HEAT PRESS MACHINE

1 YEAR WARRANTY



Operator's Manual

MechMaxx

www.mechmaxx.com

OPERATING INSTRUCTIONS

FOR THE HEAT PRESS MACHINE

Thank you for purchasing a Mechmaxx heat press!

To ensure smooth setup and operation, please read this user manual carefully before starting production with your machine.

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DOUBLE STATIONS PNEUMATIC HEAT PRESS MACHINE USER MANUAL

SUMMARY

This machine can thermo-transfer (via sublimation) colorful pictures and words onto textiles made of cotton, flax, chemical fiber, nylon, etc. This machine can also conduct some heat-treatments such as hair-planting print, vesicant print, and conglutination of clothes with their lining under lower temperature and lower pressure (such as the conglutination of kid's clothes, caps and shoes).

It is air press pneumatic, auto work, easy operation, safe and reliable with enlarged and thickened cast aluminum heating board.

SHORT OVERVIEW – MECHMAXX HEAT PRESS MACHINE

The Mechmaxx heat press machine is a pneumatic double-plate transfer press specifically designed for medium to high-volume production environments.

- Enables efficient and consistent processing of larger batches through its dual working surfaces.
- Features a digital control system for precise and user-friendly adjustment of time and temperature, including real-time monitoring of set and actual values.
- Contact pressure is flexibly adjustable via a pressure gauge, with an integrated oil and water separator to ensure optimal pneumatic performance.
- Equipped with a two-hand operation system and emergency stop functions for maximum operational safety, including a pre-press capability.
- Lifting and lowering speeds can be finely regulated using built-in restriction valves.
- The device is CE and RoHS certified and has been tested in accordance with applicable German safety standards.

SAFETY PRECAUTIONS

1.This machine must be protected by safe and reliable ground wire. Note that it is only permissible to operate a heat press from a power socket protected by a ground fault protection switch.

2. During heating up and operation, please do not touch the heater to avoid scalding.

3. To get successful sublimation effect, it should be correct time, temperature and pressure; the thickness and material of the heating sublimation products and the ink and paper also will affect the sublimation effect.

4. Before large scale production, you must make some sample test to make sure the best time, temperature, pressure etc.

5. The temperature controller is complicated, except the temperature setting, please do not make other setting to avoid program error and broken.

6. Don't put your hand on the working plate when the machine is working, for prevent your hand from burns

7.Never open the housing or attempt to modify the machine yourself

8.In case you are requested by the Mechmaxx customer support to open the heating plate cover, please make sure you are wearing respiratory protection and only touch the contained insulation wool with gloves. Any disposal of the wool must be contained in a closed bag.

9.Ensure that liquids and metal objects do not get into the inside of the heat press.

10.Disconnect machine from power outlet when not in use!

11.Never operate the heat press within the reach of children and never leave the machine unsupervised when switched on.

12.Ensure that the machine is used only in dry rooms.

13.Pay attention that the used compressor is attuned to the air consumption and the pressure.

If you cannot observe one or more of the safety precautions above, or if you are not sure whether all points are satisfied, please contact our Technical Support Department.

