



福建怡和电子有限公司

FUJIAN YIHE ELECTRONICS CO.,LTD



# 产品维修手册

Maintenance Service Manual

产品型号/MODEL: YH8382L/OS-Pinnacle

适用电压规格/ voltage specification: 120V/60Hz

# 一、产品故障列表 Trouble List

如下为常见的故障现象及维修方法。

**Common Troubles and Maintenance Methods are listed as below:**

故障序号 NO	现象 phenomenon	描述 Description	维修方法 maintenance method
01	开机无功能 No function	A. 控制器无反应 ①、保险丝烧掉 Fuse melts (电源盒处和中心板上 (in the Power Source Box and main PCB) ②、电源电路接触不良。Power supply circuit Poorly connected ③、电源板坏 POWER PCB Failed ④、中心板坏 Main PCB failed	①、更换保险丝 Replace Fuse ②、更换电源盒 Replace Power Box ③、更换电源板 Replace POWER PCB ④、更换中心板 Replace main PCB
		B. 控制器有反应: ①、上下行程光电坏。 Up or Down Stroke Photoelectricity was failed ②、中心板坏掉 Main PCB failed ③、开机直揉捏其他按键无效 kneading all the time from powerand no response with other button	①、更换行程光电 Replace stroke photoelectricity ②、更换中心板 Replace main PCB ③、宽度检测板坏， 更换宽度检测板 Replace Width Inspection Board
02	宽中窄不能切换 the Width switchover isn` t change	①、中心板宽度检测端子线材接触不良。The terminals of Width Inspection on main PCB with wires were poorly connected ②、机芯宽度检测板端子线材接触不良。The terminals of Width	①、②点将端子接插到位或是更换线材 Plug the terminals well or replace the wires ③、更换宽度检测板 Replace Width Inspection ④、更换中心板

		<p>Inspection on mechanical with wires were poorly connected</p> <p>③、宽度检测板坏。 Width Inspection failed</p> <p>④、中心板坏 Main PCB failed</p>	<p>Replace the main PCB</p>
03	<p>不行走 NO Rolling</p>	<p>①、端子或是线材接触不良 Terminals or Wire Poorly Contact</p> <p>②、上、下行程光电组件坏。 UP/ Down-stroke Photoelectricity Subassembly Failed</p> <p>③、行走电机坏 Rolling Motor Failed</p> <p>④、中心板坏 Main PCB failed</p>	<p>①、将端子接插到位或是更换线材。 Plug the terminal well or replace the wires</p> <p>②、更换上、下行程组件 Replace UP/Down-Stroke Subassembly</p> <p>③、更换机芯。 Replace gear box</p> <p>④、更换中心板 Replace main PCB</p>
04	<p>不揉捏 No kneading</p>	<p>①、中心板端子没插到位或是线材接触不良。The terminals on main PCB and wires are poorly connected</p> <p>②、揉捏电机坏 Kneading motor failed</p> <p>③、中心板坏 Main PCB failed</p>	<p>①、将端子接插到位或是更换线材。 Plug the terminal well or replace the wires</p> <p>②、更换机芯 Replace gear box</p> <p>③、更换中心板。 Replace main PCB</p>
05	<p>不敲击 No tapping</p>	<p>①、中心板端子没插到位 The terminals on main PCB and wires are poorly connected</p> <p>②、敲击电机坏 Tapping motor failed</p> <p>③、中心板坏掉 Main PCB failed</p>	<p>①、将端子接插到位 Plug the terminal well</p> <p>②、更换机芯 Replace gear box</p> <p>③、更换中心板 R Replace main PCB</p>

