



QUARTZ FLASH OWNER'S MANUAL

WWW.WORKHORSEPRODUCTS.COM

PARTS & SUPPLIES ARE AVAILABLE ONLINE AT:
<https://support.workhorseproducts.com/store/>

CONGRATULATIONS!

*You are now the proud owner of a Quartz Flash Unit.
We thank you for choosing Workhorse Products!*

While our packaging has been designed to handle normal shipping conditions, we cannot foresee damages caused by the carrier and are not responsible for damages that occur during transportation.

Please check the contents of the packaging for damages immediately.

If shipping damage has occurred:

- 1) Contact the carrier to file a claim immediately
---- AND ----
- 2) Contact Workhorse Products at 800.778.8779

THE IMPORTANCE OF THE OWNER'S MANUAL

The purpose of the Owner's Manual is to familiarize you with the parts and operations of the product. There are step-by-step instructions to assemble the product as well as troubleshooting information. Also included are explanations of the product's key features and additional information that will help with the maintenance of your product.

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SAFETY INFORMATION

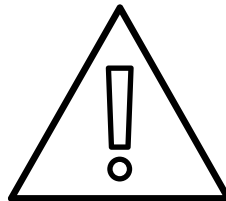
WARNING!

RISK OF ELECTRICAL SHOCK! Turn ALL power to the unit OFF before service.
All service should be done by or under the supervision of a trained technician.



- › For your safety, do not store or use gasoline or other flammable vapors and liquids in the vicinity (at least three feet) of this or any other appliance.
- › Proper grounding (a ground rod at the equipment footing), according to NEC requirements, must be provided during electrical connection by a QUALIFIED ELECTRICIAN.
- › Never alter the internal wiring of this machine.
- › Never place any item other than the stock to be cured under the flash heaters.
- › Once in position lock wheels before using the flash unit.
- › Keep all loose articles (including clothing, hair, jewelry, etc.) away from the hot elements.
- › Never leave the machine unattended when it is operating.
- › Do not perform maintenance on this machine until all power has been shut off at the flash AND at the incoming power circuit breaker. Also, disconnect the control cable leading to the machine.

THIS ELECTRIC FLASH CURE UNIT IS INTENDED SOLELY FOR THE PURPOSE OF CURING INK ONTO FINISHED TEXTILES AND CUT GOODS. THIS FLASH IS NOT INTENDED FOR USE IN HEATING, CURING OR BAKING OF ANY OTHER MATERIALS WHATSOEVER. THIS FLASH IS INTENDED FOR IN-DOOR USE ONLY.



THE EXCLAMATION WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER OF IMPORTANT SAFETY PRECAUTIONS SHOP PERSONNEL SHOULD BE AWARE OF DURING OPERATION.

SPECIFICATIONS



<i>Part Number</i>	SQF-2205	SQF-2200	SQF-2220
<i>Flash Area</i>	20" x 24" (51cm x 61cm)	20" x 24" (51cm x 61cm)	20" x 32" (51cm x 81cm)
<i>Power Requirements</i>	ELECTRIC 1-Phase, 240V 12,800W, 60A (8) 1,600W Elements	ELECTRIC 3-Phase, 240V 14,400W, 40A (9) 1,600W Elements	ELECTRIC 3-Phase, 240V 19,200W, 50A (12) 1,600W Elements

PARTS FOR ASSEMBLY



PART NO.	DESCRIPTION	QTY.
Pre-assembled	Quartz Flash	1
32-C-2841	6' Cable	1
10-22-012	Quartz Elements	
	SQF-2205	8
	SQF-2200	9
	SQF-2220	12

ASSEMBLY

STEP 1: UNCRATING

TOOLS NEEDED

- Phillips Head Screwdriver
- Drill (preferably)
- Hammer

1. The Quartz Flash ships fully assembled. Remove the wooden outer shell and the wooden caps holding the legs in place.

Carefully lift the flash off the pallet.

The flash is now accessible and can roll into place.



2. The hardware is inside of the plastic wrapping and contains the Quartz Heating Elements.

- Handle with care
- **DO NOT** touch the elements with bare hands
- Use a clean cloth or latex gloves when handling the elements

The S/O cable and plug ends are not included



ASSEMBLY

STEP 2: INSERTING THE QUARTZ ELEMENTS

TOOLS NEEDED

- Clean cloth
- Latex or cotton gloves

PARTS NEEDED

- Elements

IMPORTANT:

SQF-2205 (1-phase): Requires 8 elements
(You will see 9 slots. Leave the spot open at the position nearest the control panel. This will allow you to flash the bottom of images)

SQF-2200 (3-phase): Requires 9 elements

SQF-2220 (3-phase): Requires 12 elements

DO NOT handle the quartz elements with bare hands. The oils from skin can contaminate the quartz tubes.

