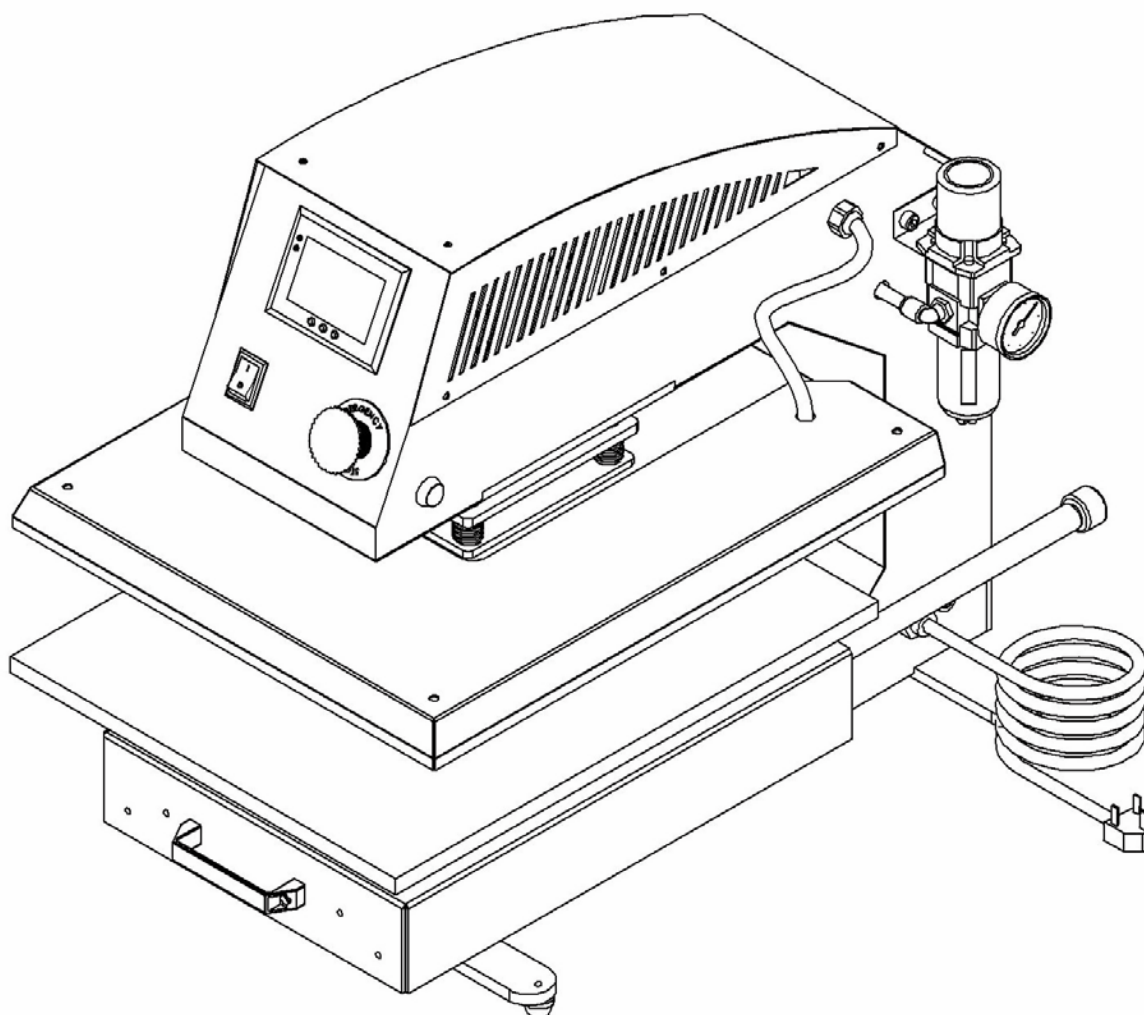




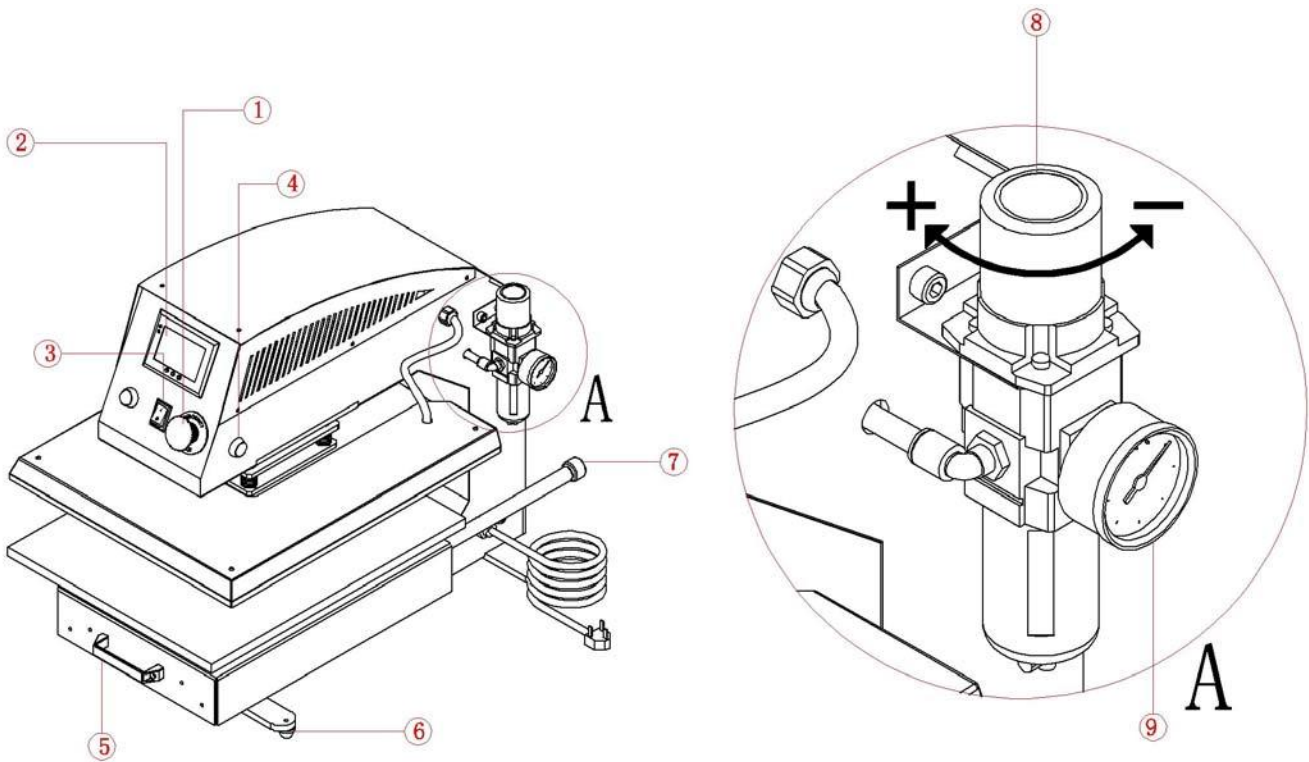
# Single Table Pneumatic Heat Press Model No.: HPD.STP60



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# I. ASSEMBLY DRAWING



- ① Emergency Stop Button
- ② Rocker Switch
- ③ GY-06 Digital Controller
- ④ Cycle Start Buttons
- ⑤ Slide Out Drawer Handle
- ⑥ Rubber Feet
- ⑦ Slide Rails
- ⑧ Pressure Adjust Knob
- ⑨ Air Pressure Gauge

