

Ai10 - Hardware Installation Manual

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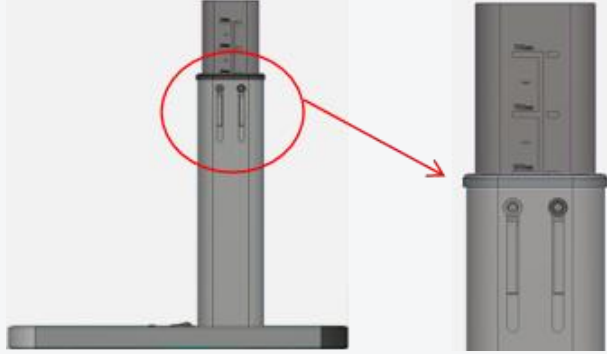
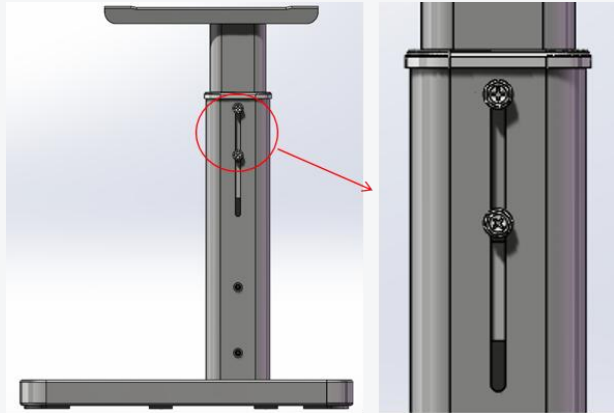
Table of Contents

1 Installation Of Platen	2
2 Wire Rack Installation	5
3 Pallet Installation	7
4 Installation Of Suction Barrel	8
5 Screen Installation (Wiring)	9
6 Machine Refueling	10
7 Electronic Knee Support Installation	11
8 Rear Tugboat Installation	13

1 Installation Of Platen

Key words: rack, Assembly

Description: Rack assembly and installation

Picture	Standard Procedure
 Figure 1.1.1.1 External installation of upper and lower sections of the rack  Figure 1.1.1.2 Internal installation of upper and lower sections of the rack  Figure 1.1.1.3 Rack rung installation	The assembly method of the rack is as follows: 1. As shown in Figure 1.1.1.1 to Figure 1.1.1.5, install according to the sequence, and fix the screw with a torque of 5.5n. M. 2. As shown in Figure 1.1.1.6, install according to the position shown in the figure, and ensure that the platen is not tilted when it is fixed. 3. As shown in Figure 1.1.1.6 to Figure 1.1.1.10, assemble in sequence according to the reference line on the platen. Note: 1. The assembly height of the rack is 780mm. The installation of the platen needs to be adjusted not to tilt left and right, and the screws are finally locked after pre-tightening and adjustment.

