



VASTEX

SCREEN PRINTING EQUIPMENT

V-2000HD

Assembly, Operating, and Maintenance Instructions for all V-2000 rotary presses.



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Serial Number: VTX _____ Date: / /

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

Vastex E-mail assistance

Purchasing & Product Info:
sales@vastex.com

Tech Support:
techsupport@vastex.com



Warranty

A copy of the warranty is also available at:
<https://www.vastex.com/Library.php>

Introduction

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

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

Features

- Micro Registration
- Wrench-less Adjustments
- Steel pallets with rubber tops
- All heads down
- Upgradeable (Available up to 10x10)
- Tabletop units available

Options

- Additional color and station upgrade packages
- Unique, fast, numbering system attachment
- Super heavy duty print arms
(hold up to 50lbs.[22.7kg])
- Pallets– Request a Pallet Spec Book
- Side clamps, removable or fixed
- Stand (for tabletop version)
- Locking casters and levelers
- Service Pan (for extra storage) w/ locking casters

In the event of an accident or breakdown

In the unlikely event that a part of your press breaks, or if your press does not seem to be operating normally and the instructions in this manual do not correct the issue, do not continue using your press. Contact Vastex for assistance in repairing your press.

Placing this equipment into service

To place your press into service —

- 1.) Review the photograph on page 4 to familiarize yourself with the parts of the press.
- 2.) Follow the instructions on pages 5 through 7.
- 3.) If necessary to make fine adjustments to your press, see pages 8 through 13.

Operating this equipment

To operate your press —

- 1.) Clamp your first screen into head #1.
- 2.) Repeat for additional screens, using additional heads.
- 3.) Place garment in pallet #1.
- 4.) Lower print head and squeegee ink through screen.
- 5.) Raise print head. For one-color printing, rotate print head, load new, blank garment and repeat steps above.
- 6.) For multi-color printing, rotate the pallet to print head #2 and repeat steps above until all colors are printed.
- 7.) If any adjustments to the print heads need to be made, refer to the instructions in this manual.

Safety Information

Read this manual before assembling and operating your press.

Intended Use:

- This equipment is intended for performing manual screen printing of fabric items, particularly garments. This equipment must not be used in a manner contrary to what is described in this manual.

Safety:

- The operator should read and understand this manual before operating this equipment. Store manual and safety information near equipment for easy access to operators.
- Children and pets must be kept clear of the work area.
- Do not store any objects on top of any part of the press.
- Do not operate if any guard or cover has been removed.
- **Noise and Vibration:** This noise level produced by this equipment does not exceed 70 dB(A).
- Do not stand in locations other than the normal workstations (a workstation is the location directly in front of any pallet) when equipment is in use.
- This equipment has been designed with care to eliminate hazards as far as possible. However, by nature of its operation, there may be pinch points. Avoid placing hands or fingers in places where they could become pinched as print heads are lowered.
- In the unlikely event that a spring in the press breaks, the print head could fall rapidly. Keep hands and fingers away from the space between the print head and the pallet.
- As with any machinery having moving parts, it is suggested that the operator(s) wear safety glasses.

Essential characteristics of tools which may be fitted to this machinery: this equipment is not designed to have tools or components added, except as specifically listed in this manual.

Stability during use, transportation, assembly, foreseeable breakdowns, etc.:

This equipment is designed and expected to be stable during all normal conditions of use.

- When assembling your press, do not stand tall parts upright until you are ready to install them; lay them flat instead.
- It is recommended that assembly should be done by two or more people, to facilitate the alignment of parts that must be bolted together.
- If one or more legs of the press will be removed, be certain to adequately support the rest of the press.

Safe Handling, transport, and storage

Your press is designed to be inherently safe under all normal conditions. When handling or transporting your press, be aware of the weight of your unit and have an appropriate number of people to lift the weight safely:

V2HD-44: 400 lbs (182 kg)

V2HD-88: 750 lbs (340 kg)

V2HD-1010: 1075 lbs (488 kg)

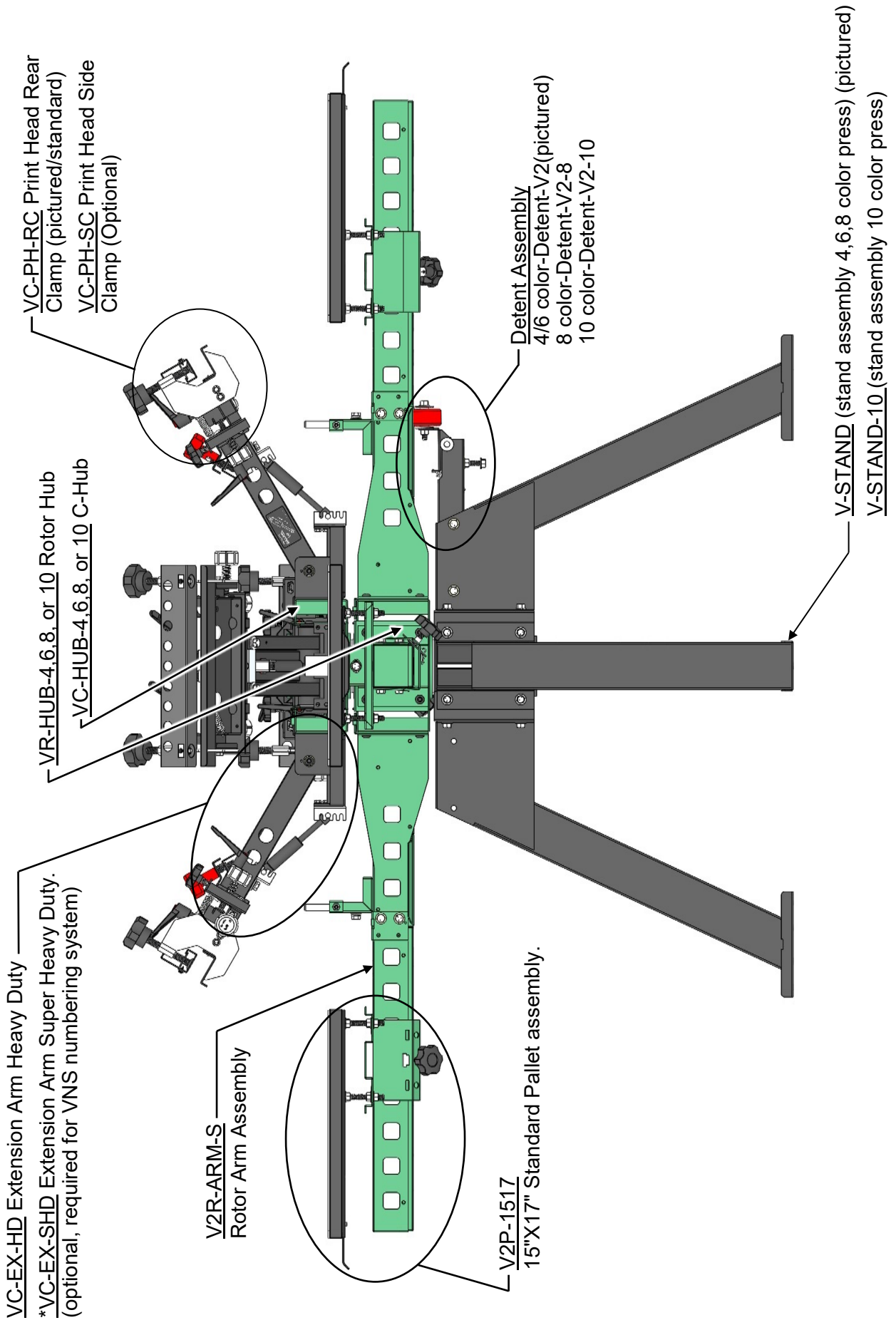
V2HD-46: 473 lbs (214.5 kg)

V2HD-66: 550 lbs (250 kg)

If your press is to be moved or transported regularly, it is recommended that you purchase the optional casters.

