

EA/VS-2408 Digital

CONVEYOR DRYERS

OWNER'S MANUAL



VS-2408 shown



For Customer Service, Call **1-800-835-0606** or
Visit www.hixcorp.com

CONTENTS

Installation	2
Operation.....	3
Controls	4
Belt Tracking.....	5
Maintenance Schedule.....	7
Warranty	8

**BEFORE warranty repair you MUST get Prior Authorization:
Call 1-800-835-0606**

INSTALLATION

VS and EA dryers use custom built infra red heaters to eliminate any cold spots within the oven chamber. Air circulation within the oven chamber is also provided on EA models for processes that require a minimum amount of airflow. VS Models are strictly infrared dryers, that is, no circulation of air.

MODELS 2410 AND SMALLER:

The control box end is the feed end of the oven. The printer may monitor the controls and make any adjustments as necessary. Position the dryer in the desired location so the product may be easily loaded onto the feed end of the conveyor before continuing.

FOR ALL MODELS:

The 10"-12" exhaust duct must be ducted outside the building. The 300-425 cfm internal fan is sufficient for vertical runs of no more than 10 feet. If the duct is run horizontally over six feet or more than 10 feet vertically a booster fan must be added to provide proper exhausting of the heat and fumes. A rain cap must be installed where the exhaust duct exits the roof to prevent any water from entering the oven.

▲ NOTE: Do not reduce the duct size diameter from that on the exhaust blower.

OPERATION

OPERATING INSTRUCTIONS

1. Turn "Main Power" Switch on.
2. Turn the belt speed control up and observe the belt moving.
Now would be a good time to "chart" your actual oven retention times for any given speed control setting. Place a coin on the belt to use as a reference when checking time through the oven. If the belt is not tracking, STOP and see page five and six for belt tracking adjustment.
3. Turn the temperature control up to the desired temperature setting. Heater light will come on to indicate that the unit is heating. After the dryer has reached the desired temperature the control will start cycling the heaters on and off to maintain the temperature selected. Normal warm-up time should be only 20-30 minutes to reach 325°F (163°C).
4. After the oven has reached operating temperature (indicated by the heater light cycling on and off), you may run belt temperature tests to determine proper temperature control and belt speed control settings. Many things factor into finding the "right" combination depending on garment type (t-shirt, sweatshirt, jacket etc.), its weight (heavier garments take longer to heat), water content (usually determined by the garments material composition, ie: 100% cotton will hold more water and take longer to dry than a 50% cotton/50% polyester garment), and ink deposit (more or thicker ink deposits will take longer to dry).

The rule of thumb is to set the temperature control just slightly higher (5-10°F or 2-3°C) than the ink manufacturers recommendations for cure temperature. In most cases for plastisol this means setting the temperature control for 325-330°F (163-165°C). At this point the belt speed can be adjusted to ensure that the garment and ink deposit has adequate time to reach the temperature desired. Depending on the garment and ink combination required, retention time inside the oven will typically range from 1 to 2 minutes. Pretesting your particular combination is a must to ensure a properly cured print. Always read and follow the ink manufacturers recommendations as temperature requirements do vary between different manufacturers and within their own product lines. Confirm you are achieving proper temperature by using either thermolable tapes or thermocouple probes on the garment. When testing garments don't use the same one twice. The first time through the oven will evaporate most all the water trapped in the garment and if passed through a second time (even if allowed to cool down) it will heat up much quicker as the cooling effect of the water evaporating is no longer present, resulting in an erroneous test result and will be confusing.

5. After the oven has reached operating temperature some adjustments in the belt tracking may have to be made. See belt tracking instructions on page five and six.
6. At the end of the production day, reduce temperature to its lowest setting and allow the dryer to "cool" for 10-15 minutes before stopping the belt or turning the dryer off.

CONTROLS

DIGITAL TEMPERATURE CONTROL

1. Press the “MODE” button
2. Press the “▲” button to change the temperature to desired setting
3. Press the “Mode” button to lock the new setting



BELT SPEED CONTROLLER

4. The belt speed is controlled by a simple rotary knob with graduations numbered from 0 to 10 as shown.



▲ CAUTION: Do not stop conveyor belt while oven is hot; belt. Damage will result.

CIRCULATING AIR SYSTEM

The air system is controlled by a simple on-off switch located on the control panel.

The EA models have a circulating single speed air system to:

1. Drive off water/solvents from the garment and ink to provide quicker and more effective drying and curing.
2. Minimize scorching of delicate fabrics and paper.

