

# MEM

## **OPERATING INSTRUCTIONS**

**for the heat press**

**MEM TZ-4050**

Congratulations on purchasing a MEM heat press!

Please read these operating instructions carefully so you can start production with your press without problems. Reproduction of these operating instructions in any form requires the written approval of MEM. We reserve all rights to change technical data and product features.

MEM does not assume any liability for direct or indirect damage resulting from use of this product.

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## Brief overview

### MEM TZ-4050 pneumatic four station heat press

The design of the MEM four station presses combines a heavy-duty solid industrial grade pressing framework with high quality electric components. This provides the operator with the best possible features and equipment needed for today's various heat transfer applications.

Using the MEM TZ-4050 four station heat press, all common heat transfer processes (flock, flex, sublimation, transfer, Inkjet- -flex etc.) can be conducted professionally and with highest productivity. The desired settings can be set easily with the temperature controller. The pneumatic pressure can be regulated smoothly with the air reducing valve. With the restriction valve on the solenoid valve, the press and lift speed could be adjusted.

### Short overview MEM TZ-4050 heat press

- Pneumatic four station transfer press for medium and large batches.
- Pressure balancing system on heat plate and bottom plate.
- Operates in automatic or manual modes.
- Adjustable air pressure by air reducing valve.
- CE certificated and RoHS certificated.
- Lifetime factory on-line service.

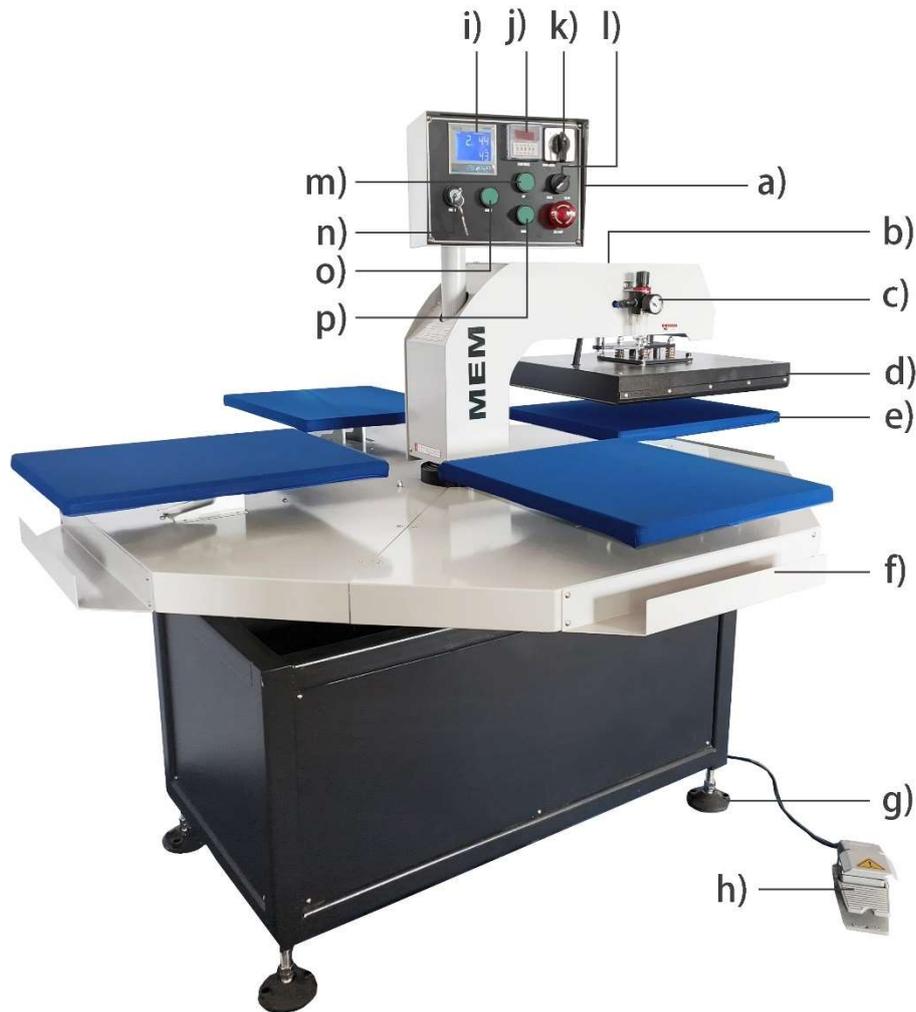
## Safety Precautions

Please read these instructions and safety precautions carefully before using your press for the first time!