## 二. 故障检修流程图 Troubleshooting Process

在修理或者替换零配件过程中注意以下几点：

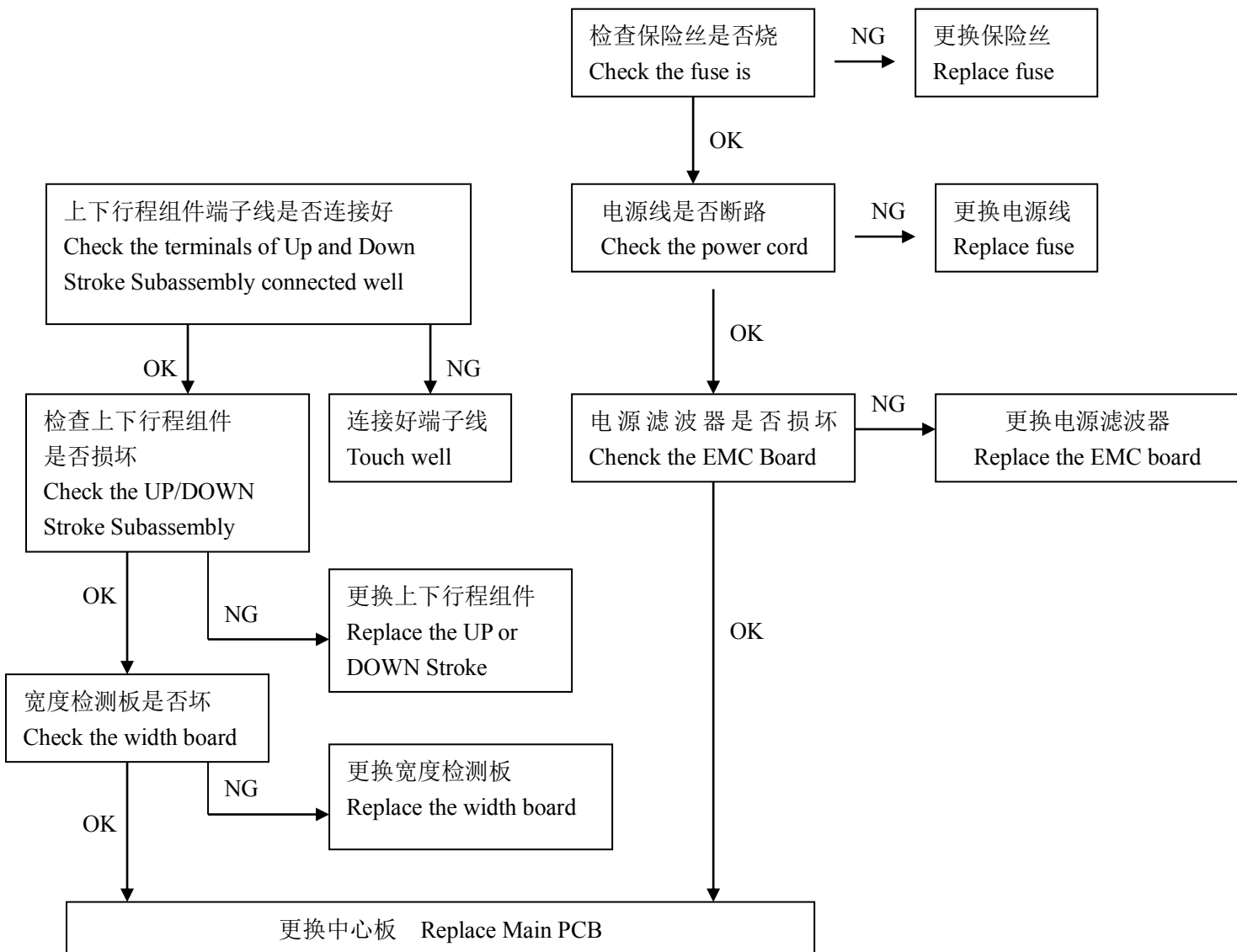
- A. 在拆卸连线，移动连接器，或者替换部件前一定要断开电源线插头。
- B. 因为半导体（像集成电路，或者其它的）很容易被静电损坏，所以当要触摸 PCB 前，请确保你的身体和大地有连线（佩带静电手环），或可以将手放在地端，以释放身体上所带的静电。

Notes for repairing chair or replacing parts

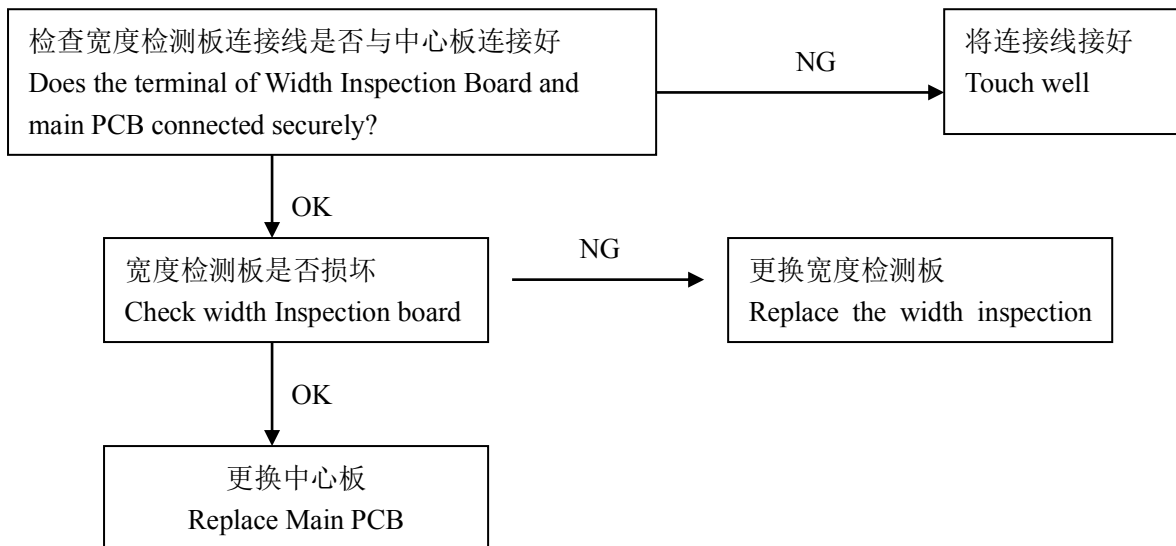
- A. Make sure the power is off when you tear down the wires, move terminals or replacing parts.
- B. The semiconductors (like IC or something else) will easily be damaged by static.

