

# CALCA Heat Press Machine User Manual

16in x 20in / Double Station



HTM-CALCA-TQ4050-US

Congratulations on purchasing a CALCA heat press!

Please read these operating instructions carefully so you can start production with your press without problems. We reserve all rights to change technical data and product features.



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#### **SAFETY INSTRUCTIONS**

When using your heat press, basic precautions should always be followed, including the following:

- 1. Read all instructions.
- 2. Use heat press only for its intended use.
- 3. To reduce the risk of electric shock, do not immerse the heat press in water or other liquids.
- 4. Never pull cord to disconnect from outlet, instead grasp plug and pull to disconnect.
- 5. Make sure the power socket in use is properly grounded. Note that it is only allowed to operate a heat press from a power socket protected by a ground fault protection switch.
- 6. Disconnect the machine from the power outlet when it is not in use.
- 7. Pay attention to ensuring that the used compressor is adjusted to match the air consumption and pressure.
- 8. Do not allow cord to touch hot surfaces, allow heat press to cool completely before storing.
- Do not operate heat press with a damaged cord or if the equipment has been dropped or damaged.
- 10. To reduce the risk of electric shock, do not disassemble or attempt to repair the heat press. Take it to a qualified service person for examination and repair. Incorrect assembly or repair could increase the risk of fire, electric shock, or injury to persons when the equipment is used.
- 11. Power supply cord mustbe disconnected before cleaning or servicing press.
- 12. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- 13. Close supervision is necessary for any heat press being used by or near children. Do not leave equipment unattended while connected.
- 14. To avoid burns, do not touch hot metal parts or the heated platen during use.



- 15. To reduce the likelihood of circuit overload, do not operate other high voltage equipment on the same circuit.
- 16. If an extension cord is necessary, then a 20-amperage rated cord should be used. Cords rated for less amperage may overheat. Care should be taken to arrange the cord so that it cannot be pulled or tripped over.
- 17. Keep hands clear of the upper heat press platen during lock down as the pressure may cause injury.
- 18. Heat press should be placed on a sturdy, suitable stand at least 41"L x 27"W x 46"H.
- 19. The work area must be kept clean, tidy, and free of obstructions.





#### **TECHNOLOGY DATE**

Item Code: HTM-TQ4050-US

Time Range: 0-999sec

Max. Heating Temperature: 500°F / 260°C

Heat Plate Size: 16in x 20in (40cm x 50cm)

Machine Size: 41in x 28in x 46in (105cm x 69cm x 117cm)

Machine Weight: 320lbs (145kg)

**Requires an air compressor (Not included)** 

#### **Machine Features**

Pneumatic double station transfer press for medium and large batches.

Pressure balancing system on heat platen and bottom platen.

Operates in semi-automatic or manual modes.

Adjustable air pressure by air reducing valve with water separator.

Two-hand operation for safety use.

CE / RoHS certificated.

#### **Requiements:**

> Voltage: AC110V±10%, 60Hz, 1 phase

> Current: 17A

> Power: 1800W

#### **Remarks:**

The access power must be consistent with the rated power of the equipment, and the guage number of the access power supply line must meet the rated requirements.

Please only use the power type identified on the machine's label. Do not use a damaged or broken power cord. If you use an additional power cord, remember that the total amperes of the device inserted in the additional power cord should not exceed the rated ampere of the power supply. in addition please remember that the total ampere of all devices inserted wall outlet should not exceed the amp rating of the wall outlet.



#### **MACHINE VIEW**



- A. Air reducing valve
- B. Print buttons on both sides (Manual mode)
- C. Fuse
- D. Control panel
- E. Power ON / OFF switch
- F. Emergency stop button
- G. Handle
- H. Manual / semi-automatic switch button (not shown)
- I. Heat platen
- J. Bottom platen
- K. Bottom pressure balancing system
- L. Stand
- M. Leveler



#### **CONTROL PANEL**



Displays the current application temperature and time.

The 'Set Value' shows the setting value, the 'Temperature' digits show the actual value, the 'Time' digits shows 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 CALCA for counter function enable instruction.



