A385 massage chair after-sales maintenance guide

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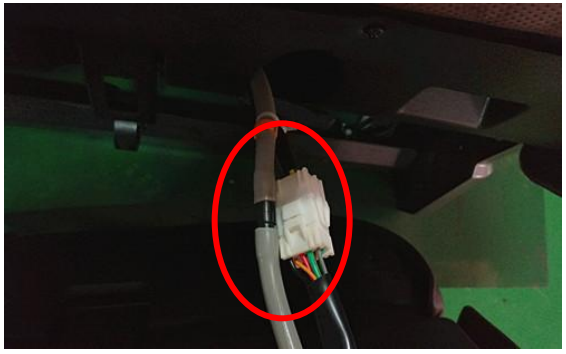
2 The installation of new massage chairs

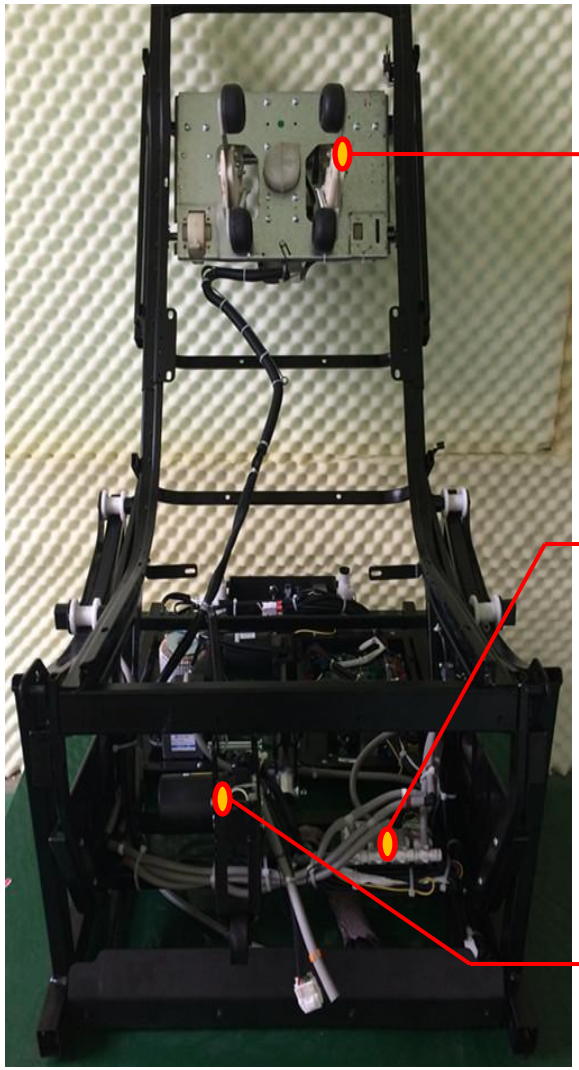
1. This machine is packed in 2 pieces, and the calf and main body should be assembled for the installation of the new machine.

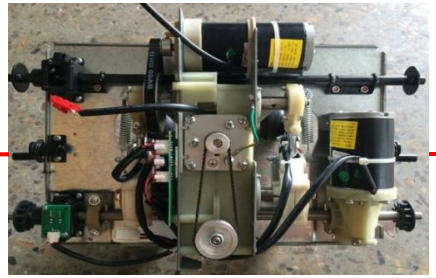


2. First insert the calf air hose and wiring harness firmly (pay attention to the plug-in direction), then hang the calf on the main body and insert the bolt on the calf installation shaft firmly.

