JP650-4D Massage Chair

Maintenance service manual

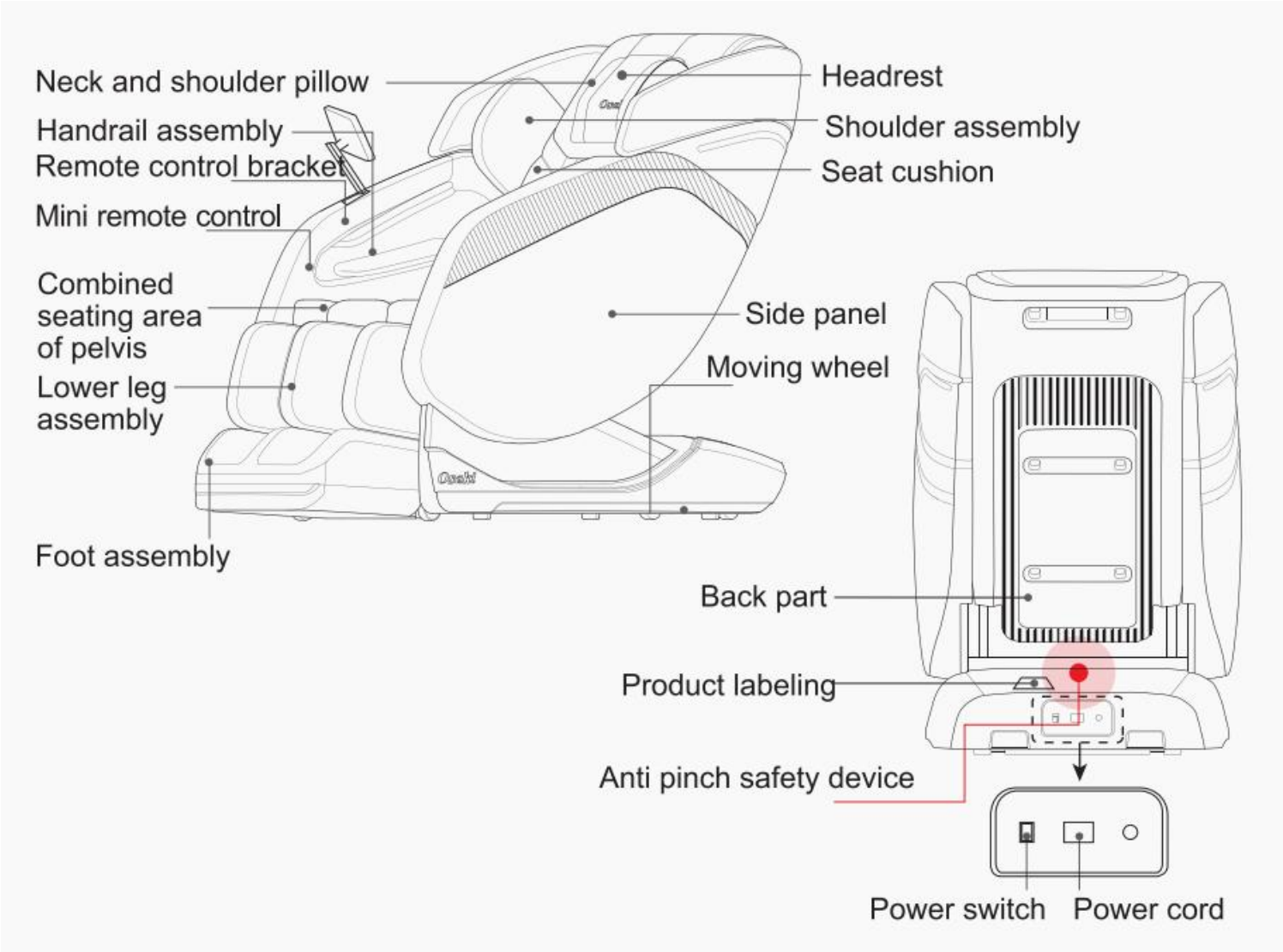
2024.02.28

Catalog

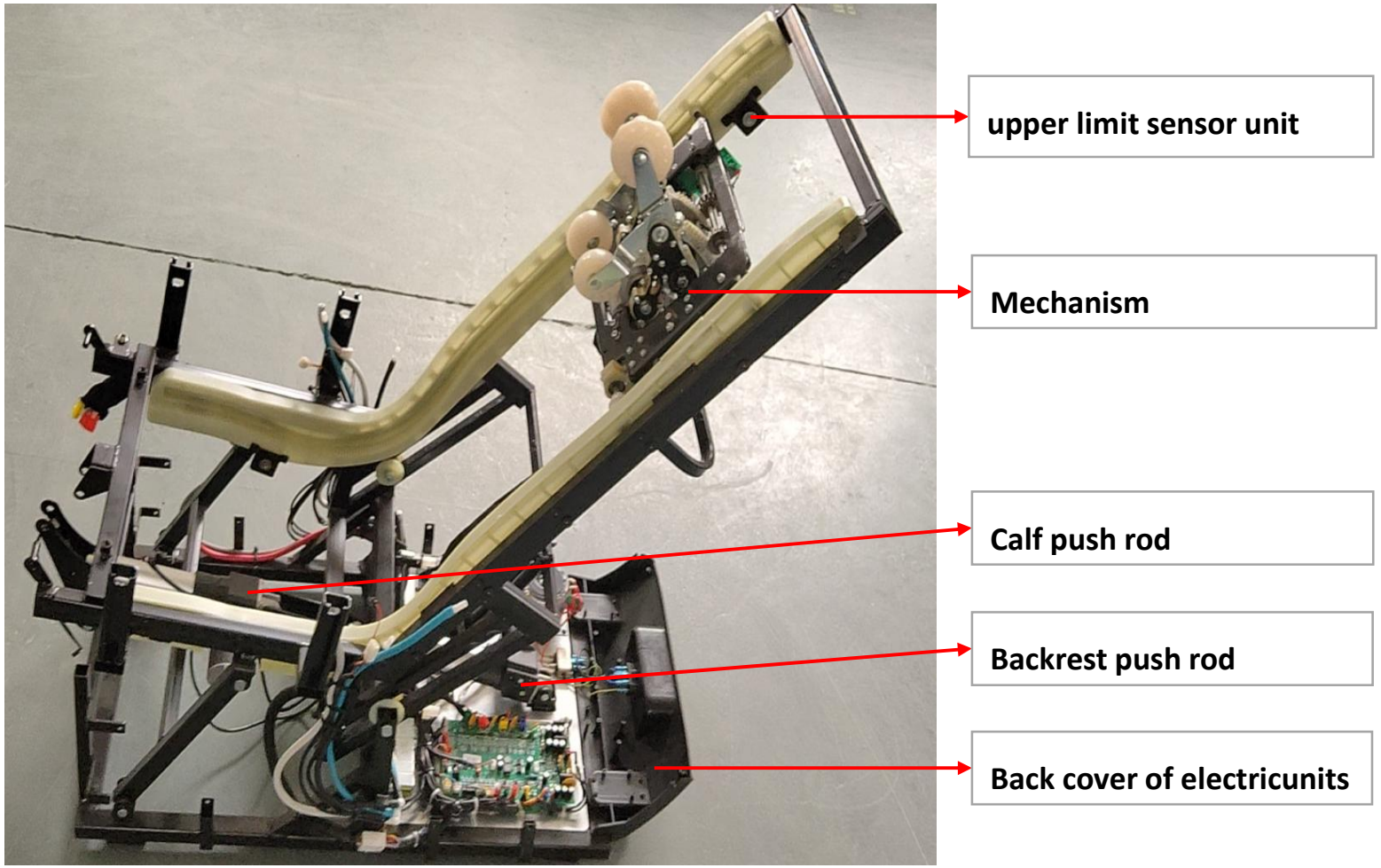
NOTE: This service manual covers components with important safety and functional features. When repairing and replacing, only parts provided by our company can be used! Please note: When parts are marked  ! It means that you should pay attention to safety when repairing this part!

