



SABRE FLASHBACK

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 Flashback.
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.

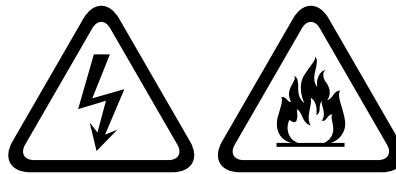
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SAFETY INFORMATION

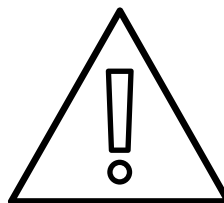
WARNING!

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.



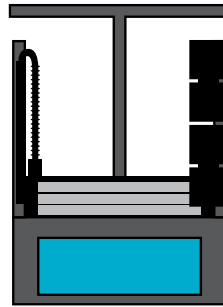
- › For your safety, do not store or use gasoline or other flammable vapors and liquids in the vicinity (at least three feet) of this or any other appliance.
- › Proper grounding (a ground rod at the equipment footing), according to NEC requirements, must be provided for during electrical connection 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 Flashback.
- › Keep all loose articles (including clothing, hair, jewelry, etc.) away from the moving and hot element tray.
- › 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 TEXTILE 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



Part Number	SFB-2020
Flash Area	20" x 20" (51cm x 51cm)
Power Requirements	ELECTRIC 1-Phase, 220V, 50-60Hz, 4600 Watts, 23 amps

PARTS FOR ASSEMBLY



PART NO.	DESCRIPTION	QTY.
SFB-2020	Flashback	1
A-0014	3-Way Air Fitting (1/4" Tube Tee)	1
A-0055	Black Airline	30'
32-C-2830	Communication Cable	1
39-1070	Tie Wraps 4" Black	10
39-1075	Tie Wraps, 15" Clear	4
39-1022	Adhesive Clamps	6
EA-0007	Dummy Plug	1

ASSEMBLY

STEP 1: UNCRATING

1. The Flashback ships fully assembled. Remove the wooden outer shell and the wooden caps holding the legs in place. Then remove all the bubble wrapping.

Carefully lift the flash off the pallet.

The flash is now accessible and can roll into place.



2. The hardware box inside of the plastic wrapping contains:

- 3-Way Air Fitting (1/4" Tube Tee)
- Black Airline
- Communication Cable
- Tie Wraps 4" Black
- Tie Wraps, 15" Clear
- Adhesive Clamps



NOTE: The Flashback's power cord is coiled and connected to the machine with wire ties. The operator is responsible for providing the male and female plug ends to create a matched set.

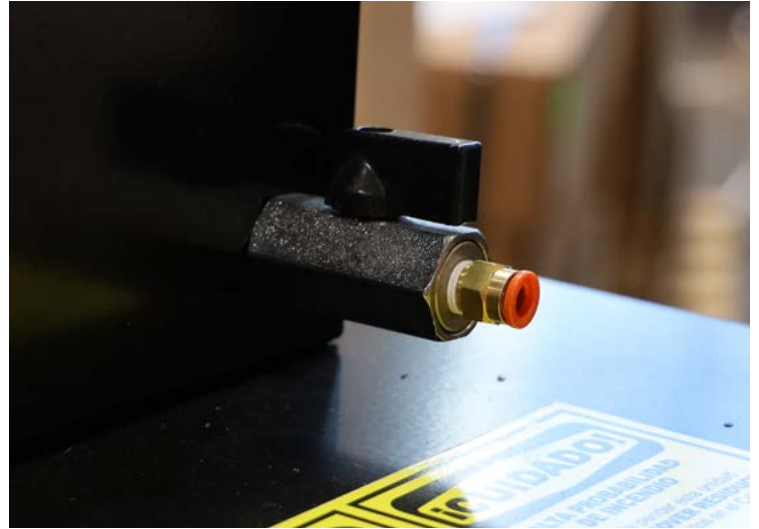
ASSEMBLY

STEP 2: CONNECTING THE AIRLINE

PARTS NEEDED

- Black Airline

1. Find the ball valve and air fitting on the right side of the Flashback.



2. Connect the black airline to it.

3. Run the black airline under the Flashback and underneath the base of the press.

The airline will need to be connected to the three-way connector in a later step.



ASSEMBLY

STEP 3: CONNECTING TO THE MAIN AIR

TOOLS NEEDED

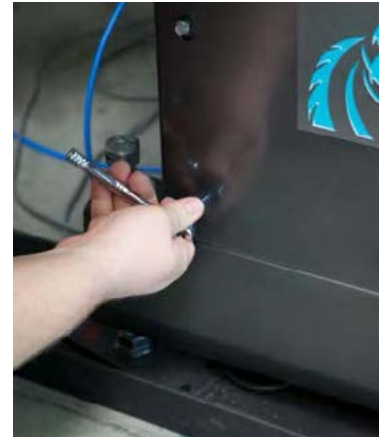
- 3/8" Socket Wrench
- Razor Blade or Scissors

PARTS NEEDED

- Black Airline
- 3-Way Air Fitting

1. Locate the panel on the backside of the press (it is directly behind the side with the tablet).

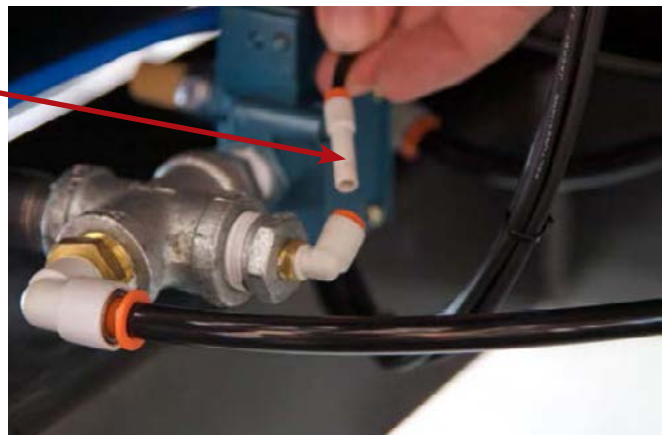
Loosen the bolts on the panel with a 3/8" socket wrench and remove all six bolts.



2. Remove the panel.



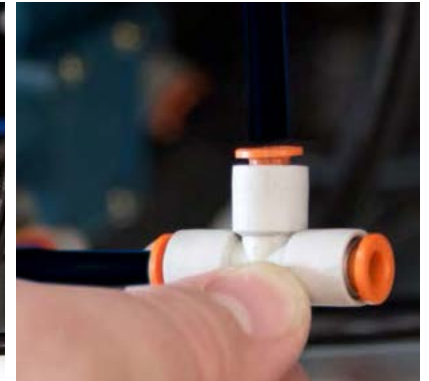
3. Remove the 5/32" adapter and black airline from the ninety-degree elbow fitting.



ASSEMBLY

STEP 3: CONNECTING TO THE MAIN AIR cont.