V-2000HD Overall View

V-2000HD Overall View



Printer Assembly

- 1) **Remove straps, top of crate, sides of crate, and shrink wrap** from around the press. Remove rotor arms and unpack boxes under press.



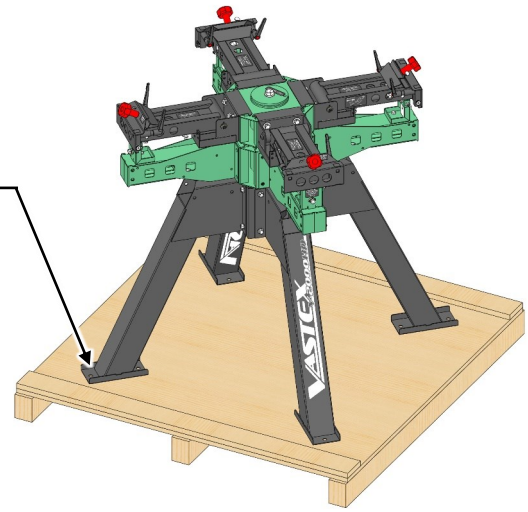
Note: Report any box damage to the driver and note it on the ticket before signing. If hidden damage is found, report it to the **trucking company right away** and save the packaging.

- 2) **Take press off of skid**, by removing the lag bolts at the feet and carefully sliding the press off the skid and onto the shop floor.

Some accessories are packed with the press.

- 2a) **If wheels or a service pan were purchased**, slide two legs just to the edge of the skid and install their 2 wheels. Then install remaining wheels one at a time, followed by service pan.

Lag bolt



Service Pan and Wheels (optional)

Wheel Set Installation:

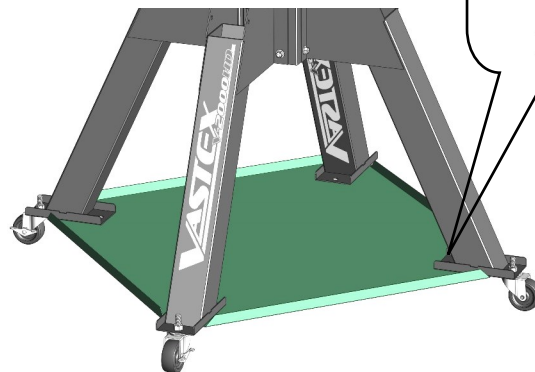
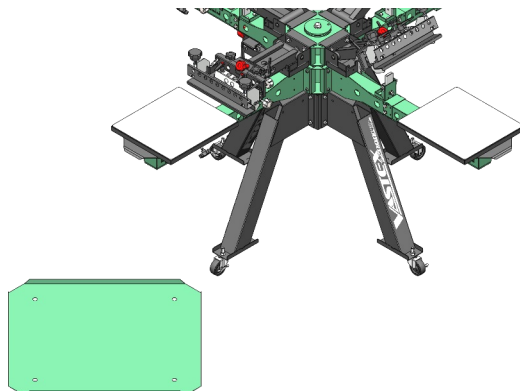
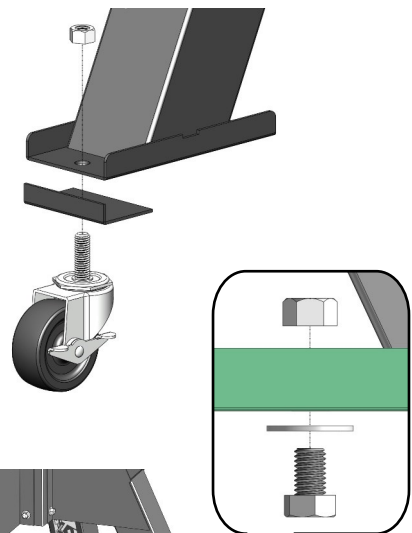
1. Install wheel caster to bottom of foot through the foot brace.
2. Attached with 1/2" nut.

Tools Required:

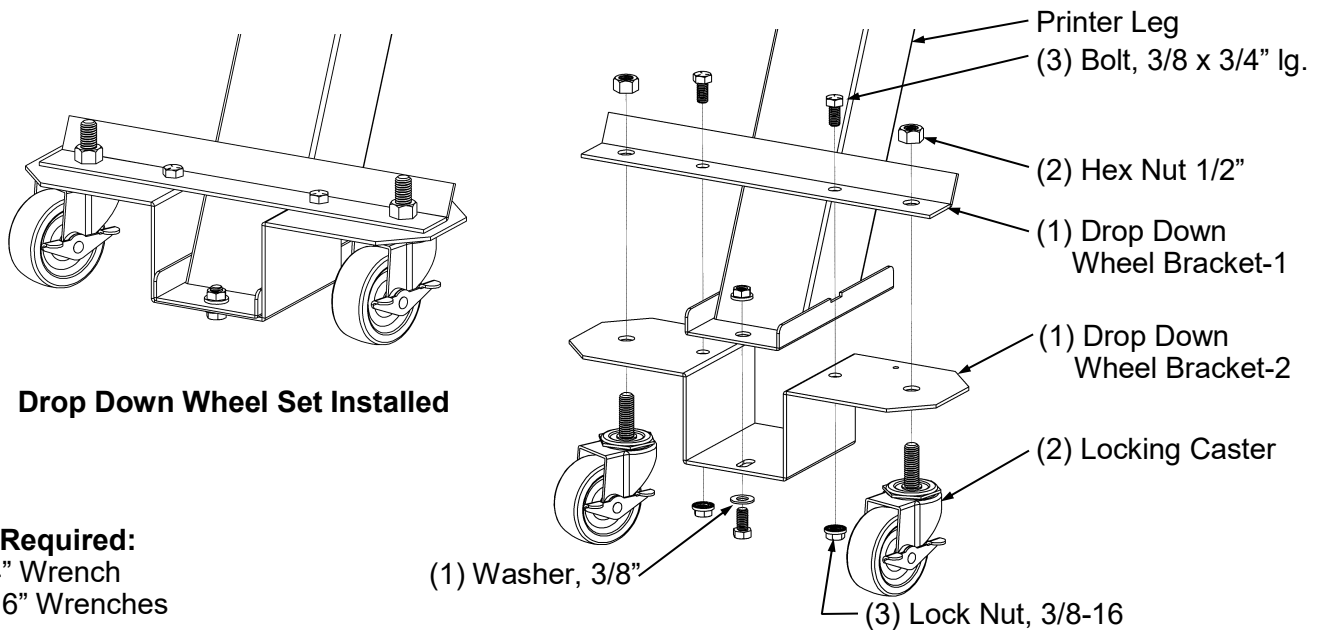
- (1) 3/4" Wrench

Service Pan Installation:

1. Lay pan on floor and roll machine over the pan.
2. Line up holes on the pan with the holes on the inside of the press' feet.
3. Lift pan up and install with 1/2" bolt, nut, and flat washer. The flat washer is installed on the bottom of the pan.



Drop Down Service Pan and Wheels (optional)

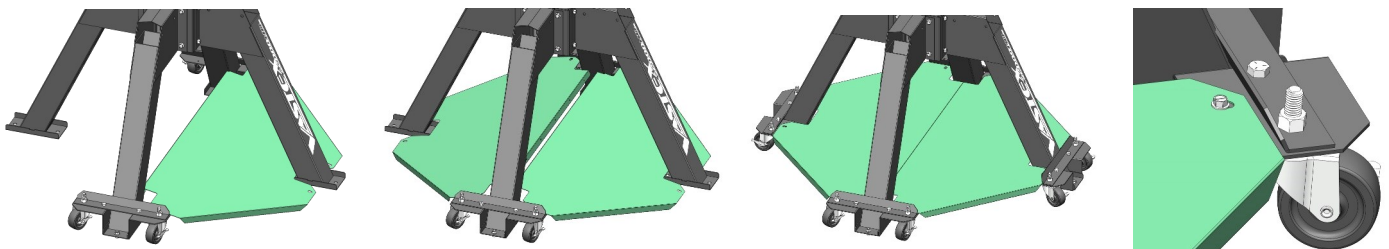


Tools Required:

- (1) 3/4" Wrench
- (2) 9/16" Wrenches

Drop Down Wheel Set Installation:

1. Attach Drop Down Wheel Bracket-1 to Bracket-2 using (2) 3/8-16 x 3/4" bolts and locknuts. Note Orientation.
2. Attach casters to the drop down wheel set brackets with 1/2" nut, use 3/4" wrench to tighten.
3. Carefully lift press and slide caster assemblies under each leg, If installing service pan , proceed to service pan installation.
4. Secure the Assembly to each leg with the 3/8-16 x 3/4" bolt, nut, and washer as shown. Tighten with two 9/16" wrenches.