1. Massage chair structure and disassembly steps

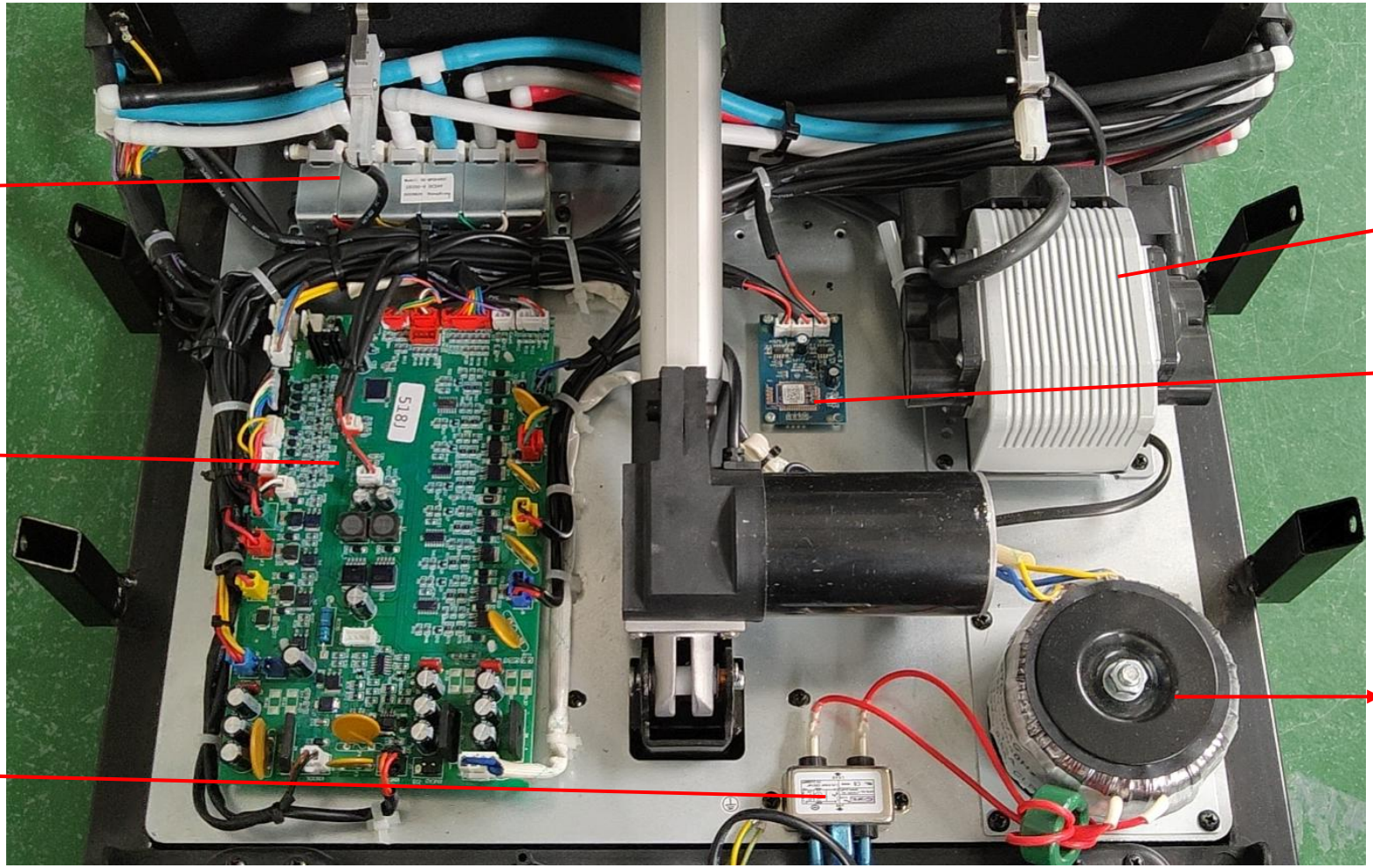
1.1 Product Introduction



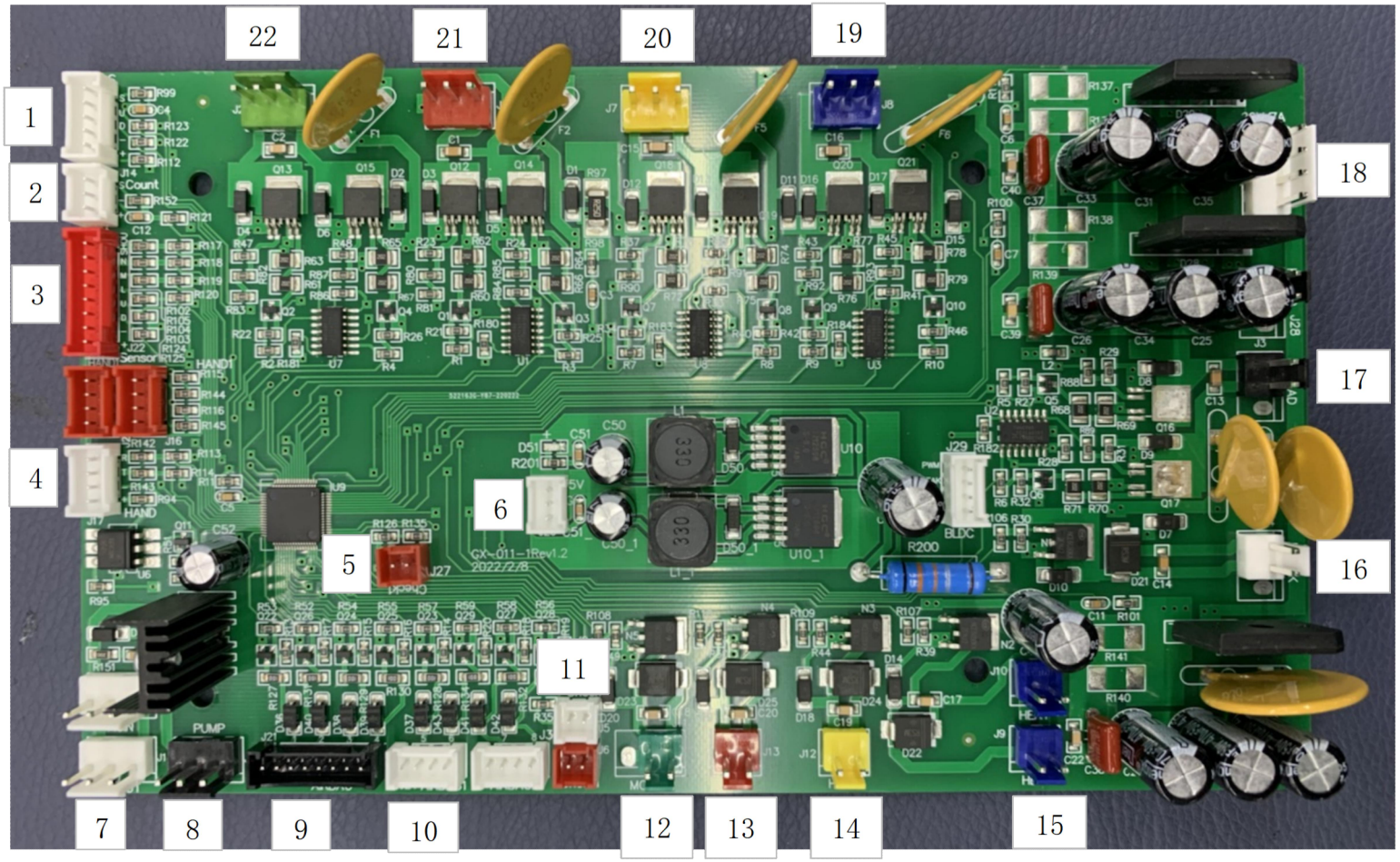
1.1 Product Introduction



1.1 Product Introduction

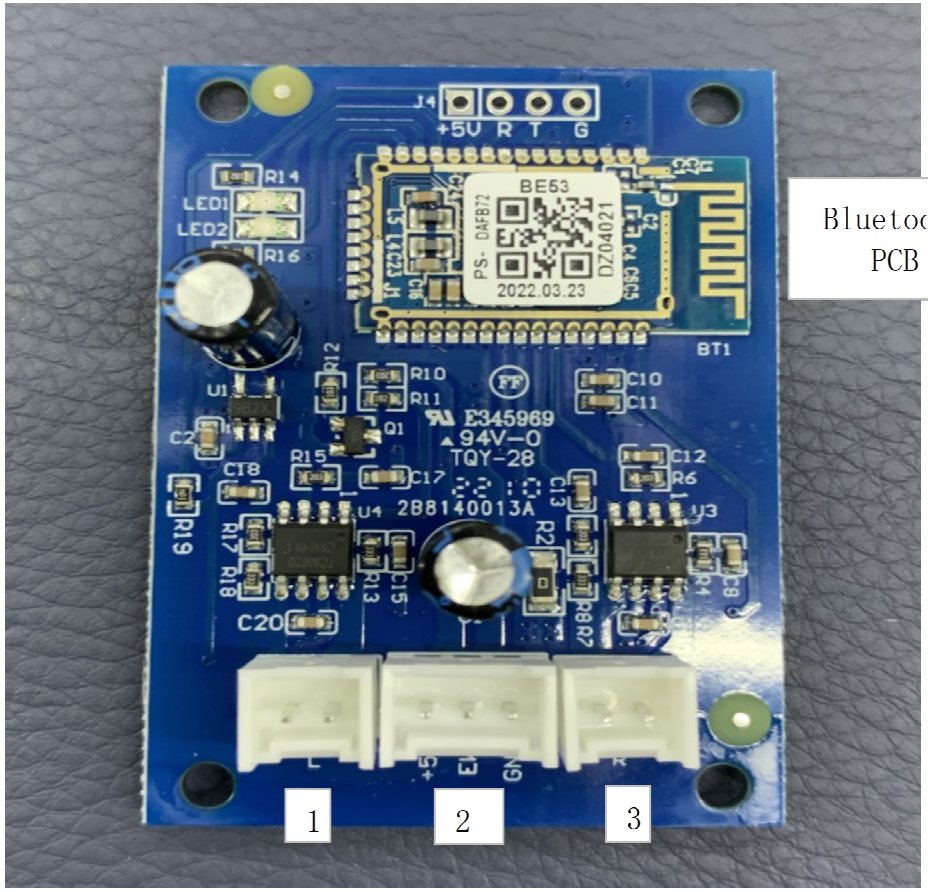


1.2 Inside spare parts ⚠



1	3D signal control
2	mechanism movement signal
3	Mechanism signal
4	7” Touch screen control
5	4.3” screen control
6	Bluetooth power supply (output)
7	Transformer input 9V
8	AC24V air pump
9	solenoid valve signal
10	solenoid valve signal
11	Anti-pinch switch
12	calf roller motor control
13	sole roller motor control
14	Calf heating control
15	Waist heating control
16	knocking motor control
17	kneading motor control
18	Transformer imput 18V
19	Backrest push rod control
20	calf push rod control
21	mechanism movement motor control
22	3D push out motor

