


Titan Pro 3D Prestige LE(6501G) Massage Chair Service Guide

Table of Contents

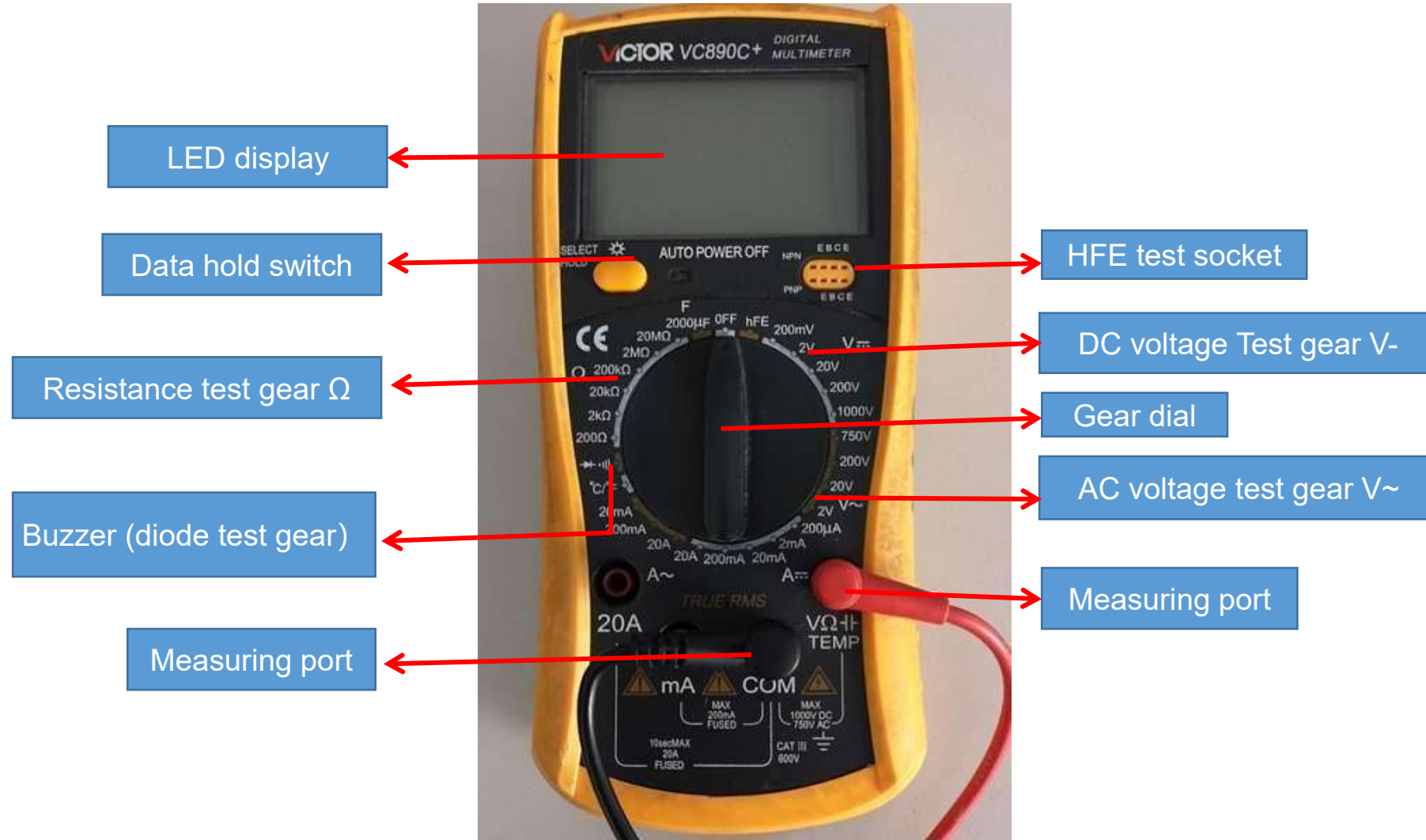
- 1、 Massage chair tools and use
 - 2、 Circuit working principle
 - 3、 Massage chair removal instructions
 - 4、 Malfunction explanation of massage chair
- 

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 |

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

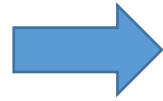
VΩ / COM: VΩ Red pen port (+ pole) during test, black pen port (- pole) during com test

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



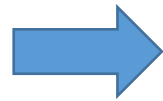
open circuit



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 voltage



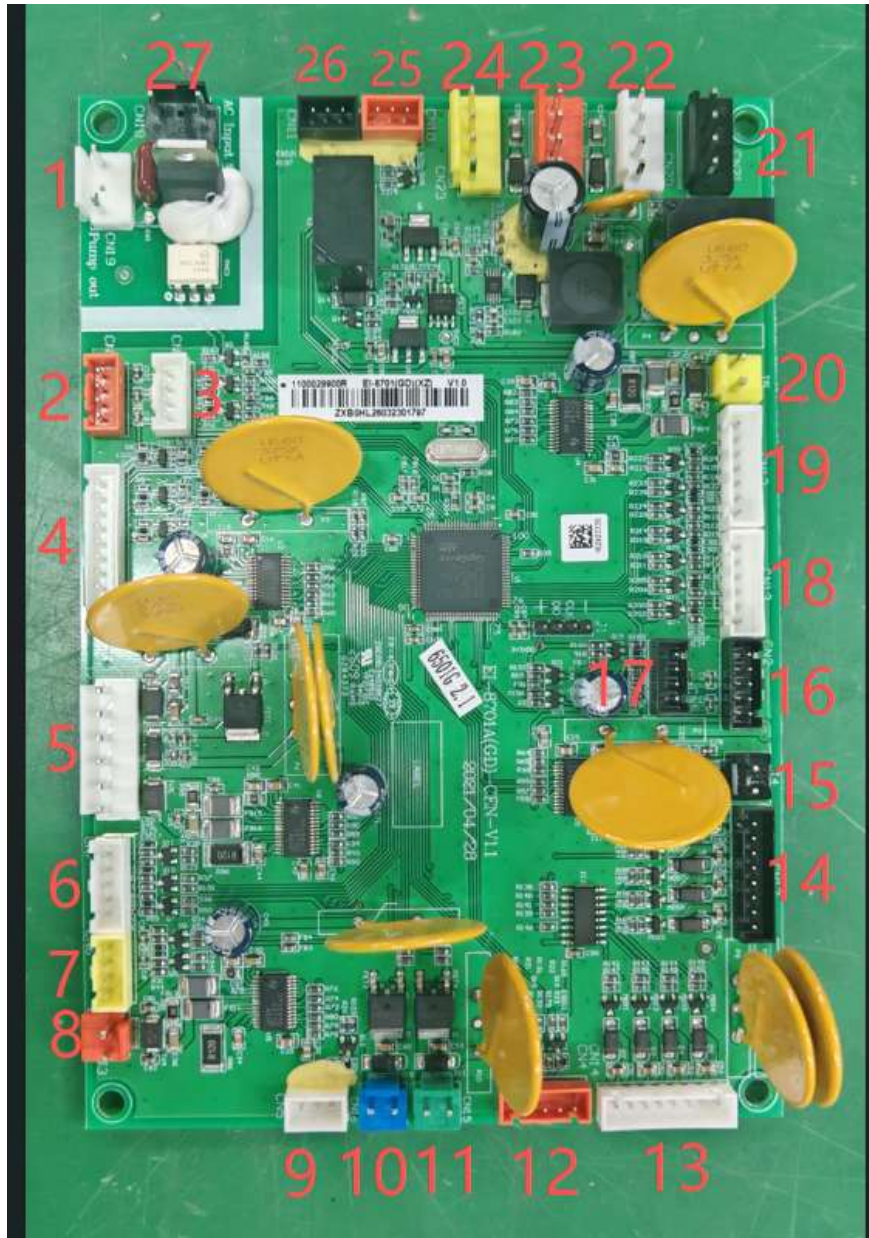
As shown in the figure above: the test result shows "1.58", indicating that the voltage at both ends of the battery has 1.58V, and the red watch pen is connected to the battery's "+" pole, while the black pen is connected to the electromagnetic "-" pole.