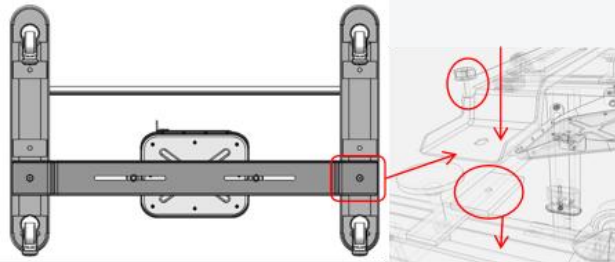


Figure 1.1.1.4 Installation of pedal crosspiece

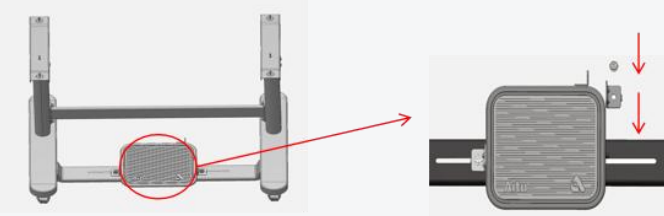


Figure 1.1.1.5 Pedal Assembly Installation

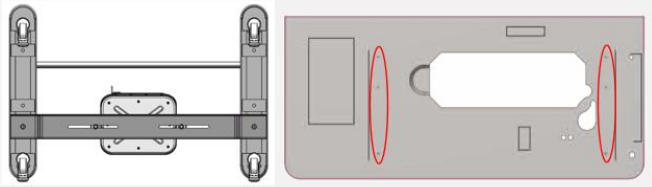


Figure 1.1.1.6 Desk Installation

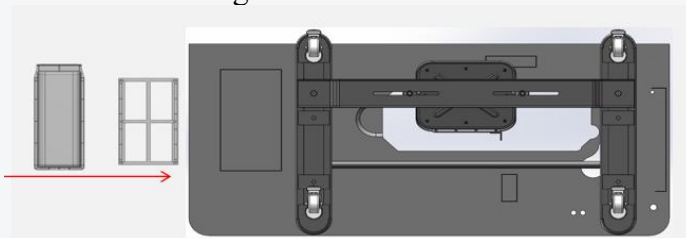


Figure 1.1.1.7 Parts box installation

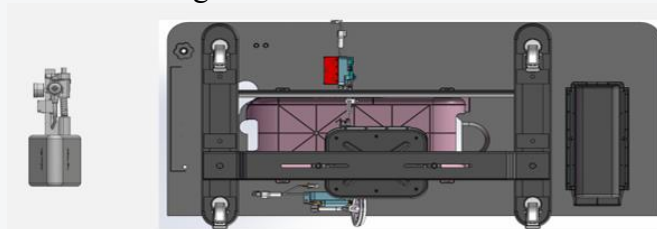


Figure 1.1.1.8 Installation of Suction Bucket

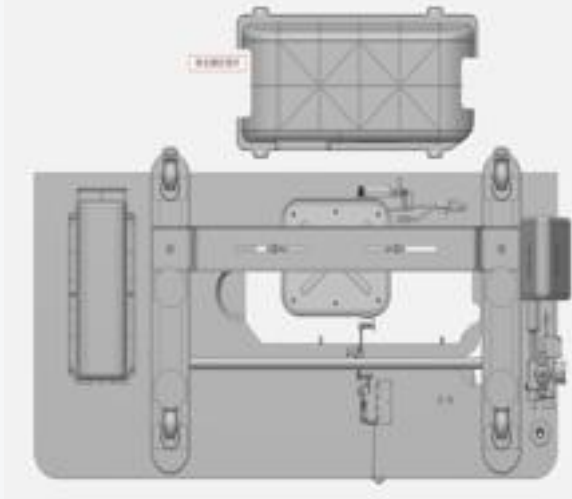


Figure 1.1.1.9 Tray Installation

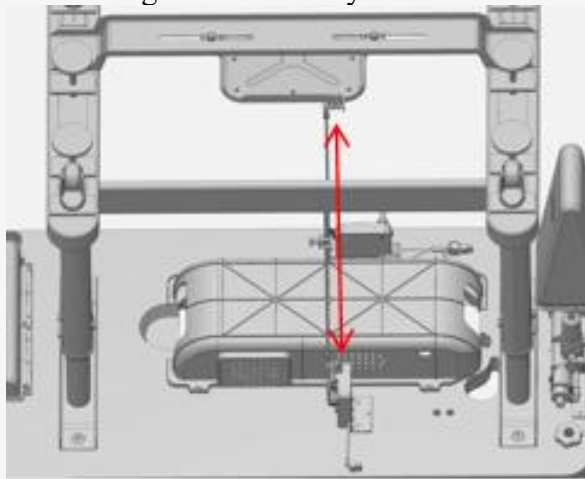


Figure 1.1.1.10 Governor Installation

2 Wire Rack Installation

Key words: wire rack, Assembly

Description: Assembly and Installation of Wire Rack

Picture	Standard Procedure
 Fig. 2.4 Installation of Wire Frame Rod and Wire Rod  Fig. 2.5 Installation of Lower Wire Rod	The assembly and installation methods of the wire rack are as follows: 1. As shown in Figure 2.4, find out the wire rod according to the shape of the parts, and assemble the upper and lower wire rods from top to bottom in sequence (note that the wire rod with holes is at the upper end) and tighten the screws. The orange top cover at the top of the wire frame rod is installed after the upper and lower wire rods are installed. 2. As shown in Figure 2.5, find out the wire support bar, wire reel anti-loosening pad, wire reel pad and wire reel according to the shape of the parts and assemble them from top to bottom in sequence (connected to Figure 3). 3. As shown in Fig. 2.6, find out the round seat assembly of the wire frame, gasket and Torx nut according to the shape of the parts and assemble them in sequence. Note: 1. The height of the upper and lower wire rods is recommended as shown in Figure 2.7.



Fig. 2.6 Installation of Wire Rack

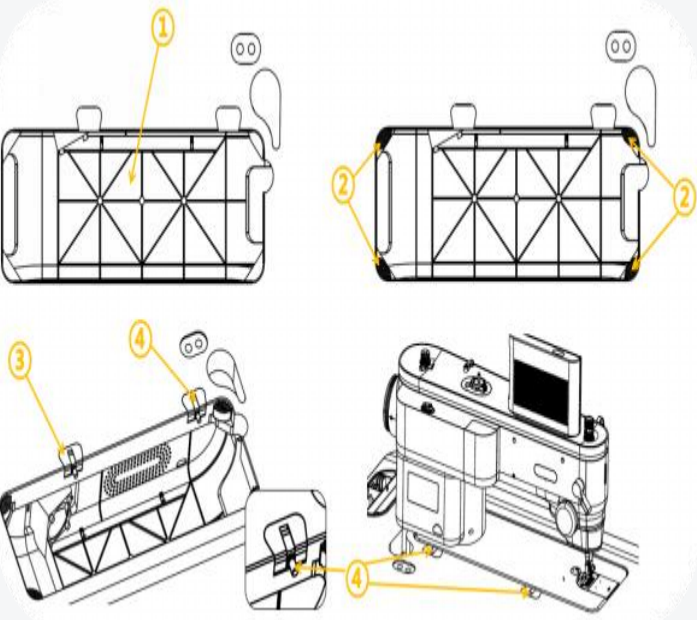


Fig. 2.7 Recommended Height of Line Frame Pole

3 Pallet Installation

Keywords: tray, assembly, installed

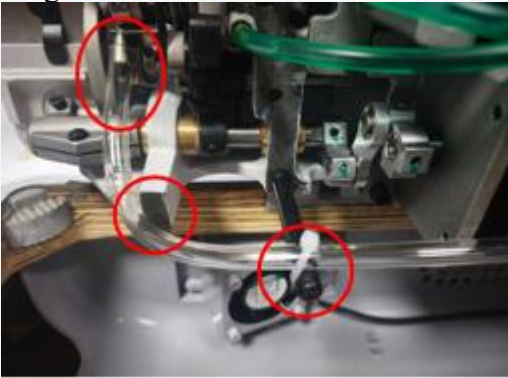
Description: Oil pan tray installation method

Picture	Standard Procedure
 Fig. 2.4 Installation of Wire Frame Rod and Wire Rod	Oil pan tray installation method is as follows: 1. Install the oil pan tray ① on the back of the platen. 2. Install the oil pan seat cushion ② and the head connecting hook seat ③ on the platen respectively. As shown in the figure, divide the four oil pan seat cushions ② on the four corners during installation, and the seat cushions ② are attached to the four corners of the platen. The three sides of the oil pan seat cushion and the platen are tightly attached without dislocation and Gap, and then use the head connecting hook seat nail to fix it on the platen; Press the two nose connecting hooks ③ into the reserved slot holes of the platen with the slotted end upward. 3. Clip the nose connecting hook ④ into the nose connecting hook seat ③ shaft, and finally place the nose on the table board, and the reserved hole on the bottom plate of the nose should be fitted with the connecting hook ④ (the nose connecting hook ④ can be installed in the mounting hole on the bottom plate of the nose in advance, and then place the nose to make it naturally coupled with the nose connecting hook seat ③).

