



INTELLIPRESS™ BENCH TOP PRESS

User Manual

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WARNING

Only authorized personnel are permitted to disassemble the electric bench top press.

WARRANTY AND LIMITATIONS OF LIABILITY

For warranty information, visit www.bimba.com.

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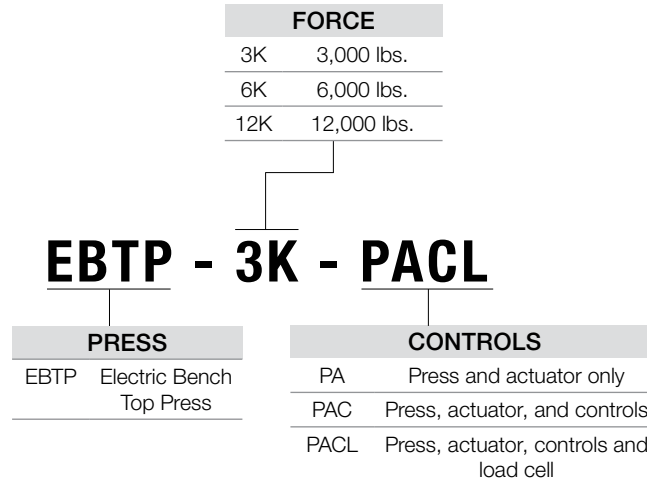
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GENERAL INFORMATION

ORDERING CODES





SECTION 1: STARTUP INSTRUCTIONS

This section will illustrate how to initialize the non-load cell enabled version of the IntelliPress™ Electric Bench Top Press beginning at power-up.

SECTION 1.1: INITIAL LOGIN

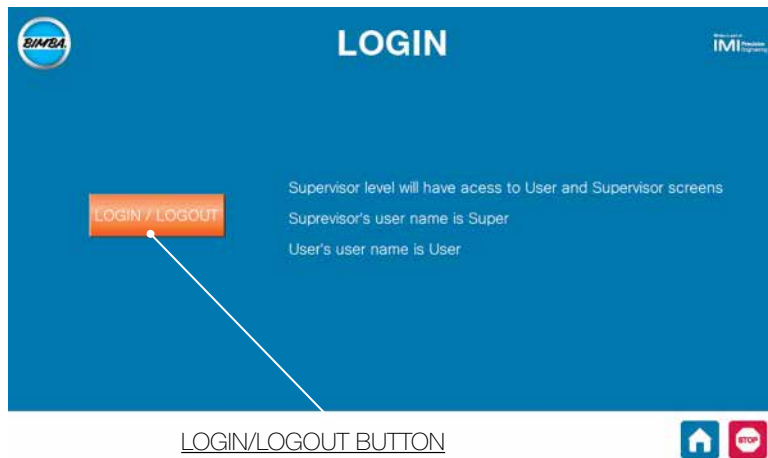
At Power-up, the following screen below will be displayed. Select the LOGIN/LOGOUT button.

See Figure 1: Power Up Screen



Selecting the LOGIN/LOGOUT button will present the following screen pictured below. Select the LOGIN/LOGOUT button again.

