BT 3D-250 Computer Pattern Machine Operating Instructions

ORINGAL VERSION



Please read the operation manual carefully before the operation. To be avoided the wrong operation, please keep the manual safety and read the manual before to operating or solve the problems.

Safety Caution

1. Signs & Definitions of Safety Marks

This User's Manual and the Safety Marks printed on the products are for you to use this product correctly so as to be away from personal injury. The signs and definitions of Marks are as follows:

| Danger | The incorrect operation due to negligence of this Mark will cause the serious personal injury or even death. |
|------------|---|
| Caution | The incorrect operation due to negligence of this Mark will cause the personal injury and the damage to mechanism. |
| | This kind of marks indicates "Matters for Attention", and the figure inside the triangle is the content for attention. (E.g. The left figure is "Watch Your Hand!") |
| \bigcirc | This kind of marks means "Forbidden". |
| Ø | This kind of marks means "Must". The figure in the circle refers to the thing that has to be done. (E.g. The left figure is "Grounding!") |

2. Safety Matters for Attention

| Dange | er |
|-------------|--|
| Â | For opening the control box, please turn off the power and pull out the plug from the socket first, and then wait for at least 5 minutes before opening the control box. Touching the part with high voltage will cause personal injury. |
| Cautio | n |
| Using Env | ironment |
| 0 | Try not to use this sewing machine near the sources of strong electric disturbance like high-frequency welding machine. The source of strong electric disturbance may affect the normal operation of the sewing machine. |
| 0 | The voltage fluctuation shall be within ±20% of the rated voltage. Large-scaled voltage fluctuation will affect the normal operation of the sewing machine, where a voltage regulator is necessary. |
| 0 | Working temperature: $5^{\circ}C \sim 35^{\circ}C$. The operation of the sewing machine will be affacted in environment with temperature beyond the above range. |
| 0 | Relative Humidity: 45%~85% (No dew inside the machine). Otherwise, the operation of the sewing machine will be affected. |
| 0 | The supply of compressed gas shall be over the consumption required by the sewing machine. The insufficient supply of compressed gas will lead to the abnormal action of the sewing machine. |
| 0 | In case of thunder, lightning or storm, please turn off the power and pull out the plug from the socket, for the operation of sewing machine may be affected. |
| Installatio | n |
| \bigcirc | Please ask the trained technicians to install the sewing machine. |
| \bigcirc | Don't connect the machine to power supply until the installation is finished. Otherwise the action of the sewing machine may cause personal injury once the |

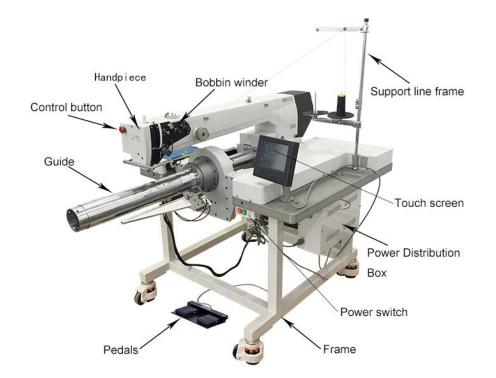
| | start switch is pressed by mistake. |
|----------|--|
| | When you tilt or erect the head of sewing machine, please use both of your hands in that operation. And never press the sewing machine with strength. |
| | If the sewing machine loses its balance, it will fall into floor thus causes the |
| | personal injury or mechanical damage. |
| | Grounding is a must. |
| U | If the grounding cable is not fixed, it may cause the electric-shock and |
| | mis-operation of the machine. |
| | All the cables shall be fixed at least 25mm away from the moving components. By |
| | the way, don't excessively bend or over-tightly fix the cable with nails or clamps, |
| | or it may cause the fire or electric shock. |
| | Please add security cover on the machine head. |
| | |

| Sewing | |
|------------|--|
| \bigcirc | This sewing machine can only be used by the trained staff. |
| \bigcirc | This sewing machine has no other usages but the sewing. |
| Ŏ | When operating the sewing machine, do put on the protection glasses. Otherwise, the broken needle will cause personal injury if it hurts the eyes. |
| | Under following circumstances, please cut off the power at once so as to avoid the personal injury caused by the mis-operation of start switch: 1.Threading on needles; 2. Replacement of needles; 3. The sewing machine is not at work or beyond supervision. |
| | During working, don't touch or lean anything on the moving components, which will cause personal injury or damage the sewing machine. |
| 0 | During working, in case of mis-operation, or abnormal noise or smell, user shall cut off the power at once, and then contact the trained technicians or the supplier of that machine for solution. |
| 0 | For any trouble, please contact the trained technicians or the supplier of that machine. |
| Maintenan | ice & Inspection |
| \bigcirc | Only the trained technicians can perform the repair, maintenance and inspection of this sewing machine. |
| 0 | For the repair, maintenance and inspection of electrical components, please contact the professionals at the manufacturer of control system in time. |
| | Under following circumstances, please cut off the power and pull out the plug at once so as to avoid personal injury caused by the mis-operation of start switch:. 1.Repair, adjustment and inspection ; 2. Replacement of components like curve needle, cutter and so on. |
| | Before the inspection, adjustment or repair of any gas-driven devices, user shall cut off the gas supply till the pressure indicator falls to 0. |
| | When adjusting the devices with the power supply and gas supply on, users can't be too careful at following the entire Safety Matters for Attention. |
| \bigcirc | In case of damages of the sewing machine caused due to unauthorized modifications, our company will not be responsible for the repair. |