4 Installation Of Suction Barrel

Key words: suction barrel, assembly, small bird's nest, locked rotor, alarm 38

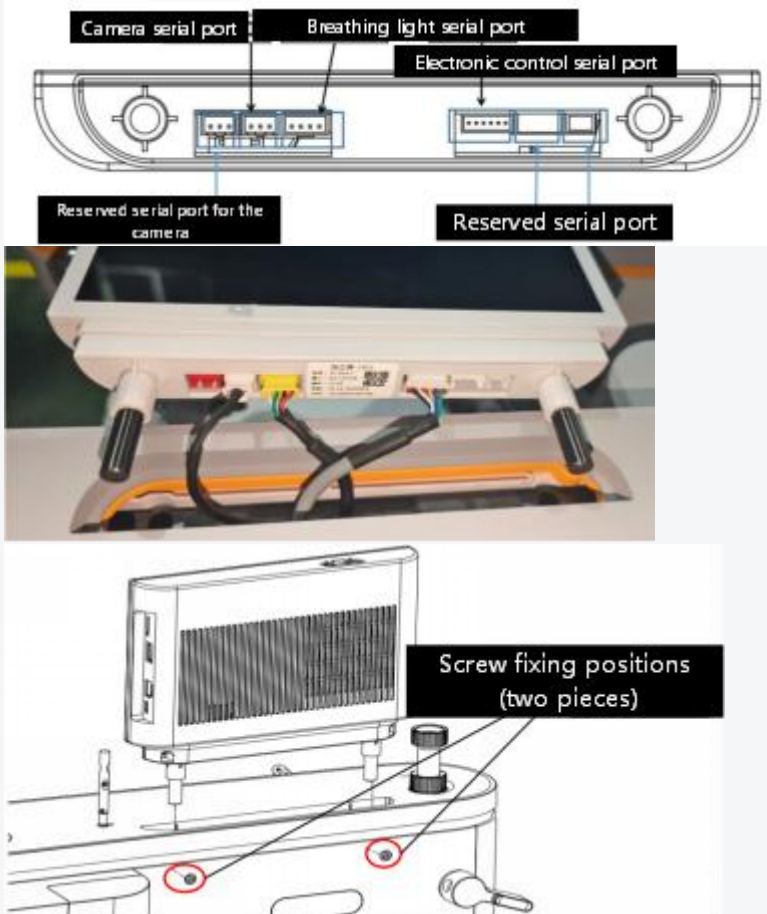
Description: Installation of Suction Bucket

Picture	Standard Procedure
 Figure 1.1.4.1 Air inlet of suction barrel  Figure 1.1.4.2 Air inlet of suction nozzle  Figure 1.1.4.3 Tracheal Path	The installation method of suction barrel is as follows: 1. Figure 1.1.4.1. After the air suction device is installed according to the position shown in the figure, it is connected to the factory air source. The upper filter in the figure is connected to the air suction barrel air pipe, and the lower solenoid valve interface is connected to the factory air source air pipe. The factory air pressure meets 0.45Mpa or more. 2. As shown in Figure 1.1.4.2, the air pipe of the suction barrel enters the tray from the Oval mouth of the tray. The air pipe is bound with the motor wire through the cable tie. The cable tie is tied to the motor wire and pre-tied to ensure that the machine can normally turn over the air pipe. The length of the air pipe is reserved and fixed firmly. 3. As shown in Figure 1.1.4.3, the trachea is pre-bound on the inner side of the bottom plate pillar. The trachea passes through the L angle on the left side of the blank. The White trachea is connected to the suction port. After checking that the thread cutting crank and the tooth frame seat do not interfere with the trachea, tighten the tie. Note: 1. It is recommended to use an air pressure of 0.4-0.45Mpa for the suction barrel. The air pressure value can be checked through the solenoid valve instrument of the suction barrel.

5 Screen Installation (Wiring)

Keywords: screen, screen, screen installation, monitor, monitor installation

Note: When Ai10 is installed for the first time, the screen in the accessory needs to be installed on the whole machine, and wiring operation and screen screw locking are required.

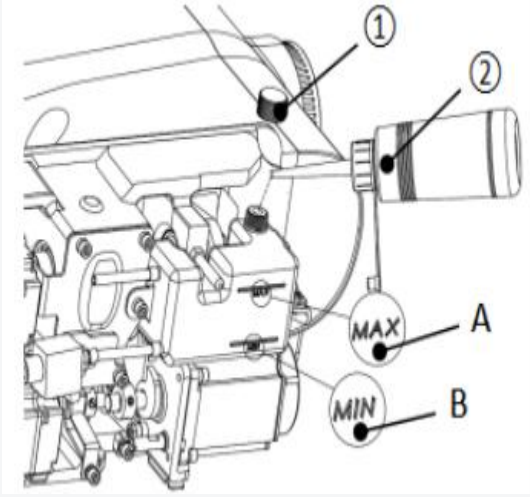
Picture	Standard Procedure
	1. Connect and connect the wire at the top of the head with the socket at the bottom of the electronic screen according to the specifications. 2. Insert the two bracket pins of the electronic screen into the reserved holes on the top of the casing, and tighten and fix them on the side of the machine head with two hexagon socket screws M6 in the accessories.

6 Machine Refueling

Key words: oil, refueling, oil pot refueling, machine refueling, Ai10 refueling

Note: When using the sewing machine for the first time or not using the sewing machine for a long time, please add the original New Defrix No.10 engine oil or add engine oil to the rotary shuttle oil box.