- Never reach into the heat press with your hands when it is connected to the power supply, particularly when it is switched on and heated up – danger of severe burns!
- Do not open the cover or attempt to modify the machine yourself without instruction.
- In case you are requested by the MEM 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.
- Ensure that liquids and metal objects do not get into the inside of the heat press.
- Ensure that the power socket used is grounded. Note that it is only permissible to operate a heat press from a power socket protected by a ground fault protection switch.
- Disconnect machine from power outlet when not in use!
- Never operate the heat press within the reach of children and never leave the machine unsupervised when switched on.
- Ensure that the machine is used only in dry rooms.
- Pay attention that the used compressor is attuned to the air consumption and the pressure

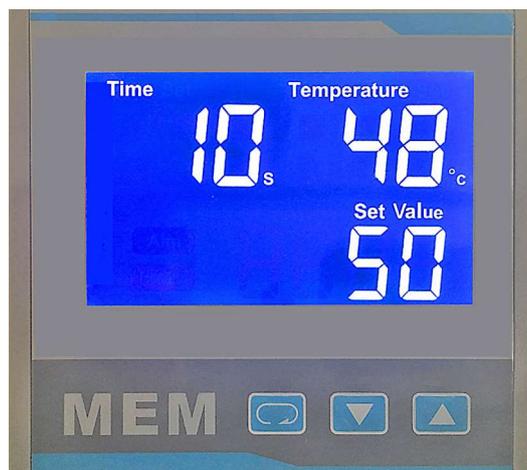
**If you cannot observe one or more of the safety precautions above, or if you are not sure whether all points are satisfied, please contact our Technical Support Department.**

## Machine description



- a. Control panel
- b. Solenoid valve (not shown)
- c. Air reducing valve
- d. Heat plate
- e. Platen
- f. Fabric holder
- g. Height adjustable foot
- h. Pedal
- i. Temperature controller
- j. Rotate timer
- k. Manual/Semi-auto/Auto switch
- l. Speed switch
- m. Heat plate lift button
- n. Power switch
- o. Rotate button
- p. Heat plate press button

# Controller



With the temperature controller, temperature (°C and °F) and pressing time can be adjusted. The Set Value are showing the setting value, the Temperature digits are showing the actual value. Counter (reset after power off) function that counts the number of transfers that have already been made during the current session could be enabled, contact MEM for counter function enable instruction.



Press and hold SET button to enter parameter setting interface, press and hold SET button to exit parameter setting interface.



Press down key to decrease the corresponding parameter value.



Press up key to increase the corresponding parameter value.  
 Press and hold up key to start self-tuning (°C or °F on the panel blinks.) Once the machine begins self-tuning, do not unplug or press any key until the self-tuning is done (°C or °F stop blinking). Before apply self-tuning, set temperature to normal working temperature and let the heat plate cool down to room temperature. Apply self-tuning when the machine could not control temperature properly. Self-tuning will change PID parameter automatically.

Do not change parameters except Pb and SL2 without our instruction.

