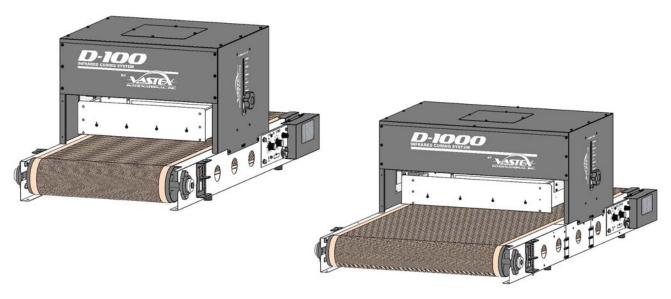


# D-100 and D-1000 Series Dryer

## **Assembly and Operating Instructions**



	Contents	Page#	
•	Intro and Safety Information	2	
•	General Information	3	
•	Package Contents	4-5	Vastex International, Inc. 7 Emery Street Bethlehem, PA 18015-1982 Phone# 610 625-2702 Fax# Web Site www.vastex.com
•	Component Identification	6	
•	Assembly & Chain Adjustment	7-16	
•	Belt Tracking	17	
•	<b>Electrical Requirements/Controls</b>	18	
•	Operation	19	Authorized Representative in
•	Warranty	20	Certification Experts BV Nieuwstad 100 1381 CE Wee

Rev: Electrical Drawing #: \_\_\_\_\_ Date:\_\_ Serial Number: VTX

(Please log your machine's serial number and date of purchase for future reference.)

USA # 610 625-2775

n Europe: esp, The Netherlands Tel: +31(0)294 -483355

Fax: +31(0)294 -414687

### Vastex E-mail assistance

Purchasing, product and printing Info: sales@vastex.com

**Electrical Support:** 

stech@vastex.com

Tech Support, Mechanical Setup, and Operation: techsupport@vastex.com

### **Introduction**

Congratulations, you have chosen a VASTEX conveyor curing system. VASTEX has been designing and building dryers since 1960 and has the knowledge and expertise to supply a quality dryer and help you keep it running for years to come. VASTEX has innovated many of the features found in conveyor ovens today from control methods, modular features, air movements and belt tracking.

Vastex Infrared Dryer have been Factory tested and burned in for a period of 2-8 hours. All components are tested to be sure they work correctly when the Dryer leaves our factory.

Inspect all packages and notify the shipping company if any damages are detected.

## Safety

# The Instruction Manual and Safety Instructions must be read and understood by anyone operating the Vastex Conveyor Drying System.

- The operator should read and understand the instruction manual before operating this equipment. Store instruction manual and safety instructions near equipment for easy access to operators.
- VASTEX Conveyor Drying System is intended for the curing of non-flammable inks on screen printed materials. Do not use for any other purpose unless authorized by Vastex International, Inc. Use of this equipment for any other purpose can be dangerous and may cause damage to this equipment, voiding the warranty.
- It is recommended that the area around this equipment be designated as a work area and only authorized employees be allowed in the area.
- Children and pets must be kept clear of the work area.
- Do not place any objects on top of the drying chamber. Surfaces are hot!
- Never leave equipment unattended.
- Do not operate conveyor or dryer with any cover or guard removed.
- Operator must be familiar with controls of the dryer and conveyor.
- Never put excessive load on the conveyor belt.
- Before starting production, the operator must check that all covers and guards are in place, no material has been left on the conveyor, and the work area is clear of obstructions.
- Switch on and verify conveyor belt is moving before turning on the heat.
- Allow dryer to cool to 300°F (149°C) or turn off heat for 10 to 15 minutes before switching off conveyor.
- Always turn off power at the main disconnect at the end of production.
- In case an abnormal symptom occurs, for example excessive vibration, noise, and strong smell or smoke development, turn off the VASTEX Conveyor Curing System and contact a qualified technician.
- Immediately turn off the VASTEX Conveyor Curing System if products become jammed in the drying chamber or conveyor belt.
- Do not remove any cover or guard until power at the main disconnect is switched off and locked out. No unauthorized persons are to be allowed inside the control boxes.
- Turn off and lock out power at the main disconnect before any cleaning or maintenance.
- Only qualified technicians should be allowed to make repairs on the VASTEX Conveyor Drying System.

### Stability during use, transport, assembly, testing, and foreseeable breakdowns:

The D-100 and D-1000 dryers are designed and expected to be inherently stable under all foreseeable conditions of use, assembly, testing, etc., so long as the procedures listed in this manual are followed. Be certain that your workbench, table, or stand can safely support the weight of your machine (see below).

### Safe handling, transport, and storage:

Unplug your dryer and allow it to cool before storing. When handling or transporting your machinery, be aware of the following weights and dimensions:

```
D-100: Assembled — 89 lbs (40.4 \text{ kg}); 46" x 24" x 24" (119 x 61 x 61 cm) Boxes: \#1-57 lbs (25.9 \text{ kg}); \#2-14 lbs (6.4 \text{ kg}); \#3-18 lbs (8.2 \text{ kg}); Boxes on skid: 115 lbs (52.2 \text{ kg})
```

```
D-1000: Assembled — 116 lbs (52.6 kg), 46" x 32" x 24" (119 x 81 x 61 cm) Boxes: \#1-38 lbs (17.2 kg); \#2-43 lbs (19.5 kg); \#3-35 lbs (15.9 kg); Boxes on skid: 137 lbs (62.1 kg)
```

### Safety during adjustment and maintenance

Before beginning any maintenance or adjustment procedures on your dryer:

- If the machine's heater has been ON, shut the heat control OFF, but allow the belt to continue running for 10 -15 minutes, or until the heater has cooled to 300°F (149°C) or lower. If the belt is stopped while the heater is hot, belt damage will occur.
- Switch machine OFF and disconnect from power before beginning any adjustment or maintenance.
- Do not attempt any maintenance while machine is powered.
- Do not run machine with panels or guards removed.