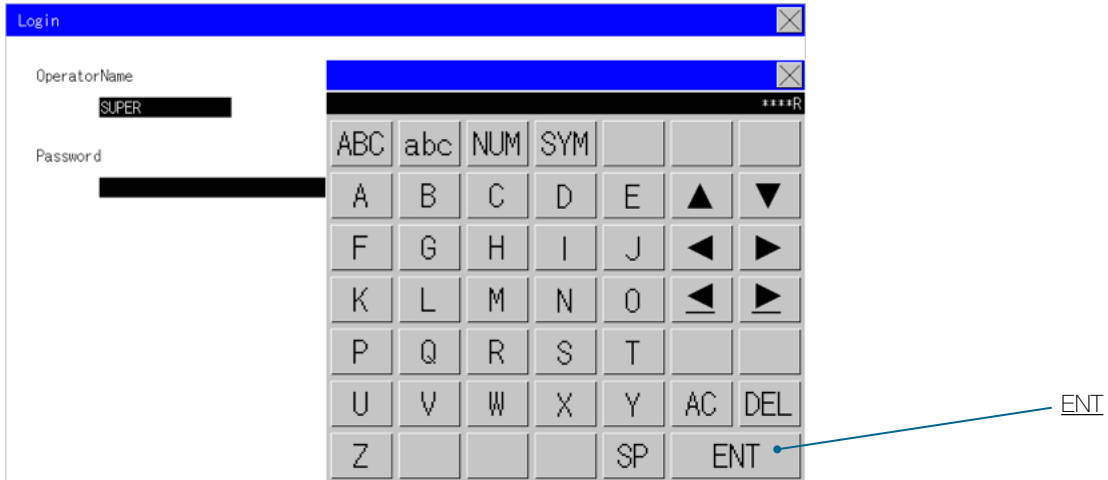
See Figure 2: Login Screen





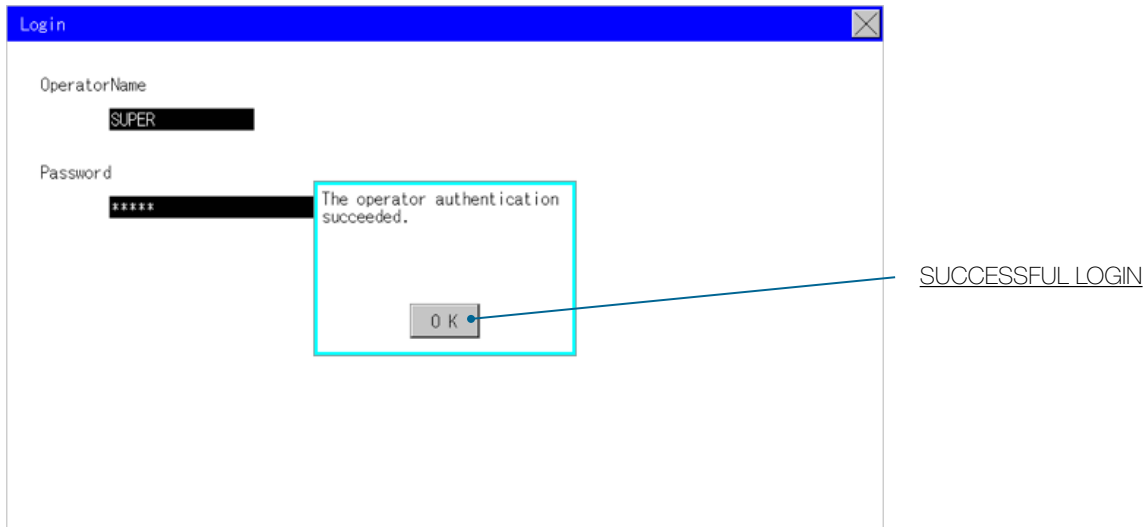
At the LOGIN screen, enter “SUPER” for both the Operator Name and Password and then press “ENT”

See Figure 3: Login Credentials Screen



Upon successful login, select “OK”. This will return you to the LOGIN screen with tabs populated at the bottom of the screen.

See Figure 4: Successful Login Screen





The following tabs on the screen below provide the following corresponding actions/abilities that are available to the supervisor. See Figure 5.

Auto Run

- Select recipes
- Return to home position
- Review operational status
- View Run Count
- Taskbar: Reset Run Count, Error Reset, return to home screen, and cycle stop

Manual Run

- Set parameters for manual operations
- Jog+ / Jog-
- Advance to home, initial, approach, and full down positions
- Taskbar: reset errors, return to home screen and cycle stop

Recipe Settings

- Call up and adjust recipe parameters
- Taskbar: reset errors, return to home screen, and cycle stop

User Setup

- Modify user access settings
- Change administrator password

See Figure 5: Logged-In Screen





SECTION 1.2: INITIAL PARAMETER SETTING - JOG

Press operations are made simpler by first establishing Jog parameters. To configure the Jog parameters follow the steps below:

- From the Logged-in screen (Figure 5 pictured on page 7), select the Recipe Settings tab.
- Select the Jog button located in the Task Bar section of the screen (Figure 6).
- Press on the Jog Speed Value (0.00 in this case) and enter the jog speed values in units in mm/sec. A maximum jog speed value of 50mm/sec is recommended.
 - » Jog+ will extend the press ram DOWN.
 - » Jog- will extend the press ram UP.
- Press the Home icon located in the taskbar to return to the Logged in screen.