3. Introduction of Internal Components of Massage Chair

3.1. Internal components on the front of the main body



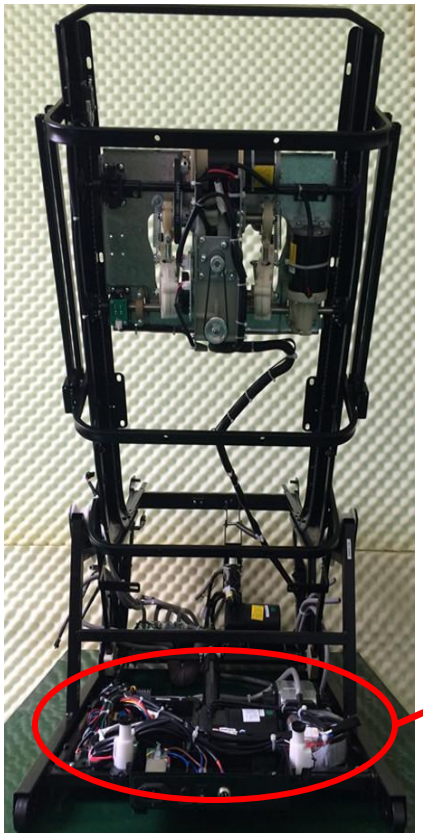


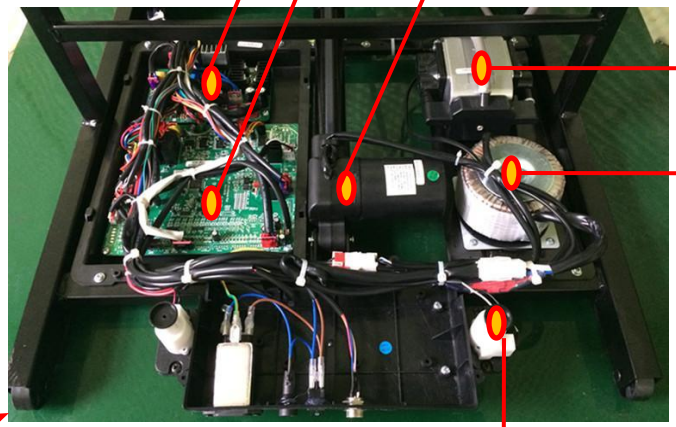
2D manipulator

6 group solenoid valve

Electric calf cylinder

3.2. Internal components on the back of the main body





Power supply board

Drive board

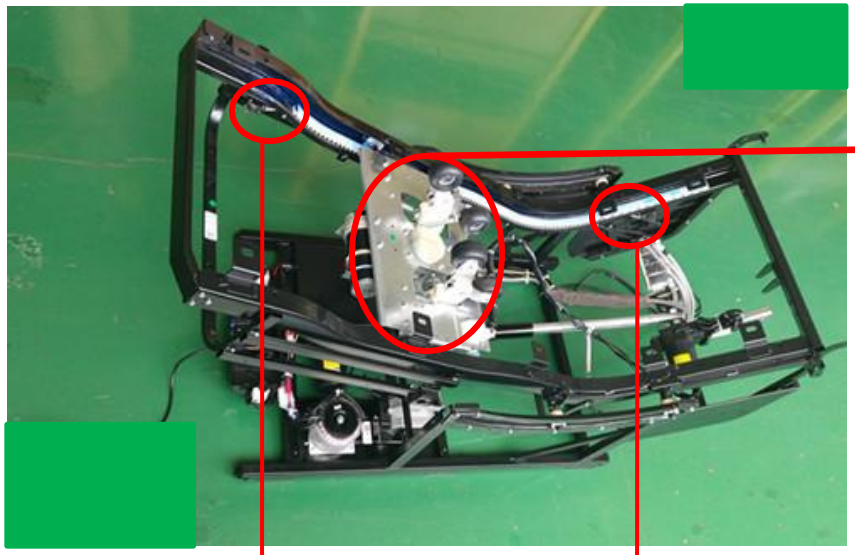
Backrest electric cylinder

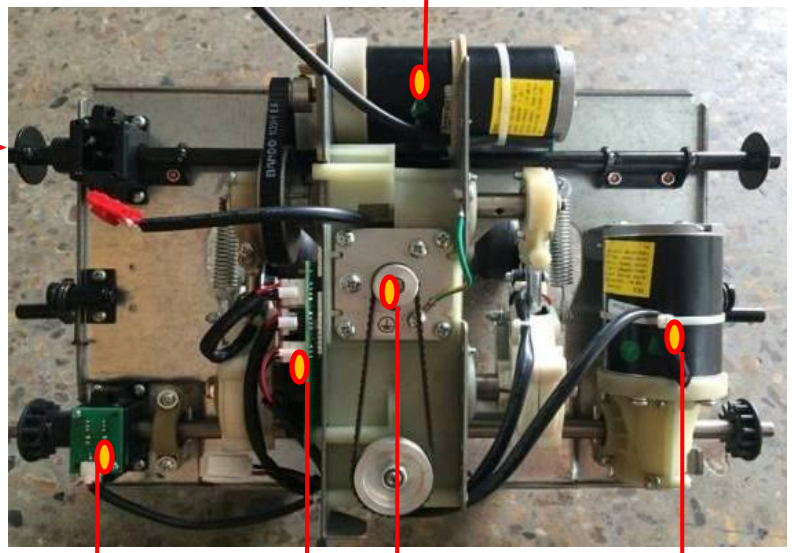
Air pump

Round transformer

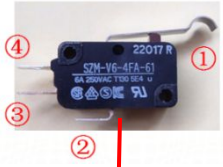
Safety switch

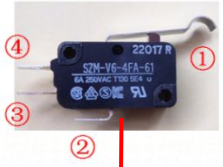
3.3. Main body side interior and manipulator components





tapping motor





Upward travel switch

Down travel switch

Traveling circle number detection board

tapping width detection board

Kneading motor

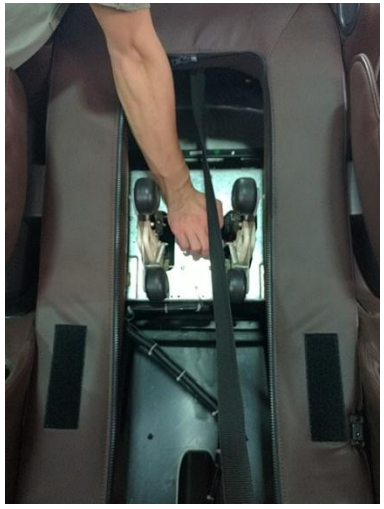
Traveling motor

4. Disassembly and assembly of special parts of massage chair

4.1. armrest disassembly and assembly

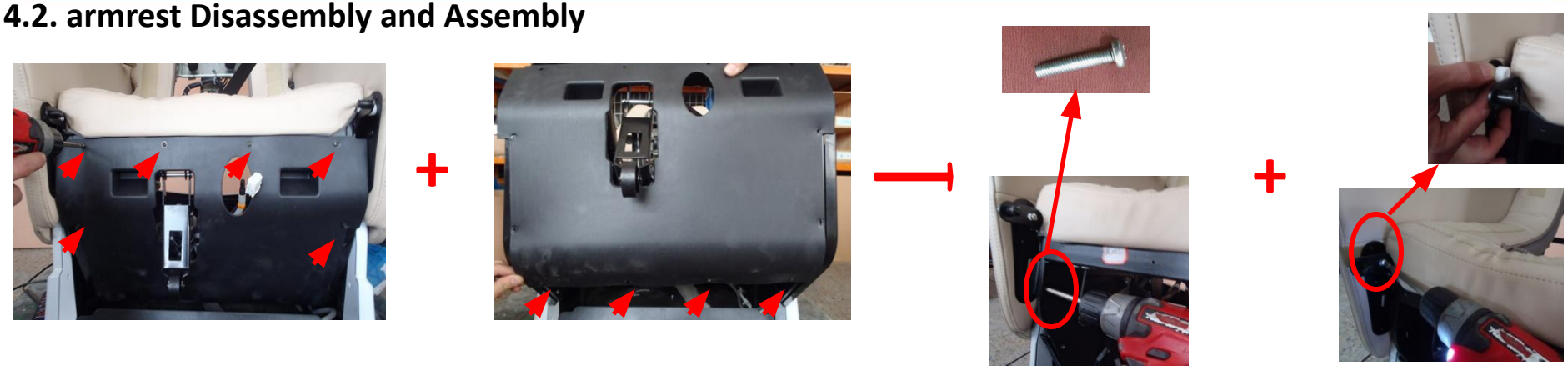


1. Remove the head cushion and cushion, unzip the kneading cloth on the rack, and finally remove the 6 screws on the back cover to remove the back cover.

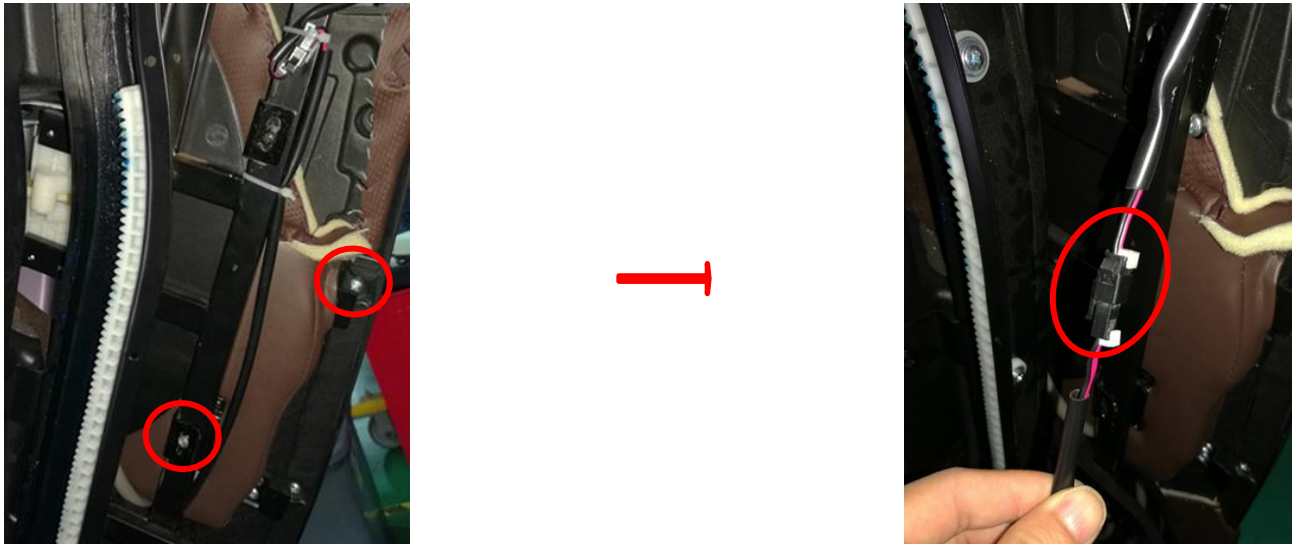




2. In case the screw is blocked by the manipulator, turn off the power supply of the machine first, then press down or pull up the manipulator to expose the screw, then remove the back cover.

