

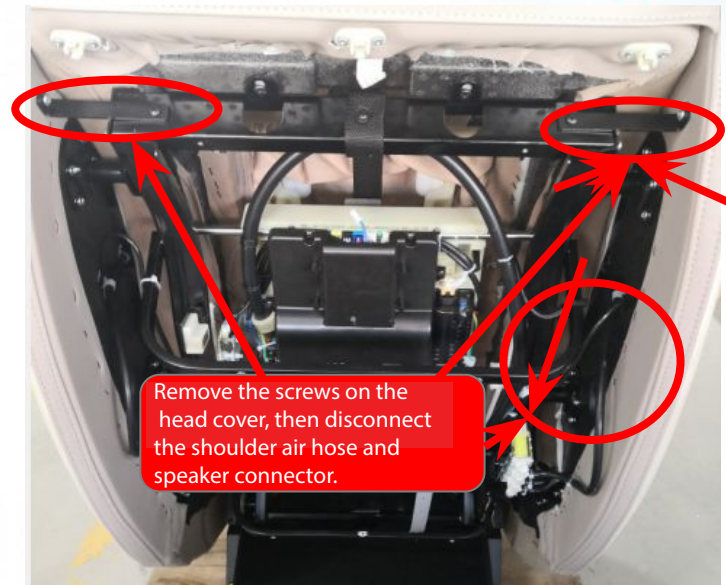
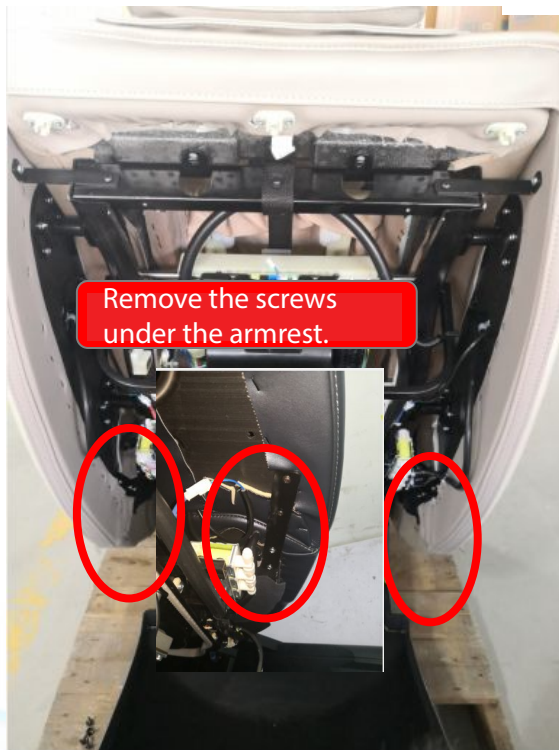
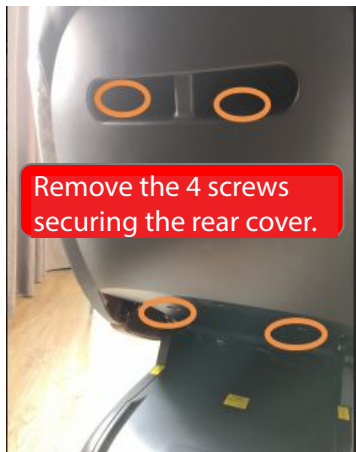
# RT-6891 (芝华仕M6080) Massage Chair