### **Adjustment and Maintenance:**

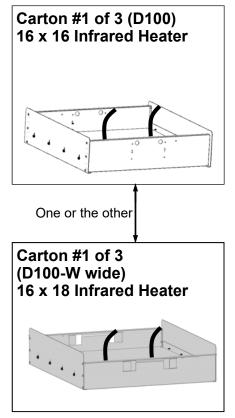
- Periodically check ink temperature on garments exiting machine. See page 11, "Operation Tips." Readjust temperature control as necessary to maintain correct temperature for your application.
- Occasionally, check belt tracking and adjust if necessary. See page 9, step 12.
- Chains in chain drives can loosen over time; occasionally check the tension on the chain in your machine.

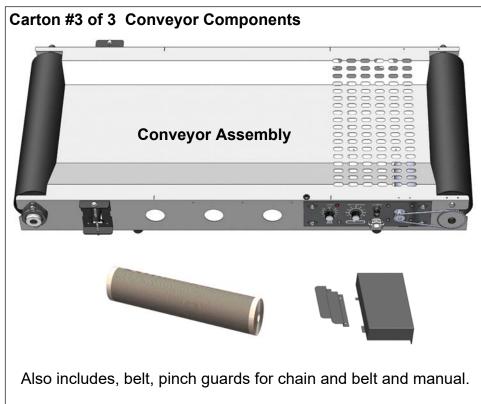
### In the event of a malfunction or breakdown:

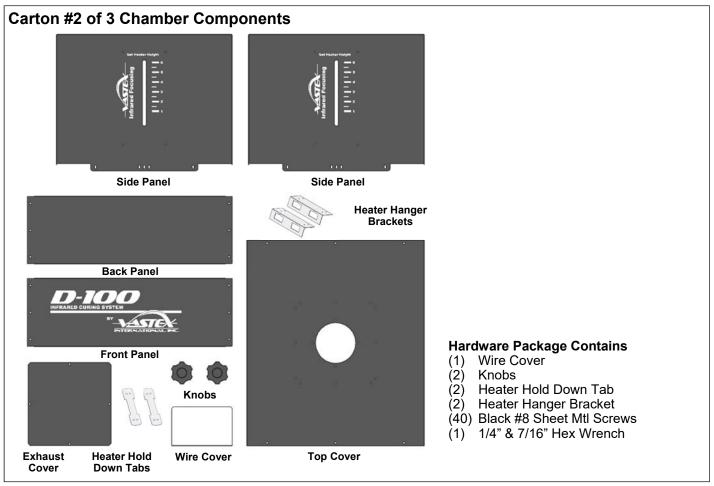
- Allow heater to cool, then shut off machine and disconnect from power as described above in "Safety during adjustment and maintenance."
- Follow the troubleshooting chart below
- If the chart does not resolve the trouble, contact Vastex for additional assistance.

Symptom	Possible Cause	Solution
No functions operate	Machine unplugged Building wiring fault	Make sure machine is plugged in. Have wiring checked.
Belt does not move	Belt circuit fuse(s) blown Speed control faulty Belt motor faulty	Check or replace fuse(s). Replace. Contact Vastex. Replace. Contact Vastex.
No heat	Faulty heater control Faulty heater assembly	Replace. Contact Vastex. Replace. Contact Vastex.

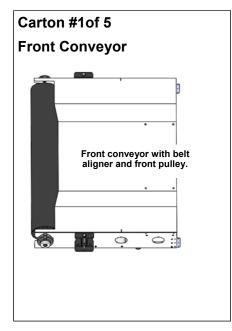
## — Package Contents D-100 or D100W (Wide)

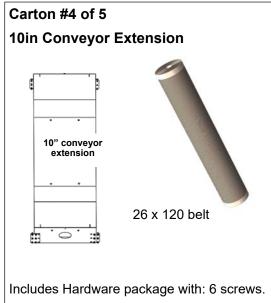


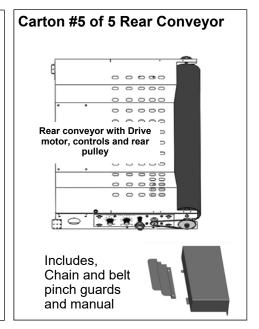


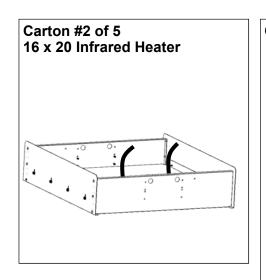


## — Package Contents D-1000 only \_



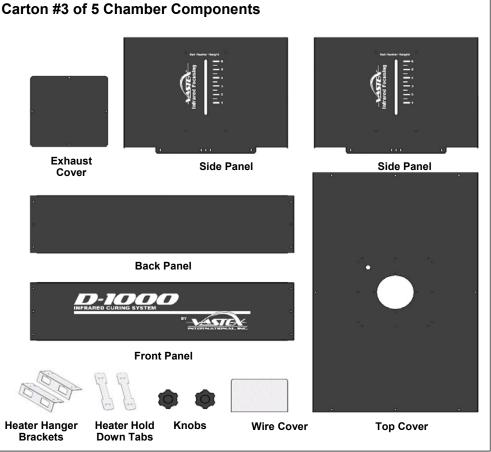


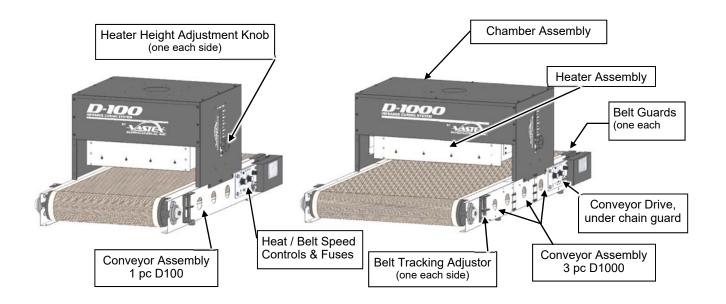






- (1) Wire Cover
- (2) Knobs
- (2) Heater Hold Down Tab
- (2) Heater Hanger Bracket
- (40) Black #8 Sheet Metal Screws
- (1) 1/4" & 7/16" Hex Wrench





### **Chamber Components**

#### **IR Heater**

HI-16-D100-120 HI-16-D100-240 HI-1618-D100W-120 HI-1618-D100W-240 HI-1620-D1000-120 HI-1620-D1000-240 The infrared heaters in VASTEX dryers emit medium wave infrared heat, perfect for curing many types of fabric inks. The heater height and tilt is adjusted by knobs located on the sides of the chamber. A heater height scale allows for accurate height adjustment.

