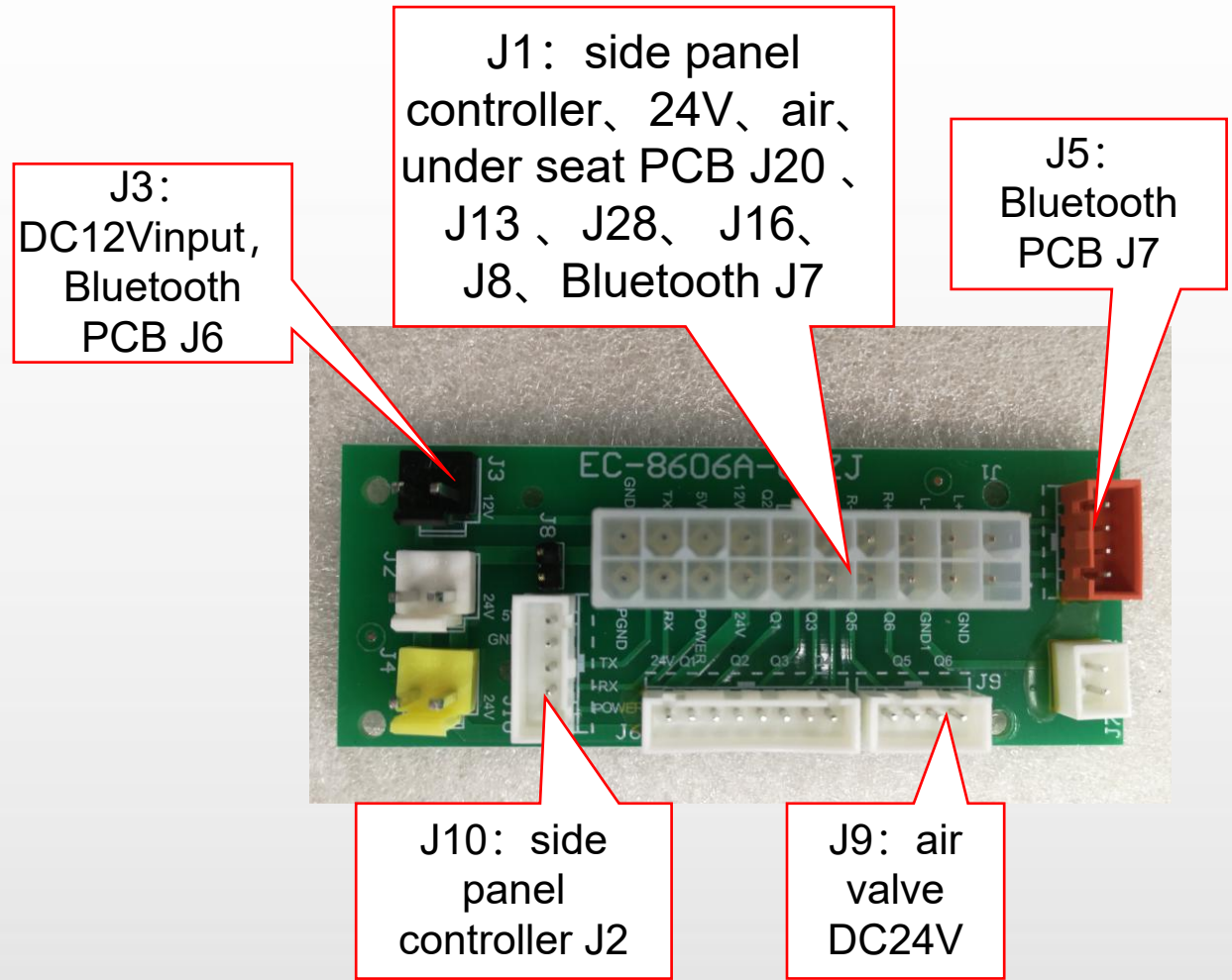
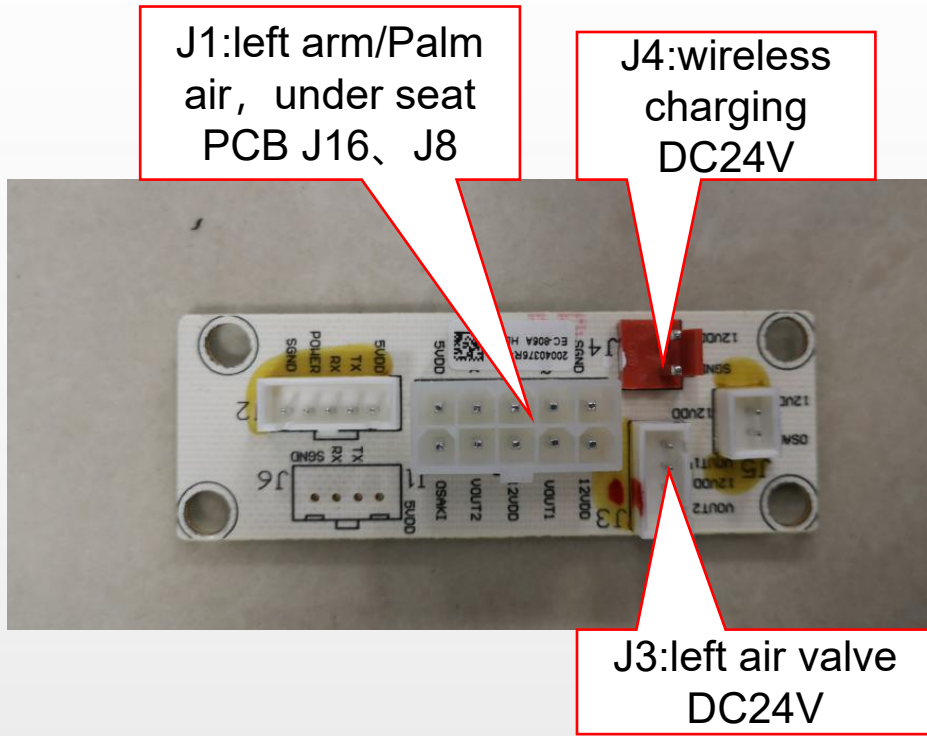
J5: shoulder, seat, R palm/arm, main PCB J2, J3

J6: DC12V input Bluetooth, hood LED Electric frequency switch PCB J2



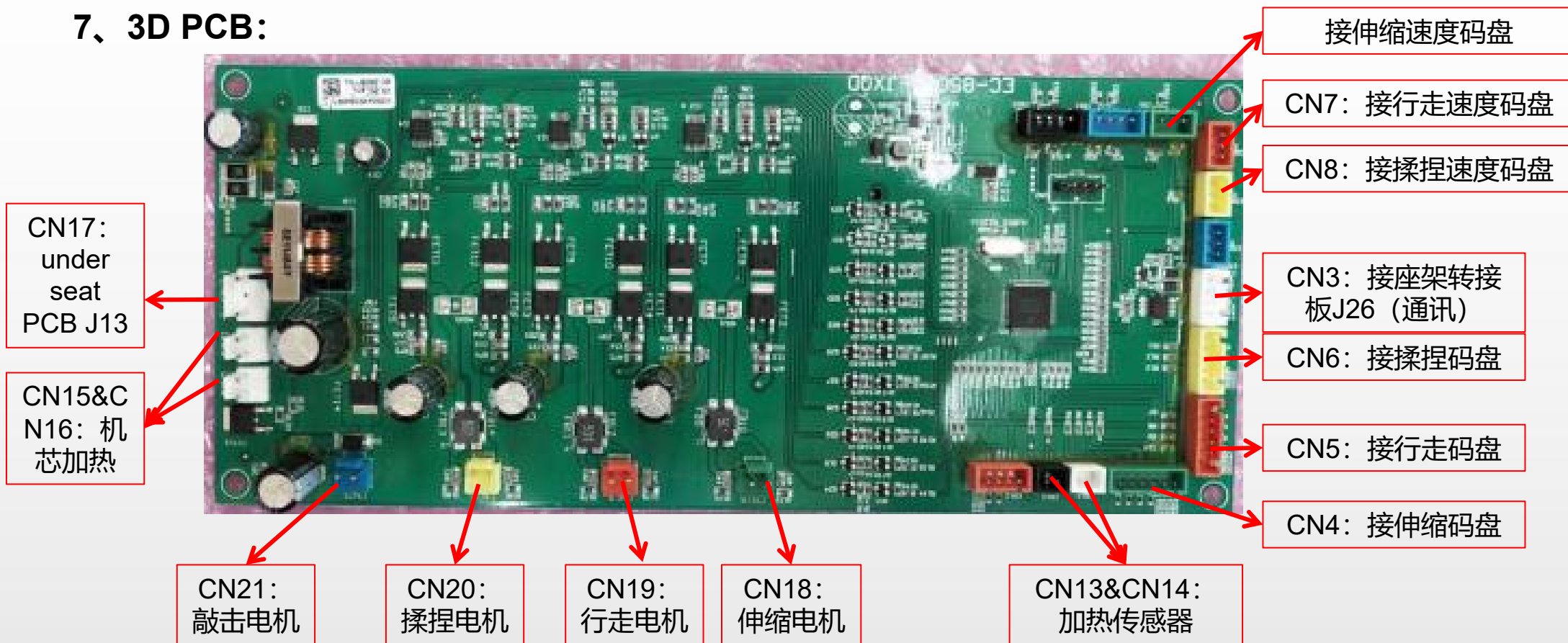


6、 side panel switch PCB:





7、3D PCB:





四、Massage chair removal instructions

1、disassembly of the pillow:



A.unzip the zippe



pilliow



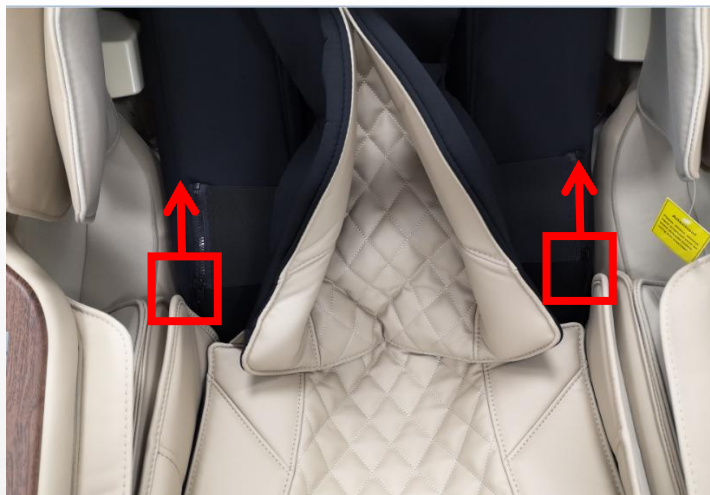
EASEPAL

厦门蒙发利电子有限公司客户服务部

2、disassembly



A.unzip the zipper



B.unzip the zipper



C.unzip the zipper



D.unzip the zipper



E.unzip the zipper



F.backrest pad



EASEPAL

厦门蒙发利电子有限公司客户服务部

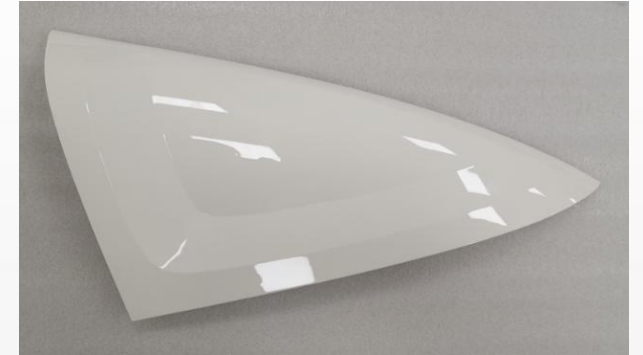
3、 disassembly of right side panel:



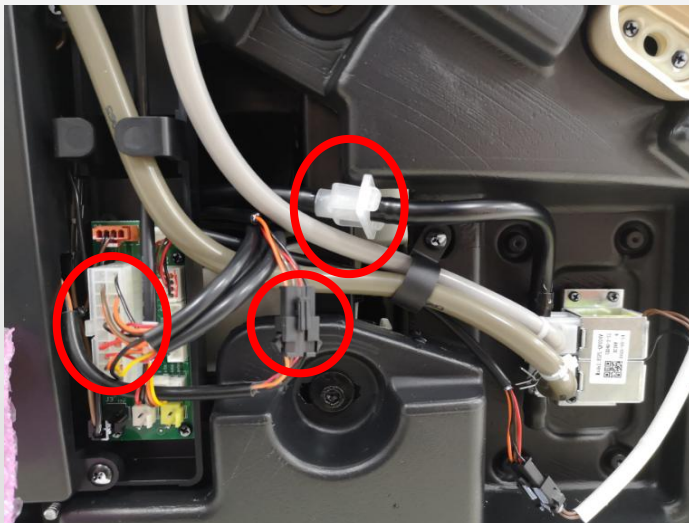
A.open the cover



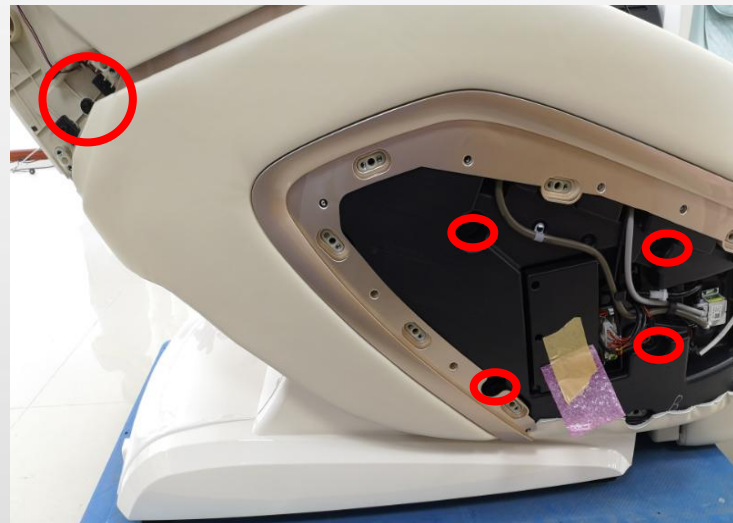
B.side panel cover



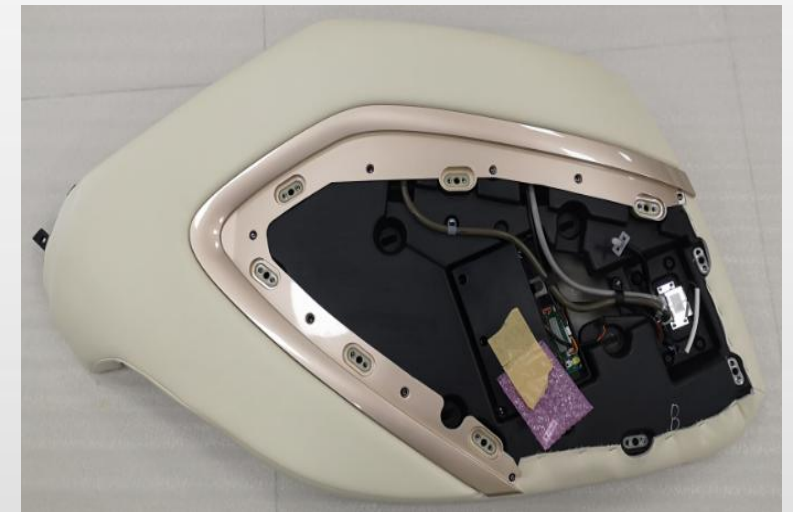
C.hood cover



D.disconnect the terminal and air hose



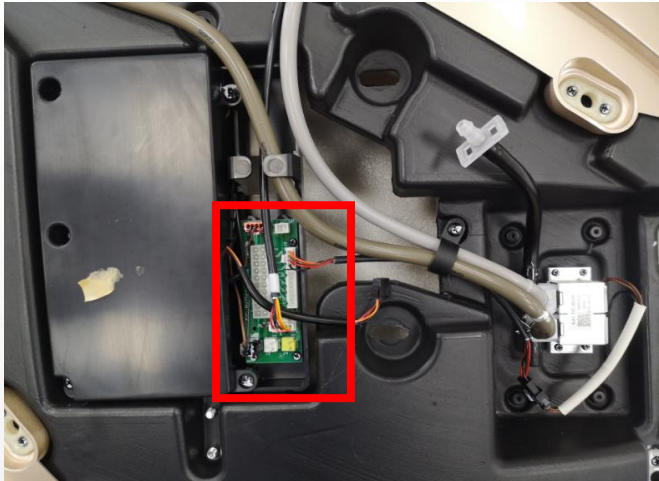
E.remove 7 screws



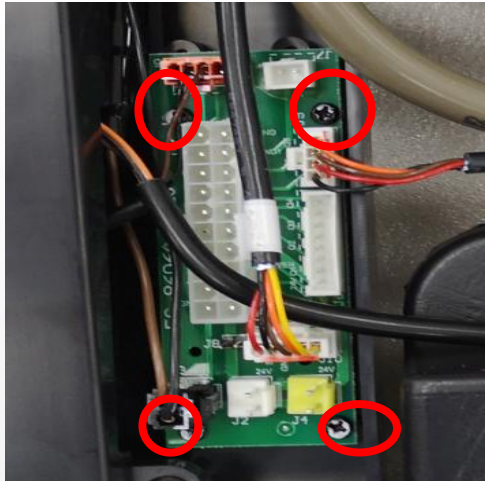
F.right side panel



4、disassembly of inner right side panel:



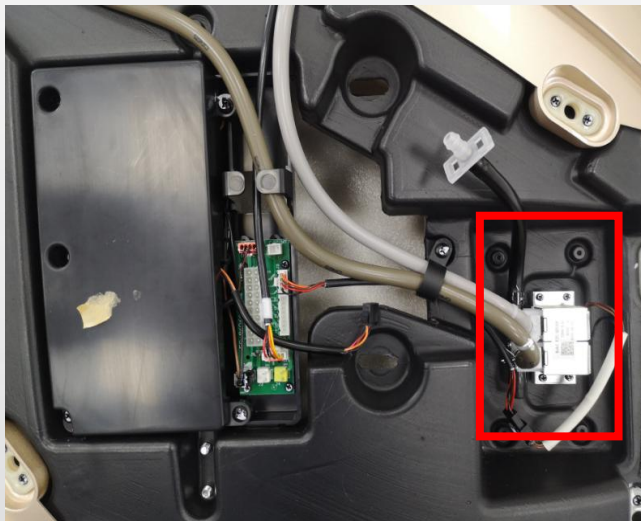
A. disconnect the terminal



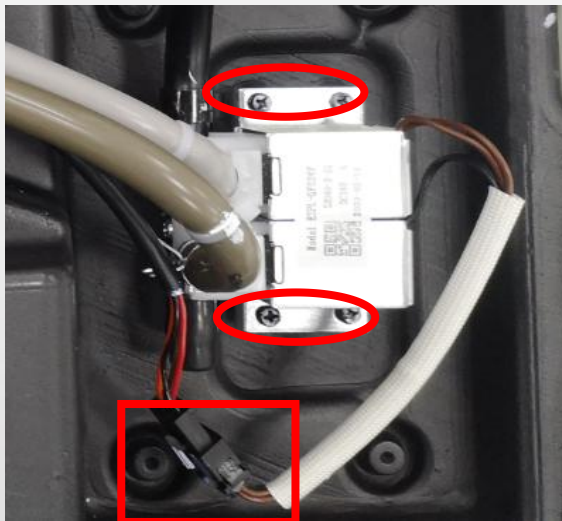
B. remove 4 screws



C. side panel switch PCB



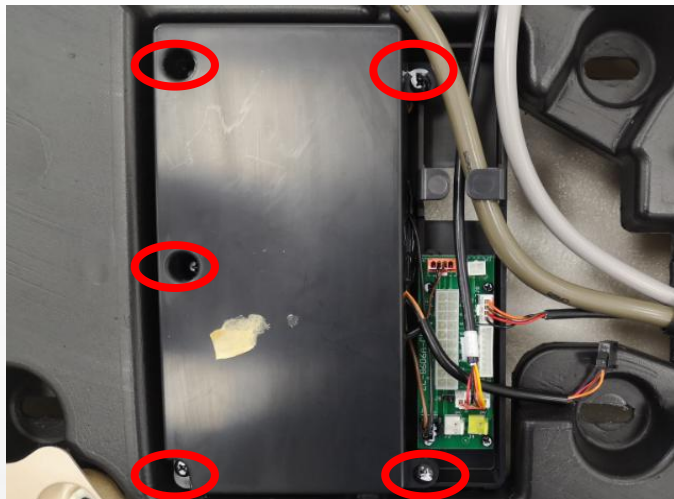
D. air valve



E. disconnect the terminal and remove 4 screws



air valve



F. remove 5 screws



G. disconnect the terminals, remove 4 screws



H. Bluetooth PCB



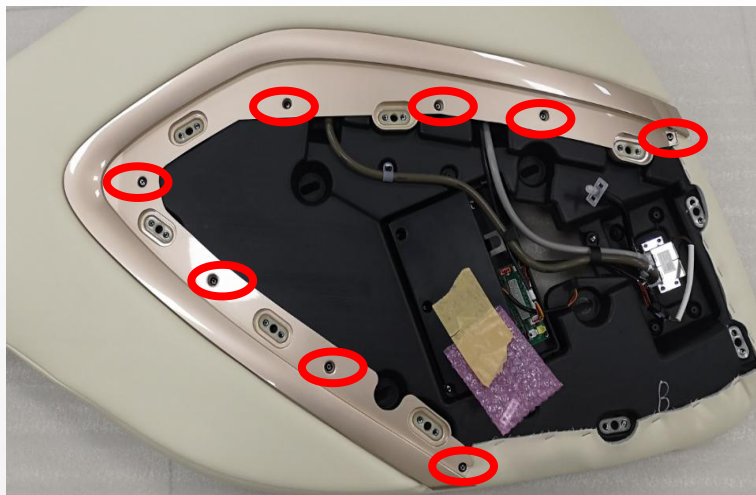
I. unzip the zipper



J. arm cover



K. air bag



L .remove the screws



M .remove the screws



N .right side panel trim



O .open the cover



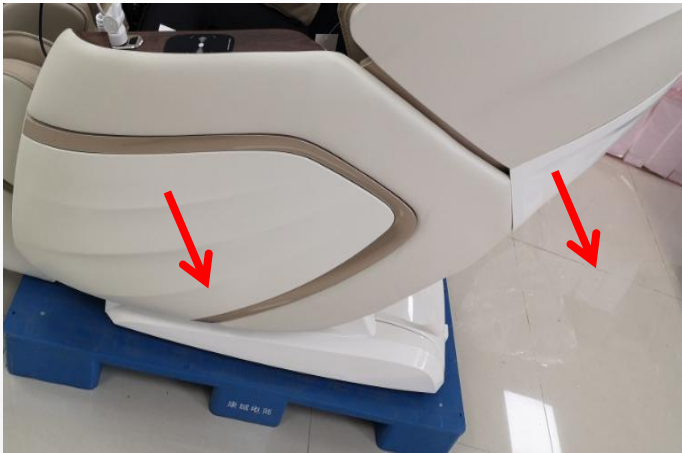
P .remove 5 screws



Q .side panel controller



5、disassembly of left side panel:



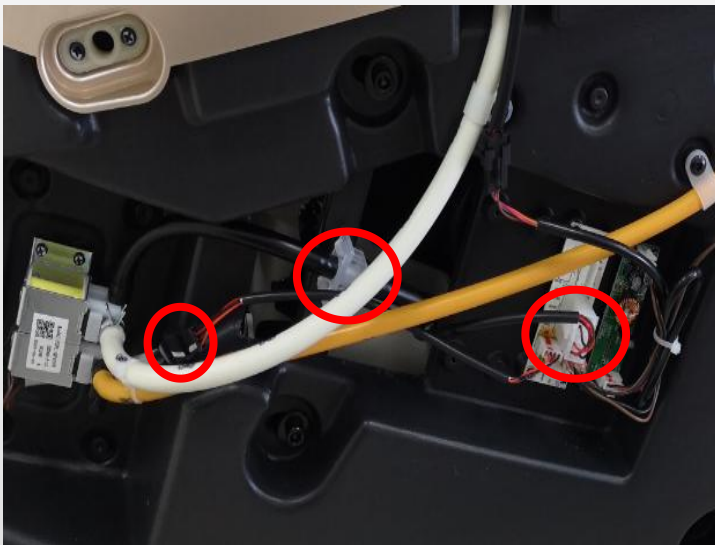
A .open the cover



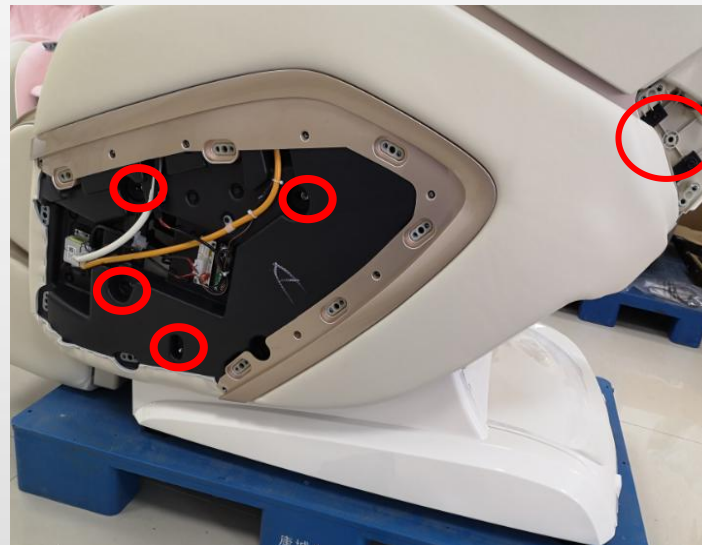
B .left side panel



C .hood cover



D .disconnect the air hose and termis



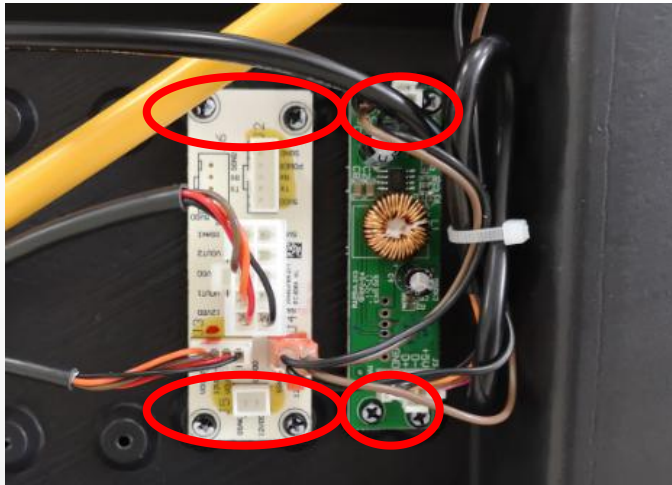
E .remove7 screws



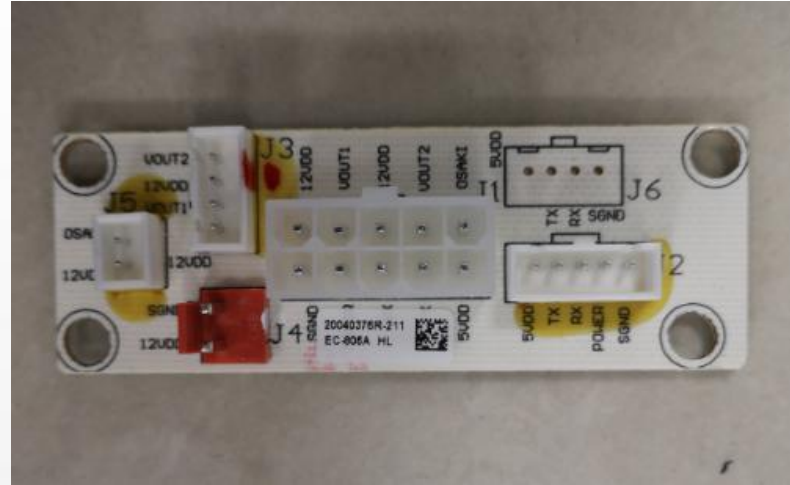
F .left side panel



6、disassembly of inner left side panel:



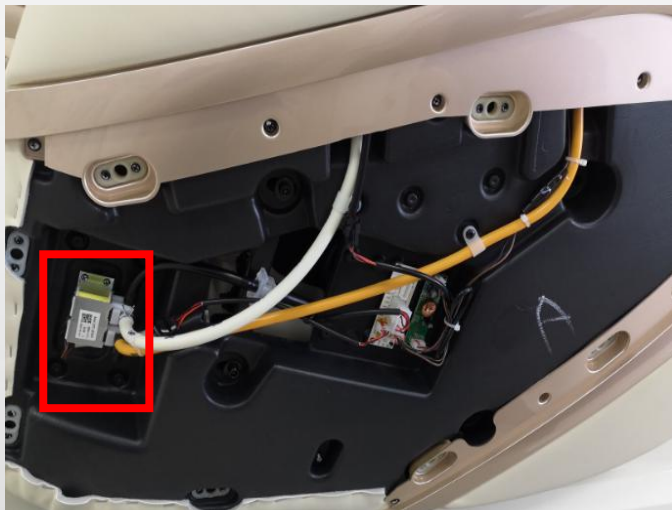
A .remove the screws, disconnect terminals