#### **SET button**

Press and hold----enter or exit parameter (Temperature or Time) setting interface.



#### **Down Arrow**

Decrease the corresponding parameter value.



#### **UP Arrow**

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.

Paramete	er code	Function
Pb	Pb	Temperature calibration: If measured temperature 1°C or 1°F lower than the showing temperature, decrease the value 1.
<b>5L2</b>	SL2	0: Celsius (°C) 1: Fahrenheit (°F)

#### **OPERATION**

#### **Pneumatic connection (Air compressor requirements)**

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.

- > With minimum 1000W (1.3hp) and 40L (11 gallon) hold tank.
- > Connects the press machine with an air hose of 3/16 inch (5mm) inner diameter, 5/16 inch (8mm) outer diameter.
- > Commonly used pressures range from 0.4 to 0.6 MPa (60 to 90 psi).
- > Charge the compressor to 0.6-0.7 Mpa, up to 0.8 Mpa (120 psi) if possible.



#### **Power supply connection**

- > Insert power cord into IEC inlet located on the side of press.
- > Connect the power cord into a properly grounded electrical outlet with a sufficient amperage rating.



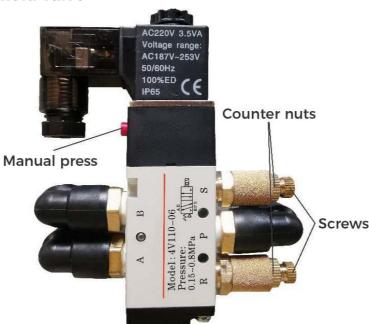


- > Circuits that have less than 17 amps, or have other high demand equipment or appliances (especially more than one heat press) plugged in, should not be used.
- > Switch on the press machine with the red power switch.

#### **Operating transfers**

- > Set the desired air pressure on the air reducing valve of the heat press by pulling up the cap at the top and then turning it. Once the pressure is set, push the cap back down.
- > Move the press head to the end position on the right or left.
- > Manual mode: Slide the upper heat platen over the garment and design. Press both print buttons located on the side of the head to activate the press.
- > **Semi-auto mode**: The heat platen will press automatically when the head reaches either end.
- > After the timer counts down to zero, the heat platen lifts automatically.
- > By pressing the red emergency stop button, transfer process can be stopped at any time.

#### **Operation of solenoid valve**



- > There are two silver/golden screws on the side of the solenoid valve to control the cylinder's air flow speed.
- > Unscrewing them, speeds up the cylinder's up/down process.





- > When the screws are screwed in, it slows down the up/down process of the cylinder.
- > Secure the setting with corresponding locknuts by hand tightening.

#### **MAINTENANCE**

#### Warning

Before making repairs, be sure ON / OFF switch is OFF and machine is unplugged! To prevent posible electrical shock, unplug the machine before removing cover to service.

Consult Technical Support before carrying out any maintenance work.

#### Lubrication

Every 6 months add one to two drops of 3-in-1 oil (available at hardware stores), to the joints of all moving parts.

#### **Cleaning heat platen**

Clean the heat platen with steel wool, scrubbing aluminum sponge, or fine wire brush.



## **ELECTRICAL SCHEMATIC** Fuse Manual/Semi-auto Power switch Heat plate Start **EMSTOP** Solid State Start Thermo Relay Power switch light Emergency Stop SSR-20 Micro Switch L Micro Switch R Solenoid Valve LQ1 12 TO П 00 NCTD-2419V-SV Temperature Controller



#### WARRANTY CARD =

MODEL	LOT#	
BUYER	DATE	
SELLER	TEL	

#### **Notes**

- i. The warranty card should be filled by seller and kept by buyer. Alterations are prohibited.
- ii. Our main objective is to support all our customers, who can manage their heat transfer activities without interruption. So we offers FREE SPARE PARTS with a quantitative order and the following guarantee:
  - Free lifetime technical support on all heat press machines.
  - · One-year warranty (Heating plate included).
- iii. No free repair is available for any damages caused by the improper use.