1.2 Inside spare parts ⚠



1	Speaker(left)signal
2	Bluetooth power supply(input)
3	Speaker(right)signal

1.3 Chair disassembly steps: 7’’ touch screen

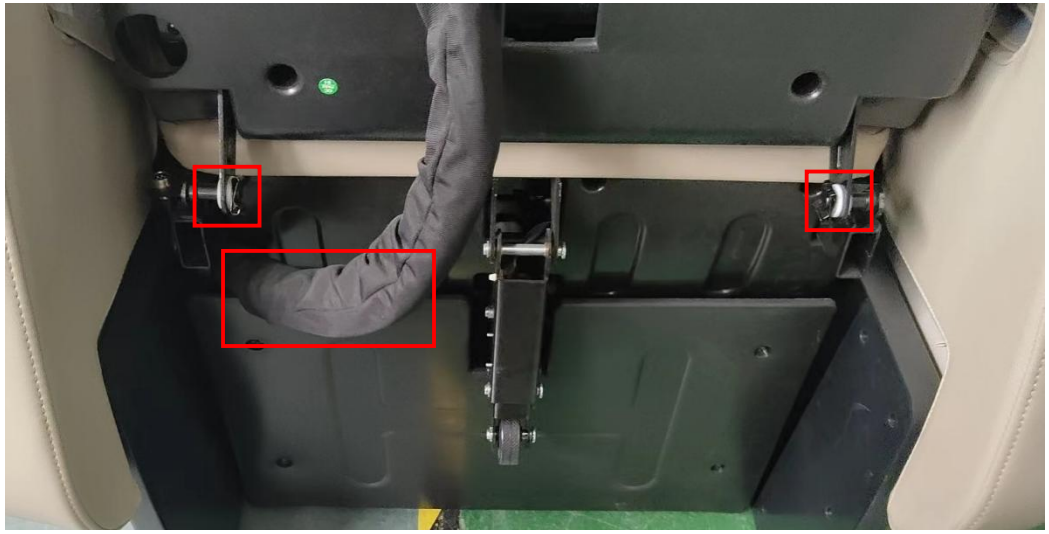
Step 1: Release the screw, unplug the cable, then you can take the touch screen off from the chair.

Step 2: Release the knob, then you can take the bracket off from the chair.

1.3 Chair disassembly steps: cushion

Step 3： Disassemble the air pipe and wiring harness of the seat cushion from the position shown in the figure, and unzip the cushion to remove it.

1.3 Chair disassembly steps: footrest and back cover



Step 4: Lift the footrest part up, loose the cloth cover, unplug the air pipe and wiring harness. Finally, pry open the two catches at the positions shown in the picture to remove the footrest.

Step 5: Remove the four cup head hex screws at the indicated positions, and then the large rear cover can be taken off

1.3 Chair disassembly steps: side panel

Figure 1

Figure 2

Step 6:

1. **Remove the two cup head hex socket combination screws shown in Figure 1, and then disconnect the air tube.**
2. **Disconnect the air tube and wiring harness shown in Figure 2, and unscrew the two knob screws.**
3. **Pull up the side plate assembly along the pipe fitting, and the side plate assembly can be removed.**

The removal method for the left and right side plate assemblies is the same.

1.3 Chair disassembly steps: seat part

Figure 1

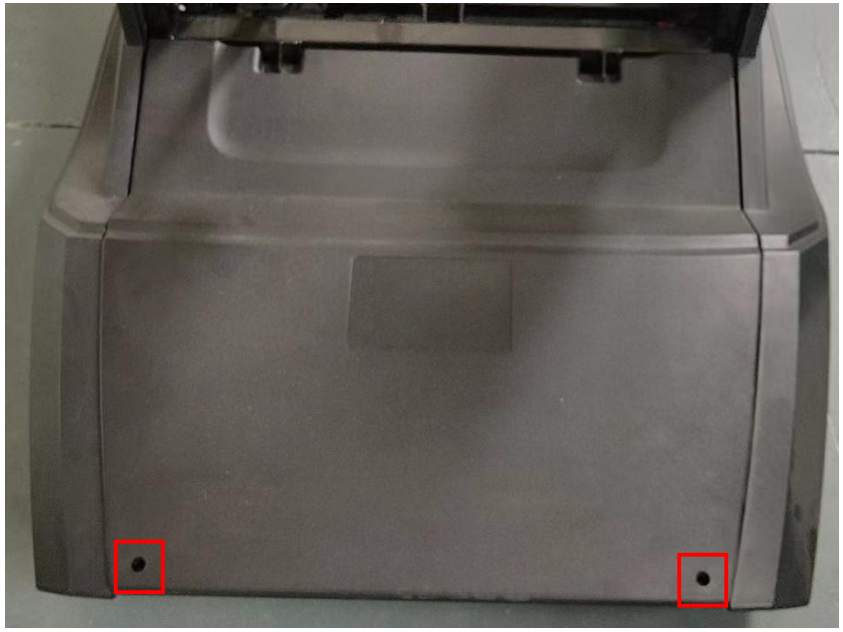
Figure 2

Figure 3

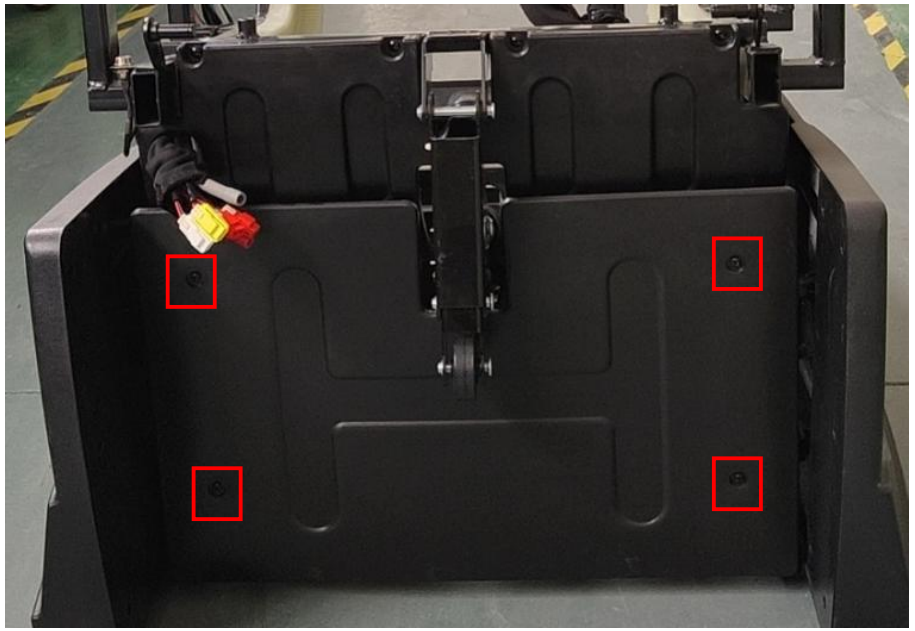
Step 7:

1. **Remove the two cup head hex screws at the position shown in Figure 1.**
2. **Disconnect the air tube at the position shown in Figure 2.**
3. **Remove the two cup head hex screws inside at the position shown in Figure 3 to take out the set assembly.**