### **Conveyor Components**

### Belt

D100 p/n <u>04-06-065</u> D1000 p/n <u>04-06-131</u> D1000 extension belt p/n <u>04-06-132</u> The conveyor belt is made of Teflon coated fiberglass. It is joined together with a metal finger lace using a steel pin to connect each side. The belt will not burn under normal conditions but the dryer should always have the belt moving while the heater is hot. The belt should remain tracked in the center of each pulley. (See Belt Installation and Tracking for adjustment instructions.)

### Aligner

The aligner is a device for tracking the belt and keeping it on the pulley. As the belt moves from side to side the aligner is used for adjustments to keep it centered. The belt does not have to be perfectly centered on the pulley but should not be hanging over either edge.

### Pulley

The pulleys at either end of the conveyor are made by VASTEX of 4 ½ inch tubing with ¾ inch center shaft. They are mounted on self aligning flange bearing blocks for precision rolling.

### **Gear Motor**

P/N <u>04-02-005</u>

A 90 Volt DC gear motor is located to the rear of the conveyor. It drives the rear pulley and belt with a roller and a #25 chain.

#### Belt Speed Control

P/N <u>04-01-004</u> (120V) P/N <u>04-01-005</u> (240V) Rotate knob clockwise to increase, counter clockwise to decrease belt speed. Turn knob counter clockwise until it clicks for off position.

### **Heat Control**

P/N <u>04-01-008</u> (120V) P/N <u>04-01-009</u> (240V) Turns power on/off and varies heater temperature.

### Fuses

P/N <u>04-03-057</u> (Fuse AGC 1 amp)

Protects the belt drive control circuit.

One required for 120V Dryers, two required for 240V Dryers

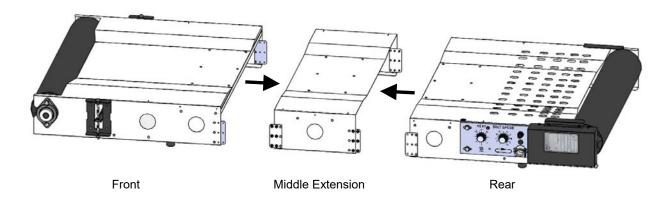
## Assembly D1000 Conveyor Only -

The D1000 conveyor comes in three sections. Slide them together while interlocking the joiner plates and insert six (6) screws on each side as shown below.

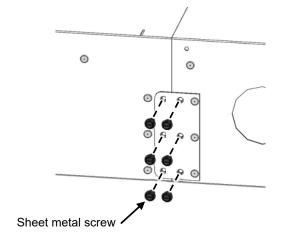


<u>**Do not**</u> plug in the conveyor until after the chamber is completely installed.

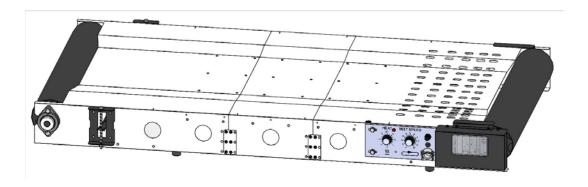
1) Slide the (3) conveyor pieces together.



**2)** Fasten the conveyor pieces together with (6) black sheet metal screws. Each section has a connection on both sides of the conveyor.

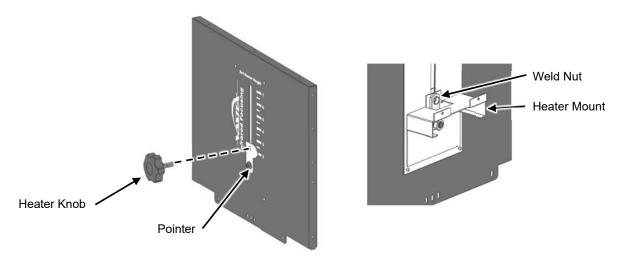


**3)** Finished conveyor will look as shown.

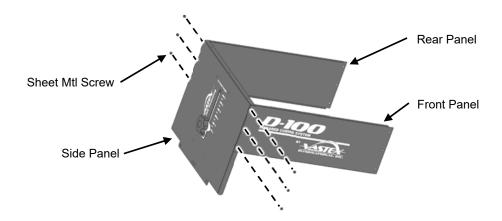


1) Install a Heater Knob in to both chamber side panels. Each chamber side will come with the Heater Mount pre installed.

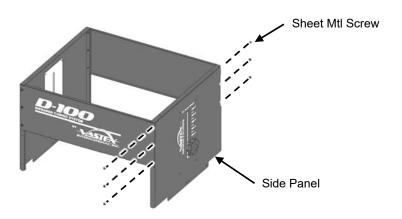
**NOTE:** Make sure the Pointer and Weld Nut line up before installing the Heater Knob.



2) Install the Front and Rear Panel to one of the Side Panels with (6) black sheet metal screws.



3) Install the opposite Side Panel to the Front and Rear Panels with (6) sheet metal screws.



Steps 4, 5 and 6, for 16 x 16 (D100), 16 x 20 (D1000) only.

