

INSTALLATION SECTION

3-CPU



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INSTALLATION

UNCRATING, PLACEMENT & SET-UP

1. Place the crated machine near the area where the unit will be installed.
2. Inspect the floor where the press will be placed. The floor should be smooth, level and free of debris. Set the machine in place. If the floor is uneven, level the press by placing tarpaper strips under the base of the machine at the low places. It is not necessary to bolt the frame to the floor, but it is important to have the machine level.
3. After the machine is set in place, remove all red shipping brackets (see Figure 1).



Figure 1 - Shipping Brackets

4. The unloading rod for the automatic unloader is in the control box. The mending sort (optional) is secured to the floor of the packing crate. Remove and place these parts in a convenient location for installation.
5. For shipment, the automatic unloader has been removed and secured to the machine crate with brackets. Remove and discard brackets. The support brace for the automatic unloader is on the floor of the packing crate.

- Carefully raise the unloader to a vertical position, then replace on the machine and tighten the three (3) bolts as indicated in Figure 2. Refer to Figure 5 for left or right hand positioning of the unloader. To change the unloader orientation, refer to **“Changing Unloader Direction”** later in the installation instructions.

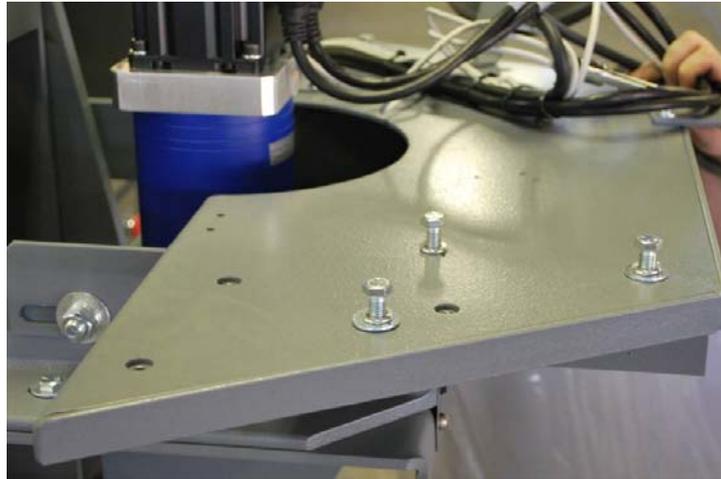


Figure 2 - Unloader Hole Pattern

When the unloader is in the correct position (right hand or left hand), install the support brace in the position indicated. Holes have been pre-located.

- Attach the unloader rod with the two set screws as indicated in (Figure 4). Tighten setscrews.



Figure 3 - Unloader Rod Mount Side View

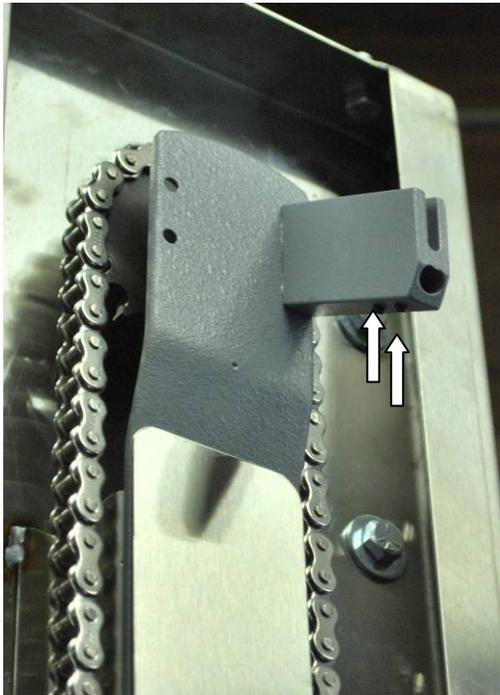


Figure 4 - Unloader Rod Mount Front View

8. Remove shipping covers from all three (3) mannequins.
9. Connect utilities (refer to "**Supply Connections**").

CHANGING UNLOADER DIRECTION

(Refer to unloader drawings in the "**Parts Diagram**" section.)

The automatic unloader can be changed to right-hand unloading or left-hand unloading in a few simple steps.