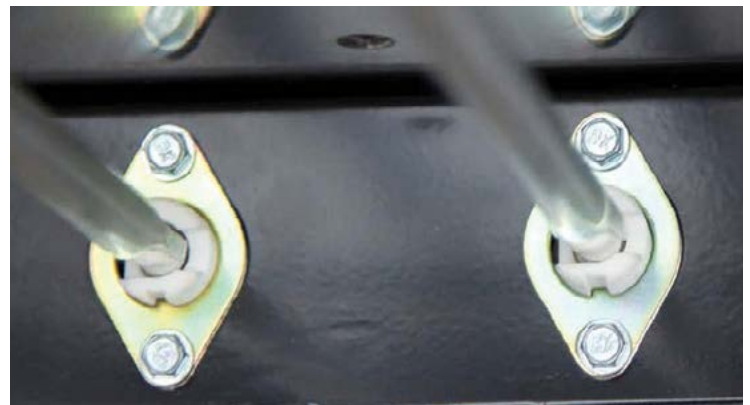
USE a clean cloth or gloves to insert the elements

1. The sockets that hold the tubes are spring-loaded. Insert the end of the tube into the socket and gently apply pressure while inserting the opposite end into the mating socket.
2. Install the rest of the elements.

DO NOT HANDLE HOT ELEMENTS!

NOTE:

If the elements do become contaminated use a soft cloth and isopropyl rubbing alcohol to clean them. Never attempt to clean the elements or any part of the flash with the power connected. Make sure the flash is disconnected and cooled down before any kind of maintenance is done.



ASSEMBLY

STEP 3: CONNECTING THE POWER & CONTROL

TOOLS NEEDED

- Phillips Head Screwdriver

PARTS NEEDED

- SO Cable
- Plug ends (optional)

An SO cable is needed for these next steps. (*NOTE: It is not included with the product*)

The flash requires a power connection to be brought to the unit and hardwired directly to the power distribution block.

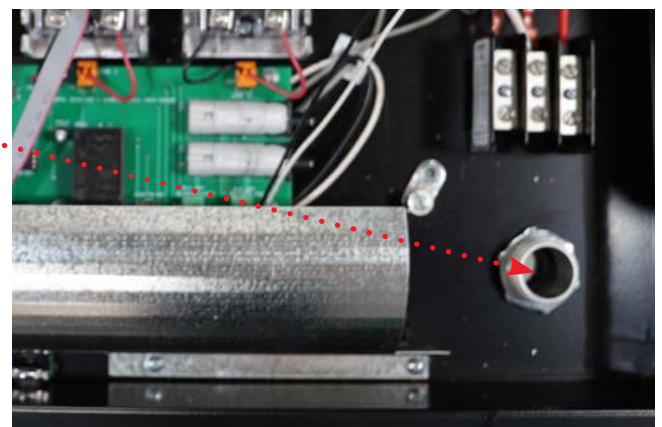
There are 2 options to connect the power:

- 1) Hardwire to an electric panel
- 2) Fitting the SO cable with plug ends

1. Start by hardwiring the SO cable to the flash. Remove the teal cover by unscrewing the 11 screws located around the edge of the cover.



2. After removing the cover, locate the Power Cable Access hole on the right side of the flash. Feed the end of the SO cable through this hole to connect to the power distribution block.



