

# VS-2407

## 24" Wide, 7' Long Conveyor Dryer

### OWNER'S MANUAL

Installation, Operation and Care of VS-2407



VS-2407

**HIX CORPORATION**  
For Customer Service, Call 1-800-835-0606  
or Visit [www.hixcorp.com](http://www.hixcorp.com)

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**BEFORE warranty repair you MUST get Prior Authorization:**

# RECEIVING & INSTALLATION

## SHIPPING OR RETURNS

**NOTE: Save all of your shipping/packing materials.**

**DO NOT RISK COSTLY SHIPPING DAMAGE!**

**RAISE OVEN HEATER TO THE HIGHEST POSITION BEFORE SHIPPING.  
THIS SECURES THE HEATER TO THE DRYER FRAME.**

**SHIP ONLY IN ORIGINAL CRATE.**

## UNCRATING INSTRUCTIONS

1. Remove top of crate
2. Remove the four 9/16" bolts that holds the oven to the crate base
3. Remove the oven from the crate (two people required to lift out of the crate)



4. Fold the legs up and reinstall the bolts at each corner and tighten



## SUPPLYING POWER TO THE OVEN

Depending on model, input supply power should be:

NEMA 6-20R – 220V: 208-240V, 20 Amp, single phase service receptacle.

NEMA 5-20R – 120V, 20 Amp receptacle.

# OPERATION

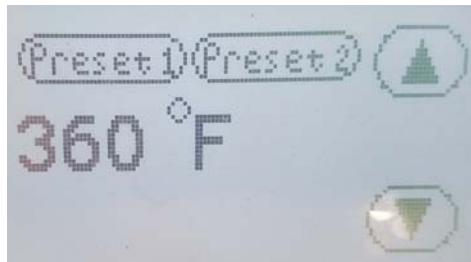
## OPERATING INSTRUCTIONS

1. Turn "Main Power" Switch on.
2. Turn the belt speed control up and observe the belt moving.
3. 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 belt tracking adjustment in this document.
4. Set the temperature control to the desired temperature setting (**See Temperature Adjustment**). 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).
5. 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).
6. 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.
7. After the oven has reached operating temperature some adjustments in the belt tracking may have to be made. See belt tracking instructions in this document.
8. 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.

# SETTINGS

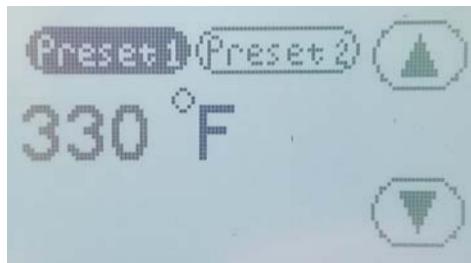
## TEMPERATURE ADJUSTMENT

1. Press on the temperature display with your finger – display will start flashing.
2. Press on the “UP” or “DOWN” arrow to change the value.
3. Once the new value is displaying, it will automatically lock in that new setting.



## STORING TEMPERATURE PRESETS

1. Temperature presets can be “stored” easily. Once the temperature has been selected that you want to store, simply press and “HOLD” the Preset 1 button for 3 seconds. When the preset is stored you will hear a beep and the button will turn “Black” as shown below.



2. The same thing can be used to store a different temperature “preset” in Preset 2.
3. Once a preset is stored, you can simply press the preset button for 1 second to instantly recall the stored preset.

## BELT SPEED CONTROLLER

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.

# ADJUSTMENTS

## OVEN DOOR HEIGHT ADJUSTMENT

The oven doors can easily be raised or lowered and then locked in place with the two black star knobs as shown below. Height is adjustable from 1" to 6" off of the conveyor belt.



## OVEN HEATER HEIGHT ADJUSTMENT

The oven heater height can also be adjusted from 5" to 7" off of the conveyor belt.

1. Remove the four chrome hole plugs located in the top of the oven
2. With a 5/8" socket you can adjust the height of the heaters.
3. Turning the bolt Clockwise will move the heater up, Counter Clockwise will lower the heater (as indicated by the stickers located next to the bolts).
4. Adjust each of the four bolts in small increments to insure the oven heater is raised or lowered evenly.