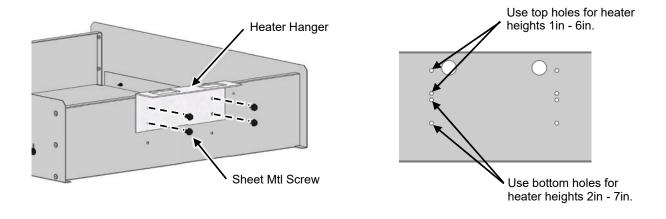
>Heater looks like this.

Steps 7, 8, 9, and 10, for 16 x 18 heater (D100W) often used for DTF curing.

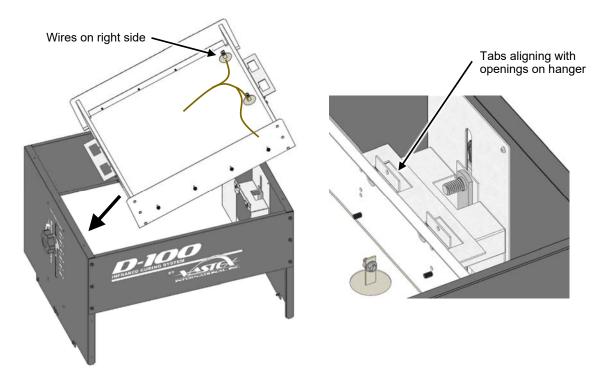
>Heater looks like this.

**4)** Install a Heater Hanger on to each side of the Heater using (4) black sheet metal screws. Be sure to use the top set of holes on the side of the heater.

**NOTE:** If you desire to have your heater height 1"(25.4mm) higher than the scale on the side of the chamber use the bottom set of holes.

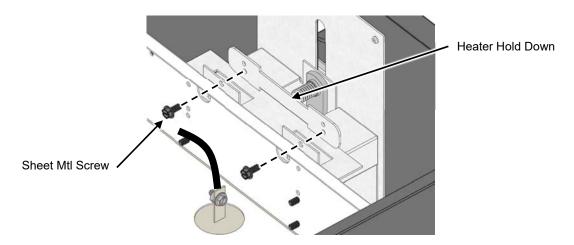


5) Lay the assembled heater into the chamber. The tabs pointing up on the Heater Mounts will fit into the openings on the Heater Hanger. Make sure to have the heater wires on the right side of the chamber.



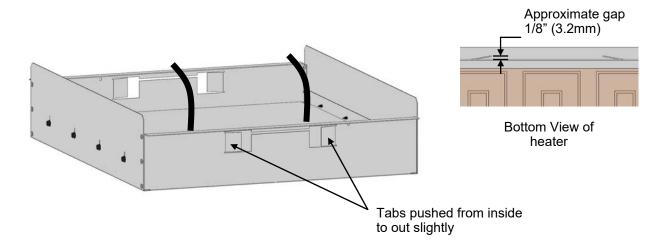
## Assembly Continued Heater

6) Install a the Heater Hold Down on each side of the heater using (2) black sheet metal screws.

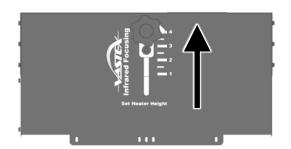


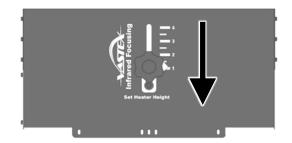
## — 16 x 18 heater (D100W) from this point

7) The 18" Heater will come from the factory with the (4) tabs bent slightly from inside to out on the heater. If not simply use your thumb to push them out slightly.



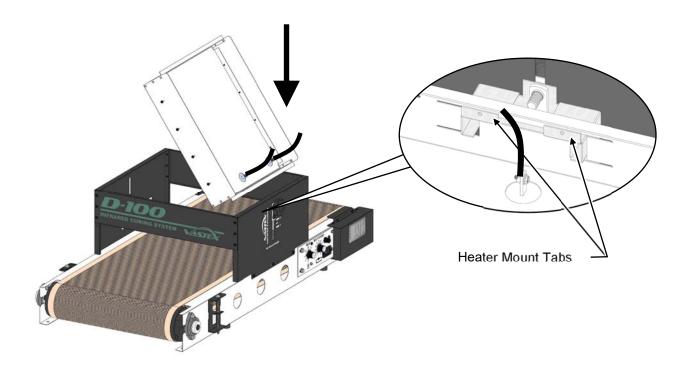
**8)** Adjust the Heater Knobs so that one side is UP all the way and one side is DOWN all the way.



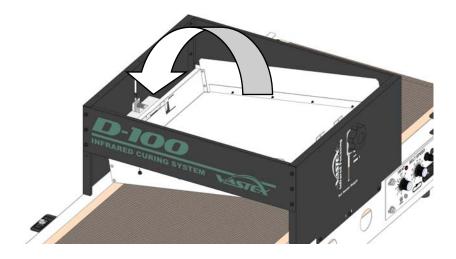


## -Assembly Continued D100W

**9)** Hold the Heater on and angle and install it onto the HIGHER Heater Mount. The tabs sticking up on the Heater Mount will slide into the upper slot on the Heater End.

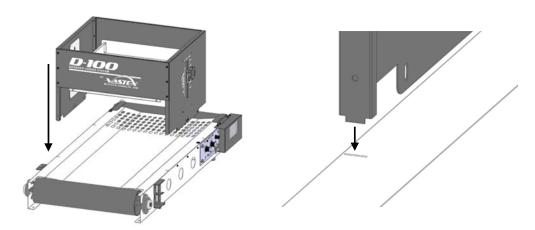


10) Rotate the Heater and lower in onto the LOWER Heater Mount and install it the same way.

