

VASTEX

SCREEN PRINTING EQUIPMENT

DB-18, DB-II-18, DB-30 & DB-II-30

Conveyor Drying System Assembly & Operating Manual



DB-18 & DB-30 Shown as table top models, optional legs available. DB-II-18 & DB-II-30 are floor models only.

Machine Model & Serial # _____
Electrical Drawing # _____ REV _____

This manual contains the following documents:

- Introductions & Features
- Safety Instructions
- Power Requirements
- Conveyor Assembly & Belt Tracking Instructions
- Operating, Maintenance & Trouble shooting
- 01-00-005 Warranty
- 01-00-006 Warranty Summary
- 01-00-015 Terms and Conditions

Vastex International, Inc.
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Web Site www.vastex.com
E-Mail info@vastex.com

DRI-BOX & DRI-BOX II SERIES INFRARED DRYERS

With X-Series Conveyors

Introduction:

Thank you for purchasing your printing equipment from Vastex International Inc.

Vastex has been designing and building printing equipment since 1960. We have the knowledge and experience, and are supplying the printing industry with quality equipment at an affordable price. You can be confident your purchase will give you years of trouble free service.

"Important" Please inspect, and file a report with the trucking company if there is any damage to the shipping crate or contents of the crate.

Features:

- 10 Year heater warranty
- Variable DC belt speed control
- Temperature Controller
- Infrared focusing system
- "X-Series" Conveyor belt tracking system
- Teflon coated fiberglass belt
- 2" to 7" heater to belt clearance, separate side to side adjustment
- Wide conveyor feed and exit openings
- Expandable in the field! Add chambers and / or belt extensions

Options:

- Additional chambers can be added
- Scrub Air™ forced hot air
- Powered exhaust stack blower
- Exhaust Hood, reduces fumes at exit of dryer
- Conveyor extensions in 18" and 36" increments
- Locking caster for easy mobility
- Conveyor Legs optional for DB-18 & DB-30 models, standard for DB-II-18 & DB-II-30 models
- Laser temperature gun

Safety Instructions for the VASTEX Conveyor Drying System

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 are allowed in this area.
- Children and pets must be kept clear from 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 degrees 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 cleaning and maintenance.
- Only qualified technicians should be allowed to make repairs on the VASTEX Conveyor Drying System.

IMPORTANT Turn off and lock power out at the main disconnect before entering any part this equipment . Do Not operate with any cover or guards removed.

Overview:

Curing Plastisol with infrared

Plastisol ink will fully cure when it reaches a minimum of 320 degrees throughout. The ink must reach this temperature to bond to the garment. The ink temperature should be periodically checked throughout the production run. Cure times vary depending on ink color, garment color, thickness of ink, ink manufacturer, and humidity in room.

Three methods to determine ink temperature are a heat gun, temperature tape and donut probes.

Adjusting the heater height, belt speed, or heater controller setting, if equipped, will change ink temperature.

Curing water based inks with infrared and air

For water based inks the moisture must be forced out before proper cure can be achieved. This makes high wattage heaters, forced hot air and a powerful exhaust necessary components of the drying process.

Always vent dryer exhaust outside of the shop.

(Note: You are curing with infrared heat. Infrared, when at high temperature emits a wave length that will heat up the ink faster than the garment. Running the machine at lower temperatures and slower speed will be inefficient and can cause scorching because the garment will lose its natural moisture.)

Note: Installing the optional powered exhaust stack blower & ducting will remove unwanted fumes from the work area. The powered exhaust system is highly recommended for machines equipped with scrub air.

Package Contents: (check purchase order for optional equipment ordered)

(1) Heat Chamber

(1) Conveyor Front, with belt aligner

(1) Conveyor Rear, with motor and controller

(1) Conveyor belt (be careful not to cut)

Conveyor extensions, options for DB-18 & DB-30, standard for DB-II-18 & DB-II-30

Conveyor legs options for DB-18 & DB-30, standard for DB-II-18 & DB-II-30

Tools Required: (2) 9/16" & (1) 7/16" Wrenches

Power Requirement for Conveyor & Dryer

Conveyor: 120V, 1 Amp, 50/60Hz
240V, .5 Amp, 50/60Hz

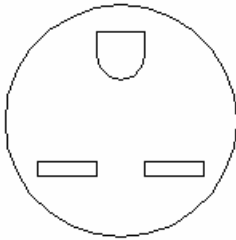
Dryer: See the applicable wiring diagram, located in this manual, and /or the spec tag located on the control box for power requirements.

CAUTION!

All amp ratings shown are the machines actual amperage draw at the listed voltage. Vastex highly recommends you always exceed the minimal electrical requirements. Infrared heaters are a resistive load. Wire size, length, insulation type, and temperature ratings are all key factors when designing the circuit.

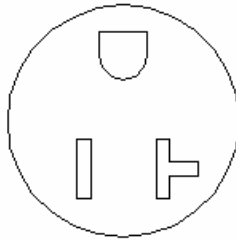
A qualified electrician should install or physically inspect the circuit for this machine.

Receptacle configuration per model



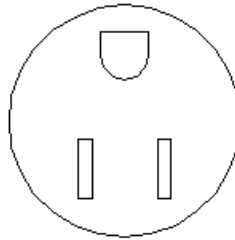
240 Volt 15 Amps
Nema 6-15R

Used on
DB-240, DB-30, DB-18-240
240 Volt "X"Series Conv.