Parameter code		Function
<b>Pb</b>	Pb	Temperature calibration: If measured temperature 1°C or 1°F lower than the showing temperature, decrease the value 1.
<b>SL2</b>	SL2	0: Celsius (°C) 1: Fahrenheit (°F)

# Operation

## Pneumatic connection

- TZ-4050 requires air compressor with minimum 800w (1 hp) and 30L (8 gallon) hold tank.
- Connect 5mm inner diameter (usually 8mm outer diameter) air hose to the machine.  
Charge the compressor to 0.6-0.7 Mpa, up to 0.8 Mpa (120 psi) if possible.
- Set the desired air pressure on the air reducing valve of the heat press by pulling up the cap at the top end and then turning it. After the pressure is set, push the cap back down. The set pressure should be lower than on the manometer of the compressor. Commonly used pressures are between 0.4 to 0.6 Mpa (60 to 90 psi).

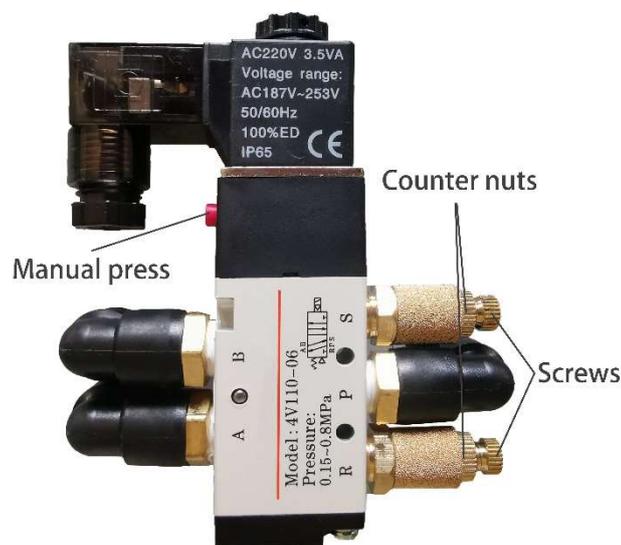
## Power supply

- Connect the heat press to 220V single phase electric wire.

## Operating

- Set the desired air pressure on the air reducing valve of the heat press by pulling up the cap at the top end and then turning it. After the pressure is set, push the cap back down.
- Rotate timer: Set the interval time, machine rotates on station after the timer count to zero.
- Manual mode (0): Machine is only controlled by the button on the panel.
- Semi auto mode: Press pedal, machine will rotate and press 1 cycle.
- Auto mode: Machine will press and rotate automatically.
- Speed switch: Switch to slow or fast rotate speed.
- By pressing the red emergency stop button, transfer process can be stopped at any time.

## Operation of solenoid valve

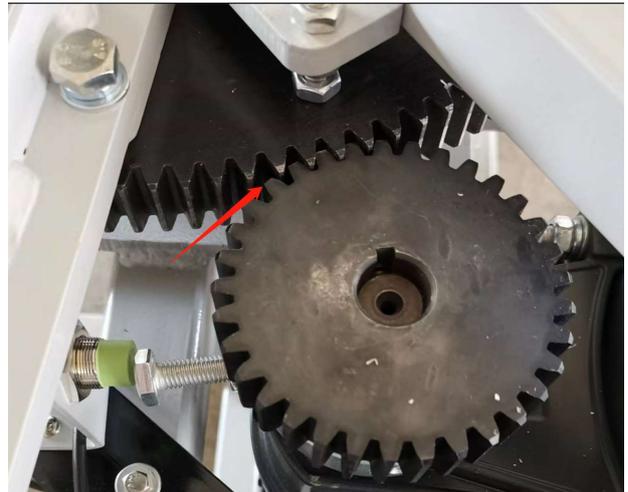


- On the side of the solenoid valve there are two silver/golden screws which restricting the air

- flow speed of the cylinder.
- If the screws are screwed out, it accelerates up/down process of the cylinder.
- When the screws are screwed in, it slows down up/down process of the cylinder
- Fix the respective setting with the corresponding counter nuts by tightening them by hand.

## Maintenance and cleaning

Apply lubricating grease oil (3 teaspoons) on the rotate gear every year.