Drop Down Service Pan Installation:

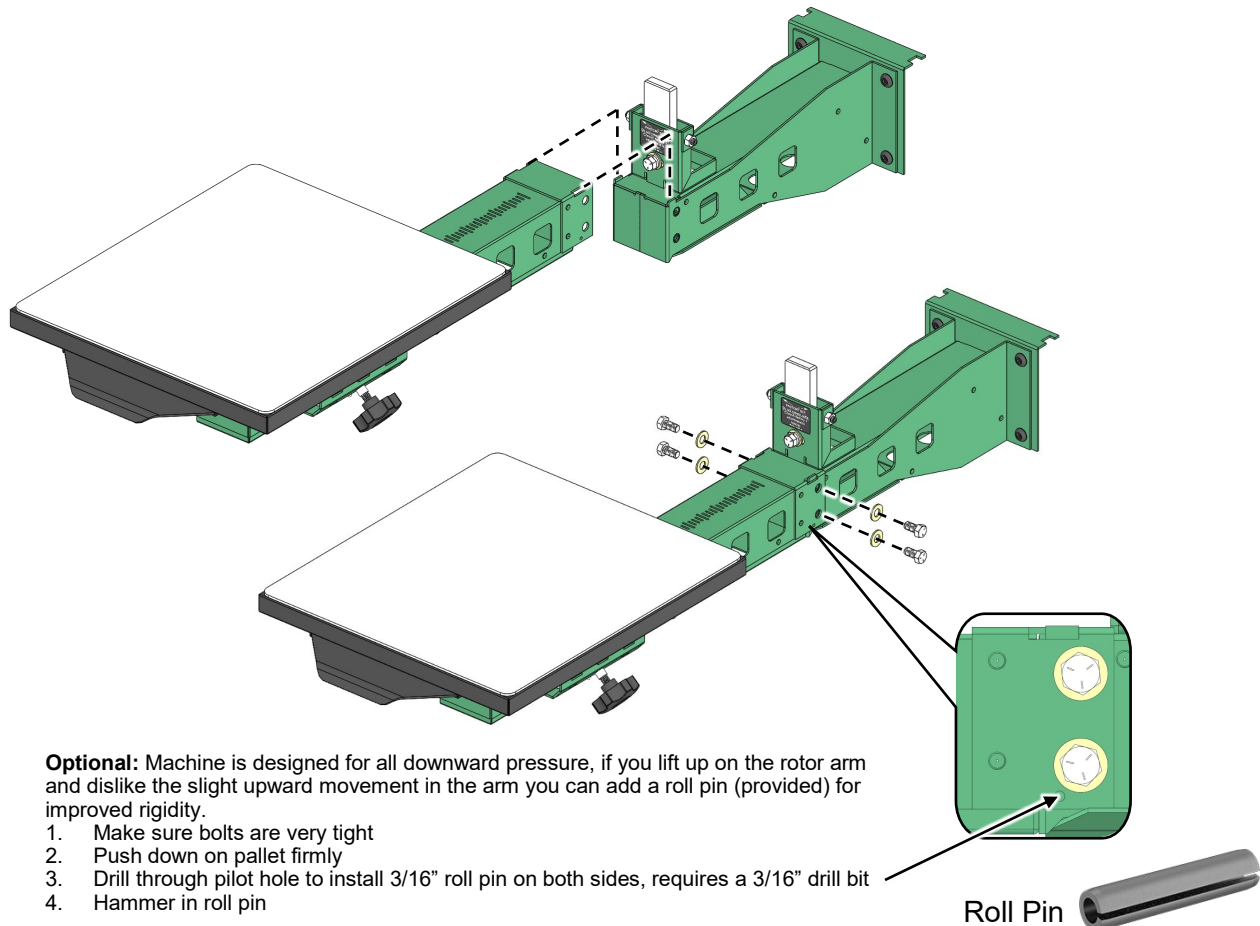
1. Two opposing caster assemblies must remain off to allow the service pan to fit between the legs.
2. With the pan on an angle, carefully slide each half of the pan between the press legs. The pan lays flat against the top of the caster assemblies. The pan will be secured to the top of each caster assemblies.
3. Lift the pan and install the two remaining caster assemblies, note the pan must be above the caster assemblies.
4. With the pan halves held tight together at the split line, center the pans over the mounting holes in the caster assemblies. Install the (8) #14 sheet metal screw and flat washer with a 3/8" socket and ratchet. It may be necessary to adjust the caster assemblies to align with the pan mounting screw holes.
5. Tighten the wheel set brackets to each leg with the 3/8" hardware shown above, two 9/16" wrenches required.

Tools Required:

- (1) 9/16" Wrenches
- (1) 3/8" Socket & Ratchet

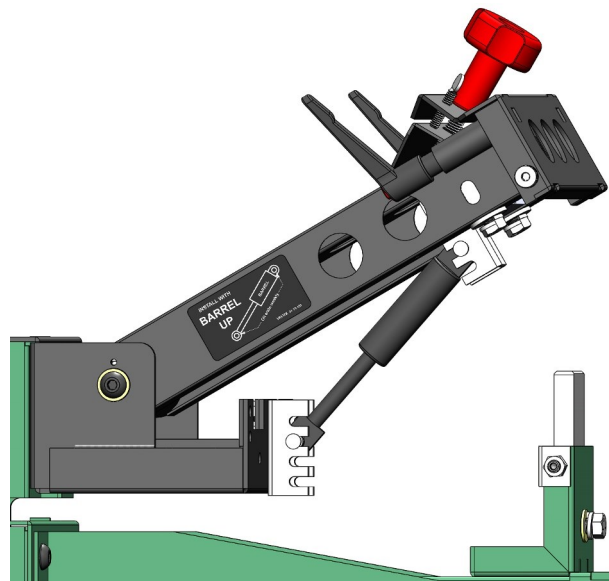
— Printer Assembly Cont.

- 3) **Install your rotor arms. Be sure to put the arms into the correct numbered positions.** Each arm is packed with a pallet attached. Install the rotor arm as shown below. Two hooks hold the Rotor Arm in place before hardware is installed. Install (4) gold colored washers and (4) 3/8" bolts on each arm. Tighten these bolts Very Well.

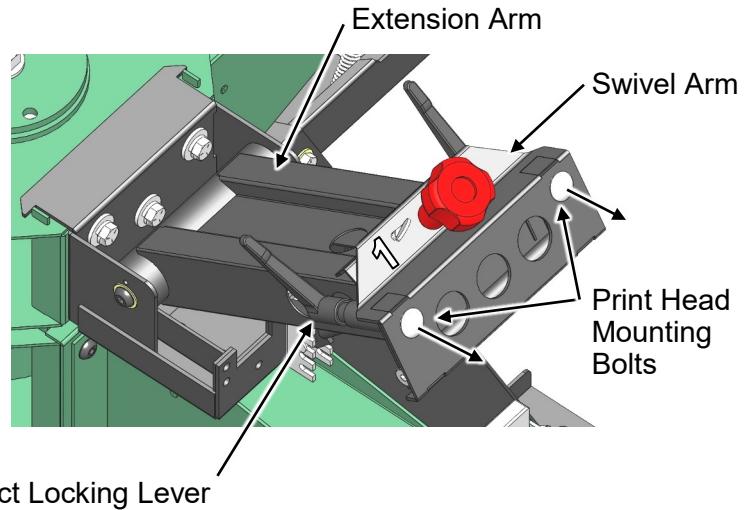


- 4) **Install the gas springs, found in print head box,** with the number 1 head and the rotor arm bolts. There are 4 slots on each side to choose. Be sure the barrel is in the up position and for starters use the slots shown to the right.