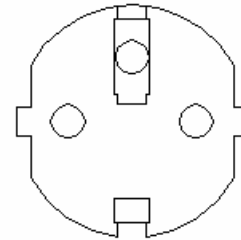
120 Volt 20 Amps
Nema 5-20R

Used on
DB-120, DB-18 &
DB-30-120



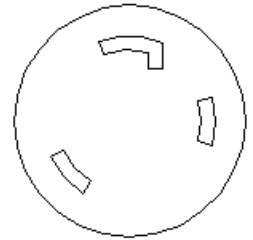
120 Volt 15 Amps
Nema 5-15R

Used on
120 Volt "X"Series Conv.
120 Volt Exhaust options
120 Volt Scrub Air



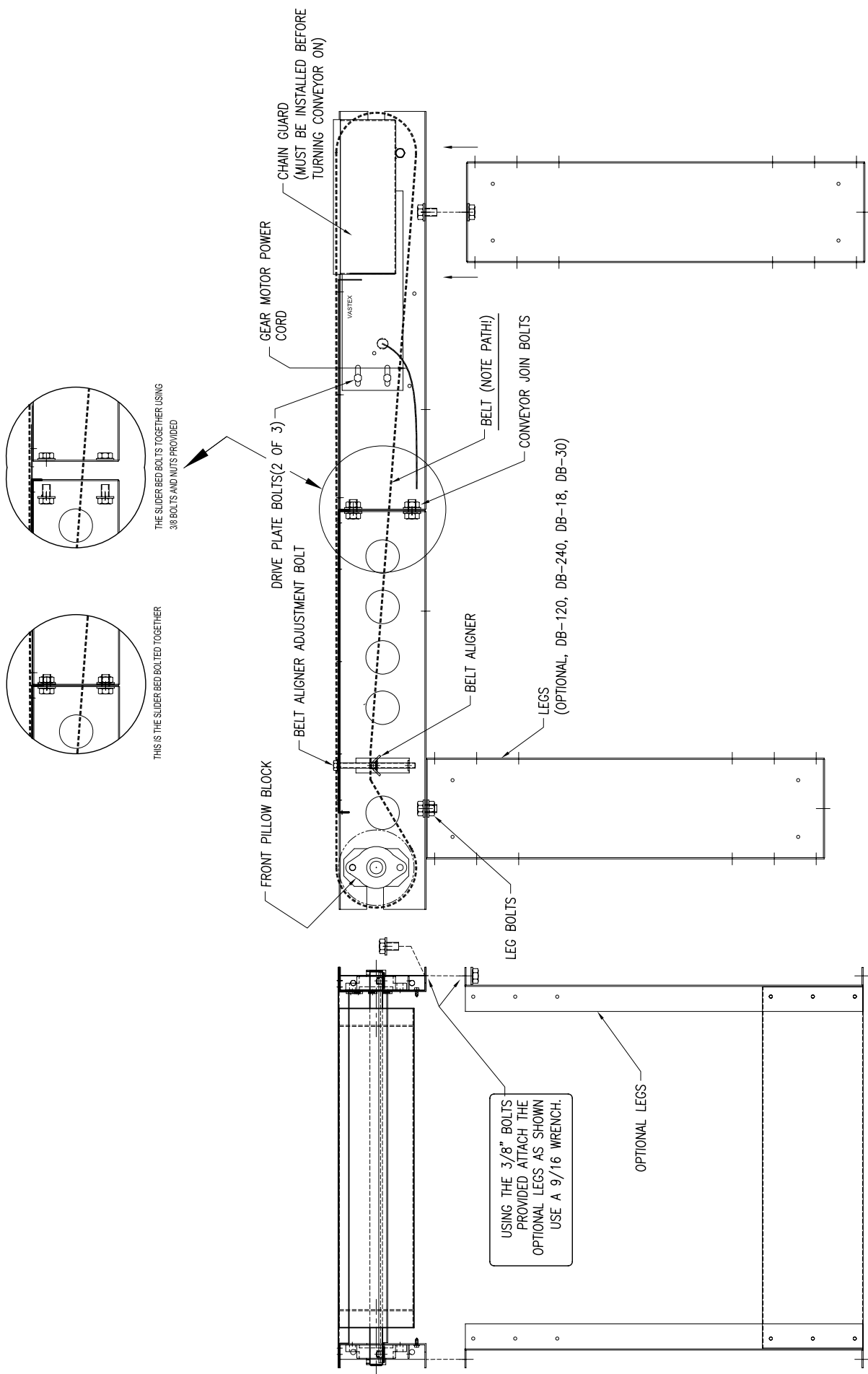
240 Volt 2.5 to 15 Amps
CEE 7/7

Used on
All Continental Europe
Machines under 16 amps



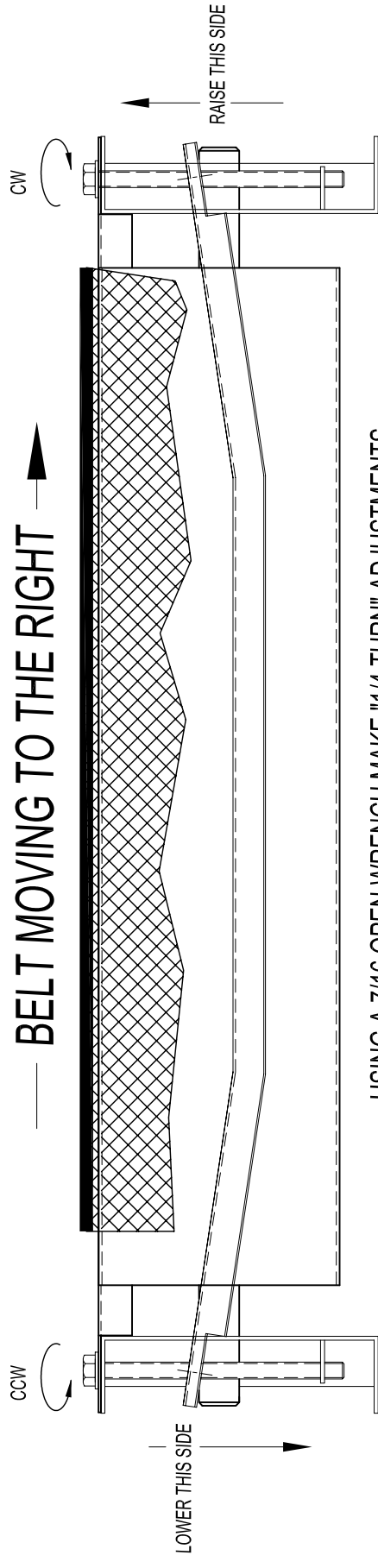
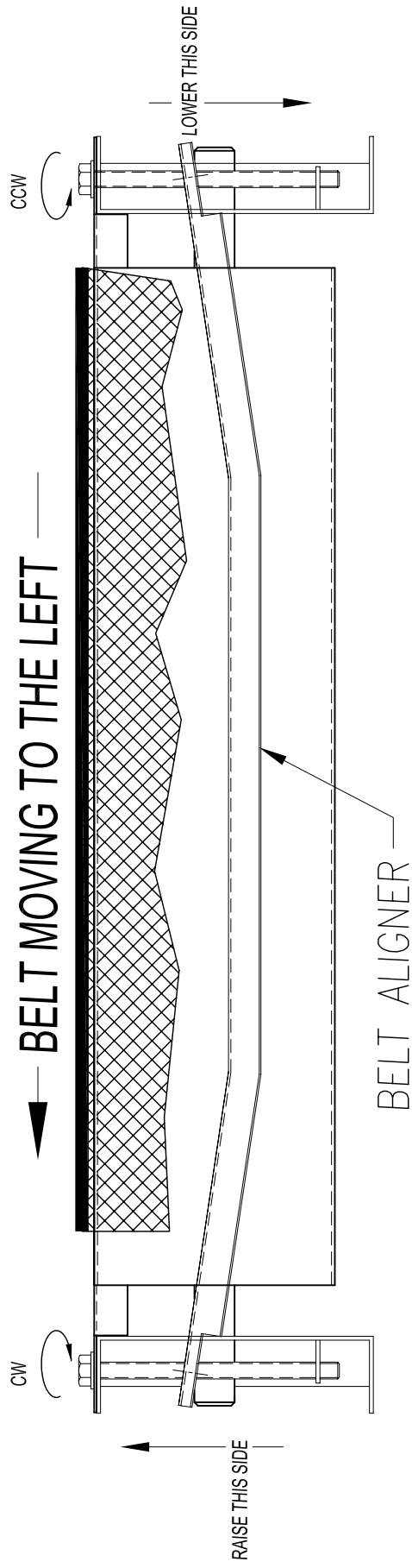
240 Volt 22 Amps
L6-30R