4.2. armrest Disassembly and Assembly

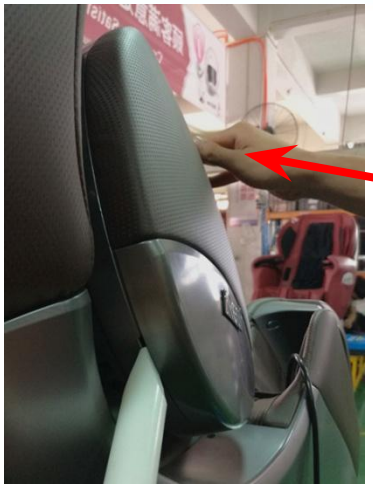


3. First remove the 6 screws on the front sealing board, then lie down the chair to remove the lower 4 screws, and then remove the 2 screws at both ends of the front side of the armrest (up and down in the two red circles)

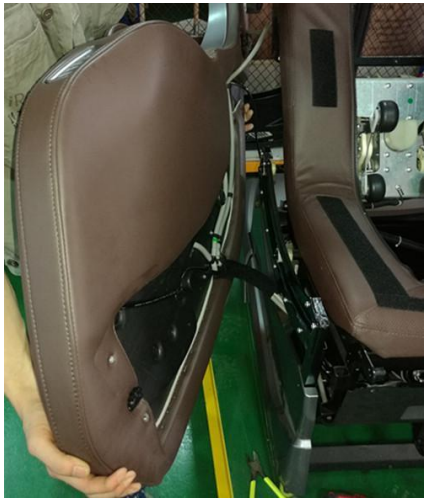


4. Remove two armrest mounting screws on the left and right inner sides of the backrest steel frame (in the red circle), and then separate the DC12V power cord.

4.2. armrest Disassembly and Assembly



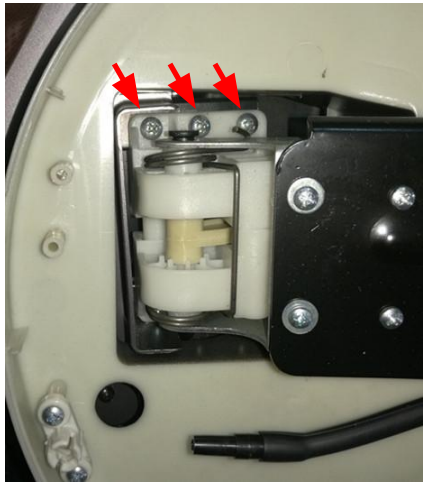
5. Press the upper arm device inward first, then pry open the outer cover, then press the inner cover of the upper arm device with your thumb (shown by the arrow under the red circle) and remove the screws in the red circle with a screwdriver.



6. First, cut the armrest air hose tie on the binding steel frame and separate the air hose (pay attention to the color ring, and pay attention to the fact that the tie should pass through the wire binding hole in the red ring during installation to prevent the wire harness from sliding and rubbing), and finally remove the armrest from themain body.

4.3. Disassembly and assembly of upper arm device

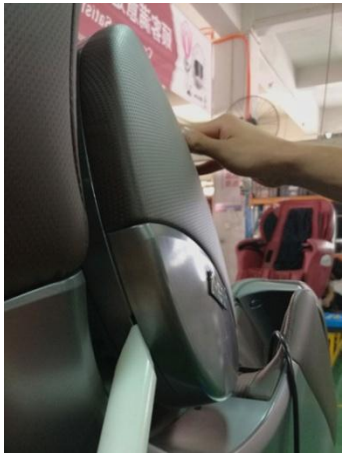
1. Press the upper arm device inward and expose the disassembly opening, and then remove the outer cover with a crowbar.



2. First remove the upper and lower screws of the arm mounting seat (indicated by the red arrow), and then remove the arm as a whole.

4.3. Disassembly and assembly of space capsule

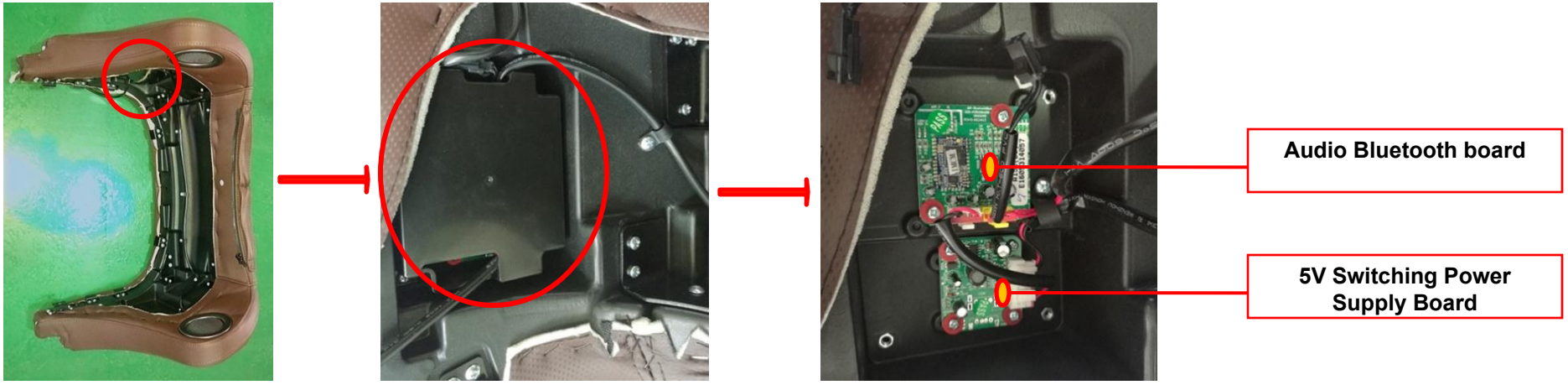
1. Remove the back cover first, then remove the three screws (in the red circle) that fix the space capsule on the left and right inner sides of the backrest steel frame, and finally separate the audio 12V power cord.



2. Remove the outer covers of upper arm devices on both sides, and remove the screws connecting the capsule with the outer covers of armrests, and finally remove the capsule as a whole.