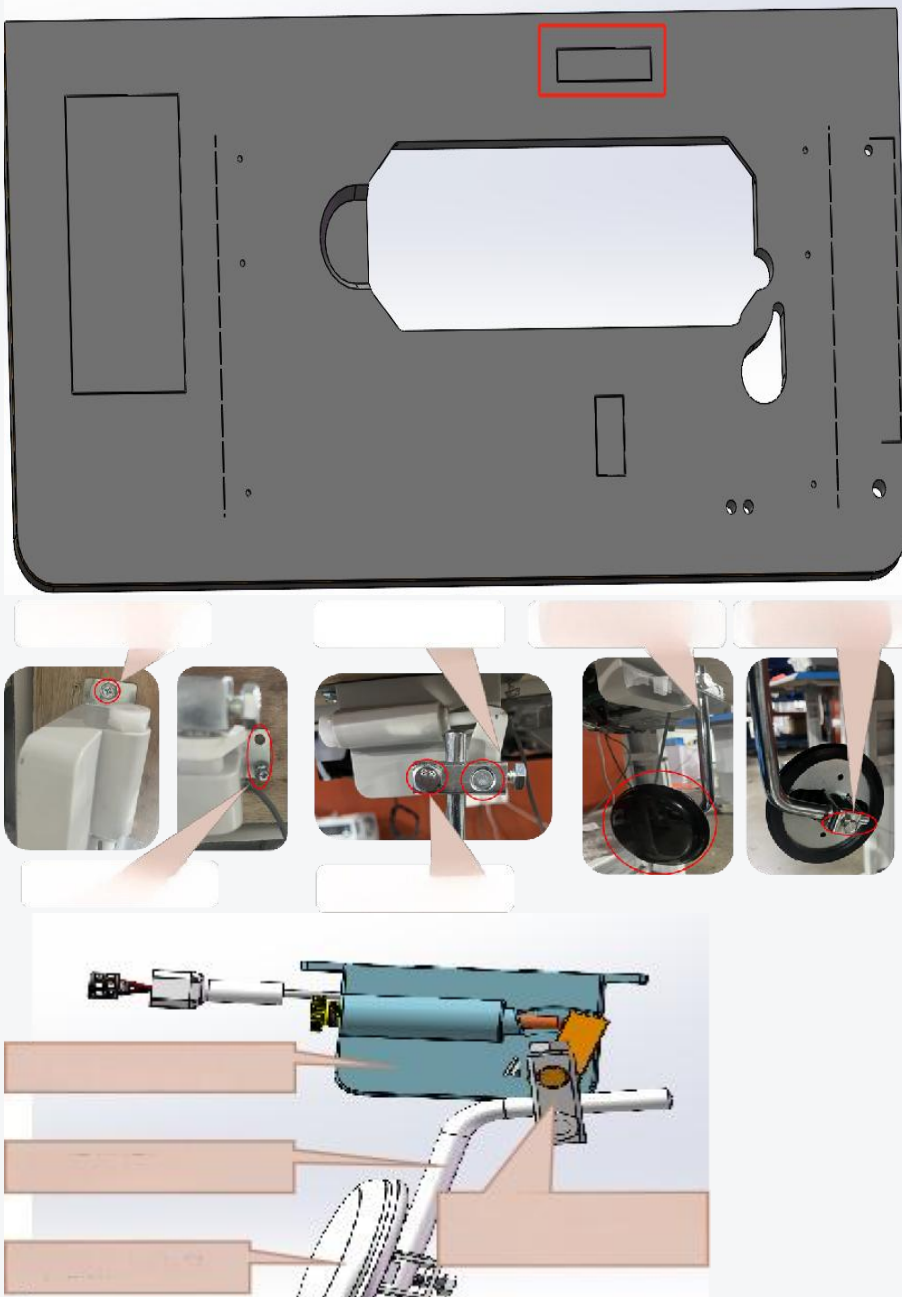
Note: Please protect your eyes, mouth and nose during refueling to prevent diseases caused by lubricating oil falling into your eyes and mouth. Do not switch on the power supply before refueling is completed. After refueling is completed, please keep the oil jug away from children to avoid vomiting and diarrhea caused by children drinking.

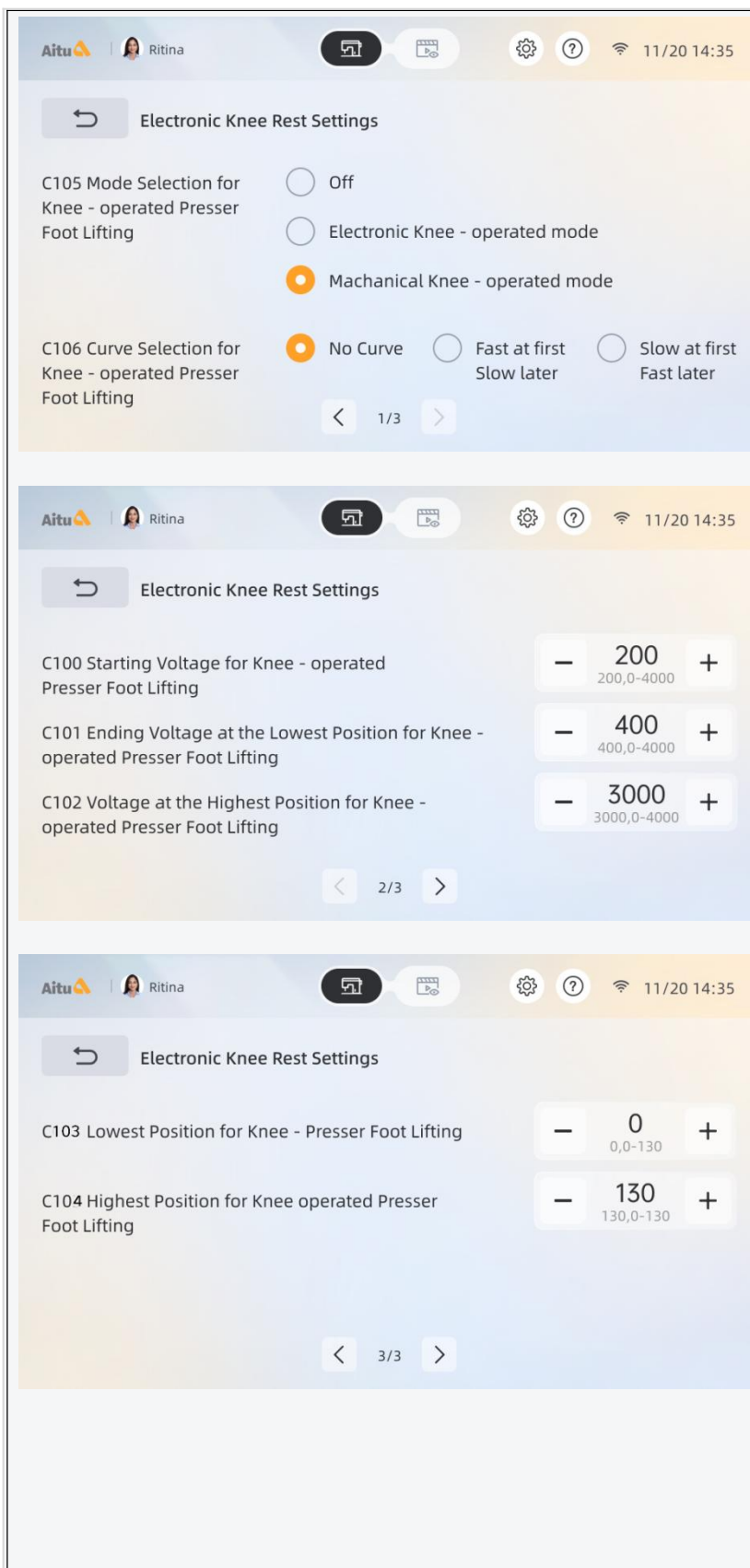
Picture	Standard Procedure
	①. Turn over the head and make it close to the head cushion, and place it smoothly. ② Unscrew the oil box cover on the nose to leak out the oil box filler. ③. Take out the oil pot in the attachment and unscrew the nozzle cap of the oil pot. ④ Align the nozzle of the oil reservoir with the oil filling port of the oil box, and fill the oil to the baseline on the engraved line A-MAX. When the oil quantity of the oil cartridge is lower than the baseline under the B- MIN of the engraved line, be sure to add oil. ◆ Note: Please check the oil storage of the oil tank regularly and make sure it is above the baseline under MIN to ensure the normal supply of oil for the rotary shuttle.