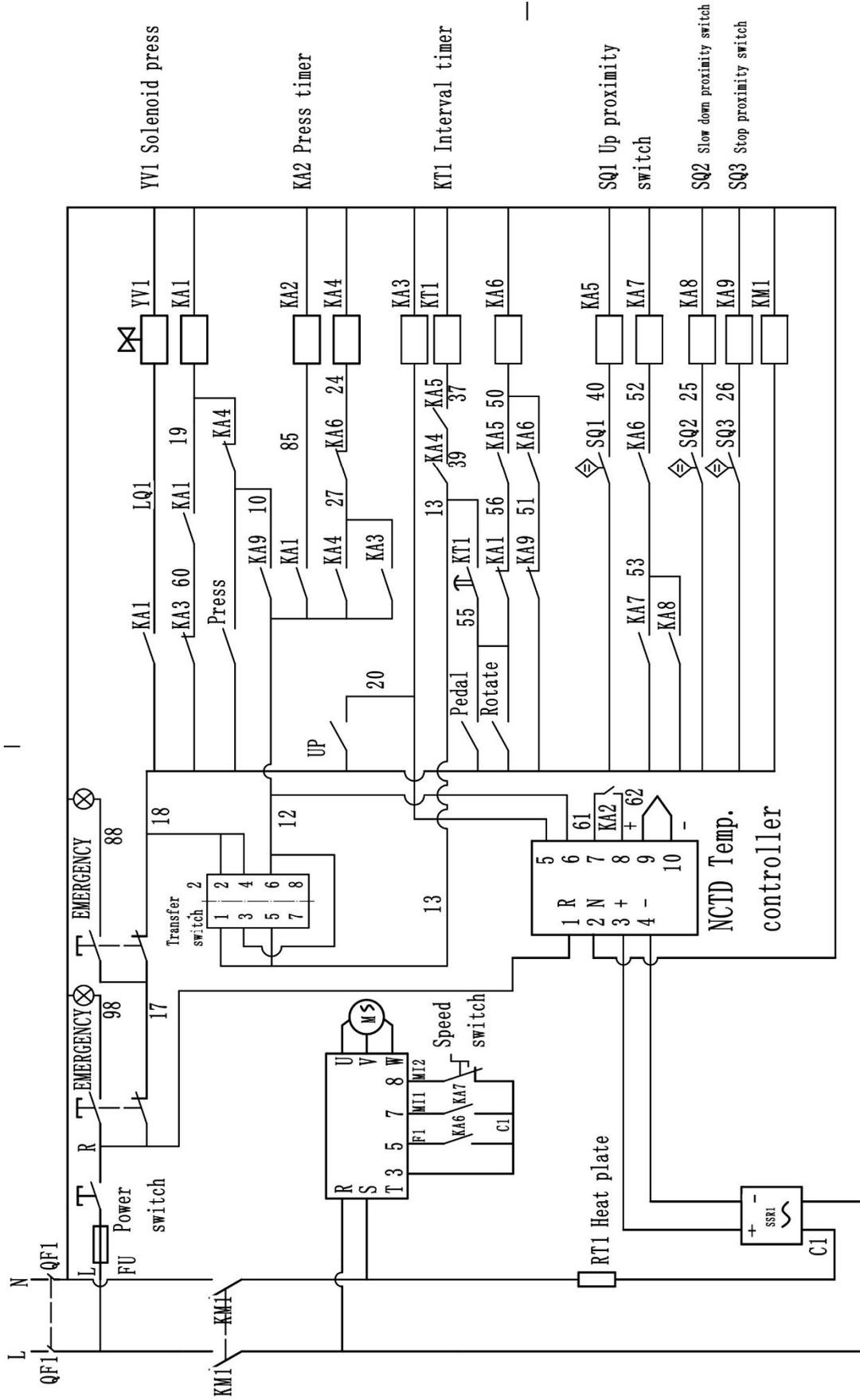


Clean the press regularly with a soft cloth and mild household cleaner to remove adhesive residues etc.