# II. Technical Parameters

1. Model No.: HPD.STP60
2. Machine Size: 810 x 410 x 625 mm
3. Heat platen Size: 40 x 50 cm/ 40 x 60 cm
4. Printable Articles Max Size: 400 x 600 x 10 mm
5. Voltage: 220v/1Phase
6. Power: 1.8kw - Heating element power: 1.8kw (x1)
7. Recommend Setting: 30~280s; 180~210°C
  - Time Range: 0~999s
  - Maximum Temp: 225°C
  - Heating Element Power: 1.8kW
8. Packing Size: 930 x 530 x 720 mm
9. Gross Weight: 62kg/ 81.3 kg (inc. wooden shipping case)

# III. Operating Process

## 1. Setting the air pressure



- i. Connect the heat press with air compressor or air sources
- ii. Lift up the cap of air valve as the picture shown
- iii. Rotate the cap anticlockwise and the air pressure goes down; Clockwise and the air pressure goes up; To lock the air pressure, push down the cap
- iv. Suggested air pressure is between 0.4~0.5Mpa (70-80Psi), dependent on the transfer materials to be used

## 2. Set temperature required


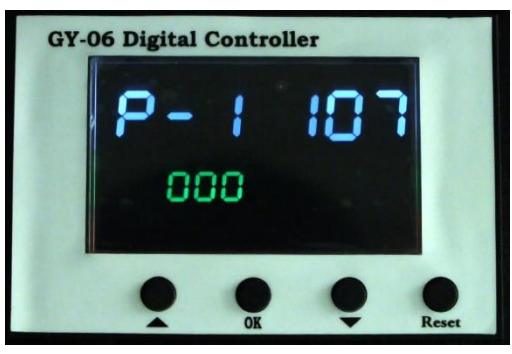



|   |   |   |
|---|---|---|
|   |   |   |
| <p>Turn on power switch, temperature light is ON. The digital display shows as above.</p> | <p>Press  button, the  light is on (C denotes Celsius). Press arrows "△" or "▽" to select "°C" or "°F" (F denotes Fahrenheit) according to your habits.</p> | <p>Press  button, the temp  light is on. With the arrows select the temperature according to your particular transfer material (Normally 180°C~200°C)<br/>SV: Set temperature<br/>PV: Current temperature</p> |

## 3. Set time required

|   |   |
|---|---|
|   |   |
| <p>Press  button after temperature setting and the time light is on. Using the arrows select the time according to different transfer material.<br/>SV: Set temperature<br/>PV: Current temperature</p> | <p>Press  button to enter operating mode. The counter denotes the number of "transfer cycles", with a range of 0~999. To reset the counter to "0" press "Reset" for 5 seconds".</p> |

**NOTE: Please do as follow:**

- 1) When the SV and PV values show a big difference [see below]
- 2) When the temperature shown on the display is not the same as the actual temperature on the heat platen [see below]

|  |   |
|--|---|
|  The image shows a GY-06 Digital Controller with a blue LCD display. The top line of the display shows 'P-2' and the bottom line shows '027'. Below the display are four buttons: an up arrow, 'OK', a down arrow, and 'Reset'.  |  The image shows a GY-06 Digital Controller with a blue LCD display. The top line of the display shows 'P-1 107' and the bottom line shows '000'. Below the display are four buttons: an up arrow, 'OK', a down arrow, and 'Reset'.   |
| <p>When SV and PV values show a big difference, press  button for 5 seconds, and press  button again to adjust the temperature.</p> <p>If SV &amp; PV values have difference of <math>\pm 20</math> degrees, Press arrows "<math>\Delta</math>" or "<math>\nabla</math>" to set to 20.</p> | <p>When the temperature shown on the display is not the same as the actual temperature on the heat platen, press  button for 5 seconds to reset mode:</p> <p>① E.g. if the display shows 200°C, and the actual heat platen temperature is 170°C, Press arrows "<math>\Delta</math>" or "<math>\nabla</math>" to set to 30.</p> <p>② Or similarly if the display shows 200°C, and the actual heat platen temperature is 230°C, Press arrows "<math>\Delta</math>" or "<math>\nabla</math>" to set to -30.</p> |