| Home page | |
|--|-----|
| Warning 1 | .2 |
| Warning 2 | .3 |
| catalogue | 4 |
| Welcoming | 5 |
| Machine guide | 6 |
| I.Summary | . 7 |
| 2 Assembly instructions | . 7 |
| 3. Machine installation | 7 |
| 4.Machine operation | 8 |
| 4.1 Machine operation procedure | 8 |
| 4.2 Introduction of operation panel and key function9- | 12 |
| 4.3 Printing operation of graphic data | 13 |
| 4.3.1 Process of printing (detailed explanation) | 14 |
| 4.3.2 Additional instructions - add pressure feet and blow up and press up the outer | |
| pressure plate | 15 |
| 4.3.3 Supplementary explanation of cursor input interface | 16 |
| 4.3.4 More basic operation and interface display instructions, see pattern machine / | |
| template machine (touch screen) use instructions | 17 |
| 5 warranty policy | 18 |
| Additional instructions: storage, transportation, hoisting, voice | 19 |
| 7 Detailed explanation of equipment maintenance | 27 |
| Annex: electrical circuit diagram 1 | 28 |
| Annex: electrical circuit diagram 1 | 29 |
| 10 Accessories: part list | 30 |

Catalog

Guide for Computer Pattern Machine



技术参数 Technical Parameters

| 机型 Model | BT 3D-250 |
|-------------------------------|--|
| 工作尺寸 Working Area: | ⊄ 350mm*250mm |
| 最高缝纫速度 Maximum sewing speed: | 2300 r.p.m |
| 针码 Stitch : | 0.05-12mm |
| 最大针数 Maximun no.of stitches | 20000stitches/pattern |
| 数据存储 Memory device: | USB |
| 外压脚方式 Work holder method | 气动式 Penumatic |
| 中压脚提升量 Medium presser height: | 15mm |
| 马达 Motor | 750W 直驱式伺服电机 750W Direct-drive servo motor |
| 使用机针 Applicable needle: | DPx17 DPx5 |
| 电源 Power supply | 220V |
| 操作面板 Operation type: | 7.5'' LCD Touch panel |
| 机器尺寸 Size: | 1480*1010*1150mm |
| 木箱包装尺寸 Wooden Case Size: | 1540*1070*1210mm |

特点 Function characteristic

7.5 inch high definition touch screen operation panel;Automatic break alarm, broken needle cover design.The X axis uses circular arc surface feeding to realize "X" facing sewing.

It is suitable for sewing bags, hats, shoes, shoes and back shoes.



I . Summary

1. The machine is a built-in sewing machine with guide rail. The machine is characterized in that it comprises an organic frame, a spindle assembly, a movable seat, a rotating sleeve and a machine head grouping.

2. the utility model relates to the field of sewing machine technology, in particular to a guide rail built-in sewing machine.

3. This product has a touch screen operation panel to control the overall structure design is reasonable, compact, and more beautiful appearance.

4. Servo motor, shuttle assembly, inductor, guide rail, pneumatic components and other important accessories are all imported. The sewing accuracy of this machine reaches 0.1 mm, sewing speed as high as 2300 rpm, low noise, high-speed operation and stability, equipment life as high as 15 years or more.

5. different shapes of material fixture can be customized.

${\rm I\hspace{-1.5mm}I}$. Assembly instructions

1. Your eyebrow bender has been assembled in our company and has completed all the quality testing, but some parts need to be packed separately because of transportation problems, so you need to reassemble.

2. It is not difficult to assemble, but it should be carefully assembled according to the instructions of the instructions in proper order so as to ensure the safety and successful operation of the machine.

3. We need you to equip with some commonly used tools, such as wrenches, screwdrivers, pliers and hexagonal wrenches. And an air compressor (at least 1.5HP) is required.

4. It is very helpful to take out and understand all the mechanical parts before the installation begins. It is very helpful to read the instructions and operation instructions carefully and some diagrams in the process of the installation.

III. Machine installation and commissioning

1, the equipment should be installed in the indoor dry and ventilated place.

2, the working environment temperature should be between 5-45 degrees.

3, the working environment humidity should be between 20-90%.

4, the equipment uses AC220V/50-60HZ power supply, the socket should be well grounded.