Used on
DB-II-18 & DB-II-30

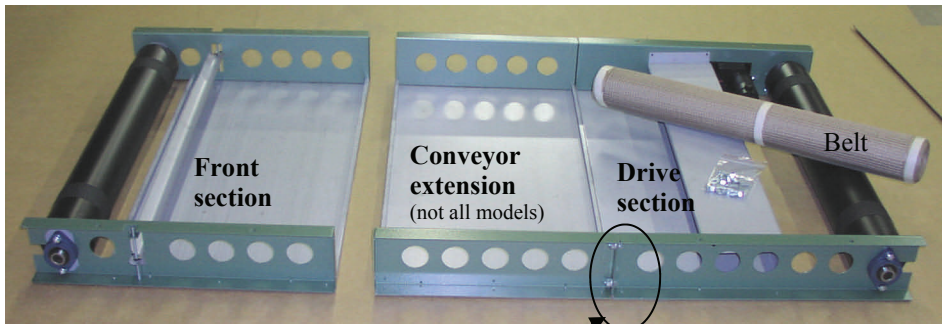


CONVEYOR DETAILS AND LEG ASSEMBLY

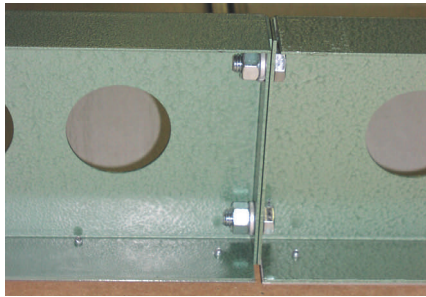
01-16-004



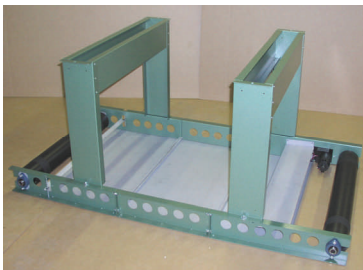
USING A 7/16 OPEN WRENCH MAKE "1/4 TURN" ADJUSTMENTS.
 WAIT 5-10 MINUTES THEN MAKE ANOTHER 1/4 TURN ADJUSTMENT
 BELT SHOULD HAVE A SLIGHT SAG ON THE BOTTOM, DO NOT OVER TIGHTEN!



Remove conveyor parts from skid and lay out on large table or floor upside down as shown.

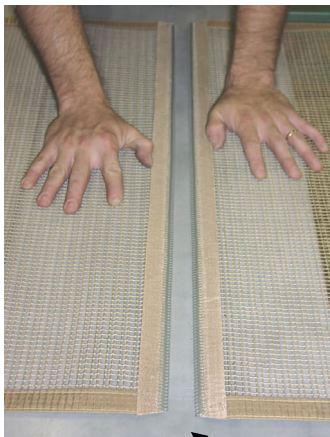


3/8-16 x 3/4 long bolts with lockwashers and nuts are provided to connect the front section to the drive section. If your conveyor is longer than 48" there will be extensions which bolt together as shown. Please install all bolts before tightening. A 9/16 wrench will be needed to tighten the bolts and nuts. The lockwasher goes next to the nut.



If you have legs with your conveyor, bolt on as shown. 3/8-16 x3/4 bolts with lock washer, washer and nuts are provided. The lock washer goes next to the nut.

Install the chain guard before plugging in your conveyor. The chain guard will protect you from getting an injury from the chain & sprocket.



Alligator lace

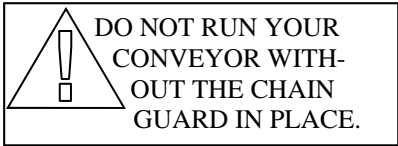


Aligner

After tightening all the bolts carefully turn the conveyor onto its feet or your table. The belt needs to be installed as shown on **page 2** making sure you thread it over the aligner. Install the pin into the alligator lace and make sure the two ends of the belt are centered to each other. If one person positions the belt ends and holds the belt into position, a second person can install the pin. Be sure when pushing on the pin you grip it close to the belt, if the pin bends it will be difficult to remove the kink in the pin. Plug the motor's power cord into the "CPC" plug on the back of the control box. The numbers on the dial are for reference only. Time the belt with a watch and set the speed to the desired seconds in the heat.

X-Series conveyor motor, chain and control maintenance.

In order to **adjust the chain tension** or **remove the control assembly**, the chain guard must first be removed.



DO NOT RUN YOUR CONVEYOR WITHOUT THE CHAIN GUARD IN PLACE.



Chain Guard

To remove the chain guard: Unfasten the two black sheet metal screws at the top. Be sure to replace the guard after adjustment is made.

DRIVE CHAIN ADJUSTMENT

Control assemble mounting screws.



Control assembly mounting screw

To adjust the drive chain, loosen the (3) control assembly mounting screws. Adjust any slack out of conveyor chain and retighten screws.

Caution! Do not over tighten chain, damage to bearings may occur.

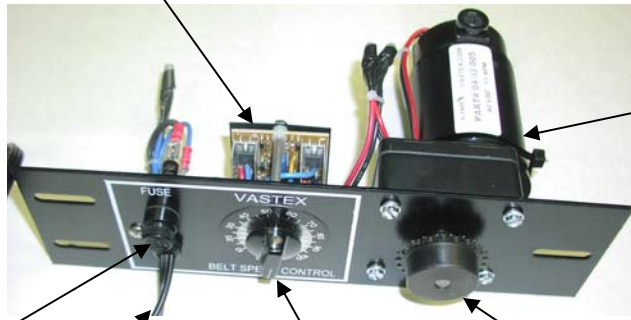
X-Series conveyor control assembly.

Model# XCB-DB-XXX
(XXX = 120 or 240 volt)

Caution:

With the control assembly removed there are open wires and electrical connections. Severe shock can occur if caution is not taken.

Belt speed control



Gear Motor

Fuse holder

Power cord

Belt speed control knob

Motor sprocket

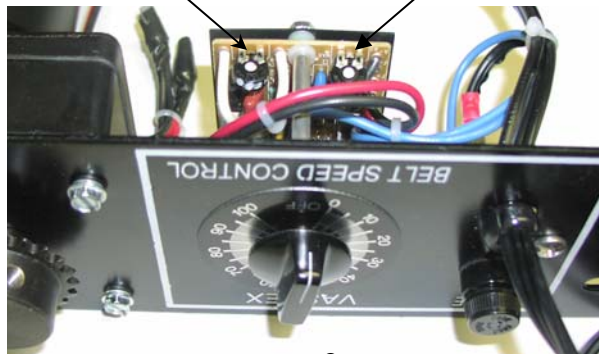
Setting the low speed pot adjustment: (small screw driver with plastic handle is needed)

Turn the speed pots clockwise to increase the speed and counterclockwise to decrease. The low speed pot should be set so the belt (or sprocket) moves very slow at the lowest setting on the controller, just before the controller is clicked in the off position. The high setting is set so 90 VDC is the maximum voltage to the motor, a volt meter is needed for the high speed adjustment. The control assembly should be placed on a bench so the speed pots are up and accessible.

Caution: Do not to touch the open wires around the controller and the fuse holder.

Pot near the white wires LOW SPEED.

Pot near the blue wires HIGH SPEED.



This view of the control assembly "upside down" is to show you the speed pot adjustments on the bottom side of the controller.



Doc# 01-16-007

OPERATING INSTRUCTIONS

- A. Be sure your breaker is in the off position and the dryer switch or dial is turned off. Then plug the unit into the properly rated outlet. See page 5 for power requirements.
- B. Turn the belt control on and adjust the speed of the belt travel through the heat chamber. Set the belt speed to achieve approximately 25 seconds time through the heat chamber. Check the belt speed by placing an object on the belt and timing it through the chamber.
- C. Turn the heat switch to "ON", or the temperature dial to "High" if equipped with a controller.
- D. Allow 10-15 minutes for the heater to get to full temperature before using. If equipped with a controller, set to 6 for heater warm-up.
- E. Adjust the heater height to approximately 3" above the product.
- F. Print several test shirts. Lay shirts flat on conveyor belt and run them through the dryer. Check the temperature of the ink.
- F. If needed, you can change the ink temperature to achieve proper cure by adjusting the temperature controller or raising and lowering the heaters. Changing the belt speed will also effect the ink temperature.

Note: Conveyor belt must be switched to on and the belt turning before allowing heaters to warm up. Allow heaters to cool to under 300 deg. or for at least 10 minutes before switching off conveyor belt.