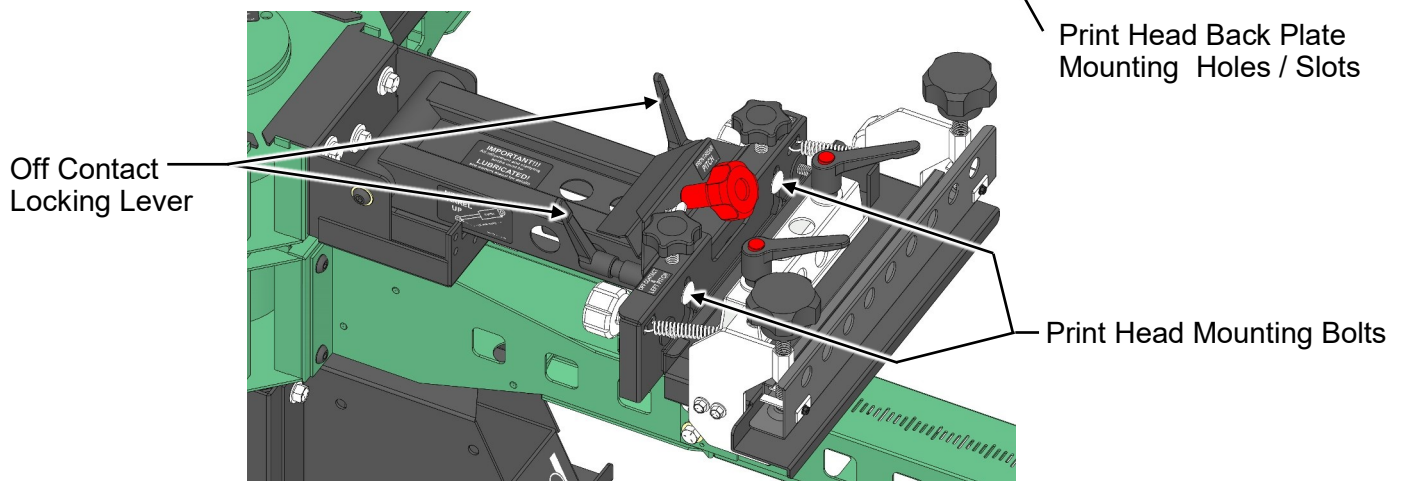
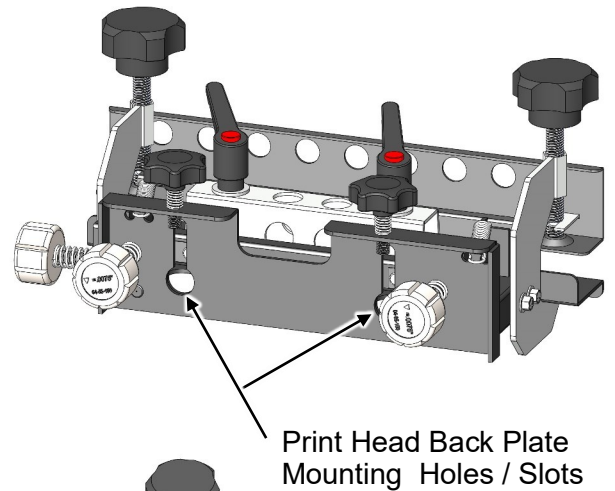
*Note: The gas spring can be put into any slots to get the "feel" you like. Be sure to install with the **barrel up** as shown.*



5a) **Installing the Print Heads onto the Swivel Arms.** One print head has been leveled and #1 to match the swivel and extension arm #1. To install the Print Heads, pull the print head mounting bolts forward.



5b) Position the large holes in the print head back plate over the mounting bolts and slide down into the slots. **Be sure the head is slid all the way down in the slots.** Fully tighten only the Locking Levers of the #1 Print Head. The remaining Print Heads will be tightened after the Print Heads are leveled. The locking lever handle can be pulled out to allow rotation to another position, release to engage for locking.



Print Head Installed

— Printer Assembly Cont. —

6) **Adjusting the remaining Print Heads.** Move the screen to remaining print head positions and set the 1/8" off contact to the now leveled pallets.

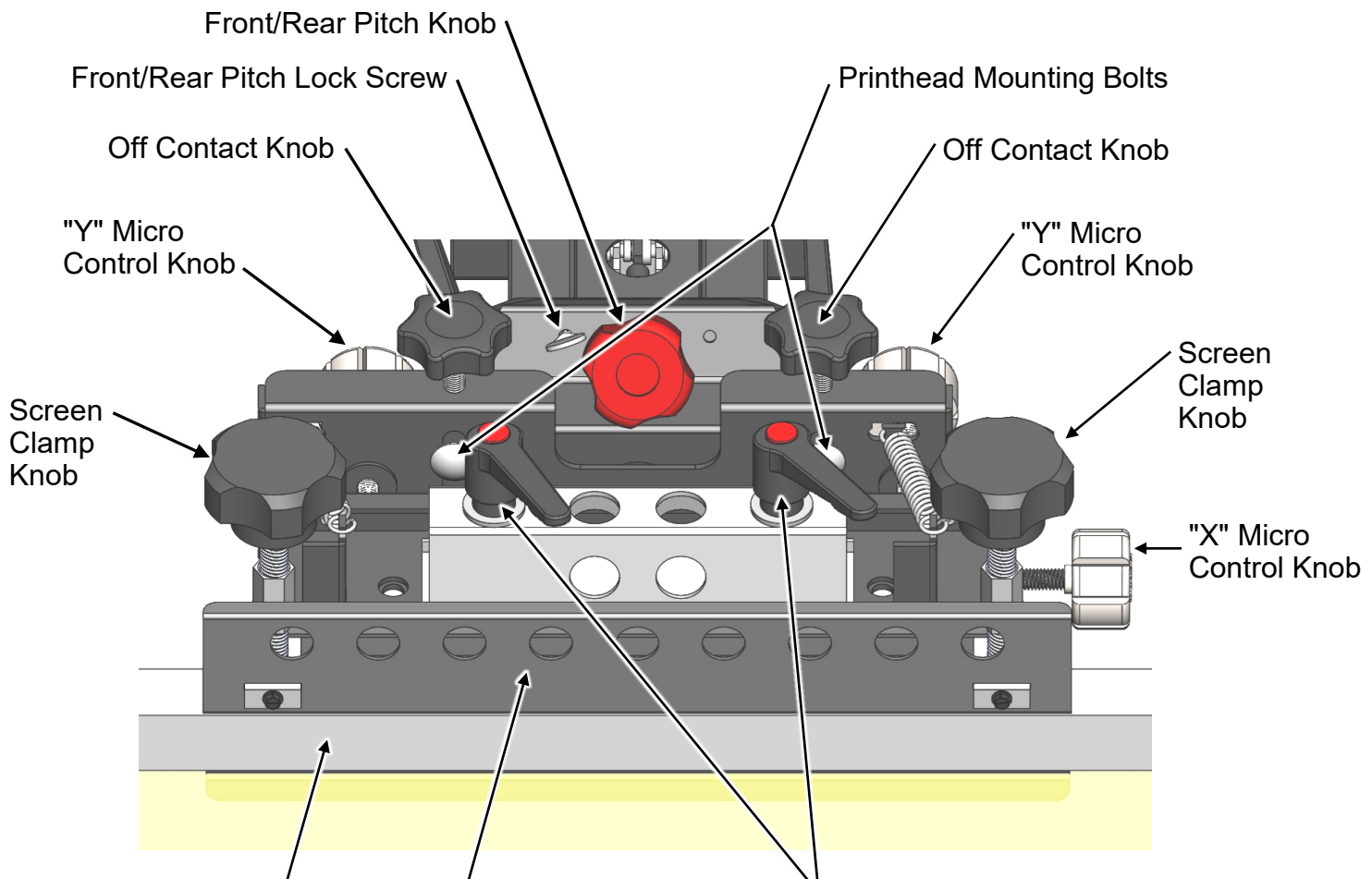
Don't forget print head #1 was adjusted at the factory.