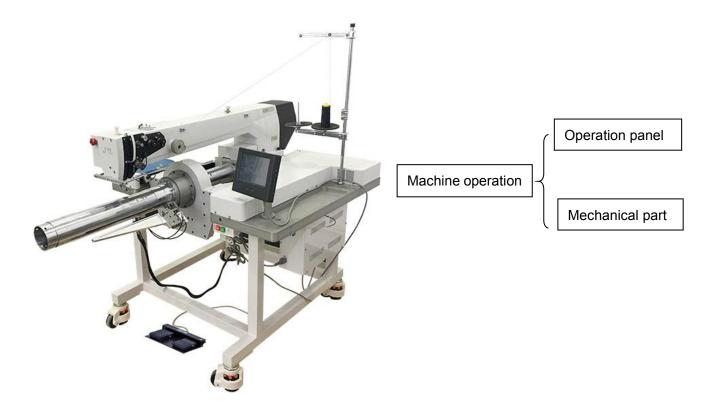
5. Place the material in the pallet and push it into the cylinder clamp material to adjust the height of the presser foot.

6. Servo motor and driver should pay attention to the ground wire.

7. After the equipment is installed, carefully check whether the bolts are locked in each part, whether there is any debris on the machine table, clean up before starting operation.

8, the commissioning of the machine needs to be clear about the power of the machine to ensure personal safety.

${\rm IV}.$ Machine operation



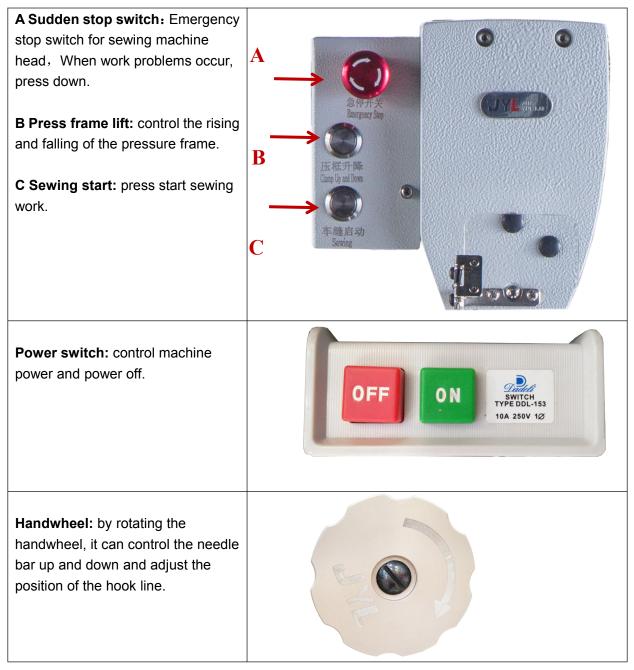
4.1 Machine operation procedure

- 1. check whether all the parts are ready.
- 2. turn on the power switch.
- 3. step on the foot pedal and return to the origin.

- 4. pedal to start the pedal, let the machine go to the second origin.
- 5. press the "sew start" switch to start working.

6. if you stop working on the way or when you are off duty, you can stop working if you press the OFF button.

4.2 Introduction of operation panel and key function



4.3 Precautions for safe use

Working environment

Please do not use this control device in the following environment:

Power supply voltage

The variation of the voltage will exceed the fixed voltage of more than 10%. The power supply capacity can not be guaranteed in the specified capacity.

Radio wave interference

Next to it, there are places where radio waves emitter and high frequency machine s will emit strong waves and magnetic fields.

Temperature and humidity

Room at room temperature below 0 C or above 35 C. A place that is directly exposed to outdoor or sunlight. The place next to the heating stove (electric heater). Where the relative humidity is below 45% or more than 85%, and where there is d ew.

Air

A place that is corrosive or dusty. It is prone to gas explosion or oil explosion.

Vibration

If the place where the sewing machine is placed is prone to excessive vibration, th e control box should be placed elsewhere.

Installation

Control box

Please follow the instructions and properly install them.

Annex

If you want to install other accessories, please turn off the power and unplug the p ower supply.

Power line

Please do not press the power cord with gravity or distort the power cord too muc h.

Please do not turn the power cord near the rotating part, leaving at least 25mm. Before the control box is connected to the power supply, it is necessary to check whether the voltage of the power supply to be connected is the same as the volta ge marked on the control box and to determine the position of the power supply. If a power supply transformer is used, the power supply can only be supplied after checking. The button power switch on the sewing machine must be placed at [OF F].

Earthing

In order to prevent noise interference and leakage of electricity and electrical shock events, the grounding wire on the power line must be sure to do a good job of g rounding.

Accessory device

If you want to use electrical accessories, please follow the instructions.

Dismantling

If you want to unload the control box, you must first turn off the power and unplug the power supply.

When pulling out the power plug, you must not pull the power cord only. You must pull it out with your hand.

There is dangerous high voltage in the control box, so to open the cover of the co ntrol box, you need to turn off the power first and wait more than 5 minutes befor e opening the cover of the control box.

Maintenance, inspection and repair

The operation of repair and maintenance is to be carried out by trained technician s.

When changing the needle and shuttle, please turn off the electricity.

Please use the parts of the factory. Other safety countermeasures

When the sewing machine is in operation, please do not touch the parts that will r otate and move (especially needles and belt accessories), and pay attention to the hair not close to them, so as to avoid danger.

The control device must not fall to the ground, and no more items can be stuffed i nto the gap.

Please do not operate under the condition of dismantling the protective covers.

If the control device is damaged or can not operate normally, it is necessary to as k experienced technicians to adjust, or check and repair, before troubleshooting, do not run it again.