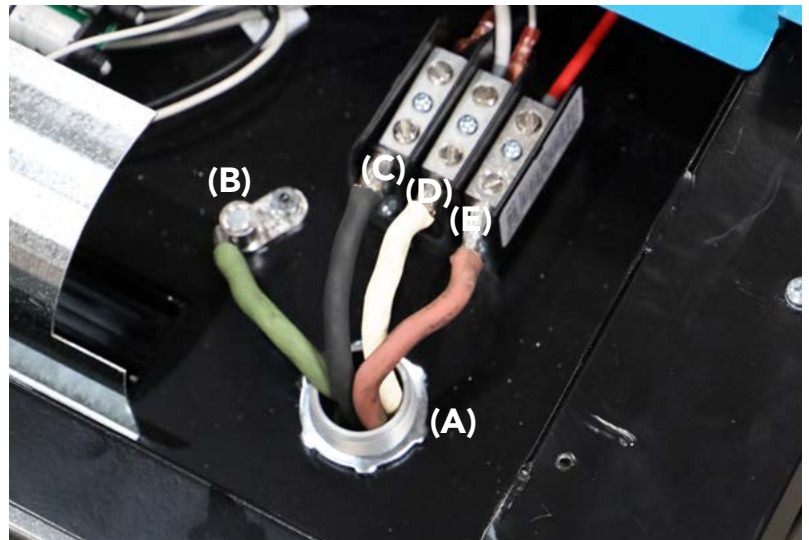
ASSEMBLY

STEP 3: CONNECTING THE POWER & CONTROL

3-PHASE CONNECTION

Requires 3 hot wires and 1 ground wire

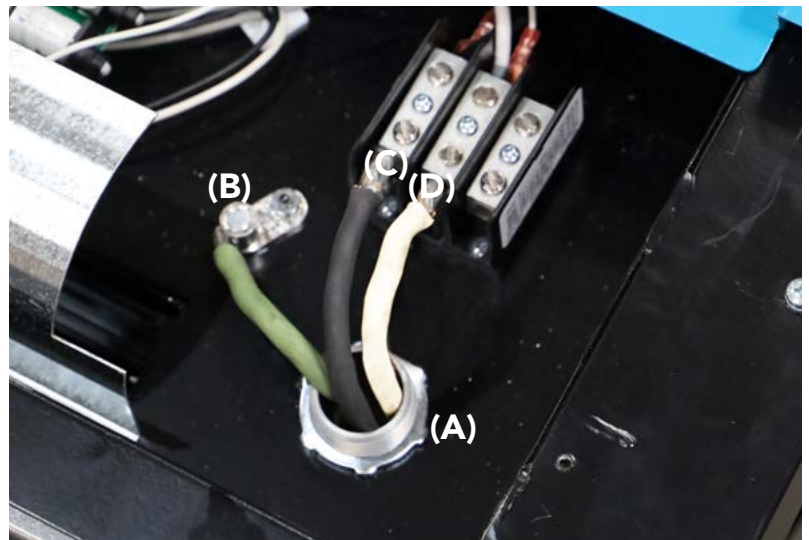
1. Feed the SO Cable up through the Power Cable Access (A) from the bottom of the control box.
2. Connect the 3 hot wires to the open legs on the back of the power distribution block (C, D and E).
3. Connect the earth ground wire to the ground lug (B).



1-PHASE CONNECTION

Requires 2 hot wires and 1 ground wire

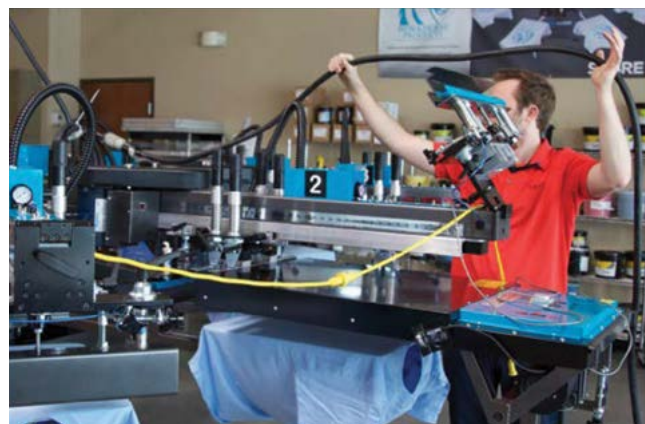
1. Feed the SO Cable up through the Power Cable Access (A) from the bottom of the control box.
2. Connect the 2 hot wires to the open legs on the back of the power distribution block (C and D).
3. Connect the earth ground wire to the ground lug (B).



3. Attach the other end of the SO cable to the power source.

It is recommended to use a ceiling drop as the power source.

This allows the SO cable to lay across the print head the flash is being used on; eliminating the dangers of having cables run along the ground.



(NOTE: The flash in this example may be a different model than yours)

ASSEMBLY

STEP 4: CONNECTING THE FLASH TO YOUR PRESS

NOTE: This connection method only works with a Workhorse Cutlass or Sabre. All other machines use the IR Sensor.

PARTS NEEDED

- 6' Cable Jack

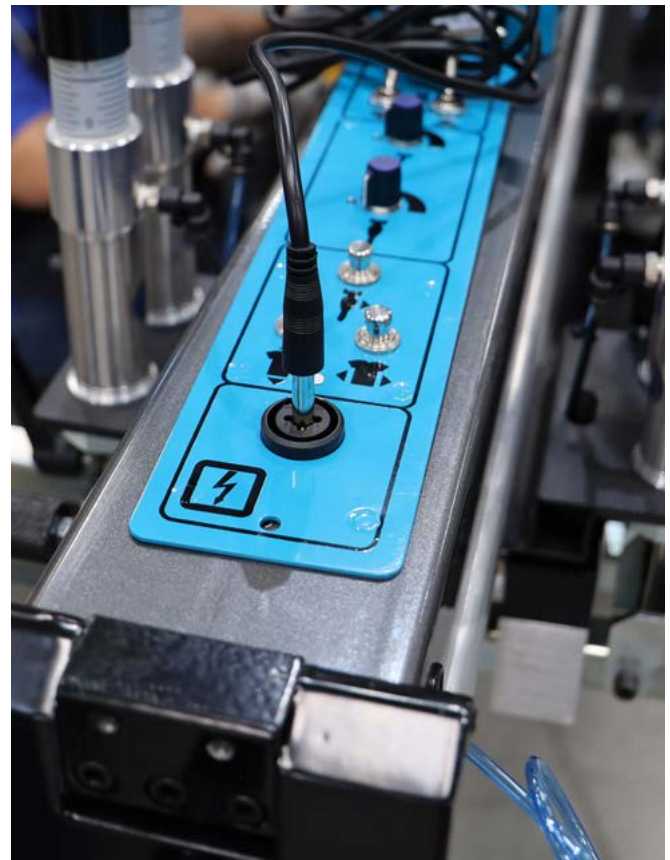
1. Plug one end of the jack into the flash.