#### 4. Printing methods

- Step 1:** Make sure the cord is connected well to the wall socket. Place the object (i.e. T-shirt) on the press bed, then put transfer paper with image facing down onto the object. Adjust the pressure to your requirement, and turn on the power.
- Step 2:** Set the temperature and time required (see above) and the temperature will start to rise.
- Step 3:** When the temperature has risen to the setting required, the buzzer will sound; you can then lower the heat platen (in the meantime the buzzer will stop). This starts the transfer cycle.
- Step 4:** Then the time counter is on, once time is up, open up the upper heat platen.
- Step 5:** Consult the Transfer Paper instructions on whether to peel cold or hot. Here are suggested Pressing time guidelines for different transfer papers:
- Ink-Jet Transfer Paper (fabric) 14-18 seconds.
  - Sublimation Transfers (onto Fabrics) 25-30 seconds.
  - Sublimation Transfers (onto FR-Plastic/Woods) 60-70 seconds.

#### 5. Recommendations:

1) Ceramic tile transfer: (Mugs & Plates transfer is similar)

- Set temperature: 180°C.
- Set time: 15 seconds.

2) T-shirt transfer:

- Set temperature: 180°C.
- Set time: (chemical fibre use for sublimation transfer paper: 30-50 seconds; pure cotton use for T-shirt transfer paper: 10-20 seconds).

3) Aluminium sheet transfer:

- Set temperature: 180°C.
- Set Time: 45 seconds.

**Step 6:** When the temperature rises to the set temperature, the buzzer sounds and the heat platen lowers down, the buzzer then stops, and the transfer cycle starts.

**Step 7:** Once the transfer cycle is finished the buzzer will sound again. The heat platen will then open automatically and the buzzer will stop.

**Step 8:** Pull the draw forward using the Slide Out Drawer Handle.

**PLEASE NOTE:**

1) Switch off the machine and unplug the power cord when the machine is not in use.

2) Suitable air pressure range is 0.4-0.5Mpa (75-80Psi), setting the air pressure too high can break the machine, Setting the air pressure too low will lead to spoiled work and erratic machine operation.

3) It is recommended that the press should be powered off for 1-2 hours after it has been in continuous operation for 6-8 hours.

**▲ When you finish the transfer process, there are two important matters that will need your urgent attention.**

4) After use please DO NOT shut off the power immediately. The heat platen is very hot now after the machine has been in operation for any length of time. The operator should initially press the "OK" button after they have finished their last heat transfer cycle, this will prevent the heat platen from heating, but the fan in control box is still spin helping to cool down the heat platen. The power should be kept on for around 20-30 minutes after the transfer process is finished.

5) After use please DO NOT shut off the air pump immediately. The heat platen is very hot now after the machine has been in operation for any length of time. If you shut down the air pump, the hot heat platen will lower and rest on the lower platen which can lead to burning of cotton pad. The air pump should be kept on for around 20-30 minutes after the transfer process is finished.

## IV. Maintenance

### 1. The machine will not work after you turn on the power.

- 1). Check the plug is connected well or that it is not broken.
- 2). Check the power switch or digital controller is not broken.
- 3). Check the fuse is not blown.
- 4). Indicating light is on, but no display on screen, check the 5 cable of Railway transformer. If it is loose, this indicates that the problem is poor connection. If it is securely connected, it indicates that the Transformer is faulty.

### 2. The display screen is working well, but the heat platen temperature does not rise.

- 1). Check whether the thermocouple of the heat platen is secure. If the thermocouple is loose, the display will show 255°C and the machine will keep beeping.
- 2). Check if the indicating light of the solid-state relay is on. If not, check if the relay or digital controller is broken.
- 3). If you have already replaced the solid-state relay for a new one but the heat platen will still not heat up, then check to see if the heat platen is faulty or the heat platen's power cable is loose, you may need a new heat platen.

### 3. The heat platen works well, but suddenly the display screen shows 255°C.

- 1). Check whether the thermocouple is secure.
- 2). If the thermocouple is firmly attached but the controller still shows 255°C, then it is faulty.