Please do not alter or control the device. **Disposal of waste** Please deal with general industrial waste.

Warning signs and dangerous hints

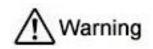
The wrong behavior may be dangerous, which is different from the latter.

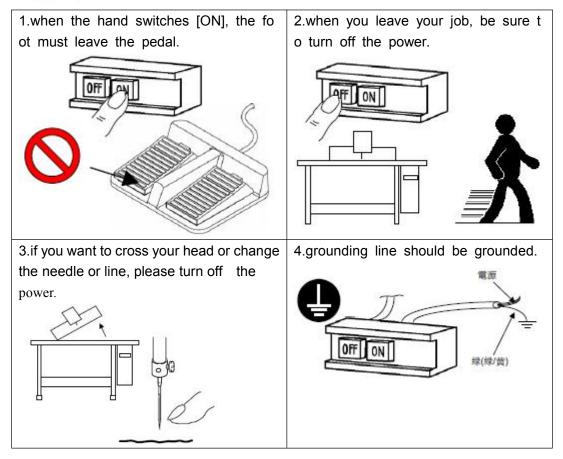
| Marning | Erroneous action may lead to serious injury or death. | Attention | Erroneous behavior may lead to bodily injury or loss of property. |
|---------|---|-----------|---|
|---------|---|-----------|---|

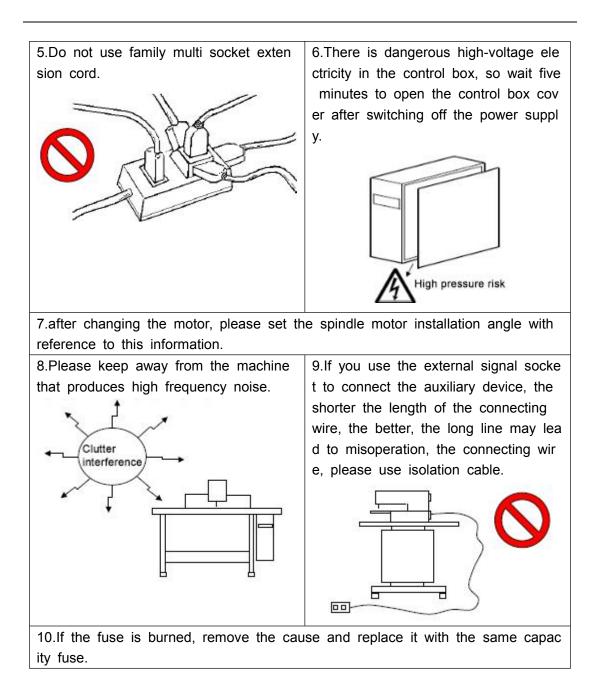
 \diamond The indication of the symbol is as follows.

| \triangle | Please follow the instructions. | \mathbb{A} | Prevent high voltage electric shock |
|-------------|-----------------------------------|--------------|--|
| | Pay attention to high temperature | • | Be sure to connect the ground wire. |
| \bigcirc | Never execute. | | |

4.3.1 Precautionary measures in use

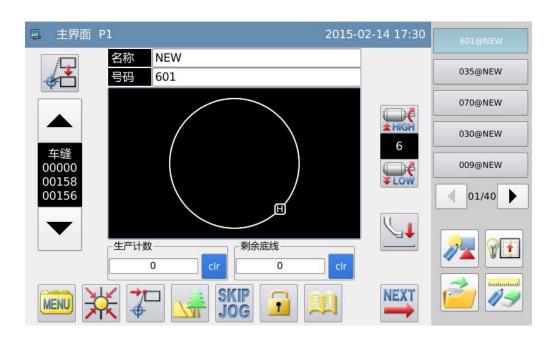






4.3.2 standardization

Functional keys are recognized by the industry graphics logo, graphics is an international language, users can identify.



4.3.3 Operation mode

Mitsubishi touch screen operation panel adopts the advanced touch operation technology of the industry, friendly interface and convenient operation bring innovative changes to the daily use of users. Users can touch the screen with fingers or other objects to complete the corresponding operation.

Warning

When using touch screen, please note:

Users should pay attention to avoid touching the screen with sharp objects in order to avoid permanent damage to the touch screen.

4.4 Operation description

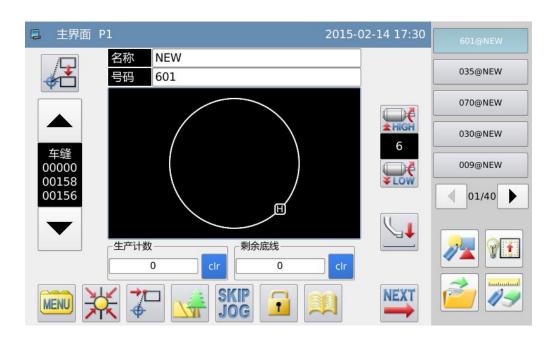
4.4.1 Basic operation

1. Turn on the power switch.

After the power is turned on, the main interface P1 is displayed.