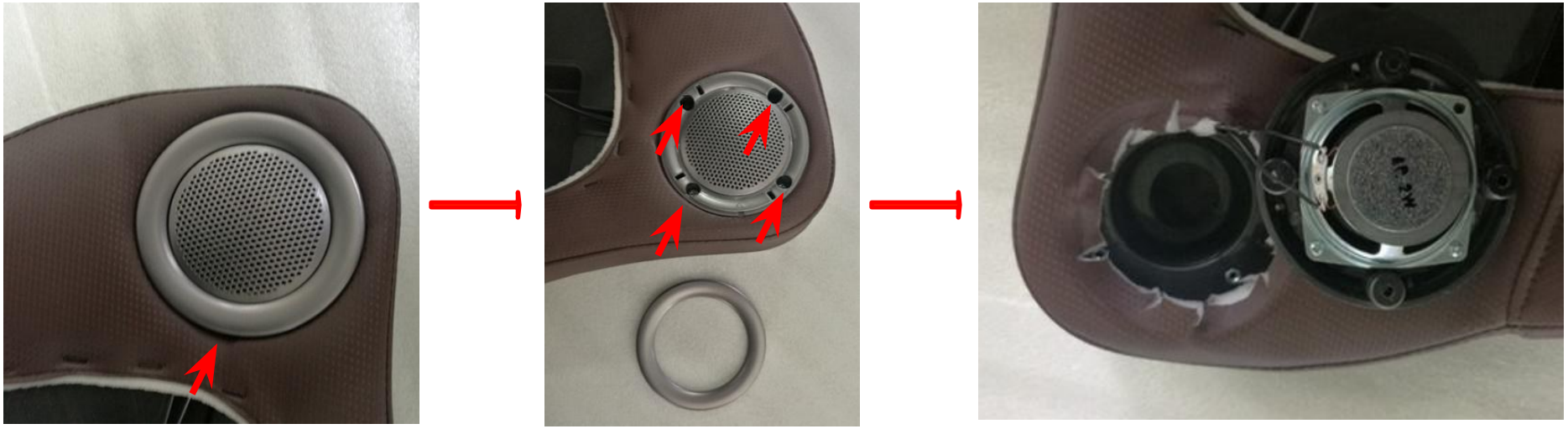
4.4. Disassembly and assembly of 5V switching power supply board and audio Bluetooth board

1. Because the audio board is installed on the right side of the capsule, it is necessary to remove the capsule before taking it out.



2. After removing the capsule, remove the outer cover of the audio Bluetooth board to see the 5V power supply board and the audio Bluetooth board.

4.5. Disassembly and assembly of speaker



1. Remove the decorative ring of the speaker cover first
2. Remove the four mounting screws of the speaker cover
3. Finally, pry out the speaker as a whole

5.1. Distribution of power board plug-ins

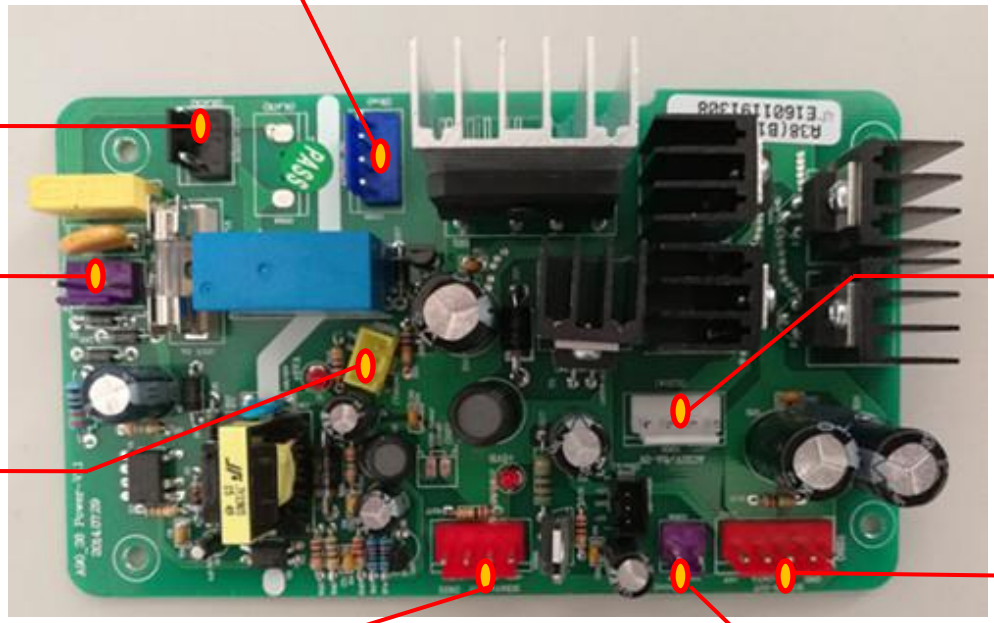
Transformer output AC19V

Transformer input AC220V

External input AC220V

+ 5VA and start signal

24VA, + 5VB



Transformer output AC220V

GND, 24VB, 12V

AC22V

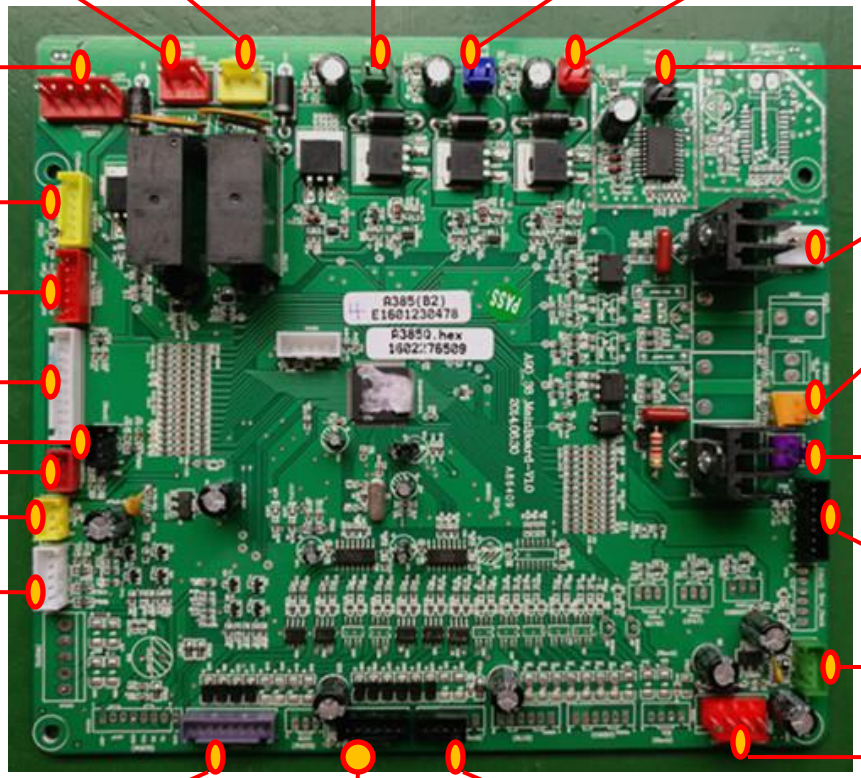
Remarks: ① + 5VA power supply to drive board and hand controller single chip microcomputer, + 5VB power supply to detection circuit

AC22V supplies power to air pump and thermotherapy drive circuit

3. 24VB power supply to the motor of manipulator, plantar motor, electric cylinder and other driving circuits

4. 24VA supplies power to solenoid valve drive circuit

5.2. Distribution of drive board plug-ins



- Electric cylinder drive of lower leg
- Backrest electric cylinder drive
- GND, 24VB, 12V
- Detection of electric cylinder of lower leg
- Detection of backrest electric cylinder
- Width and position detection
- Lower limit detection
- Upper bound bit detection
- + 5VA and start signal
- Mremote wire
- Legest solenoid valve
- Foot roller motor
- armrest solenoid valve
- Kneading motor
- tapping motor
- Up and down traveling motor
- Air pump
- Back heating sheet
- AC22V
- armrest shortcut key board
- Safety switch
- GND, 24VA, 5VB
- Shoulder solenoid valve