### 4. The machine is heating between 0~180°C, but the display number jumps to above 200°C or 300°C suddenly, or the numbers on the display jump irregularly.

- 1). Check whether the thermocouple of the heat platen is firmly attached.
- 2). If the thermocouple is OK, It shows that the program of the digital controller is broken. You will need to replace it for a new controller.

### 5. The temperature is out of control: Set to 180°C , but the actual temperature is above 200°C.

- 1). This indicates that the solid-state relay is broken/ out-of-control; You will need to replace the relay.
- 2). Alternatively, the digital controller could be faulty with an open circuit providing constant power; You will need to replace the controller.

### 6. The setting temp and time becomes abnormal after you have replaced the heat platen.

- 1). Please reset the temp and time according to this operators' manual.

## **7. Maintenance.**

- 1). In order to prolong the machine's service life, you should regularly lubricate all mechanical joints with light machine oil.
- 2). Care should be taken to protect the heat platen whenever the machine is not in use. This will prolong the life of the platen and help to keep the image quality of your work high.
- 3). The machine should be stored in a dry place.
- 4). If you are not able to solve your problem, please contact [heatpressesdirect.com](http://heatpressesdirect.com) for technical support.

## **8. The following checks should be carried out at regular intervals by a qualified and competent person:-**

- Electrical connections
- Pneumatic system for air leaks
- Pneumatic system for lubrication
- Mechanical moving parts

## **V. Trouble shooting for transfer print quality**

1. If the print colours are pale: the temperature is too low / the pressure is not correct / or the transfer has not been pressed for long enough.
2. If the print colour is too brown or the transfer paper is almost burnt: reduce the setting temperature.
3. If the print is blurring: too much transfer time causes proliferation of the ink.
4. If print colour is different/ partial transfer effect is not good enough: the pressure is not enough / or the transfer has not been pressed for long enough / or poor quality transfer paper.
5. If transfer paper sticks to the object after transfer: the temperature is set too high/ or poor quality printing ink.



## VI. Heating Element Temperature Measurement

**Testing of the Heating Element** for temperature consistency or fault condition should only be undertaken after consulting a qualified engineer, and then only using a wired Digital Thermometer (**\*please see note below**).