## Technical data

Model	TZ-4050
Voltage and power	220V (2700W) single phase
Time Range	0-999sec.
Max. Temp.	260°C / 500°F
Heat plate size	40x50cm (16"x20")
Dimensions(L*W*H)	1530*1530*1400mm (60"x60"x55")
Shipping Dimensions(L*W*H)	1500*1100*1400mm (59"x44"x56")
Shipping Weight	375kg (830lbs)
Max. press thickness	65mm

# Circuit diagram



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 C1 = GND = 3  
 F1 = M0 = 5  
 MI1 = M3 = 7  
 CMI2 = M4 = 8

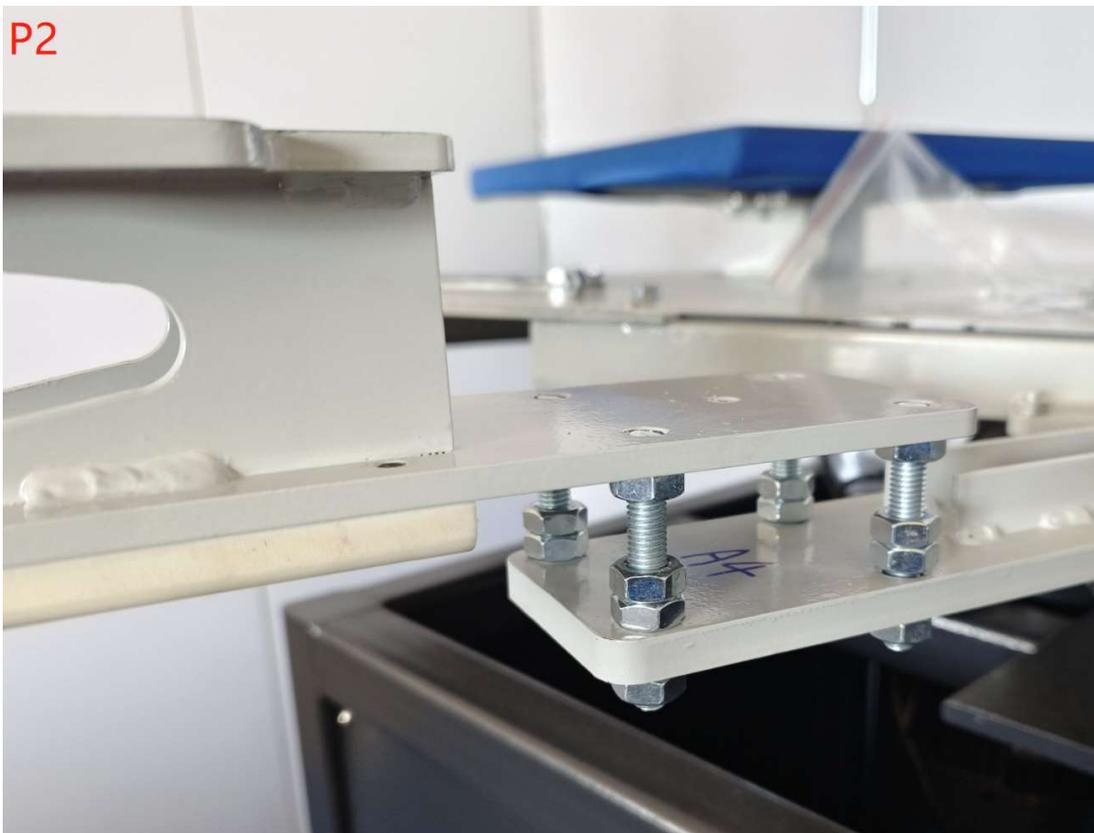
# Installation

P1



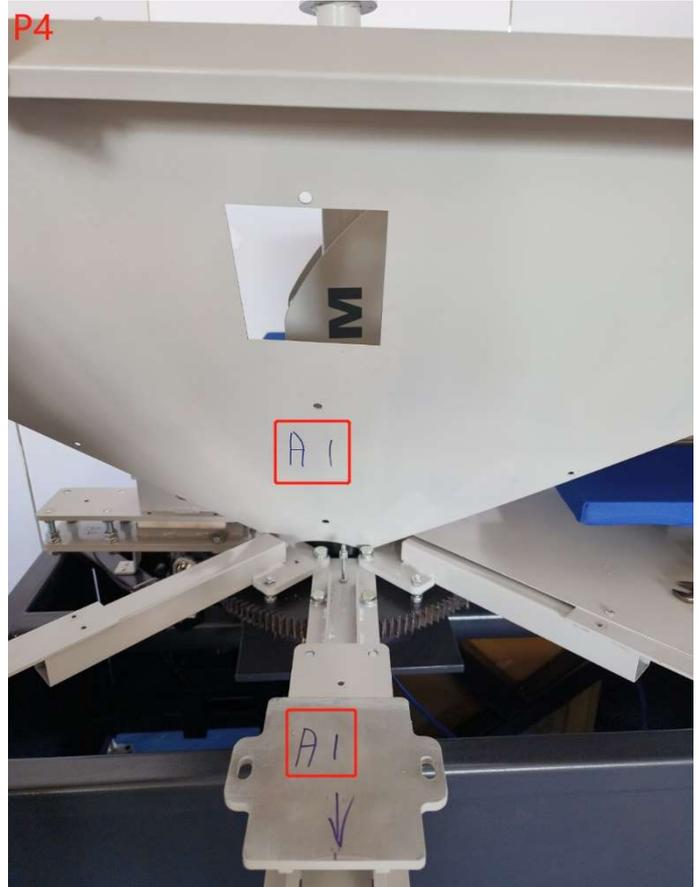
P1: Release the four nuts marked in red. Rotate the yellow part 180 degree and reinstall (shown as P2.)