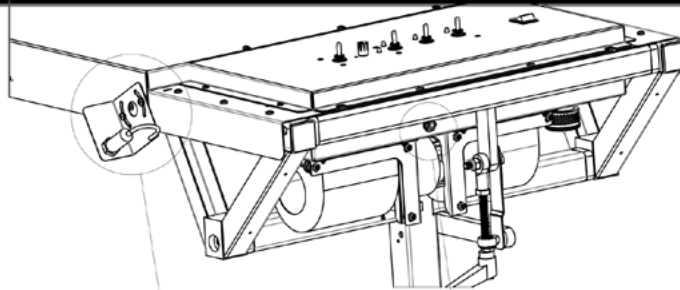
2. Plug the other end into the print head. Once the flash is plugged into the end of the print head the touch screen control will recognize that the flash is in place.

The flash receptacle on the press is identified with a lightning icon on the end of the print head. This round, black receptacle is where you plug in the cable jack.

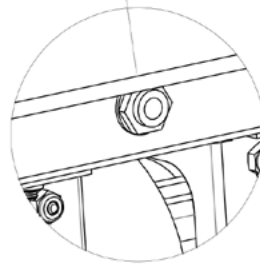
3. The power switch for the flash must be in the "ON" position for the press to recognize the flash and for the flash to function.