6. Fault Elimination Method 1-----No power

6.1. 1. Reasons for failure of no power

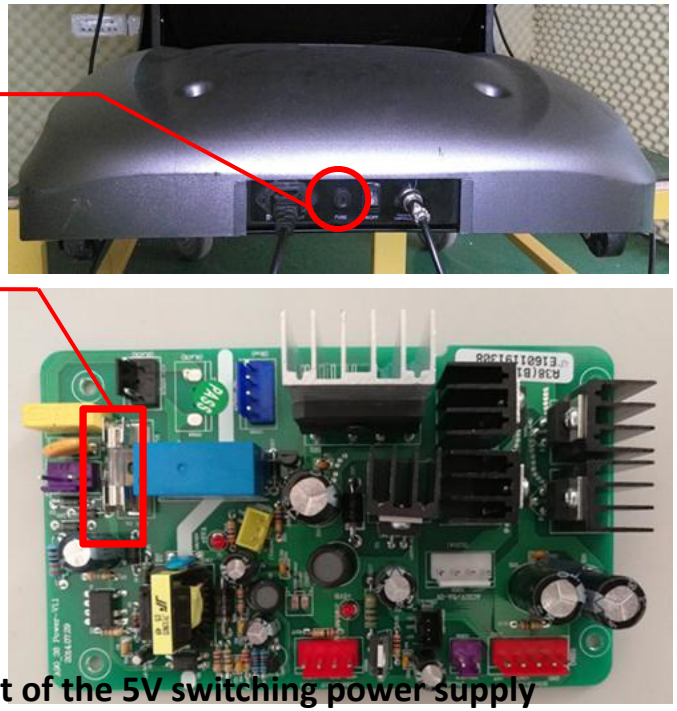
(1) The fuse is blown

(2) power board broken

(3) remote broken

(4) driving board broken

(5) broken harness contact

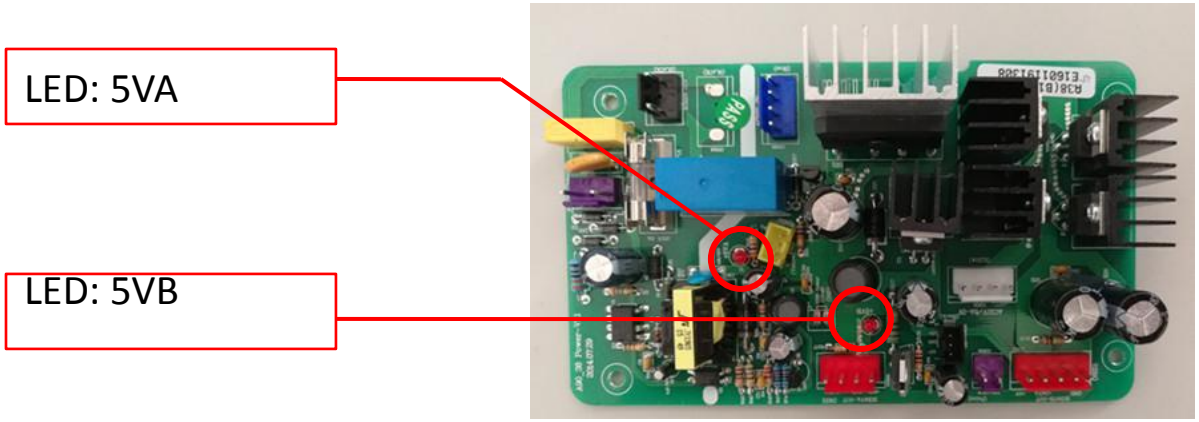


6.1. 2 Troubleshooting of fuse burnt:

(1) As shown in the right photo, if the 1 # fuse is burnt, then the rectifier circuit of the 5V switching power supply circuit or the "471K" varistor of the overvoltage protection device of the power supply board has breakdown, and the power supply board can be replaced;

(2) As shown in the right photo, if the 2 # fuse is burnt, it means that the output load circuit of the transformer has overcurrent. First of all, it is necessary to confirm whether the loads such as manipulator motor, leg and backrest lifting electric cylinder, air pump and heating pad are short-circuited. If there is short-circuited phenomenon, change the load such as motor before changing the drive board (if not replace the broken motor first, the new drive board will be burnt again). If there is no short-circuited phenomenon, the drive board can be replaced;

6. Fault Elimination Method 1-----No power



6.1. 3. Troubleshooting of broken power board:

As shown in the above figure, when the main power switch of the massage chair is on, the DC5VA power indicator does not light up, so it shows that the 5V switching power supply circuit of the power board is broken and does not start up, so replace the power board.

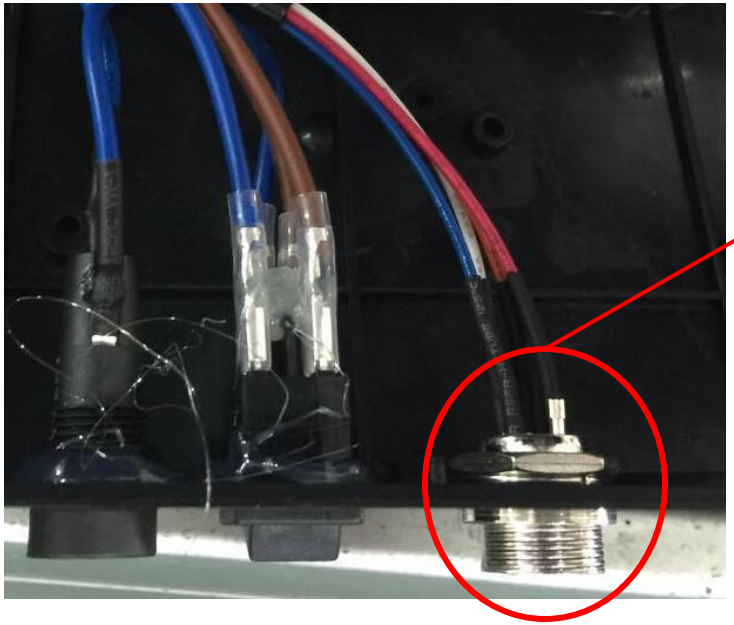
6.1. 4. Troubleshooting of defective manual controller:

Novice controller replacement method can be used to judge whether the hand controller is good or broken, and it can be eliminated or replaced.

6.1. 5. Troubleshooting of defective drive board:

The new driving board replacement method can be used to judge whether the driving board is good or broken, and it can be eliminated or replaced.

6. Fault Elimination Method 1-----No power



Pay attention to whether there is desoldering at the welding points of signal lines in the red circle

6.1. 6 Troubleshooting of broken wiring harness contact:

(1) After the previous steps, if it is still can't solve, then check whether the plug-in pins and wiring harnesses on the drive board are loose or defective.

(2) As shown above, the desoldering contact of aviation socket of manual control line is broken.