4. Cut a 3" piece of black airline from the airline that was provided. Insert the piece into the ninety-degree elbow fitting.

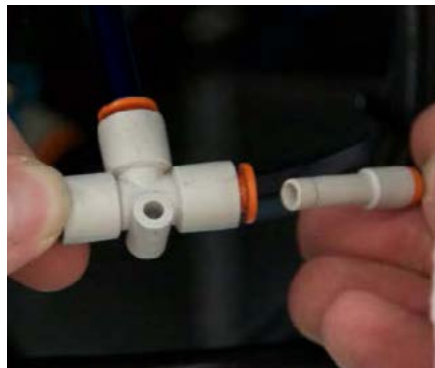


5. Attach the other end of the 3" piece to the left side of the three-way air fitting.

Then attach the black airline from the Flashback into the top of the three-way air fitting.

6. Insert the 5/32" adapter and black airline that was removed in Step 3 into the final side of the three-way air fitting.

The three-way connector is how the Flashback connects to the main air of the press. The left side is connected to the 3" piece. The top is connected to the Flashback and the right is connected to the original black airline.



7. When the airline is connected, place the panel back onto the base.



ASSEMBLY

STEP 4: CONNECTING THE COMMUNICATION CORD

PARTS NEEDED

- 3/8" Socket Wrench

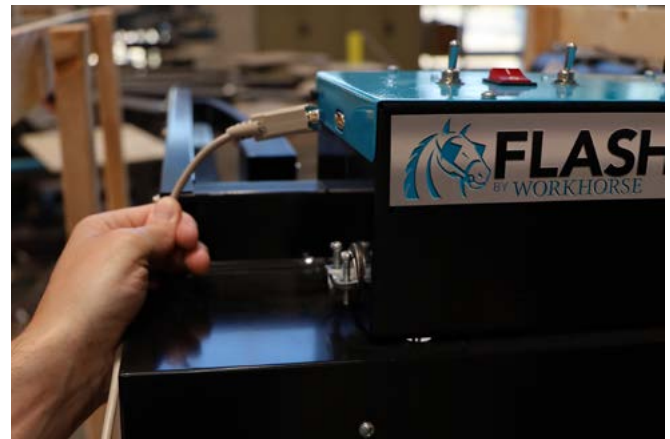
PARTS NEEDED

- Communication Cord

1. Locate the Communication Cord, which is included with the Flashback.



2. Plug the female end of the communication cord into the left side of the flashback.



3. Now you are ready to connect the flashback to the press.

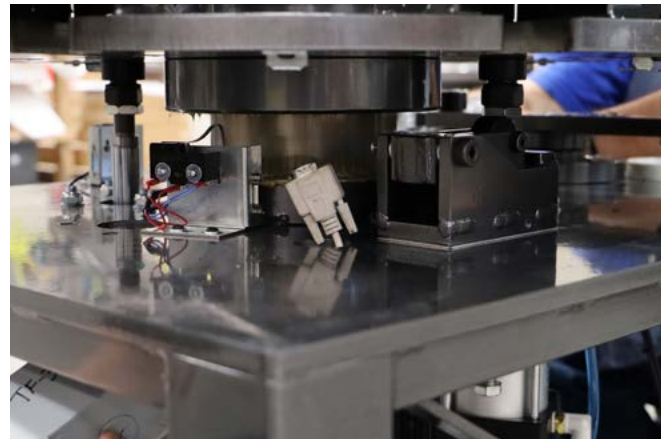
Open the front panel of the press with a 3/8" socket wrench (it is on the front side where the touch screen display is located).



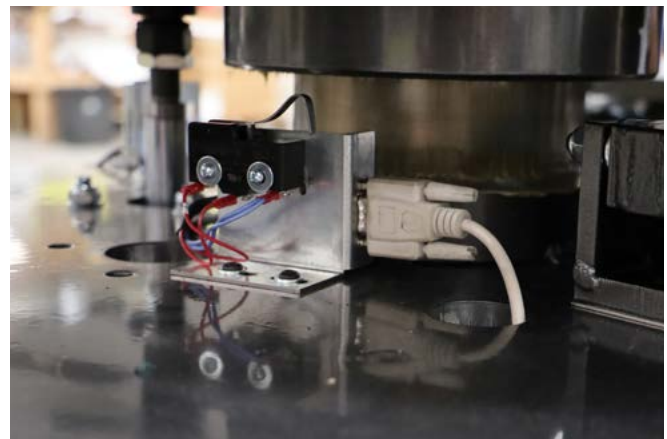
ASSEMBLY

STEP 4: CONNECTING THE COMMUNICATION CORD cont.

4. Run the Communication Cord underneath the flash and underneath the base of the press then up through the hole on the top part of the base.

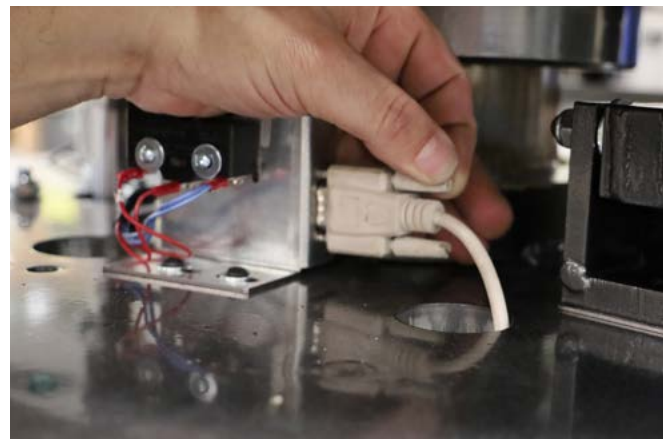


5. Insert the Communication Cord into the designated port on top of the base.



6. Hand tighten the sides of the Communication Cord.

Note: If the Communication Cord detaches it will prevent the press from tabling up.



ASSEMBLY

STEP 5: CONNECTING THE POWER CABLE

1. The Flashback's power cord is coiled and connected to the machine.

NOTE: The customer is responsible for providing the male and female plug ends to create a match set.