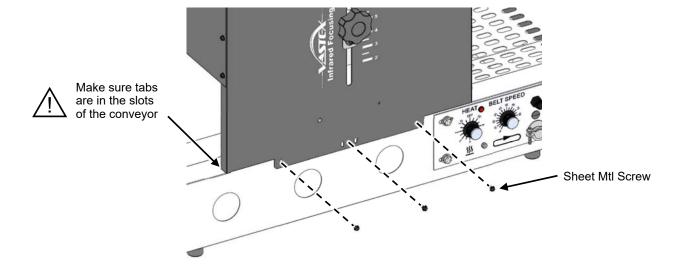


## - Assembly Continued all dryers -

11) Place the chamber onto the conveyor. The bottom of the chamber has tabs that fit into slots on the conveyor.



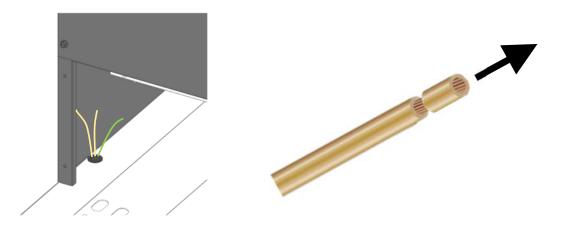
12) Fasten the chamber to the conveyor with (6) black sheet metal screws, (3) per side.



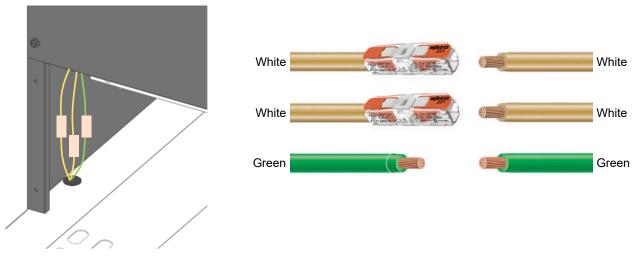


## Be sure the machine is unplugged

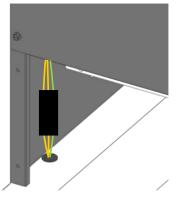
**13)**The three wires out from the conveyor will have caps on the ends of the wires. Remove the caps before moving on to the next step



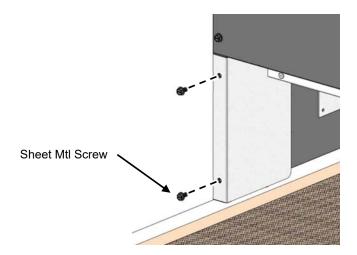
**14)** The three wires, two white and one green, will have in-line Wago connectors pre installed from the factory on the heater. Match the white wires from the heater to the white wires coming from the conveyor, and the same for the green wire. It does not matter which white wires go together, but the green wires must go together! Be sure to push the wire all the way into the Wago until it stops, then close the latch.



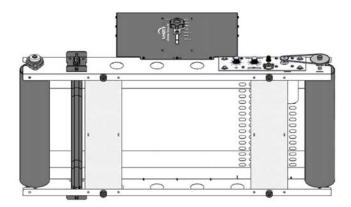
**15)** There will be a piece of black insulating tube on the wires. Slip the tubing over the bundle of in-line Wago connectors for an added layer of heat protection.



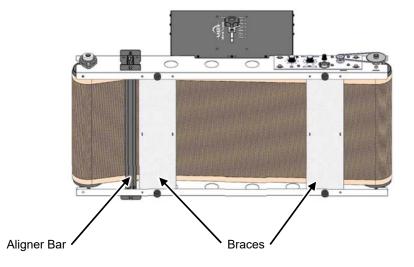
16) Install the wire cover with (2) black sheet metal screws. Make sure all the wires are behind the cover.



17) Carefully lay the dryer on to its side.



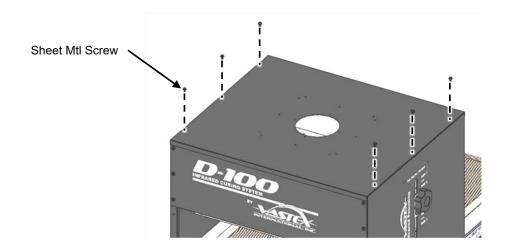
**18)** With the dryer still on its side, pass the belt over the aligner bar and both bottom braces.



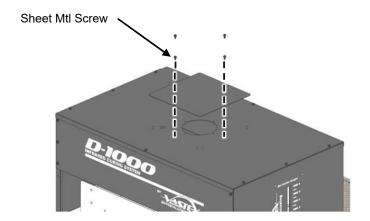
**19)** Lay the dryer back onto its feet to install the Belt. Align the Alligator Lace together and install the Belt Pin as shown, the belt does have a top and bottom.



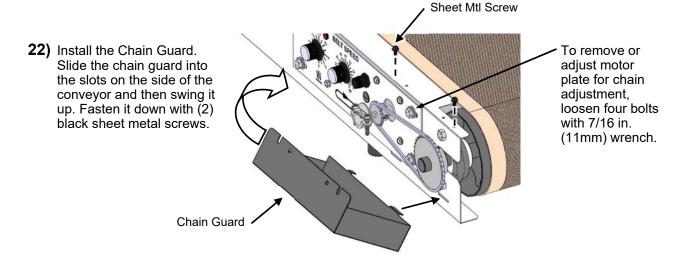
20) Install Top Cover with (6) or (8) black sheet metal screws.



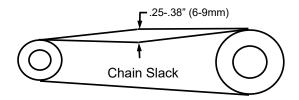
21) Install Exhaust Cover with (4) black sheet metal screws.



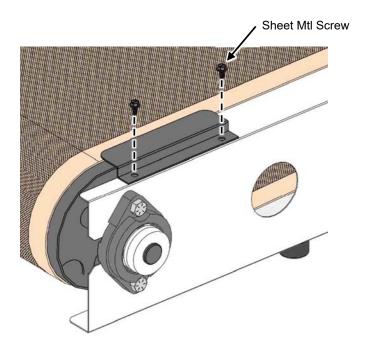
## Assembly Continued



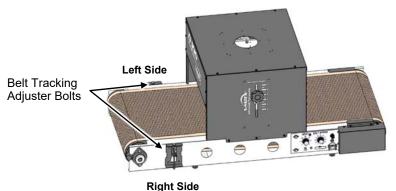
**22A)** The proper <u>chain tension</u> is critical to achieving acceptable service life of chain and motor. For Vastex drives, the total movement of <u>Chain Slack</u> should be .25 to .38 inch (6-9mm). See below.