See Figure 6: Jog Speed Selection





SECTION 1.3: DEFINITIONS AND PARAMETER SETTING - MANUAL RUN

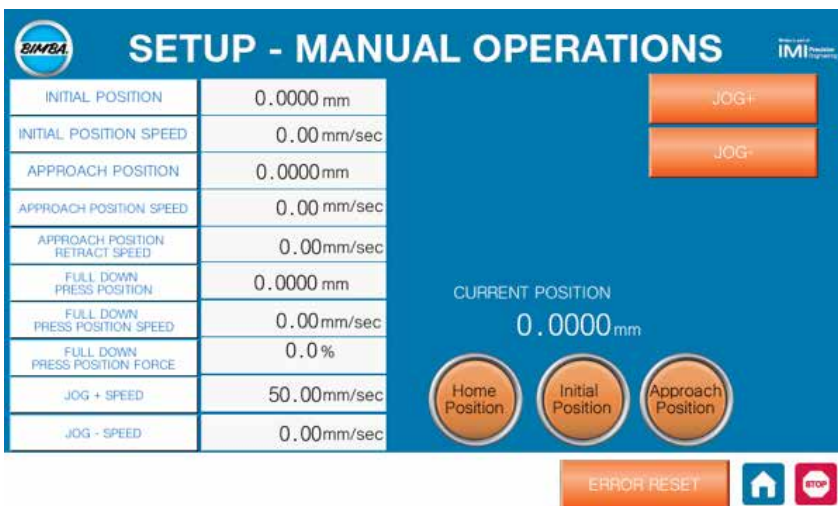
Operation of the IntelliPress™ Electric Bench Top Press can be performed via either recipes or manual operations. For Manual Run operation setup see the following below:

From the Logged-in screen (Figure 5), select the Manual Run tab.

See Figure 5 below:

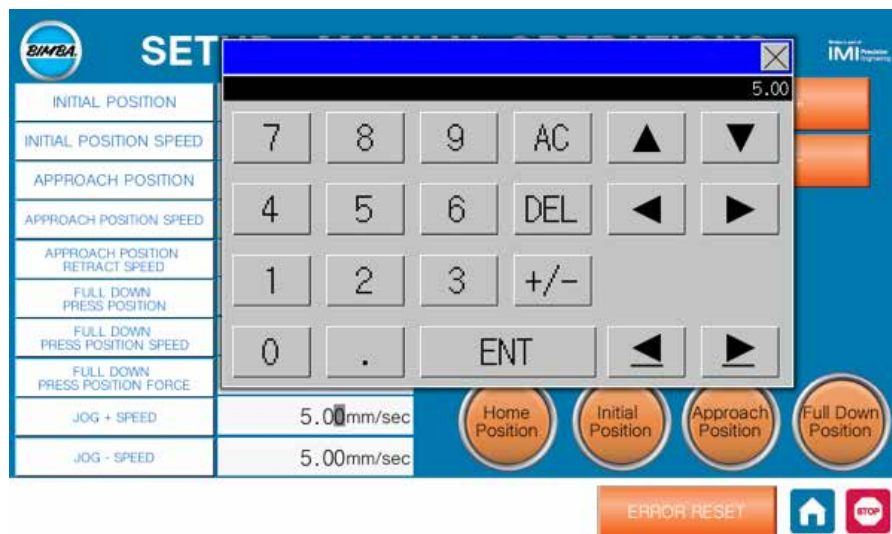


From the Setup - Manual Operations screen (Figure 7), select the recipe to be modified



Press on the parameters to be modified to bring up a pop-up keypad (Figure 8).