PROPER CURE

CURING PLASTISOL WITH INFRARED:

Plastisol ink can fully cure in approximately 15-25 seconds. The *ink itself* throughout must achieve 310-320 degrees to cure and fuse to the garment. Actual cure times can vary depending on environmental conditions such as garment color, ink color, thickness and manufacturer. Aggressive air movements, though desirable, are not necessary with plastisol. Proper exhaust is important for expelling effluents from the curing chamber and ultimately from the work environment.

CONTROLS

TOGGLE SWITCH (DB-120, DB-240, early models of DB-18 & DB-30)

DB-120, DB-18: 20 amp single pole breaker switch.

DB-240, DB-30, DB-30-200 and EU: 20 amp double pole breaker switch.

This breaker/switch turns the power on and off to the heater. It will trip if an electrical short is detected. Consult factory if frequent trips occur. (Caution! The plug must be removed before entering control box or any servicing to the heater head.)

POWER LIGHT

The red pilot light next to the breaker switch is wired to the output side. When the breaker/switch is sending power to the heater, the pilot light will illuminate.

(See troubleshooting guide for light diagnostic functions.)

HEAT CONTROLLER (DB-18, DB-18-200, DB-II-18, DB-30, DB-30-200, DB-II-30)

The controller allows the operator to adjust the heat from low to high (full power). The controller has positions Low-2-3-4-5-6 and High. The higher the number on the controller the longer the on cycle and shorter the off cycle. The High position keeps the power on constantly.

CONTROL OUTPUT LIGHT

The green pilot light next to the controller is wired to the output side of the controller. When the controller is sending power to the heater, the pilot light will illuminate.

(See troubleshooting guide for light diagnostic functions.)

POWER LIGHT

The red pilot light next to the controller is wired to the input side of the controller. The light will be illuminated when the controller is on and is seeing voltage.

(See troubleshooting guide for light diagnostic functions.)

BELT SPEED CONTROL

The control takes the AC voltage and converts it to DC voltage and varies it from 0 to 90 volts. The dial is for reference only. Speed can vary from location to location depending on the input voltage. You should time the belt and note what dial position gives you desired number of seconds in the chamber.

GEAR MOTOR

A 90 Volt DC gear motor is located to the rear of the conveyor. It drives the rear pulley and belt via a roller #25chain and 25B22 sprockets. A one amp fuse is located on the belt control box to protect the belt control.

HEATER HEIGHT ADJUSTMENT

The hand knobs on each side of the dryer chamber are used for adjusting the heater height. Each side of the heater can be adjusted independently. The heater can be set at 2" to 7" off the belt or set at an angle. The optimal height is 2.5" off the garment in most cases, but this can be changed to whatever setting you desire.

CONVEYOR

BELT

The conveyor belt is made of Teflon coated fiberglass. It is joined together with an alligator 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 heaters are above 300 degrees. The belt should remain tracked in the center of each pulley. (See 01-16-004, 005, 006 for installation and tracking adjustments.)

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.

PULLEYS

The pulleys at either end of the conveyor are made by VASTEX of 4-1/2" inch tubing with 3/4 inch center shaft. They are mounted on self aligning flange bearing blocks for precision rolling. A belt lagging material is used on each pulley for better belt grip and aid in the tracking.

MAINTENANCE

Before any maintenance or entry into the machine, shut off power at the main disconnect and install a lockout device. Never operate machine with guards or covers removed.

Your VASTEX dryer has few points that need maintaining. The most important first step is to follow the unpacking and setup instructions. The proper electrical hookup and exhaust duct installation will insure the most can be achieved from your investment. **Turn off power at your disconnect before entering any part of the machine.**

ELECTRICAL CONNECTIONS

Electrical connections will loosen in time from heating and cooling. Every three (3) months the **power should be turned off** at the external disconnect and all the points of connection should be inspected and tightened.

LINT BUILDUP

As with your clothes dryer at home lint will build up where ever air is flowing over garments. The optional exhaust blower, located on the rear of the machine, and any air paths leading to the blower should be **cleaned every 2-3 months** depending on usage. To perform the cleaning, remove the black cover on top of the chamber and the blower box cover. Remove the lint build up and any other foreign matter around the air slots and the blower "squirrel" cage.

Every six months the top cover should be removed to clean around the heater and any other visible debris buildup.

(Note: Restricting the air flow can do damage to electrical components, inhibit your dryer=s performance and cause a fire. Keep the dryer clear of all lint buildup.)

MOTOR CHAIN

The motor chain can loosen over time and should be inspected, adjusted and lubricated when necessary. The motor chain is located in the rear of the conveyor. See page 9

(Caution: Do not over tighten chain, damage to bearings may occur.)

SPARE PARTS

VASTEX stocks parts used on current model machines. Also any older machine can be upgraded to new style components to keep their controls modern and operating. But having spare parts on your shelf can save you overnight shipping costs and the downtime waiting for shipment of parts in the event of a component failure. The only downside of buying spare parts ahead of time is the warranty starts on the ship date, not installation date.

TROUBLESHOOTING GUIDE

IMPORTANT Turn off and lock out power at the main disconnect before entering any part this equipment . Do Not operate with any covers or guards removed.

A wiring schematic is supplied to aid in trouble shooting by an experienced electrician.

Toggle Switch Models

Problem, No heat

Possible cause

Solution

Pilot light is on	Bad connection after toggle switch Failed heater	Check connections Return heater for repair
Light off	Customer power failed or outlet failed Bad connection before toggle switch Damaged power cord	Check power at main disconnect Check connections or replace toggle switch Replace damaged cord & plug

Heat Controller Models

(set controller to at least 5 for diagnostics)

Problem, No heat

Possible cause

Solution

Red Pilot light out	Loose connections Customer power failed or outlet failed Controller bad	Check connections Check power at main disconnect Replacement controller
Red light on & green light off	Loose connections Bad controller	Check connections Replace controller
Heat not cycling on and off	Bad controller	Replace controller

Conveyor

Problem belt stopped

Possible cause

Solution

Motor turning	Broken chain drive Loose sprocket set screws	Replace chain & worn sprockets Tighten sprocket set screws
Motor & drive pulley turning	Obstruction in belt path Belt loose	Clear jam Tighten belt

Vastex E-mail assistance

Purchasing & Product Info:

sales@vastex.com

Electrical Support:

stech@vastex.com

Tech Support, Mechanical Setup, and Operation

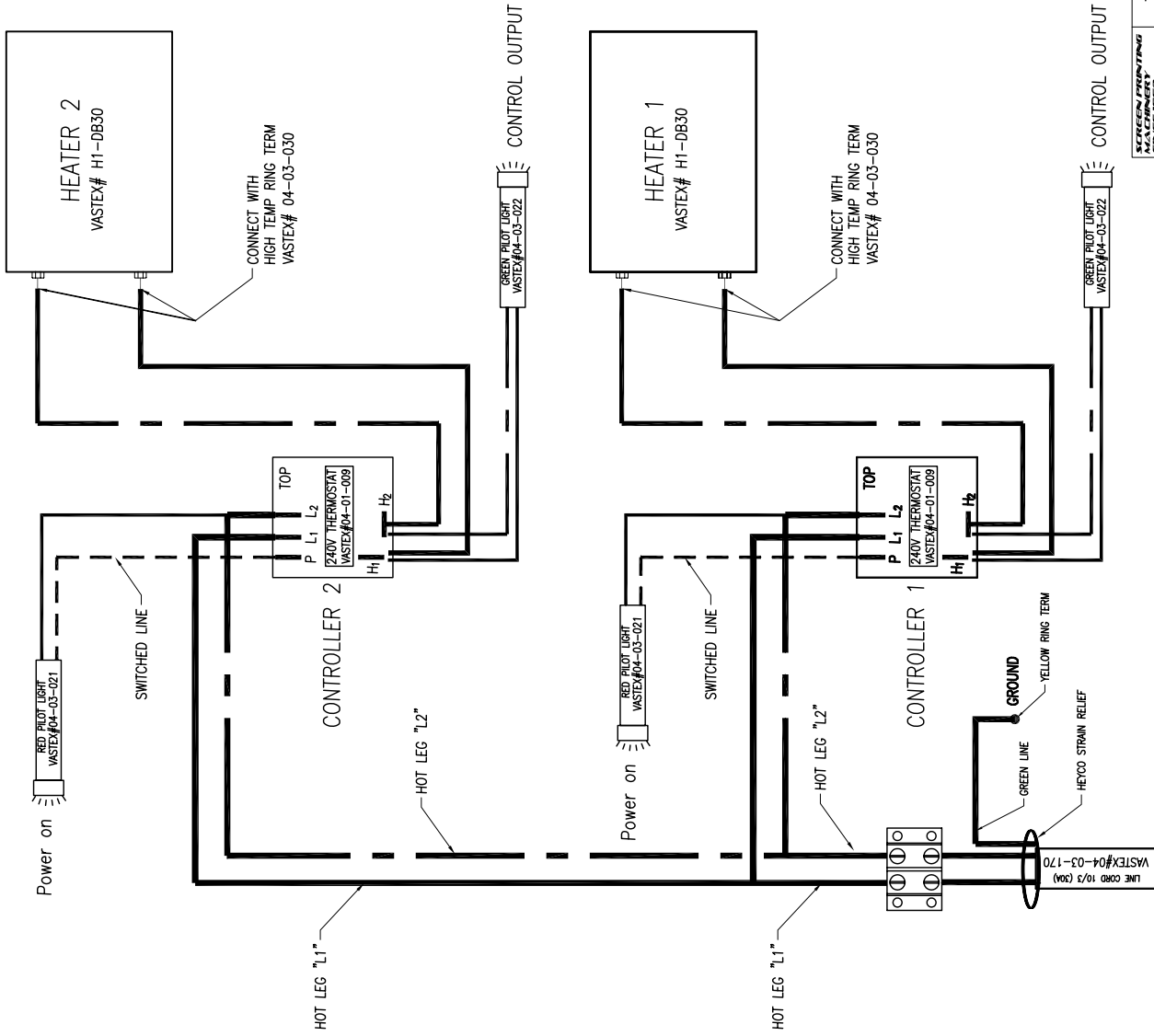
techsupport@vastex.com

Screen Printing Issues & Support:

printech@vastex.com

02-01-001

REVISIONS			
REV	DESCRIPTION	DATE	BY APP'D

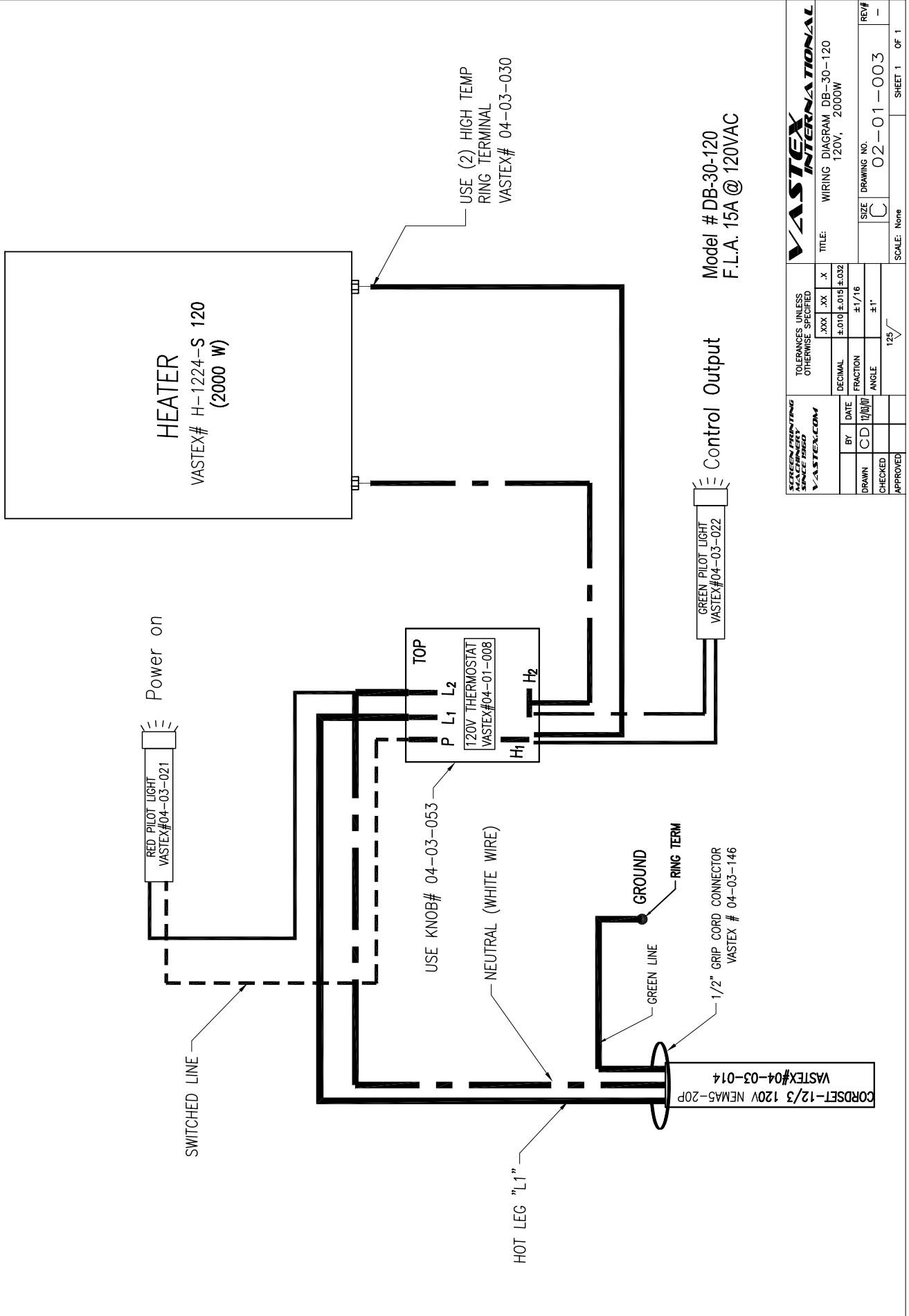


Model # DB-II-30
F.L.A. 22A @ 240VAC

TOLERANCES UNLESS OTHERWISE SPECIFIED		TITLE	
XXX .XX	.X	WIRING DIAGRAM DB-II-30	
±0.10	±0.15 ±.032	(2) 240V, 2600W	
DECIMAL	FRACTION	SIZE	DRAWING NO.
	±1/16	C	O2-01-001
	ANGLE		REV#
	±1'		-
1/32		SCALE: none	
VASTEX INTERNATIONAL		SHEET 1 OF 1	