[Note] When power on (ON) is turned on, if there is no pattern in the internal memory (graphics data), the prompt "no pattern in memory" will be displayed. Then click the

confirm key. , Hints that the information screen will disappear and switch to the main interface.



2. want to sew the pattern.

The selected pattern will be displayed under the current interface. If you want t o change the pattern (stitching material), please see "How to use Dahao touch scr een".

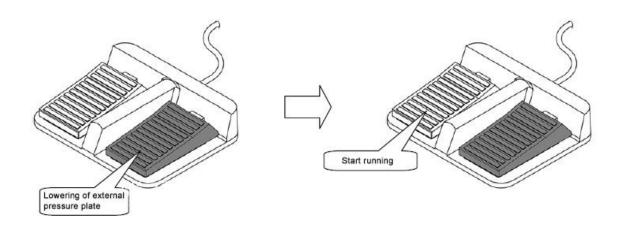
3. Start sewing.

(1) Before actual sewing, please reconfirm the settings of the sewing conditions, es pecially the settings of the speed settings (0-9).

(2) The speed of the sewing machine is determined by the setting value of the sp eed and the needle spacing. The setting value of the speed determines the maxim um speed of the sewing machine, and the needle spacing will limit the speed of th e sewing machine.

[Note] When the sewing machine is sewing, do not change the speed setting value (except when suspended in the middle), will affect the take-up.

(3) After putting the sewing products in the designated position, use the foot to step on the outer pressure plate switch (black) to make the outer pressure plate fall down, then step on the operation switch (grey) sewing machine to start the actual operation sewing, once started running, the foot can leave the operation switch and do not have to continue to step, the sewing machine will automatically run to the end, outside. The pressure plate will also rise automatically.

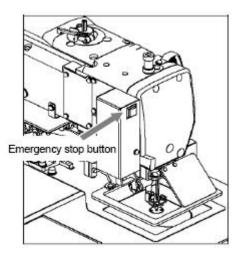


4. Halfway pause

If you want to stop sewing, press the emergency stop button installed on the head (see below). Sewing opportunity immediately stops at the upper stop position (factory standard setting), and enters the half-way suspension state. To relieve the suspension, the emergency pause button must be pressed again before the suspension can be relieved. The following actions can be continued.

- 1. If you pedal the switch, it will continue to work and sew.
- 2. press the forward / backward key to move to the starting position of sewing.
- 3. If the foot pressing plate switch is pressed, the outer pressure plate can be raised.
- 4. The speed setting value of sewing machine can be changed.

The middle pressure foot can be lifted or lowered.



5. Repair stitching method

The above midway suspension function can be used to repair the seam. If the break thread press the emergency stop button, the machine needle stop in the stop position, press the back shift key, the external pressure foot back to the break line of the first two or three needle position, threaded and then stepped on the switch, you can continue sewing.

Warning

• Never use your foot to step on the running switch when threading. This will make the sewing machine run. It is very dangerous, so you must leave the running switch when threading.

X More basic operation and interface display instructions, see pattern machine / template machine (touch screen) use instructions.

6. regular maintenance principles

1, regularly lubricate the transmission parts (oil mixture).

2, regularly check whether the induction switch is normal.

3, check the power cord regularly, whether the control line is damaged, and whether there is foreign matter or dust in the electric box.

5, clean up the machine before going to work everyday, do not leave any foreign matter on the machine.

6, check and re lock the bolts and screws in the components every quarter.

7, wash the transmission parts every half a year, avoiding the abrasion of the transmission part after mixing the dust and oil.

A year's limited guarantee all over the world!

We offer a one-year warranty after purchasing this machine, but the problem must still arise under normal use. (Warranty Period: Within one year from the date of delivery order/invoice). When the customer finds out the problem of the machine parts, he should email the detailed problem to us within 30 days.

(1) Free maintenance of defective parts, replacement of defective parts with new or replaced parts, or (2) exchange of a new part/used part (its function is equivalent to the quality of the original machine). The above guarantee services should be decided by the company's interpretation.

This limited warranty service is not suitable for (1) not following the instructions in the instructions in the instructions for the use of this product, and incorrect operation of the machine parts or (2) removing the add-on fittings, cleaning, transmission, without prior consultation with the company, or acceptance of the test, and the adverse effects on the machine parts.

Additional instructions:

A. storage: equipment shall be stored in the windproof, dustproof, pressure defense, damp-proof for the indoor place, and the horse.

B. transportation: need full wooden reinforcement load, pressure defense, moistureproof, prevent the horse transportation.

C. noise: sewing machine equipment around the noise of 50 db, if necessary, prevent noise can be worn equipment.

D. safety warning: running device, need special attention to: the prick the hand, prevent to get an electric shock, hand pressure defense, anti high temperature hot safety, etc.



维修保养详细说明 Maintenance details:

感谢使用广东金悦来自动化设备有限公司生产制造的电脑花样缝纫机.

警告 warning:

※ 本设备只能由专业维护、维修人员或培训合格人员进行操作; The equipment can only be operated by professional maintenance ormaintenance personnel or trained qualified personnel.

※ 通电之前,应确认输入电源与该设备的额定电压电流是否相符; Before energizing, confirm whether the input power is consistent with the rated voltage and current of the device.