As shown in the 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).

1、main PCB:

2、Circuit working principle



- 1.CN19-Connected to the inflation pump
- 2.CN9-NO
- 3.CN8-NO
- 4.CN3-NO
- 5.J2-Foot roller motor and calf push rod drive
- 6.CN7-
- 7.CN6-NO
- 8.J3-Massage movement walking motor 24V
- 9.CN5-NO
- 10.CN16-vibration motor
- 11.CN15-heating
- 12.CN4-NO
- 13.CN14-air receiving valve
- 14.CN17-air receiving valve
- 15.J4-Flat push rod 24V
- 16.CN2-Manual controller communication
- 17.CN1-communication
- 18.CN13-Upper and lower limits of movement
- 19.CN12-Massage movement signal
- 20.J5-Knocking motor 24V
- 21.CN21-Connected to switching power supply (24V power supply)
- 22.CN20-24V power output
- 23.CN22-
- 24.CN23-24V power output
- 25.CN10-Calf push count signal
- 26.CN11-flat push rod counting signal
- 27.CN18-

3、 Massage chair removal instructions

1、 disassembly of the pillow:



1.unzip the zipper,
remove the pillow



2.pillow

2.Cape cushion removal



1.unzipped



2.unzipped



3.unzipped



4.unzipped



5.Open the cloth cover



6.disconnecting the terminals



7.Cape cushion

3.Lower leg assembly removal



1.unzipped



2.Remove DK card



3.Cut off the tie buckle and disconnect the terminal and air pipe



4.Lower leg assembly

4. Left side panel assembly, right side panel assembly removal **(Please remove step 3 first)**



1. Remove the left and right screws



2. Remove 4 screws

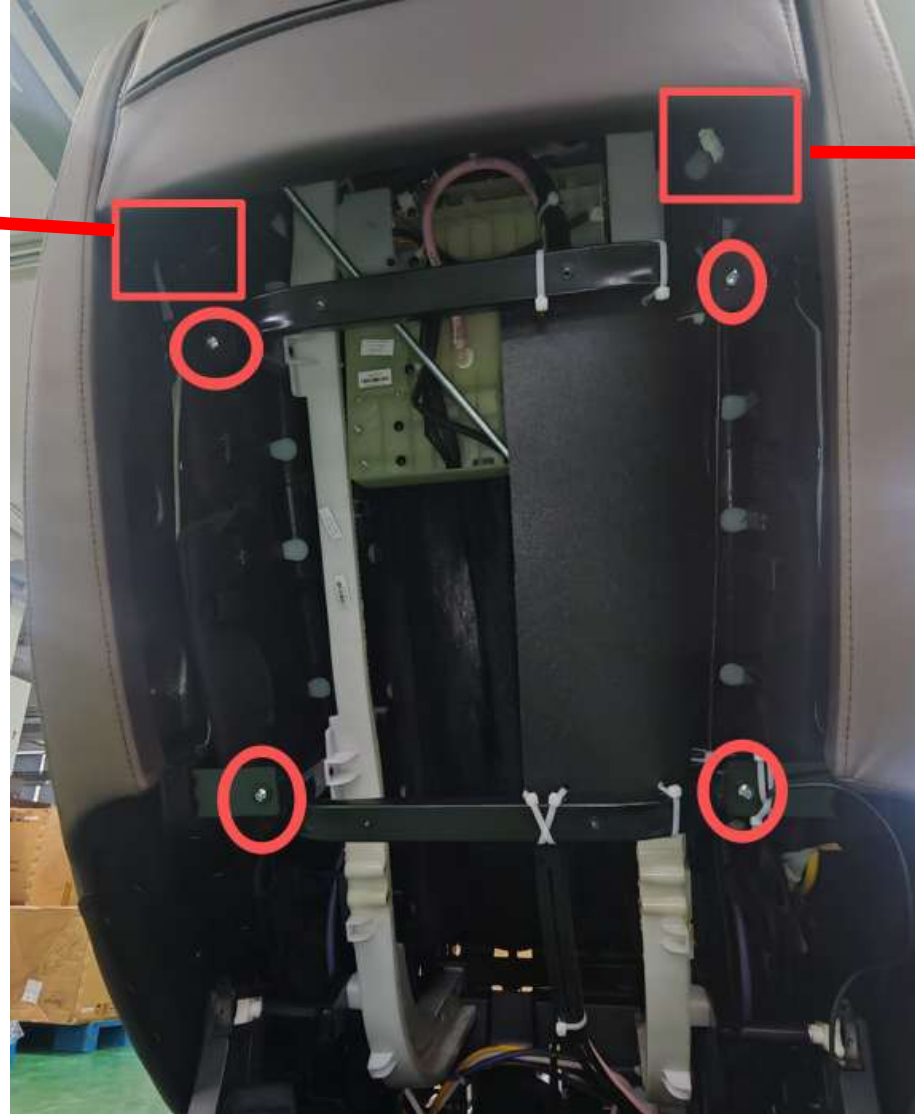


3. Pull out the cloth sleeve pin and remove the rear cover

4.Left side panel assembly, right side panel assembly removal (Please remove step 3 first)



4.disconnecting the terminals



6.Remove 4 screws



5.disconnecting the terminals

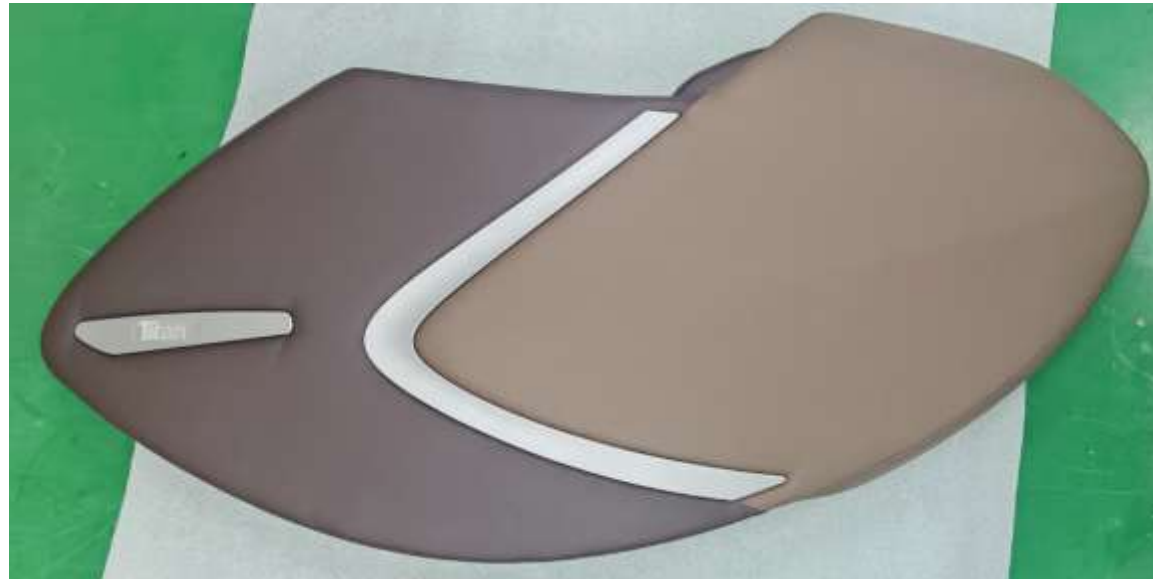
4. Left side panel assembly, right side panel assembly removal **(Please remove step 3 first)**