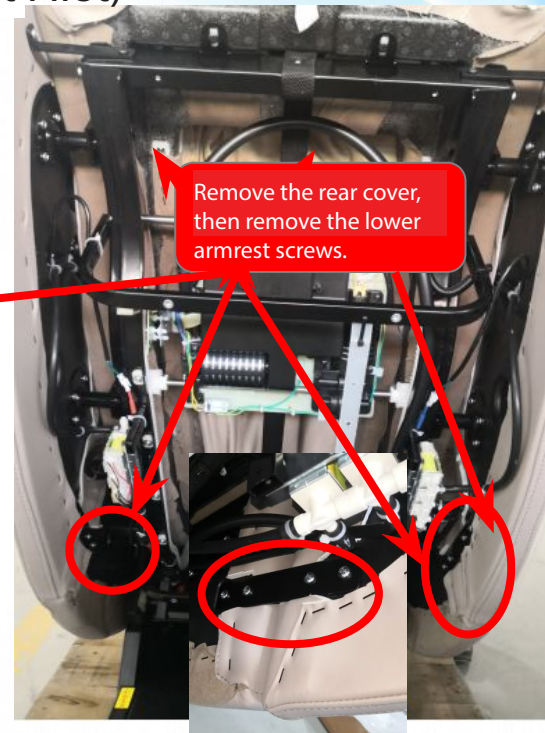
Remote  
Controller



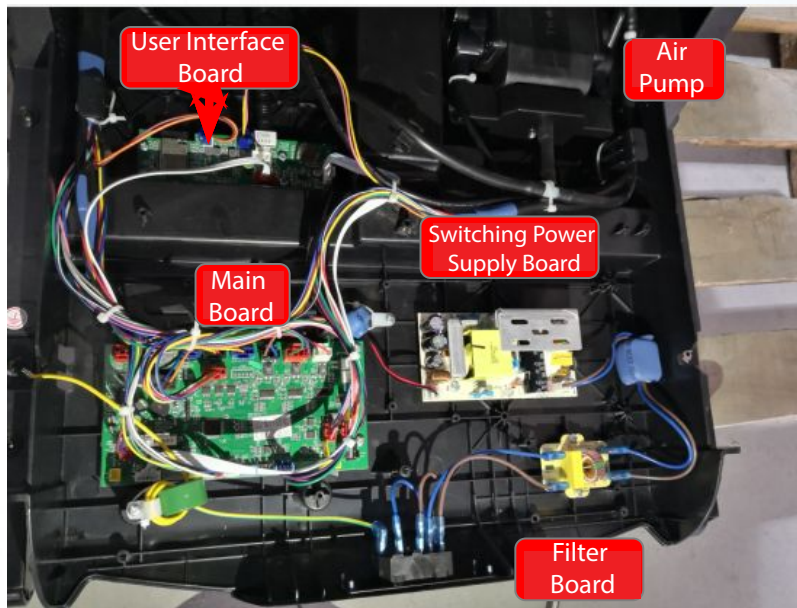
## RT-6891 Shoulder Disassembly



## Armrest Disassembly RT-6891 (Remove the Shoulder Unit First)



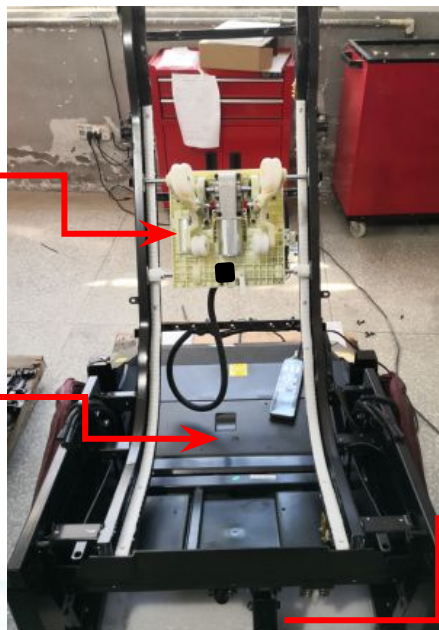
# RT-6891 Power Box Disassembly Diagram



# RT-6891 Internal Structure

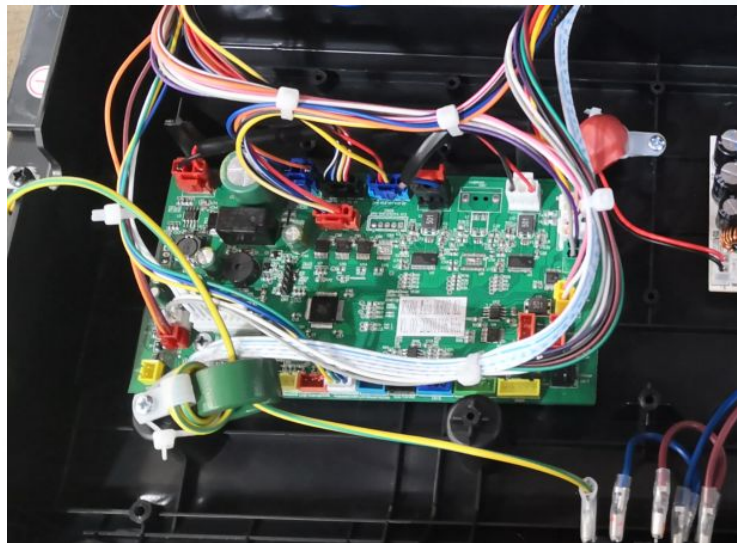
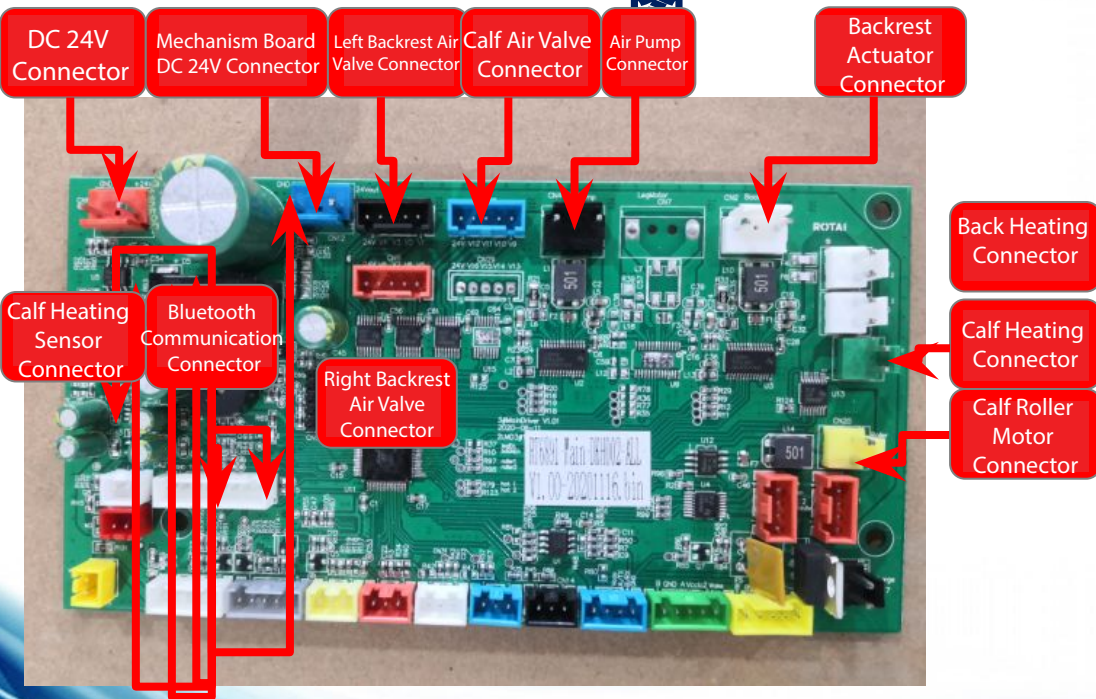
Massage  
Mechanism