1.3 Chair disassembly steps: upper cover and lower front panel of the electrical control box

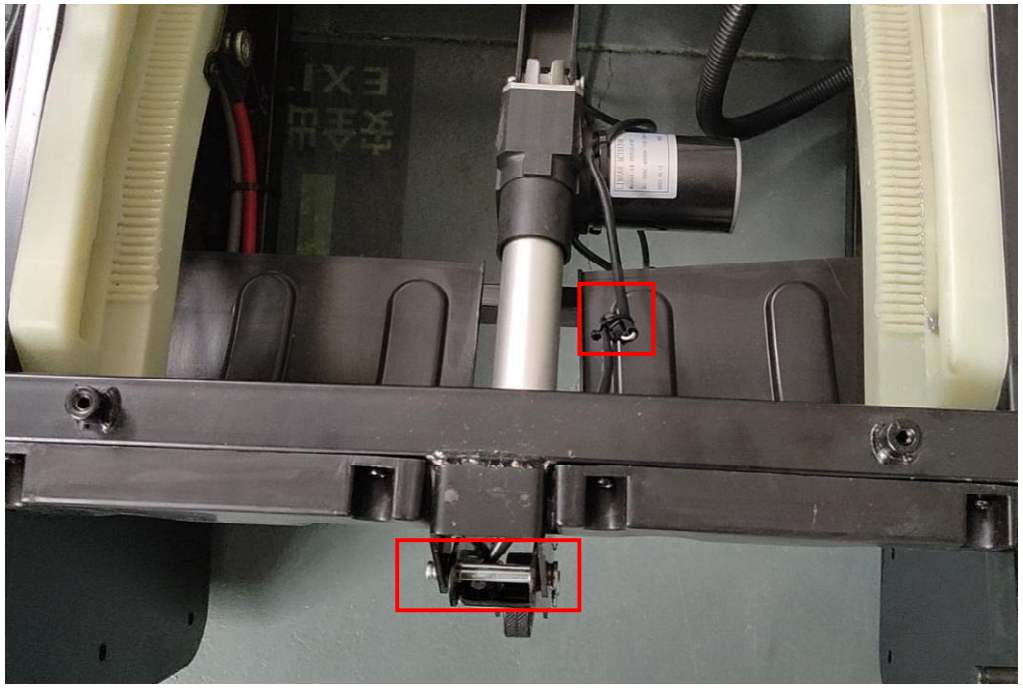


Step 8: Remove the two Phillips head screws at the indicated positions in the diagram, and then the upper cover of the electrical control box can be taken off.

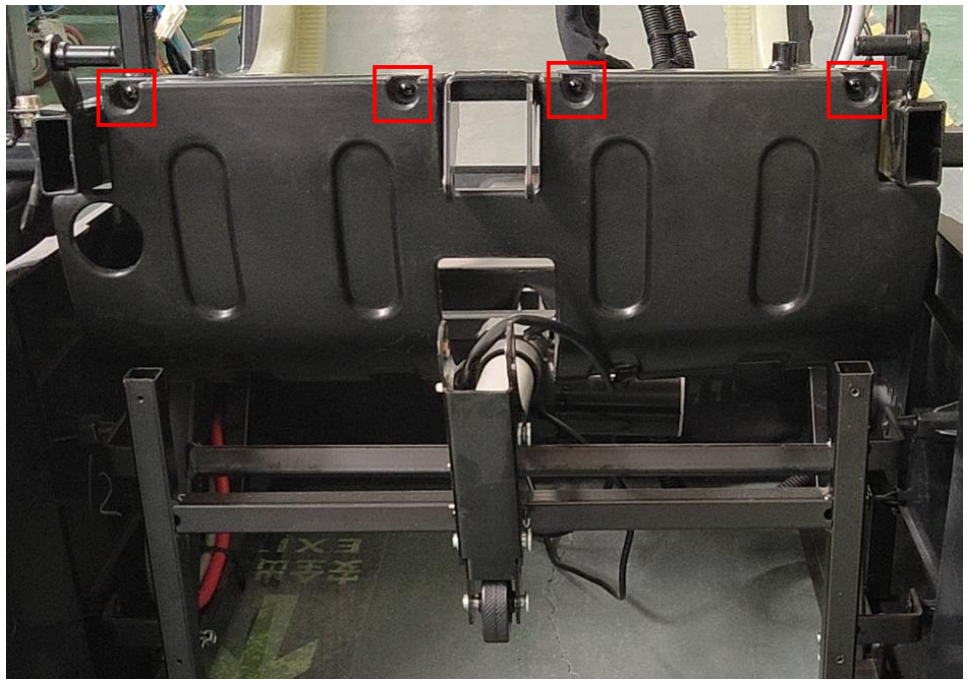


Step 9: Remove the four Phillips head screws with triangular teeth at the indicated positions in the diagram, and then the lower front panel can be taken out.

1.3 Chair disassembly steps: upper front panel of the electrical control box

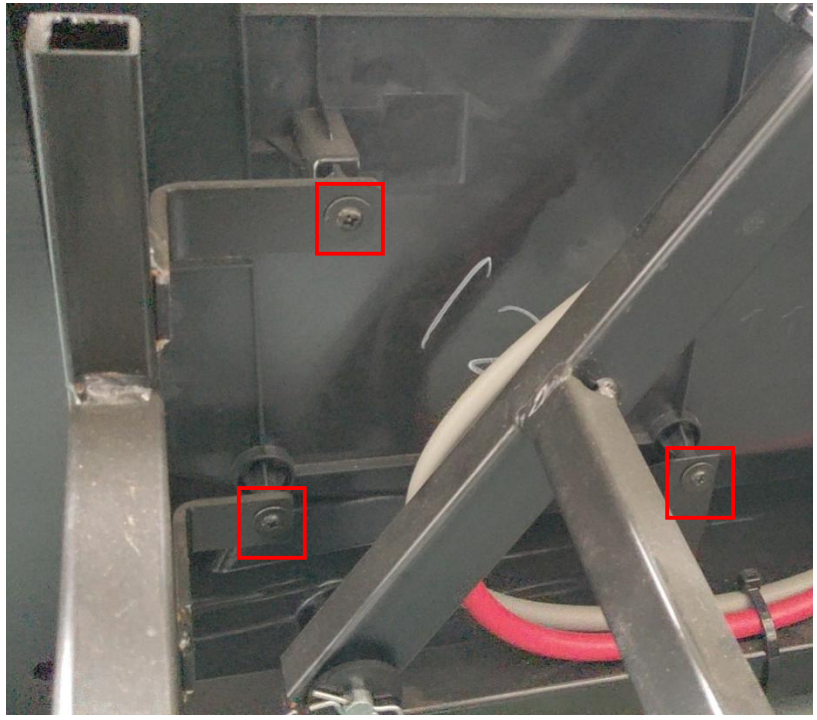


Step 10: Disconnect the detection wiring harness. Pry open the E-type snap ring and pull out the pivot shaft.