7. Pull out the side panels upwards



8. Disconnect the air pipe



9. Left Side Plate Assembly

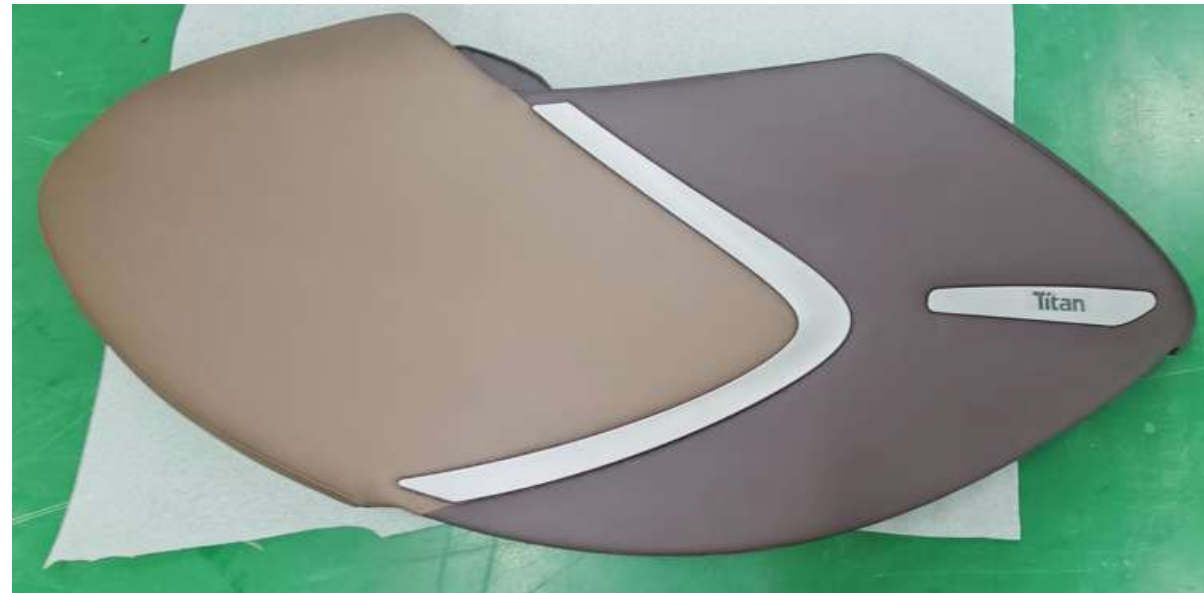
4. Left side panel assembly, right side panel assembly removal **(Please remove step 3 first)**



10. Pull out the side panels upwards



11. Disconnect the air pipe



12. Right Side Plate Assembly

5. Back frame wire removal



1.Remove 4 screws



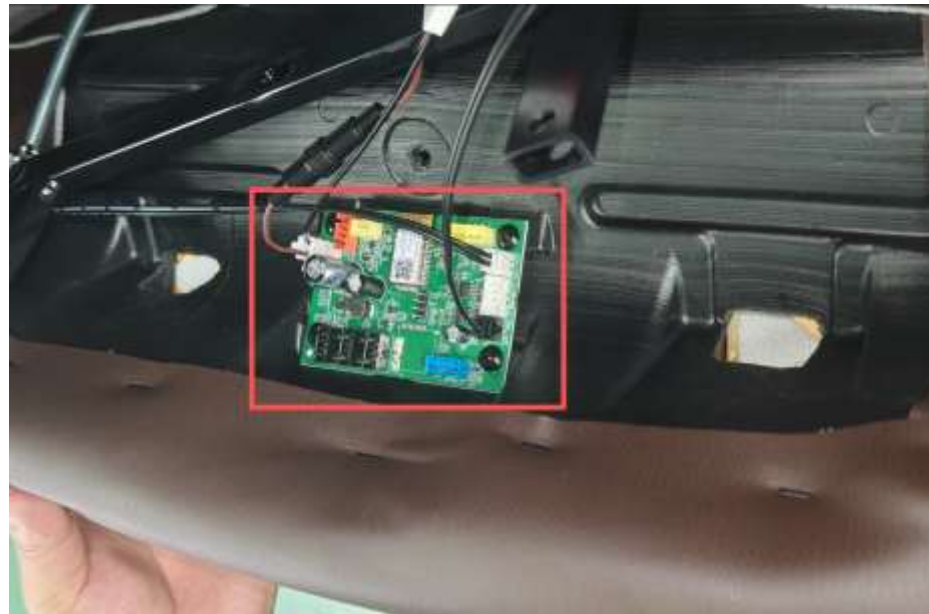
2.Pull out the cloth sleeve pin and remove the rear cover