REVISIONS

REV	DESCRIPTION	DATE	BY	APP'D

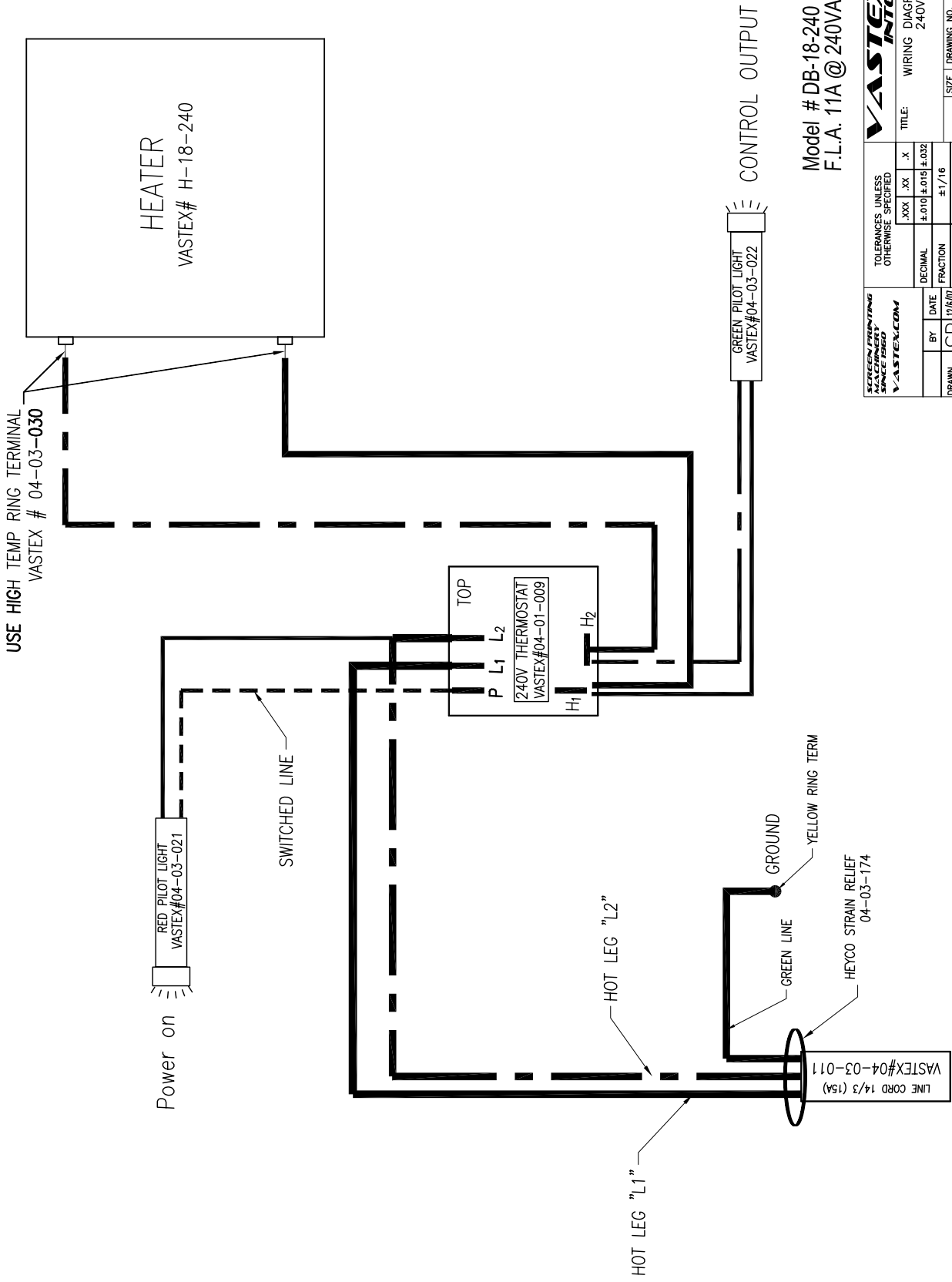


SCREEN PRINTING MACHINE SINCE 1960		TOLERANCES UNLESS OTHERWISE SPECIFIED		TITLE	
VASTEX.COM		.XX	.XX	X	WIRING DIAGRAM DB-30-120
BY	DATE	DECIMAL	FRACTION	ANGLE	120V, 2000W
CD	12/00/07	±0.10	±1/16	±1°	
DRAWN					SIZE C
CHECKED					DRAWING NO. 02-01-003
APPROVED					REV# -
					SCALE: None
					SHEET 1 OF 1

02-01-004

REVISIONS

REV	DESCRIPTION	DATE	BY	APP'D
A	2600 W was 2000 W was dual voltage heater	05/20/08	CD	