So you touch the PCB before, please make sure your body is connected with the ground.

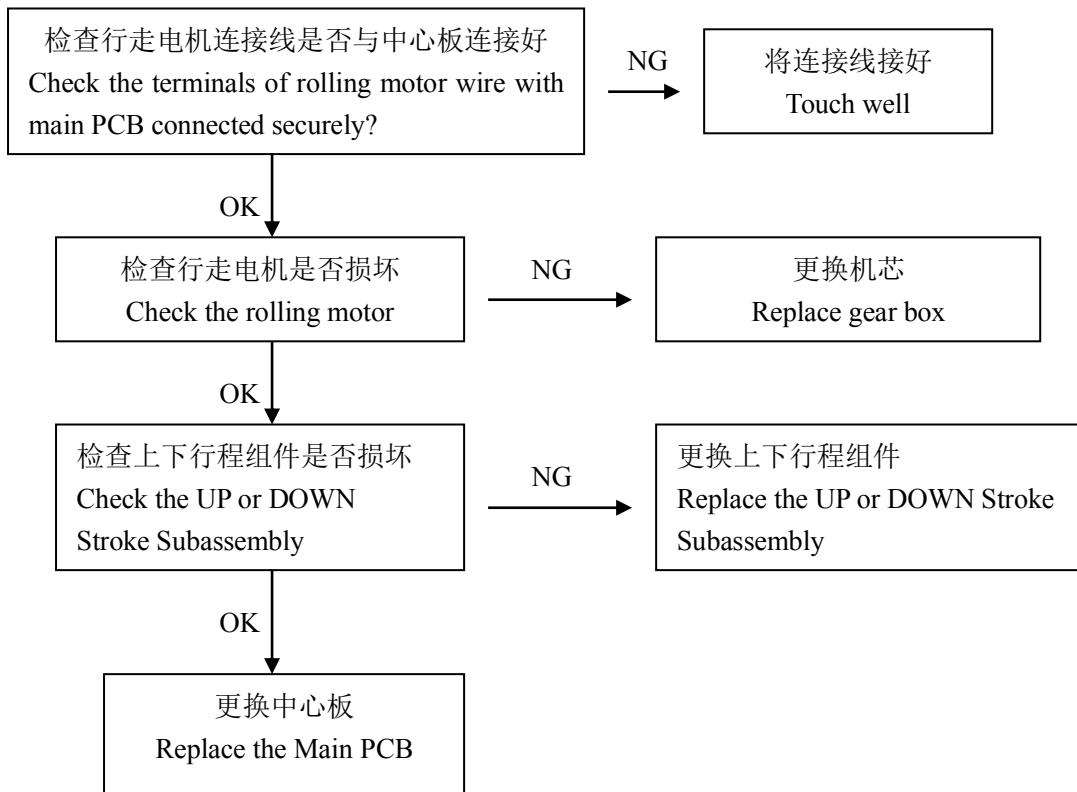
### 1、开机无功能/ No function



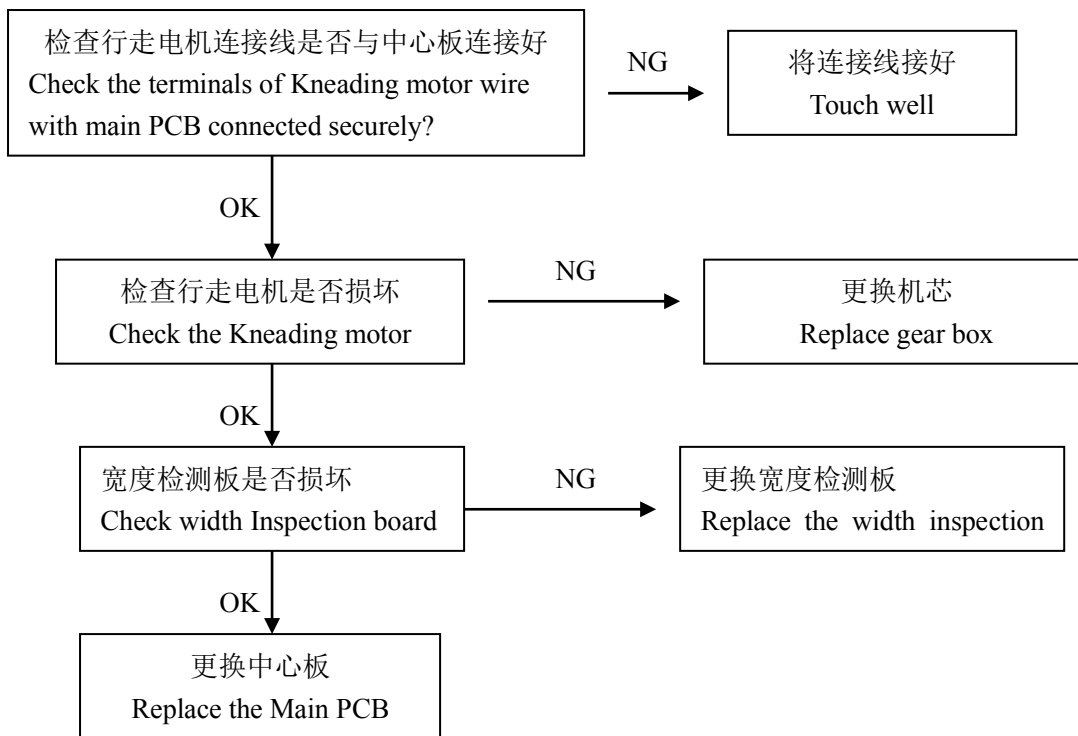
## 2、机芯宽中窄不能切换 No width switchover



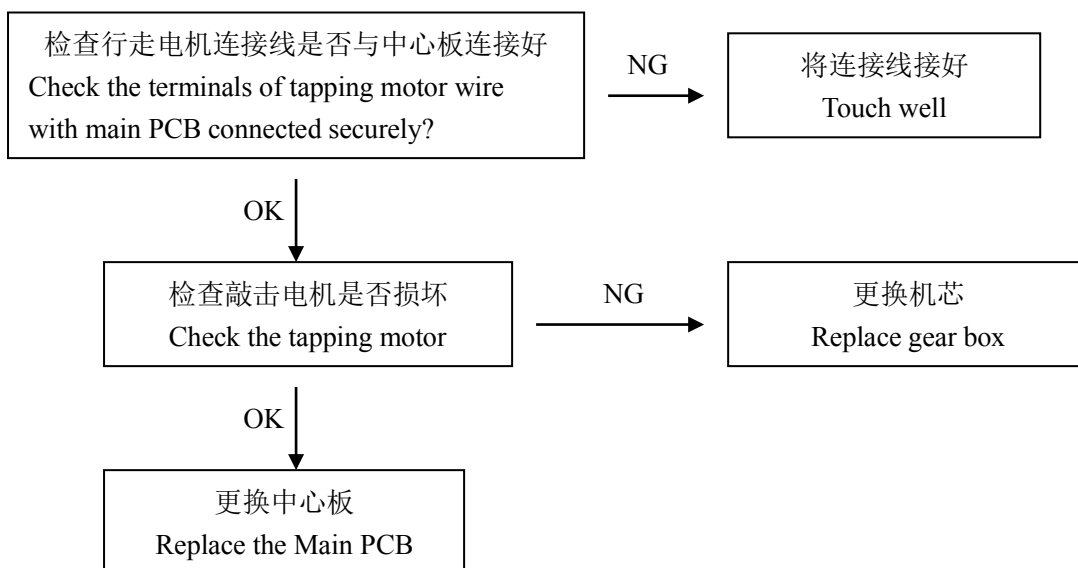
## 3、不行走/ NO ROLLING



#### 4、不揉捏/ NO KNEADING



#### 5、不敲击/ NO TAPPING



## 工具列表 Tools List

			
<p>十字螺丝刀 Screwdriver size 1,2,3</p>	<p>老虎钳 尖嘴钳 Diagonal cutter and long nose pliers</p>	<p>斜口钳 Diagonal pliers</p>	<p>扳手 Spanner tools Kit</p>
			
<p>电笔 Test pen</p>	<p>六角扳手 Allen Key set</p>	<p>内六角扳手 Ratchet Tools Set</p>	<p>24V/DC 电源 24V/DC power</p>
			
<p>电动螺丝刀 Electric Driver</p>	<p>90 度弯头电动螺丝刀</p>	<p>扎扣 Cable Ties</p>	<p>压线帽 WIRE ONECTORS</p>

# 目录

## Table of Contents

小腿的拆卸更换 Footrest replacement steps .....	9
披风的拆卸更换 Backrest pad replacement steps.....	10
中心板、蓝牙板、变压器、气泵、气阀、滤波板、灯带稳压板的拆卸更换 Mainboard, Bluetooth PCB, Power PCB, Air pump replacement steps. ....	10
右侧板的拆卸更换 Right side panel replacement steps .....	13
机芯上下行程开关的拆卸更换 UP/DOWN limit sensor replacement steps.....	15
机芯的拆卸更换 2D massage mechanism replacement steps.....	16
小腿推杆的拆卸更换 Footrest actuator replacement steps .....	19
靠背推杆的拆卸更换 Backrest actuator replacement steps .....	21
手控器的拆卸更换 Remote controller replacement steps .....	22

## 小腿的拆卸更换 Footrest replacement steps

1-1、将小腿与座架连接拉链拉开（图 1），小腿左右两边各有 1 颗螺丝螺母（图 2），用十字螺丝刀和扳手将螺丝螺母卸下（图 3），即可将小腿与座架分离；

1-1. Unzip the zipper connecting the lower leg to the seat frame (Figure 1). There is a screw and nut on each side of the lower leg (Figure 2). Use a Phillips screwdriver and a wrench to remove the screws and nuts (Figure 3), and the lower leg can then be detached from the seat frame.