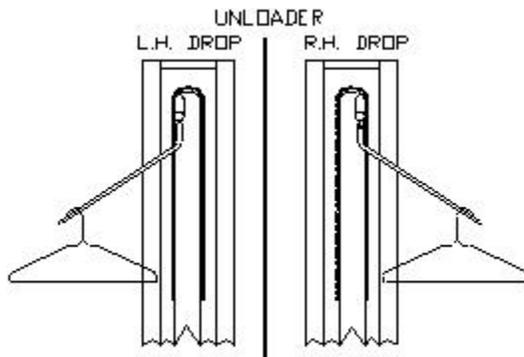


Figure 5

1. Remove center shield (cover plate).
2. Remove mounting plate with unloading rail.
3. Remove unloading rail from mounting plate.
4. Re-install unloading rail on opposite side of the mounting plate.
5. Remount unloading rail plate onto automatic unloader. The rail should now be on the opposite side (Figure 5).
6. Replace center plate.
7. Hanger unloader finger: Place a hanger in the mannequin at the unload position. Grasp the hanger unloader finger and rotate the unloader chain until the unloading finger is positioned just above the hanger hook. At that position, loosen set screw holding the unloading finger.
8. Set the unloading finger so the end tilts upwards. This will ensure hangers to slide back on the finger and against the unloader.
9. To reverse unloader chain direction of travel, follow the instructions on the wiring diagram found in the Maintenance Section of this manual.
10. Re-align the unloader assembly so that the unloader finger will match up to the hanger being held in the hanger slot of the mannequin assembly. To re-align the assembly, the three (3) bolts holding the base of the unloader to the top of the shirt press must be removed and the base repositioned to the second set of mounting holes, see Figure 6. Use caution while repositioning the unloader making sure to support it adequately to prevent falling. Reinstall the mounting bolts finger tight, place a hanger in the hanger slot, then, pivot the unloader assembly so the unloader finger will line up with the center of the hanger hook. Tighten the three (3) bolts.

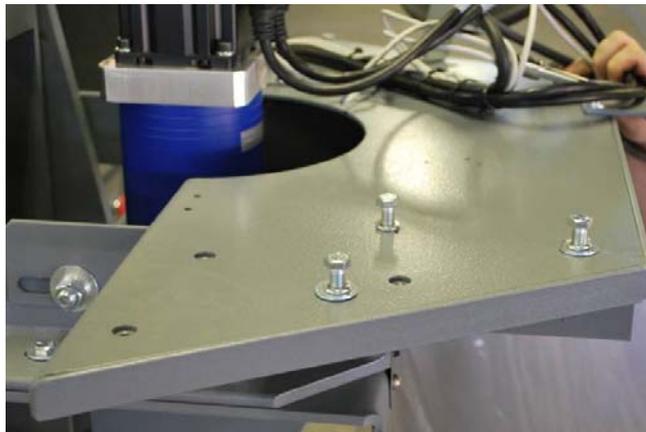


Figure 6 - Bolts Showing Right-Hand Unloader Position

Conversion is now complete.

Verify unloader operation. (See “**OPERATIONS**” section of this manual for details)

If you have any questions concerning this conversion please call Colmac Industries service department.

INSTALLING THE INTERLOCK OPERATING HANDLE

The interlock operator handle has been removed from the electrical control box door at the factory prior to shipping. The handle is located inside the control box for shipping.

To reassemble and install:

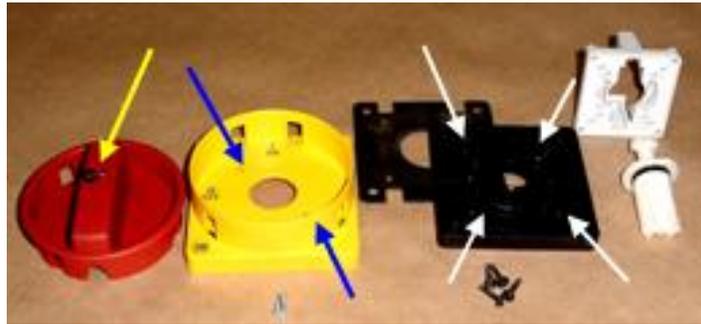


Figure 7 - Interlock Disassembled

1. Remove center screw (yellow arrow) allowing operating handle to be removed.
2. Remove two (2) screws (blue arrows) allowing “On-Off” lock-out housing to be separated from backing plate.
3. Remove four (4) screws (white arrows) allowing disassembly of backing plate, gasket and inner mounting plate.
4. Sandwich the control box door between the inner mounting plate on the inside of the control box door (Figure 8) and the backing plate with gasket on the outside of the door (Figure 9). Both have stamped labels indicating “top” to insure correct alignment.