SCOPE OF DELIVERY

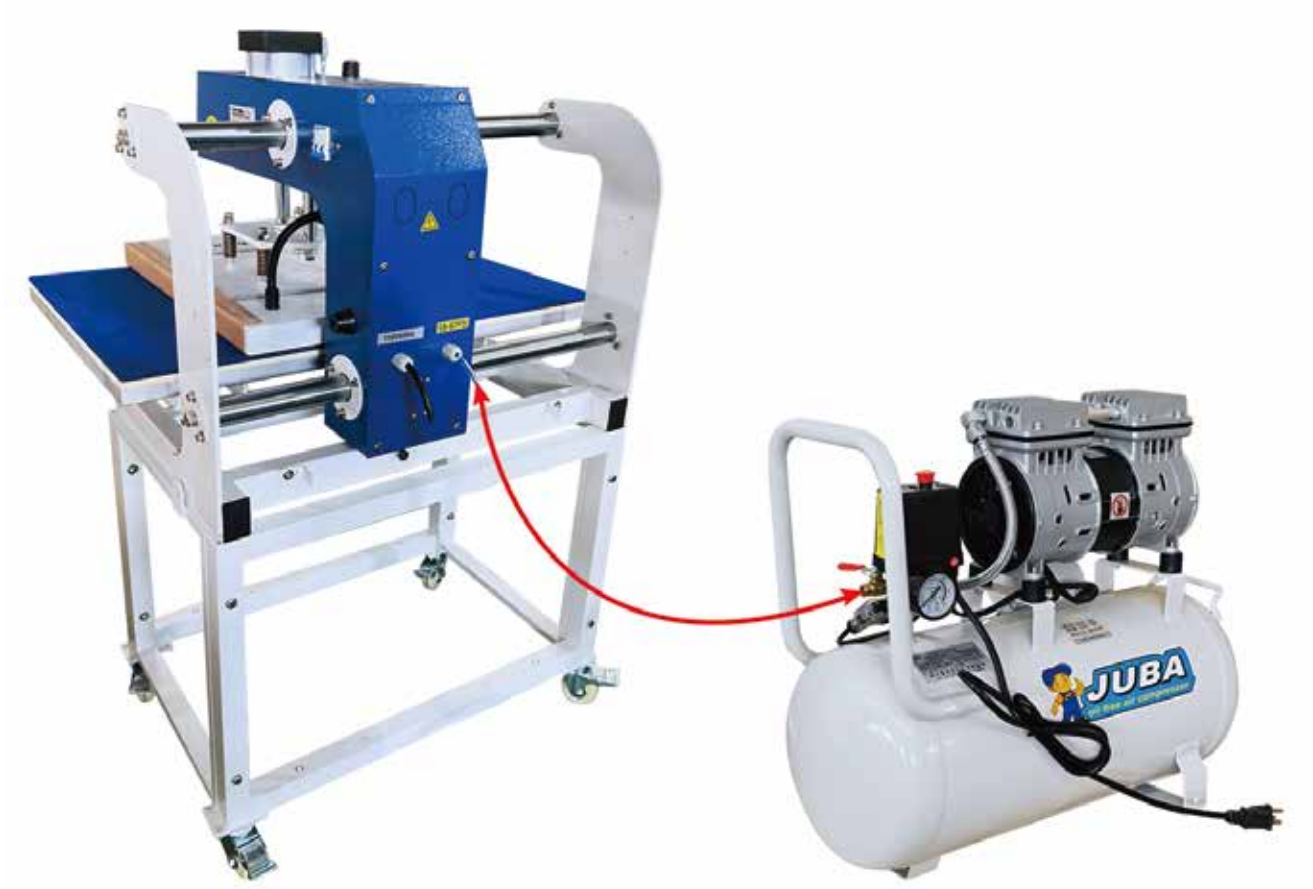
Item	Quantity
Heat press machine	1
Instruction manual	1

TECHNICAL PARAMETERS

Large format Heat Press Machine		
Model	PUD1624	PUD2024
Voltage	110V	110V
Power	1650W/2.21HP	1500W/2HP
Temperature	0-750°F / 0-399 ℃	0-750°F / 0-399 ℃
Time for heating up	10-15 minutes	10-15 minutes
Pressure output	85 PSI / 6kg/cm²(minimum)	85 PSI / 6kg/cm²(minimum)
Work Size	16*24 inches / 40*60cm	20*24 inches / 50*60cm



PNEUMATIC CONNECTION AND PRESSURE ADJUSTMENT





1).Connect the heat press with air compressor or air sources.
2).Lift up the cap of air valve as the picture show.
3).Revolve the cap anticlockwise , the air pressure goes down ; contrariwise , the air pressure goes up ; when you finish the pressure adjustment , push down the cap.
4).Suggested air pressure is 58-87PSI, up to 87PSI is possible. It depends on the transfer materials.