3.unzipped



4.Remove 3 screws



5.Disconnect the Bluetooth board terminal

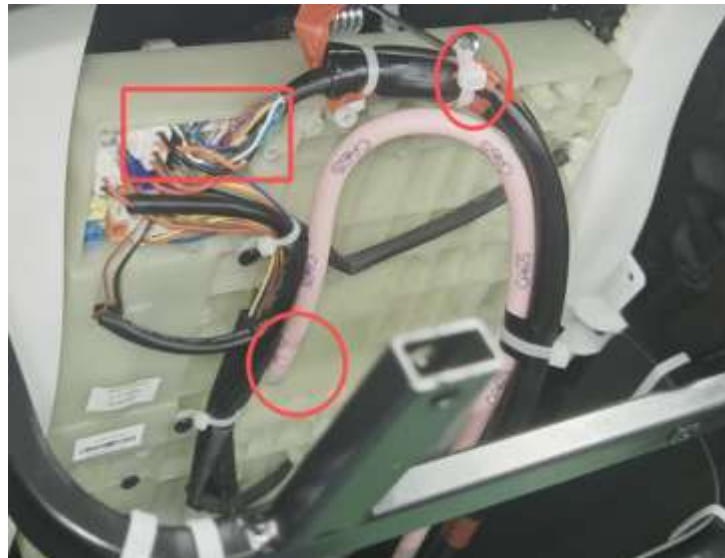


6.Inner and outer components
of the hood

6.Back frame wire removal



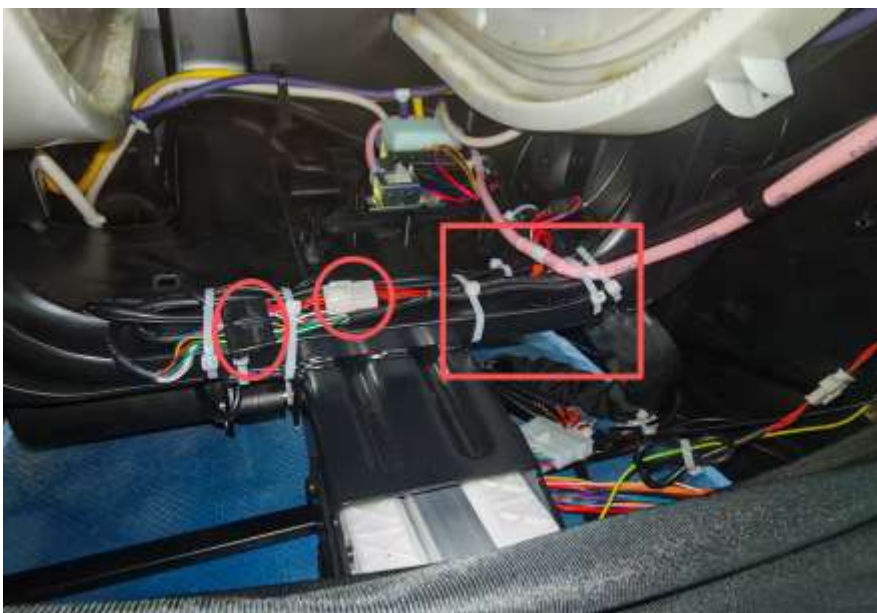
7.Remove 4 screws



8.Cut off the straps and disconnect the back frame wire terminals and air pipes



7.Cut off the tie



10.Cut off the straps and disconnect the terminals and air pipes



11.back frame line

7. Massage movement removal (Please remove step 2 first)



1.Remove 4 screws



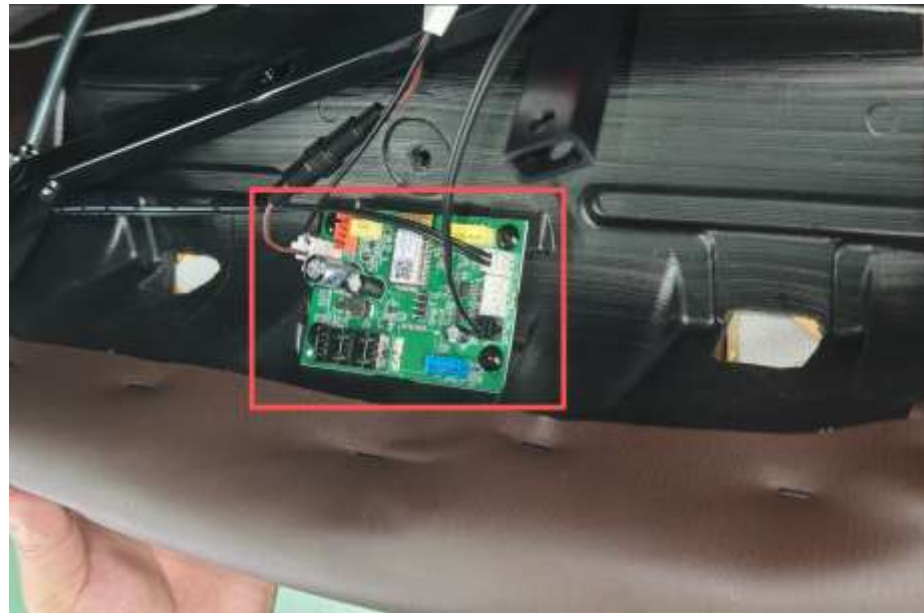
2.Pull out the cloth sleeve pin and remove the rear cover



3.unzipped



4.Remove 3 screws



5.Disconnect the Bluetooth board terminal

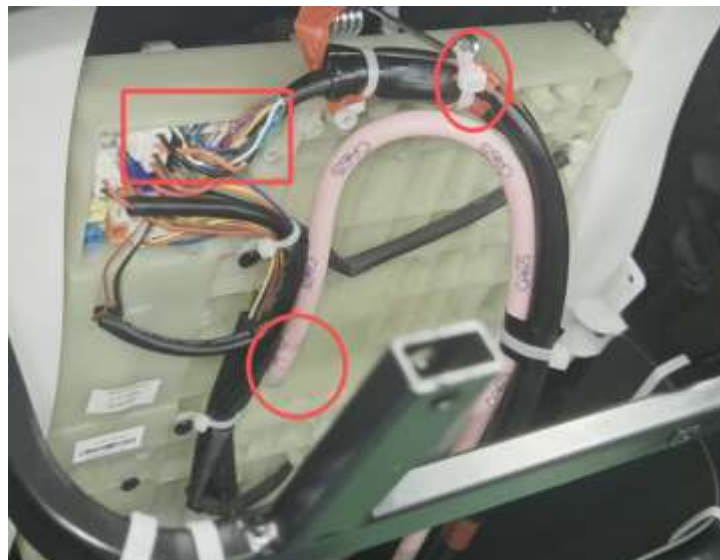


6.Inner and outer components
of the hood

7. Massage movement removal (Please remove step 2 first)



7.Remove 4 screws



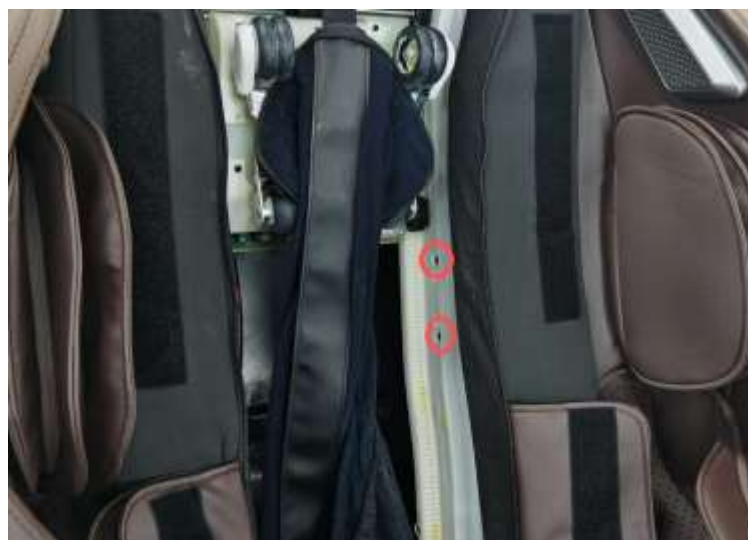
8.Cut off the straps and disconnect the back frame wire terminals and air pipes



9.unzipped



10.Remove 2 screws and remove the baffle



11.Remove 2 screws and remove the baffle



12.Disconnect the white two-core terminal

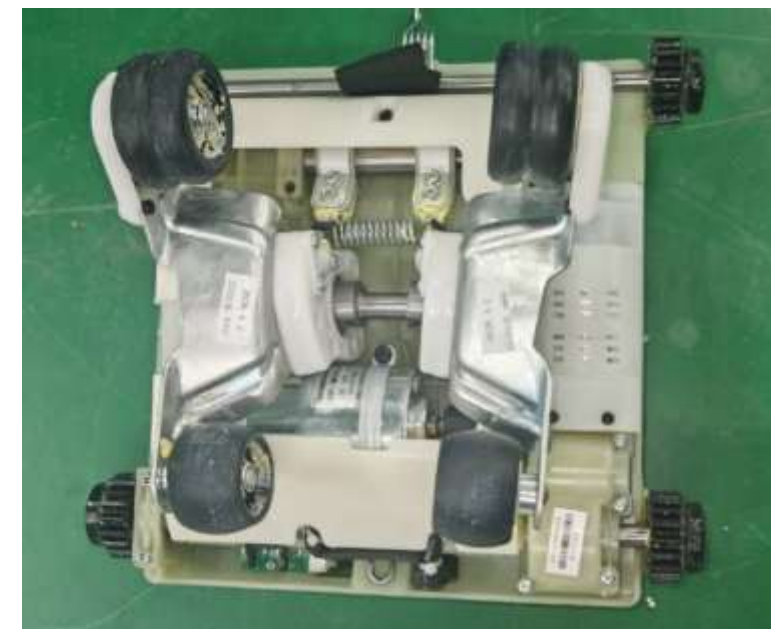
7. Massage movement removal (Please remove step 2 first)