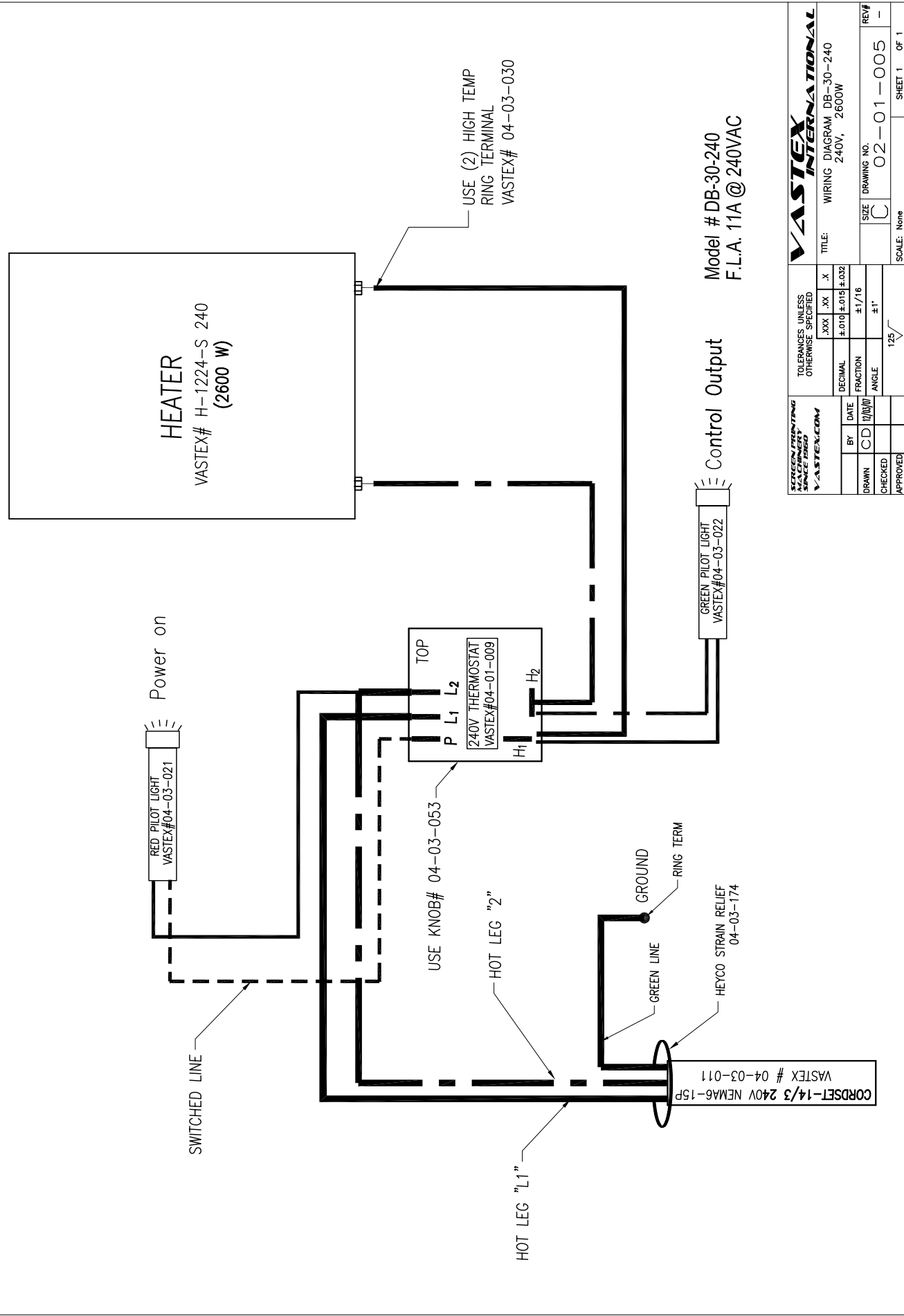


Model # DB-18-240
F.L.A. 11A @ 240VAC

ELECTRICAL DRAWING MACHINERY SPACE 1980 VASTEX.COM		TOLERANCES UNLESS OTHERWISE SPECIFIED	
DATE	12/6/07	.XXX	±.010 ±0.015 ±.032
BY	CD	DECIMAL	±1/16
CHECKED		FRACTION	±1'
APPROVED		ANGLE	125°
TITLE: WIRING DIAGRAM, DB-18-240		SIZE	C
DRAWING NO. 02-01-004		SCALE	None
REV# A		SHEET 1 OF 1	

02-01-005

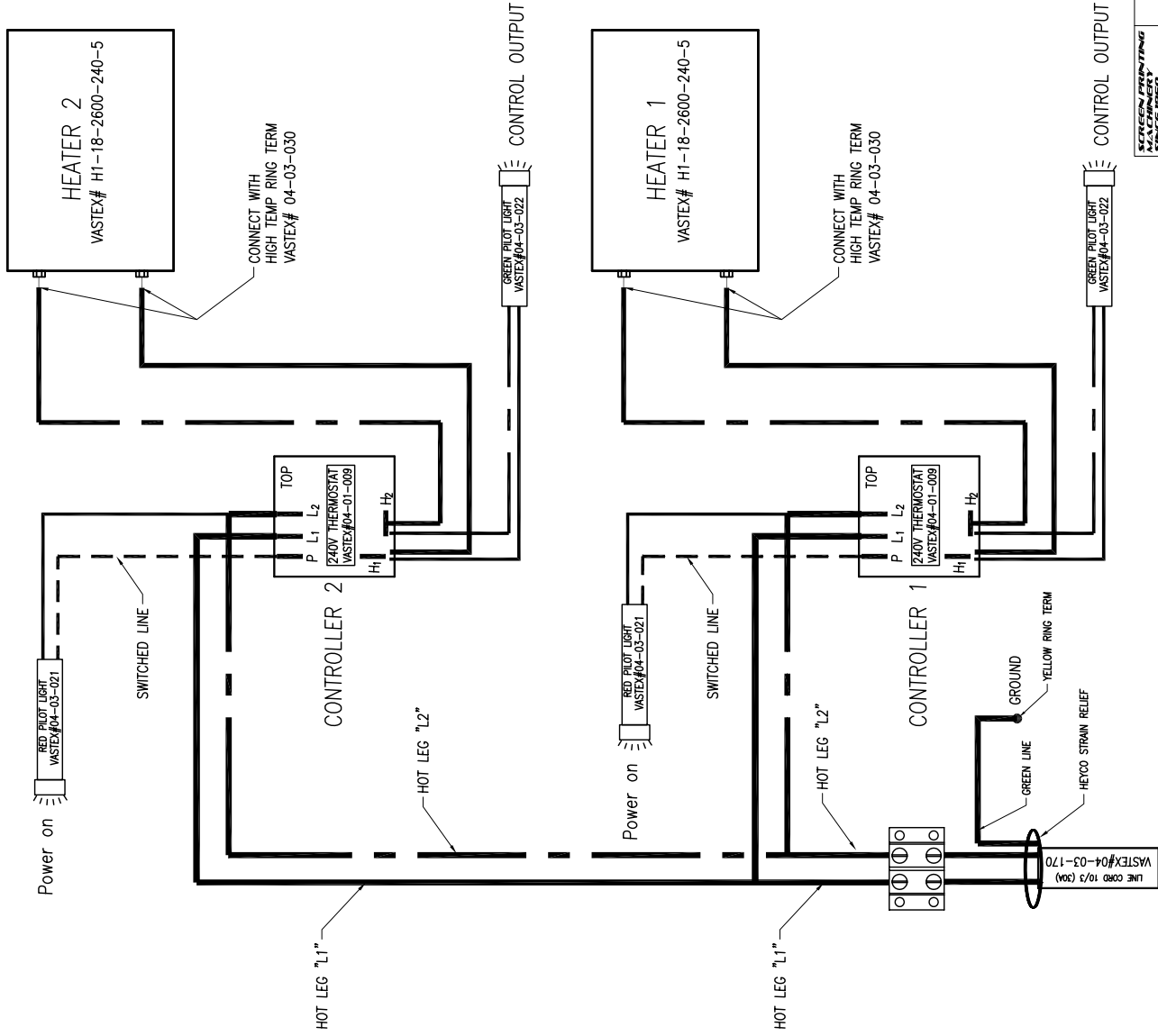
REVISIONS		
REV	DESCRIPTION	DATE BY APP'D



SCREEN PRINTING SPACE 1800 VASTEX.COM		TOLERANCES UNLESS OTHERWISE SPECIFIED	
BY	DATE	.XXX .XX .X	±.032
CD	12/00/07	DECIMAL	±.010 ±.015 ±.032
CHECKED		FRACTION	±1/16
APPROVED		ANGLE	±1°
		SIZE	125
		DRAWING NO.	02-01-005
		REV#	-
		TITLE	WIRING DIAGRAM DB-30-240 240V, 2600W
		SCALE	None
		SHEET 1 OF 1	