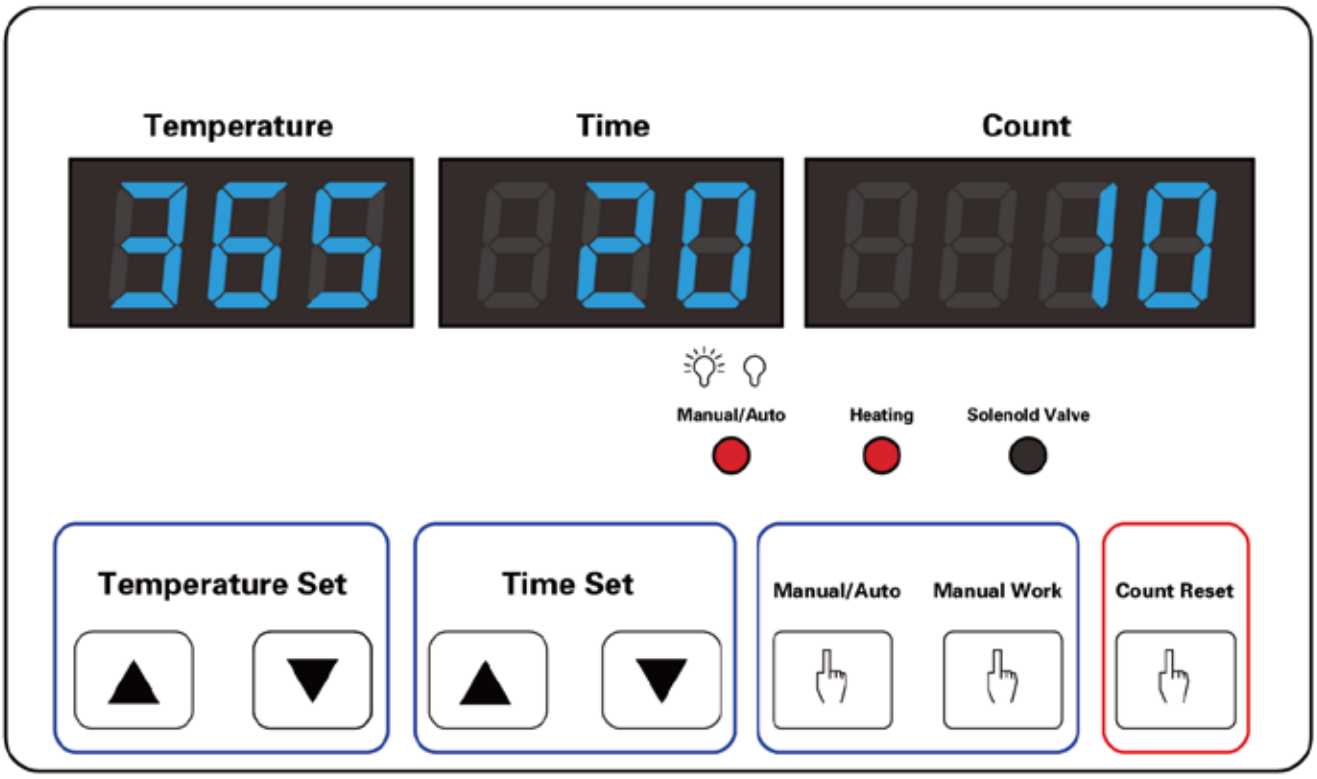
OPERATION

1.READ BEFORE USAGE

Before turn on the power, check each spare parts to make sure they are not loose.

Connect the air source, power supply and open the pressure valve to let the pressure valve to needed pressure (about 58-87 PSI) till the heating board rises up automatically.

2.PANEL SETTING



Turn on the power switch,

1): Set temperature, press ▲ for temperature increase, press ▼for temperature decrease;

2): Set time. press▲ for time increase, press▼ for time decrease;

3): Finish setting. Machine starts heating up.

3. PNEUMATIC PRESS UP AND DOWN

1) When reach to needed temperature, the machine will alarm, the heater will rise up;

2) Move the work table exactly under the heater, the heater will automatically press down;

3) When time is up to finish printing, the heater will rise up.

OPERATION OF THROTTLE VALVES

1) On the right side of the press head there are two silver screws with which the restricting valves to open and close the heating sheet can be adjusted.

2) If the screws are screwed out, this slows down the lifting and lowering process.

3) When the screws are screwed in, the heat press machine accelerates the lowering and lifting of the heating sheet.

4)Fix the respective setting with the corresponding counter nuts by tightening them by hand.

Note: Please note that a certain time is required before the press cools down after it is switched off.