图 1



图 2



图 3

1-2、用斜口钳将固定小腿线束保护布套的扎扣剪掉，将保护布套拉开（图 4），将小腿电源线对插接头及气管接口拔掉（图 5），即可将小腿取下（图 6），小腿如果有损坏就可更换新的。

1-2. Use diagonal pliers to cut off the cable ties securing the protective cloth sleeve of the lower leg wiring harness. Peel back the protective sleeve (Figure 4), disconnect the plug connector of the lower leg power cable and the air hose interface (Figure 5), then remove the lower leg section (Figure 6). If the lower leg is damaged, it can be replaced with a new one.



图 4



图 5



图 6

**注意：**在装回小腿时按上面的操作步骤逆向即可。

**工具：**十字螺丝刀、扳手、斜口钳。

Note: Follow the steps above to reverse the calf when it is replaced.

Tools: Phillips screwdriver, wrench, diagonal pliers.

### 披风的拆卸更换 Backrest pad replacement steps

2-1、将披风最上端粘毛扣掀开，拉链拉开（图 7），将电源连接线对接插头拔掉（图 8）

2-1. Lift the velvet buckle at the top of the cloak, open the zipper (Picture 7), and unplug the plug of the power cable (Picture 8)



图 7



图 8

2-2、将披风腰部两侧背面、座部两侧背面、座部前端背面拉链拉开，即可将披风取下（图 10），披风如果有损坏就可更换新的。

2-2. Remove the cloak by zipping the back of both sides of the waist, the back of both sides of the seat, and the back of the front end of the seat (Figure 10), and replace the cloak with a new one if it is damaged.



图 9



图 10

注意：在装回披风时按上面的操作步骤逆向即可。

Note: Follow the steps above to reverse the installation of the cape.

### 中心板、蓝牙板、变压器、气泵、气阀、滤波板、灯带稳压板的拆卸更换 Mainboard, Bluetooth PCB, Power PCB, Air pump replacement steps.

3-1、将固定中心盒的两颗螺丝卸下（图 11），将中心盒盖板向上掀开（图 12），

3-1. Remove the two screws that hold the center box (Picture 11) and lift the lid of the center box upwards (Picture 12).



图 11



图 12

3-2、将中心板上各接线端子拔掉（图 13），将固定中心板的 4 颗螺丝（图 14）卸下，即可将中心板取下（图 15），中心板如果有损坏就可更换新的。

3-2. Unplug the terminals on the center plate (Figure 13) and remove the four screws that fix the center plate (Figure 14) to remove the center plate (Figure 15), and replace the center plate with a new one if it is damaged.



图 13



图 14



图 15

3-3、将蓝牙板上各接线端子拔掉（图 16），将固定蓝牙板的 4 颗螺丝（图 17）卸下，即可将蓝牙板取下（图 18），蓝牙板如果有损坏就可更换新的。

3-3. Unplug the terminals on the Bluetooth board (Figure 16), remove the four screws that fix the Bluetooth board (Figure 17), and remove the Bluetooth board (Figure 18), and replace the Bluetooth board with a new one if it is damaged.



图 16



图 17



图 18

3-3、将电源板上 2 个对插端子拔掉（图 19），将固定电源板的 4 颗螺丝（图 20）卸下，即可将电源板取下（图 21），电源板如果有损坏就可更换新的

3-3. Unplug the two plug-in terminals on the power board (Figure 19) and remove the four screws that hold the power board (Figure 20) to remove the power board (Figure 21).



图 19



图 20



图 21

3-4、用斜口钳将固定气泵线束的扎扣剪掉，中心板上气泵对插端子拔掉，将固定气泵的 4 颗螺丝、固定伸缩带的 4 颗螺丝、固定气管的 1 颗螺丝卸下，将气管连接拔掉（图 22），即可将气泵取下（图 23），气泵如果有损坏就可更换新的。

3-4. Cut off the buckle that fixes the wiring harness of the air pump with diagonal pliers, unplug the air pump plug-in terminal on the center plate, remove the 4 screws that fix the air pump, the 4 screws that fix the telescopic belt, and the 1 screw that fixes the air pipe, and unplug the air pipe connection (Figure 22), then the air pump can be removed (Figure 23), and the air pump can be replaced with a new one if it is damaged.



图 22

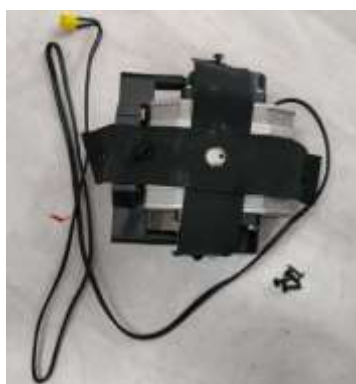


图 23

3-5、用斜口钳将固定气阀线束的扎扣剪掉，中心板上气阀对插端子拔掉，将固定气泵的4颗螺丝卸下，将气管连接拔掉（图24），即可将气阀取下（图25），气阀泵如果有损坏就可更换新的。

3-5. Cut off the buckle of the fixed air valve harness with diagonal pliers, unplug the valve plug-in terminal on the mainboard, remove the 4 screws that fix the air pump, and unplug the gas pipe connection (Figure 24), then the air valve can be removed (Figure 25), and the air valve pump can be replaced with a new one if it is damaged.