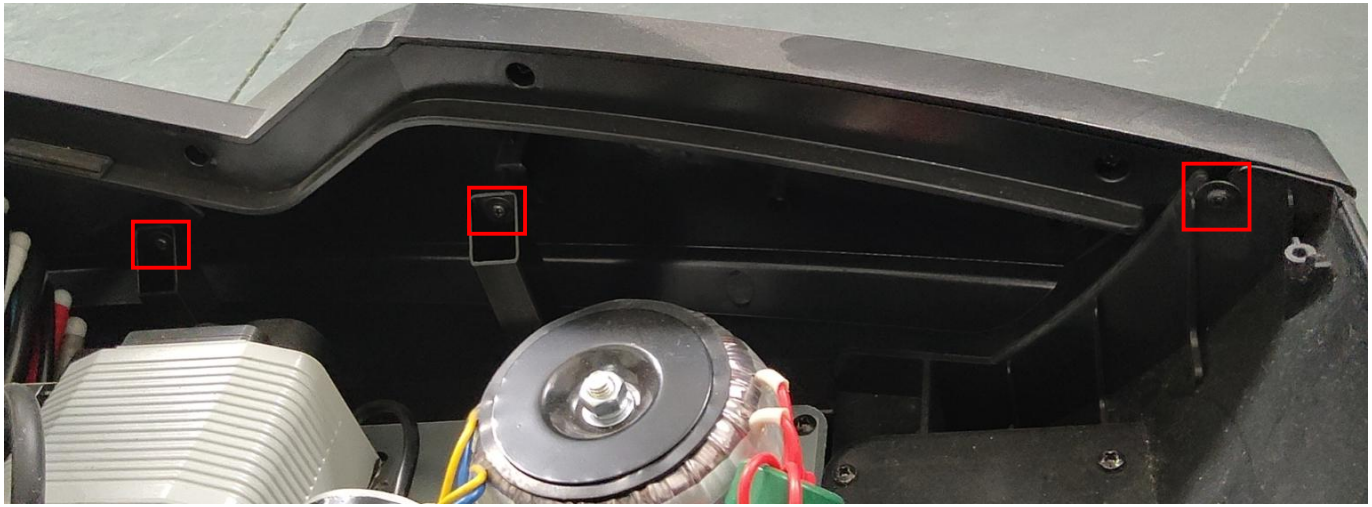
Step 11: Remove the four Phillips head screws with triangular teeth at the indicated positions in the diagram, and then the upper front panel can be taken out.

1.3 Chair disassembly steps: lower side panel

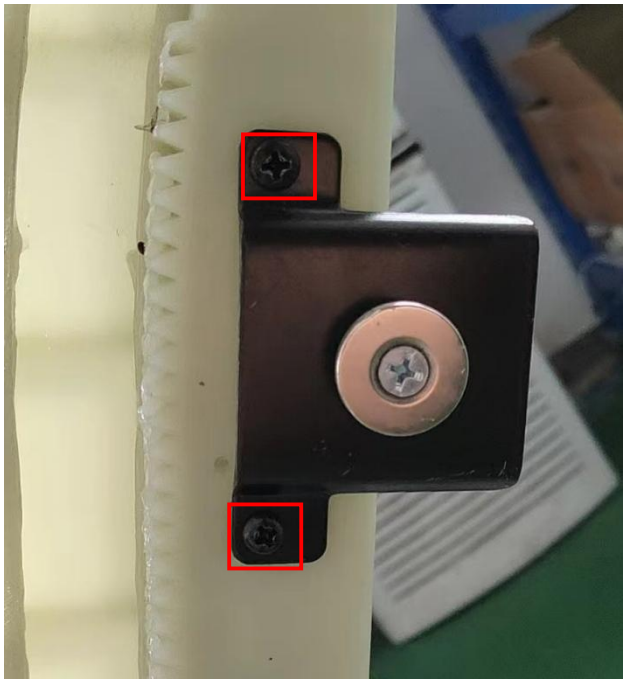


Step 12: Remove the six Phillips head screws with washers at the indicated positions in the diagram, and then the lower side panel can be taken out.

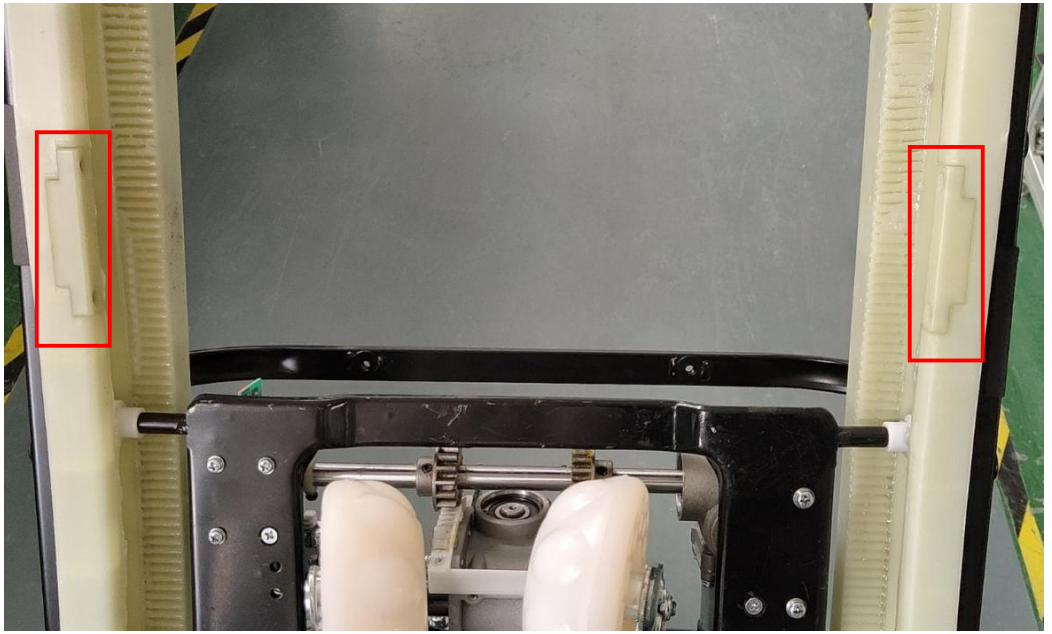
The removal method for the left and right lower side panels is the same.