▲ NOTE: VS and EA dryers are not recommended for the drying or curing of high water content or high solvent based inks.

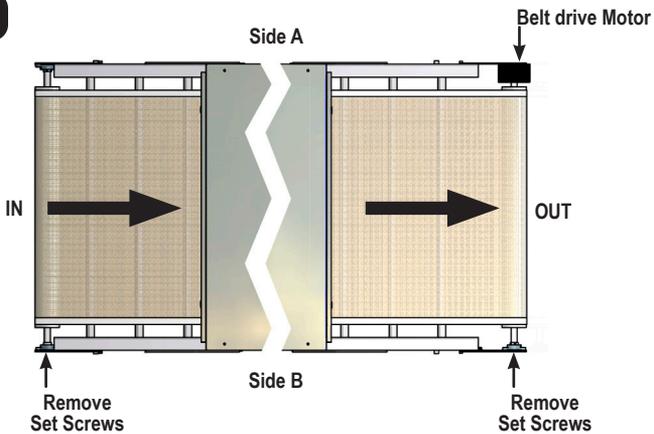
BELT TRACKING

BELT TRACKING ADJUSTMENT

After the conveyor belt has been installed some adjustment may be necessary to ensure the belt is tracking properly.

1. Make sure the oven is level (from side to side). Use a carpenter's level.
2. Slightly loosen the pulley adjustment end plates (leave snug yet allow the plates to move with the adjustment screws) shown in the diagram.
3. The belt has a label that shows the direction of travel and which side to mount face up. Verify the travel and face up direction label are correct and then connect belt with the supplied spline pin.
4. For ovens made prior to October 2007, verify that the two set screws on side B only (that is the side opposite of the belt drive motor side of oven) and on both ends of the oven are removed. (set screws are located in the flange bearing into the belt roller shaft) See figure 1

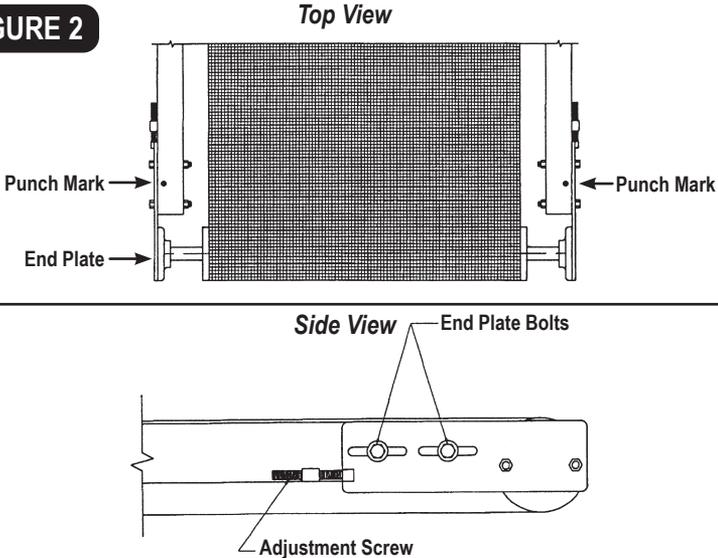
FIGURE 1



BELT TRACKING

- Adjust the adjustment screw until the punch marks on each side line up, these are located on the pulley adjustment plates and the top at the end of the dryer frame. These marks are used to set the belt tension and initial tracking adjustment settings. See figure 2

FIGURE 2



- Bring the dryer up to your desired operating temperature, at low belt speed, until you reach temperature. The belt will track differently when hot than when cold.
- Set the belt speed to maximum/high speed; setting #10.
- If the belt is moving to the left, tighten (1/2 turn-clockwise) the adjustment screw on that side. If tracking to the right, tighten the right side adjustment screw. Allow the belt to make at least 3 full revolutions before making further adjustments. If the belt is quickly moving to the side it can be adjusted every belt revolution. Check the position at the same location on the belt each time. The seam is a convenient place to make this check. Repeat this procedure until the belt is tracking straight. Do not tighten the adjustment screws more than 5 full revolutions. Do not over-tighten the belt or damage could occur that is not covered under warranty. Make smaller, (tighter or looser) adjustments for final tracking. As the belt ages with time/heat, further minor adjustment may be necessary.
- Tighten the end plate bolts and verify the belt is still tracking correctly.

▲ NOTE: Belt travel is always toward the belt drive motor, keeping the belt under tension. Do not attempt to reverse the motor rotation or belt travel direction as proper belt tracking will not be possible.