6. fault elimination method 2-electric cylinder does not lift

6.2. 1 Fault cause of electric cylinder not lifting

(1) broken electric cylinder

(2) broken driving board

(3) The backrest only rises but does not fall, or presses to fall but it rises up

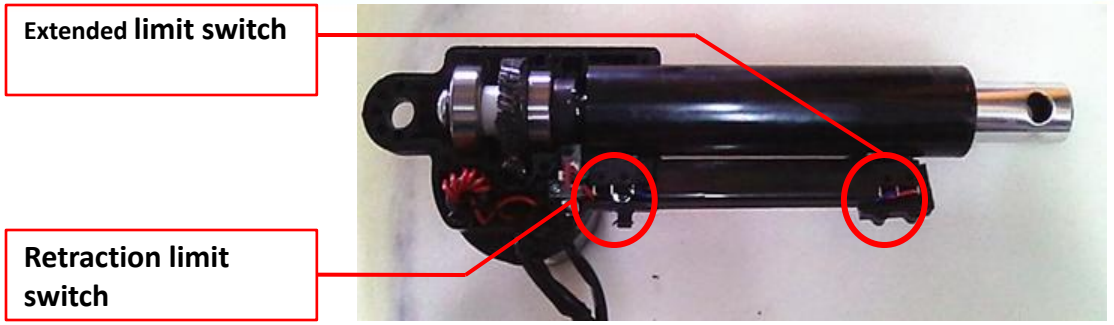


Fig. 1. Distribution diagram of internal limit switch of electric cylinder

6.2. 2. Troubleshooting of broken electric cylinder:

As shown in Figure 1, the internal coil of the electric cylinder itself and the broken detection of the limit switch usually do not work, so the replacement method can be used to judge its broken and replace the electric cylinder.

6.2. 3. Troubleshooting of defective drive board:

Because the driving board detection or driving circuit is not good, the electric cylinder does not work, and the replacement method can be used to judge and replace it.

Figure 2. Safety Switch

6.2. 4. The backrest only rises but does not fall, or presses down but rises:

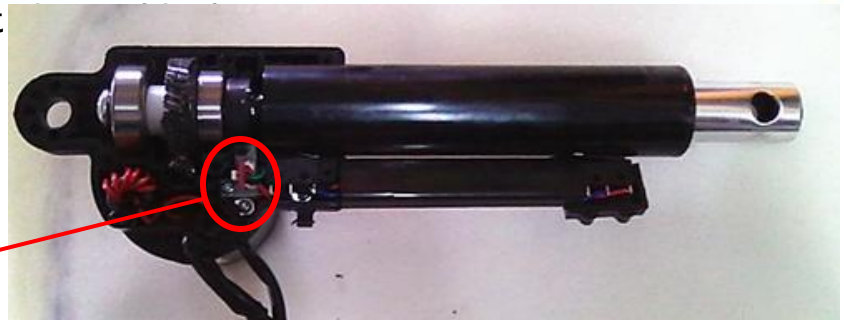
When there is foreign matter on the outer cover of the seat frame, in order to protect the massage chair itself or prevent the articles from being crushed, the program sets that the backrest only rises but does not fall, so the foreign matter is eliminated first, and then Figure 2 eliminates whether the safety switch is broken.

6. Fault Elimination Method 3-Memory Function Fault of Electric Cylinder

6.3. 1 Failure reason of memory function of elect

(1) broken electric cylinder

(2) broken driving board



6.3. 2. Troubleshooting of broken electric cylinder:

When this happens, the manually operated electric cylinder can rise and fall normally, but it can't be used normally when using the "Back Stretch/M2" key for traction and swing function, And the telescopic position (i.e., lying angle) of the electric cylinder cannot be remembered when the memory function is performed. As shown in the above figure, it is usually caused by the broken turn number detection board inside the electric cylinder (i.e., the telescopic turn number is detected to determine its telescopic position), so it can be judged by replacement method and replaced.

6.3. 3. Troubleshooting of defective drive board:

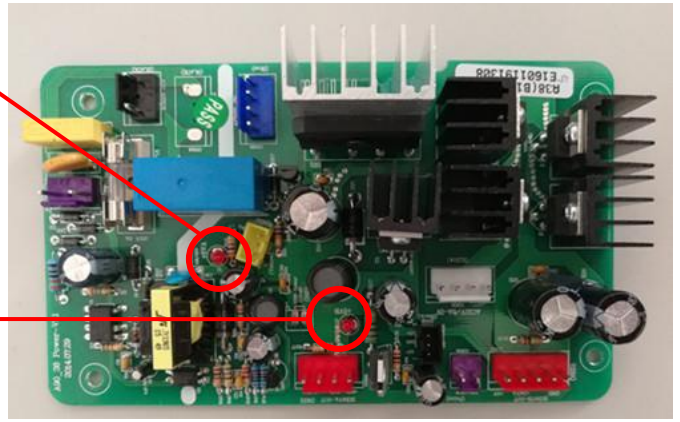
Because the driving board detection or driving circuit is broken, the electric cylinder does not work, and the replacement method can be used to judge and replace it.

6.4. 1, Display "E101" Failure Cause

(1) The 5VB circuit of the power board is broken

(2) broken up and down stroke switch

(3) broken driving board



6.4. 2, showing "E101" troubleshooting:

(1) As shown above, when the massage chair is started, the 5VB power indicator light of the power board does not light up, indicating that the power board is not good and can be replaced.

(2) As shown in the following figure, the abnormal detection signal caused by broken upper and lower stroke switches is controlled to turn off the driving signal, and the stroke switch can be replaced (note: the stroke switch is connected with ② ④ normally closed group signals).

(3) The driving board itself is broken, so the walking motor can't move up and down, so there is an error code, please replace the driving board.

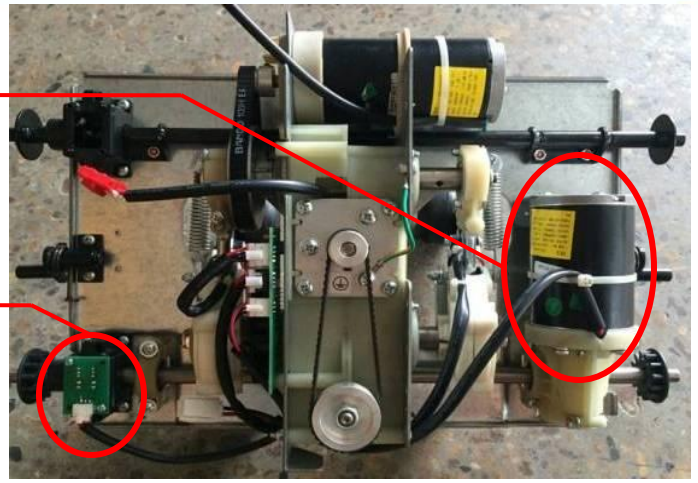
6.5. 1, Display "E102" Failure Cause

(1) broken 5VB power supply

(2) The number of turns detection board is not good

(3) broken driving board

(4) broken motor



6.5. 2, Show "E102" Troubleshooting:

(1) The broken power supply board causes no 5VB power supply, and the circuit of the circle detection board cannot work.

(2) As shown in the above figure, the position of the manipulator on the backrest cannot be detected due to the defect of the turn number detection board, so replace the turn number detection board.

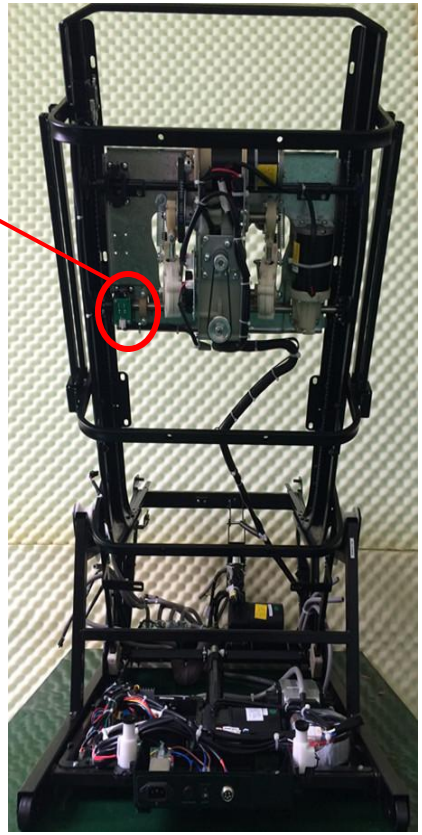
(3) If the driving board detects that the circuit is broken, replace the driving board.