QUARTZ FLASH CONNECTION

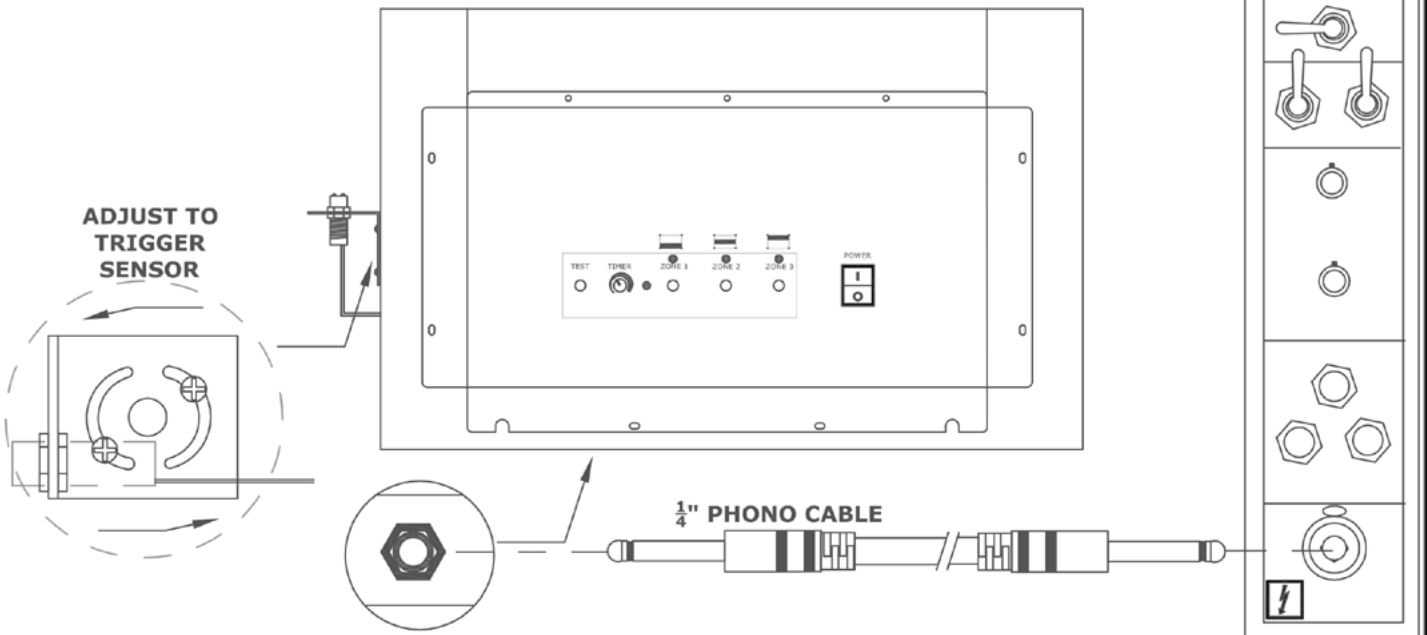


DETAIL A
SCALE 1 : 2



DETAIL B
SCALE 1 : 2

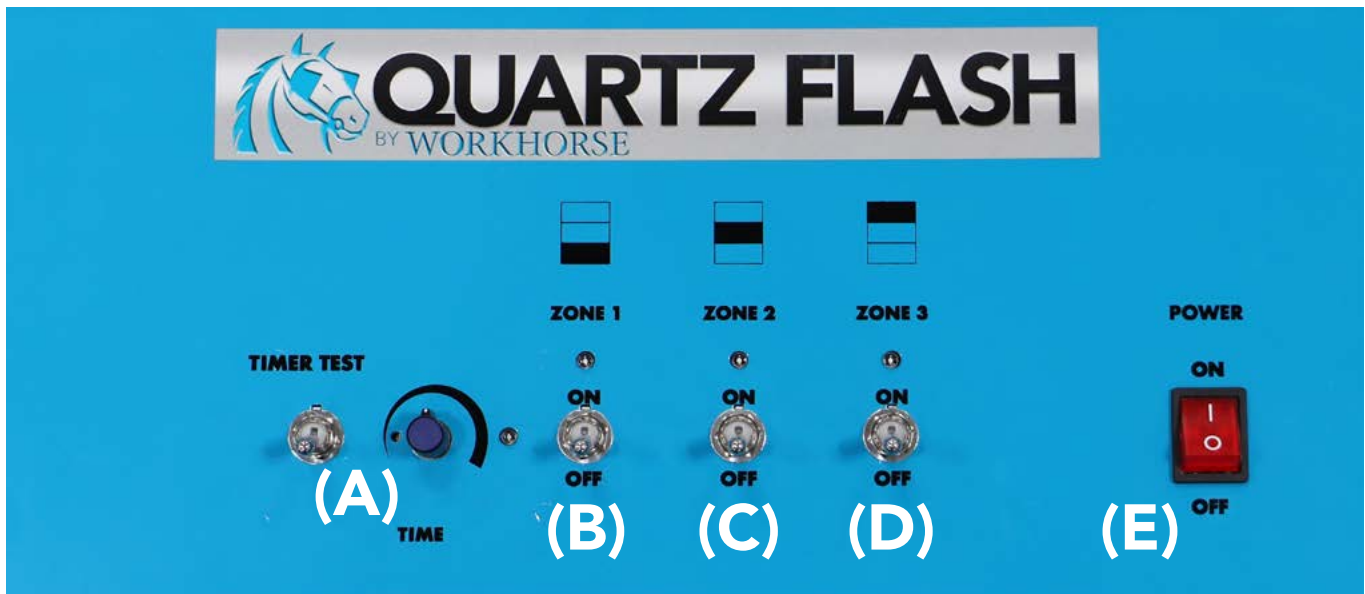
TOP OF PRINT ARM



ADJUST TO
TRIGGER
SENSOR

1/4" PHONO CABLE

CONTROLS



(A) TIMER TEST + TIME KNOB

These features are used in conjunction with the IR Sensor (*pictured below*). The IR Sensor is used with older Workhorse Autos, manual presses and non Workhorse manufactured presses.

Timer test = toggle switch that is used to turn the bulbs on to ensure they are working and to confirm proper timing

Time knob = manually controls the duration of the flash (left for shorter duration, right for longer duration)

IR sensor = recognizes when the pallet indexes and triggers the flash

To use these features the flash CANNOT be connected to your press via the communication cable.



HEAT ZONE OPTIONS

Heat zone options allow the operator to choose which part of the flash is used. Zones can be used individually or in combinations. This allows you to control the amount of heat needed to flash an image. Heat zone options work in both Sensor and Plug-N-Go modes.

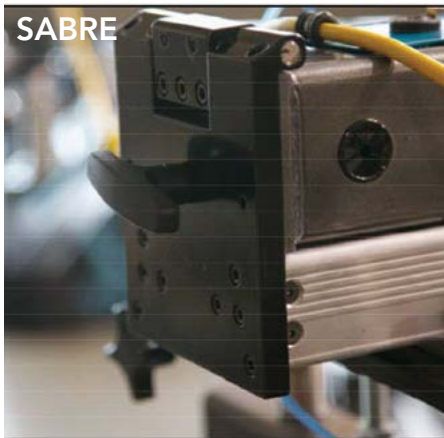
- (B) Heat Zone 1 = Bottom Elements
- (C) Heat Zone 2 = Middle Elements
- (D) Heat Zone 3 = Top Elements

(E) POWER INDICATOR

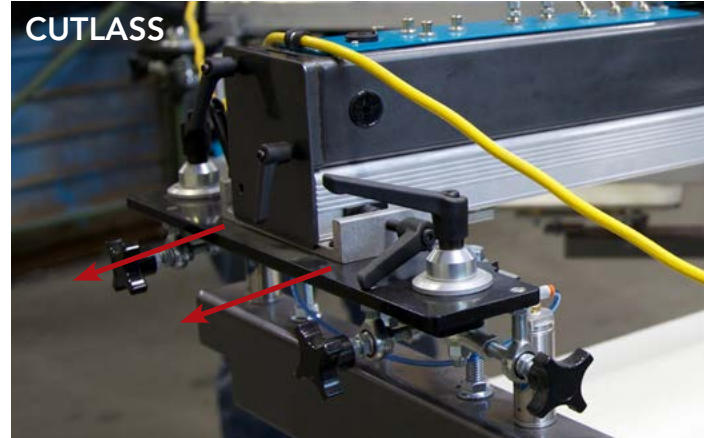
The red light will illuminate when the flash is on.