1.3 Chair disassembly steps: upper limit assembly and left and right guide pressure blocks

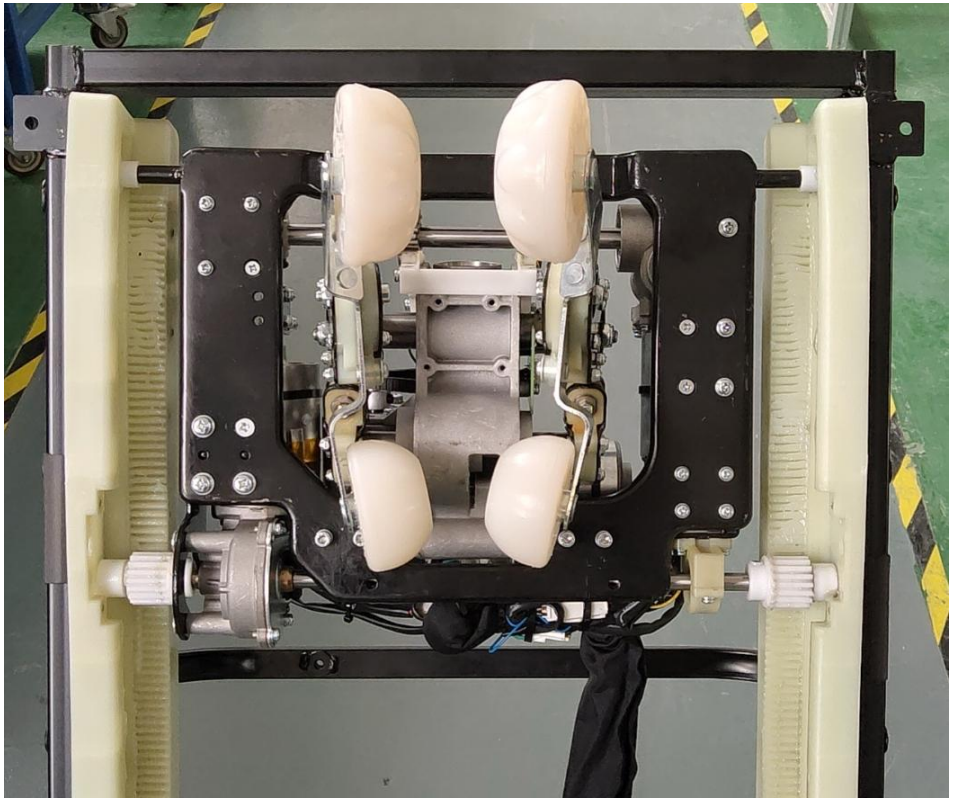


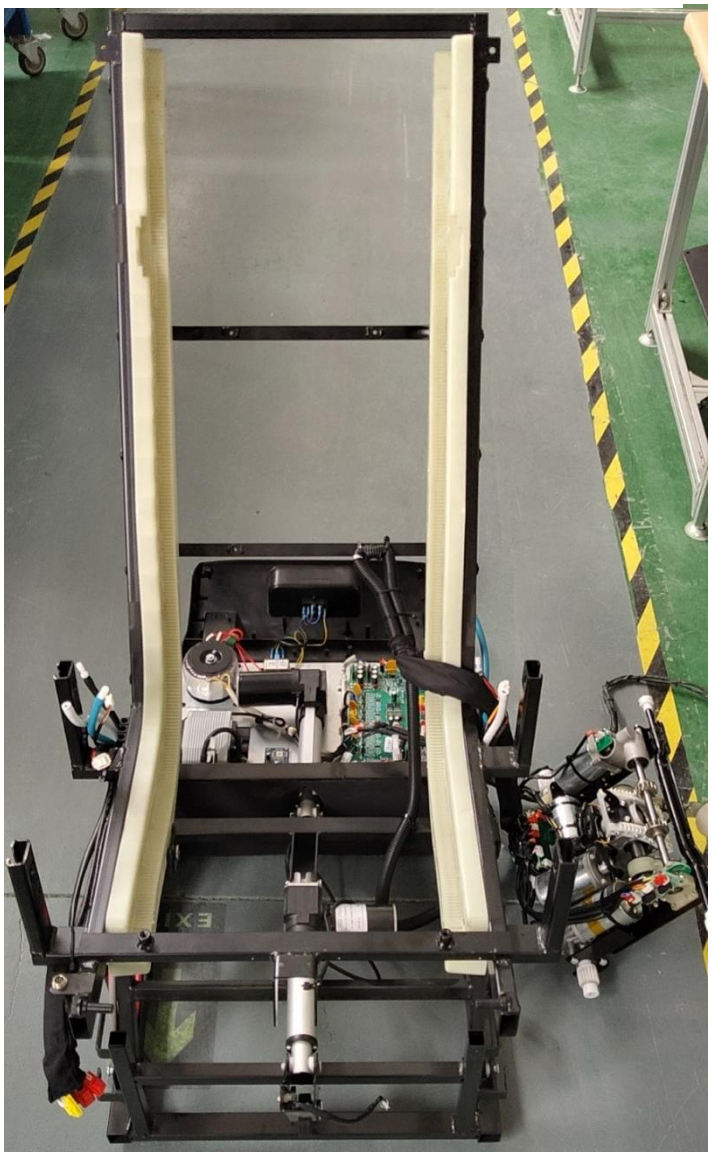
Step 13: Remove the two screws at the indicated positions, and then the upper limit assembly can be taken out.



Step 14: Using a 24V power adapter, move the mechanism downward. Remove the four screws at the indicated positions, and then the left and right guide pressure blocks can be taken out.

1.3 Chair disassembly steps: mechanism





Step 15: Using a 24V power adapter, move the mechanism upward to the notch of the guide rail, and then the mechanism can be taken out.

2. Massage Chair Troubleshooting and Maintenance

1. Whole chair not working
2. Kneading not working
3. Tapping not working
4. Mechanism can’t move up or down
5. Back push rod can’t move
6. Other problem

2. Massage Chair Troubleshooting and Maintenance

Issue 1: The entire chair does not work

Analysis:

1. **The main switch is not turned on (I for on, O for off), confirm if the power connection line is plugged in properly.**
2. **The fuse is burned out, usually caused by a short circuit in the drive caused by the load. Replace the load, replace the main PCB, and replace the fuse.**
3. **Check if the transformer has current output. If there is current output, it indicates that the main PCB is damaged, so replace the main PCB. If there is no current output, replace the transformer.**

2. Massage Chair Troubleshooting and Maintenance

Issue 2: Kneading not working

Analysis:

1. Use a multimeter to measure whether there is a 24V voltage on the plug in the red circle on the mainboard during operation.