See Figure 8: Pop-Up Keyboard



The following parameters can be modified from the Setup - Manual Operations Screen:

- **Jog+ / Jog-:** Indexes the press ram UP (+) or DOWN (-).
- **Initial Position:** The location below the Home Position to where the press will return after each automatic cycle.
- **Initial Position Speed:** The speed at which the press travels from the Home Position to the Initial Position and from the Approach Position to the Initial Position.
- **Approach Position:** The location below the Initial Position where pressing torque begins.
- **Approach Position Speed:** The speed at which the press travels from the Initial Position to the Approach Position. This also includes the speed at which the ram will retract to the Home Position.
- **Full Down Press Position:** The final ram position.
- **Full Down Press Position Speed:** The speed at which the press applies force in the downward direction.
- **Full Down Press Position Force:** Expressed as a percentage of the force rating of the press, this is the pressing force applied to the part.
- **Home Position Button:** Directs the press ram to the Home Position.
- **Initial Position Button:** Directs the press ram to the Initial Position.
- **Approach Position Button:** Directs the press ram to the Approach position.

Taskbar Definitions:

- **Error Reset:** Resets any alarms or faults in the press controller.
- **Home Icon:** Returns to the Logged-In Screen (See Figure 5 on page 9).
- **Stop Icon:** Stops the program operation of the press. Note: The stop icon does NOT remove power from the motion control system

Modify the Setup - Manual Operations values as necessary.
When manual operations are complete, press the Home icon.



SECTION 1.4: DEFINITIONS AND PARAMETER SETTING - AUTO RUN

From the Logged-in screen (Figure 5), select the Recipe Settings tab.

See Figure 5: Logged-In Screen



From the Recipe Parameters screen, select the recipe to be modified (Figure 9).

Two new parameters have been added:

- **Dwell Time:** The amount of time the press ram exerts downward force on the part once full force has been achieved. This is measured in milliseconds.
- **Torque Limit:** The maximum amount of rotary force that can be outputted by the servo motor. This is expressed by a percentage.

Modify the Recipe Parameter values as necessary.

Return to the Logged-in screen via the Home icon when complete.



SECTION 1.5: USER SETUP

From the Logged-in screen (Figure 5), select the User Setup tab.

See Figure 5: Logged-In Screen



From the Setup screen (Figure 10), two functions are available:

- **Security Management:** Add, delete, or modify user permissions. Note: This is only available to the admin. via the admin.'s password.
- **Password Change:** Change/update the admin.'s password.

See Figure 10: Setup Screen



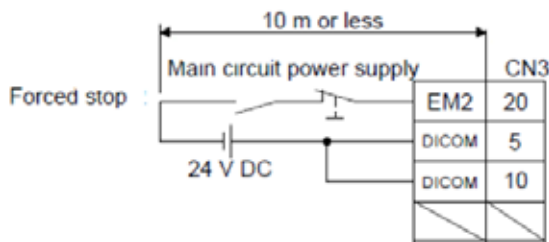
SECTION 2: E-STOP / FORCED STOP AND START INPUTS

This section will illustrate how to configure the E-Stop / Forced stop and start inputs for all versions of the IntelliPress™ Electric Bench Top Press.

SECTION 2.1: E-STOP / FORCED STOP AND CYCLE START INPUTS

Securely mount the provided E-Stop button to a location that is convenient to the press operator. Prior to press operation, ensure the E-Stop button is not depressed and wiring to the E-Stop terminals are continuous and secure.