7 Electronic Knee Support Installation

Key words: knee, electronic knee

(Electronic knee by labor-saving design, can significantly reduce the physical consumption of the operation, thereby reducing the operator's fatigue.).

Picture	Standard Procedure
	Electronic Wire gripper installation steps: ①. Fix the electronic knee to the corresponding area at the bottom of the platen with self-tapping screws (there are laser marking marks) ②. Install the presser foot operating rod joint assembly to the electronic knee abutment shaft, and lock the hexagon screw ③. Adjust the height of the operating lever and lock the external hexagon screw ④. Adjust the height of the knee rest cushion to meet the position of the knee rest and lock the external hexagon screw



Click "electronic knee rest setting" in the parameter setting interface to enter the setting interface of lifting seam micro-lifting presser foot, with a total of three pages.

C105 parameter ① is selected to be closed, and the electronic knee support cannot be operated;

② Select the electronic knee rest mode, in the sewing process, the electronic knee rest can not operate, need to complete the sewing and then lift the teeth and feet action;

③ Select the mechanical knee-rest mode, and you can also lift your teeth and feet in sewing.

C106 parameter ① No curve, lifting tooth and foot at a constant speed

② The front is fast and the back is slow, and the speed of lifting teeth and feet is changed to slow down and lift up.

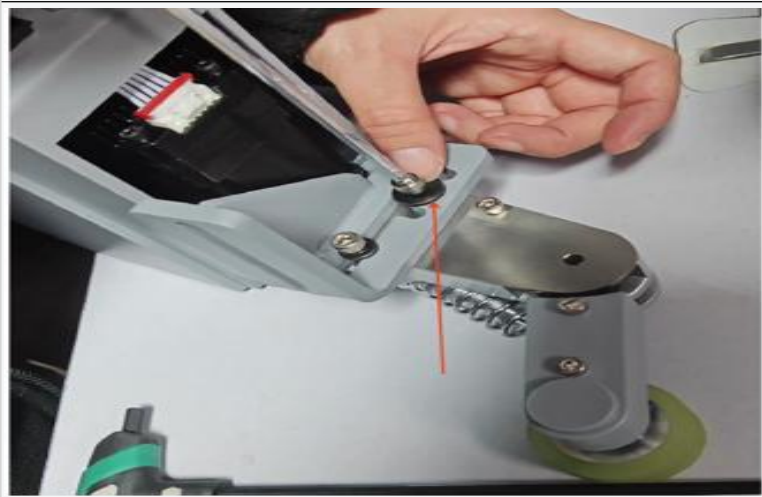
③ The front is slow and the back is fast, and the speed of lifting the teeth and feet is changed to accelerate and lift up. The C100 change Parameter decreases, which is equivalent to the knee Abutment displacement smaller distance to start the tooth and foot lifting action, and vice versa.

C101 and C102 parameters, when the difference between C101 and C102 parameters is greater, the longer the time required for the electronic knee rest to reset, and vice versa (if the electronic knee rest is not reset below the C101 parameter, it is impossible to lift the foot again)

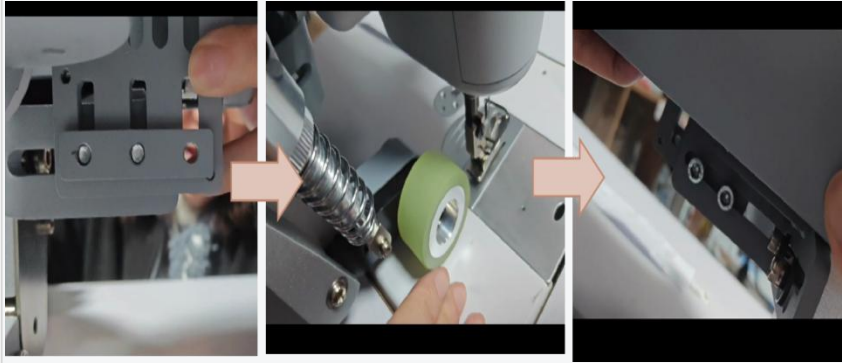
C103 and C104 are the tooth-lifting foot height mode under the electronic knee rest mode. If C103 is increased, the lowest height of the presser foot becomes higher, and vice versa; If C104 is increased, the highest height of the presser foot becomes higher, and vice versa.