REVISIONS

REV	DESCRIPTION	DATE	BY	APP'D

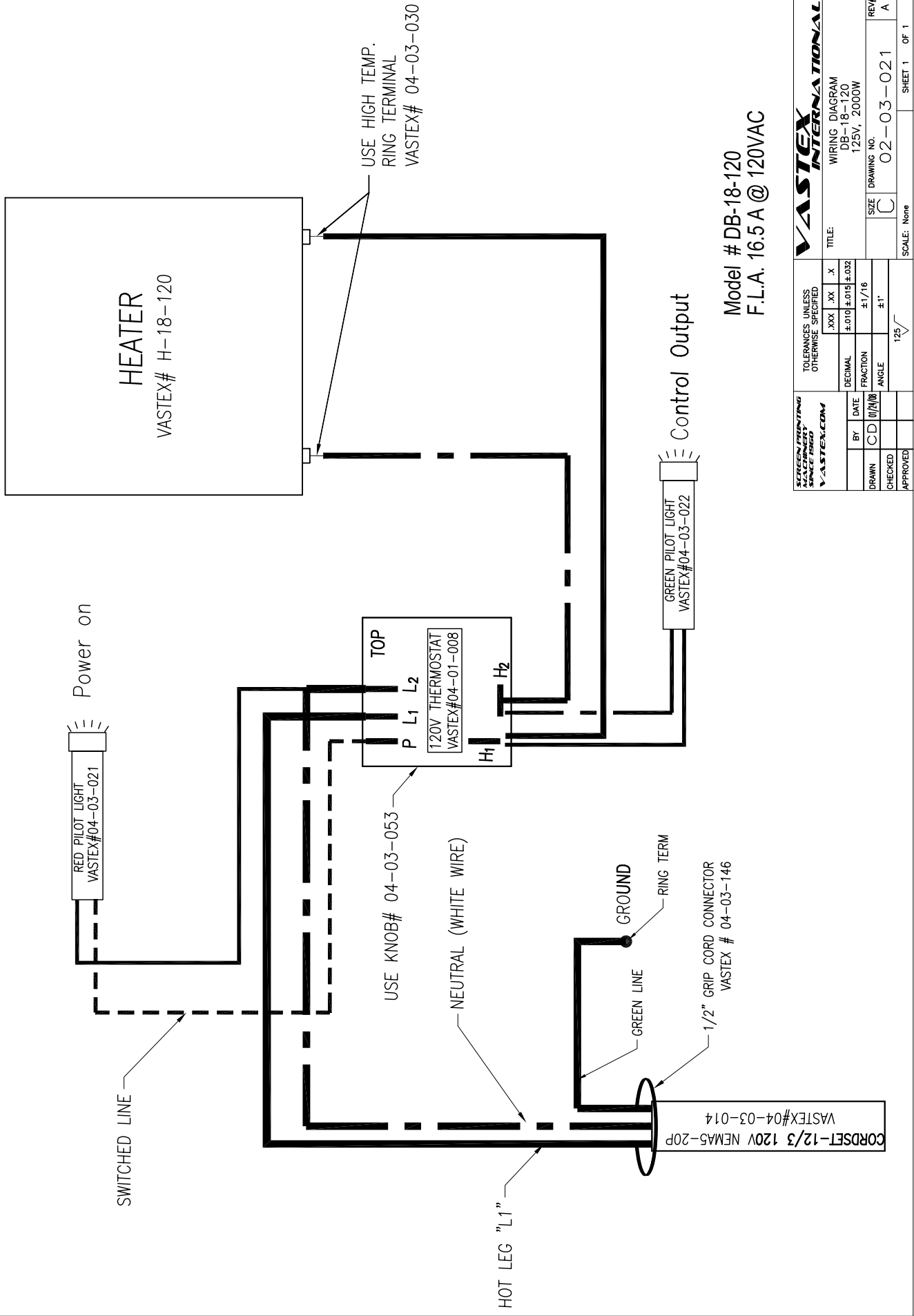


Model # DB-II-18
F.L.A. 22A @ 240VAC

VASTEX INTERNATIONAL TITLE: WIRING DIAGRAM, DB-II-18 (2) 240V, 2600W	
TOLERANCES UNLESS OTHERWISE SPECIFIED .XXX .XX .X ±0.010 ±.015 ±.032	DECIMAL FRACTION ANGLE ±1/16 ±1°
SCREEN PRINTING MACHINERY FINISHES VASTEX.COM	BY: MIKE DATE: 4/7/08 DRAWN: MIKE CHECKED: APPROVED:
SIZE: C DRAWING NO.: 02-01-007 REV#: -	SCALE: NONE SHEET 1 OF 1

REVISIONS

REV	DESCRIPTION	DATE	BY	APP'D
A	was dual voltage heater	06/20/08	CD	



Model # DB-18-120
F.L.A. 16.5A @ 120VAC

TOLERANCES UNLESS OTHERWISE SPECIFIED		TITLE:	
.XXX	.XX	WIRING DIAGRAM	
±.010	±.015 ±.032	DB-18-120	
DECIMAL	FRACTION	125V, 2000W	
	ANGLE	SIZE	DRAWING NO.
	±1°	C	02-03-021
APPROVED	CHECKED	SCALE: None	REV#
			A
			SHEET 1 OF 1

SCREEN PRINTING
SPACE FILL
VASTEX.COM

VASTEX INTERNATIONAL

Vastex Warranty

Doc#01-00-005B Revised 10/15/07

(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 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 E-1000, and V-1000, three (3) years for all other equipment (including F-Flash), ten (10) years for infrared heaters (excluding F-Flash) installed by Vastex in a new dryer, three (3) years for replacement infrared heaters, 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 but 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.

(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 workmanship and defective parts to a 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.

Infrared heaters are the only replacement parts covered for a period of (3) years from date of shipment and contingent to receipt of payment in full.

Electrical components can not be returned once installed unless proven defective.

Please refer to doc. 01-01-006 for warranty implementation help.

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.

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VASTEX WARRANTY IMPLEMENTATION SHEET

Please read this document in order to fully understand the warranty.

Doc.# 01-00-006

Your new Vastex equipment is protected against *manufacturers' defects by our warranty, completely explained in doc# 01-00-017 for the V2000-HD series manual printer and in doc# 01-00-005 for all other Vastex manufactured equipment. Please refer to these documents for the **warranty term and specific concerns about the warranty. The following are some important facts and requirements for the proper implementation of the warranty.

1.0 Everything is covered!

2.0 **Warranty Term is defined as: Ship date from VASTEX to the date the item in question is returned to VASTEX for inspection and repair.

3.0 *Manufacturers defects are defined as: Parts determined to be defective in workmanship which will lead up to a premature failure. The determination will be made only by the manufacturer of the item in question.

4.0 To take advantage of the warranty the following steps must be taken:

- 4.1 The equipment must be paid for in full.
- 4.2 The item in question must be shipped to VASTEX for evaluation with all shipping costs incurred by the buyer.
- 4.3 If the item is deemed as a manufacturer's defect it will be repaired or replaced within 2 business days from the time received. The shipping cost back to the customer located in the continental United States will be paid by VASTEX if a warranty item.
- 4.4 **If the item in question must be replaced immediately and is more than a year old, it will have to be purchased at list price and will be shipped COD. A pro-rated credit will be given promptly if the returned item is a valid manufacturer's defect.**
- 4.5 If the equipment was shipped less than a year before the date of the service call and a technician confirms the part needed for repair, the replacement will be shipped before the replacement is shipped back. An RGA will be issued and must accompany the old part to VASTEX within 30 days or the account will be billed.

5.0 Important facts about the condition of shipped equipment:

- 5.1 Dryers are partially assembled with the belts tracked and the machine run at full temperature for a min. of 1 ½ hours.
- 5.2 Printers are partially assembled, inspected, and adjusted for all heads down prior to partial disassembly and packing.
- 5.3 Exposing units are fully assembled and tested with the maximum screen size for vacuum integrity, timer operation and light output.

6.0 This document is in addition to the standard warranty and only helps the customer understand how to take advantage of the warranty. In no way does this document override the standard warranty or the terms and conditions of sale and the limited warranty doc# 01-00-015.

Please see doc# 01-00-015 for specific terms and conditions of sale and the limited warranty

VASTEX
INTERNATIONAL

1032 N. IRVING ST.
ALLENTOWN PA. 18109 USA

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Vastex International, Inc.

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

1. 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.
3. (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.
4. 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 circumstances 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.
5. 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.
6. 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.
7. Seller reserves the right, at any time, to revoke any credit extended to Buyer because of Buyer's failure to pay for any products when due or for any other reason deemed good and sufficient by Seller and in such event, all subsequent shipments shall be paid for prior to at delivery at Seller's option.
8. (a) SELLER'S LIABILITY SHALL BE LIMITED TO SELLER'S STATED SELLING PRICE PER UNIT OF ANY DEFECTIVE GOODS AND SHALL IN NO EVENT INCLUDE BUYER'S MANUFACTURING COSTS, LOST PROFITS, GOODWILL, OR ANY OTHER SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL 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.
9. 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.
10. 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.
11. This contract shall be governed and shall be construed according to the domestic laws of the Commonwealth of Pennsylvania.
12. 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.
13. This agreement shall inure to the benefit of and be binding upon the parties hereto, their respective successors and permitted assigns.
14. **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.**