注意 Be careful:

※ 操作本设备前请仔细阅读本用户手册; Please read the user manual carefully before operating this equipment.

※ 请不要将本设备安装在电磁干扰源附近;

Please do not install this equipment near the source of electromagnetic interference.

※ 请妥善保管本手册,并按本手册要求对设备进行定期保养; Please keep this manual carefully and maintain the equipment regularly according to the requirements of this manual.

装箱清单 Packing list:

※ 附工具及工具箱一套; A set of tools and toolboxes is attached.

※ 本机用户手册一本。Machine user manual

I .Summary

1. This machine is composed of electrical control part and mechanical transmission part. It controls the movement of mechanical parts by electrical control, thus realizing automatic feeding and processing of 360 degree rotary pattern sewing machine.

2. The machine adopts integral design. The structure is reasonable, the idea is advanced, and the mobile debugging is convenient.

3. The operation is controlled by the computer + panel button. The operation is convenient and simple.

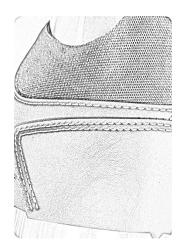
4. Servo motor, screw, reducer, shuttle bed, balance group, needle position group and other important accessories are all imported, seam accuracy as high as 0.01 mm. Low noise, high speed and stable operation, and the service life of the equipment can be more than 15 years.

5, equipment with different vehicle line ranges can be customized.

| 型号 Tape | BT 3D-250 |
|-------------------------------|-------------------------------|
| 工作尺寸 Working Area: | Ф150mm*100mm |
| 最高缝纫速度 Maxinmum sewing speed | 2300 r.p.m |
| 针码 Stitch | 0.05-12.0mm |
| 最大针数 Maximun no.of stitches | 20000stitches/pattern |
| 数据存储 Memory device: | USB |
| 外压脚提升量 Presser foot lifting: | 30mm |
| 外压脚方式 Work holder method | 气动式 Penumatic |
| 中压脚提升量 Medium presser height: | 15mm |
| 马达 Motor | 750W 直驱式伺服电机 |
| | 750W Direct-drive servo motor |
| 使用机针 Applicable needle: | Dpx17 DPx5 |
| 电源 Power supply | 220-240V |
| 操作面板 Operation type: | 7.5'' LCD Touch panel |
| 机器尺寸 Size: | 1200*1050*1370mm |
| 木箱包装尺寸 Wooden Case Size: | 1240*1110*1510mm |

II.Main product parameters

Shape and specification (take stitch as an example)



III. Machine Installation and Commissioning

1. the equipment should be installed in the indoor dry and ventilated place.

2. the working environment temperature should be between 5-45 degrees.

3. the working environment humidity should be between 20-90%.

4. the equipment uses AC220V/50-60HZ power supply, the socket should be well grounded.

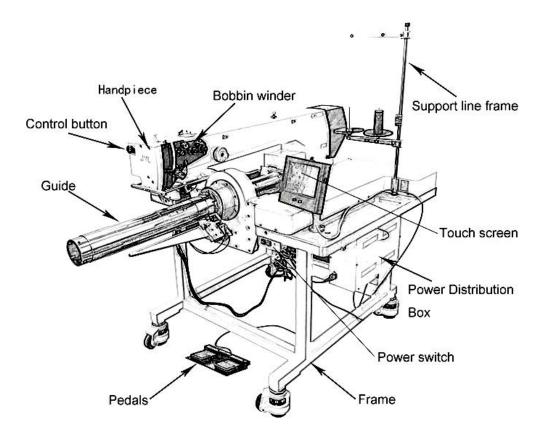
5. Place the material in the pallet and push it into the cylinder clamp material to adjust the height of the presser foot.

6. Servo motor and driver should pay attention to the ground wire.

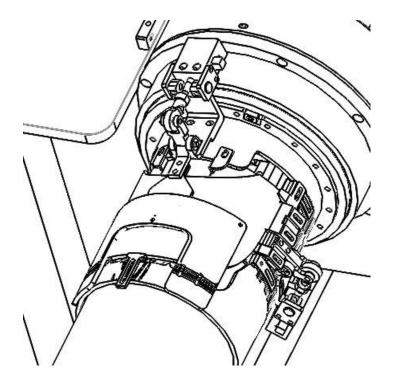
7. After the equipment is installed, carefully check whether the bolts are locked in each part, whether there is any debris on the machine table, clean up before starting operation.

8. the commissioning of the machine needs to be clear about the power of the machine to ensure personal safety.

IV. Main Machinery Description



4.1 Clamping Mechanism (press frame / tray)

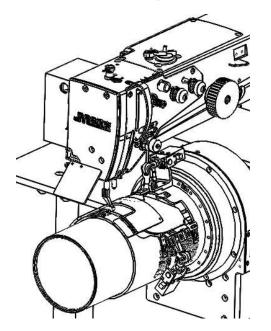


1. The clamping device belongs to a circular arc. When the material of different shapes of the vehicle can be changed by adjusting the screw to fix the material of the clamp.