IMPORTANT NOTEICE FOR EMERGENCY STOP:

When machine works abnormally, please immediately press EMERGENCY STOP button to stop work; to restart, rotate the EMERGENCY STOP button and pull it out.

RECOMMENDED TIMES AND TEMPERATURES

These values are only guidelines;; they can vary from material to material and should always be checked before pressing.

Item Name	Lowest Temp.(F)	Highest Temp.(F)	Time(S)	Remark
Plate	230	330	40	1.Printing On Sublimation Paper , Mirror Image ; 2.Put The Plate Right ; 3.Light Medium .
	320	330	100	
Ceramic Tile	230	345	50	1.Printing On Sublimation Paper , Mirror Image ; 2.Image And Printing Side Matched Tight Without Margin ; 3.Printing Side Downward ; 4.Medium Pressure .
			120-240	
	330	345	100	
			300-420	
Metal Board	230	330	20	1.Printing On Sublimation Paper , Mirror Image ; 2.Tear Off The Protective Film On The Board Before Printing ; 3.Image And Printing Side Matched Tight Without Margin ; 4.High Pressure .
	330	330	100-120	
Key Chain (Sparking Aluminum Sheet)	230	310	20	1.Printing On Sublimation Paper , Mirror Image ; 2.Tear Off The Protective Film On The Board Before Printing ; 3.Image And Printing Side Matched Tight Without Margin ; 4.High Pressure .
	310	330	100	
T-Shirt (Non Cotton Material)	330	330	120	1.Printing On Sublimation Paper , Mirror Image ; 2.Keep Temperature Sensitive Parts Away From Heating Board ; 3.Press Down The Heating Board After It Rises To The Lowest Temperature ; 4.High Pressure ; 5.Only For Non Cotton Material Like Fabrics And Polyester .
T-Shirt (Light Color Cotton Material)	340	340	30	1.Printing On Light Color Transfer Paper , Mirror Image ; 2.Keep Temperature Sensitive Parts Away From Heating Board ; 3.Press Down The Heating Board After It Rises To The Lowest Temperature ; 4.High Pressure ; 5.Peel Off Base Paper Immediately After Printing ; 5.Only For Light Color Cotton T-Shirts .

Item Name	Lowest Temp.(F)	Highest Temp.(F)	Time(S)	Remark
T-Shirt (Dark Color Cotton Material)	340	340	30	1.Printing On Dark Color Transfer Paper , Non Mirror Image ; 2.Keep Temperature Sensitive Parts Away From Heating Board ; 3.Press Down The Heating Board After It Rises To The Lowest Temperature ; 4.High Pressure ; 5.Wait For 3 Minutes And Peel Off Thermal Paper.
Mouse Pad	345	345	120	1.Printing On Sublimation Paper , Mirror Image ; 2.Image And Printing Side Matched Tight Without Margin ; 3.Medium Medium .
Puzzle	320	320	120	1.Printing On Sublimation Paper , Mirror Image ; 2.Image And Printing Side Matched Tight Without Margin ; 3.Medium Medium .
Metal Name Card	330	330	40	1.Printing On Sublimation Paper , Mirror Image; 2.Printing Side Downward; 3.Both Sides Printable , Printing Side By Side With The Need For Thermal Paper.
Pillow	345	345	80	1.Printing On Sublimation Paper , Mirror Image; 2. Keep Temperature Sensitive Parts Away From Heating Board; 3.Press Down The Heating Board After It Rises To The Lowest Temperature ; 4.High Pressure.
Photo Slate	230	345	120-180 360-480	1.Printing On Sublimation Paper , Mirror Image; 2.Image And Printing Side Matched Tight Without Margin ; 3.Printing Side Downward; 4.Medium Pressure.
	345	345	240-300 450-600	

IMPORTANT NOTICE

Before beginning full production, it is essential to conduct your own tests using the specific transfer materials and substrates intended for use. The settings and values provided in this manual, as well as those from the material manufacturer, should be regarded as general guidelines only.

The user is solely responsible for determining the correct settings suitable for their individual conditions. Performance characteristics such as washability and transfer behavior must be verified through your own testing.