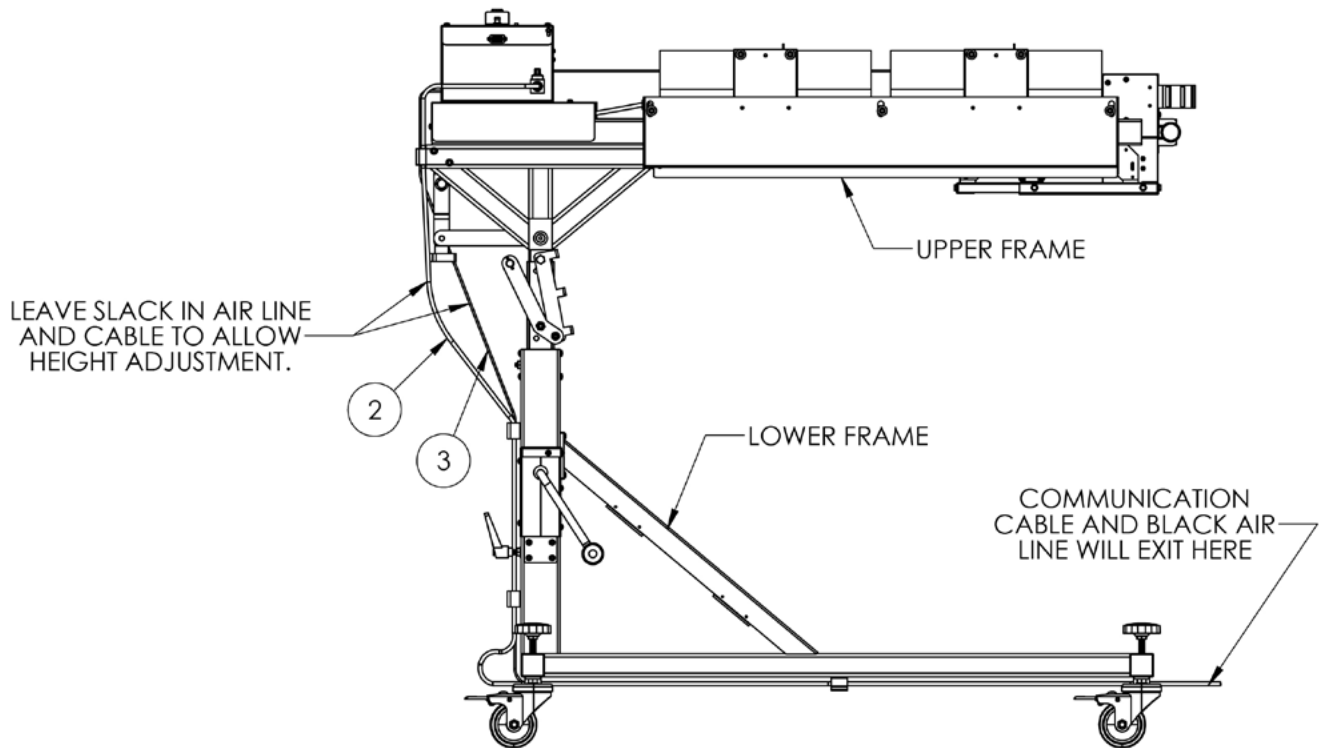


We recommend:

- Drop from ceiling
- Enough cable to move Flashback from head to head

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



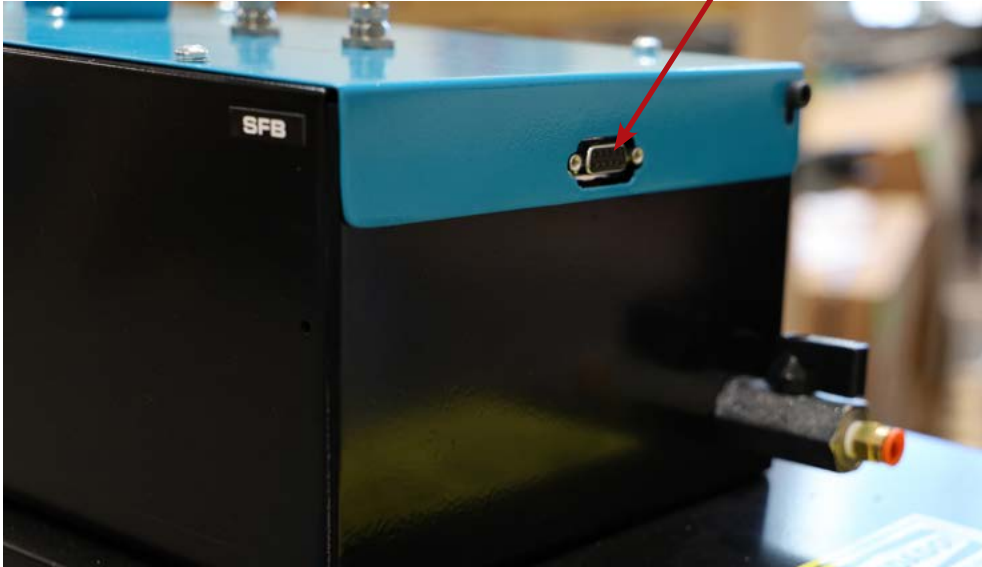


OPTIONAL: Use the adhesive clamps to route the communication cable and black air line along the base of the flash.