13. The terminals are externally connected to a 24V power supply to enable the movement to go up or down



14. Move the movement gears and take out the movement at the gap

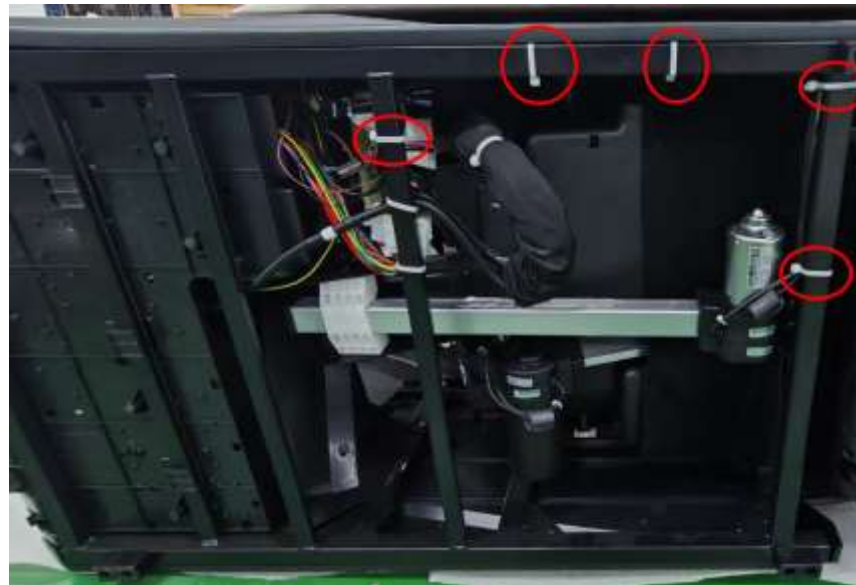


15. massage machine core

8.Remove flat push rod



1.Flip massage chair



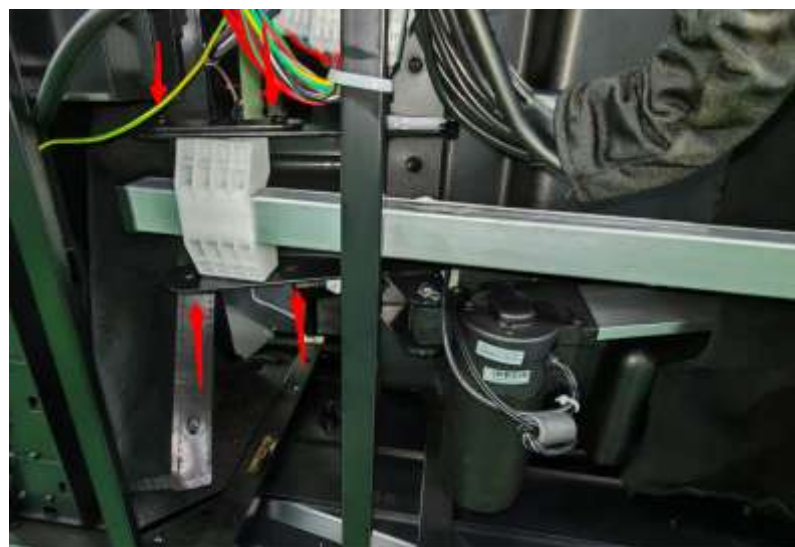
2.Cut off the tie



3.Disconnect the flat push rod terminal



4.Pull off the cotter pin and remove the lower pin shaft



5.Remove 4 screws



6.Remove the flat push rod

9.Remove leg lift push rod



1.Remove 4 screws



2.Pull out the cloth sleeve pin and remove the rear cover



3.Flip massage chair



4.Pull off the cotter pin and remove the lower pin shaft



5.Pull off the cotter pin and remove the lower pin shaft



6.Cut off the tie

9.Remove leg lift push rod



7.Disconnect the terminal
of the leg lift push rod



8.Remove leg lift and
push

10. Manual controller removal



1.Remove 4 screws



2.Pull out the cloth sleeve pin and remove the rear cover



3.Remove 1 screw and disconnect the terminal



4.Pull out the wire

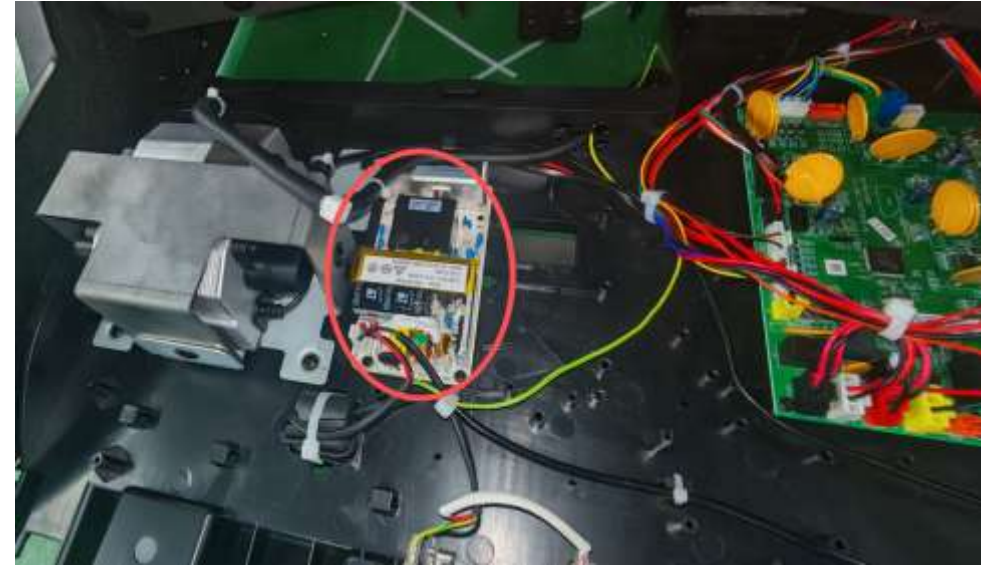


5.controller

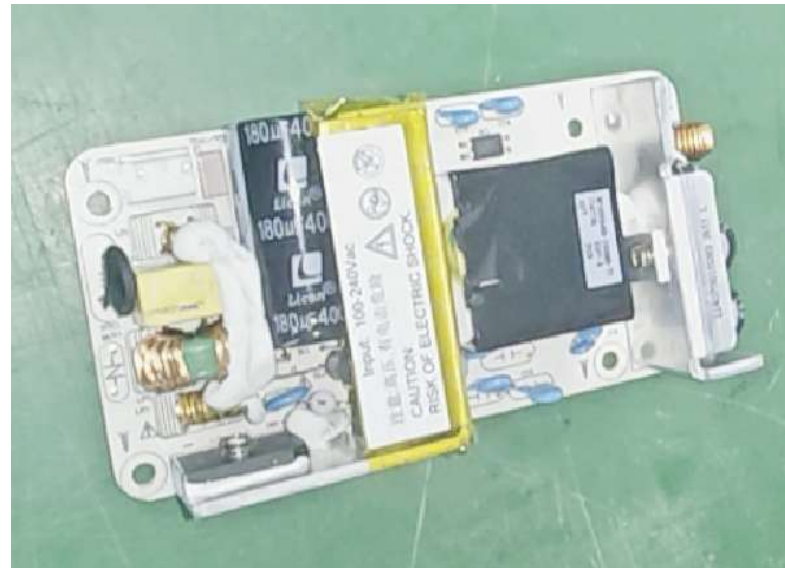
11.Switching power supply removal



1.Remove 3 screws



2.Disconnect the terminals and
remove the 3 screws



3.switching power supply

12.Motherboard Removal



1.Remove 3 screws



2.Disconnect the terminals and
remove the 4 screws



3.main board

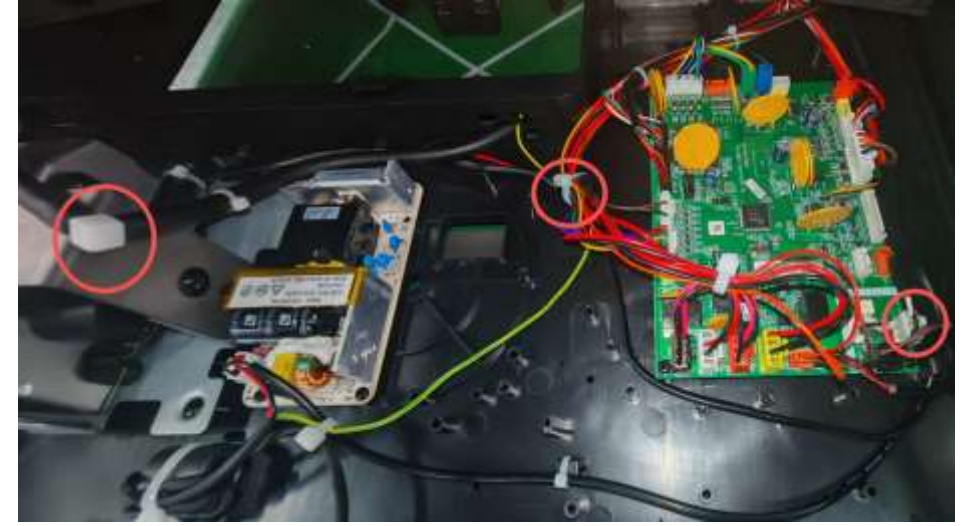
13. Inflation pump removal



1.Remove 3 screws



2.Remove 4 screws



3.Cut off the straps and disconnect the terminals and air pipes



4.Remove 5 screws on three sides of the iron frame



5.Pull out rubber pad



6.air pump

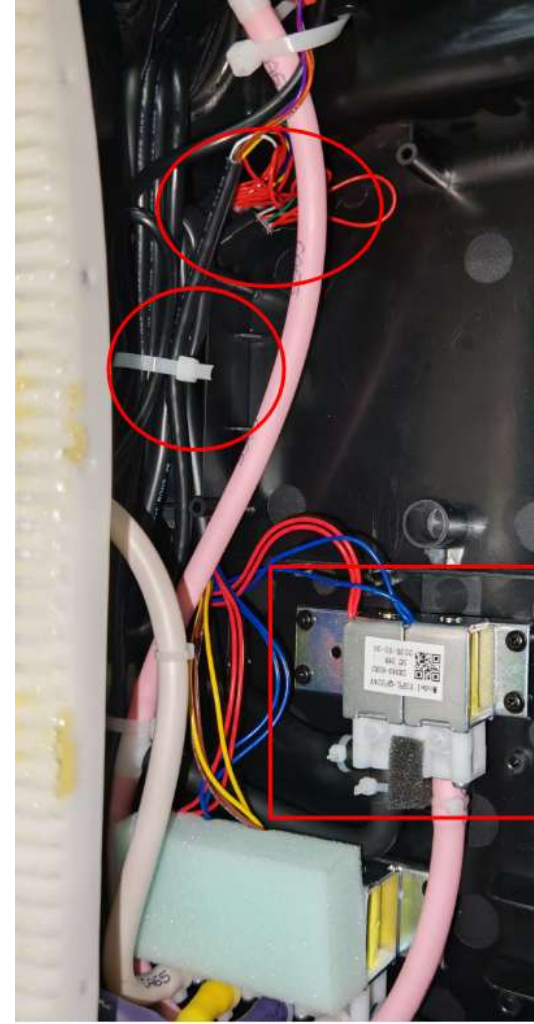
14. Air valve removal (Please remove step 2 first)



1.unzipped



2.valve position

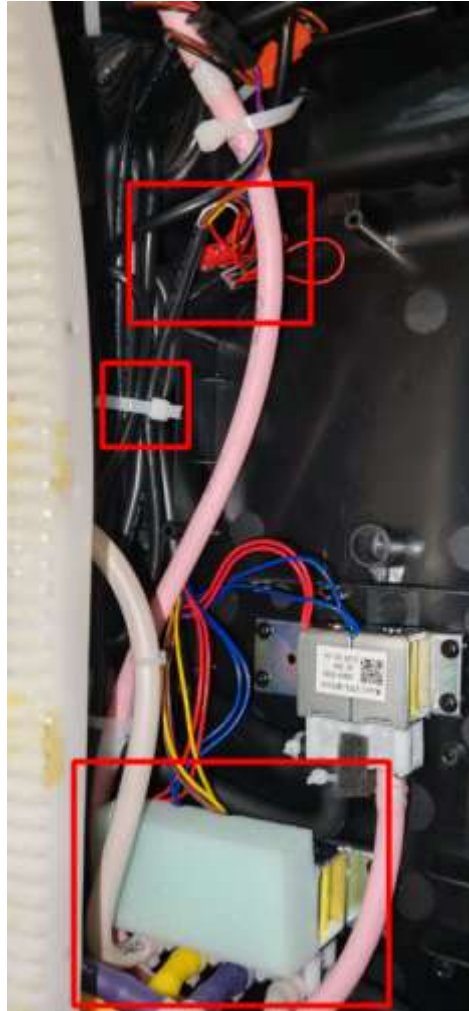


3.Remove the 4 screws of the air valve and disconnect the air pipe.
Cut off the binding wire and disconnect the terminal