Control Box

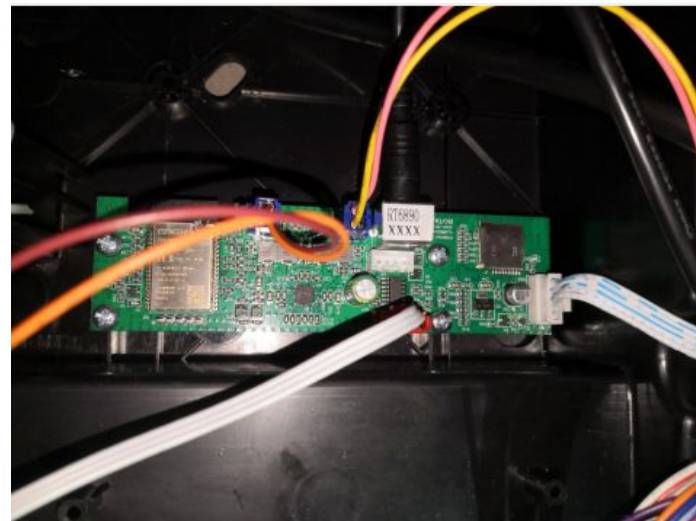
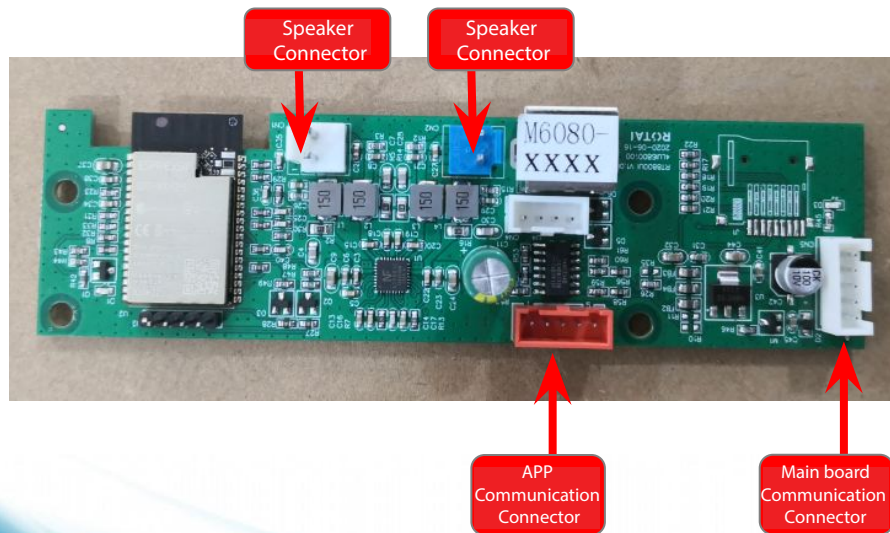


Backrest Actuator  
DC 24V / 220 mm  
with Hall Sensor

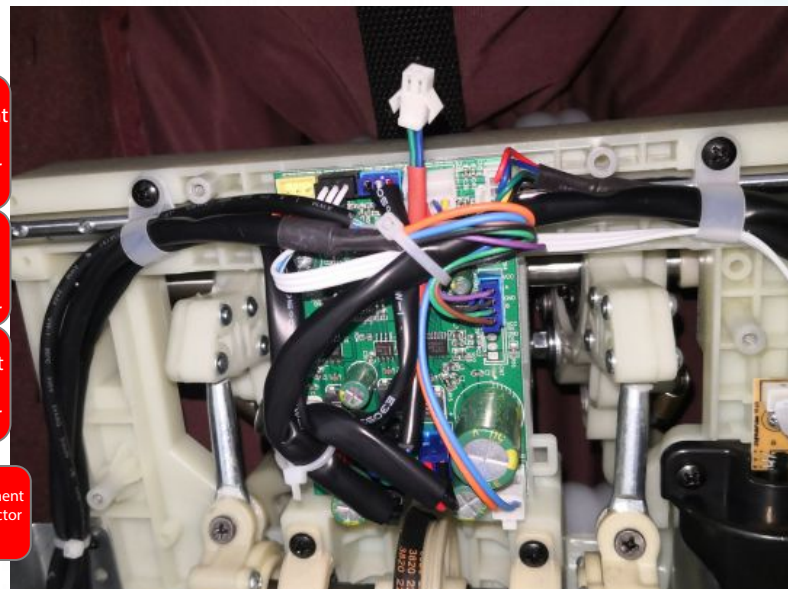
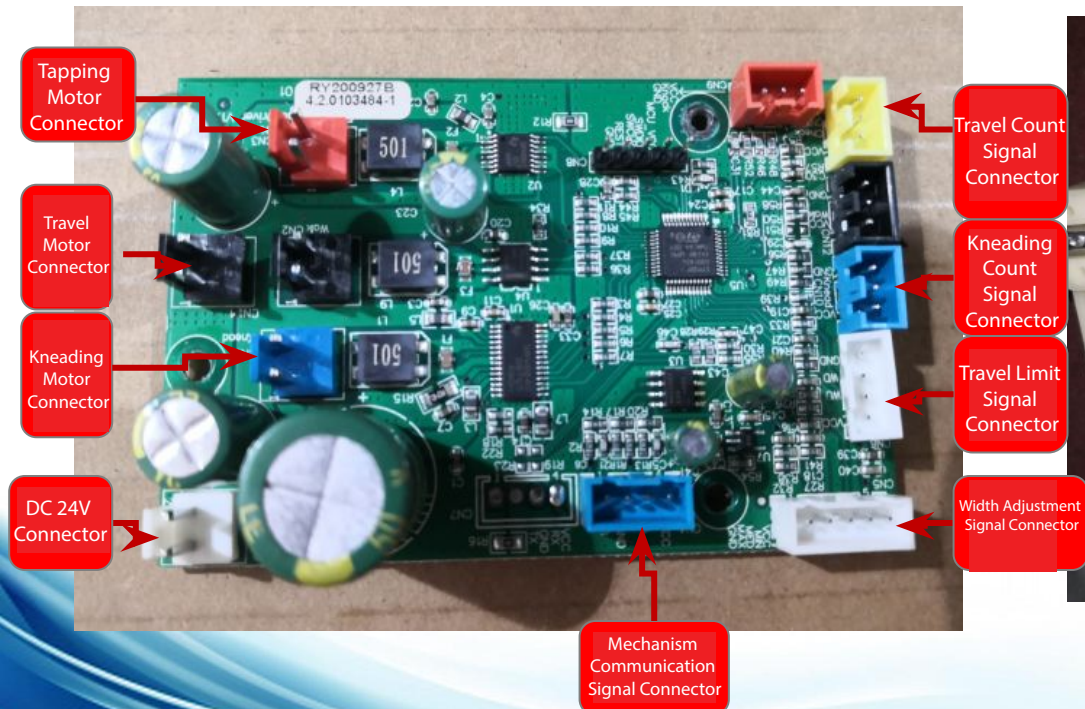
# RT-6891 Main Board Connector Diagram