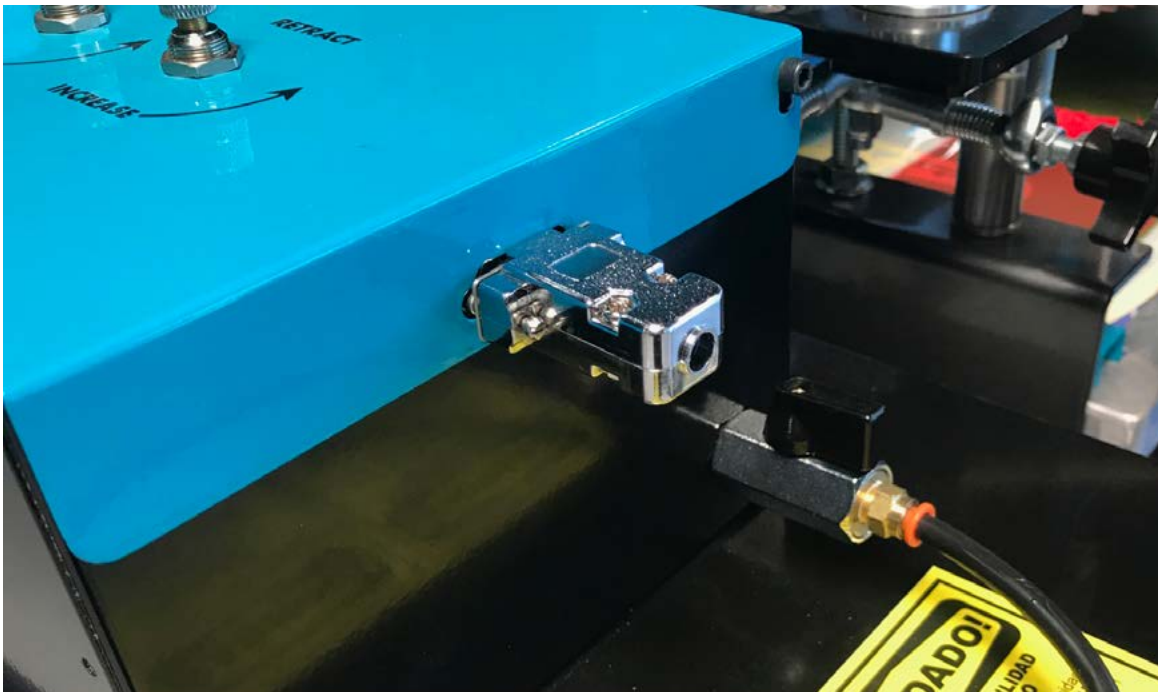
ASSEMBLY

STEP 6: CONNECTING THE DUMMY PLUG

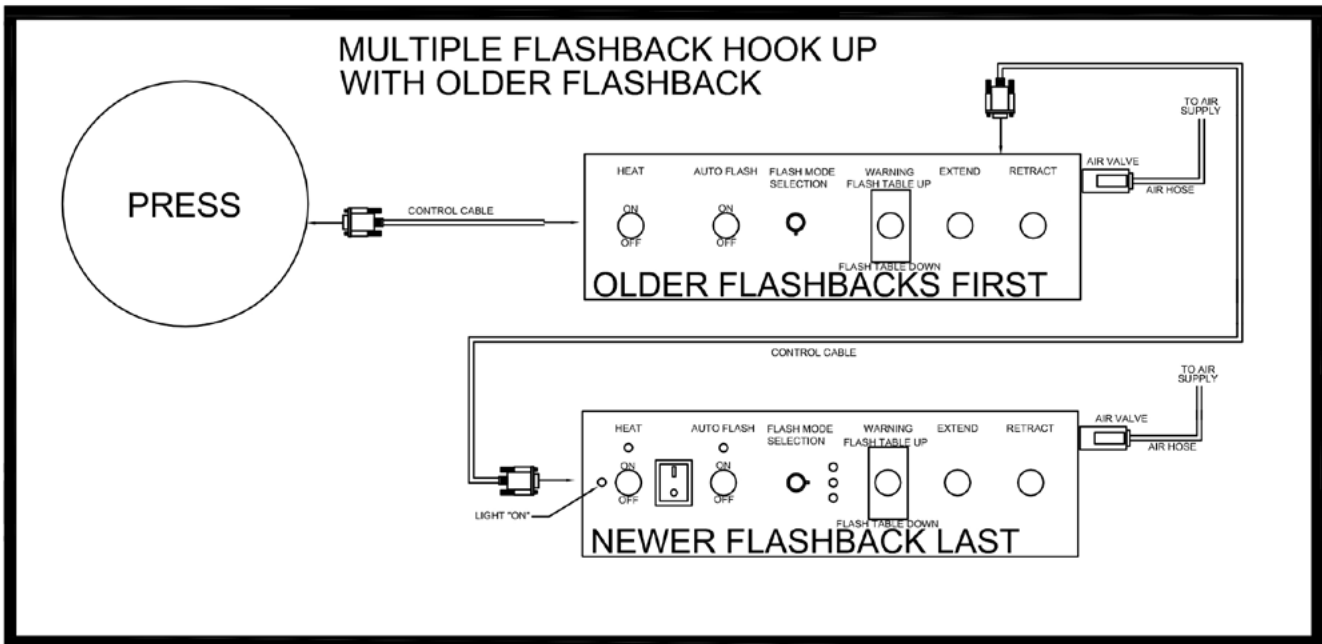
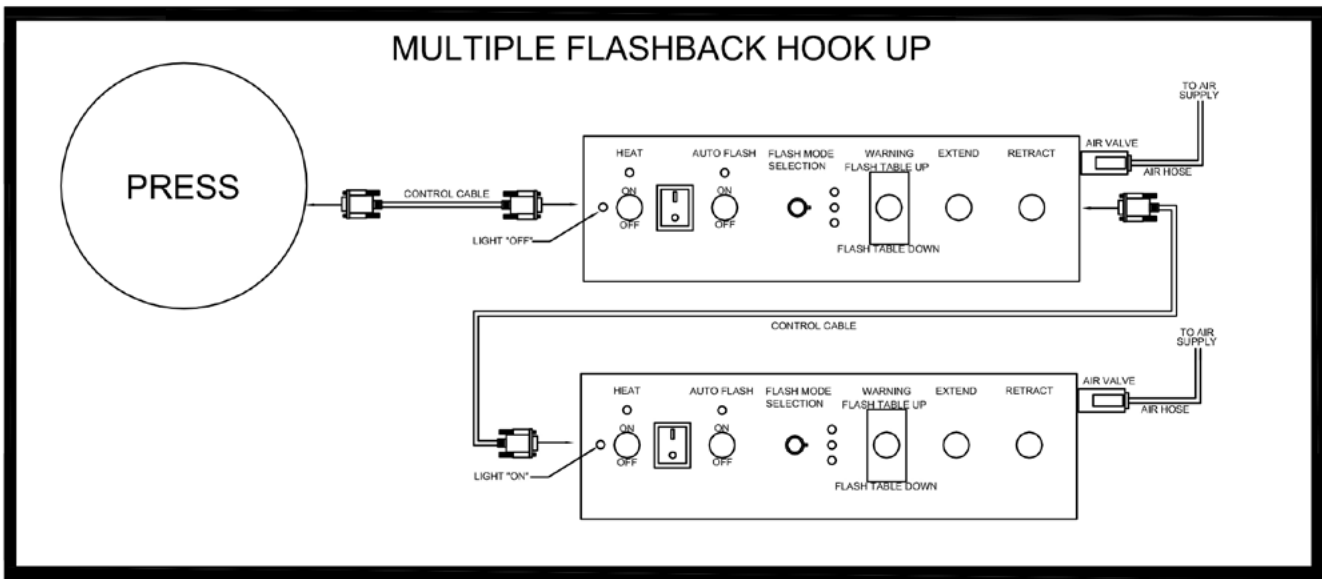
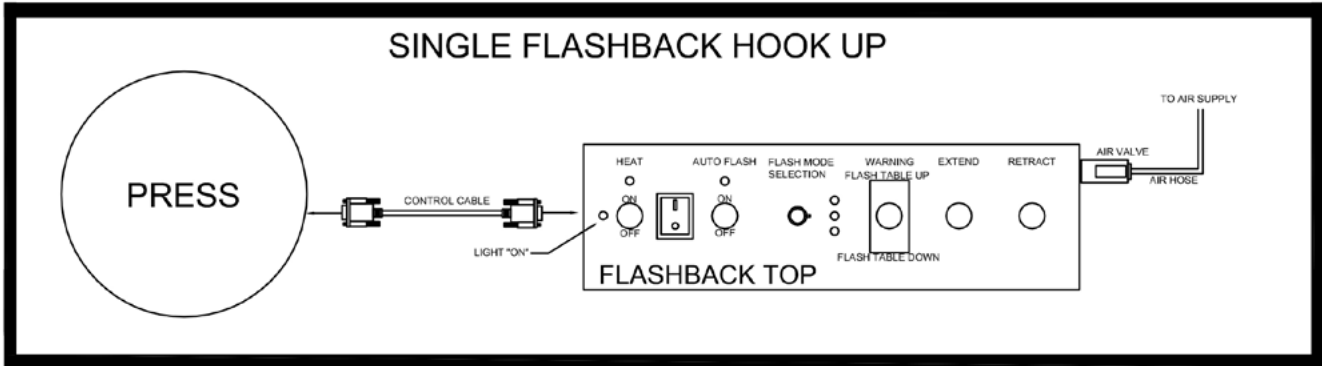
1. The dummy plug must be inserted into to the open receptacle on the control panel.