P2

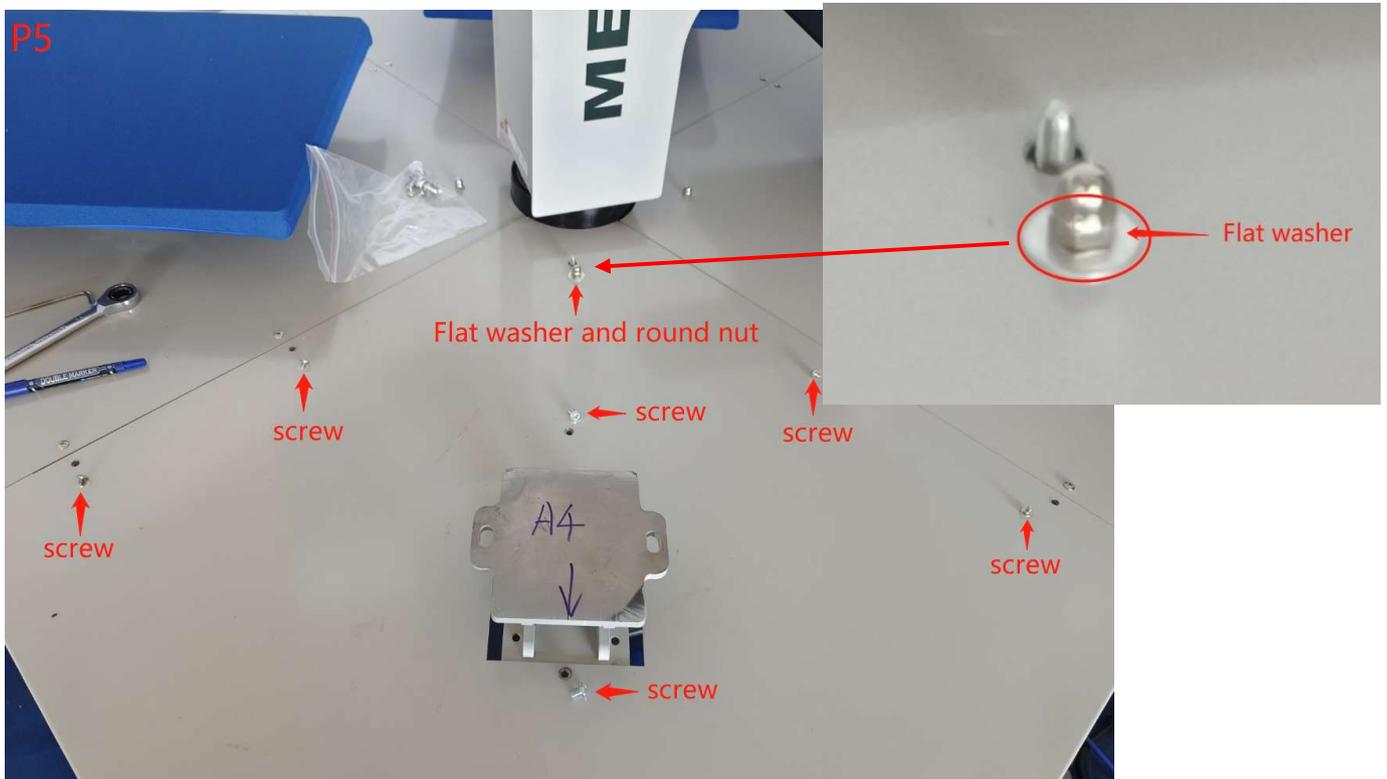




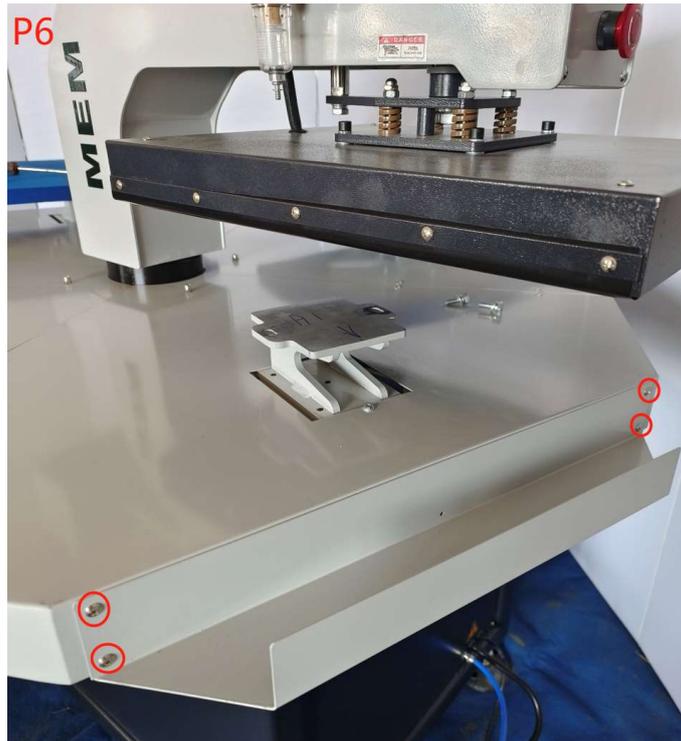
P3: Put a flat washer at the marked position.