2. Adjusting the feeding device on the fixture can determine the amount of the press material, and pay attention to ensuring that the press foot will not be bumped during the seam process.

3. check whether the guide is smooth, if not smooth, loosen the screws, while adjusting the screws.

4. adjust the width of the fixture.



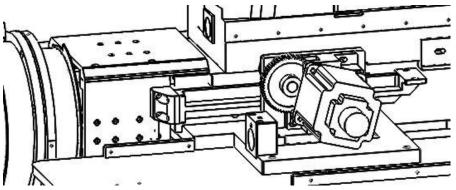
4.2 Nose Working Mechanism

1. Press foot part: For materials with different thickness of seam, press foot height can be adjusted according to the actual needs (can be sampled when proofing parameter adjustment or manual adjustment);

2. hook line position;

3. clamping device: according to the actual sewing material and customer required sewing effect can adjust the tightness of the line.

4.3 Translation Feeding Device

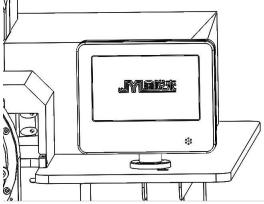


1. adjust the XY axle guide rail, no fluctuation when the power is up. Ensure smooth feeding during the actual sewing process.

2. feeding is to ensure that the material is fixed, otherwise there will be a pattern walk phenomenon, resulting in defective products.

3. the clamping fixture can be used in a small range after adjustment, and it needs no replacement. If the shape of the material to be processed is too large, it needs to be replaced with the company's scheduled, after the replacement of the clamp to see if the width of the opening can be put into the material.

4. ensure that the material is placed without askew, or there will be defective products.



4.4 Operation Panel Mechanism

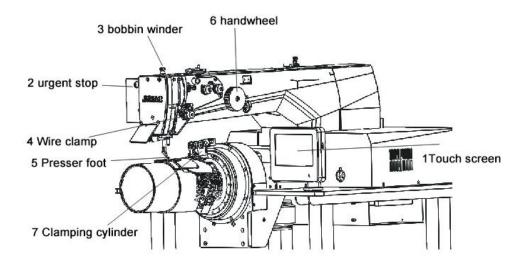
1. pattern preservation, pattern collection, pattern modification, pattern conversion, parameter setting;

2. The pattern of sewing can be collected by panel operation, or the pattern of this machine can be copied to U disk and used on other machines.

3. software upgrade can be carried out through panel operation.

4. parameter adjustment, XY axis movement direction, sewing speed, sew file selection, etc.

4.5 Master Adjustment Instructions



- 1, display adjustment, pattern making and parameter setting.
- 2, key panel adjustment, emergency stop.
- 3, adjust the winding device, around the bottom line.
- 4, clamp device adjustment, adjust the line tightness.
- 5, presser foot adjustment, according to the actual sewing material height adjustment.
- 6, handwheel adjustment, turn the handwheel to adjust the needle bar up and down.
- 7. Clamp the cylinder to adjust the material to be processed.

4.6 Machine Description

1. material pallet: put the materials to be processed into pallets, and materials are automatically fed through pallets.

2. Patterned track: The material enters the patterned track through the tray, moves the tray to carry on the localization to the material and controls the machine work through the panel operation.

3. Processing patterns: According to different processing requirements, can be drawn by CoreIDRAW software, export the DXF format and import the operation panel, you can replace the new patterns for processing.

V.Operation

5.1 connect the pressure box gas supply to ensure adequate gas supply.

5.2 switch on the power supply (220V/50-60HZ) and ensure that the connection is correct.

5.3 before switching on the power supply, make sure there are no obstructions on the worktable and keep it clean.

5.4 turn on the power switch on the control panel, and the power indicator light is on.

5.5 Place the tray in the clamping device, fix the material well, and choose the best working speed according to different materials.

5.6 Press "Start switch, the machine starts to run, in actual work found problems can be pressed" pause "switch to stop the machine running.

5.7 In the actual line found jumping needle can be timely pressed "pause", adjust the looseness of shuttle bed and thread can be pressed "start" key to continue work.

VI. Maintenance

6.1 regularly lubricate the transmission parts (needle oil).

6.2 regularly check whether the induction switch is normal.

6.3, check the power cord regularly, whether the control line is damaged, and whether there is foreign matter or dust in the electric box.

6.4 every working day, one to two times for the guide bar slider and lubricating oil in the execution part.

6.5 clean up the machine before going to work every day. Don't leave any foreign matter on the machine.

6.6 check and re lock bolts and screws in various components quarterly.

6.7 cleaning the transmission parts every half a year, avoiding the abrasion of the transmission part after mixing the dust and oil.

VII. Matters needing attention

7.1 in normal working process, no foreign matter should be allowed to enter the transmission parts, so as not to damage the machine or injure people.

7.2 in normal production process, do not put limbs into the transmission parts, so as not to hurt people.

7.3 if abnormal conditions occur during operation, please turn off the power directly.

7.4 if problems arise in the production process, please notify the professional maintenance and repair personnel immediately.

7.5 in the production process, the green indicator light is bright, indicating that the machine is in automatic operation, please pay attention to the operation safety.