**23)** Install a Belt Guard on each side of the rear conveyor with (2) black sheet metal screws.



## Belt Tracking



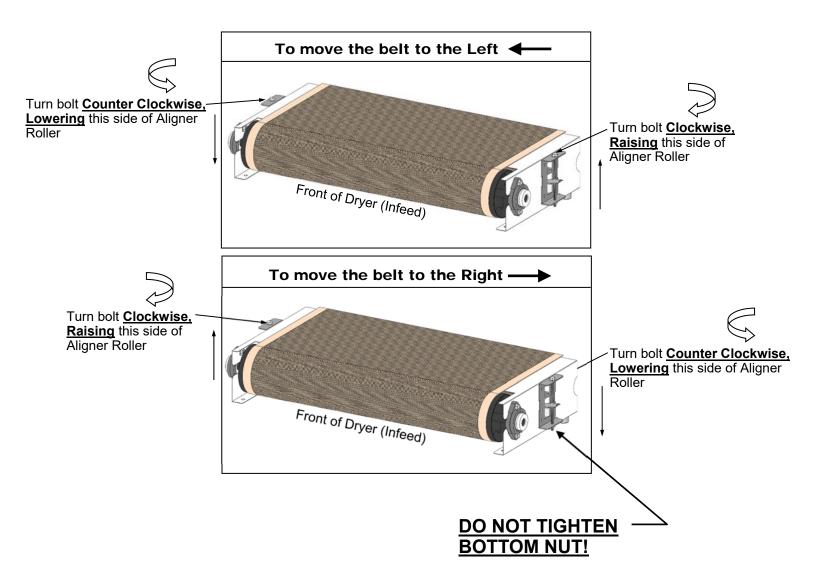
### **Belt Tracking**

Perform after assembly is complete and dryer is on a flat surface.

Maintain belt as close to centered as possible on both rollers. Do Not leave conveyor unattended during tracking process.

- While conveyor is running at full speed, observe position on both rollers.
- 2) Raising the belt aligner on one side moves the belt in the opposite direction. Lowering the bar moves the belt toward that side.
- Make small adjustments, 1/4 turn of adjuster bolts. Allow the belt to respond to the adjustment.

Never allow the belt to track off the rollers, belt damage can result. Make belt tracking adjustments as needed.



## Electrical Requirements

### Models:

**D-100** / 120Volts, 12.5Amps, 1.63KW

Requires dedicated 15 amp circuit with a NEW commercial duty 5-15R receptacle.

**D-100-W** / 120Volts, 16Amps, 1.875KW

**D-1000** / 120Volts, 16.5Amps, 2.05KW

Requires dedicated 20 amp circuit with a NEW commercial duty 5-20R receptacle.

<u>D-100-240</u> / 240Volts, 6.3 Amps, 1.63KW

**D-1000-240** / 240Volts, 8.6 Amps, 2.05KW

Requires good quality 6-15R receptacle. (Some international plugs available)



D-100 120 Volt 15 A. Nema 5-15R



D-100-W / D1000 120 Volt 20 A. Nema 5-20R



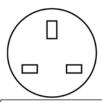
D-100(W) / D-1000 240 Volt 15 Amps Nema 6-15R



Australia 240 Volt 10 A. AS/NZS 3112



European 240 Volt 16 A. CEE 7/7



United Kingdom 240 Volt 13 A. BS 1363A

### - Controls

### - Variable Heat Control

The control has positions LO-2-3-4-5-6 and HI. The controller turns the power to the heater on and off to vary the temperature. The higher the number on the control the longer the on cycle and shorter the off cycle is. The "HI" position is full power.

## - Heat On Light

This RED light is wired to the controller. It will illuminate when the control is turned on, even if the controller has failed.

## - Belt Speed Control

Rotate clockwise to increase, counter clockwise to decrease belt speed.

### - Fuses

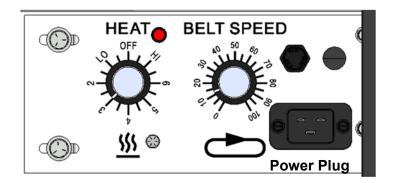
Protects belt control circuit, (1) Amp AGC fast blow

One (1) fuse for 120 volt.

Two (2) fuses for 240 volt.

### - Power Plug-

Appropriate cord is included

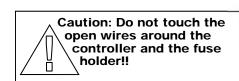


### **Control Plate**

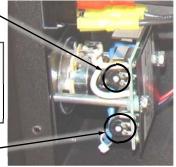
### **Belt Speed Min/Max Adjustment**

This adjustment can be used to make the speed dial less sensitive when making small adjustments. Call the factory for assistance.

Pot near the white wires LOW SPEED



Pot near the blue wires HIGH SPEED



## - Dryer Operation

### **Startup Procedure**

Plug in Dryer:

Be sure the breaker and dryer controls are switched off. Plug the dryer into a properly

rated outlet and turn the breaker on.

**?** Check belt path: Remove any objects from the conveyor and belt.

**Turn on Conveyor**: Set belt speed with the Belt Speed Control on the conveyor, near the motor.

Turn on the Heat: Turn the Variable Heat Control dial on HI for 10-15 minutes to allow the dryer to warm up.

### **Curing Plastisol with infrared:**

Plastisol ink can fully cure in approximately 20-30\* seconds. Most inks must achieve 320°-330 F (160°-165°C) throughout to cure and fuse to the garment. The thicker the ink the hotter the top skin has to be in order to be cured completely to the garment.