NOTE: When adding additional Flashbacks the dummy plug must be inserted into the last Flashback, otherwise the machine will not table up.



HOW TO INSTALL MULTIPLE FLASHBACKS



CONTROLS



(A) HEAT ON/OFF

Turns elements and blower motors on/off.

(B) MAIN POWER SWITCH

Turns the unit on/off

(C) AUTO FLASH ON/OFF

When "on" is selected, the Flashback will automatically extend and retract the element tray in sequence with the table's rotation. When "off" is selected, the Flashback will remain retracted when the flash is unneeded.

(D) FLASH MODE SELECTION

Print Flash Print

In this function the Flashback extends in double stroke mode only. If the press is set to single stroke the Flashback will not flash while in this mode. The Flashback will automatically extend and retract, and as the Flashback is retracting the press will flood. When the element tray returns to its home position the table will raise and make a second print stroke. When the sequence is finished, the Flashback will no longer extend and the table will turn immediately.

Print Print Flash

In this mode the print head will print two strokes and flash the image before the table turns. The press floods, and the tables raises to make the print stroke and lowers. This sequence repeats to make the second print stroke. When the sequence completes, the Flashback automatically extends and retracts. Set the delay timer to approximately eight seconds to give the Flashback time to extend and retract before the tables turn.

Print Flash Print Flash

In this mode the Flashback extends and retracts after every print stroke. With the print head set to single stroke the press floods, the table then rises to make the print strokes and lowers. After the sequence is completed, the Flashback automatically extends and retracts. During the Flashback's retract phase the press will flood and wait for the Flashback to return to its idle position, then the table will rise to make the print stroke, and finally the table lowers. The press must be in "Automatic Mode" to double stroke. Set the delay timer to approximately eight seconds to give the Flashback time to extend and retract before the tables turn.

CONTROLS



(E) FLASH TABLE DOWN/FLASH TABLE UP

The Flashback can be configured for two different methods of flash curing.

Flash Table Down

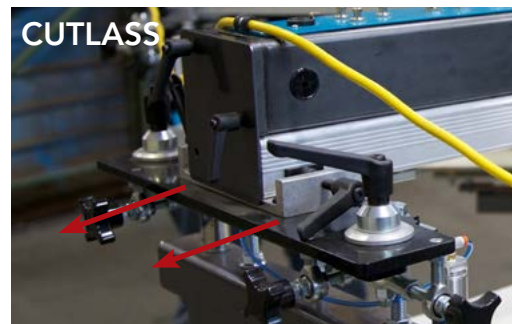
The press prints, flashes and cools down in one position. The press will not raise the table while the Flashback's element tray is extended.

Flash Table Up - This should only be used while in Print Flash Print Flash Mode

The table will raise when the Flashback is extended. The operator must be cautious when using this mode because it could potentially damage the heat lamps. Before operating in this mode you must provide access to roll the flash over the platen in it's higher table up position.



SABRE - Loosen the T-knob and pull the hinged front screen clamp up and over the top of the print head.



CUTLASS - Remove the end levers, disconnect the front airlines from the cylinders and slide the assembly out the end of the head.

(F) EXTEND

The extend control is a flow control to increase/decrease the air supply to the Flashback. This control allows the operator to adjust the speed of the flashback's extend stroke. Turn the knob clockwise to decrease the speed, or turn the knob counter-clockwise to increase the speed.

(G) RETRACT

The retract control is a flow control to increase/decrease the air supply to the Flashback. This control allows the operator to adjust the speed of the Flashback's retract stroke. Turn the knob clockwise to decrease the speed, or turn the knob counter-clockwise to increase the speed.

ADJUSTMENTS

ADJUST THE FLASH HEIGHT FOR TABLE DOWN



CRANK HANDLE

LOCKING LEVER

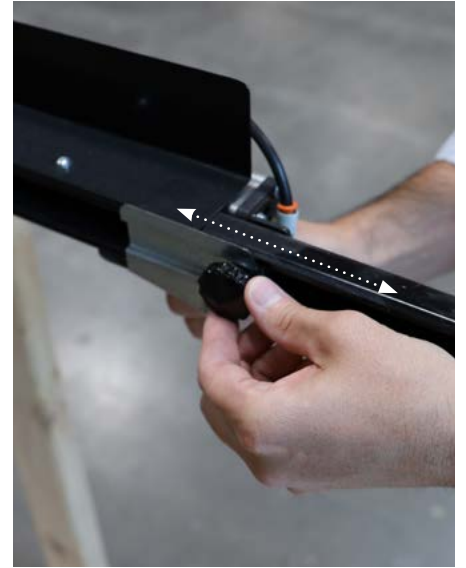
Unlock the locking lever, and use the crank handle to adjust the height of the element tray. Once set to the desired position, tighten the locking lever.

ADJUST THE CASTERS FOR LEVELING



Turn the knob until flash is level.

ADJUST THE STROKE LENGTH



Loosen the knob and slide the stopper to the desired length. Re-tighten the knob.

CHANGE FROM TABLE DOWN TO TABLE UP POSITION



Remove the front screen clamp and adjust the height of the flash with the teal handle located directly underneath the base. Table up position creates the opportunity to flash for quicker productions.

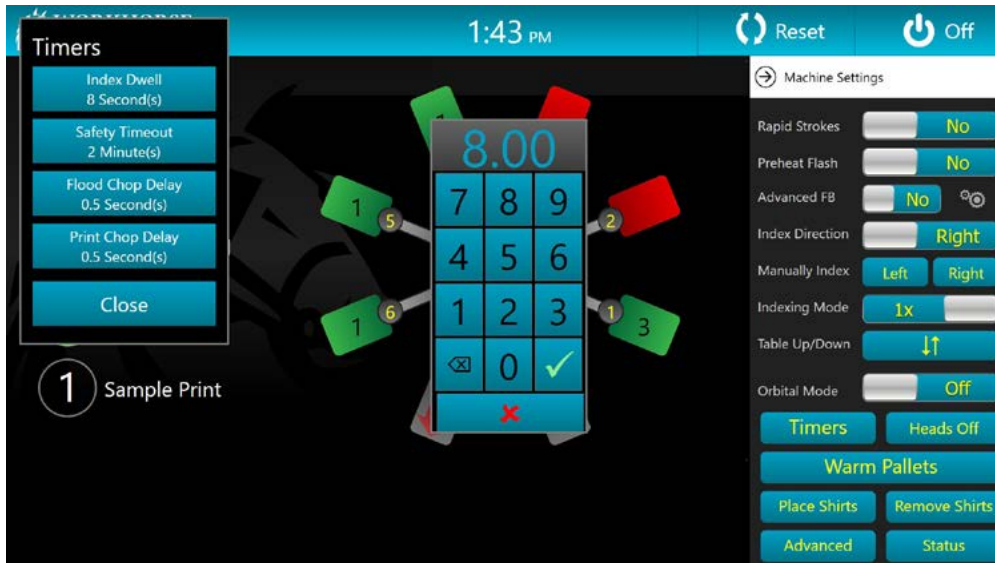
RAISE OR LOWER THE FRONT OF THE ELEMENT TRAY



Adjust the tilt adjustment accordingly to guarantee the element tray is traveling on a level plane. Once the element tray is set to the proper height and the tray is traveling on a level plane, the flash is ready to operate.