TEXTILE APPLICATION NOTE:

After pressing, allow the textile to cool completely before removing any type of carrier or backing from the transfer material. The adhesive in the transfer material activates fully only when cooled. If the adhesive fails to bond properly once cooled, it may indicate insufficient pressing temperature or duration.

MAINTENANCE

1.Air pressure

Checking the lubricating oil If it's enough in the Cylinder. Use the pressure knob on the Air Requlator to adiust thepressure, turn toward "+"direction to add the pressure, "_"direction to reduce the pressure.

2. Heat Platen Not Goes Down: If digital display show normally, but when you press green start button, theheat platen not goes down

1). The limit value under the bottom platen doesn't touch the counting down switch because of its too high position.Please loosen the value's screw a little to make it longer.

2). Checking the circuit connecting with green start-up switch if it's with problem.

3. No action after turn on the machine

1). Check the plug whether it connects well or whether it is broken.

2).Check the power switch or digital controller whether it is broken

3).Check the fuse whether it has been burnt out.

4). Indicating light is on, but no display on screen, check the 5 cable of Railway transformer. If it's loosening.

showing the problem is poor connection. If they connects well, showing that the Transformer is faulty.

4.Heater can not be heating up

1)The panel has problem

2)Check whether the thermocouple of the heat platen touches well. If the thermocouple is loose, the display wil

show 255 and machine keeps beeping.

3)Check if the indicating light of solid-state rela y is on, if not, check if the relay or digital controller is broken.

4)If you already changed the new solid-state relay but the heat platen still can't heating up, check if the heat platenis faulty or the heat platen's power cable is loose, need to change by new heat platen

5. The heat platen works well, but suddenly the display screen show 255℃.

1). Check whether the thermocouple of the heat platen touches well.

2). If the thermocouple touches well but stills show 255'℃ , then it is faulty.

6. The machine is heating during 0~180'c, but display number jumps to above 200'℃ or 300'℃ suddenly, or the numbers on display jumps irregularly.

1). Check whether the thermocouple of the heat platen touches well.

2). If the thermocouple is good, it shows that the program of digital controller is broken, which namely IC or is

broken, need to change by new controller.

7. The temperature is out of control: Set 180℃, but the actual temperature is above 200'℃。

1). It means the solid-state relay is broken, out of control, need to change the relay.

2). Or the digital controller is faulty and it keeps conveying electric to relay, need to change controller

8. The setting temp and time becomes abnormal after exchange the heat platen

Please reset the temp and time according the operation process manual.

9.Thermocouple is broken

One line broken light will light up from the temperature display, then change the thermal couple.

10.Maintenance and cleaning

1).In order to prolong the machine service life, please add the lubrication oil regularly on the joints.

2).In order to keep the heat platen's good transfer effect, you need to protect the heat platen carefully whenever you are using it or not.

3).Please keep the machine in dry place.

4).If you are not able to solve the electrical parts problem, please kindly contact the supplier and get technical support

5).Maintenance work should always be accomplished with the press switched off and cooled down.

6).The plug must first be disconnected from the power socket.

7).Clean the press regularly with a soft cloth and mild household cleaner to remove adhesive residues etc. Never use scouring sponges, solvents or gasoline!

8).Clean the Drain Valve by draining Oil and Water through the Drain Valve.