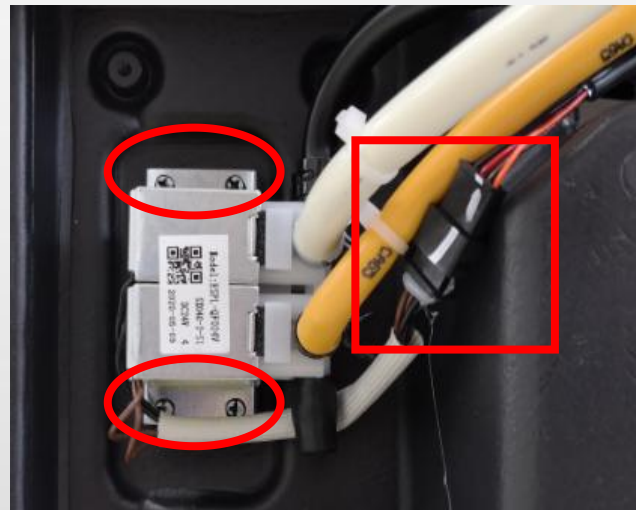
B .side panel switch PCB



C USB PCB



E. air valve



F. disconnect the terminal and air hose, remove 4 screws



G. air valve



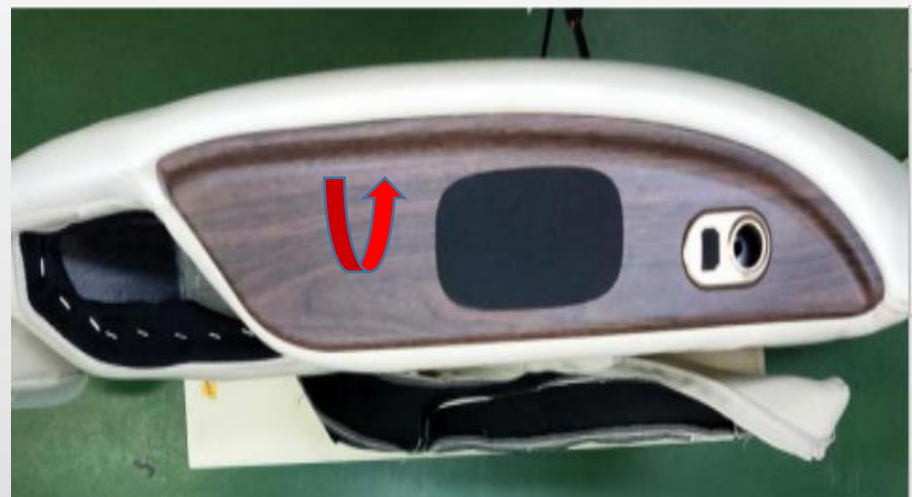
H. unzip the zipper



I. remove the nut



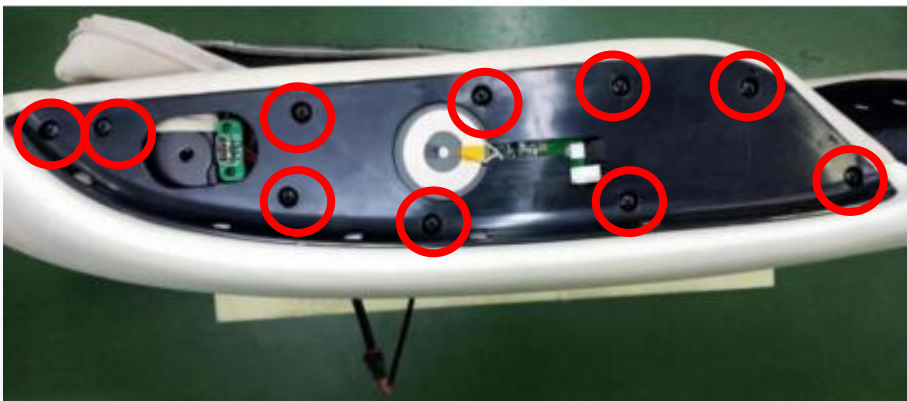
J. remote controller holder



K. open the cover



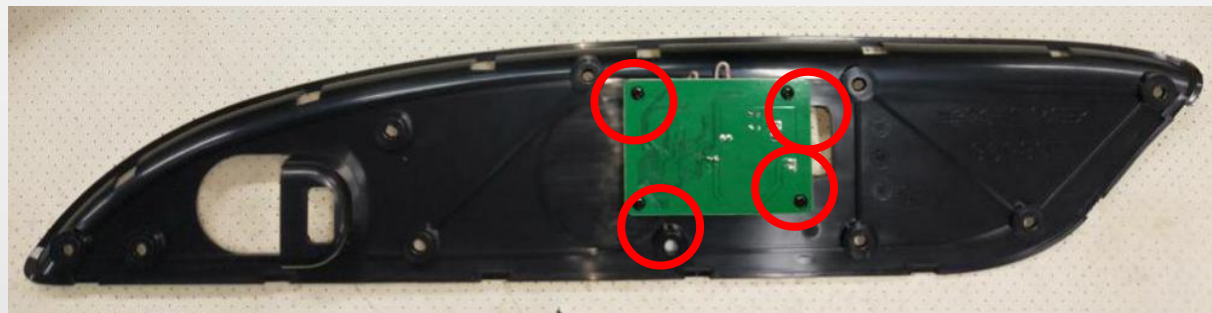
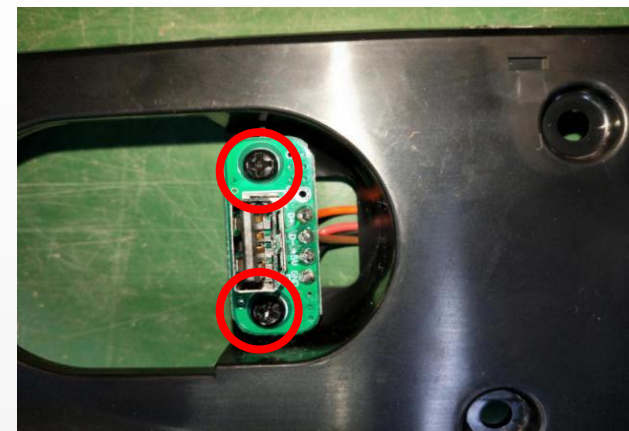
L. air cover



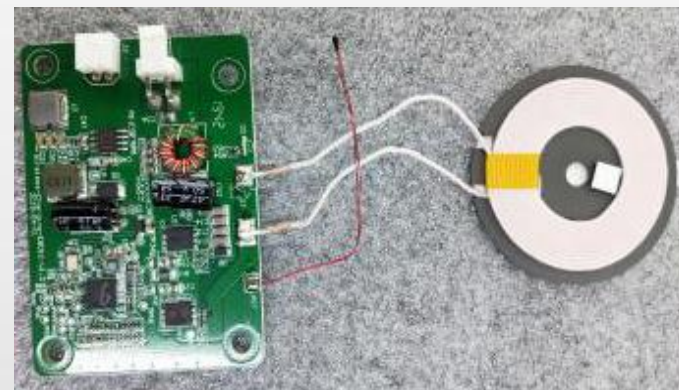
M. remove the screws



N. remove the screws



O. remove 4 screws





EASEPAL

厦门蒙发利电子有限公司客户服务部

7、disassembly of remote controller and unit:

A. disassembly of left side panel (reference 6 disassembly of left side panel)



B. Remove the screw holding the remote controller



C. disconnect the connector



D. remote controller



EASEPAL

厦门蒙发利电子有限公司客户服务部

8、disassembly of the side seat:

A. disassembly of left side panel (reference 6 disassembly of left side panel)



B. remove 2 screws,
disconnect the air hose



C. side seat air bag



D. side seat cover



9、disassembly of rear cover:



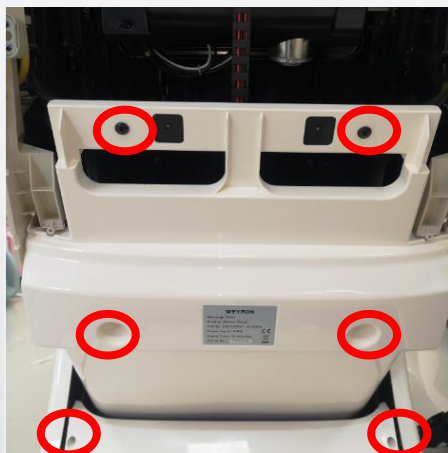
A. remove 5 screws



B. remove 4 screws



C. rear hood cover



D. remove 6 screws



E. rear cover

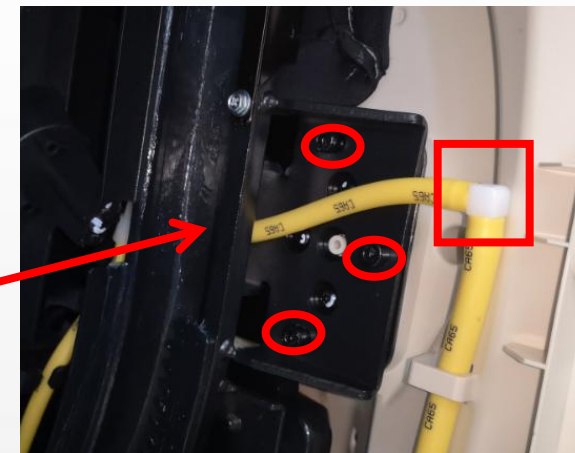
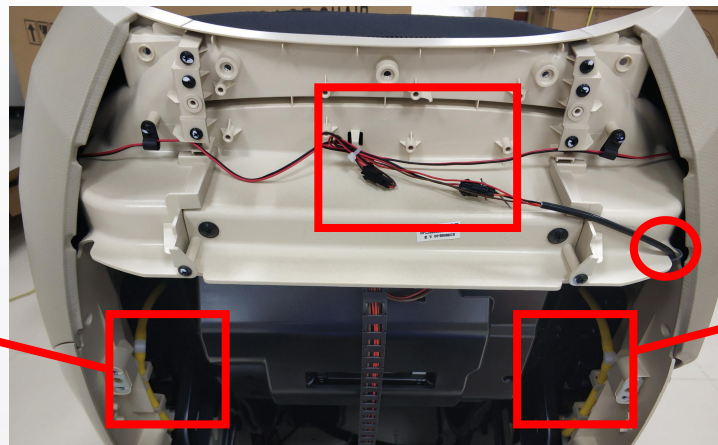
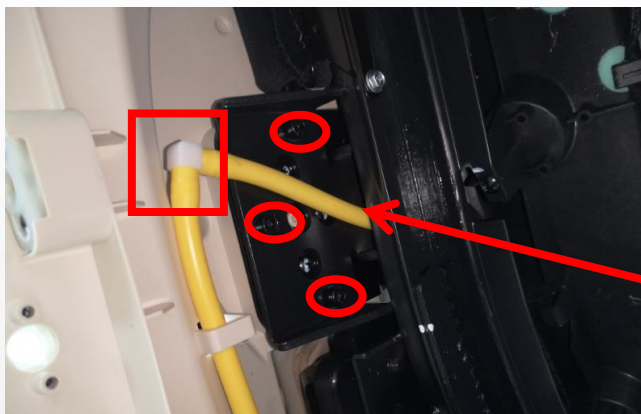


F. Protective cover

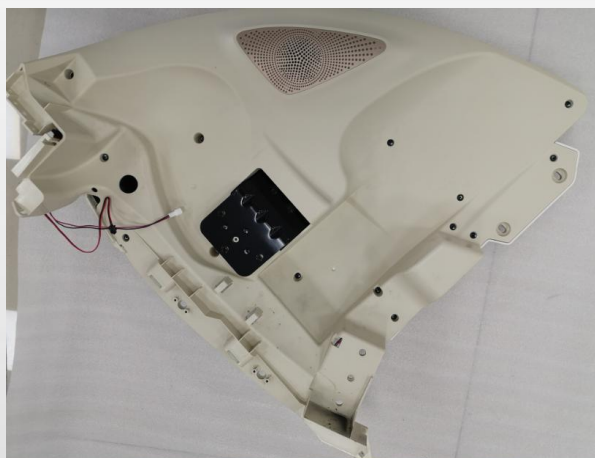


10、disassembly of the hood:

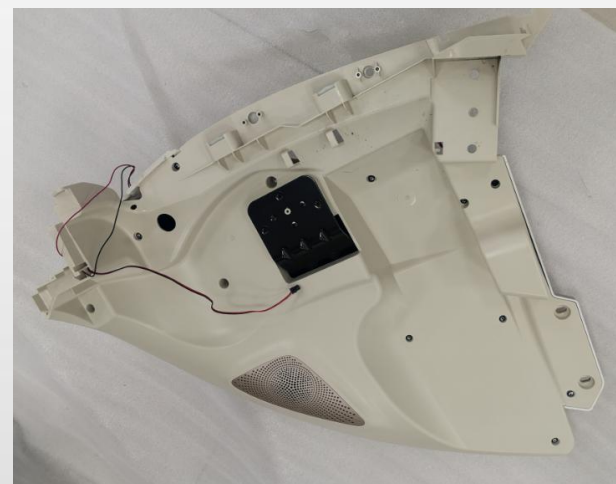
A. disassembly of rear cover (reference 9 disassembly of rear cover)



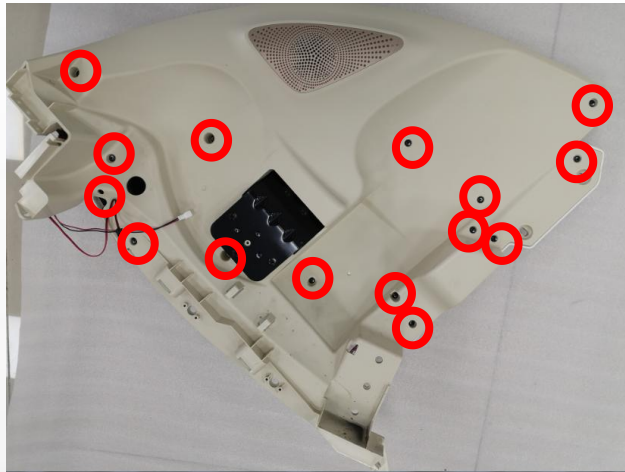
B. remove the screws, disconnect the terminal and air hose