4.secondary air valve

14. Air valve removal (Please remove step 2 first)



5. Remove the 4 screws and disconnect the air pipe. Cut off the tie and disconnect the terminal



6. quadruple valve

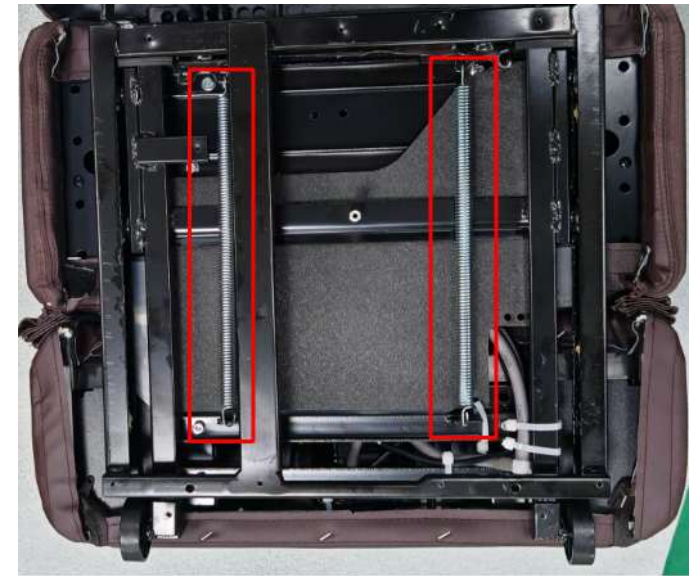
15. Decomposing of calf components **(Please remove step 3 first)**