COMMON FAILURES AND THEIR POSSIBLE REASONS

1. Picture burning: Too much time or temperature, just adjust time or temperature

2. Picture not vivid: less time or too low temperature, just adjust to have more time or temperature

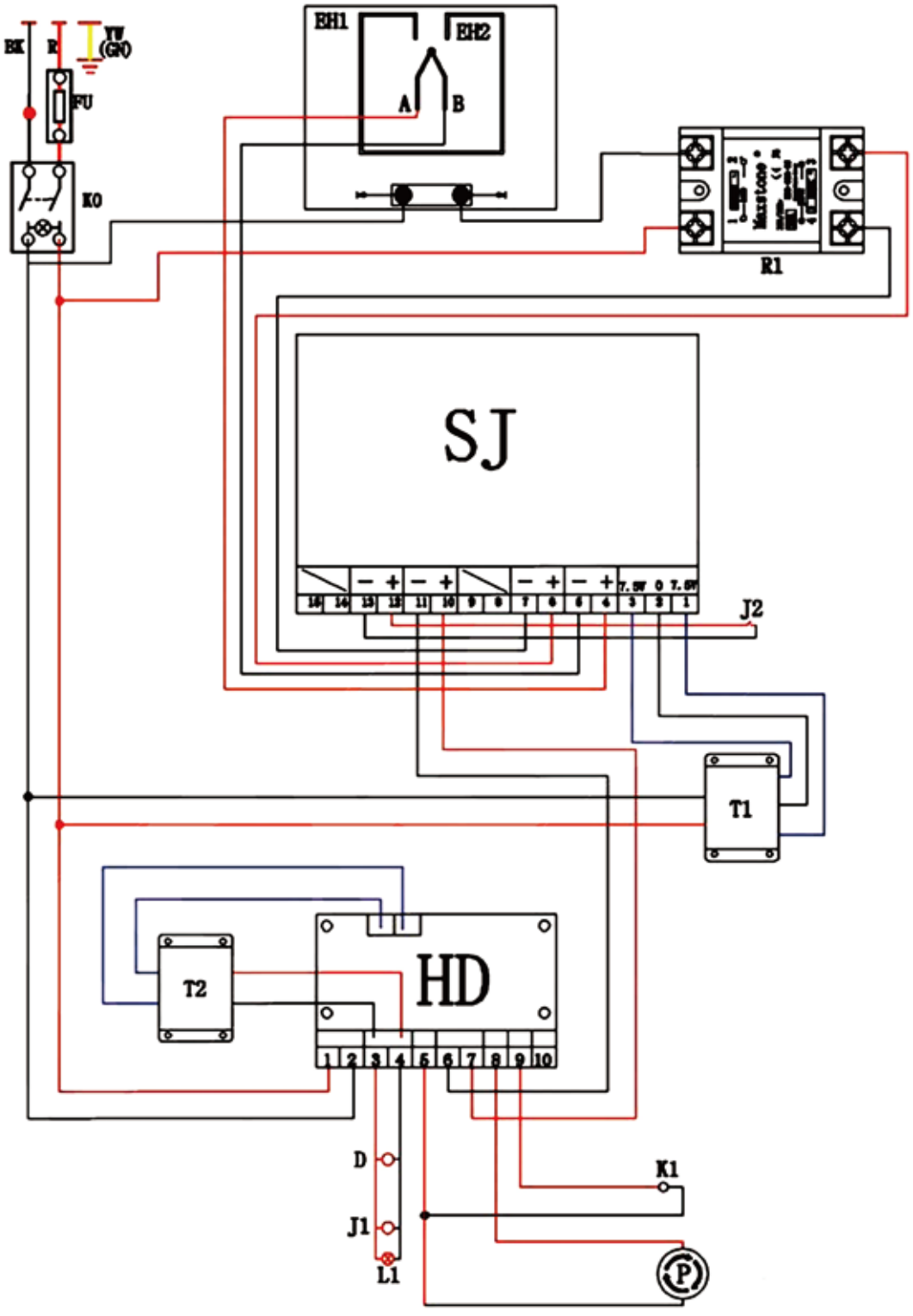
3. If the print color is pale: the temperature is too low / the pressure is not correct / or not pressed long enough2. If the print color is too brown or the transfer paper is almost burnt: reduce the setting temperature