But you may still have to make an adjustment due to variations in screens and possible movement in shipping. Please adjust the print head in this case not the pallet.

Clamp a flat screen into a print head. Using the "Front/Rear Pitch" knobs, the "Left/Right Pitch" knobs, and the Off Contact knobs, adjust the screen gap or "off contact" to 1/8". Please read the notes below before making adjustments.

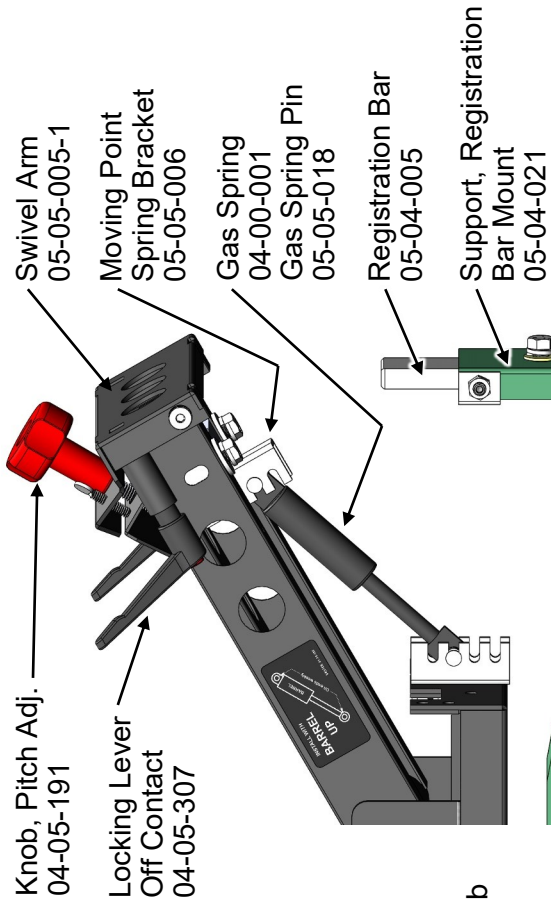
- A. Tighten both Screen Clamp Knobs to secure the screen in the printhead.
- B. Loosen the Front Rear Lock Screw before adjusting the pitch. Retighten after adjusting.
- C. Loosen both Micro Clamp Levers before adjusting the left right pitch and "X" movement. Retighten after adjusting.
- D. Loosen both Off Contact Locking Levers. Set off contact. Retighten after adjusting.

— Printhead Component Identification —

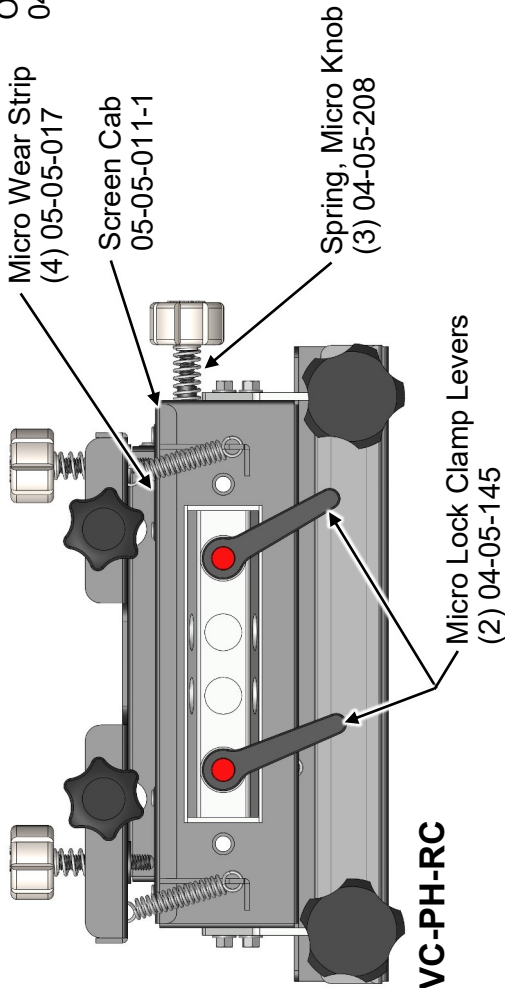


MICRO CLAMP LEVERS:
Lift and rotate to a comfortable position. Only loosen and tighten levers while the head is in the down position.

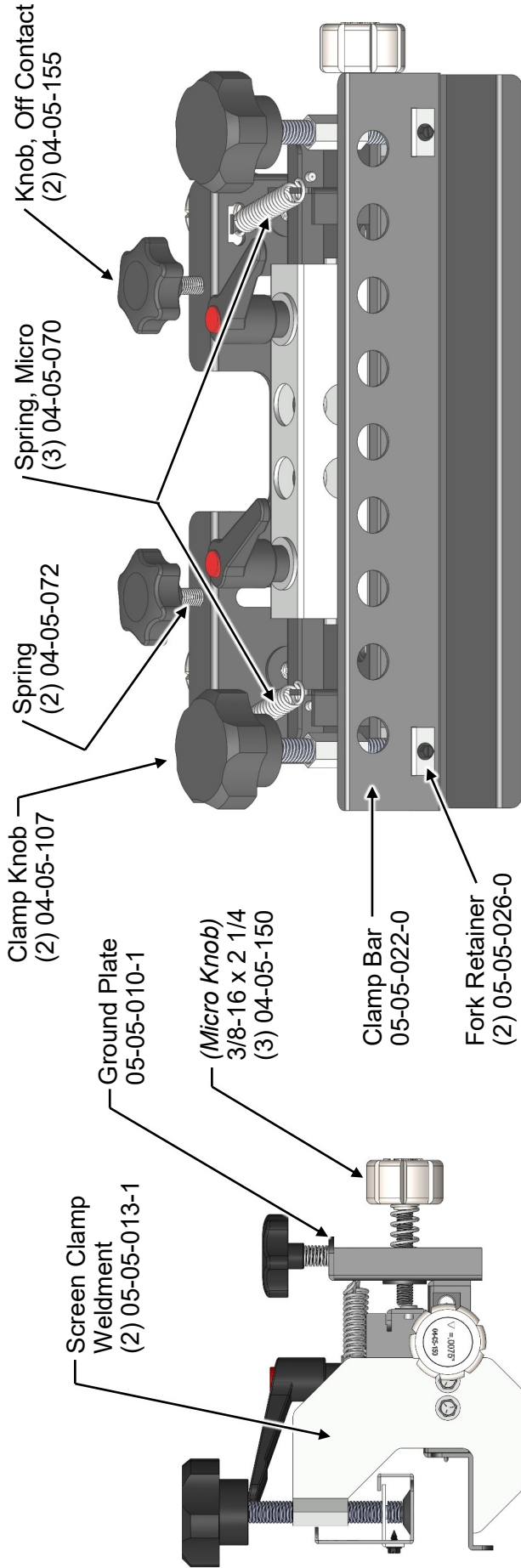
Vastex V-2000HD Print head/Extension Arm Part Number Identification



VC-EX-HD



VC-PH-RC



— Micro Registration Adjustment Instructions —

Vastex micro-registration is standard with every V-2000 screen printer. It uses three control knobs, two micro clamp levers, and three return springs for movement control. A set of centering sites is used to start at a zero point. A total of 1/2" movement is available in the "X" direction and also in the "Y" direction

- Rotating the screen can be done by turning one of the "Y" micro control knobs. The pivot point for rotation is the tip of the other "Y" micro control knob.
 - The micro clamp levers must be loosened (1/4-1/2) turn only, before turning the control knobs.
- Start each job with the centering sites lined up. This ensures you will have all the available adjustment.