1.1 If there is voltage, check if the wire harness plug is in poor contact and if the motor has resistance.

1.2 If there is no 24V voltage output, replace the mainboard.

2. If after confirming the mainboard has voltage, the wire harness plug and wire harness are in good condition, and the kneading motor still does not work: Replace the motor.

3.If you do not have a multimeter, you can use substitution to confirm whether the motor is good or bad (swap the kneading and tapping plugs).

mainboard

2. Massage Chair Troubleshooting and Maintenance

Issue 3: Tapping not working

Analysis:

1. Use a multimeter to measure whether there is a 24V voltage on the plug in the red circle on the mainboard during operation.

1.1 If there is voltage, check if the wire harness plug is in poor contact and if the motor has resistance.

1.2 If there is no 24V voltage output, replace the mainboard.

2. If after confirming the mainboard has voltage, the wire harness plug and wire harness are in good condition, and the tapping motor still does not work: Replace the motor.

3. If you do not have a multimeter, you can use substitution to confirm whether the motor is good or bad (swap the tapping and kneading plugs).

Mainboard

2. Massage Chair Troubleshooting and Maintenance

Issue 4: Mechanism cannot move up and down

Analysis:

1. First, check if the wire harness has poor contact or if the plug is loose.

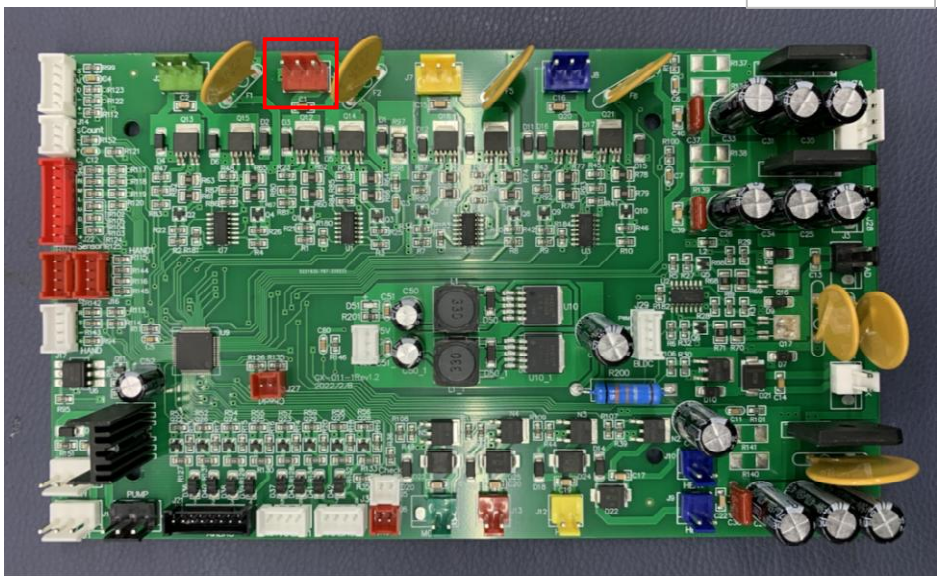
2. Use a multimeter to measure whether there is voltage at the plug in the red circle on the mainboard during operation. If there is no voltage output, replace the mainboard.

3. If there is voltage output, use a multimeter to measure if the motor has resistance. If there is no resistance, replace the motor to eliminate the fault.

4. If you do not have a multimeter, you can use substitution to confirm whether the motor is good or bad (swap the movement and push rod plugs)

5. If after confirming that the wire harness, power supply, and motor are all good, and the mechanism still cannot move up and down:
Replace the mechanism movement counting board or mechanism component to eliminate the fault.

Mainboard



2. Massage Chair Troubleshooting and Maintenance

Issue 5: Backrest push rod does not move up and down

Analysis:

1. First, check if the push rod wire harness has poor contact or if the plug is loose.

2. Use a multimeter to measure whether there is voltage at the plug in the red circle on the mainboard during operation.

2.1 If there is voltage output: Replace the push rod.

2.2 If there is no voltage output: Replace the mainboard.

3. If you do not have a multimeter, you can use substitution to confirm whether the motor is good or bad (swap the push rod and movement plugs).

Mainboard

2. Massage Chair Troubleshooting and Maintenance

Issue 6: Other issues

6. When the massage chair is turned on, the mechanism stays at the top or bottom and cannot move up and down. The problem may be that the limit switch signal is not working, the limit switch board is faulty, or there is poor contact of the terminal of the limit switch wire.

7. No sound from the speaker, which may be a Bluetooth board problem.

8. Tapping makes noise, or there is abnormal noise during kneading, indicating a problem with the mechanism arm.

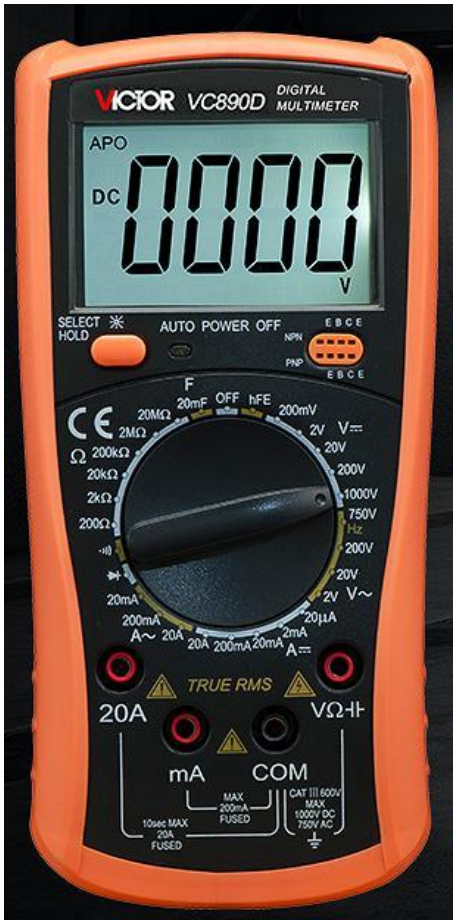
9. Backrest makes noise when reclining or ascending, which may be a problem with the push rod.

10. Airbags do not inflate but the air pump is working, which may be due to a faulty mainboard.

11. Airbags do not inflate, and the air pump is not working. First, check if the air pump has working voltage. If not, it may be that the transformer has no voltage input. If there is working voltage, it may be an issue with the air pump.

3. Maintenance tools

1. Phillips screwdriver (one long and one short)
2. Needle-nose pliers
3. Diagonal cutting pliers
4. 4. Ratchet wrench (hexagonal socket 6mm, 8mm; socket 10mm, 13mm)



Multimeter

Direct current 24V power supply