(4) The motor is not good, resulting in the number of turns detection board can not detect the position of the manipulator, replace the motor.

6.6. 1. Display "E104" fault cause

(1) Overload

(2) broken up and down stroke switch



6.6. 2, showing "E104" troubleshooting:

(1) The causes of overload are: the traveling motor is stuck by foreign matter, which leads to the motor not rotating or the traveling gearbox is not running normally, so the upper and lower limit positions that the manipulator should reach cannot be detected in unit time, which makes the program protect and turn off the driving circuit, and the error code appears at the same time.

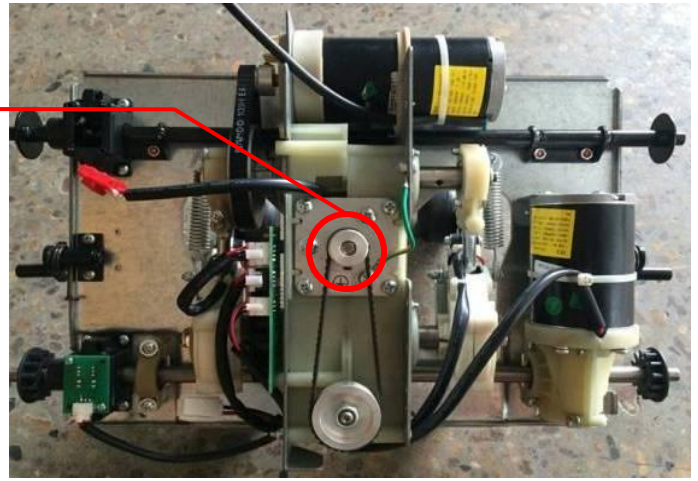
(2) The up and down stroke switch is broken, which leads to the failure to detect the position that the manipulator should reach in unit time, so that the program turns off the driving circuit and an error code appears.

6.7. 1. Reasons for failure of manipulator kneading function

(1) broken motor

(2) broken driving board

(3) broken wiring harness contact



6.7. 2. Troubleshooting of manipulator kneading function:

(1) broken open circuit of motor coil leads to non-operation, replace the motor.

(2) There is no driving power supply caused by the defect of the driving board, replace the electric driving board.

(3) The broken contact between the wiring harness from the drive board to the motor leads to the non-operation of the kneading motor, which can be eliminated.

6. Troubleshooting 8-The tapping function of the manipulator can't be started

6.8. 1. The reason why the tapping function of the manipulator can't be tur

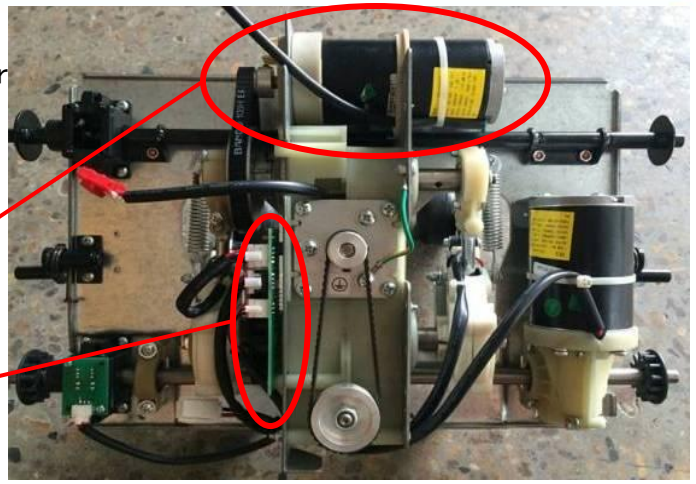
(1) The width can not be detected because the kneading motor does not work

(2) broken width detection board

(3) broken beating motor

(4) broken driving board

(5) broken harness contact



6.8. 2. Troubleshooting that the tapping function of the manipulator cannot be turned on:

(1) Because the tapping motor can only run when the "wide, medium and narrow" positions are detected, The width detection is completed by the rotation of the kneading motor, so when the kneading motor does not work, the beat cannot be opened (at the same time, the single beat cannot be opened, but the technique of "kneading and beating" linkage can be opened, because "kneading and beating" linkage does not need width detection).

If this happens, refer to the troubleshooting method of kneading function.

(2) If the width detection board is defective as shown in the above figure, it can be eliminated and replaced.

(3) The open circuit of tapping motor coil is broken, so it can be eliminated and replaced.

(4) There is no driving power supply caused by the defect of the driving board, so it is enough to eliminate and replace the driving board.

(5) broken wiring harness or inspection wire contact between drive board and motor causes motor can’t run, and can be eliminated

6. troubleshooting 9-backrest heating can't be started

6.9. 1. Reasons for failure of backrest heating function

(1) broken heating sheet

(2) broken contact of heating wire

(3) broken driving board

Fig. 1. Heating pad

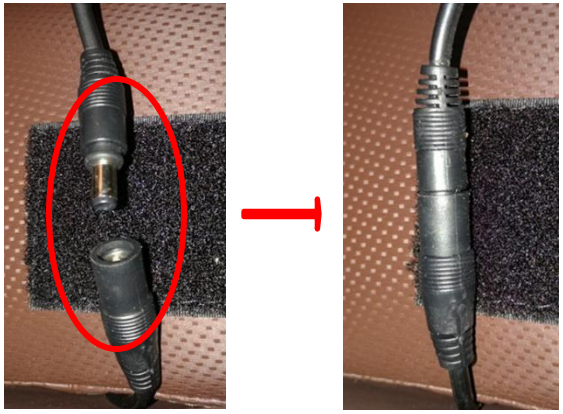


Fig. 2. Heating pad plug-in

6.9. 2. Troubleshooting of backrest heating function:

(1) If the heating pad in Fig. 1 is broken, it can be judged whether the resistance value is about 25 Ω,

(2) As shown in Fig. 2, the heating pad plug broken, in the red circle falls off.

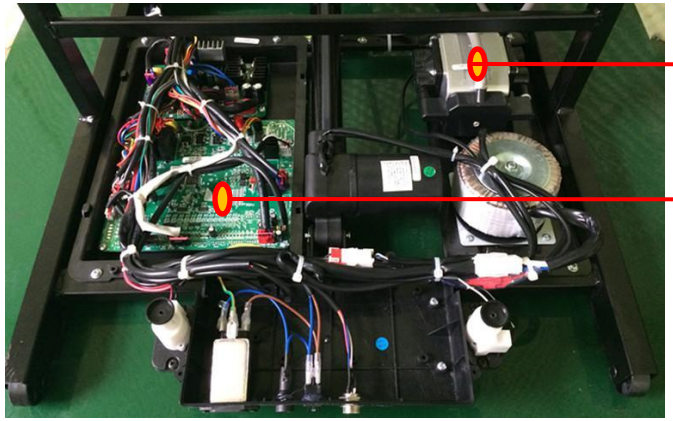
(3) If there is no heating power supply due to broken driving board, it is enough to eliminate and replace the driving board.