To Move the Screen Left to Right

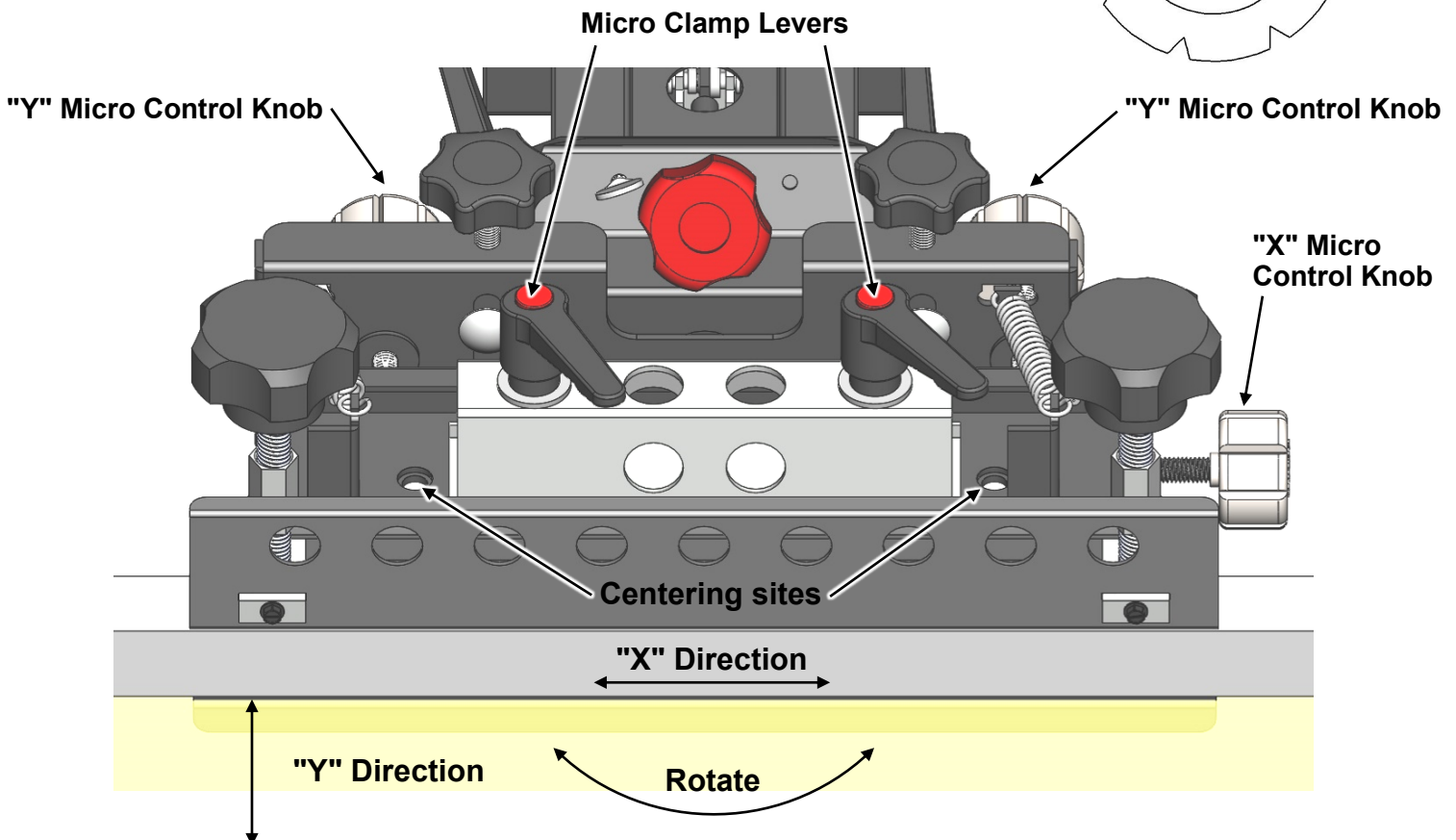
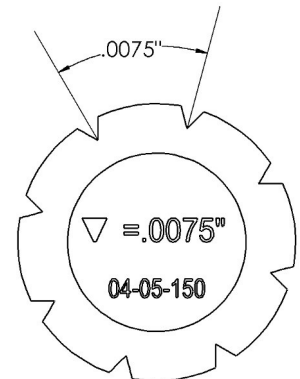
- 1) Loosen the two micro clamp levers (1/4-1/2) turn
- 2) Turn the "X" micro control knob clockwise (looking at the head) to move the screen to the right. Turn it counterclockwise to move the screen to the left.
- 3) Tighten the micro clamp levers and check the position. Repeat the above steps if necessary until the desired position is achieved.

Note: The micro clamp levers may be lifted and rotated to any position desired. They must be down to be loosened or tightened.

To Move the Screen Front to Back or Rotate

- 1) Loosen the two micro clamp levers (1/4-1/2) turn.
- 2) Turn both "Y" micro control knobs clockwise (looking at the head) to move the screen toward you. Turn them counterclockwise to move the screen away from you. Turn one or the other to rotate the screen.
- 3) Tighten the micro clamp levers and check the position. Repeat the above steps, if necessary, until the desired position is achieved.

Micro adjustments of .0075" can be made on the micro control knobs by turning it from one notch to another.
One full turn = 1/16" (0.062)

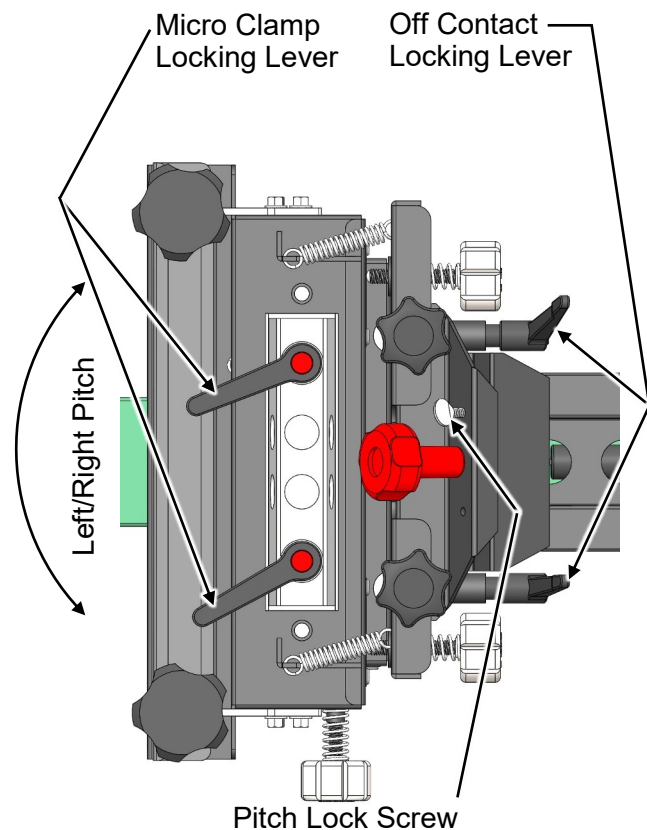


— Level & Off Contact Adjustments —

The Vastex V-2000 comes standard with 6-way level adjustments.

- A. Tighten both Screen Clamp Knobs to secure the screen in the printhead.
- B. Loosen the Front Rear Lock Screw before adjusting the pitch. Retighten after adjusting.
- C. Loosen both Micro Clamp Levers before adjusting the left right pitch and “X” movement. Retighten after adjusting.
- D. Loosen both Off Contact Locking Levers. Set off contact. Retighten after adjusting.

Refer to **Printhead Component Identification** section for descriptions of knobs and levers.