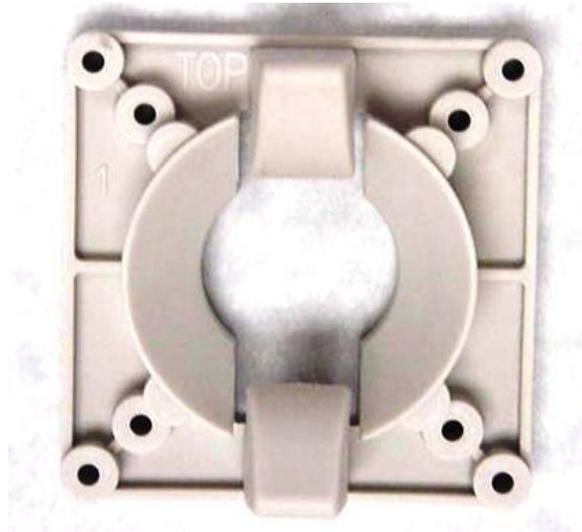


Figure 8 - Inner Mounting Plate

5. Attach “On-Off” lock-out housing and operating handle (Figure 10 and Figure 11).

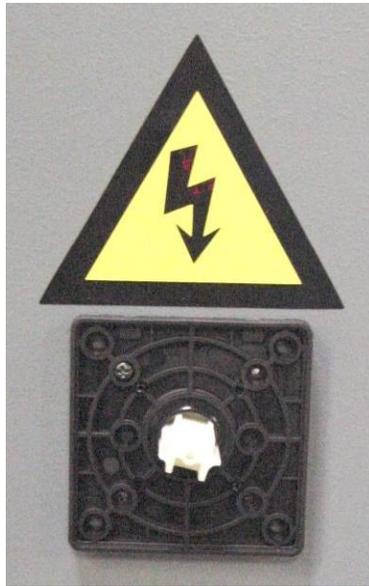


Figure 9 - Backing Plate (Gasket not shown under Backing Plate)

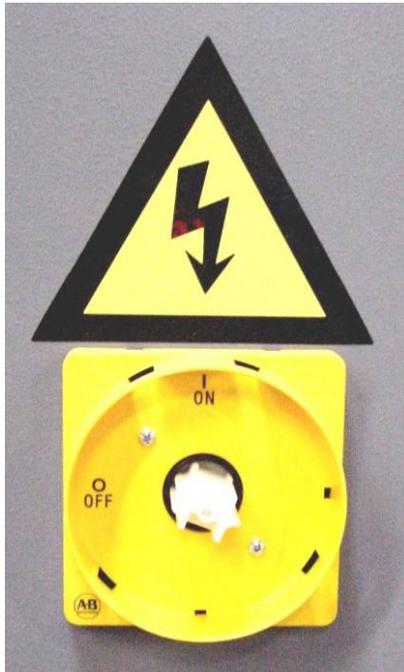


Figure 10 - Lock-Out Housing



Figure 11 - Operating Handle

6. Close the door and verify interlock operation.

SUPPLY CONNECTIONS

During the winter season the factory will run anti-freeze through the steam system and then blow it out to prevent frozen pipes in shipment. Before operating, open traps and purge, and also, check solenoid steam valves to be sure they are not stuck.

STEAM

To insure an adequate supply of steam to the press, the steam line should be 1-1/2" (38mm) or larger. A smaller size line will compromise the performance of the press. Be sure that a strainer is installed in the steam line near the machine and that the steam lines are insulated to prevent heat loss and possible injuries to personnel. A shut-off valve should be installed at the machine, to turn steam off if necessary.