ADJUSTMENTS

PLACING THE FLASH UNDER THE PRESS

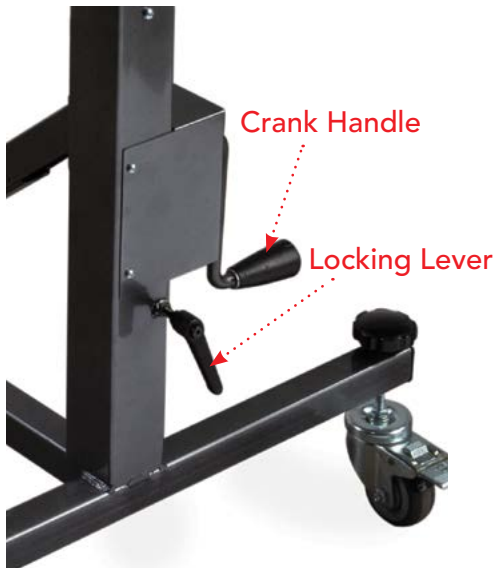


SABRE
In order to place the flash into the proper position you must loosen the T-knob and pull the hinged front screen clamp up and over the top of the print head. This provides access to roll the flash over the platen in it's table up position.



CUTLASS
In order to place the flash into the proper position you must remove the end levers, disconnect the front airlines from the cylinders and slide the assembly out the end of the head. This provides access to roll the flash over the platen in it's table up position.

HEIGHT OF THE FLASH



Unlock the locking lever, then use the crank handle to adjust the height of the element tray. Once set to the desired height re-tighten the locking lever.

TILT ADJUSTMENT



The tilt adjustment is to level the heating elements so that they are parallel with the platen.

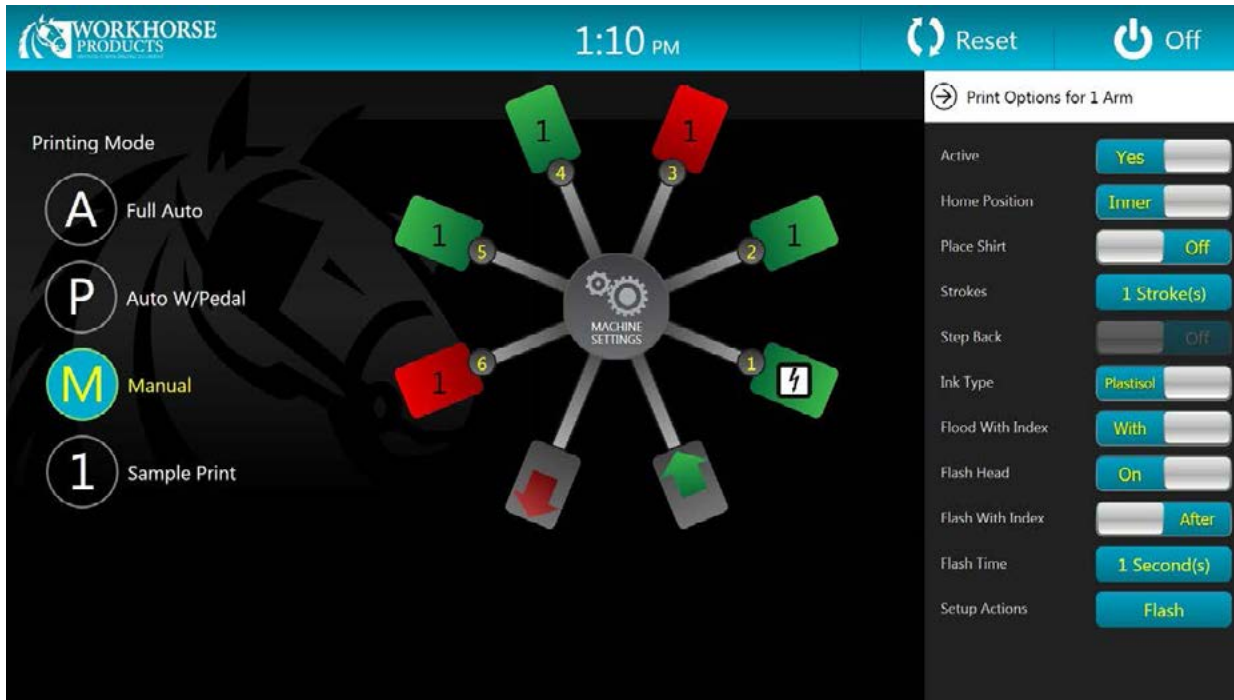
ADJUST THE CASTERS FOR LEVELING



Turn the knob until flash is level.

TOUCH SCREEN CONTROLS

PLUG-N-GO MODE



When the flash is in plug-n-go mode a lightning bolt icon will appear on the press graphic. Touch the print head to display the sub menu with the options to control the flash.

(A) ACTIVE

Select "Yes" for the print head to be active

(B) FLASH HEAD

Select "On" for the print head to be active

(C) FLASH WITH or AFTER INDEX

"WITH": The flash will turn on when the platens begin to move from one station to another, allowing the flash to have more time to heat up while the press is indexing. This mode is recommended when you need a hotter, faster flash.

"AFTER": The flash will turn on after the press completes index. This mode is recommended when you need a cooler flash (which is necessary for sensitive compound fabrics).

(D) FLASH TIME

The flash time represents the amount of time the press holds the platens in the up position until the flash curing process is complete. Optimization of this time is essential because it will have a dramatic effect on production numbers. The time can be lowered after the press has been running and the platens are heated. Be wary of setting the flash timer for too long, this could ruin the ink and not adhere if the layer is too cured.