1. Remove the 4 screws and remove the cover plate



2. Remove 7 screws and remove the cover plate



3. remove the spring



4. unzipped

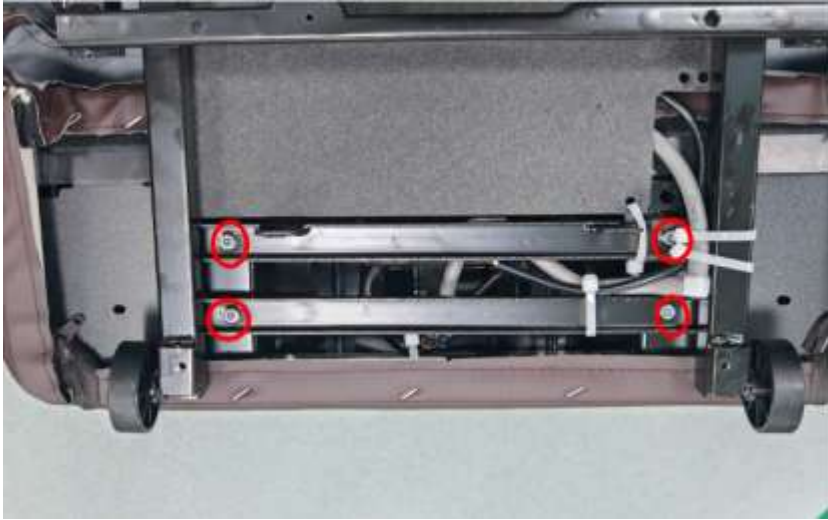


5. Remove 2 screws



6. Remove 4 screws

15. Decomposing of calf components (Please remove step 3 first)



7. Remove 4 screws



8. Cut off the tie and disconnect the air pipe and terminals



9. Separate the iron frame, upper calf component, and lower calf component



10. Remove 2 screws and unzip



11. Remove 12 screws



12. Tear off the sticky hair button

15. Decomposing of calf components **(Please remove step 3 first)**



13. Remove 2 screws



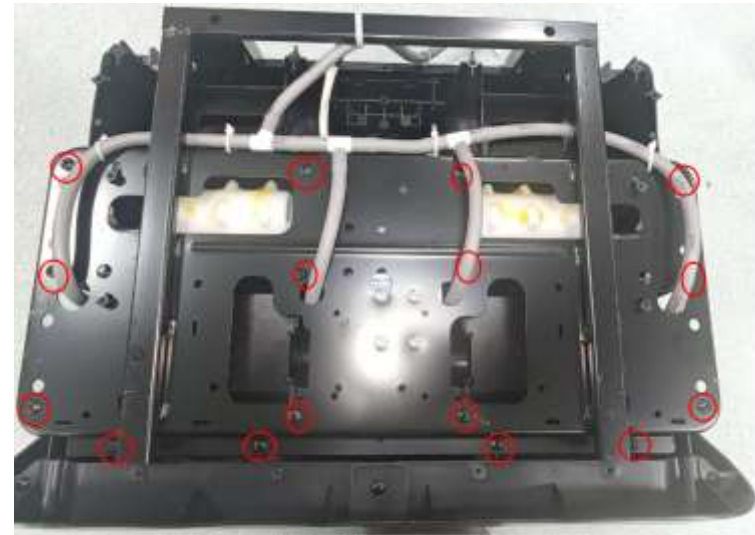
14. Remove the lower calf holster



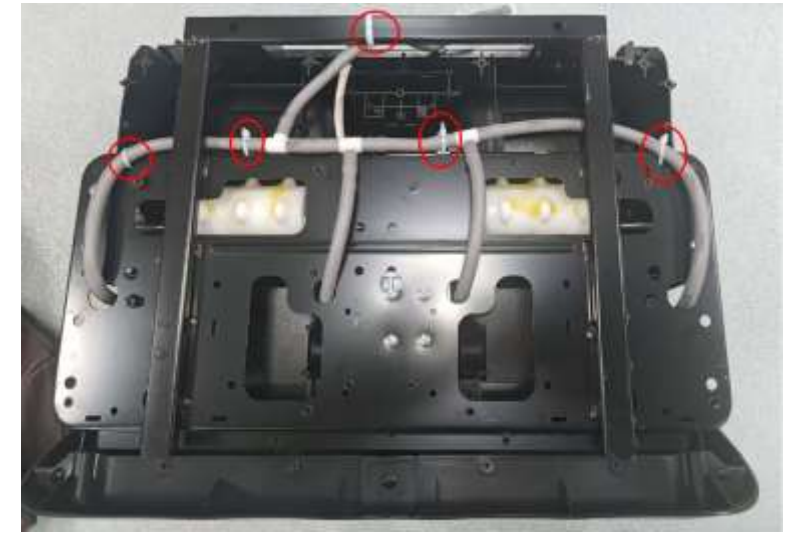
15. Lower calf holster and components



16. Remove 11 screws and separate the injection molded parts

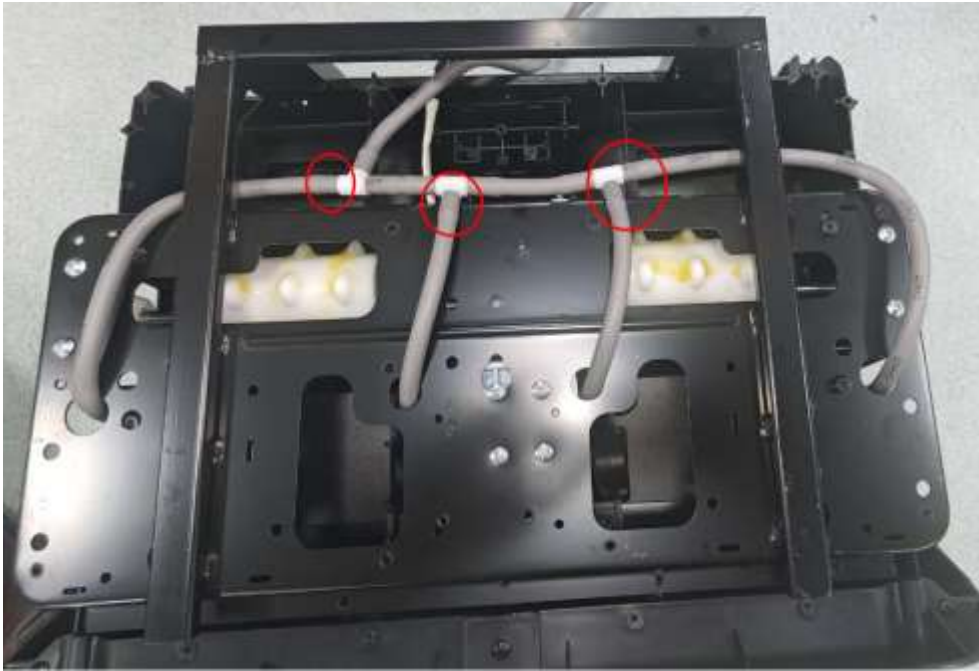


17. Remove 16 screws

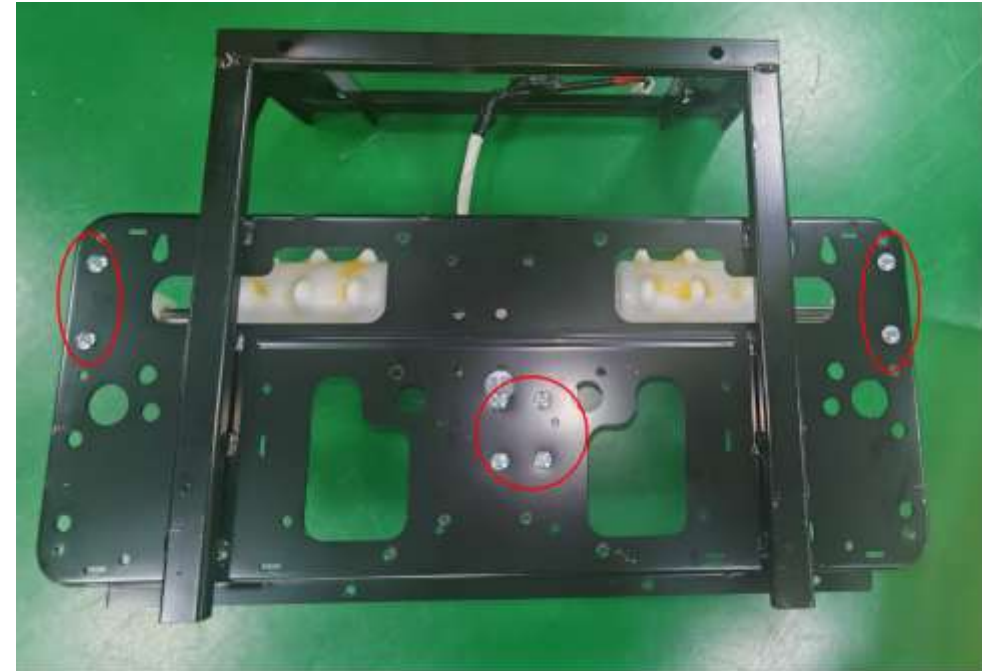


18. Cut off the tie

15. Decomposing of calf components (Please remove step 3 first)



19. Disconnect the trachea of the balloon



20. Remove 8 screws



21. Foot roller assembly

4、 Malfunction explanation of massage chair

| fault number | fault description | Possible causes | elimination method | remarks |
|--------------|--|--|---|--|
| 1 | Controller card key exceeds 45S | Controller key card key | <ol style="list-style-type: none"> Carefully check the status of each button Replace the manual controller | |
| 2 | Controller and motherboard did not communicate for more than 4s | Poor contact or breakage of patch cord | <ol style="list-style-type: none"> Check or replace the patch cord replace the controller replace the motherboard | |
| 41 | Travel motor counting signal is abnormal | <ol style="list-style-type: none"> Position sensor is broken Movement overshoot | <ol style="list-style-type: none"> replace the sensor Move the movement to the initial height position replace the motherboard | <ol style="list-style-type: none"> real-time detection Automatic shutdown in case of failure. And booting is not allowed. |
| 42 | The speed sensor of the movement travel motor is abnormal, that is, no change in the speed code dial is detected after more than 6S. . | <ol style="list-style-type: none"> Motor is broken or blocked Driver circuit device damaged | <ol style="list-style-type: none"> Check the connection between the motor and the small movement plate Inspect or replace the motor replace the motherboard | <ol style="list-style-type: none"> Detection when function is turned on Automatic shutdown in case of failure. And booting is not allowed. |
| 44 | The position sensor of the movement kneading motor is abnormal, that is, no change in the position code dial is detected for more than 10 seconds. | <ol style="list-style-type: none"> Position sensor is broken Motor is broken or blocked Driver circuit device damaged | <ol style="list-style-type: none"> Check the connection between the sensor and the small movement board replace the sensor Inspect or replace the motor replace the motherboard | <ol style="list-style-type: none"> Detection when function is turned on Automatic shutdown in case of failure. And booting is not allowed. |