See Figure 11: E-Stop / Forced Stop Input Circuit Configuration

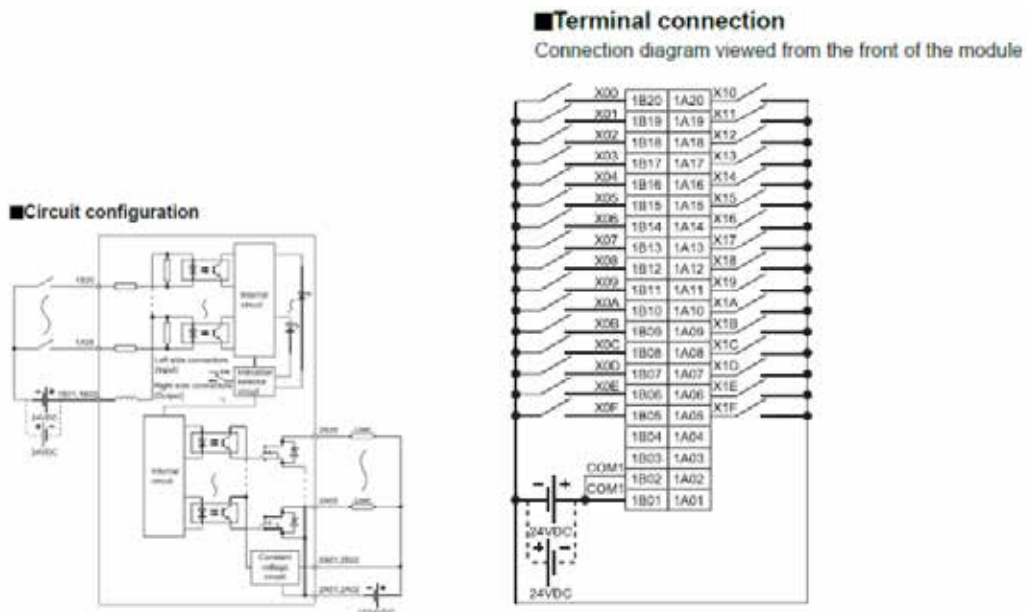


Two options for press cycle start are available (See Figure 12):

- Momentary start input (X01)
- Maintained start input (X00)

The start input must be configured on the PLC before the press will operate. See the following diagrams for termination instructions below.

See Figure 12: Cycle Start Input Circuit Configuration and Terminal Connection





SECTION 3: RECIPE SELECTION AND AUTO RUN

This section will illustrate how to select a configured recipe and operate the press from the configured input.

SECTION 3.1: RECIPE SELECT

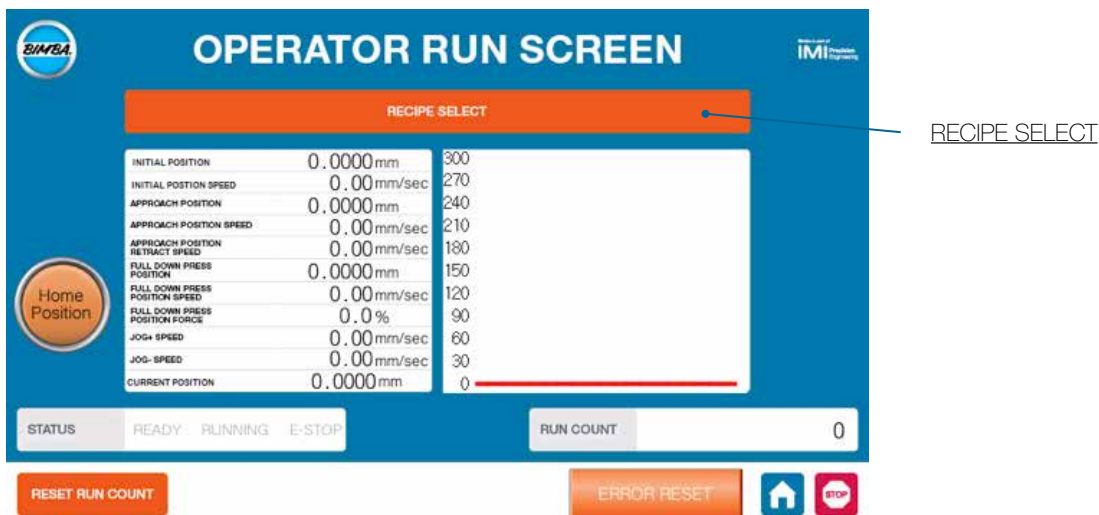
From the Logged-in screen (Figure 5), select the Auto Run tab.