MAINTENANCE SCHEDULE

DRYER MAINTENANCE SCHEDULE

EVERY 6 MONTHS:

- Remove exhaust motor from duct and lubricate as indicated on the motor with SAE 20 oil.
- Vacuum any lint/dust accumulation around air intake holes on both sides of oven and perforated ends on control box.

EVERY YEAR:

- Remove top chain guard cover on belt motor drive and lightly lubricate drive chain with SAE 20 oil. Replace cover after lubricating, DO NOT leave off!
- Have a qualified electrician check the heater elements with either an Ohm meter or amp clamp. Specifications are:

Ohms: 17-27 ohms per heater (+/-1 ohm)

- Check belt drive motor brushes for wear, replace if necessary.

EVERY 3 YEARS:

- Replace thermocouple.

WARRANTY

(Effective 3/1/2020)

HIX will automatically register the equipment on the date it was shipped to you or your distributor. If the equipment was not purchased directly from HIX, but through a distributor (either domestic or foreign), please keep a copy of their sales invoice showing the serial number and date it was sold/shipped to you with this warranty. In this case, we will use the distributor's invoice date as the beginning warranty date. **STAPLE A COPY OF YOUR PROOF OF PURCHASE TO THIS WARRANTY** and keep in a safe place to provide verification of your warranty should a problem occur. Thank you.

Please fill in the following information and attach a copy of your receipt for your records.

Date Purchased: _____ From: _____
Model #: _____ Serial #: _____

This warranty applies to equipment manufactured by the HIX Corporation (HIX), Pittsburg, Kansas, U.S.A. HIX warrants to the original purchaser, its Ovens and Dryers, Heat Transfer Machines, Textile Printers, Spot Heaters, and Exposure Units against defects in workmanship and material, except for wear and tear for a period of "One Year" from the date of purchase. HIX warrants Accessories for a period of 90 days from the date of purchase. doughXpress products are covered under separate warranty.

In the event of a defect, HIX, at its option, will repair, replace or substitute the defective item at no cost during this warranty period subject to the limitations of insurance and shipping costs stated below (excludes labor).

In the case of heat transfer presses (except the Hobby Lite and Large Format presses), HIX warrants the heat casting for the "Life" of the machine for the original purchaser. If a part becomes obsolete at the time for repair, and/or cannot be reasonably substituted for, HIX will credit, at half the then current list price or last recorded price, only that part toward a new machine or any product HIX offers. This credit offer shall be the sole responsibility of the HIX Corporation in the event of an obsolete part.

This warranty does not cover belts, rail tape, pads, mug wraps, canvas, rubber blankets, bulbs, glass. Warranty does not cover damages due to accident, misuse/abuse, alterations or damage due to neglect, shipping or lack of proper lubrication or maintenance. HIX shall not be responsible for repairs or alterations made by any person without the prior written authorization by HIX. This warranty is the sole and exclusive warranty of HIX and no person, agent, distributor, or dealer of HIX is authorized to change, amend or modify the terms set forth herein, in whole or in part.

In the case of a problem with the equipment identified herein, HIX Corporation should be contacted during regular business hours to discuss the problem and verify an existing warranty. HIX personnel will assist the customer to correct any problems which can be corrected through operation or maintenance instructions, simple mechanical adjustments, or replacement of parts. In the event the problem cannot be corrected by phone, and upon the issuance of a return authorization by HIX, the equipment shall be returned to HIX or an authorized service representative. All insurance, packaging and shipment/freight costs are solely the responsibility of the customer, and not that of HIX, and HIX shall not be responsible for improper packaging, handling or damage in transit. Contact HIX customer service for complete return authorization information. Correct shipping boxes are available from HIX.

This expressed warranty is given in lieu of any and all other warranties, whether expressed or implied, including but not limited to those of merchantability and fitness for a particular purpose, and constitutes the only warranty made by HIX Corporation.

In no event shall HIX's liability for breach of warranty extend beyond the obligation to repair or replace the nonconforming goods. HIX shall not be liable for any other damages, either incidental or consequential, or the action as brought in contract, negligence or otherwise.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.



Design and Manufacturers of Graphic Imaging, Commercial Food, Industrial and Custom Drying Equipment

1201 E. 27th Terrace • Pittsburg, KS 66762 • U.S.A.
Web site: www.hixcorp.com • Phone: (800) 835-0606 • Fax: 620-231-1598
E-Mail: customerservice@hixcorp.com • E-Mail: sales@hixcorp.com