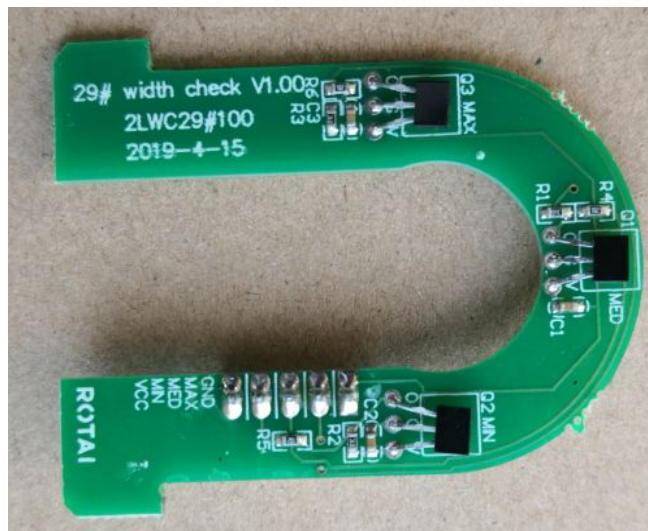
# RT-6891 User Interface Board Connector Diagram



# RT-6891 Mechanism Board Connector Diagram

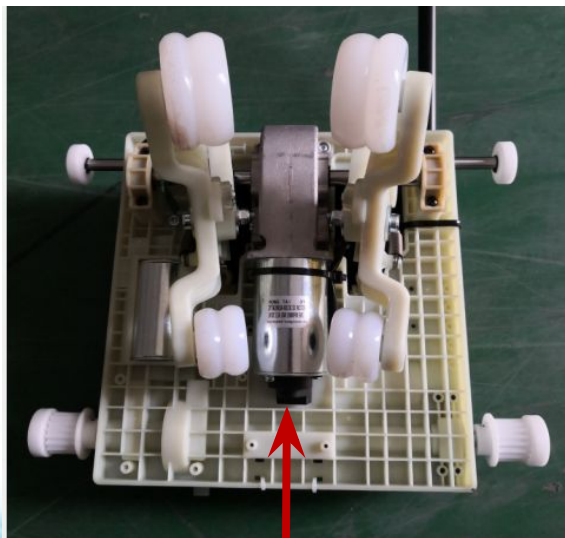


# RT-6891 Massage Chair Width Detection Board

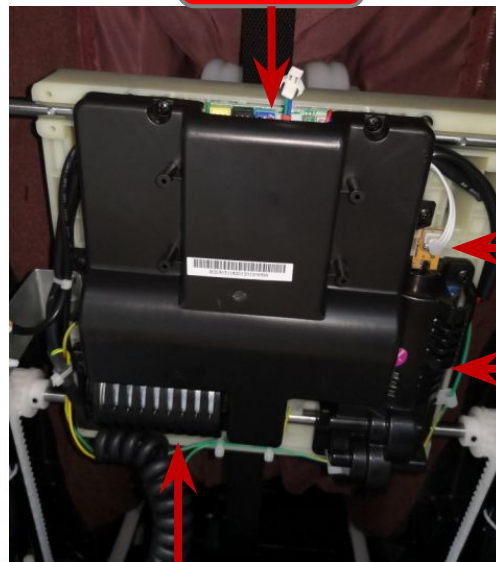


Wide/Middle/Narrow  
Signal Connector

# RT-6891 Mechanism Assembly (Actual View)



Kneading Motor



Tapping Motor

Mechanism  
Main Board

Travel Motor  
Encoder  
Board

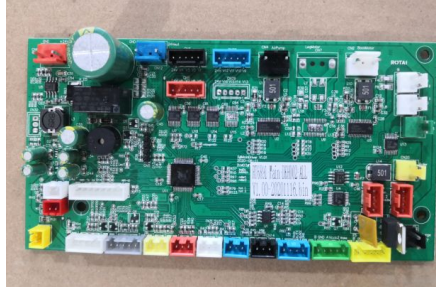
Travel Motor

## Troubleshooting & Maintenance

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1. Remote Controller Does Not Power On
2. Kneading Motor Not Working
3. Tapping Motor Not Working
4. Travel Motor Not Working
5. Blown Fuse
6. Backrest Actuator Not Working
7. Airbags Not Working in Certain Areas
8. Mechanism Overruns Upper or Lower Limit
9. During Reset, Mechanism Keeps Kneading or Tapping (Abnormal Operation)
10. Rollers Not Working