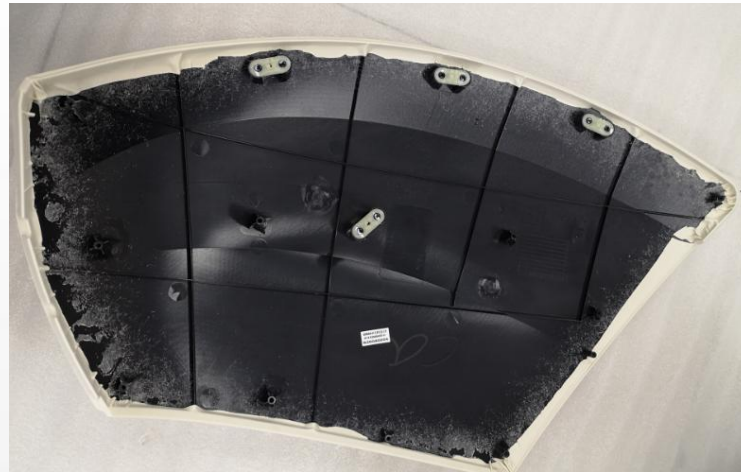
left inner hood



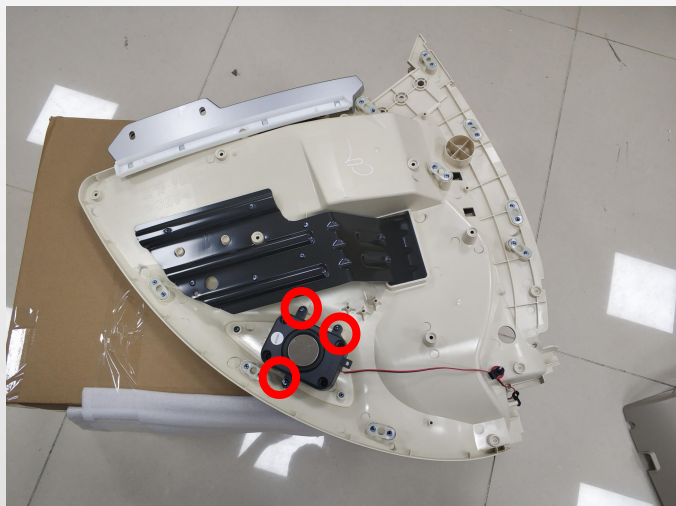
right inner hood



C.remove the screws



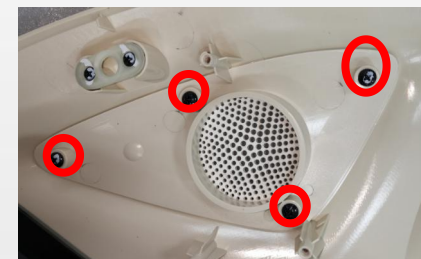
take down the hood cover



D.remove 3 screws



horn



remove 4screws





E.remove 2 screws



inner middle hood



11、disassembly of the shoulder:

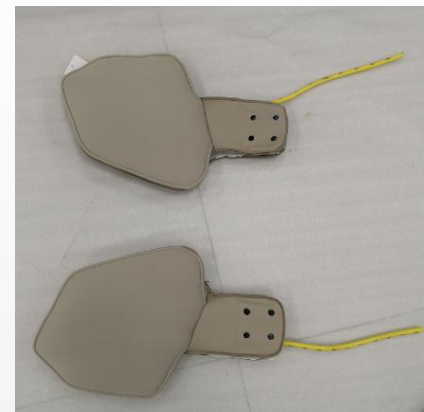
A. disassembly of the hood (reference 10 disassembly of the hood)



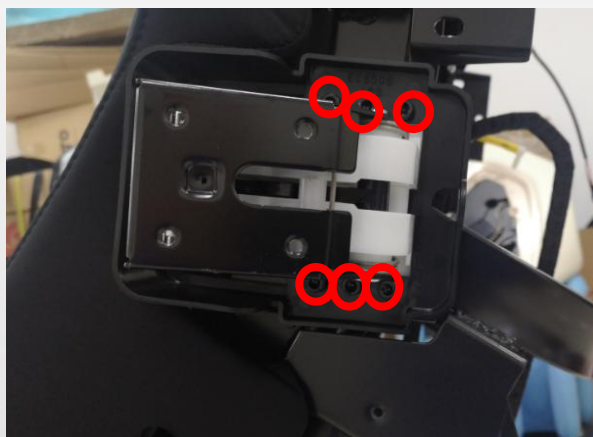
B.remove 4 screws



C.remove 4 screws



L/R shoulder unit



D.remove 6 screws

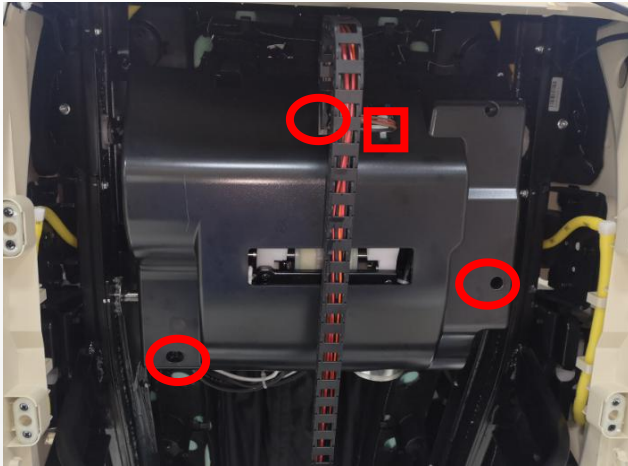


Regulating mechanism assembly

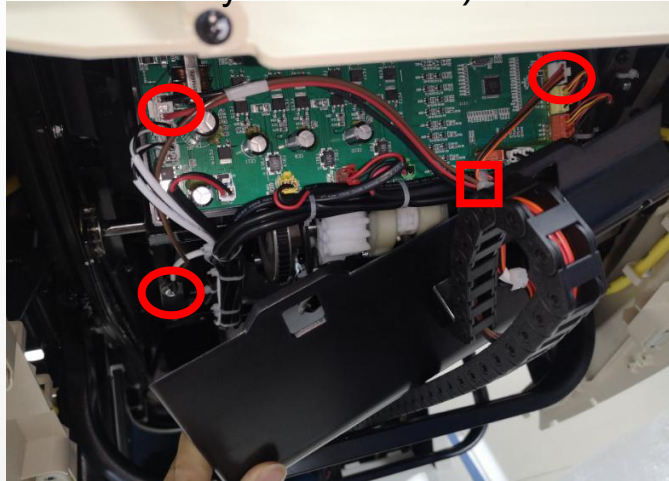


12、disassembly of backrest cable:

A. disassembly of rear cover (reference 9 disassembly of rear cover)



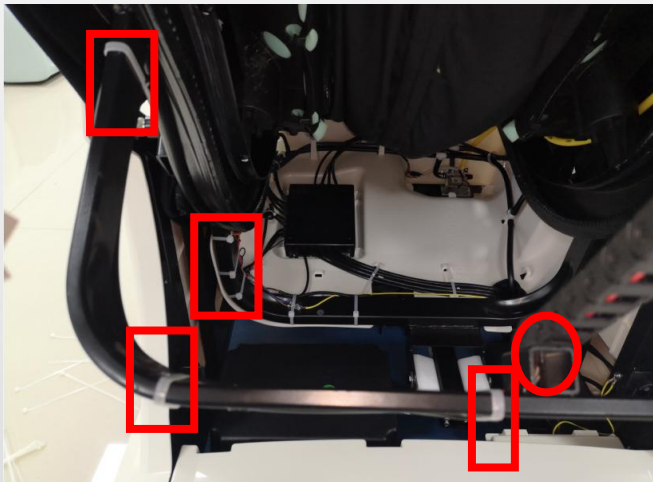
B.remove the screws and cut cable tie



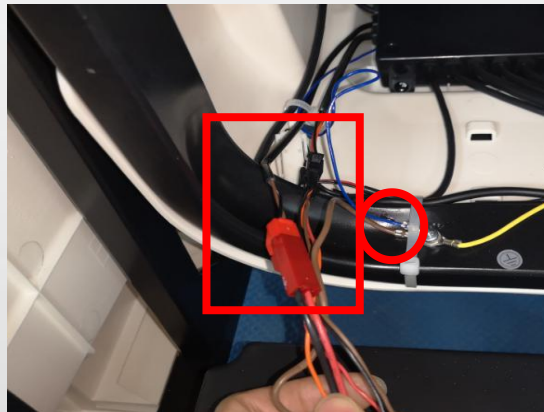
C.disconnect the terminal, remove the screw of ground, cut cable tie



D.mechanism cover



E.cut the cable tie, remove the screws



F.disconnect the terminal, remove the screws

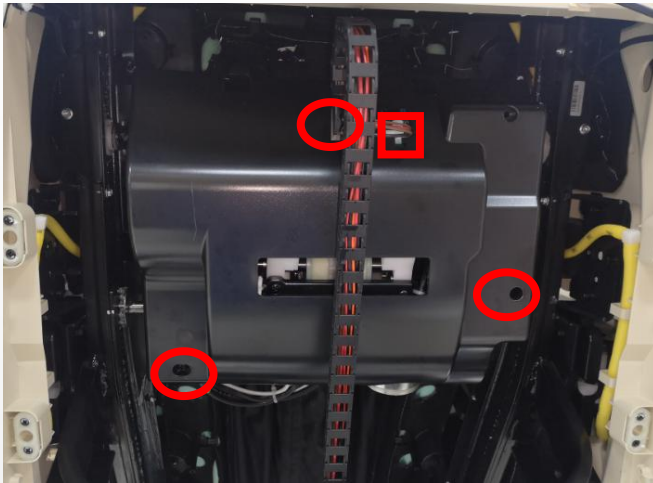


backrest cable

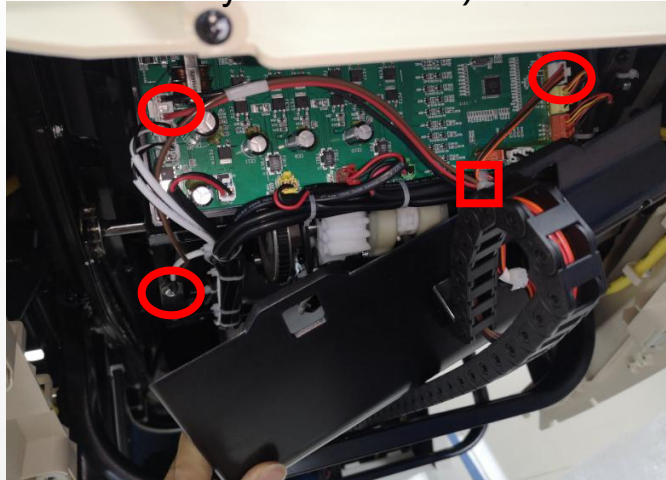


13、 backrest cable:

A. disassembly of rear cover (reference 9 disassembly of rear cover)



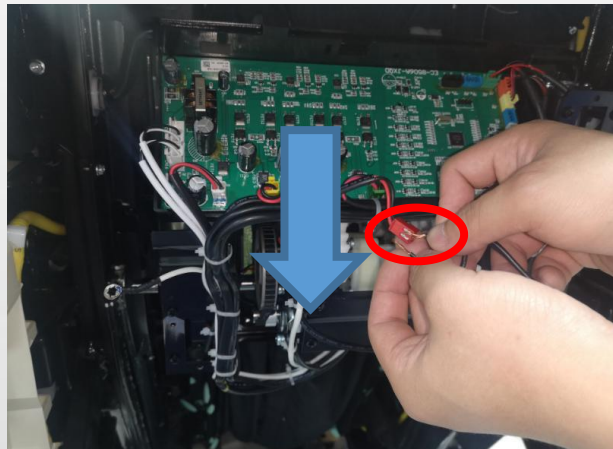
B.remove the screws and cut cable tie



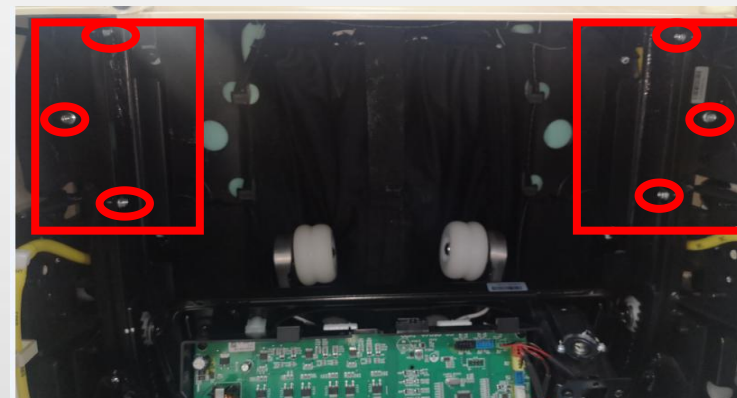
C.disconnect the terminal, remove the screw of ground, cut cable tie



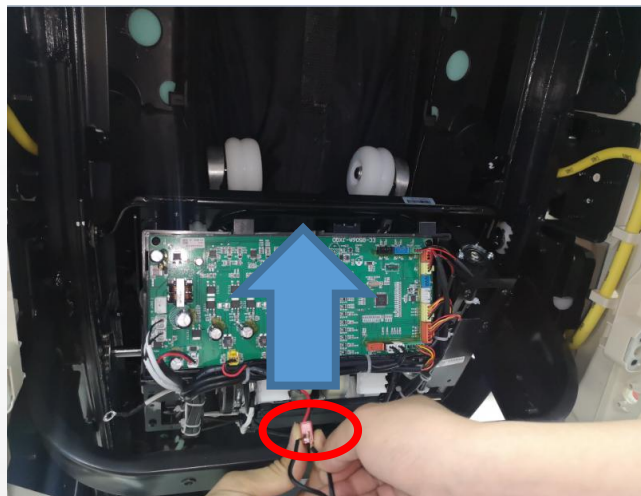
D.mechanism cover



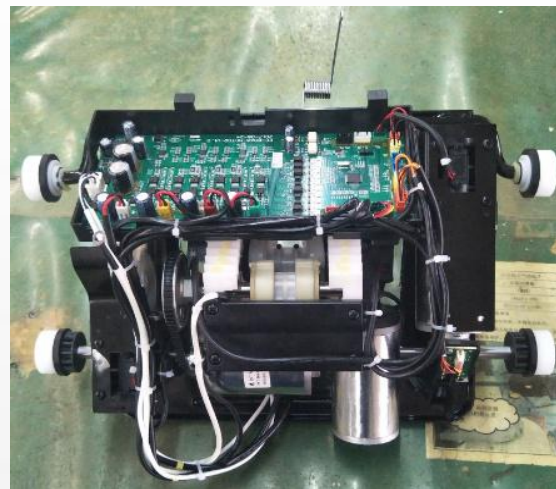
E.Red terminal connect 24V/DC, mechanism go down