PROPER STEAM HOOK-UP

The steam and return system connections are very important. Poor steam quality or incorrect connections directly affect its performance. (Figure 12).

- 1** To insure adequate steam supply, the steam line should be 1-1/2" (38mm) or larger and the return line should be 3/4" (19mm). The factory recommends the larger supply sizes to compensate for line loss. Since the machine is equipped with steam traps, no additional traps are required. Never put one trap in line with another, as the traps will no longer function. Be sure to check all steam connections for leaks. A strainer should be put into the steam line. All steam lines should be insulated to prevent loss of heat and possible injury to personnel.
- 2** **Supply Line:** Connect the steam line to the top of the steam headers as shown in Figure 12 to insure a clean, dry steam supply.
- 3** **Shut-off valves** installed ahead of the union and strainer on the "steam-in" and "steam-out" lines and between the union and return header on the "Main Header Trap System" (8), will simplify shut-off for repair and maintenance. "Ball" or "Gate" type valves are recommended for maximum flow. Shut-off valves need to be in the "ON" position during machine operation.
- 4** **Unions** placed between the shut-off valve and the machine will simplify hook-up and disconnection between the steam supply and the machine.
- 5** The **strainer** is important to insure that the steam is free of foreign materials that could foul electric valves, traps and other components in the steam system of the machine.

- 6 **Condensate Return System:** Connect the condensate, return pipe to the top of the return header to prevent foreign material from being drained back into the return system of the machine.

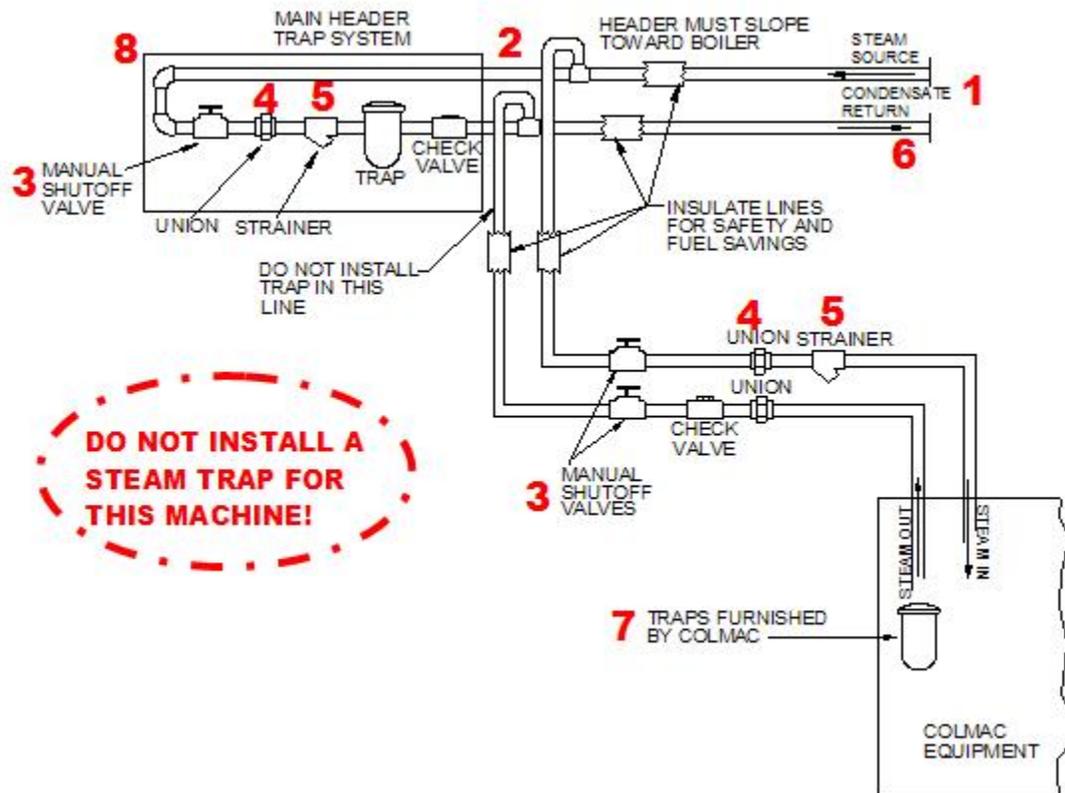


Figure 12 - Proper Steam Plumbing Example

- 7 **Do not install a steam trap for this machine.** Your press already has this part installed as part of the return system. If a trap is installed outside the machine, the steam and return systems will not function properly.
- 8 To assure clean, unsaturated steam to your equipment, the main steam header(s) should be trapped. This will help prevent condensate in the steam lines and increase the efficiency of the steam-heated equipment.