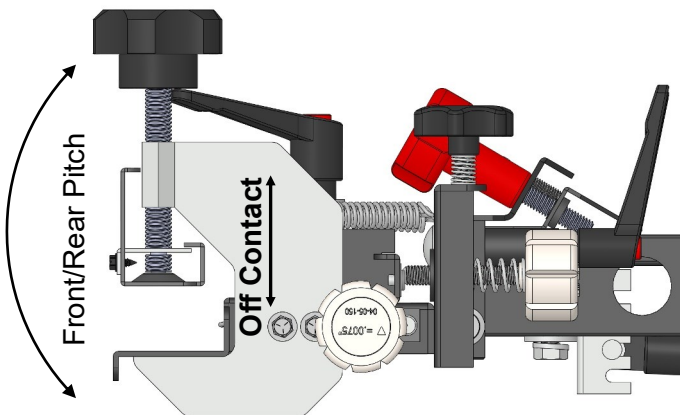
Adjusting the Screen Off Contact:

- Be sure the screen is clamped tightly and both the Micro Clamp Levers and Off Contact Locking Levers are tight.
- There are two sets of adjustments that affect the off contact.
 - (1) The **Off Contact Knobs** control left to right level as well as screen off contact. Loosen slightly the Off Contact Locking Levers. Adjust the left / right pitch knob as needed. Do one side at a time while observing movement.
 - (2) The **Pitch Knob** controls the front to back level. The **Pitch Lock Screw** must be loosened to make this adjustment. Do not over tighten.

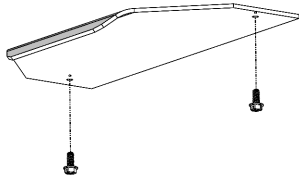
Follow these steps for each head. Head #1 is factory set.

- 1) Lower the print head to be leveled. Be sure all four locking levers and the pitch screw are tight.
- 2) If the screen is touching the pallet in one corner or more loosen one **Off Contact Locking Lever** and turn the **Off Contact Knobs** as needed. Adjust each side until the screen is level left to right and about 1/8" off the pallet. If the front of the screen is contacting the pallet it may be necessary to adjust pitch before off contact can be achieved.
- 3) Adjust the front to rear level by unlocking the **Pitch Locking Screw** and turning the **Pitch Knob**. Clockwise will lift the front of the screen and counter clockwise will lower. (It may be necessary to repeat step 2 after adjusting the front to rear pitch.)

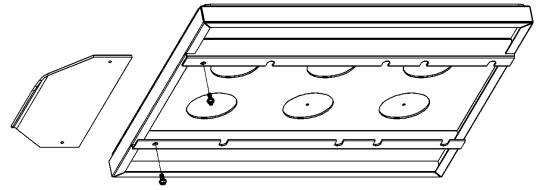
Be sure to tighten all four levers and pitch lock screw before printing.



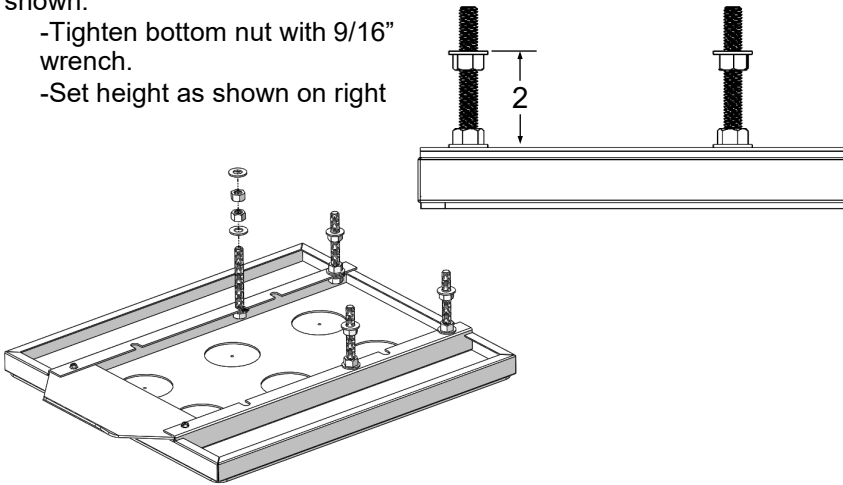
- 1) Remove screws from neck guide
-Using Flat Blade Screwdriver or 1/4" nut driver



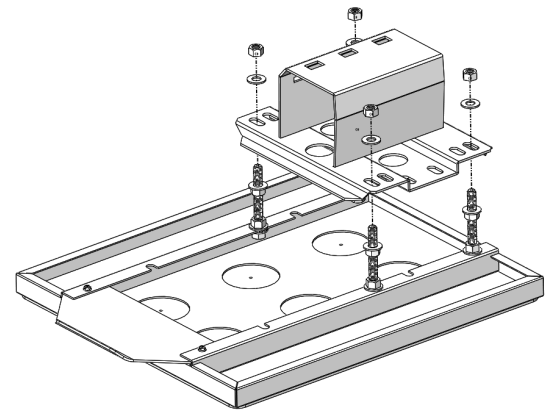
- 2) Install neck guide as shown, using removed screws.
-Tighten with Flat Blade Screw driver or 1/4" nut driver



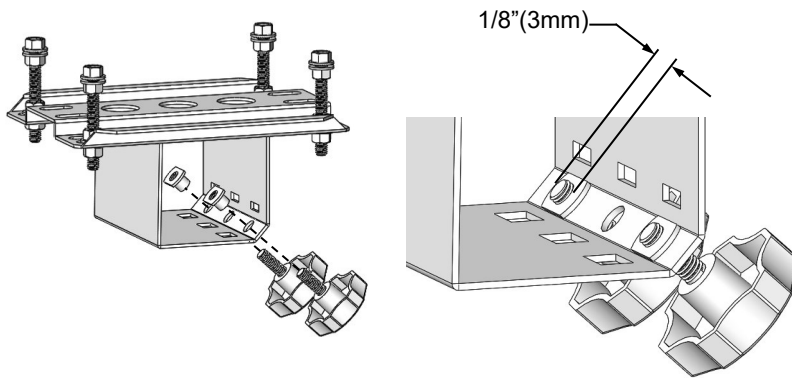
- 3) Install (4) 3/8-16 x 3" bolts, (8) 3/8" washers, and (8) 3/8-16 nuts as shown.
-Tighten bottom nut with 9/16" wrench.
-Set height as shown on right



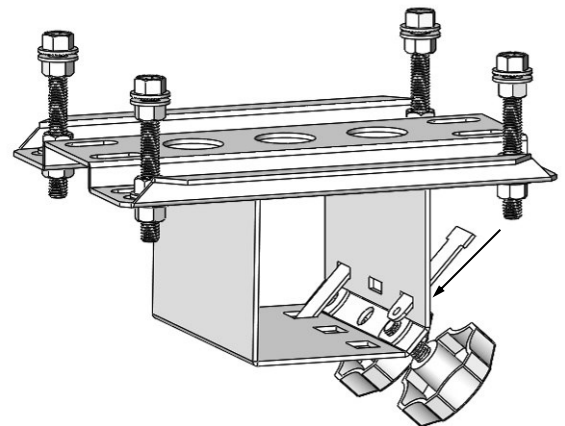
- 4) Install Pallet arm, (4) 3/8" washers, and (4) 3/8-16 nuts, as shown.
-Tighten with (2) 9/16" wrenches



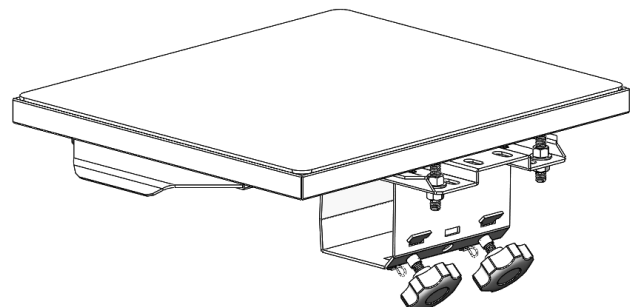
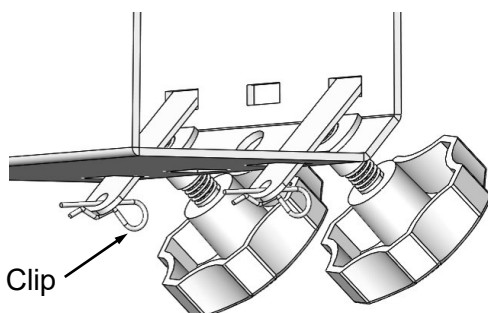
- 5) Install a Corner Nut and knob as shown
-Thread knob through Nut about 1/8" (3mm)



- 6) Install Corner Tab as shown



- 7) Install Clip as shown



Pallet Leveling

Note: All pallets have been preassembled and leveled at the factory since summer of 2010.