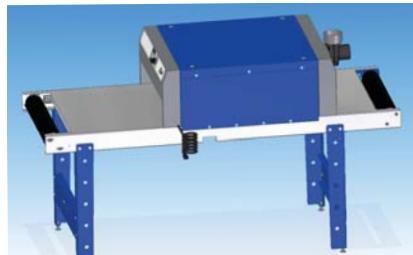
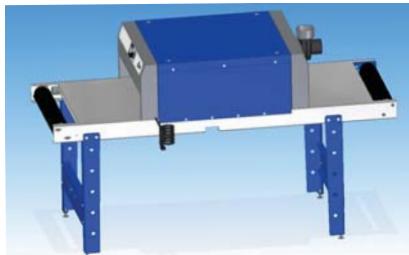
**NOTE:** For safety during transport, the heaters are set to their maximum height at the factory. Set the heater height to your own requirement following installation of the dryer.

## ADJUSTABLE OVEN INFEED DELIVERY LENGTHS.

The oven can be repositioned over the conveyor system to provide either of the following.

1. 20" infeed and delivery
2. 26" infeed and 14" delivery

Simply remove the eight screws securing the oven chamber to the conveyor frame and slide as desired as shown below, then reinstall the screws.



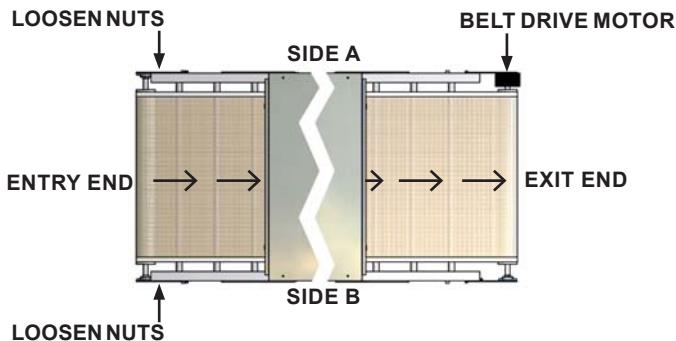
# MAINTENANCE

## BELT TRACKING ADJUSTMENT

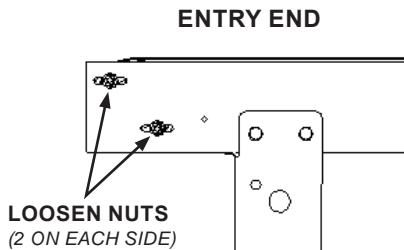
After the conveyor belt has been installed some adjustment may be necessary to ensure the belt is tracking properly.

1. Make sure the oven is level (from side to side). Use a carpenters level.
2. Slightly loosen the four nuts on the input side of the dryer as shown in the diagram.

**FIGURE 1**



**FIGURE 2**

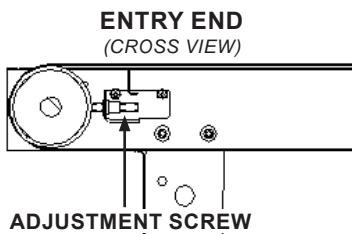


3. The belt has a label that shows the direction of travel and which side to mount face up. Verify the travel and face up direction label are correct and then connect belt with the supplied spline pin.
4. Bring the dryer up to your desired operating temperature, at low belt speed, until you reach temperature. The belt will track differently when hot than when cold.
5. Set the belt speed to maximum/high speed; setting #10.

# MAINTENANCE

6. 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.

**FIGURE 3**



7. Tighten the four nuts loosened in step two 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.

## DRYER MAINTENANCE SCHEDULE

### **EVERY 6 MONTHS:**

1. Vacuum any lint/dust accumulation around air intake holes on both sides of oven and perforated ends on control box.

### **EVERY YEAR:**

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

Ohms: 26 ohms per heater (+/-1 ohm)

### **EVERY 3 YEARS:**

1. Replace thermocouple.

# WARRANTY

(Effective October 30, 2015)

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 RECEIPT 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 Presses, Mug Presses, Mug Glazer, Retensionable Screen Frames, 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 its Accessories, Reten Splines/Hardware/Tool Kit, and Shuttle for a period of 90 days from the date of purchase. Thermatrol and 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 period subject to the limitations of insurance and shipping costs stated below.

In the case of heat transfer presses (except the Hobby Lite), 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, rod ends, turn buckles on printers or 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*

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