TOUCH SCREEN CONTROLS

TABLE DOWN POSITION



Press the “Machine Settings” button located in the middle of the graphic of the press. The flash time is controlled by the index dwell time, which is controlled by the “Timers” button. Within the “Timers” menu the time can be adjusted to hold the tables from indexing long enough for the element tray to retract.

TABLE UP POSITION



Press the print station where the flash is located and set “Flash Head” into the “on” position. Then set “Flash With Index” to “After” and set the “Flash Time” to the time required for the element tray to retract. If the time is too short the tables will drop before the flash stroke is completed.

BASIC OPERATION

The FlashBack has two primary modes of operation: Flash Table Down and Flash Table Up.

FLASH TABLE DOWN MODE

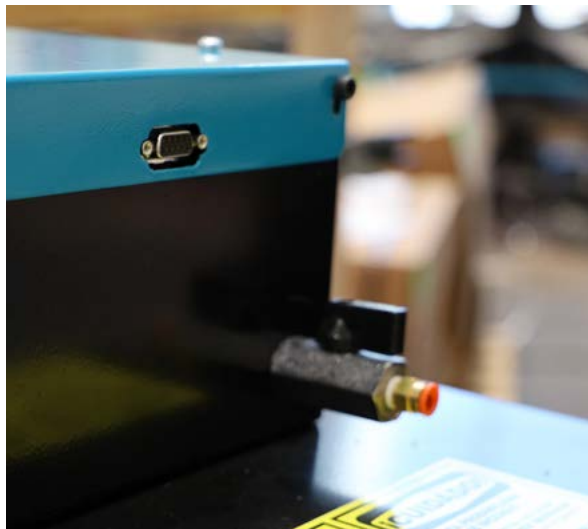
The most commonly used FlashBack mode. The FlashBack is installed on any of the printheads. The printhead will also be used with a screen to print one of the colors. The Flashback can only be used with a compatible Workhorse Press (Javelin, Freedom, Freedom Express, Cutlass, and Sabre).

Step 1

ADJUST THE FLASH HEIGHT

With a screen frame in place on the press and a printing platen (in the DOWN position) under the screen, adjust the flash height so the heater tray will move safely between the platen and the screen frame.

The height will vary by product, as a starting point; adjust the heater tray so it is $\frac{1}{2}$ " to $\frac{3}{4}$ " above the printing platen. To adjust the height unlock the telescopic stand and turn the crank handle to raise or lower the heater tray. Once you get it the the proper height visually it's best to move the heater tray back and forth by hand to verify the height is correct. It is also important to ensure that the heater tray is maintaining a consistent height off the platen over the entire travel. Also check that the tray is moving parallel over it's entire travel. Front to back parallelism can be adjusted with the tilt adjustment. Left to right parallelism is adjusted with the knobs above the casters at the base of the flash.



NOTE: The heater tray will not move until the air pressure has been released. To release the air CLOSE both the air disconnect and the EXTEND air valve completely. Turn the Auto Flash Switch to ON. Raise the tables on the press up and then back down. This will fire the electronic valve and remove the air from the cylinder. Then re-open the EXTEND Valve and you will be able to move the tray by hand.

BASIC OPERATION cont.

Step 2

ADJUST THE STROKE LENGTH STOP

Loosen the knob and slide the stopper to the desired length. Re-tighten the knob.

You only want the tray to move far enough to cover the current image. Over travel takes extra time and slows down overall production.



Step 3

ADJUST THE EXTEND AND RETRACT SPEEDS

- It's best to flash in just one direction
- Adjust the extend to move out quickly, but not so fast that it stops violently
- The retract stroke should be much slower than the extend and the curing is done on Retract
- Slower = Hotter
- The speed should only be slow enough to cure the ink (extra flash time will greatly reduce overall production).



Step 4

SELECT FLASH MODE SELECTION

Make the proper mode selection for the type of job being run. There are three modes available:

PRINT/FLASH/PRINT/FLASH

This is the most common mode. No matter how many squeegee strokes are set the flash will extend after each print stroke and the image will leave that print head in a dry state.

NOTE: The delay timer on the press must be set long enough to hold the platens stationary until the flash has completed it's travel.

PRINT/PRINT/FLASH

This mode will apply two strokes of ink and then flash the image before the platens advance. The image will leave that print head in a dry state. **NOTE:** The delay timer on the press must be set long enough to hold the platens stationary until the flash has completed it's travel.

PRINT/FLASH/PRINT

This mode will apply one stroke of ink, drop the platens and the flash will dry the 1st layer of ink. Then the platens will rise and make the 2nd stroke of ink on top of the dried layer. The platens will then advance with the top layer of ink in a wet state.

BASIC OPERATION cont.

FLASH TABLE UP MODE

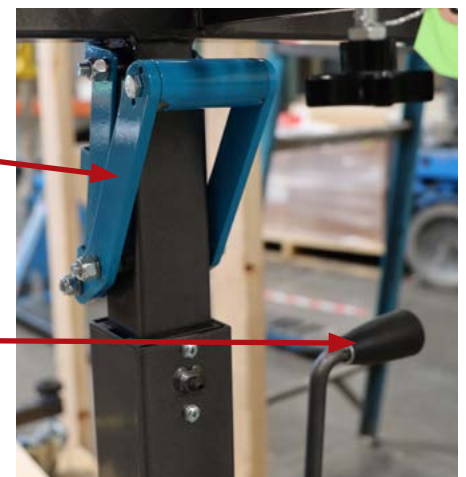
This is the more traditional way to use a flash on an Automated Press. In this mode the flash will replace the screen and flashes at the same time that the squeegee is printing, so it's MUCH faster!

IMPORTANT: Changing from Flash table down mode to Flash table up mode can cause EXTENSIVE damage. Do Not flip the switch until all adjustments below have been made!!!