CONDENSATE RETURN LINE

The return line should be 3/4" (19mm) or larger to insure a fast, even removal of the condensate from the press. The return line should have a check valve and a shut-off valve installed close to the machine. Traps are installed in the press. Do not install any additional traps in the return line. This would only cause all the traps to malfunction. The condensate return line should be insulated to conserve heat and prevent possible injury to personnel.

AIR

Air should be supplied by a 3/4" (19mm) or larger line to insure an ample volume for proper operation of the machine. It is recommended that a 3-way plug type valve be installed at the machine for quick shut-off and exhausting of the air on the machine. The air supplied to the machine should be at 85psi (5.8atm) to 100psi (6.8atm). The airflow and pressure should remain reasonably constant. Too much fluctuation of air pressure will effect the operation of the machine.

Steps should be taken to insure the air is clean and dry. Dirt and moisture shorten the life of the air system components and can cause valve and cylinder problems. Oil level and moisture traps of the incoming air supply should be checked daily.

ELECTRICAL

Check to be sure that the electrical supply is the same as that required by the machine. Connect the main power supply to the control box. A fused disconnect switch should be placed between the main power supply and the machine.

VERIFY ROTATION DIRECTION OF MOTORS

1. Turn on main steam and air supply valves. Check for leaks in each system.
2. Remove the upper side panel behind the control box so that the main blower is visible.
3. **To start up the press, refer to “TURNING ON THE PRESS” located in the operations section of this manual.**

- Once the press is fully started, navigate to the “Testline” screen on the touch screen. Press the “Main Blower” power “On/Off” (Figure 13). To enter the “Testline” screen, the user name and password are 4505.

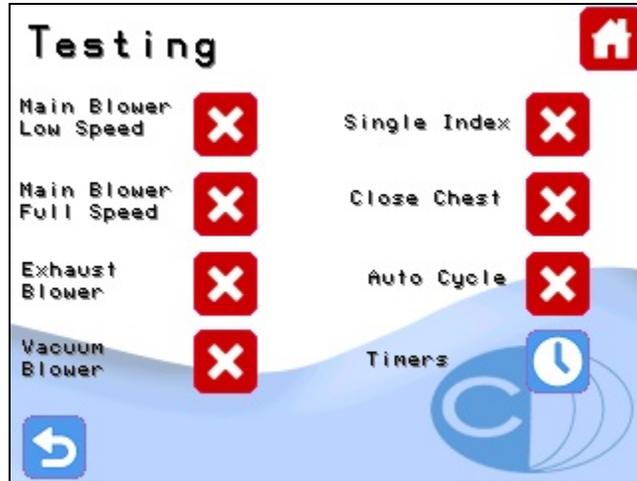


Figure 13 - Testline Screen

- Carefully observe the rotational direction of the main blower. The blower wheel must rotate clockwise as viewed from the panel behind the control box removed in step 2. There is a red arrow painted on the blower motor indicating the correct direction of rotation (Figure 14).



Figure 14 - Main Blower Motor with Direction Indicator

If it does not rotate in the correct direction, the incoming power wiring must be changed in order to change the rotation of all three-phase motors in the machine.