BASIC OPERATION

PLUG-N-GO CONNECTION

The Quartz Flash should be installed with extra cable to allow it to be moved to any printhead on the press. As a plug-n-go it is designed to connect to any compatible Workhorse Press (Cutlass or Sabre).

STEP 1

Move or remove the front screen clamp, this process varies by model of machine. *(See page 13 for instruction on moving clamp)*

STEP 2

From the control panel of the press, raise the printing platens to the table up position.

STEP 3

Adjust height of flash to 1.5" above printing platen in table up position *(this height is a suggested starting point and will vary by job)*. Also using the tilt adjustment make the flash parallel to the printing platen front to back. Finally, the flash needs to be parallel from left to right. This adjustment is made with the knobs on the wheels of the flash base. *(See page 13 for instruction)*

STEP 4

Attach the communication cable from the communication port on the flash to the com. port on the desired printhead. On compatible machines, once the connection is made the press will recognize that printhead as a flash head. Connection will be indicated on the tablet with the lightning bolt symbol on the representation of the printhead.

STEP 5

Once plugged into the press the flash is now controlled from the tablet. To program touch the desired printhead which will enable the menu.

- 1) Select Active
- 2) Select "Flash with Index" for most fabrics OR Select "Flash after Index" for heat sensitive fabrics
- 3) Set flash time *(suggested starting point would be 5 seconds and adjust as needed)*

BASIC OPERATION

USING FLASH WITH IR SENSOR

This applies to Workhorse Presses without communication ports, auto presses from other manufacturers, and manual presses. In this mode the Sensor on the flash sees the moving platen then turns on the elements and starts the timer. Once the preselected time set on the timer has elapsed the heating elements will shut down until the sensor sees the next platen moving into position.

STEP 1

Move or remove the front screen clamp, this process varies by model of machine. (See page 13 for instruction on moving clamp)

STEP 2

From the control panel of the press, raise the printing platens to the table up position.

STEP 3

Adjust height of flash to 1.5" above printing platen in table up position (*this height is a suggested starting point and will vary by job*). Also using the tilt adjustment make the flash parallel to the printing platen front to back. Finally, the flash needs to parallel from left to right. This adjustment is made with the knobs on the wheels of the flash base. (See page 13 for instruction)

STEP 4

Set the timer on the flash at the half-way point. With no communication cable plugged into the press the IR Sensor will automatically be active. To operate simply rotate the next platen in front of the flash. Adjust timer as needed for fabric type.

ADVANCED OPERATION

Set up of the Flash remains the same but programming at the tablet will vary by program selected.

ORBITAL MODE

In Orbital mode the machine is programmed to cycle around more than one rotation.

To print a set # of colors on each rotation and moving past the flash unit before starting the colors on the next rotation.

STEP BACK MODE

In this mode the flash is placed in the printhead between 2 colors and the single flash unit will cure both colors by rotating the platens in both directions (this feature is only offered on the Cutlass and Sabre products).

TROUBLESHOOTING

NO POWER TO FLASH

Check the power switch. Is the power cable plugged in? Check circuit breaker from the building.

ONE OR MORE LAMPS IS NOT WORKING

Check Zone switches to make sure proper switch is on. Verify Lamp is in sockets on both ends. Swap non-working lamp with one that works.