F.remove the baffle both side



G.Red terminal connect 24V/DC,
mechanism go up



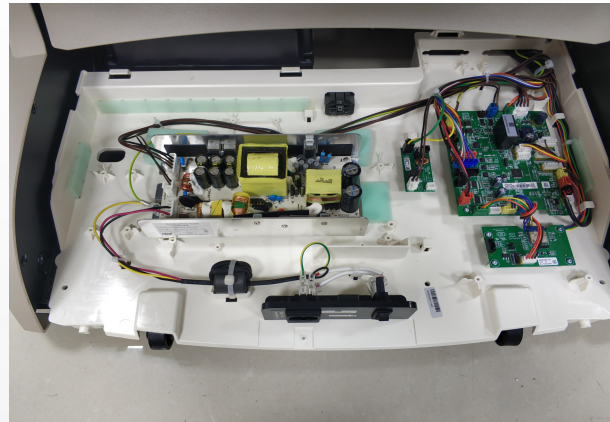
H.take down mechanism



EASEPAL

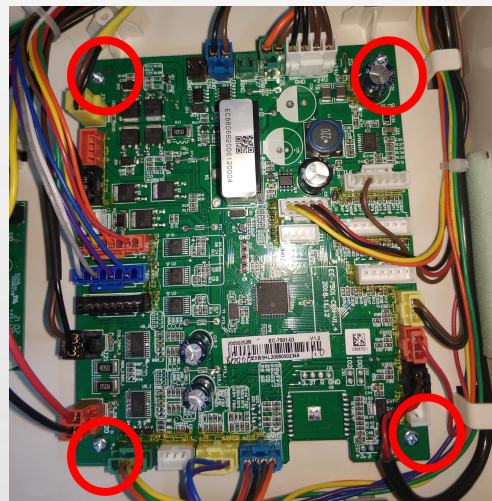
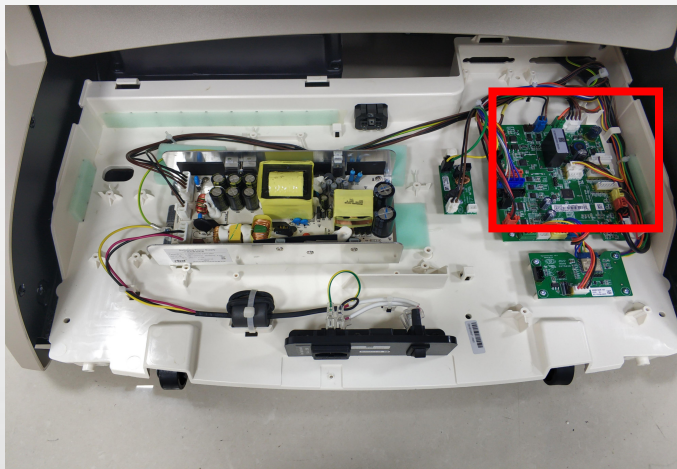
厦门蒙发利电子有限公司客户服务部

14、disassembly of main PCB box:



A.remove 3 screws, open themain PCB box

main PCB box cover



B.main PCB

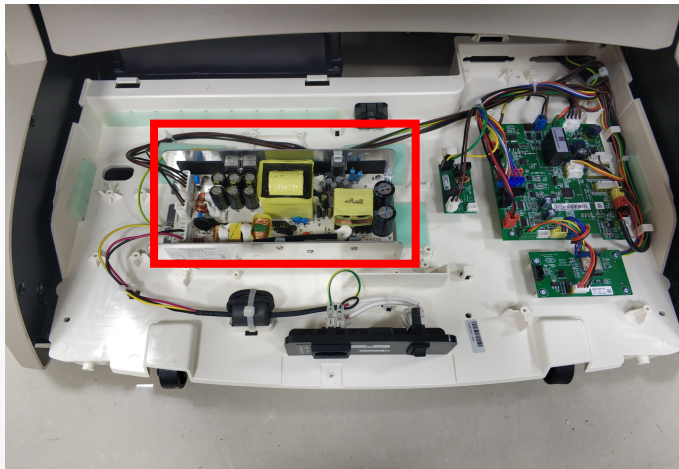
disconnect the terminals, remove 4 screws

main PCB had been taken down



EASEPAL

厦门蒙发利电子有限公司客户服务部



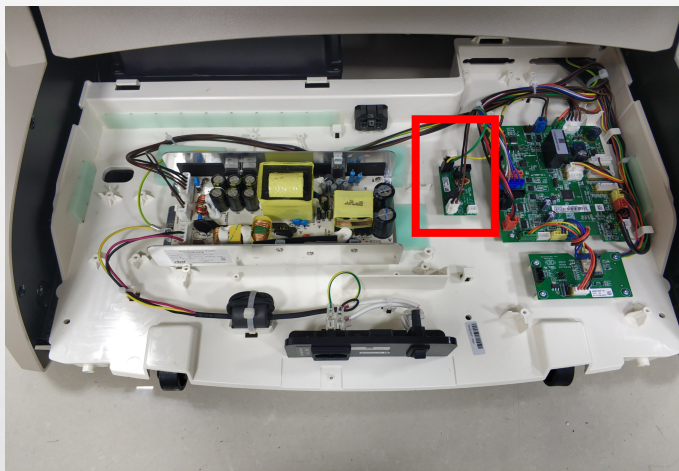
C.power PCB



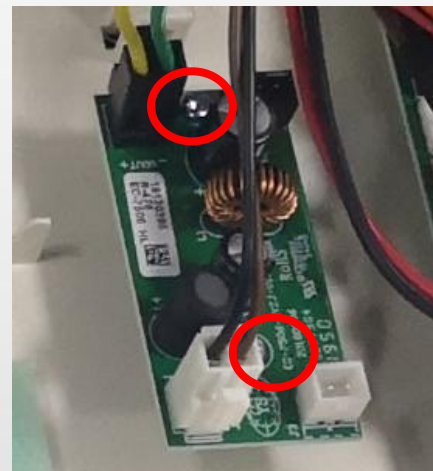
disconnect the terminals, remove 5 screws



take down power PCB



D.Electric frequency switch PCB



disconnect the terminal and remove 2 screws

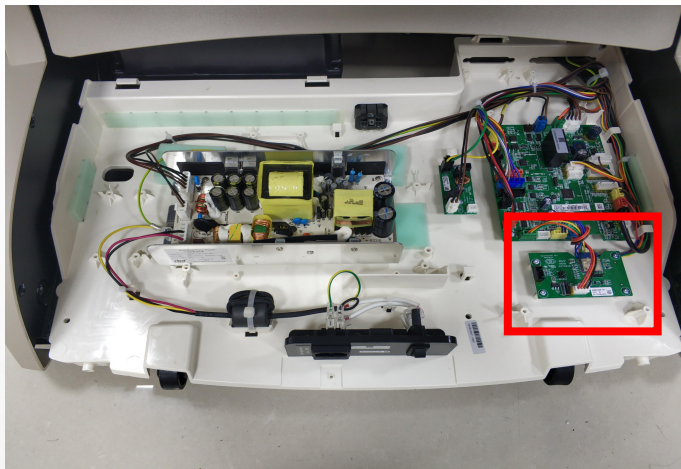


Electric frequency switch PCB

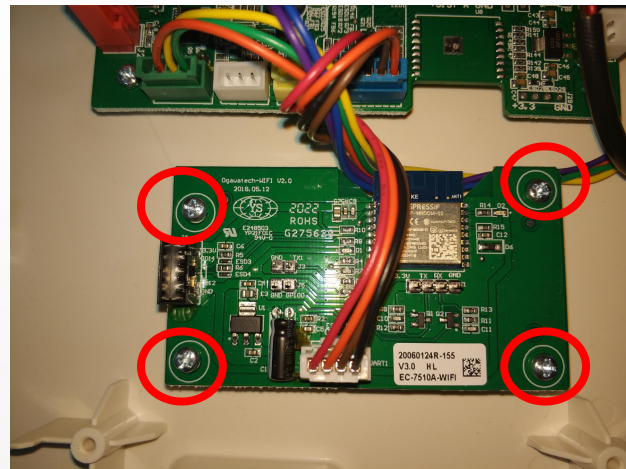


EASEPAL

厦门蒙发利电子有限公司客户服务部



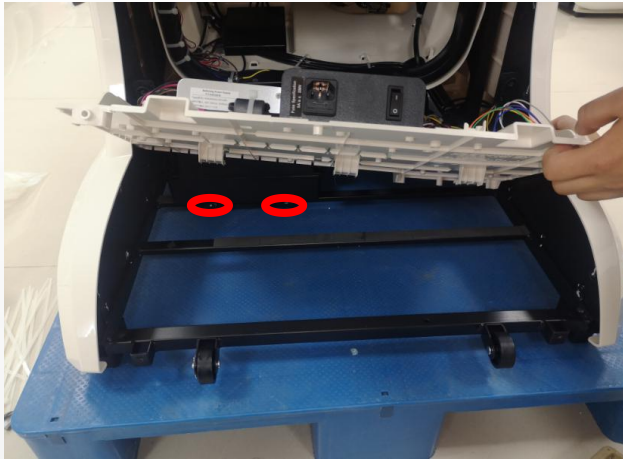
E.WIFT PCB



disconnect the terminal and
remove 4 screws



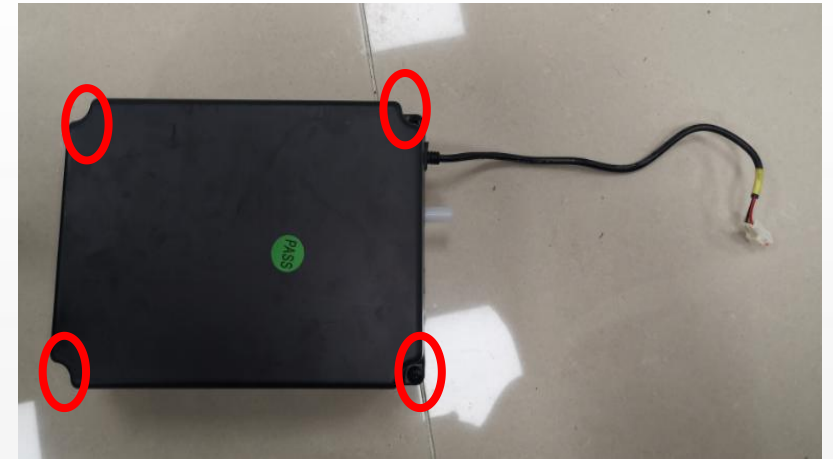
15、disassembly of air pump:



A.remove 2 screws



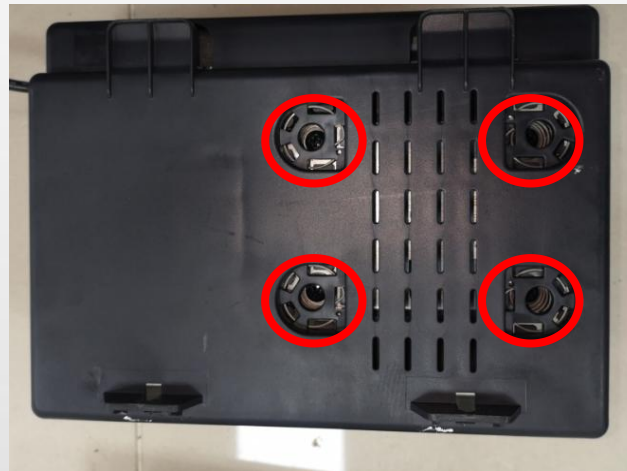
B.cut cable tie, disconnect the terminal



C.remove 4 screws



D.open the box



E.remove 4 screws



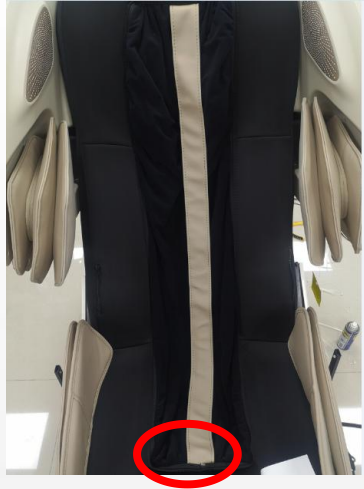
F.take down air pump



EASEPAL

厦门蒙发利电子有限公司客户服务部

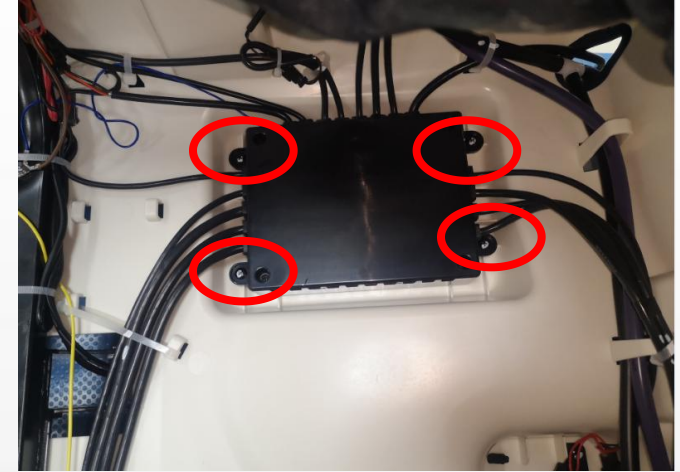
16、disassembly of the under seat PCB:



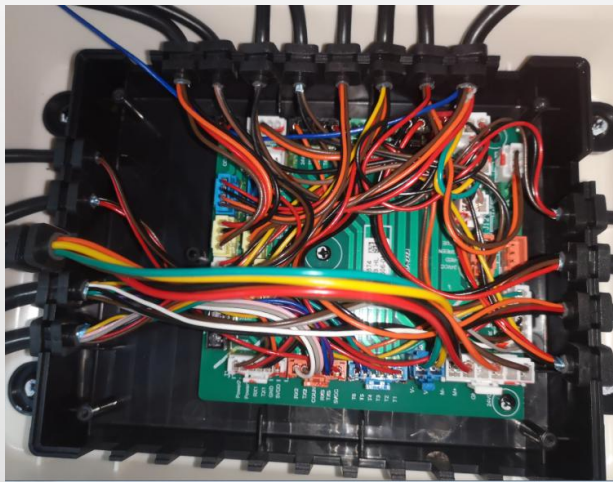
A.unzip the zipper



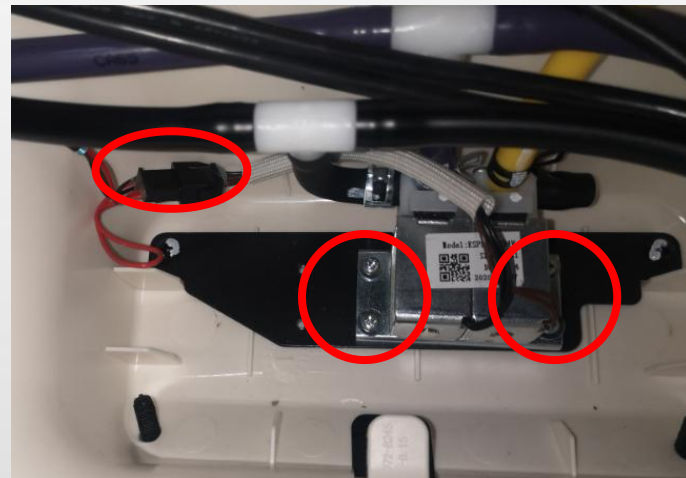
B.under seat PCB



C.remove 4 screws



D.under seat PCB



F.disconnect the terminal and
remove 4 screws



G.air valve under seat



17、disassembly of the legrest:



A. Remove the blocking on both sides of the legrest



B. disconnect the terminal and air hose



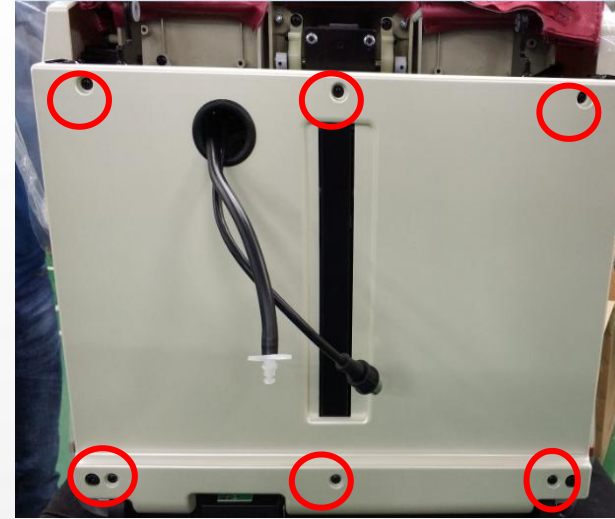
18、decomposition of the upper legrest:



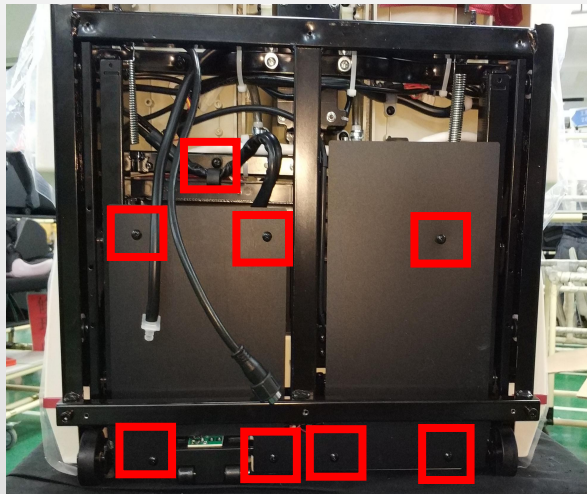
A. Bring your calves up to this position



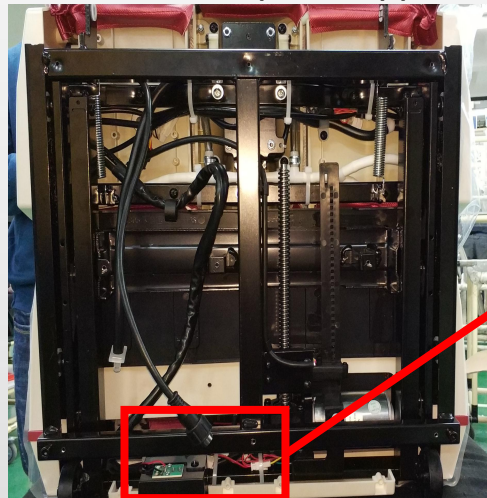
B. unzip the zipper



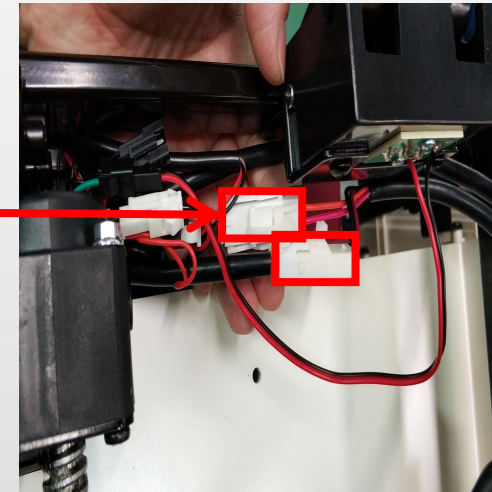
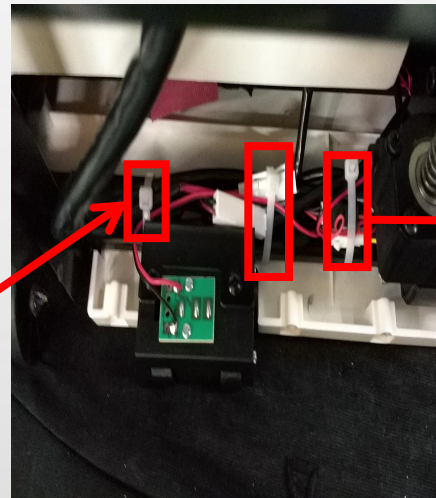
C. remove 6 screws



D. remove 8 screws



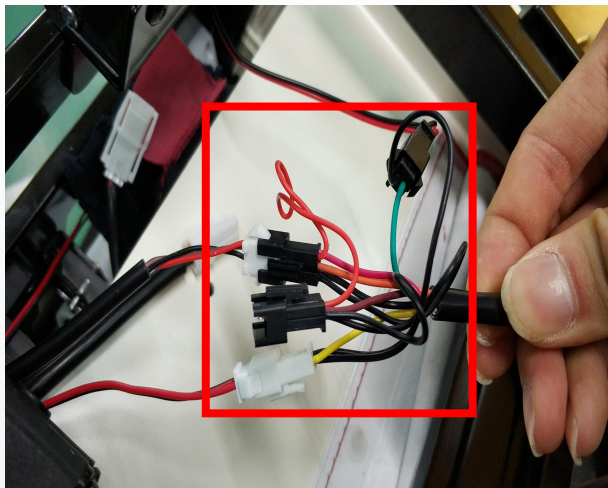
E. Cut off button



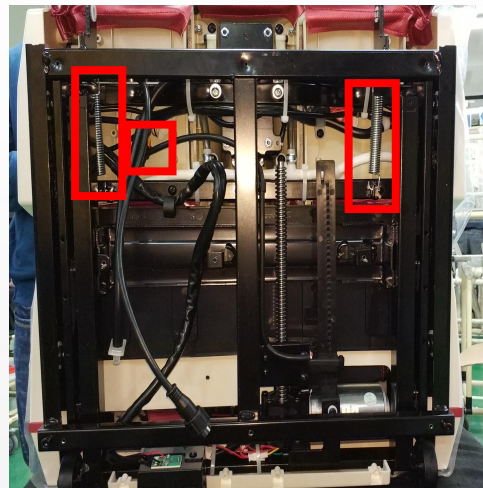


EASEPAL

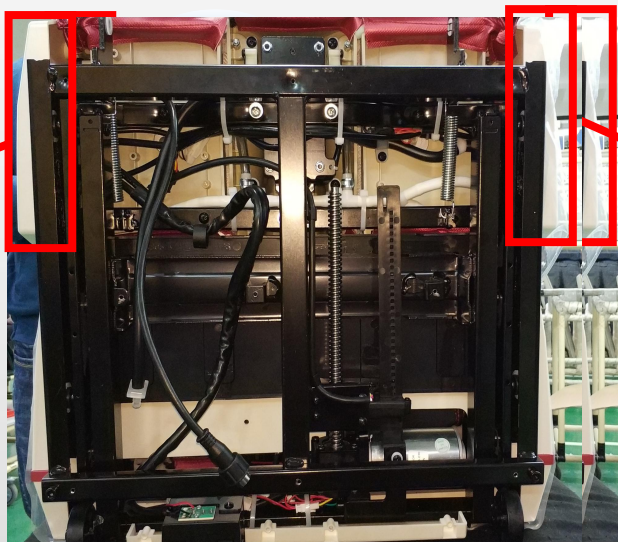
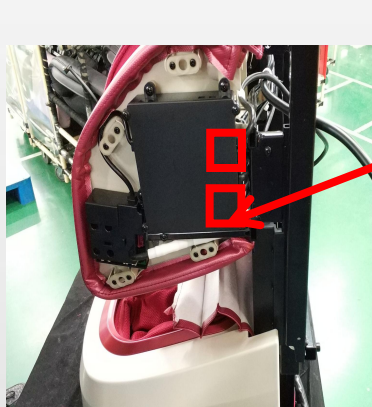
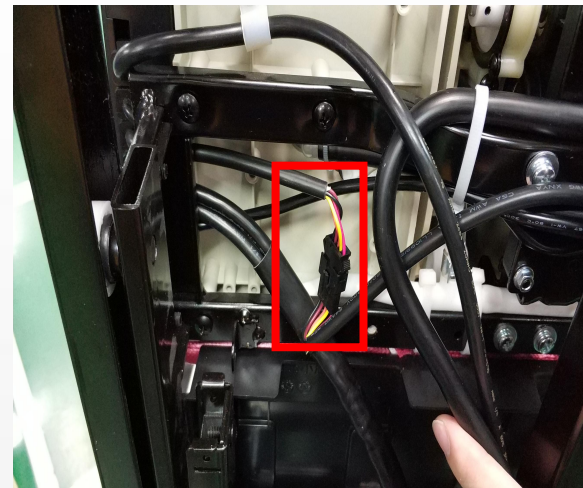
厦门蒙发利电子有限公司客户服务部



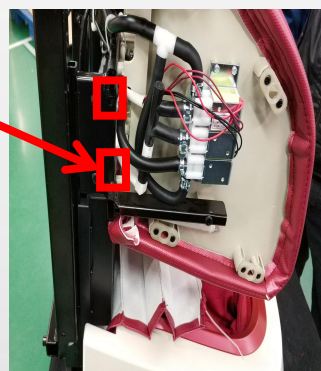
F.disconnect the terminals

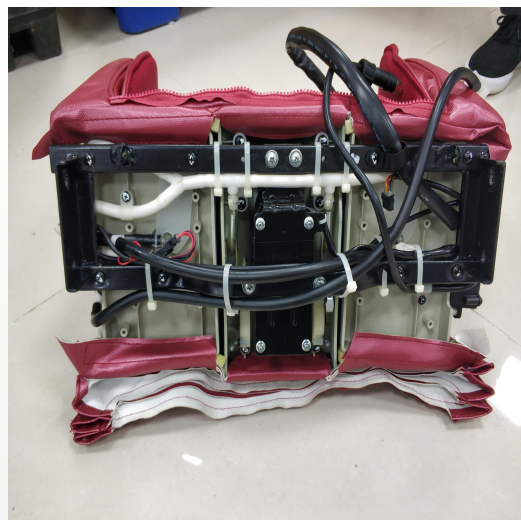


G.Remove the spring and discontent the terminals

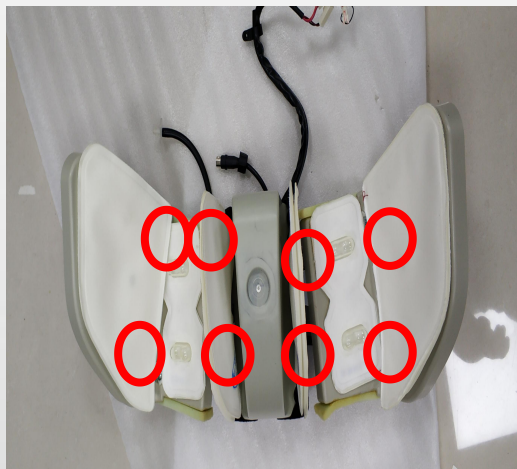


H.remove 4 screws

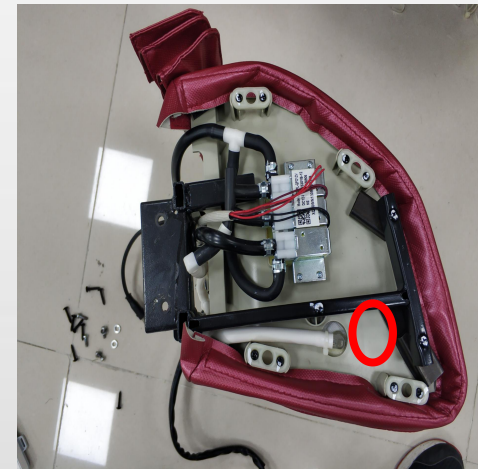
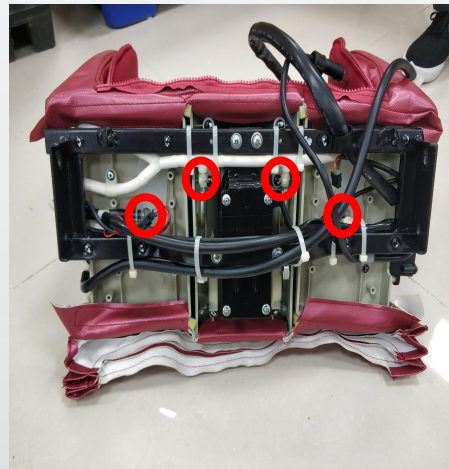




I.stick the Sticky, upper calf leather case can be replaced



J.remove 8 screws



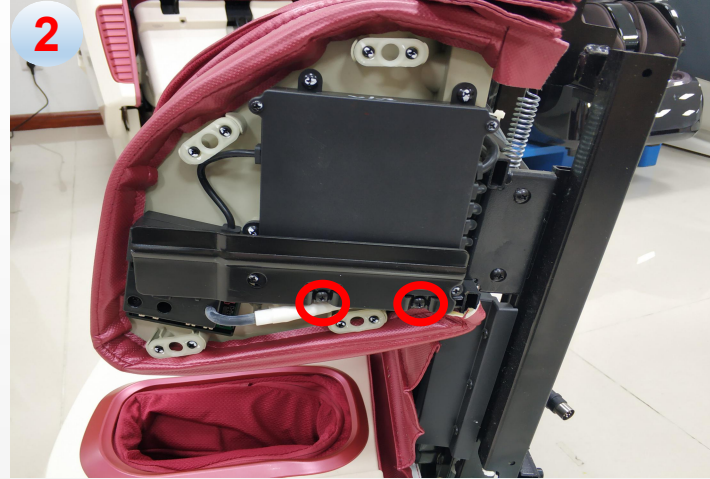
K.Pull out all the air pipes, All air bags can be replaced