See Figure 5: Logged-In Screen



From the Operator Run screen, select the Recipe Select window (Figure 13)

See Figure 13: Operator Run Screen





From the Recipe Selection screen, select the desired/earlier configured recipe (Figure 14).

See Figure 14: Recipe Selection Screen



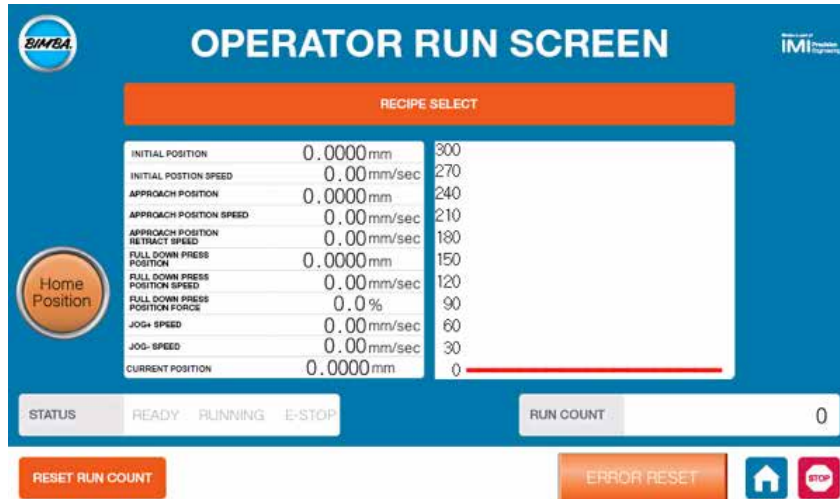
With the Operator Run Screen now visible (Figure 13), the press is ready to function.

See Figure 13: Operator Run Screen



For initial operations, press the Home Position button to home the press ahead of production.

See Figure 13: Operator Run Screen

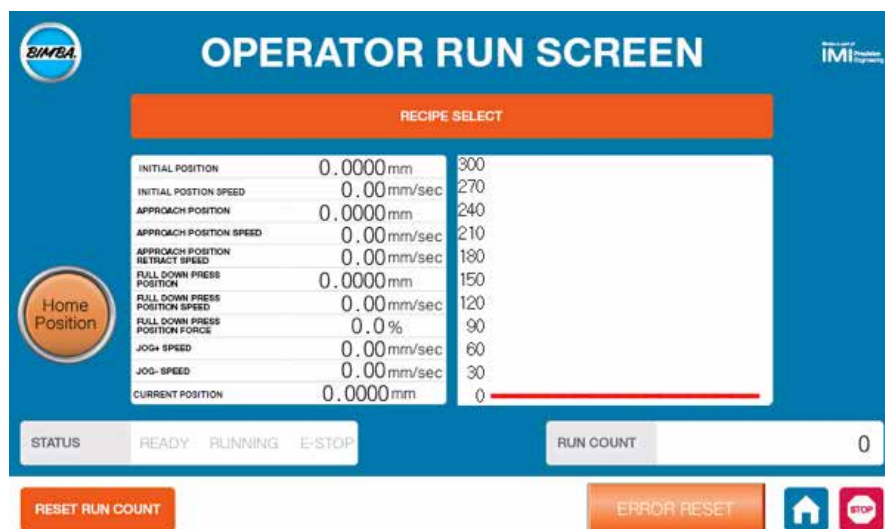


When parts are in position, use the chosen cycle start to initialize the press. The press will return to the pre-configured Initial Position and await the next start input.

SECTION 4: PRESS STATUS, RUN COUNT, AND ERROR RESET

This section will explain how to interpret the Press Status messages, reset the Run Count, and troubleshoot the press in the event of an error/fault. For this section, refer to the Operator Run Screen (Figure 13).