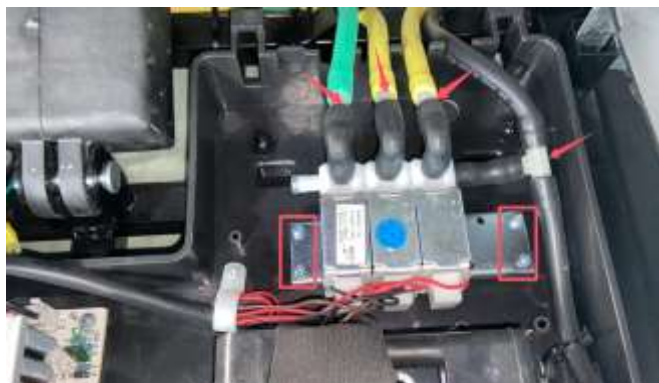


图 24



图 25

注意：在装回中心板、蓝牙板、电源板、气泵、气阀时按上面的操作步骤逆向即可。

工具：十字螺丝刀、斜口钳。

Note: When installing the mainboard, Bluetooth board, power board, air pump, and air valve, you can reverse the operation according to the above steps.

Tools: Phillips screwdriver, diagonal pliers.

#### 右侧板的拆卸更换 Right side panel replacement steps

4-1、用螺丝刀将固定后盖的4颗螺丝（图26）卸下，即可后盖取下（图27）；

4-1. Remove the four screws that fix the back cover with a screwdriver (Picture 26) and remove the back cover (Picture 27).



图 26



图 27

4-2、用斜口钳将蓝牙音箱电源线固定扎扣剪掉，对插端子拔开（图 28），用斜口钳将气管固定扎扣剪掉，拔掉气管接头（图 29、30）；

4-2. Cut off the Bluetooth speaker power cord fixing buckle with diagonal pliers, unplug the plug-in terminal (Figure 28), cut off the tracheal fixing buckle with diagonal pliers, and unplug the tracheal joint (Figs. 29 and 30);



图 28



图 29



图 30

4-3、用内六角扳手将右侧板后方固定螺丝卸下（图 31）；

4-3. Use an Allen wrench to remove the fixing screw behind the right plate (Fig. 31).

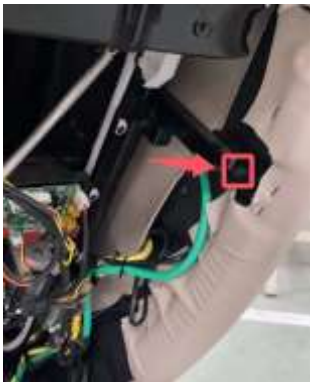


图 31

4-4、将座侧挡布两边拉链拉开（图 32），掀起挡布（图 33），用螺丝刀将右侧板 2 颗固定螺丝卸下（图 34），将右侧板前后端向上提起（图 35），即可将右侧板卸下（图 36），右侧板如果有损坏就可更换新的。

4-4. Pull the zippers on both sides of the seat side baffle (Fig. 32), lift the baffle (Fig. 33), remove the two fixing screws on the right side plate with a screwdriver (Fig. 34), lift the front and back ends of the right side plate up (Fig. 35), and replace the right side plate with a new one if it is damaged.



图 32



图 33



图 34



图 35



图 36

注意：在装回侧板时首先将侧板下方挂钩挂在座架上，上方挂钩卡入沟槽内，其余按上面的操作步骤逆向即可。左侧板更换方法与右侧板相同。

工具：斜口钳、十字螺丝刀、内六角扳手。

Note: When installing the side plate back, first hang the hook under the side plate on the seat frame, the upper hook is snapped into the groove, and the rest can be reversed according to the above operation steps. The left plate is replaced in the same way as the right board.

Tools: diagonal pliers, Phillips screwdriver, Allen wrench.

### 机芯上下行程开关的拆卸更换 UP/DOWN limit sensor replacement steps

5-1、机芯上下行程开关的拆卸，首先按照右侧板的拆卸流程先将右侧板拆下；

5-2、将上下行程开关上的对插端子拔掉，用螺丝刀和扳手将固定上下行程开关的螺丝卸下（图 37、38、39），即可将上下行程开关取下（图 40、41），上下行程开关如果有损坏就可更换新的。

5-1. To disassemble the upper and lower travel switches of the massage mechanism, first remove the right plate according to the disassembly process of the right plate;

5-2. Unplug the plug-in terminals on the upper and lower travel switches, and remove the screws fixing the upper and lower travel switches with a screwdriver and wrench (Figs. 37, 38, 39), then remove the upper and lower travel switches (Figs. 40 and 41), and replace the upper and lower travel switches with new ones if they are damaged.