## 1. Remote Controller Does Not Power On



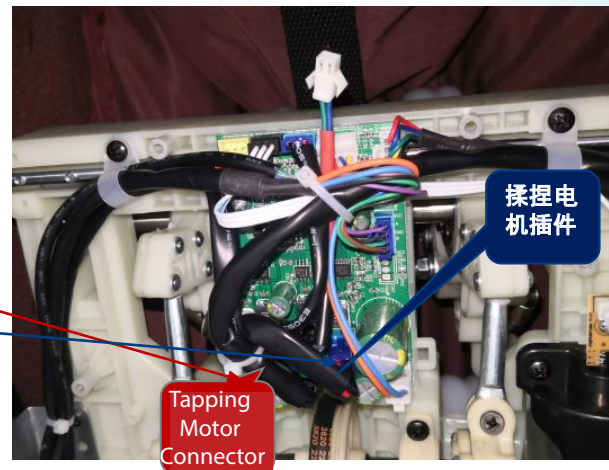
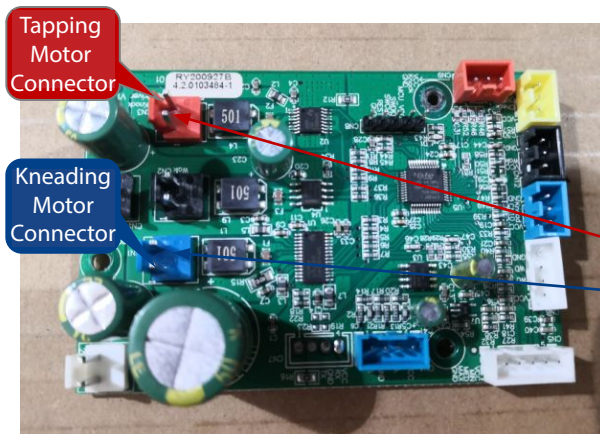
### Possible Causes:

1. Damaged remote cable or faulty remote controller
2. Defective 5V power supply board
3. Main board failure
4. User interface board failure

### Troubleshooting Steps:

1. replace the remote controller and cable to test
2. Check if the power supply board indicator is on; if not, replace the power supply board
3. Check if the main board indicator is on; if not, replace the main board
4. If the main board indicator is on, use a multimeter to check for DC 5V output from the user interface board. If there is no output, replace the user interface board

## 2. Kneading Motor Not Working



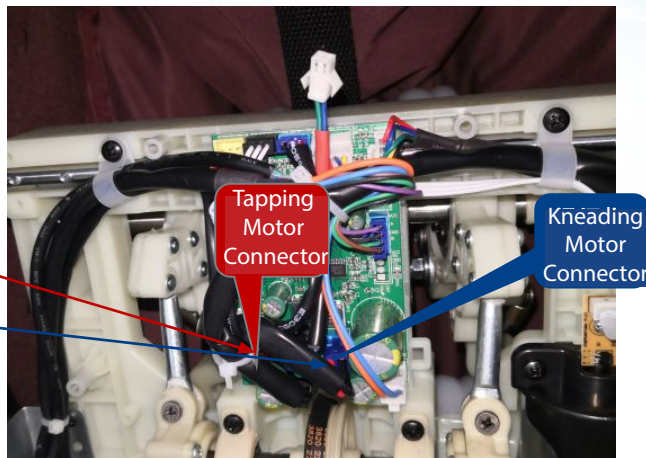
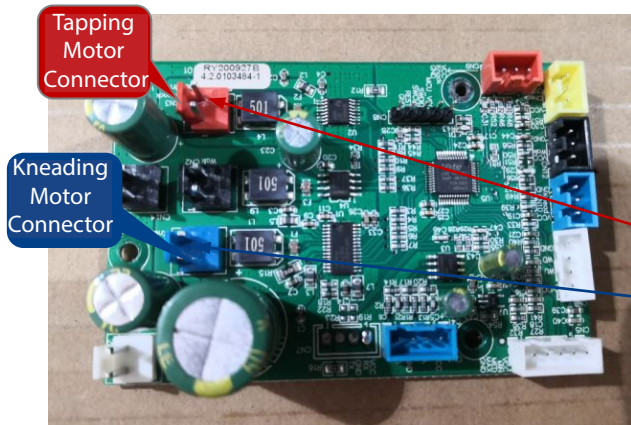
### Possible Causes:

1. Motor failure
2. Main board failure
3. Wiring harness damaged or poor connection

### Troubleshooting Steps:

1. Select the tapping function manually. On the mechanism board, connect the kneading motor connector to the tapping motor port. Check whether the kneading motor operates.  
If it works: The issue is with the wiring harness or main board  
If it does not work: The motor is faulty > replace the motor
2. Reconnect the motor connector to its original position. Then connect the kneading motor connector to the tapping motor port on the main board. Check whether the kneading motor operates.  
If it works: The main board is faulty > replace the main board  
If it does not work: The wiring harness is faulty & check with a multimeter and replace the harness

## 3. Tapping Motor Not Working



### Possible Causes:

1. Motor failure
2. Main board failure
3. Wiring harness damaged or poor connection

### Troubleshooting Steps:

1. Select the kneading function manually.

On the mechanism board, connect the tapping motor connector to the kneading motor port.

Check whether the tapping motor operates.