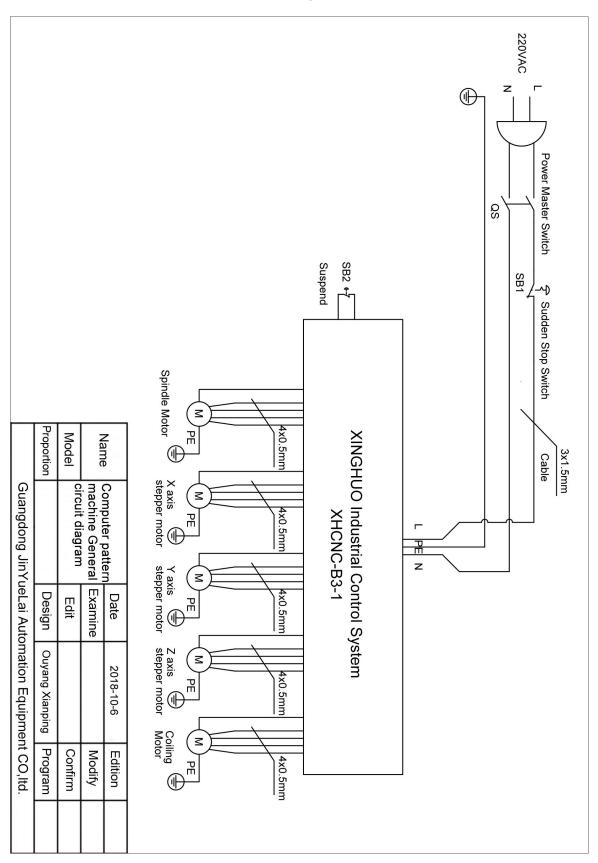
VIII. Electrical schematic diagram (see Annex 28-29)

IX. Vulnerable parts with drawings

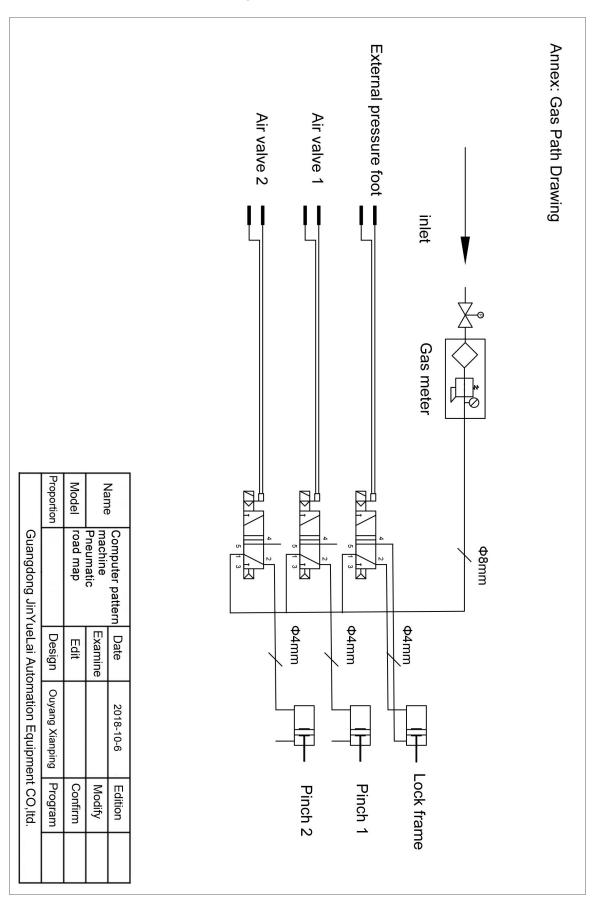


Machine needle

The company will make improvements to the products, or to the customer's needs, if not in conformity with the specifications, in kind or customer requirements prevail, without notice.



Annex: Electrical schematic diagram



Annex: Gas Path Drawing

| Symbol No. | Object/part name | Manfacturer/Trademark | Type/mode | Technical Data | Approval |
|------------|--------------------------------|-----------------------|---------------------------|---|----------|
| | Switching Mode Power Supply | BAISITE | D-120B | IN:600V AC OUT:5V 6A 24V 4A | |
| | Toroidal transformer | LIQIN | blk-blk | IN:220V AC OUT:58V AC P:350W | |
| | Power switch | GELEI | GLH13B-20/A | Ui:500vac Ith:20A | |
| | Sudden stop switch | HONGBO | K22-8101 | Ui:600V AC Ith:10A | |
| | Spindle motor | fuji | GYB751D5-RC2 | 3PH 750W 98V 0- 400HZ | |
| | Spindle servo drive | fuji | RYH751F5-VV2 | SOURCE:200-240V 50-60HZ OUTPUT:3PH 750W | |
| | X axis motor | CHUANGYI | 86H2P130-5004A-14 | AC220V 50/60HZ | |
| | Y axis motor | CHUANGYI | 86BGH-150-4-15P2-SH326AX3 | AC220V 50/60HZ | |
| | X axis / Y axis drive | Hande Castle | ASA872E | AC220V 50/60HZ | |

Annex: General parts list of computer pattern machine

Accessory List