图 37



图 38



图 39



图 40



图 41

注意：在装回机芯上下行程开关的操作步骤逆向即可。

工具：扳手、十字螺丝刀。

Note: When installing the upper and lower travel switches of the movement, it is sufficient to reverse the operation.

Tools: wrench, Phillips screwdriver.

### 机芯的拆卸更换 2D massage mechanism replacement steps

6-1、机芯的拆卸，首先按照后盖的拆卸流程先将后盖拆下；

6-2、用螺丝刀将固定靠背的6颗螺丝卸下（图42、43），将靠背往前掀开一段距离（图44）；

6-1. To disassemble the mechanism, first remove the back cover according to the disassembly process of the back cover;

6-2. Use a screwdriver to remove the six screws that hold the backrest (Fig. 42 and 43) and lift the backrest forward for a distance (Fig. 44).



图 42



图 43



图 44

6-3、用 90 度弯头电动螺丝刀将机芯导轨上端限位横杆两端 4 颗螺丝卸下（图 445），取下横杆（图 46）；  
6-3. Use a 90-degree elbow electric screwdriver to remove the four screws at both ends of the limiting crossbar at the upper end of the movement rail (Fig. 445) and remove the crossbar (Fig. 46).



图 45



图 46

6-4、用螺丝刀将机芯中心板外盖固定螺丝卸下（图 47），取下外盖（图 48）；  
6-4. Use a screwdriver to remove the fixing screws for the outer cover of the center plate of the movement (Fig. 47) and remove the outer cover (Fig. 48).

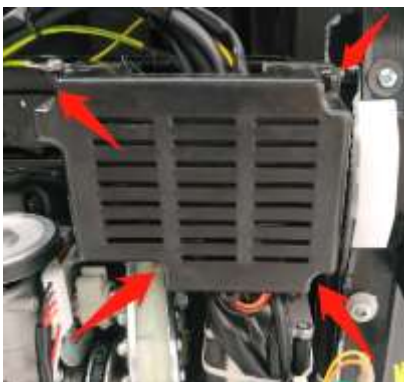


图 47



图 48

6-5、用斜口钳将固定机芯电源线的扎扣剪掉（图 49），用螺丝刀将接地螺丝卸下，取下电源线的接地线，将机芯中心板上电源线的对插端子拔掉（图 50）；

6-5. Cut off the buckle that holds the power cord of the movement with diagonal pliers (Fig. 49), remove the grounding screw with a screwdriver, remove the grounding wire of the power cord, and unplug the plug-in terminal of the power cord on the center plate of the movement (Fig. 50).



图 49

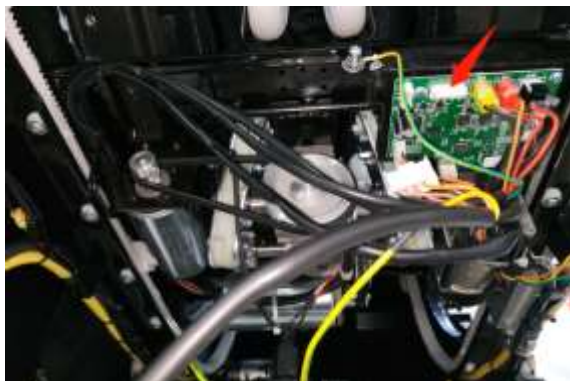


图 50

6-6、将机芯中心板上的行走电机接线端子拔掉（图 51），将行走电机接线端子连接 24V 电源，即可将机芯从导轨中退出取下（图 52），机芯中心板如果有损坏就可更换新的。

6-6. Unplug the terminal block of the travel motor on massage mechanism PCB (Figure 51) and connect the terminal block of the movement to the 24V power supply, then the movement can be withdrawn from the guide rail (Figure 52), and the center plate of the movement can be replaced with a new one if it is damaged.



图 51



图 52

注意：在装回机芯中心板的操作步骤逆向即可。

工具：十字螺丝刀、斜口钳、90 度弯头电动螺丝刀、24V 电源。

Note: When installing the mechanism PCB, it is sufficient to do it in reverse  
Tools: Phillips screwdriver, diagonal pliers, 90 degree elbow electric screwdriver, 24V power supply.

### 小腿推杆的拆卸更换 Footrest actuator replacement steps

7-1、小腿推杆的拆卸，首先按照小腿的拆卸流程将小腿拆卸；

7-2、电源开启，将按摩椅调整至零重力状态后，切断电源使按摩椅保持零重力状态（图 53）；

7-1. To disassemble the lower leg pusher, first disassemble the lower leg according to the disassembly process of the lower leg;

7-2. Turn on the power supply, adjust the massage chair to zero gravity, and cut off the power supply to keep the massage chair in zero gravity (Figure 53);



图 53

7-3、用螺丝刀将座架前挡板 6 颗螺丝卸下（图 54），将座部前盖板的 7 颗螺丝卸下（图 55），取下前盖板及前挡板（图 56）；

7-3. Remove the 6 screws of the front bezel of the seat frame with a screwdriver (Fig. 54), remove the 7 screws of the front cover plate of the seat (Fig. 55), and remove the front cover plate and the front bezel (Fig. 56);