### Discharge or water based: (A powered exhaust is recommended)

Water based products require more time than plastisol to cure due to the fact that the water/moisture must be evaporated before the ink can cure. We have seen cure times from 50 to 90\* seconds to achieve a full cure or discharge and not damage the garment. Please note as the time is increased the temperature must be decreased to protect the garment from scorching.

### **Direct to Film (DTF)**

The process of digitally printing onto a transfer type film with a inkjet printer. The added adhesive needs to be heat set without distorting the film. Heater height: 1-2", Heat setting: 6, Belt Speed: 1-1.5 minutes.

\*Actual cure times can vary depending on conditions such as garment moisture and color, ink color, ink thickness, and environmental conditions. All three variables should be used to maximize production while insuring a proper cure.

Set the Heat:



With the dryer plugged in, rotate the Variable Control Timer to the desired setting. Often times, it is best to run the dryer on HI and adjust your belt speed and heater height to achieve a proper cure.

Set the Heater Height:



Set the desired heater height for your job. On each side of the heating chamber, there is a knob to raise and lower the heater. It is recommended to run the heater height at about 2" - 3" above the garment. The heater can be run at an angle for curing non-flat substrate such as hats.

7 Set the Belt Speed:



Rotate the Belt Speed Control Knob clockwise to increase speed and counter-clockwise to decrease it. For Plastisol inks, a good starting point is 20-25 seconds in the chamber. The dial numbers are for reference only. They do not represent seconds in the chamber.

### Operation Tips

- While machine is in operation, it is necessary to have the belt moving while the heater is above 300°F (149°C).
- Allow approximately 15 minutes for dryer to reach Full temperature.
- If no garments are being run through the dryer for more than 10 minutes, it is recommended to lower the dryer heat control to "4" or lower. It will take approximately 10 minutes to return to operating temperature.
- Periodically check ink temperature at the exit of the dryer. It is recommended that you check the temperature of the ink towards the outside of the printed image.
- When checking temperature with a laser gun, shoot the ink while it is still under the heating elements.

### Shut Down Procedure

**Turn off Heat:**Turn the Heat Control off. Allow the heaters to cool for 10-15 minutes before shutting the conveyor off. Belt damage may result from stopping the conveyor with hot elements.

**Turn off Conveyor**: Once the dryer cools down to 300°F (149°C) or lower, turn the Belt Speed down to the off position. Skip this step if leaving the conveyor belt speed set for the following shift.

**Turn off Breaker**: Turn off the breaker controlling the dryers at the end of each shift and unplug them from their outlets.

Page 19

## Vastex Warranty

Doc#01-00-005D Revised 07/15/2024

- (1.) Vastex, hereinafter referred to as "seller" warrants only to its original "purchaser", who holds a copy of the original invoice and is the original end user of the equipment in question, its new equipment against manufacturer defects in materials or workmanship on a pro-rated basis. Warranty period begins from date of shipment to the buyer and will only apply to customers paid in full. Warranty periods are as follows: one- (1) year for V-10, V-100, PTF-100, C-100, E20-2024, EXH Exhaust Hoods and CABX Cooling Air Bars, three- (3) years for all other complete machines, five- (5) years for LED Light Bars, fifteen- (15) years for infrared heaters installed by Vastex in a new dryer, twenty-five- (25) years for V2000HD, three (3) years for replacement Infrared Heaters and replacement LED Light Bars, and one (1) year for replacement parts. Rubber blankets, light bulbs and glass on exposure units are particularly subject to wear while in use. Wear is not covered by this warranty and as stated above only manufacturers' defects are covered. All sales made through Vastex dealers must be certified by that dealer before a warranty replacement is issued. All equipment is thoroughly tested and inspected before packaging. This warranty does not cover minor cosmetic damages that occur during shipment that do not affect the functionality of the equipment.
- (2.) This warranty is expressly contingent upon the buyer delivering to seller, at the address below, with all transportation charges prepaid, the part or parts claimed to be defective within the above mentioned warranty periods stated in paragraph one. The defective part or parts will be repaired or replaced at the discretion of Vastex International, Inc. If the equipment in question is less than one (1) year old, it will be shipped to the customer at no charge, with an RGA issued by Vastex for the defective part. The defective part must be shipped back to Vastex freight prepaid within 30 days or the account will be billed. If the equipment is more than a year old, the part will be shipped after we receive the defective part. If it's necessary to expedite the movement of parts and to minimize down time to the buyer, the replacement part shall be supplied on a C.O.D. basis. If testing and analysis of said part by the seller or its supplier discloses that said part is defective, the cost of said part will be refunded to the buyer on a prorated basis.
- (3.) Except as otherwise provided herein, the equipment is being sold "as-is". Final determination of the suitability of the equipment for the use contemplated by the buyer, is the sole responsibility of buyer, and seller shall have no responsibility in connection with the suitability.
- (4.) All warranties implied by law, including the implied warranties of merchantability and fitness are hereby limited to manufacturer defects in materials or workmanship during the warranty period stated in paragraph one. The express warranty and remedies contained herein and such implied limited warranties are made solely to the sole warranties and remedies and are in lieu of all other warranties, guarantees, agreements, and other liabilities, whether express or implied, and all other remedies for breach of warranty or any other liability of seller, in no event shall seller be liable for consequential damages.

No person, agent, distributor, or service representative is authorized to change, modify or extend the terms hereof in any manner whatsoever.

These terms and conditions are an essential part of the transaction between the parties and constitute the entire agreement between them with respect to the same. Some states do not allow limitation on how long an implied warranty lasts of the exclusion or limitation of incidental, or consequential damages, so the above limitation may not apply to you.

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

Electrical components cannot be returned once installed unless proven defective.

Please refer to doc. 01-00-015 for specific terms and conditions of sale and the limited warranty. Please refer to doc. 01-00-017 for V-2000HD printer warranty.

Updates: V1000 to 3 year warranty 01/09/12, Heater warranty to 15 years 01/02/2012.