Remove the front screen clamp so the Flashback can be rolled under the printhead:

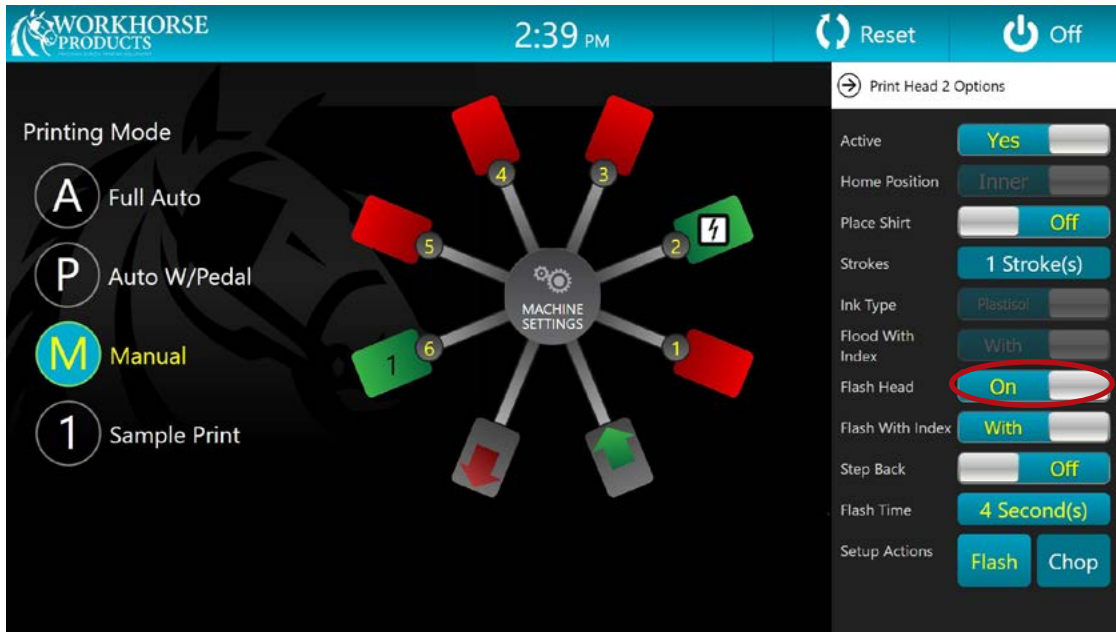
1. **Sabres:** Slide the clamp out to the end of the head, loosen the T-Knob and flip the clamp up out of the way on it's hinge.
Javelins and Cutlass Products: Unbolt and remove the front screen clamp.
2. Using the teal colored lever, switch the height of the Flashback from the Table Down position to the Table Up position. The use of this lever will move the flash tray up closer to the proper distance.
3. **HOWEVER**, small adjustments with the crank handle may still be required due to height differences on the machine to the floor level. Do not rely on the lever adjustment alone. Make a visual check before moving the flash heater tray. **CHECK** with the Print Platens in the UP position.
4. Once you are sure the height is correct and the heater tray will not strike anything you are now ready to:
5. Flip the toggle switch from Flash Table Down to Flash Table Up.



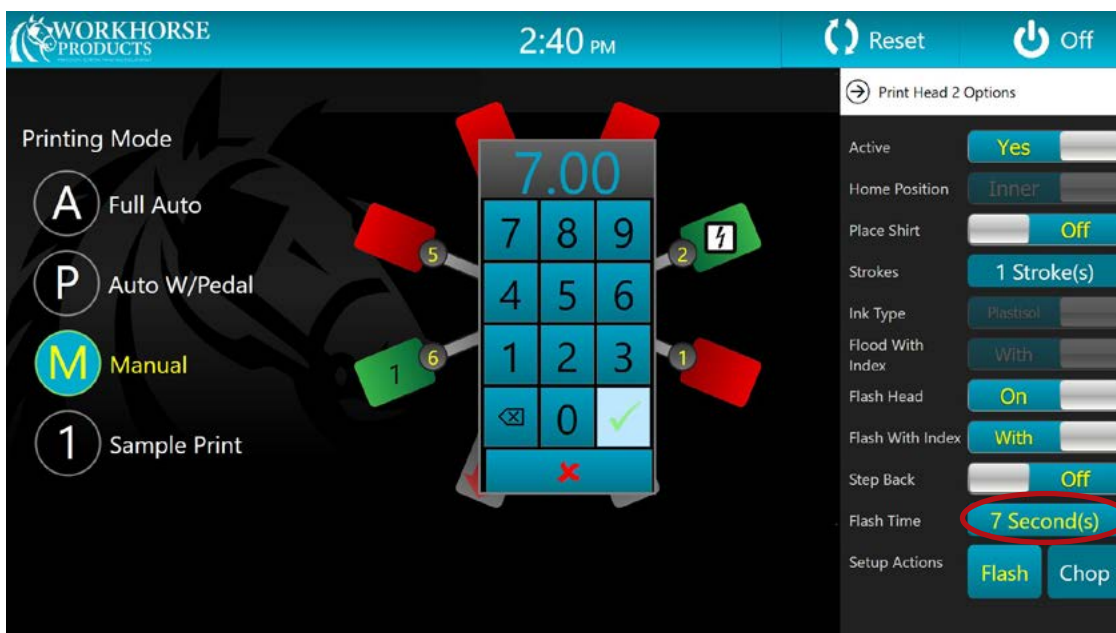
Change the rotary switch to Print/Flash/Print/Flash mode. This is the **ONLY** mode that will function in the Flash Table Up position.

BASIC OPERATION cont.

- Next go to the tablet and set this printhead to be ACTIVE and as a FLASH HEAD. Then Set your FLASH TIME to a long enough interval to allow the heater tray to complete its pass over the image.



The squeegee is usually faster than the flash so if you don't add some flash time the printing platen will drop away from the Flash before the heater tray has covered the entire image. You want the Printing Platens to drop as soon as the heater tray has cleared the image...it's OK if the tray is still retracting.



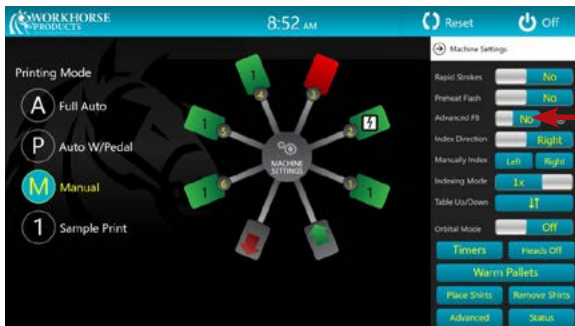
ADVANCED OPERATION

These settings are only available for Sabre or Cutlass screen printers that have a Flashback. This setting will allow you to designate when the flash will cycle at a certain interval of print strokes. Example: You may want two strokes a flash and then a single stroke and another flash, this may help achieve better coverage or opacity on a design.

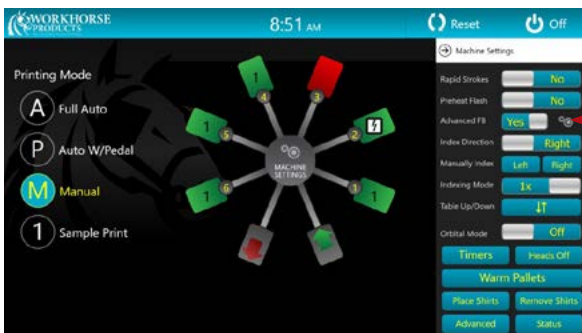
In order to use these settings you will need to make some selections on the printer and the flashback. The Flashback will need to be set to Print/Print/Flash mode on the Flashback control box and tablet settings will need to be changed.