图 54



图 55



图 56

7-4、用斜口钳将固定线束的扎扣剪掉（图 57），用螺丝刀松开接地螺丝，将接地端子取出（图 58），拔掉小腿推杆电源线接线端子（图 59）

7-4. Cut off the buckle of the fixed wiring harness with diagonal pliers (Fig. 57), loosen the grounding screw with a screwdriver, take out the grounding terminal (Fig. 58), and unplug the power cord terminal of the lower leg pusher (Fig. 59)

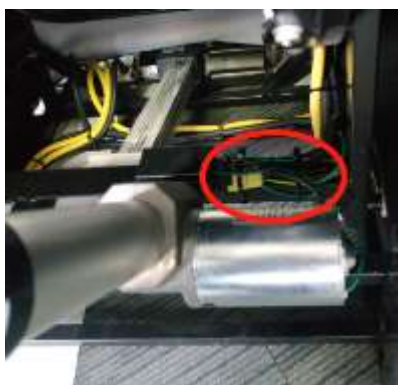


图 57

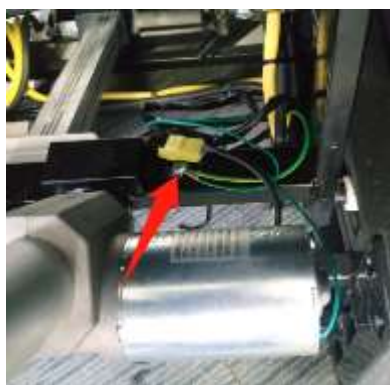


图 58



图 59

7-5、拔掉小腿推杆前后两端波浪形开口销，取下销轴（图 60），即可将小腿推杆取下（图 61），小腿推杆如果有损坏就可更换新的。

7-5. Remove the wavy cotter pins at the front and rear ends of the lower leg pusher, remove the pin (Fig. 60), and remove the calf putter (Fig. 61), and replace the calf putter with a new one if it is damaged.



图 60



图 61

注意：在装回小腿推杆的操作步骤逆向即可。

工具：十字螺丝刀、斜口钳。

Note: When installing the lower leg pusher, the reverse operation is sufficient.

Tools: Phillips screwdriver, diagonal pliers.

### 靠背推杆的拆卸更换 Backrest actuator replacement steps

8-1、靠背推杆的拆卸，首先按照 7-1、7-2、7-3 的拆卸流程将小腿、前盖板、前挡板拆卸；

8-2、用螺丝刀将固定推杆的 2 颗螺丝卸下，拔掉两边的波浪形开口销，取下销轴（图 62）；

8-1. To disassemble the backrest push rod, first disassemble the lower leg, front cover plate and front baffle plate according to the disassembly process of 7-1, 7-2 and 7-3;

8-2. Use a screwdriver to remove the two screws that fix the push rod, remove the wavy cotter pins on both sides, and remove the pins (Fig. 62).

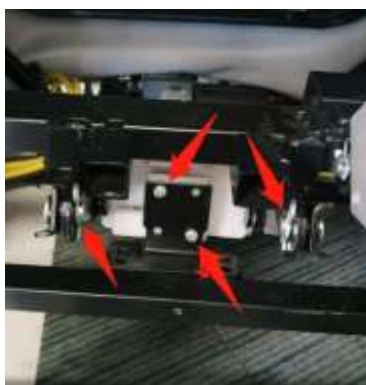


图 62

8-3、按照 3-1 的拆卸流程将中心盒盖板拆卸，用斜口钳将固定线束的扎扣剪掉，拔掉靠背推杆电源线接线端子，用螺丝刀松开接地螺丝，将接地端子取出（图 63），即可将靠背推杆取下，取下后用六角扳手将滑块两边 6 颗螺丝卸下，取下两边铁片（图 64），靠背推杆如果有损坏就可更换新的。

8-3. Disassemble the center box cover according to the disassembly process of 3-1, cut off the buckle of the fixed wiring harness with diagonal pliers, unplug the power cord terminal of the backrest push rod, loosen the grounding screw with a screwdriver, and take out the grounding terminal (Figure 63), then remove the backrest push rod, remove the 6 screws on both sides of the slider with a hex wrench, remove the iron pieces on both sides (Figure 64), and replace the backrest push rod with a new one if it is damaged.



图 63



图 64

注意：在装回靠背推杆的操作步骤逆向即可。

工具：十字螺丝刀、六角扳手、斜口钳。

Note: When installing the backrest pusher, the reverse operation is sufficient.

Tools: Phillips screwdriver, hex wrench, diagonal pliers.

### 手控器的拆卸更换 Remote controller replacement steps

9-1、在按摩椅左侧侧披风下方，将手控器对插接头旋开，即可将手控器取下，手控器如果有损坏就可更换新的。

9-1. Under the cloak on the left side of the massage chair, unscrew the hand control to the plug joint, then the hand control can be removed, and the hand control can be replaced with a new one if it is damaged.