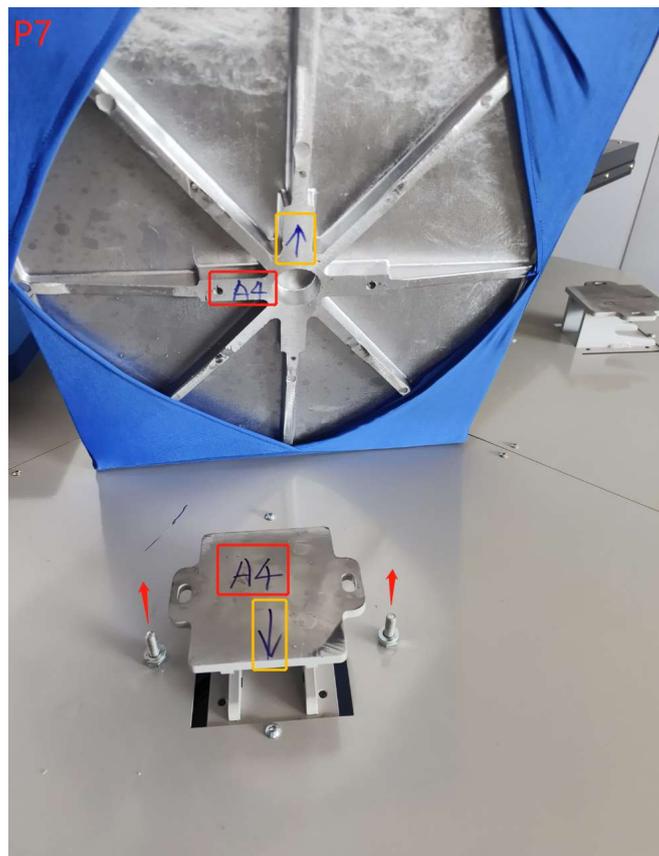
P4: Match the cover mark and base mark (A1 in the picture,) install the four covers.



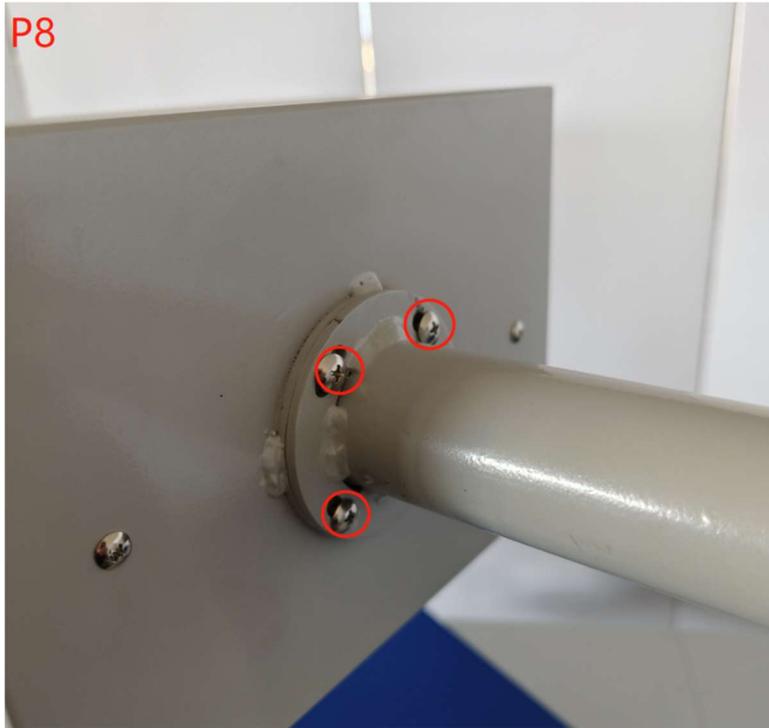
P5: Fix the four covers with screws as shown in the picture.



P6: Install the fabric tray (it is designed for long fabric press job, which can prevent the fabric from fall off, this part might not needed for regular t-shirt press)



P7: Install the platen, match the mark (A4-A4) and the direction. We pre-aligned the platen to make it parallel to the heat plate to ensure the best pressure distribution. Fix the platen with screw, spring washer and flat washer.



P8: Fix the control box with four screws.

# Statement of Conformity

## CE certification

We herewith declare that the product meets the provisions of the following EC Directives and Harmonized Standards:

Certificate Number: M.2020.206.C9752

- 2006/42/EC Machinery Directive
- 2014/35/EU Low Voltage Directive
- Related Standards: EN ISO 12100:2010, EN 60204-1:2018



## RoHS test

We herewith declare that the product conforms to RoHS Directive 2011/65/EU Annex II amending Annex (EU)2015/863 and amending Annex (EU)2017/2102.

Report No.: B-R2203A0560