8 Rear Tugboat Installation

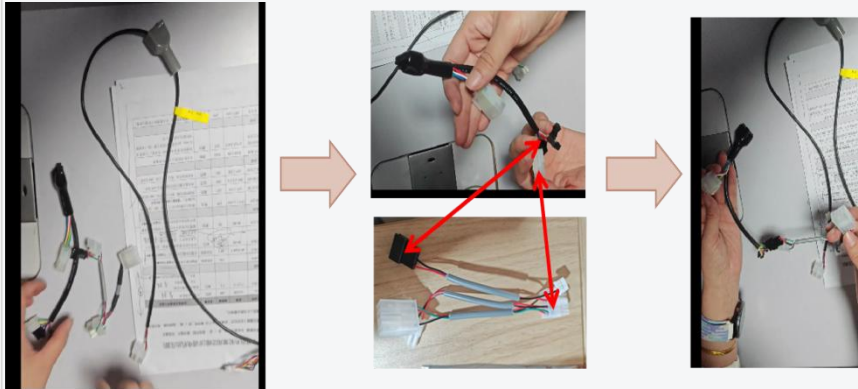
Key words: rear tugboat, rear tugboat cover, synchronous correction, electrical angle correction, rear tugboat wiring
 Note: When additional devices need to be added, the installation configuration of the rear tugboat should be reserved.
 The installation and debugging of the rear tugboat can be completed according to the following methods.

Picture	Standard Procedure
 Remove the rear tug mounting cover	1. Remove the rear tug cover on the rear cover to expose the mounting screw holes of the rear tug.
 Mount rear tugboat bracket	2. Place the notch of the mounting plate in the lower left corner, place it on the transition plate, adjust the height of the mounting plate, and fix it on the casing with two M6 * 35 long screws.
	3. Adjust the installation angle of the rear tugboat to the second installation slot.

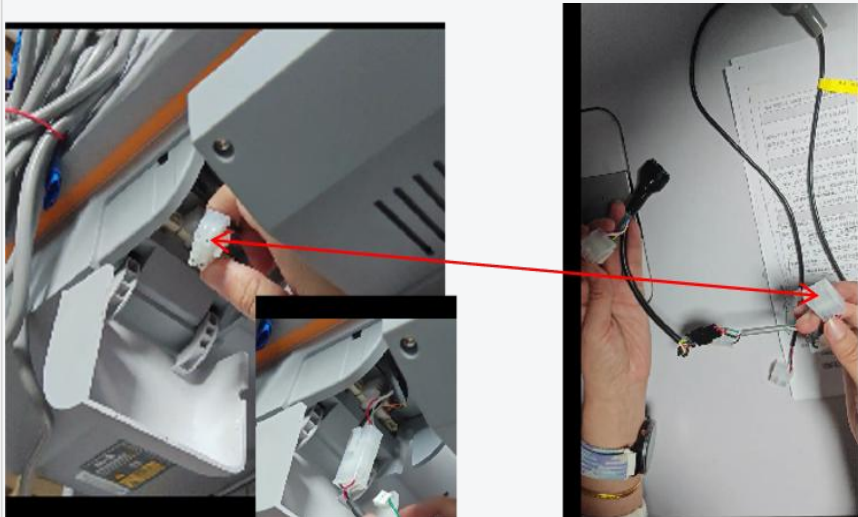
Adjust the angle of the rear tugboat



IV. Main body of tugboat after installation
 1. Pre-tighten the small fixing plate with M6 * 1000.00G screws
 2. Adjust the height and position of the trailer
 3. After the adjustment is completed, lock the two screws tightly



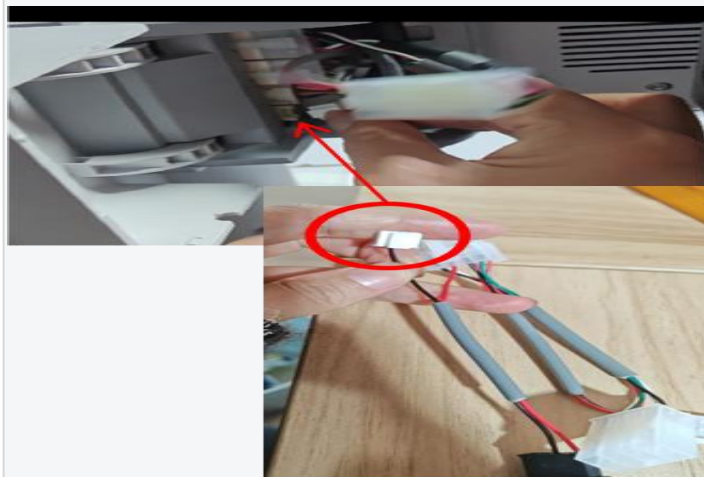
1.3 patch cords
 2. Connect the two lines on the figure, black and black are inserted in pairs, and White and White 2p are inserted in pairs.
 3. After completion as shown in the figure



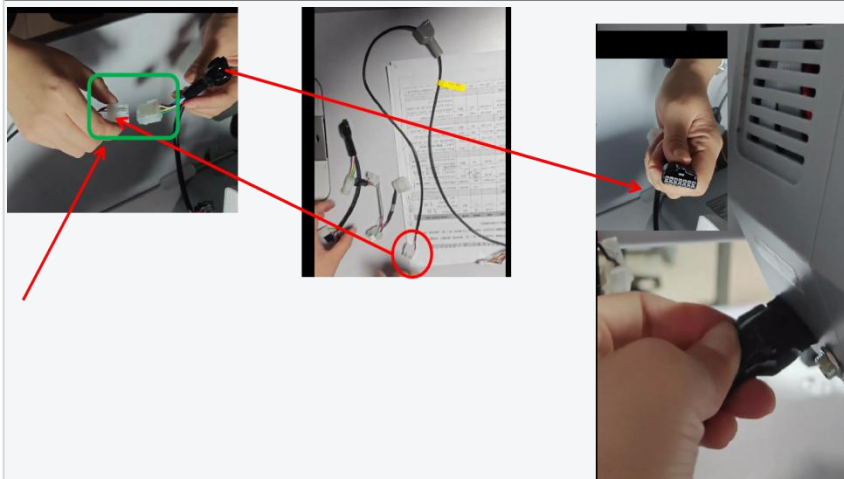
The electric control cover is opened, and the top plug is pulled out and plugged into the newly prepared adapter wire.