If it works: The issue is with the wiring harness or main board

If it does not work: The motor is faulty > replace the motor

2. Reconnect the motor connector to its original position.

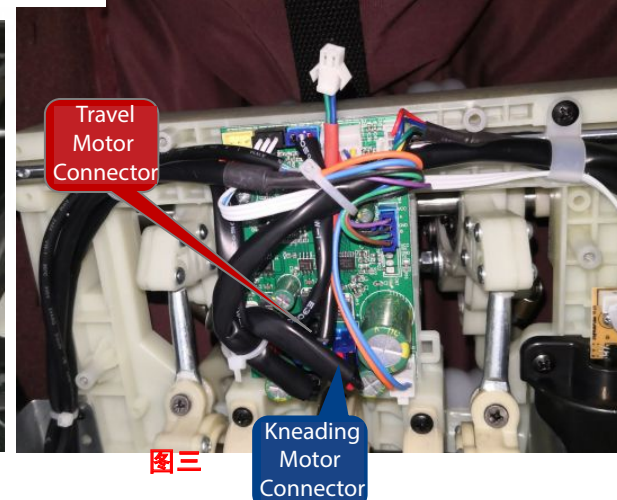
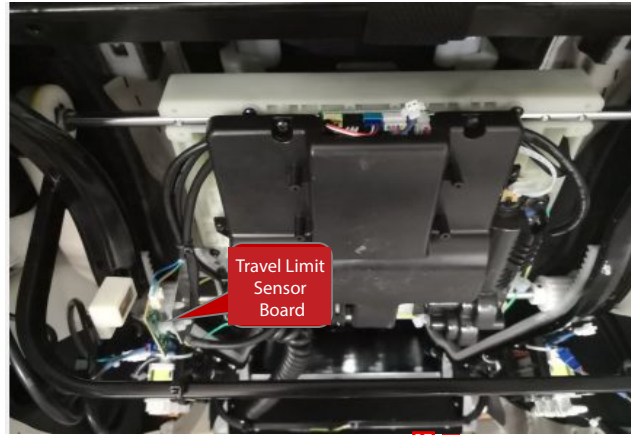
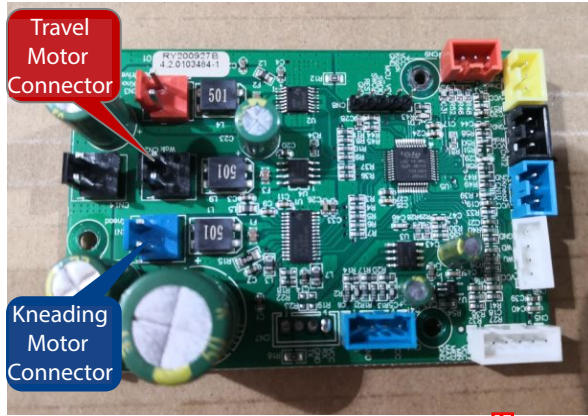
Then connect the tapping motor connector to the kneading motor port on the main board.

Check whether the tapping motor operates.

If it works: The main board is faulty > replace the main board

If it does not work: The wiring harness is faulty ☒ check with a multimeter and replace the harness

## 4. Travel Motor Not Working



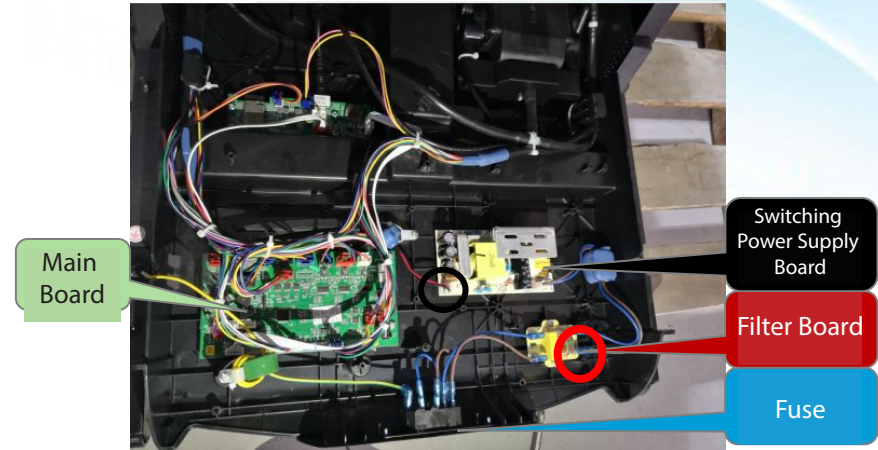
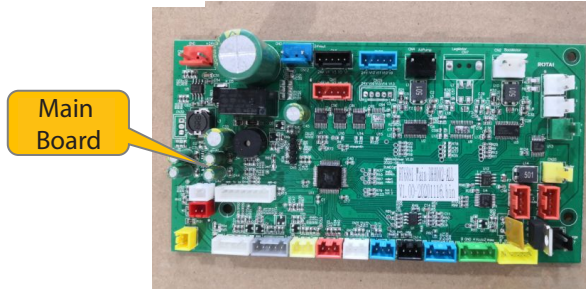
### Troubleshooting Steps:

#### Possible Causes:

- 1.Travel motor failure
- 2.Wiring harness damaged
- 3.Travel limit sensor board failure
- 4.Main board failure

- 1.Select the manual function and run the kneading + tapping synchronization mode. Then switch to fixed-point mode and press the up/down travel buttons. Check whether the remote controller produces a double “beep” sound.  
If upward movement works but downward does not: The lower limit sensor board is faulty or the wiring connection is poor  
If downward movement works but upward does not: The upper limit sensor board is faulty or the wiring connection is poor the harness
- 2.If both up and down movements produce a slow single “beep,” the travel limit signal is normal. Then connect the travel motor connector (black) to the kneading motor connector (blue) on the mechanism. Check whether the motor runs.  
If it does not run: The motor is faulty > replace the motor
- 3.Reconnect the motor to its original position. Then connect the travel motor connector on the main board to the kneading motor port. Check whether the travel motor operates.  
If it works: The main board is faulty > replace the main board  
If it does not work: The wiring harness is faulty> test with a multimeter and replace the harness

## 5. Blown Fuse



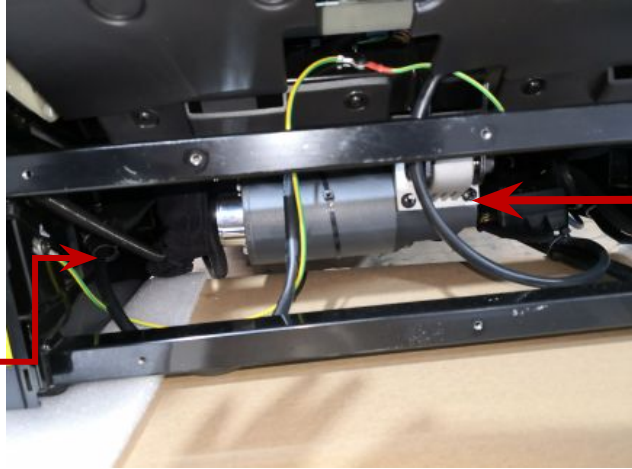
### Possible Causes:

1. Blown fuse
2. Filter board short circuit
3. Switching power supply board short circuit
4. Short circuit in main board components
5. Short circuit in a load component

### Troubleshooting Steps:

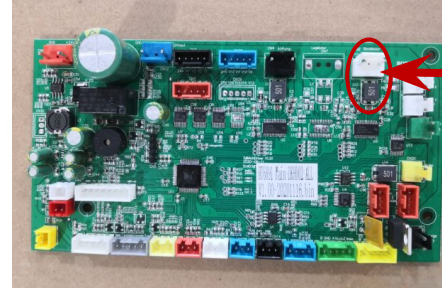
1. If the fuse is blown due to voltage fluctuation, replace it with the same type (5A).
2. If the fuse blows again after replacement: Disconnect the connector marked in red (Figure 2), then power on. If the fuse blows > replace the filter board. If the fuse does NOT blow: Reconnect, then disconnect the connector marked in black (Figure 3), and power on. If the fuse blows & the switching power supply board is shorted & replace it.
3. If the fuse still does not blow after reconnecting: Restore all connectors. Then disconnect other connectors from the main board one by one and power on. If the fuse blows at a specific connector: That connected component has a short circuit & replace that load component.  
**(In most cases, a blown fuse is caused by a short circuit in the filter board or switching power supply board.)**

## 6. Backrest Actuator Not Working



Backrest Actuator

Backrest Actuator Connector



Backrest Actuator Connector

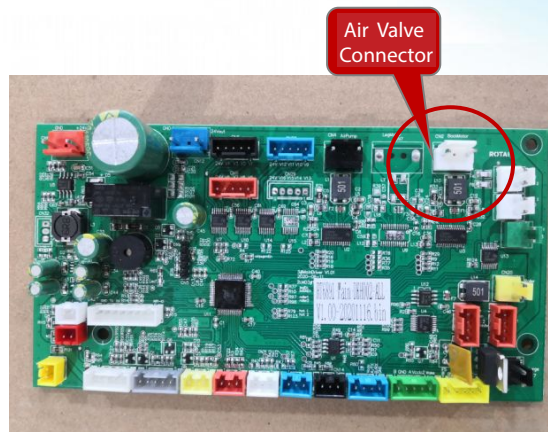
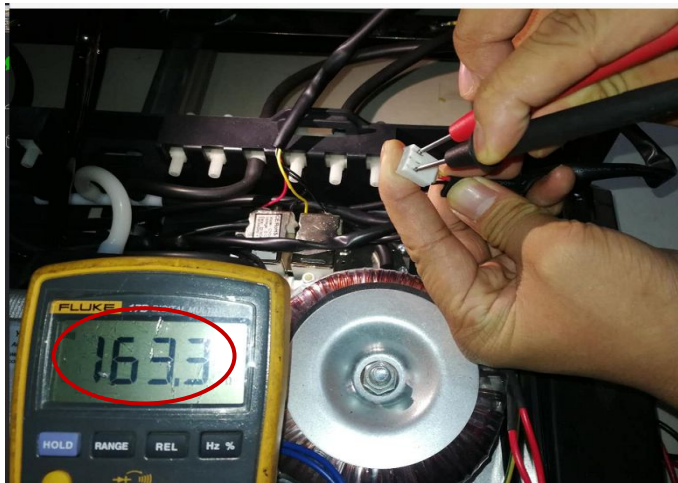
### Possible Causes:

- 1. Actuator failure
- 2. Main board failure
- 3. Actuator wiring harness damaged

### Troubleshooting Steps:

1. Use the remote controller to adjust the backrest (up/down). Listen for the sound from the controller. Both directions should produce a "beep-beep" sound.  
If both directions produce the double beep: The actuator position signal is abnormal > the actuator itself is faulty > replace the actuator
2. If one direction produces a single beep and the other produces a double beep: Use a multimeter to check whether there is DC 24V output at the main board connector  
If there is output: The actuator is faulty  
If there is no output: The main board or wiring harness is faulty  
Use a multimeter to further check actuator resistance and wiring continuity

## 7. Airbags Not Inflating in Certain Areas



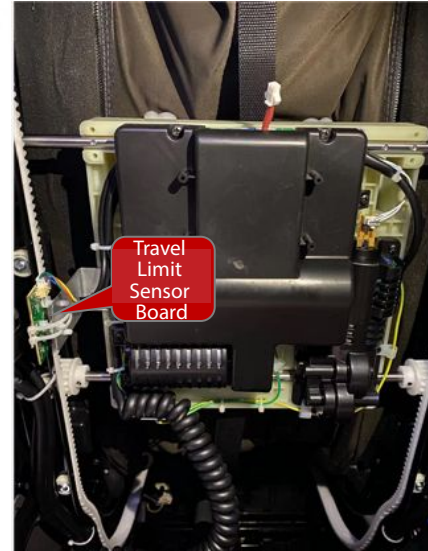
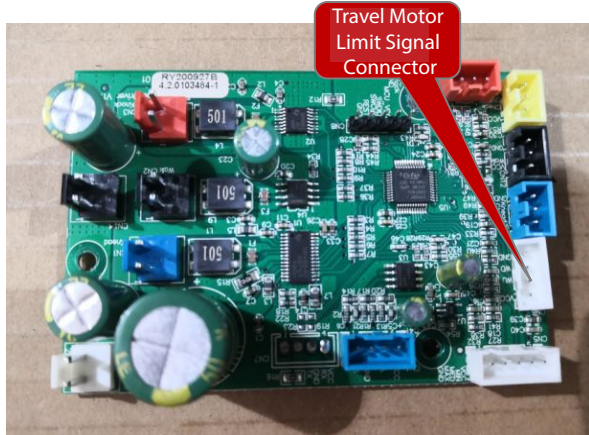
### Possible Causes:

1. Air hose kinked or disconnected
2. Faulty air valve
3. Main board failure

### Troubleshooting Steps:

1. Check whether the air hose of the non-inflating area is kinked or disconnected.
2. If the air hose is normal, use a multimeter (continuity/resistance mode) to test the air valve. (Refer to Figure 1)  
Measure between: Black & Red wires/Black & Yellow wires (Normal value: 160–170  $\Omega$ )  
If the value is within 160–170  $\Omega$ : The air valve is normal > Main board is faulty > replace the main board  
If the value is outside 160–170  $\Omega$ : The air valve is faulty > replace the air valve

## 8. Mechanism Overruns Upper or Lower Travel Limit



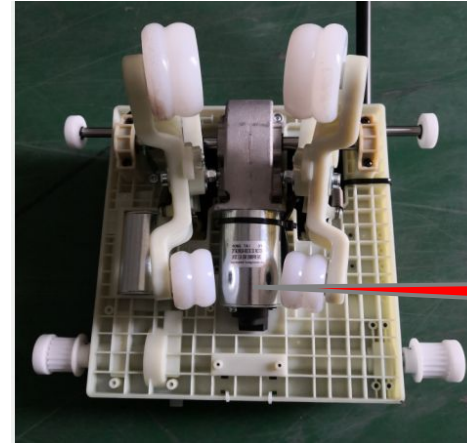
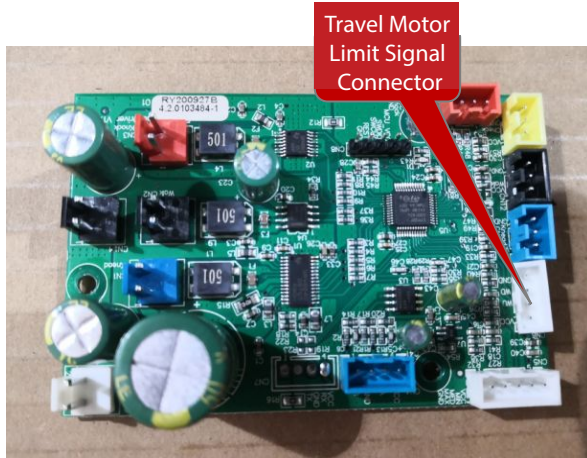
### Possible Causes:

- 1.Upper/Lower limit sensor board failure
- 2.Main board failure
- 3.Wiring harness between main board and limit sensor board damaged or loose

### Troubleshooting Steps:

- 1.Check whether the connectors are loose, pins are pushed out, or the wiring harness is damaged.
- 2.If the mechanism overruns upward: Replace the upper limit sensor board  
If the mechanism overruns downward: Replace the lower limit sensor board
- 3.If the issue persists after replacing the limit sensor board: The main board is faulty ☒ replace the main board

## 9. Mechanism Keeps Kneading or Tapping During Reset



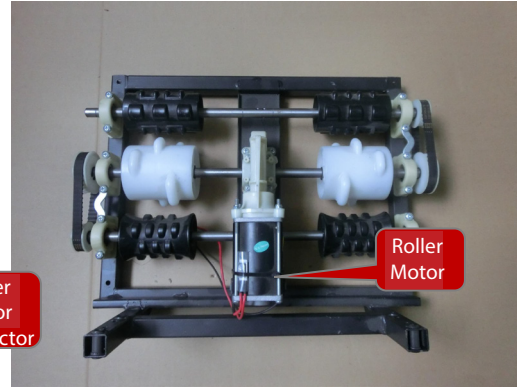
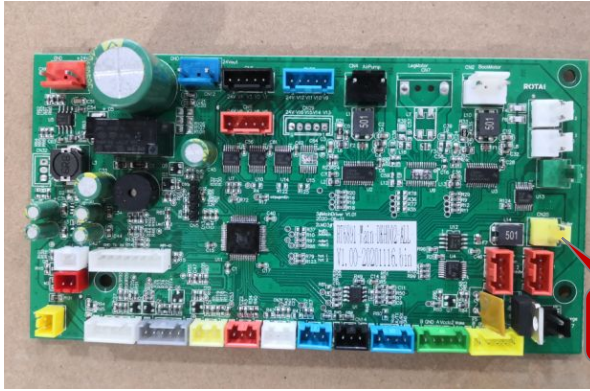
### Possible Causes:

- 1.Kneading motor failure
- 2.Width Detection Board failure
- 3.Wiring harness / connector issue

### Troubleshooting Steps:

- 1.Check whether the kneading motor has pulse/count feedback.  
If there is no feedback signal, replace the kneading motor.
- 2.Manually test the mechanism width adjustment (wide/middle/narrow).  
If the width adjustment does not function properly, replace the width detection board.
- 3.Check whether related connectors are loose, pins are pushed out, or wiring harness is damaged.

## 10. Roller Not Working



### Possible Causes:

- 1.Main board failure
- 2.Roller motor failure
- 3.Wiring harness between roller motor and main board damaged or loose

### Troubleshooting Steps:

- 1.Activate the heating function.  
Connect the roller motor to the heating port and check whether the roller operates.  
If it operates: The main board is faulty > replace the main board
- 2.If it does not operate, measure the motor resistance. If resistance is abnormal or infinite (open circuit):  
The motor is faulty > replace the motor
- 3.If the motor resistance is normal, use a multimeter to check the continuity of the wiring between the motor and the main board.  
If no continuity > replace the wiring harness

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**谢  
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SHANGHAI RONGTAI HEALTH TECHNOLOGY CORPORATION LIMITED