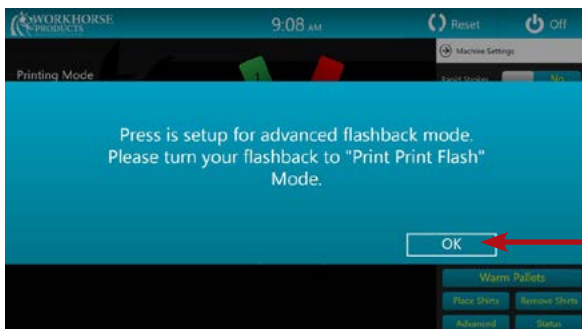
1) To access advanced Flashback you will need to tap the center screen machine setting and this will open menu settings. The Rapid stroke mode needs to be turned off in order to turn on advanced.



2) Change the Advanced FB menu from NO to YES.



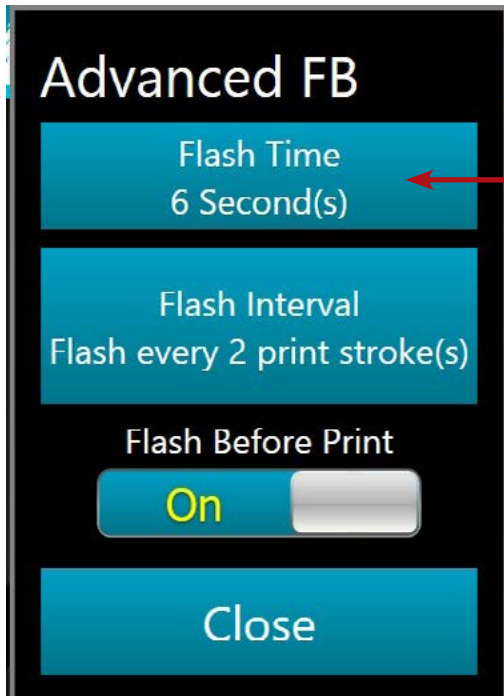
3) After selecting yes tap the gears to the right of the setting for Advanced Flashback Settings.



4) Turn your flashback to "Print Print Flash" Mode then select "OK".

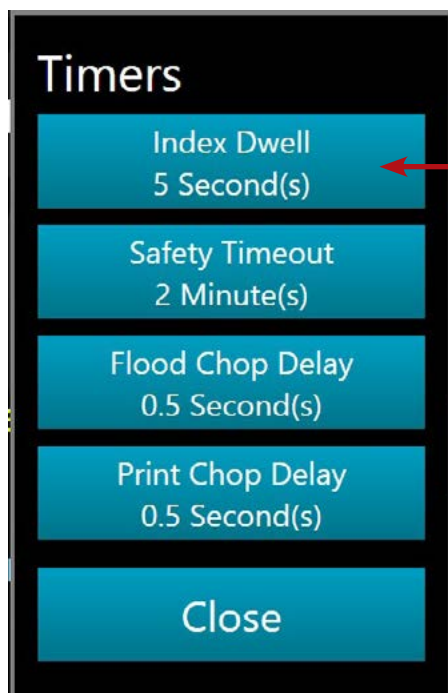
ADVANCED OPERATION cont.

During advanced flashback you will need to consider two different timers for machine functions.



When advanced flashback is performing a routine the computer is controlling the element tray extending and retracting. The Advanced Flashback "FlashTime" is the amount of time the element tray will extend forward. The reversing sensor on the flashback will not cause it to return home. It is all based on the Flash Time you have programmed.

In the picture it is displaying 6 seconds, the element tray will move forward and retract after 6 seconds has occurred. If less time is needed lower the setting to amount of time needed.



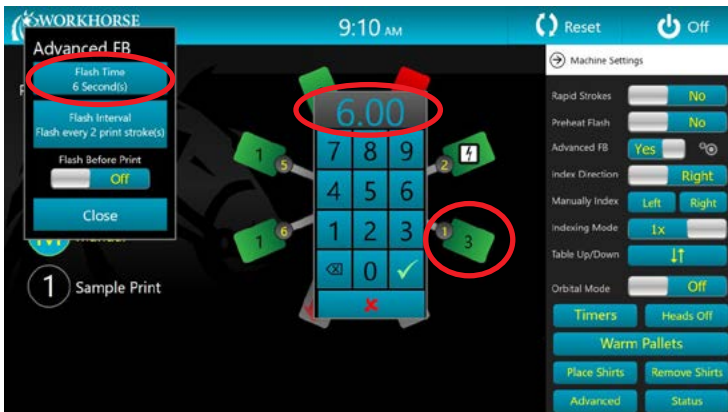
Index Dwell will control the time before index after the final print stroke has been made. This will also determine the time the flash is extending while in the Print/Print/Flash mode.

ADVANCED OPERATION cont.



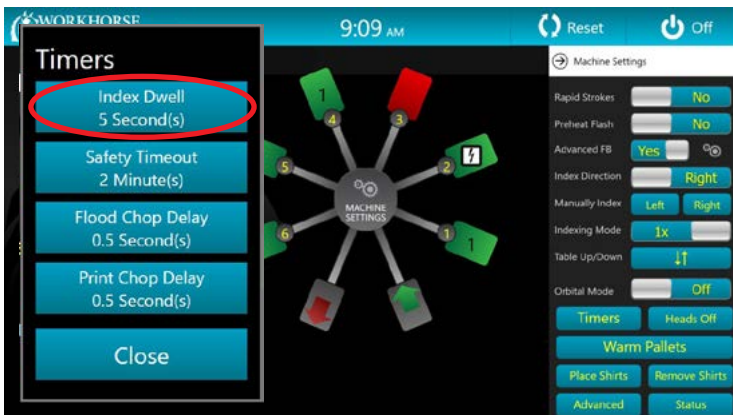
FLASH INTERVAL SETTING

In this description we are showing three print strokes and flash after two print strokes. This will end with a final third stroke. At this time if you need to flash again you will need to allow "Index Time" before the tables cycle.



SETTING FLASH TIME

Flash time is selected to 6 seconds, this is the amount of time the element tray will move forward to flash. The element tray will not retract until this has timed out, if the time is too long lower the setting to a shorter time.



INDEX DWELL

Now you will need to determine the amount of time for the index.

This is to determine the need for a second Flash to happen and the amount of time it needs.

Or if turned to 0, the cycle will occur and Flash will cancel.

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.

FOR WARRANTY TO TAKE PLACE YOU MUST COMPLETE THE PRODUCT REGISTRATION FORM ONLINE:

<https://workhorseproducts.com/equipment-registration-form/>



WWW.WORKHORSEPRODUCTS.COM

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

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