The 8p on the patch cord is plugged into the electric control



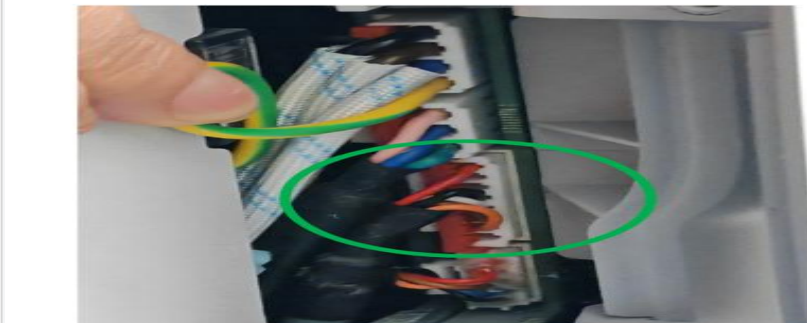
The 4p on the patch cord is plugged into the socket at the bottom of the electric control.



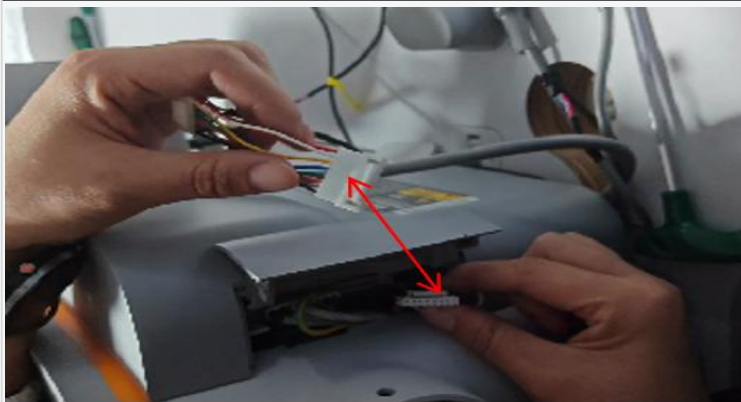
接插到拖布轮主体上。



Open the electrically controlled rear side cover.



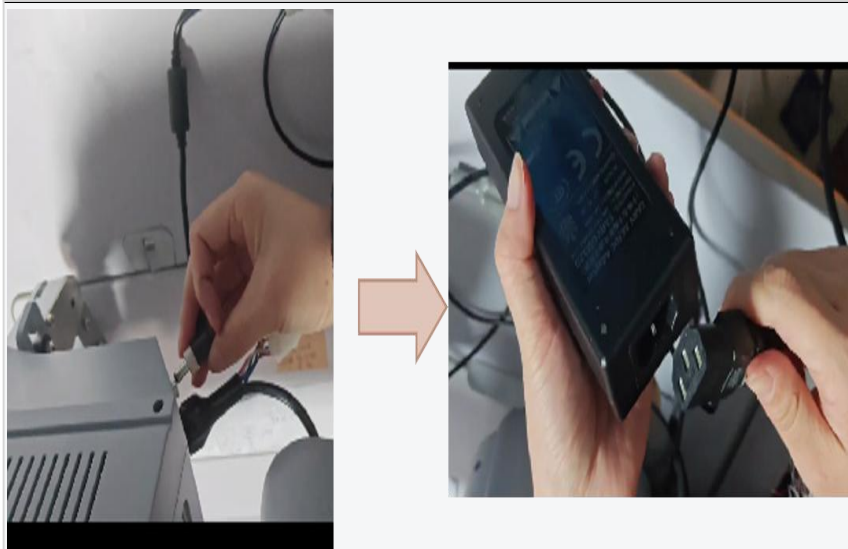
Pull out encoder line



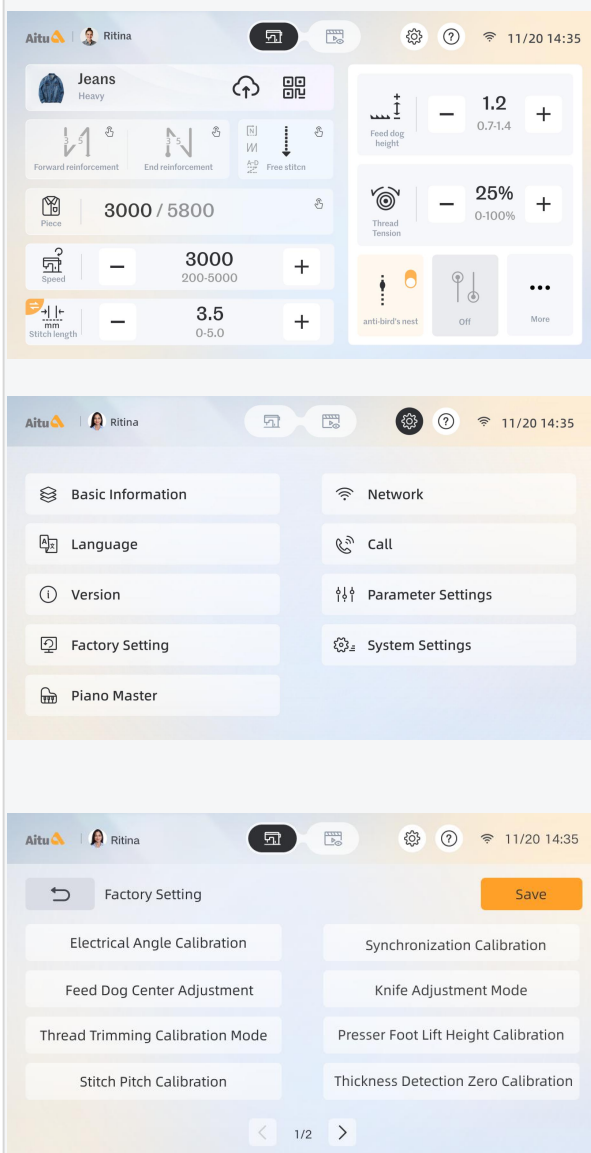
Insert the encoder wire on the electric control into the encoder adapter wire of the rear tugboat.



Insert the encoder 8p of the rear tugboat back into the electric control.



1. Insert the power cord and tighten it.
2. Power cord plug connection.



Ai10 spindle electric angle correction description:

1. Click the out-of-wheel icon key to enter the menu bar, then click "Factory Settings", and then click "Electrical Angle Correction";
2. The encoder fault value is 0 at this time, which means that the encoder installation spacing is appropriate, and the display "1" means that the installation clearance is too large, and the display "2" indicates that the installation gap is too small. If the installation gap is normal when "4" is displayed, it should be cleared after re-calibration;
3. Adjust the needle stop position to the highest point according to the text description on the screen. Click Start and the motor will start to suck 0. At this time, you can see the electricity.