#### TERMS AND CONDITIONS OF SALE AND LIMITED WARRANTY Doc.#01-00-015

- Buyer's order will constitute an offer in accordance with the terms hereof and such offer, upon acknowledgment of Seller, will constitute the agreement between Buyer and Seller. Buyer's order after such acknowledgment by Seller will not be subject to cancellation, change or reduction in amount, or suspension by Buyer of deliveries, unless prior to such action Buyer has obtained Seller's written consent. Notwithstanding anything to the contrary in Buyer's Purchase Order or other communications, the parties agree to be bound by these Terms and Conditions. Acceptance of the product by the Buyer shall be deemed to constitute unconditional acceptance of these Terms and Conditions.
- 2.
- Any of these terms, conditions and provisions of Buyer's order which are inconsistent with Seller's acknowledgment and these Terms and Conditions of Sale shall not be binding on the Seller and shall be considered not applicable to any sale so made. No waiver, alteration or modification of any of the provisions on either side of the document shall be binding upon Seller unless agreed to in writing by Seller.

  (a) All prices are F.O.B. Seller's Plant and method of delivery and routing shall be at Seller's discretion, unless specifically otherwise stated herein. Notwithstanding any agreement to pay freight, delivery of products purchased hereunder to a common carrier or licensed trucker shall constitute delivery to Buyer and be determinative of the date and time of shipment and all risk of loss or damage in transit shall be borne by Buyer. If the Buyer fails to accept the goods from the common carrier or licensed trucker, the Seller shall be entitled to claim payment from the Buyer. Seller shall arrange for storage, the risk and the cost, including insurance costs, to be borne by the Buyer (and Buyer agrees to pay such amounts upon demand) except if the failure to accept delivery is due to any of the exceptions noted in Paragraph 4.

  (b) Terms of payment shall be as stated on invoice. 3
- (b) Terms of payment shall be as stated on invoice.

  It is understood that deliveries will be made in accordance with Seller's regular production schedule. Every reasonable effort will be made to meet the Buyer's required delivery dates but Seller will not be liable for damages or be deemed to be in default by reason of any failure to deliver or delay in delivery due to any preference, priority, allocation or allotment order issued by the Government, whether Federal, State or local, or causes beyond its control including but not limited to, Acts of God or a public enemy, acts of Government, fires, floods, epidemics, quarantine restrictions, strikes, lockouts, freight embargoes, severe weather, unavailability of materials or shipping space, delays of carriers or suppliers or delays of any subcontractors. Should delay in delivery be caused by any of the circumstances mentioned in this paragraph, such extension of the delivery period shall be granted as is reasonable under the circumstanced of the case. Should delay be caused by an event not specifically mentioned in this paragraph, damages will be limited to cancellation of the purchase order without penalty, and refund of any monies deposited or prepaid on the purchase order with no liability for any consequential or incidental damages. Seller reserves the right to increase the prices prior to Seller's acceptance of order and/or after expiration of any price quoted by Seller.

  Unless otherwise stated in writing, Seller's prices do not include sales, excise, value-added or other taxes. Consequently, in addition to the price specified herein, the amount of any present or future sales, use, excise, value-added or other tax applicable to the manufacture, sale, purchase or use of the products hereunder shall be paid by Buyer, or in lieu thereof, Buyer shall provide Seller with a valid tax exemption certificate acceptable to the taxing authorities.

  Seller reserves the right, at any time, to revoke any credit extended to Buyer because of Buyer's failure to pay for any
- 7
- DAMAGES, ARISING OUT OF THE AGREEMENT, THIS CONTRACT, THE SALE OF THE PRODUCTS TO THE BUYER OR THE USE OR THE PERFORMANCE OF THE PRODUCTS. Seller may at its discretion repair, replace or give the Buyer credit (pro-rated) for such defective products.
  - (b) Notwithstanding anything herein to the contrary, Seller shall have no liability for alleged defects with the products which are not specified in written notice from the Buyer to the Seller within thirty-six (36) months from the date of shipment of machines. Seller shall pass to Buyer any warranty received by Seller from the manufacturer of Limited Life
  - Components, which in most cases is 12 to 18 months.

    (c) Seller shall have no liability under this Limited Warranty unless Buyer has paid in full for the products. Further, this Limited Warranty is expressly contingent on Buyer's delivery to Seller, all costs prepaid, the defective part(s) within thirty-six (36) months of shipment to Buyer, together with a written statement specifying the alleged defect(s). Any replacement part(s) shall be shipped to Buyer on a C.O.D. basis.

    (d) SELLER SPECIFICALLY EXCLUDES ALL WARRANTIES, EXPRESSED, IMPLIED OR OTHERWISE, EXCEPT AS STATED EXPLICITLY IN THESE TERMS AND
  - CONDITIONS OF SALE. SELLER DISCLAIMS THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

    The remedies herein reserved by Seller shall be cumulative and in addition to any other legal remedies. No waiver of a breach of any portion of this contract shall constitute a waiver
- of continuing or future breach of such provision or of any other provisions hereof.
- These Terms and Conditions constitute the entire agreement of the parties. No amendments, changes, revisions or discharges hereof in whole or in part shall have any force or effect unless set forth in writing and signed by the parties hereto. This contract shall not be assignable by Buyer voluntarily by operation of law or otherwise without Seller's written consent.
- This contract shall be governed and shall be construed according to the domestic laws of the Commonwealth of Pennsylvania.
- Anything herein to the contrary notwithstanding, any action for alleged breach by Seller of the contract between the parties, including but not limited to any action for breach of the warranties herein set forth, shall be barred unless commenced by Buyer within one (1) year from the date such cause of action accrued.
- This agreement shall inure to the benefit of and be binding upon the parties hereto, their respective successors and permitted assigns.

  All notices required by this contract to be given by either party shall be sent in writing or by facsimile and shall be addressed to the last known address of such other party. Notices shall be deemed to have been received on the fifth business day following deposit in the mail.

VASTEX 7 EMERY ST