6. Troubleshooting 10-The air pump can't start

6.10. 1. Failure cause of air pump

(1) broken air pump

(2) broken driving board



6.10. 2. Troubleshooting of air pump failure:

(1) If the air pump broken, replace a new one

(2) The broken driving board causes the air pump can’t work, so it can be eliminated and replaced.

6. Troubleshooting 11-A single set of airbags is not inflated

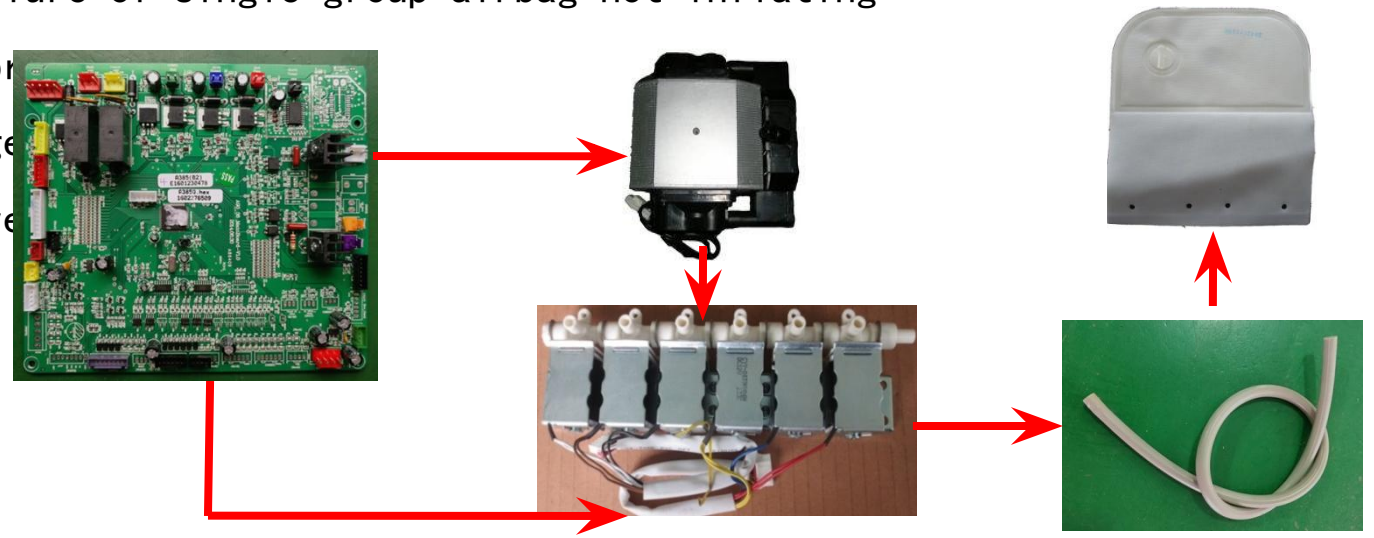
6.11. 1. Reasons for failure of single group airbag not inflating

(1) The air hose is compr

(2) The air bag is damage

(3) broken solenoid valve

(4) broken driving board



Flow chart of airbag air supply

6.11. 2. Troubleshooting of non-inflatable single group airbags:

(1) If the air inflation is not smooth due to air hosel folding caused by machine operation or human reasons, it can be eliminated.

(2) The air bag is damaged and leads to air leakage, which can be eliminated and replaced.

(3) A single solenoid valve is broken, resulting in no air source to be transported to the air bag, which can be eliminated and replaced.

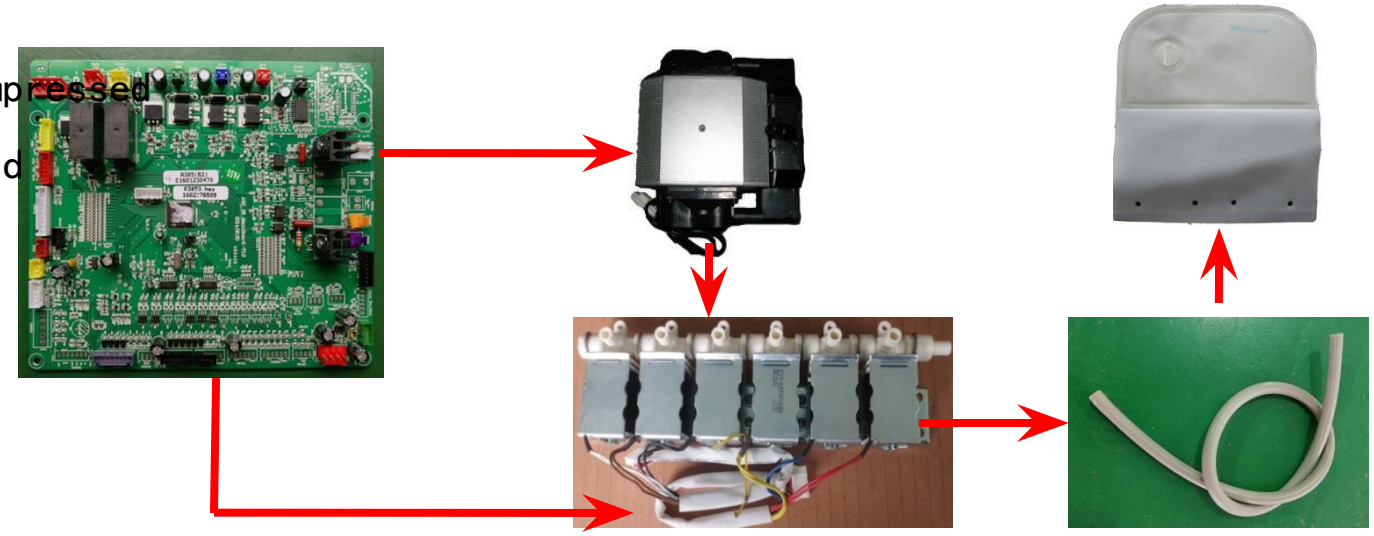
(4) The solenoid valve does not work because of the broken driving board, so that there is no air source in the air bag, replace the driving board.

6. Troubleshooting 12-A single group of airbags does not inflate

6.12. 1. Causes of failure of single group airbag inflation

(1) The air hose is compressed

(2) broken driving board



Flow chart of airbag air supply

6.12. 2. Troubleshooting of single group airbag inflation:

(1) The deflation is not smooth due to air hosel folding caused by machine operation or human reasons, so it can be eliminated.

(2) Drive board control solenoid valve solenoid valve power supply can not be turned off, resulting in electromagnetic work all the time, change the drive board can be.

7. Error code

Display	problem	reasons
E1 01	Up and down problem	• WIRES NOT CONNECT WELL 1. THE LIMITED SWITCH BROKEN
E1 02	Up and down problem	• THE LIMITED SWITCH BROKEN 1. POSITION SIGNAL WIRE NOT CONNECTED 2. UP AND DOWN MOTOR BELT LOOSE 3. UP AND DOWN MOTOR PROBLEM 4. MAIN BOARD PROBLEM 5. OVER LOADED
E1 04	Up and down problem	• OVER LOADED 1. THE LIMITED SWITCH BROKEN