See Figure 13: Operator Run Screen



SECTION 4.1: STATUS

The press has three status indications:

- **Ready** - A bold **READY** signal indicates the press is ready for the next input.
 - » Any input to the press (Home Position, Start Signal, Stop, E-Stop, etc.) will be executed.
- **Running** - A bold **RUNNING** signal indicates the press is currently performing an operation.
 - » Any additional input to the press while the press is in a RUNNING state other than the Stop icon will cause fault to the press.
- **E-STOP** - A bold **E-STOP** signal indicates the E-Stop button has been depressed.
 - » The press will not function until the E-STOP button has been reset.

SECTION 4.2: RUN COUNT

- The **RUN COUNT** status keeps a running total of how many times the start signal has been energized.
 - » The **RUN COUNT** can be reset by pressing the RESET RUN COUNT button.

SECTION 4.3: ERROR RESET

To recover from any error, follow the following steps:

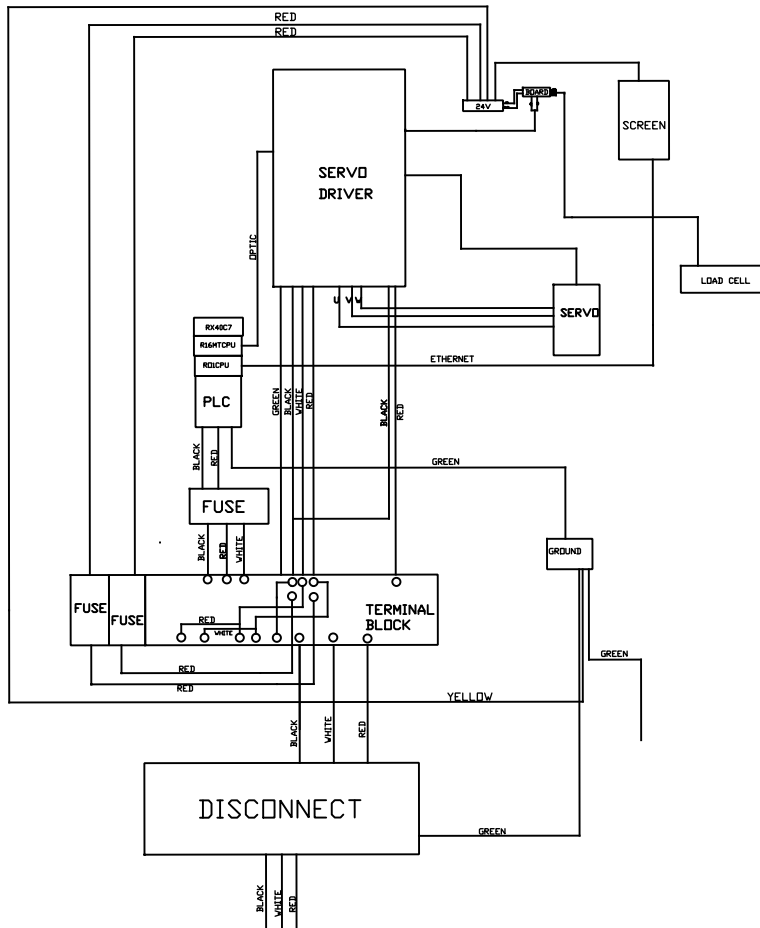
- If displayed, close the red Alarm error screen by selecting the red "X" in the upper right-hand corner of the Alarm section.
 - » Press the **STOP** icon.
 - » Press the **ERROR RESET** button.
 - » Press the **Home Position** button.
- If the press still fails to return to the Home Position then please follow these instructions:
 - » Press the **Error Reset** button again.
 - » Press the **Home Position** button.

SECTION 5: SCHEMATIC

This section shows the schematic layout (Figure 15) of the IntelliPress™ Electric Bench Top Press.

SECTION 5.1: SCHEMATIC LAYOUT

See Figure 15: Schematic



Electric Press
 SCHEMATIC





TECHNICAL DOCUMENTS

Visit the Bimba website for additional models, drawings, and further documentation.
www.bimba.com

SUPPLIER CONTACT

To purchase electric motion products, accessories, or receive further information, contact your local Bimba distributor or contact Bimba directly.

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