- a. Turn the main disconnect off (Figure 19 [6]).
- b. Use a Lock Out-Tag Out procedure, shut off the incoming power to the press at the source.
- c. Reverse any two of the three incoming supply wires at the top of the main disconnect (Figure 15)

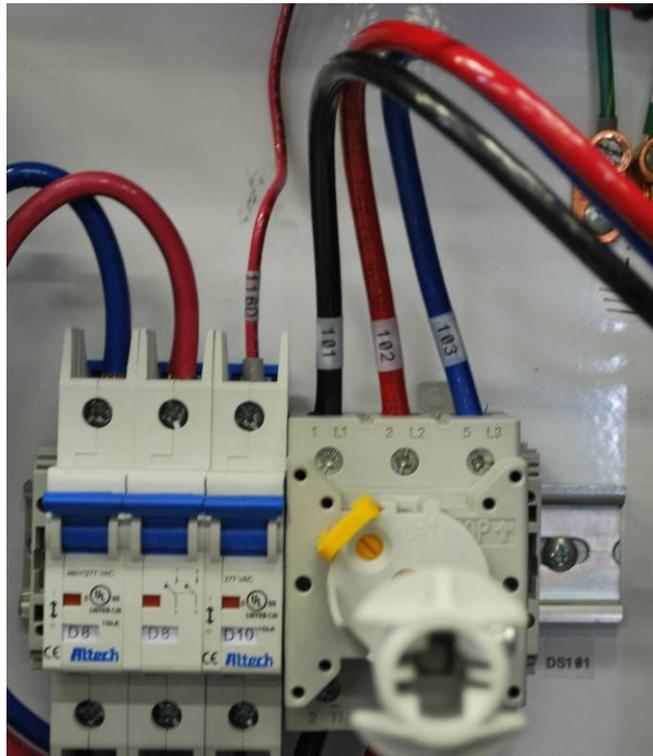


Figure 15 - Main Disconnect Wiring

- d. Return to Step 3 above and recheck blower rotation

If you have any questions concerning this procedure, contact Colmac Industries service department.

6. Refer to the operation section of this manual to cycle the press.

ALIGN PROXIMITY SWITCHES

All proximity switches are aligned and adjusted prior to shipment of the press, however it is possible for switches to fall out of alignment during shipment and installation.

Verify the alignment of the “**TURNTABLE PROX**” with each of the three “flags” on the underside of the turntable. One “flag” should line up with the proximity switch when a mannequin is in pressing position. When properly aligned, the indicator lights on the proximity switch will illuminate. (Control power must be on)

Any misalignment can cause a malfunction and possibly damage the pressing mechanism or mannequin.

See Figure 16 below for an example of proper alignment.

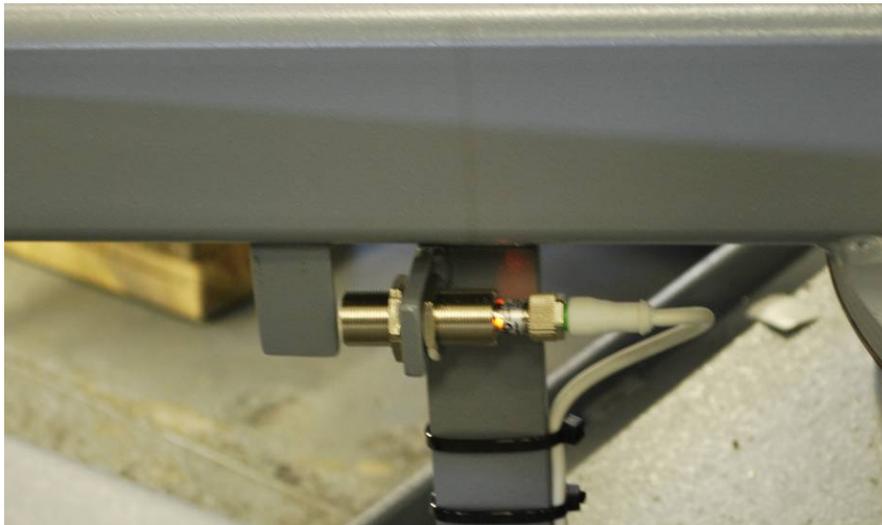


Figure 16 - Turntable Proximity Switch Alignment

Verify the position of the “**PRESS ARM PROX**” with the chest pressing arms. The press arm and proximity switch are aligned properly if the indicator lights on the switch illuminate when the press chests are in the fully open position. The fully open position is the default position for the chest when compressed air is supplied to the machine.

See Figure 17 below for an example of proper alignment.



Figure 17 - Press Arm Proximity Switch Alignment