4. If the print is blurring: too much transfer time causes proliferation.

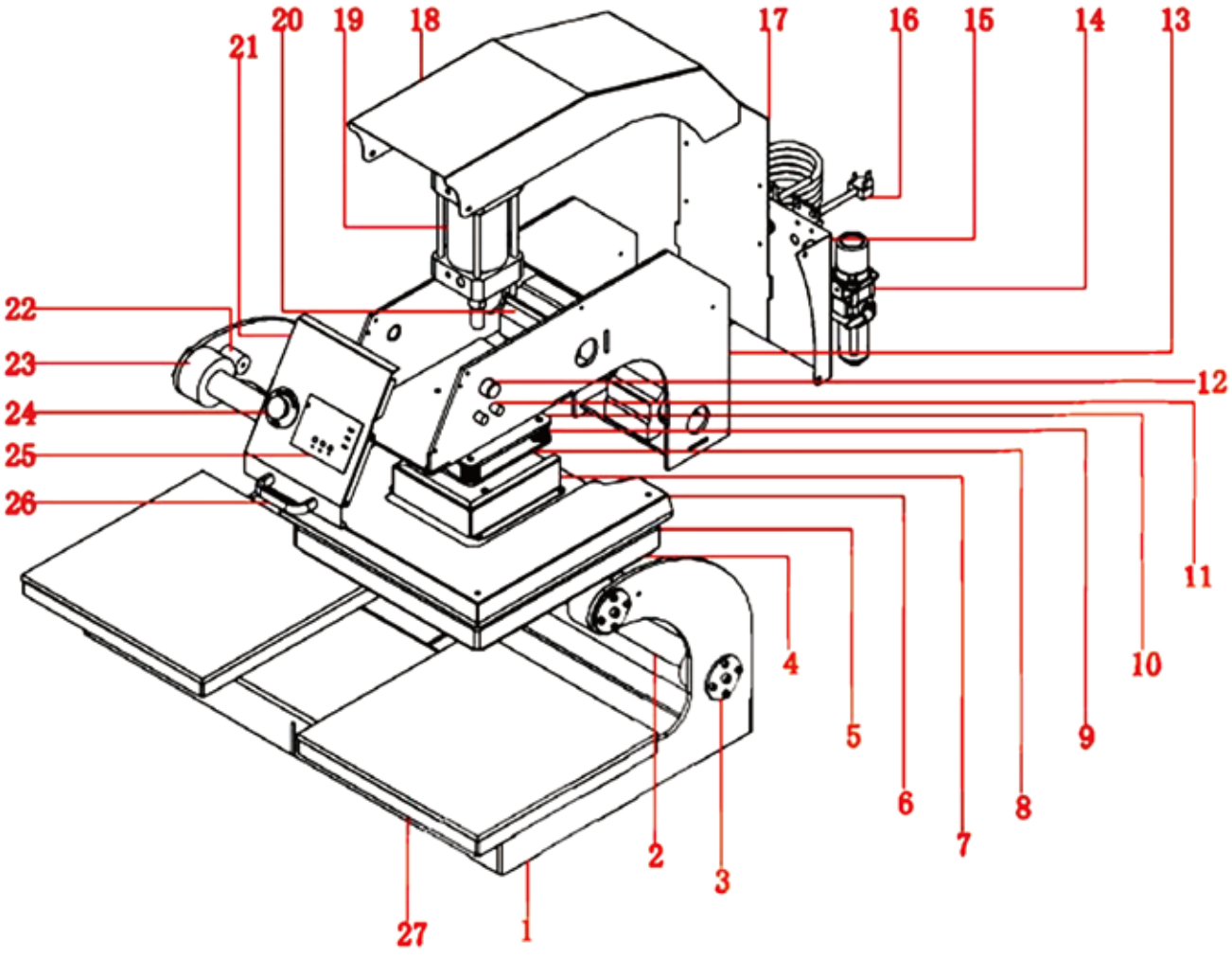
5. If print color is different/ partial transfer effect is not good enough: the pressure is not enough / or not pressed long enough /or poor quality transfer paper.

6 .If transfer paper stick to the obiect after transfer: the temperature is too high/ or poor quality printing ink

CIRCUIT DIAGRAM



PARTS DIAGRAM



PARTS LIST

No.	DESCRIPTION	QTY
1	Machine Frame	2
2	Slide Rail	1
3	Slide Rail Fixed Plate	1
4	Heat Platen	1
5	Heat Platen Cover	1
6	Anti-scald protect metal cover	1
7	Spring Protective Cover	2
8	Spring Fixed Cover	2
9	Spring	1
10	Adaptor Plate	1
11	Air Regulating Valve	1
12	Start Switch	1
13	Side Plate	1
14	Air Filter	1
15	Back Plate	4
16	Power Cord	1
17	Electronic Parts Bracket	1
18	Upper Cover Plate	1
19	Air Cylinder	1
20	Spindle with Base	1
21	Controller Cover	1
22	Electromagnet	2
23	Casting Polyurethane	2
24	Emergency Stop Button	2
25	GY-04 Digital Controller	1
26	Front Handle	1
27	Under Plate	1

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