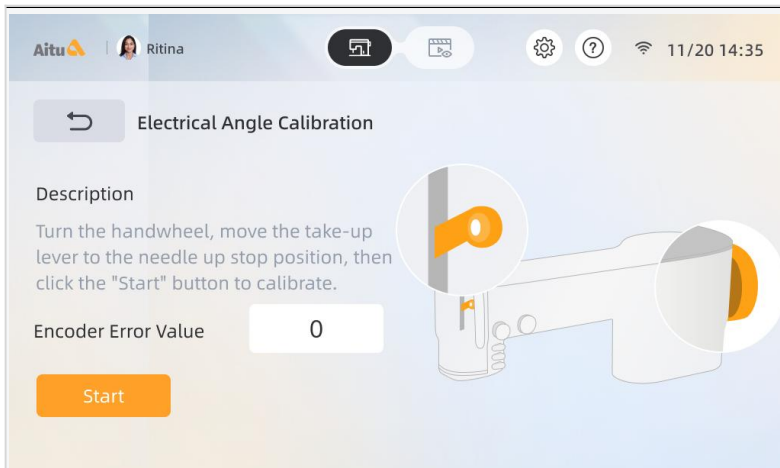
The machine first sucks in one direction and moves in the reverse direction. At this time, the motor stops at the position of electric angle 0, and a pop-up window appears after waiting for a few seconds.

"Corrected successfully";

4. After the correction is successful, press the return key to exit the electrical angle correction interface, and then click the factory parameter to save in the factory setting interface;

Quality Control Point:

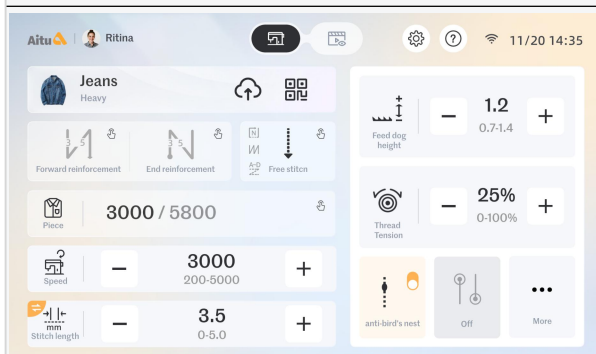
1. The normal clearance between the encoder PCB and the rotor is 1.4mm;



2. After correction, the parking position is near the upper parking needle;
3. After the correction is completed, the spindle motor almost does not move, indicating that the spindle encoder zero correction is successful;

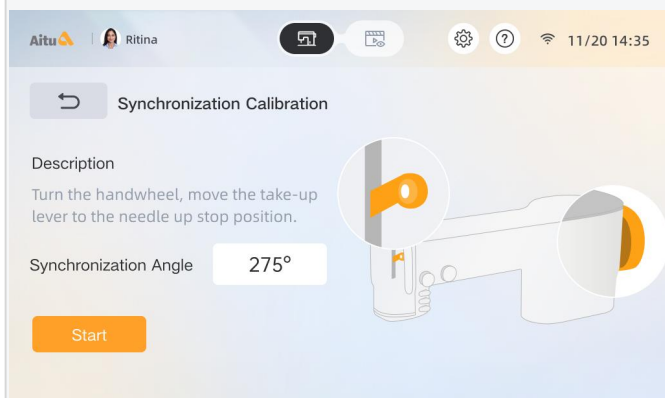
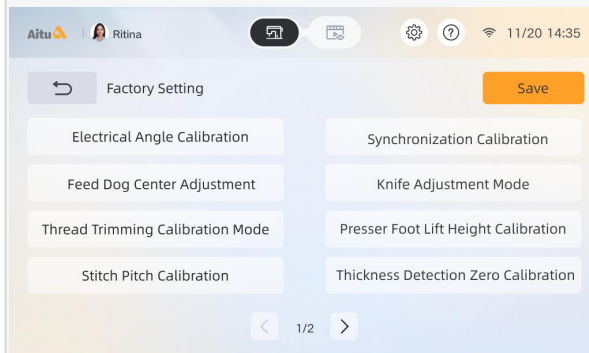
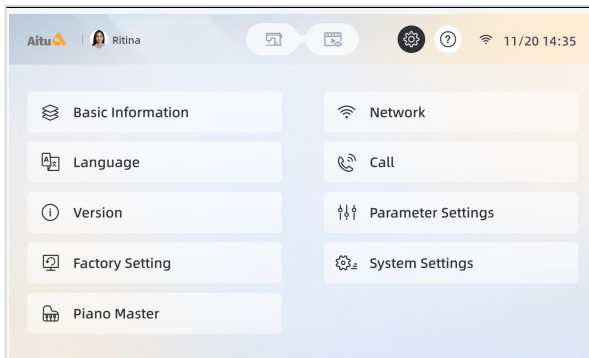
Precautions:

1. When replacing the encoder and powering on again, keep your hands away from the moving parts of the equipment to prevent the danger caused by accidental speeding.
2. During operation, keep your hand away from the needle bar. After 0 hours of suction, if you don't start suction near the upper stop needle position, it will suck To other positions, easy to hit the hand;
3. The suction position is wrong, please enter the "electrical angle correction" interface, adjust the needle stop position, and re-correct according to the needle stop position;
4. If the encoder is disassembled and assembled after normal verification of 0, power on at this time, there is a great probability of flying, and the speed will enter directly after the flying car is finished." Recalibrate the electric angle correction;
5. You only need to click "Save Factory Parameters" once for a startup factory setting configuration;



Ai10 electronic control adjustment instructions:

1. Click the gear icon in the main interface to enter the menu bar, and then click "Factory Settings"
- Enter the factory setting interface, and then click "synchronous correction" to enter, enter the same Step correction interface;
2. Place the standard needle stop gauge block, adjust the needle stop position, and click Start,
- Exit the synchronous calibration interface after "Calibration Successful" appears;
3. After successful correction, press the return key to exit the synchronous correction interface, and then set it at the factory.



Click the factory parameter to save;
4. Click "Save Factory Parameters" after exiting ";

Quality Control Point:

1. The operation needs to be performed after the spindle encoder is calibrated to 0;