| | | | | |
|-------|--|--|---|---|
| 46 | The speed sensor of the movement kneading motor is abnormal, that is, no change in the speed code dial is detected after more than 6S. | <ol style="list-style-type: none"> 1. Motor is broken or blocked 2. Driver circuit device damaged | <ol style="list-style-type: none"> 1. Check the connection between the motor and the small movement plate 2. Inspect or replace the motor 3. replace the motherboard | (1)Detection when function is turned on (2)Automatic shutdown in case of failure. And booting is not allowed. |
| 47 | Reverse back push rod motor/calf push rod motor/walking motor/kneading motor one of the four motors alarm over current | <ol style="list-style-type: none"> 1. load is too large 2. Motor is broken or blocked 3. Driver circuit device damaged | <ol style="list-style-type: none"> 1. Power off and power on again, no-load test run 2. replace the motherboard 3. Replace the entire movement 4. Replace the calf push rod 5. Replace backrest push rod | (1)Detection when function is turned on (2)Automatic shutdown in case of failure. And booting is not allowed. |
| 54 | The movement kneading motor position is wide, medium and narrow. A certain position cannot be detected for more than 25 seconds | <ol style="list-style-type: none"> 1. Position sensor is broken 2. Motor is broken or blocked 3. Driver circuit device damaged | <ol style="list-style-type: none"> 1. Check the connection between the sensor and the movement board 2. replace the sensor 3. Inspect or replace the motor 4. Replace the movement plate 5. Replace the brushless motor drive plate | (1)Detection when function is turned on (2)Automatic shutdown in case of failure. And booting is not allowed. |
| 59 | The back push rod count sensor is abnormal | <ol style="list-style-type: none"> 1. Counting sensor is broken 2. connection exception 3. Motor is broken or blocked 4. Driver circuit device damaged | <ol style="list-style-type: none"> 1. Check the connection 2. Check or replace push rod 3. replace the motherboard | (1)Detection when function is turned on (2)Automatic shutdown in case of failure. And booting is not allowed. |
| 63 | Calf push rod counting sensor is abnormal | <ol style="list-style-type: none"> 1. Counting sensor is broken 2. connection exception 3. Motor is broken or blocked 4. Driver circuit device damaged | <ol style="list-style-type: none"> 1. Check the connection 2. Check or replace push rod 3. replace the motherboard | (1)Detection when function is turned on (2)Automatic shutdown in case of failure. And booting is not allowed. |
| other | During self-test, the buzzer keeps ringing | The middle position signal detection of the movement kneading motor wide, medium and narrow position sensor is abnormal | <ol style="list-style-type: none"> 1. Check the connection between the sensor and the movement adapter plate 2. Check the connection between the movement adapter plate and the center plate 3. replace the sensor 4. Inspect or replace the motor 5. Replace the movement adapter plate 6. Replace the kneading position detection board | |