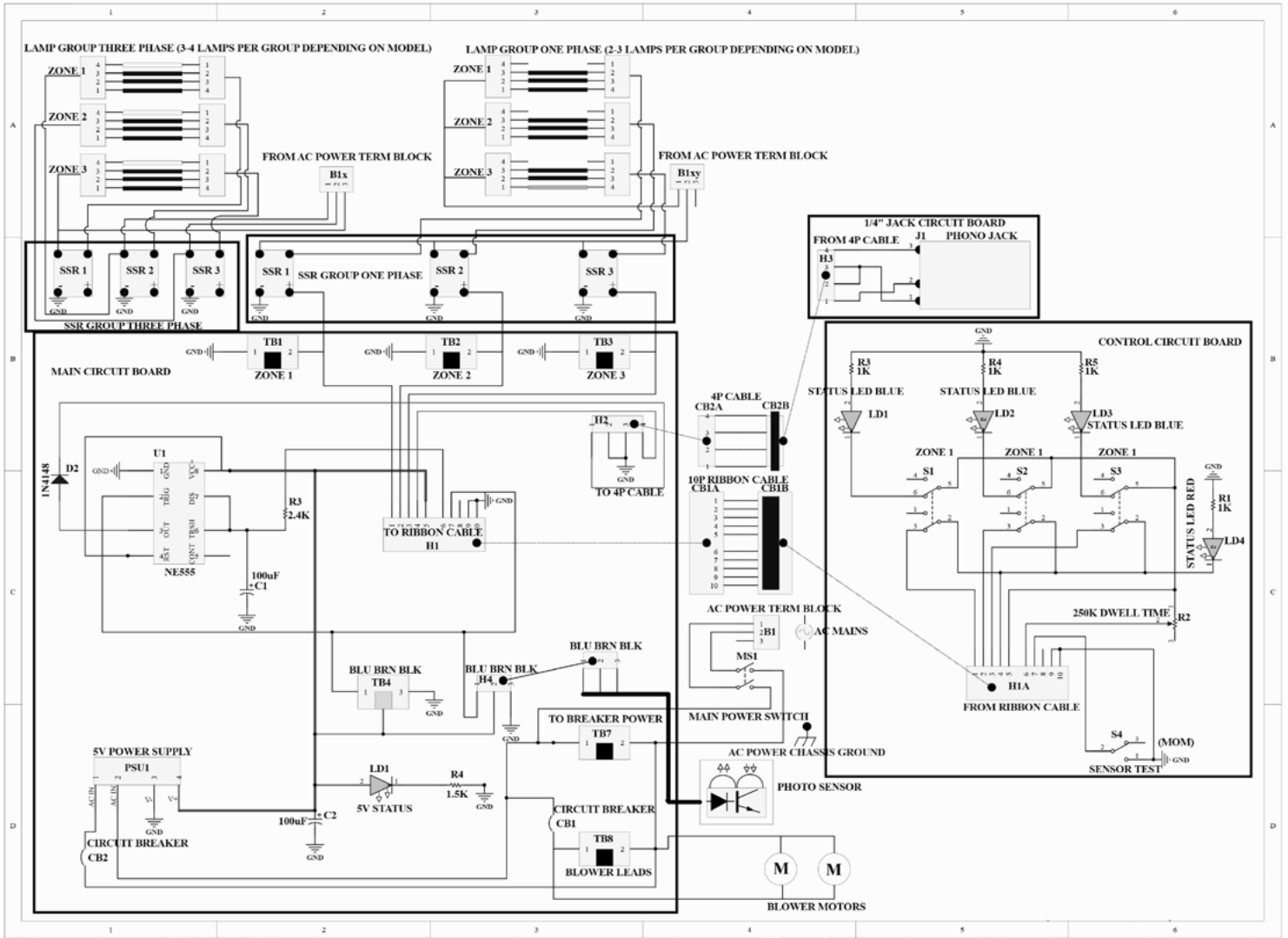
LAMPS STAYING ON ALL THE TIME

Unplug control cable between Flash and Printhead. Check relays for sticking closed.

FOR TECH SUPPORT

PLEASE CALL 800.778.8779 option 2

WIRING DIAGRAM



LIMITED WARRANTY

Although every effort has been made to provide accurate specifications, Workhorse Products does not assume any liability for damages, whether consequential or incidental, that may result from the use or misuse of the indicated specifications. Workhorse Products requires the use of a licensed industrial electrician for the installation of electrical service to equipment requiring electrical power.

Workhorse Products reserves the right to alter specifications in the manufacture of its products. It is understood and agreed that Seller's liability for any equipment whether liability in contract, in tort, under any warranty, in negligence, in strict liability or otherwise shall not exceed the return of the amount of the purchase price paid by Buyer. Notwithstanding the foregoing provision, under no circumstances shall Seller be liable for special, indirect or consequential damages. The price stated for the equipment is a consideration in limiting Seller's liability. No action regardless of form, arising out of the transactions under this Agreement may be brought by Buyer more than fifteen (15) years after the cause of action has occurred. Our warranty is specified, is exclusive and no other warranty, whether written or oral, is expressed or implied. Workhorse Products specifically disclaims the implied warranties of merchantability and fitness for a particular purpose. Equipment manufactured or sold by Workhorse Products is warranted against defects in workmanship and materials for a period of one year from receipt by customer. All warranties initiate from date of shipment to original customer. Replacement parts are covered for the term of the equipment warranty period. Parts not under warranty are covered for thirty (30) days from receipt by customer. Any part found by Workhorse Products to be defective in material or workmanship within the stated warranty period will be replaced or repaired at Workhorse's option without charge.

**AFTER OBTAINING AN RMA# SEND RETURNED FREIGHT PREPAID TO:
3730 E. Southern Avenue, PHOENIX, AZ 85040 USA.**

Written authorization must be obtained from Workhorse before any part will be accepted. Replacement parts are sent out freight collect. Parts sent out prior to receiving defective require a credit card hold for cost plus freight. Upon return of defective part, if it is deemed that the part was not damaged by customer but failed, the cost of the replacement part will be refunded.

This warranty does not extend to expendable parts such as filters, fuses, elements and brushes, casters. Workhorse does not warrant failure of parts or components resulting from misuse or lack of proper maintenance. Installation, inspection, and maintenance costs are the sole responsibility of the purchaser.

REGISTRATION FORM

Company Name: _____	Contact Name: _____
Address: _____	Phone Number: _____
City: _____	Fax Number: _____
State: _____	Email: _____
Country: _____	Cell Number: _____
Zip Code: _____	
Model Number: _____	Serial Number: _____
Date Purchased: _____	Date Purchased: _____

**FOR WARRANTY TO TAKE PLACE YOU MUST EMAIL THIS FORM BACK TO:
PRITZ@WORKHORSEPRODUCTS.COM**



WWW.WORKHORSEPRODUCTS.COM

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<https://support.workhorseproducts.com/store/>

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