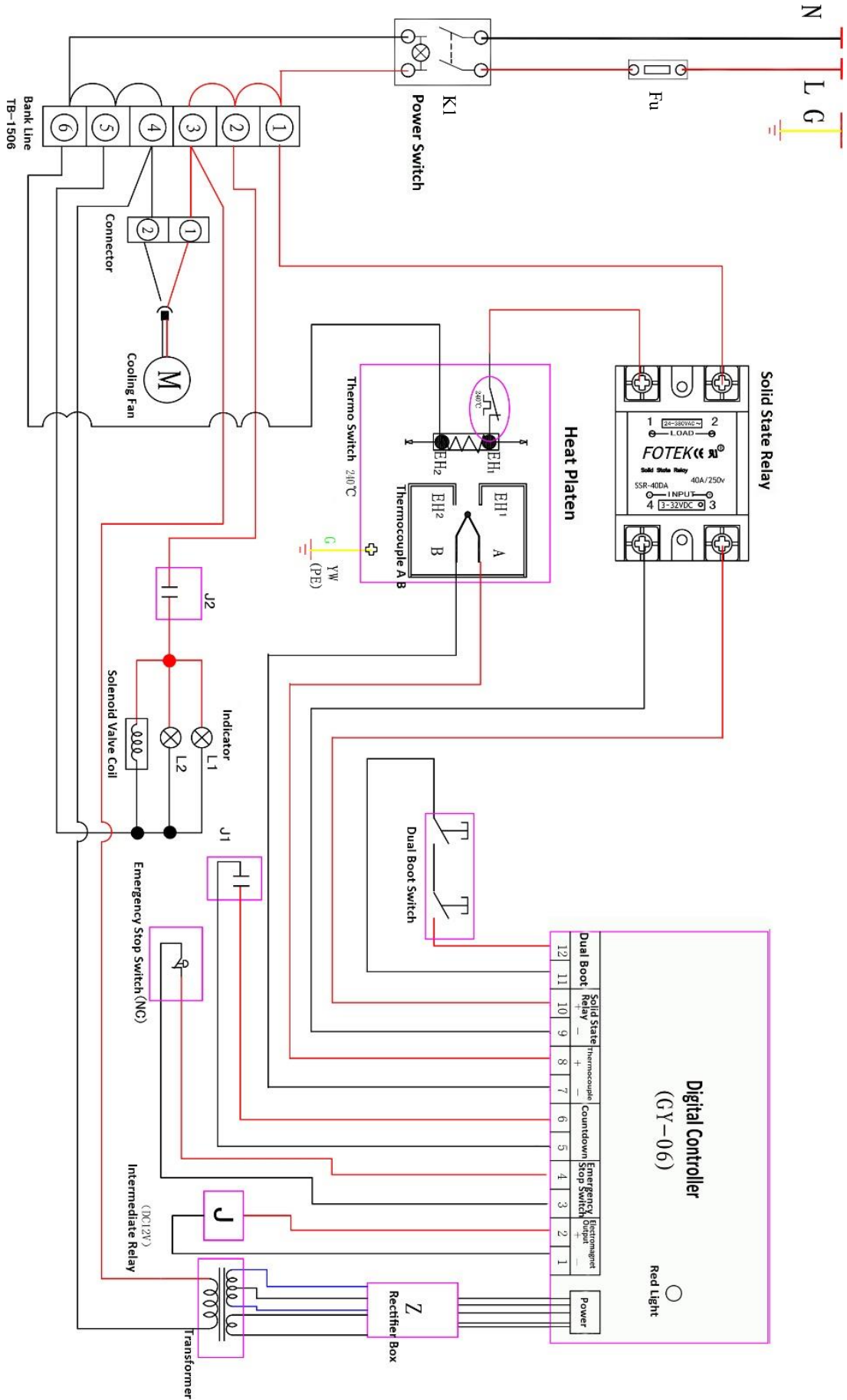


**\*Please Note:**

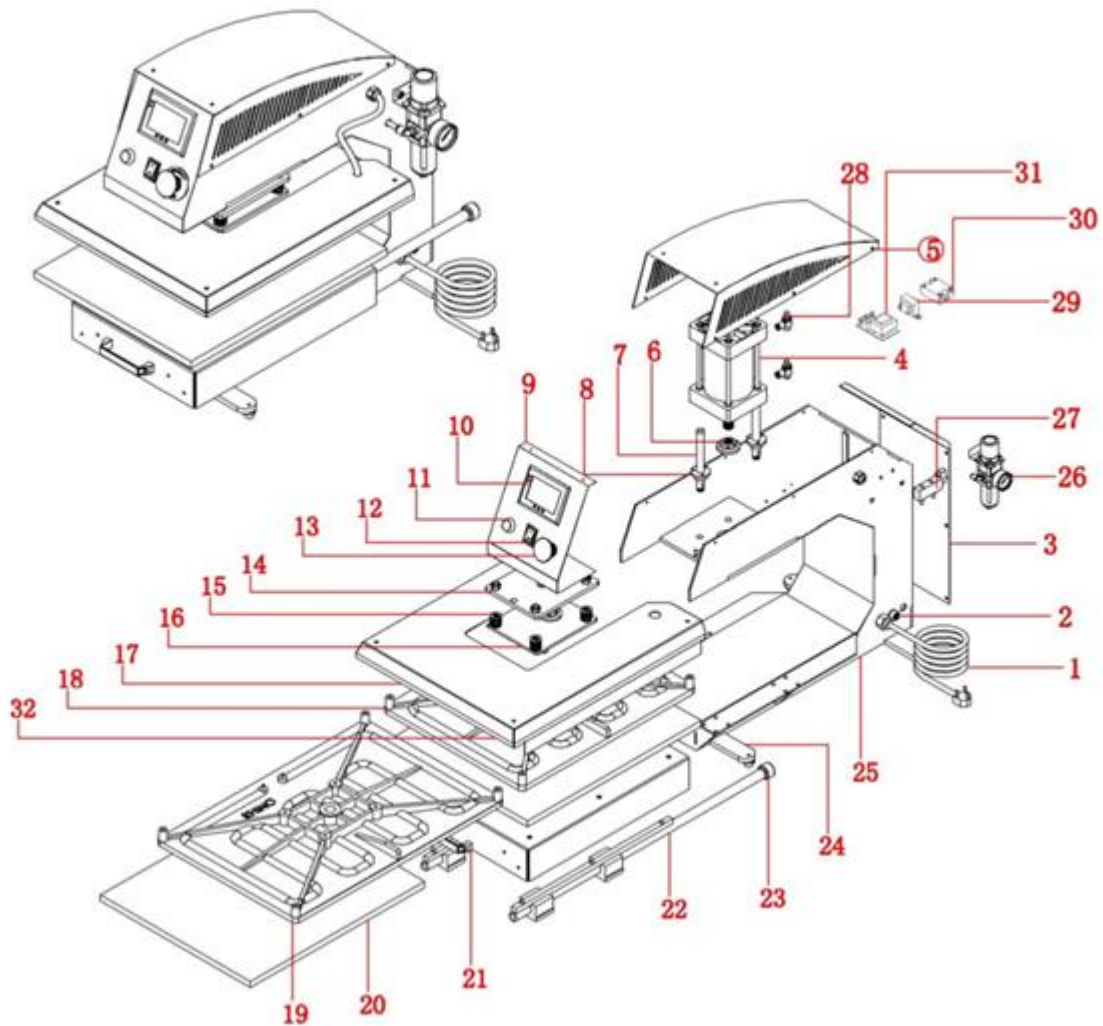
**The Digital Thermometer with external probe** is suitable for surface, air and immersion/penetration measurement, which is required for all Heat Presses Diect heat presses.

**Laser Thermometers only measure air surfaces** which can be misleading due to currents of hot air floating on the surface of the heating Element.

# VII. Electrical Diagram



## VIII. Exploded Diagram



| No. | Part Name                | Qty. |
|-----|--------------------------|------|
| 1   | Power Cord               | 1    |
| 2   | Fuse                     | 1    |
| 3   | Back Cover               | 1    |
| 4   | Air Cylinder             | 1    |
| 5   | Electronic Cover         | 1    |
| 6   | Lock Nut                 | 1    |
| 7   | Fixing Pillar            | 2    |
| 8   | Washer                   | 2    |
| 9   | Controller Cover         | 1    |
| 10  | GY-04 Digital Controller | 1    |
| 11  | Start Switch             | 1    |

|    |                                  |   |
|----|----------------------------------|---|
| 12 | Rocker Switch                    | 1 |
| 13 | Emergency Stop Button            | 1 |
| 14 | Adaptor Plate                    | 1 |
| 15 | Spring                           | 4 |
| 16 | Adaptor Plate                    | 1 |
| 17 | Antiscald protective metal cover | 1 |
| 18 | Heat Platen 40x50cm              | 1 |
| 19 | Heat Platen 40x60cm              | 1 |
| 20 | Print Bed                        | 1 |
| 21 | Slide Out Drawer Handle          | 1 |
| 22 | Slide Rail                       | 2 |
| 23 | Slide Rail Buffer                | 2 |
| 24 | Rubber Feet                      | 2 |
| 25 | Machine Frame                    | 1 |
| 26 | Air Valve                        | 1 |
| 27 | Electromagnet Valve              | 1 |
| 28 | Air Hose Connector               | 2 |
| 29 | Transformer                      | 1 |
| 30 | Solid-State Relay                | 1 |
| 31 | Electromagnetic Driver Board     | 1 |