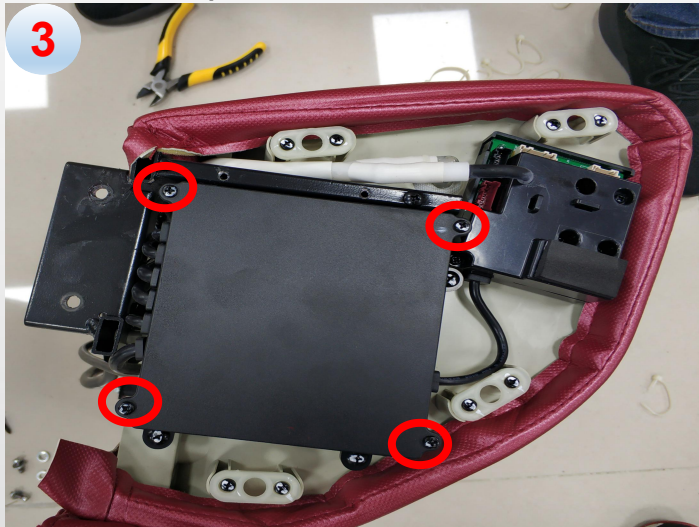
19、decomposition of the legrest PCB



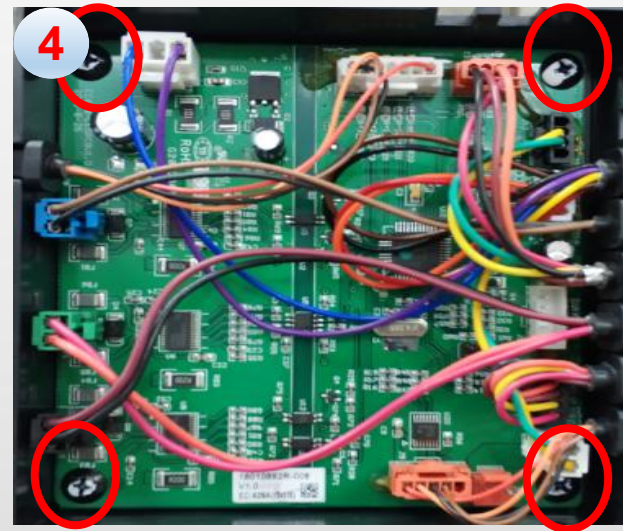
A. Open the cover



B. remove 2 screws



C. remove 4 screws



D. remove 4 screws, Unplug all terminals, decomposition of the legrest PCB



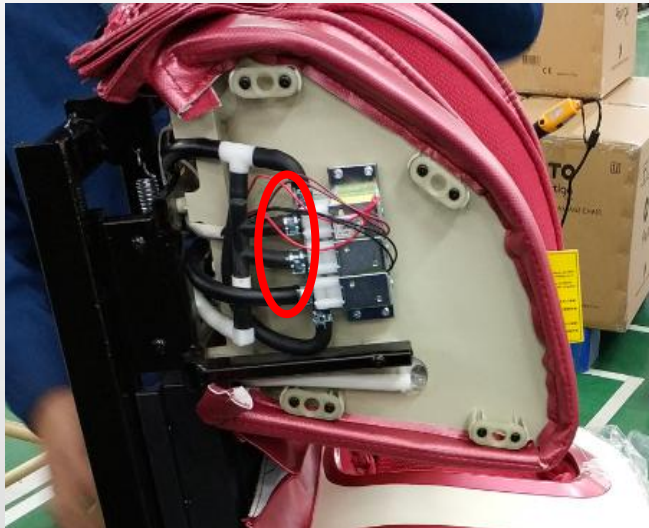
20、decomposition of the legrest Air valve



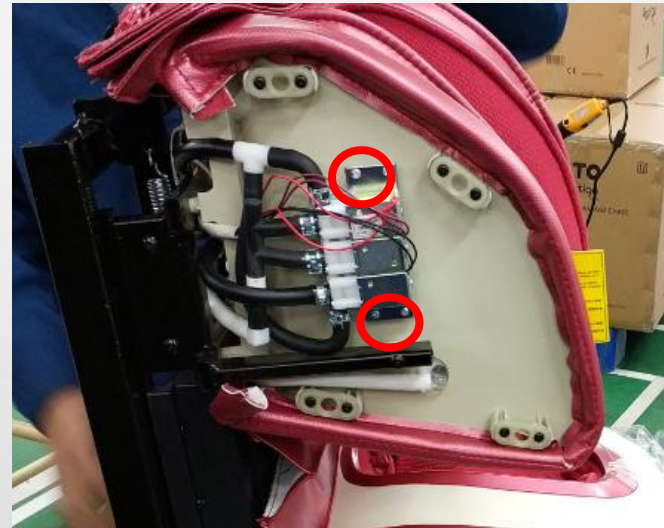
A.Open the cover



B.Cut off button,Unplug all terminals



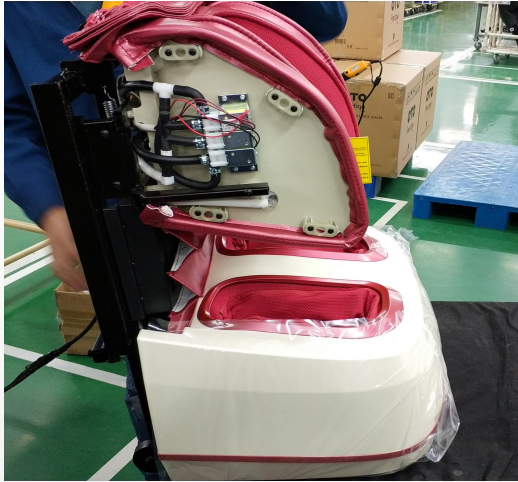
C.Pull out all the air pipes



D.remove 4 screws



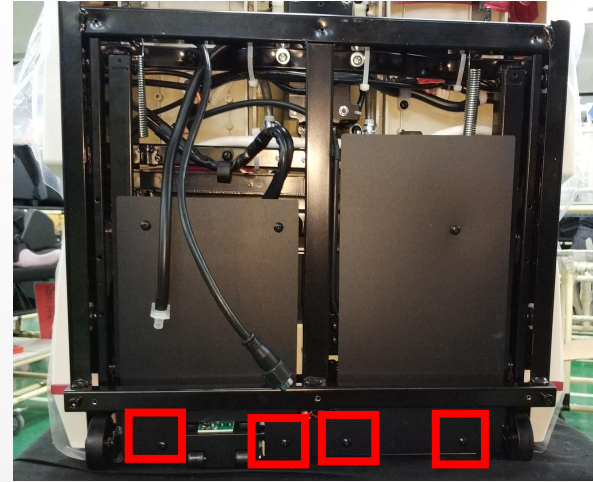
21、decomposition of the kneading motor unit of leg rest



A. Bring your calves up to this position



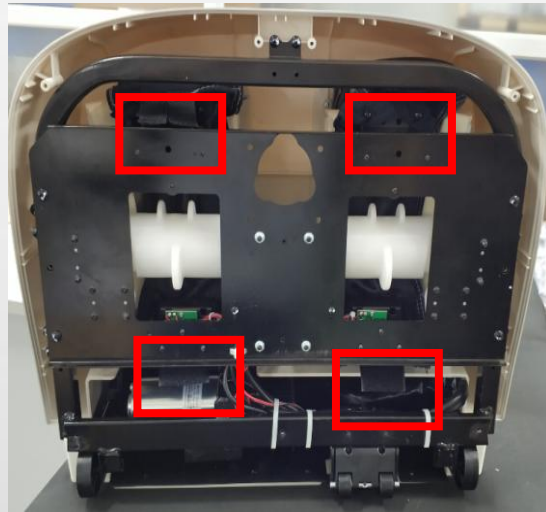
B. unzip the zipper



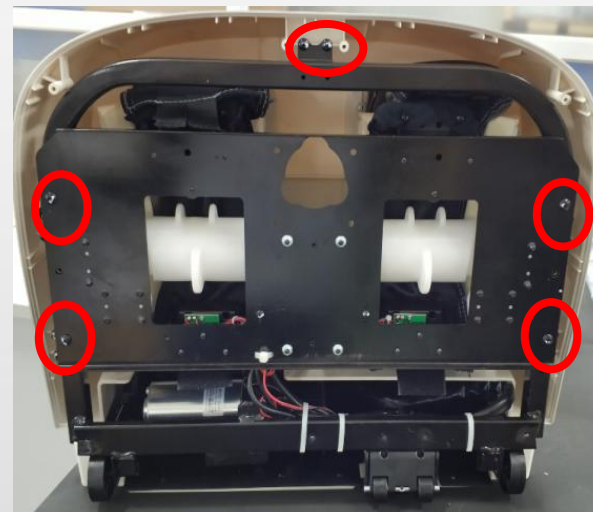
C. remove 4 screws



D. remove 9 screws



E. remove screws

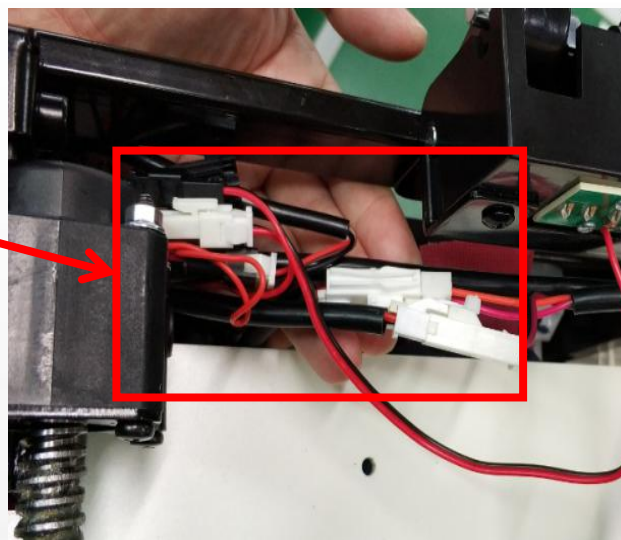
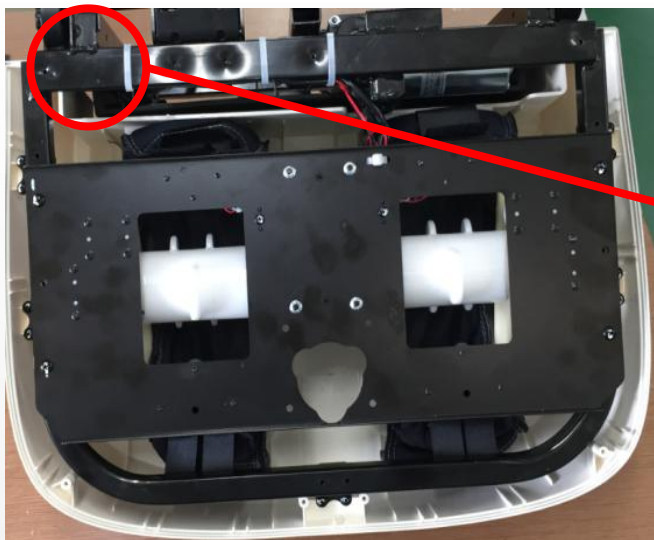


F. remove 5 screws

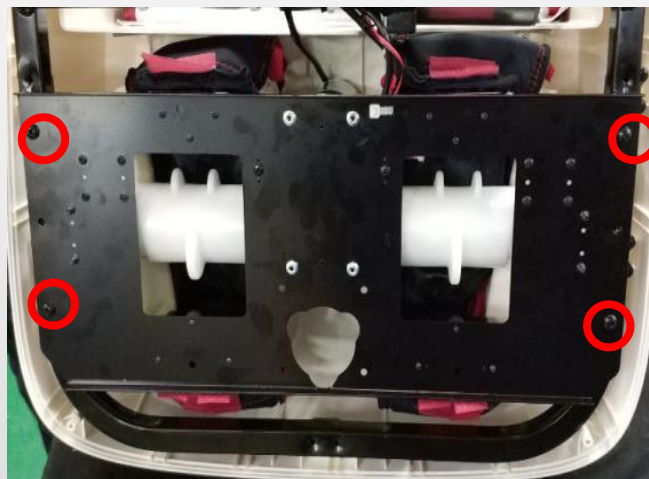


EASEPAL

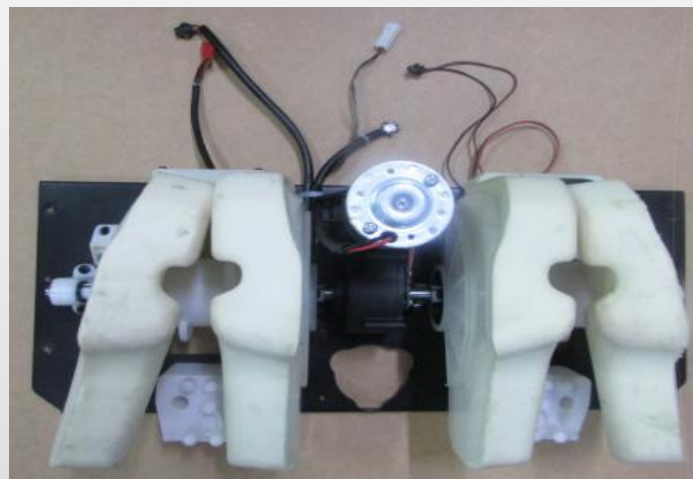
厦门蒙发利电子有限公司客户服务部



G. Cut off button,Unplug all terminals

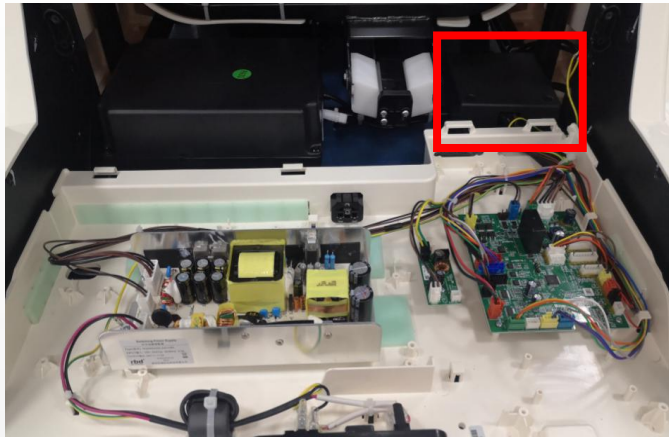


H.remove 4 screws

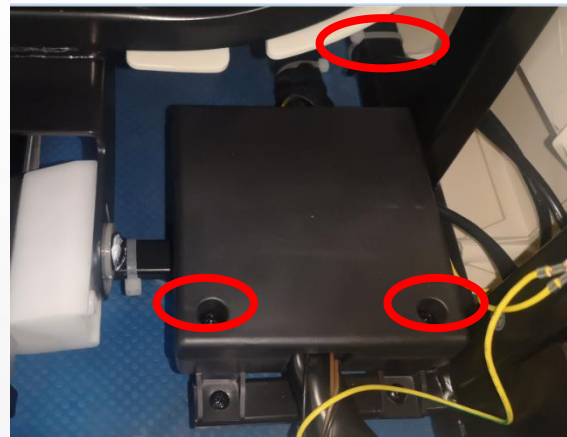




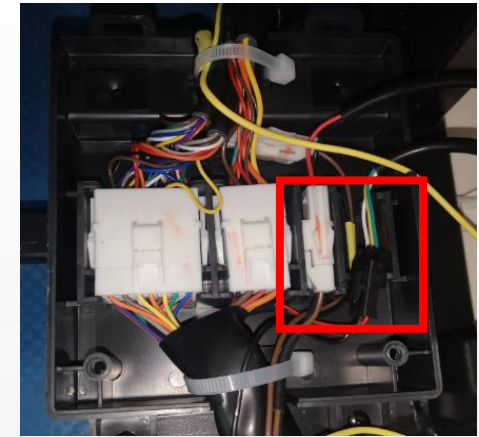
22、disassembly of backrest actuator:



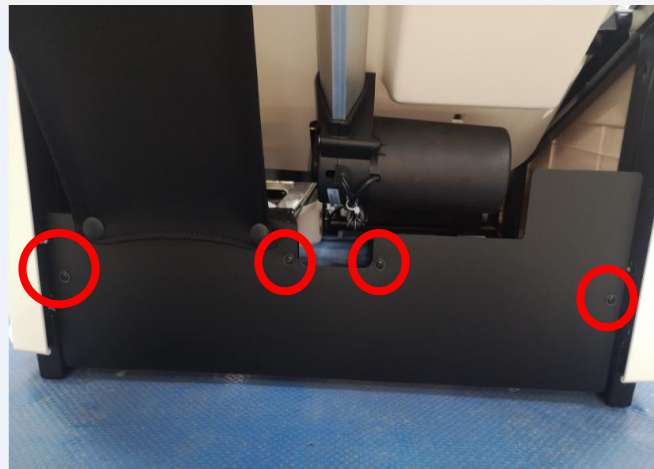
A.switch box



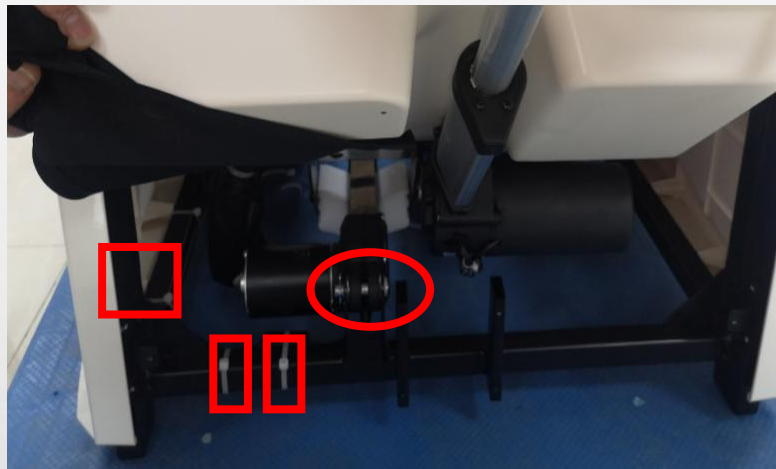
B.open the box



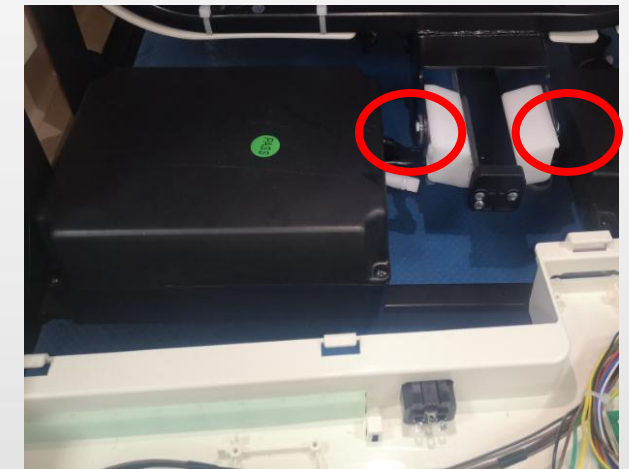
C.disconnect the terminals



D.remove 4 screws



E.cut cable, remove the shaft

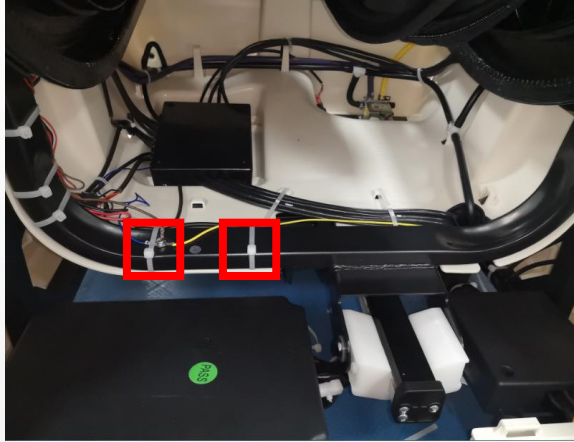


F.remove 2 screws

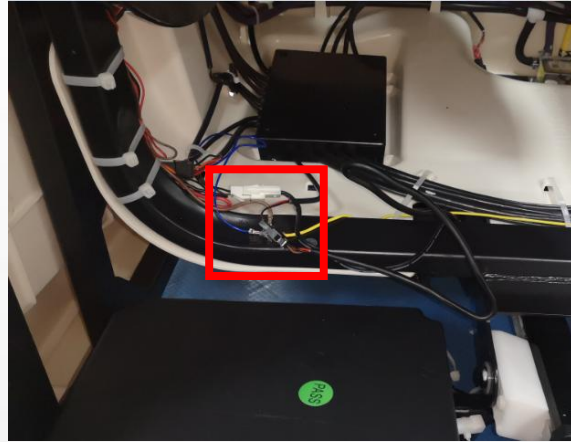


23、disassembly of legrest actuator:

A. disassembly of rear cover (reference 9 disassembly of rear cover)



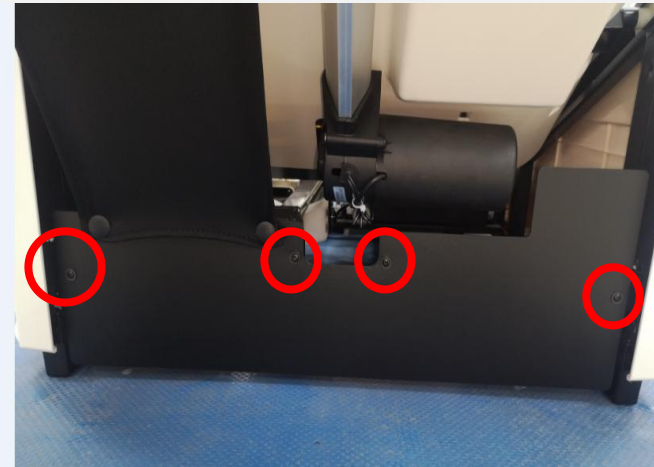
A.cut cable tie,disconnect the terminal



B. .Remove the blocking on both sides of the legrest



C. disconnect the terminal and air hose



D.remove 4 screws



E.take down the shaft,



五、Massage chair fault judgment

按摩椅自动故障检测项目列表

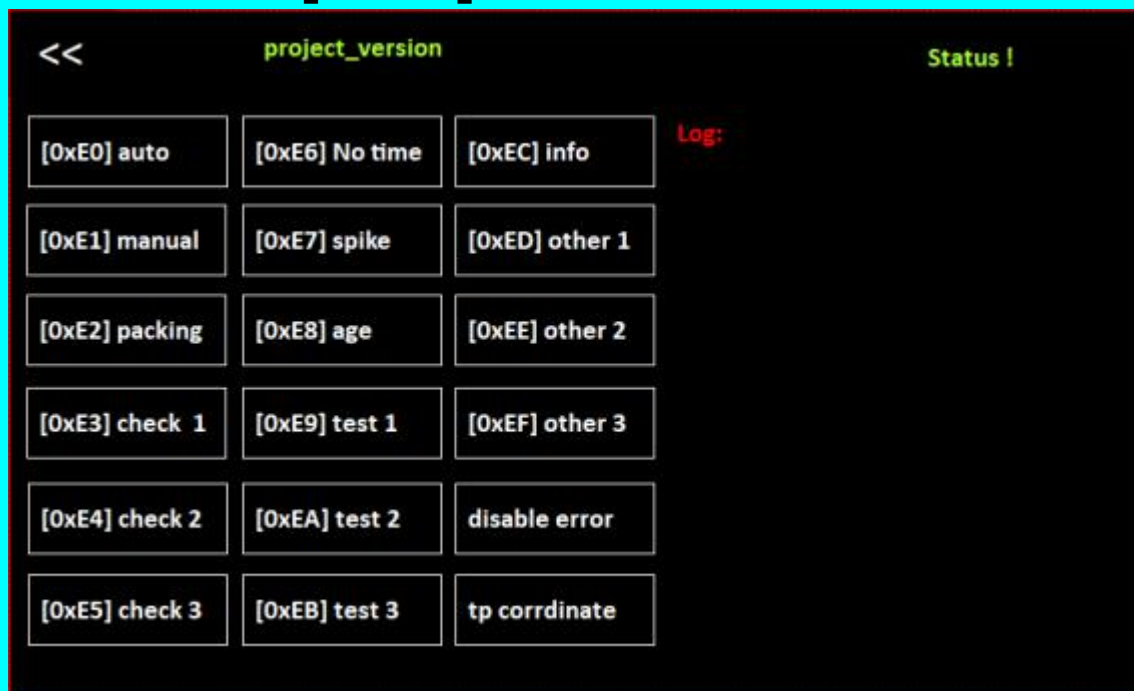


开启:

[0xE0]auto 自检



此区域内长按 4 秒, 弹出密码页面, 输入 0000 或 0592, 进入工程模式页面



【Testing process】

Backrest actuator: back to the lowest -- > up to the highest

legrest actuator: up to the highest -- > down to the lowest

legrest extension: extend -- > retract

mechanism up and down: down to the lowest -- > up to the highest

mechanism 3D expansion: strongest -- > weakest

mechanism width: narrowest -- > widest

mechanism knocking: knock all the time first, and then stop knocking after the above steps are completed

Air pump: normally open

Air valve: open 2S -- > Close 2S and keep cycling.

mechanism heating: always on.

Projector: always on.

Logo light: always on.

leg kneading: keep it open.

Foot kneading: keep it open.



故障号	故障描述	可能发生原因	排除方法	备注
2	remote control did not connected more than 4 seconds	1.remote control wire is broken or the remote control is disconnected	1.reconnecte the remote control or change the remote control wire.	turn on the chair
3	backrest signal is abnormity	1.backrest wire is not well connected. 2.backrest wire is broken	1.check whether the backrest wire is well connected 2.change the backrest wire	turn on the chair
5	remote control tested any key pressed more than 45 seconds	1.one of the KEY has been blocked.	1.check remote control or side panel controller	enter auto-check model
6	leg rest tested more than 4 seconds	1.connector of leg rest wire not well 2.wire of leg rest broken	1.check the connector of leg rest wire 2.change the wire of leg rest	enter auto-check model



32	Side panel controller fails to communicate with main PCB more than 4S	connector of wire not well	1.check the connector of wire 2.change the wire	enter auto-check model
40	The position sensor of the rolling motor is abnormal, no change of the position code disk is detected after 8s.	1. Position sensor is broken 2. The connection between the main PCB and the 3D PCB is abnormal 3. rolling motor is broken or locked 4. Drive circuit components are damaged	1.change the sensor 2.check the wire 3.check or change the motor 4.change main PCB	enter auto-check model
41	The position coding of rolling motor is abnormal, the code disk is in an incorrect position	1.position sensor broken 2.Incorrect initial position of code disk 2.mechanism overshoot	1.change the sensor 2.the mechanism to the initial height position, and then turn the code disk to the correct initial position.	enter auto-check model



42	The rotation speed sensor of the core massage (rolling) motor is abnormal, that is, no change of the rotation speed code disk is detected more than 4S.	<ol style="list-style-type: none"> 1. position sensor is broken 2. The connection between the main PCB and the 3D PCB is abnormal 3. motor is broken or locked 4. Drive circuit components are damaged 	<ol style="list-style-type: none"> 1. change the sensor 2. check the wire 3. check or change the motor 4. change main PCB 	enter auto-check model
44	The position sensor of the core kneading motor is abnormal, that is, no change of the position code plate is detected after 8s.	<ol style="list-style-type: none"> 1. position sensor is broken 2. The connection between the main PCB and the 3D PCB is abnormal 3. motor is broken or locked 4. Drive circuit components are damaged 	<ol style="list-style-type: none"> 1. change the sensor 2. check the wire 3. check or change the motor 4. change main PCB 	enter auto-check model
46	The rotation speed sensor of the core kneading motor is abnormal, that is, no change of the rotation speed code disk is detected after 5S.	<ol style="list-style-type: none"> 1. position sensor is broken 2. The connection between the main PCB and the 3D PCB is abnormal 3. motor is broken or locked 4. Drive circuit components are damaged 	<ol style="list-style-type: none"> 1. change the sensor 2. check the wire 3. check or change the motor 4. change main PCB 	enter auto-check model



48	The position sensor of the core expansion motor is abnormal, i.e. no change of the position code disk is detected after 10s.	<ol style="list-style-type: none"> 1. position sensor is broken 2. The connection between the main PCB and the 3D PCB is abnormal 3. motor is broken or locked 4. Drive circuit components are damaged 	<ol style="list-style-type: none"> 1. change the sensor 2. check the wire 3. check or change the motor 4. change main PCB 	enter auto-check model
49	The position coding of the core expansion motor is abnormal, that is, the code disk is in an incorrect position.	<ol style="list-style-type: none"> 1. position sensor is broken 2. Incorrect initial position of code disk 2. mechanism overshoot 	<ol style="list-style-type: none"> 1. change the sensor 2. Move the mechanism to the initial retraction position 	enter auto-check model
50	Abnormal rotation speed (count) sensor of core expansion motor	<ol style="list-style-type: none"> 1. position sensor is broken 2. The connection between the main PCB and the 3D PCB is abnormal 3. motor is broken or locked 4. Drive circuit components are damaged 	<ol style="list-style-type: none"> 1. change the sensor 2. check the wire 3. check or change the motor 4. change main PCB 	enter auto-check model



59	backrest Count sensor abnormal	1. count sensor broken 2. the wire is broken 3. motor is broken or locked 4. Drive circuit components are damaged	1. change the sensor 2. check the wire 3. check or change the motor 4. change main PCB	enter auto-check model
63	leg rest Count sensor abnormal	1. count sensor broken 2. the wire is broken 3. motor is broken or locked 4. Drive circuit components are damaged	1. change the sensor 2. check the wire 3. check or change the motor 4. change main PCB	enter auto-check model
68	Calf extension position (count) sensor abnormal	1. count sensor broken 2. the wire is broken 3. motor is broken or locked 4. Drive circuit components are damaged	1. change the sensor 2. check the wire 3. check or change the motor 4. change main PCB	enter auto-check model
69	Abnormal coding of crus extension position (the shortest and longest limit sensors are valid at the same time)	1. position sensor broken 2. wire broken	1. change the sensor 2. check the wire	enter auto-check model
70	Calf extension shortest limit sensor failure	1. position sensor broken 2. wire broken	1. change the sensor 2. check the wire	enter auto-check model



71	Calf extension longest limit sensor failure	1.position sensor broken 2.wire broken	1.change the sensor 2.check the wire	enter auto-check model
72	The back heating thyristor is short circuited, i.e. the temperature is greater than or equal to 78 degrees detected for 10s.	The heating wire is short circuited and caused by overcurrent.	(1)check or chuange the heater (2)Check whether the back frame wire and the heating of the core are short circuited and replace if there is any problem.	enter auto-check model
73	The back heating thermistor is short circuited, i.e. the AD detection value is less than or equal to 5 in 5S.	Heating thermistor wire short circuit to ground	Check whether the back frame wire and the heating of the core are short circuited and replace if there is any problem.	enter auto-check model
74	The back heating thermistor has an open circuit, that is, the ad detection value is greater than or equal to 247 in 5S.	Heating thermistor wire disconnected	Check whether the back frame wire and the heating of the movement are open circuit, and replace if there is any problem.	enter auto-check model