If pallet leveling is required follow procedure below

The objective is: To make the pallets and print heads **aligned and parallel to each other** with approximately 1/8 off contact.

You do not need to use a bubble level on the pallets. You can level the machine to the floor if you like, but the important thing is the pallets need to be parallel to the screen mounted in the print head and centered over the rotor arms.

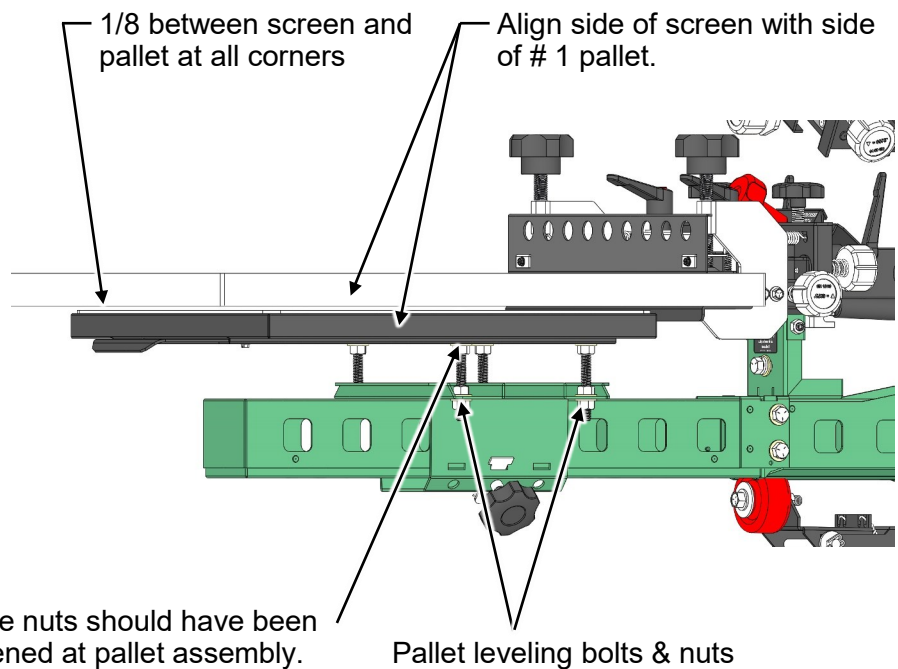
Remember print head #1 was adjusted at the factory. In the next few sections we will use print head #1 to adjust any pallets needing leveling then use the pallets to adjust the remaining print heads.

IMPORTANT NOTE: It is best to line up the inside of the screen with the front of the clamp bar any time you install screens in your V-2000 rear clamps.

1) Place your best flat aluminum screen into head #1 and lower it over pallet #1. Align side of screen with side of pallet as shown. **Do not remove this screen until all pallets have been set.**

Be sure the gas spring is in a position that allows the screen to stay down by itself.

Observe the “off contact” in all four corners of the pallet. It should be approximately 1/8”.



#1 Rotor Arm, Pallet, & Print Head Shown Above

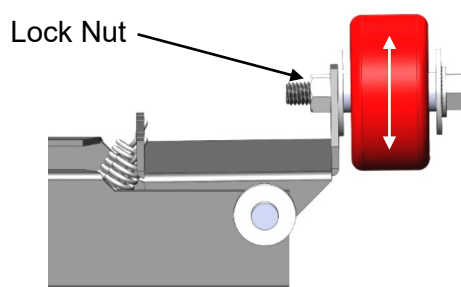
2) Lower the # 1 print head with the already installed screen over another pallet. The pallet leveling nuts should be finger tight while setting side alignment and off contact. Align the side of the pallet to the side of screen. **Do not** move the screen to the pallet, move the pallet to the screen. Adjust the nuts at the bottom of the pallet leveling bolts to set the off contact to approximately 1/8”. When 1/8” off contact has been achieved at all corners and the pallet and screen sides are flush proceed to tighten all pallet nuts. **It is important that a good quality flat screen is used while making these adjustments.** Repeat for all remaining pallets.

— Detent Wheel Adjustment

The Detent Rocker is used to achieve a repeatable position for the pallet under your flash. It can be set to lock the arm very firmly, loosely, or can be disabled altogether to remove the indexing feature.

V2HD Printers built before Jan. 1, 2012

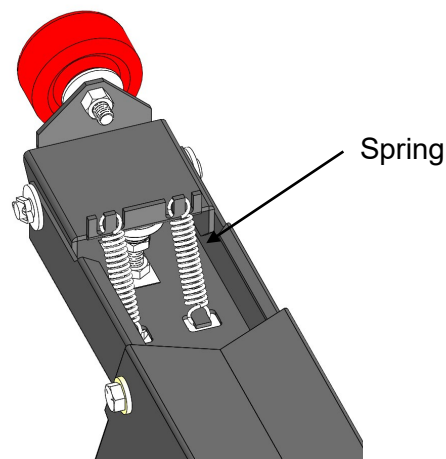
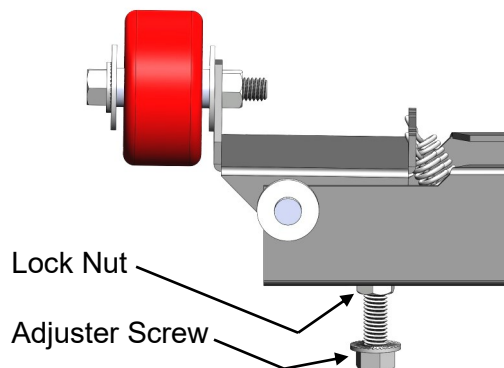
The Detent Wheel is adjustable. To adjust; Loosen the nut, with (2) 9/16 wrenches. Move the wheel up, to increase, or down, to decrease, the Rotor Arm holding pressure.



V2HD Printers built after Jan. 1, 2012

The Detent Wheel is adjustable. To adjust; Loosen the lock nut with a 9/16" wrench. Turn the screw out to increase or in to decrease holding pressure. Retighten locking nut after adjusting.

The Detent Wheel may only have one spring installed from the factory. The other spring may be inside the detent assembly. Install the second spring if you want a harder engagement or if the single spring breaks.



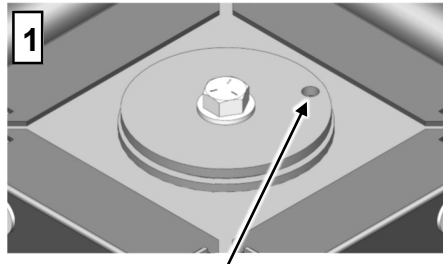
**** Please follow all Lubrication instructions to prevent premature wear ****
Lubricate monthly

Supplied Lubricants:

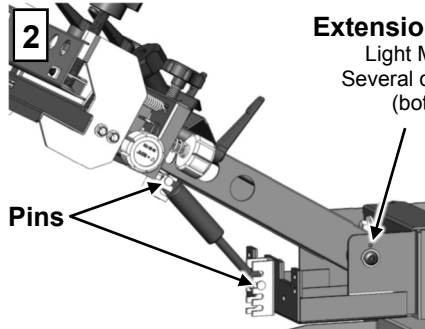
- 1) Light Machine Oil (SAE 20 or equal)
 - 2) Thread Lubricant (White Lithium Grease) or Anti Seize.
- Brush a small dab of lubricant to threads and a thin layer on three wear plates. Remove knobs and levers as needed to allow for proper application. See next page for tips.

Replacement Lubricants can be ordered at
 Vastex International Inc.
 P/N 04-05-300 Oil 4 oz.
 04-05-301 Grease 1.5 oz.

****Note: Apply thread lubricant to all areas below unless noted otherwise****

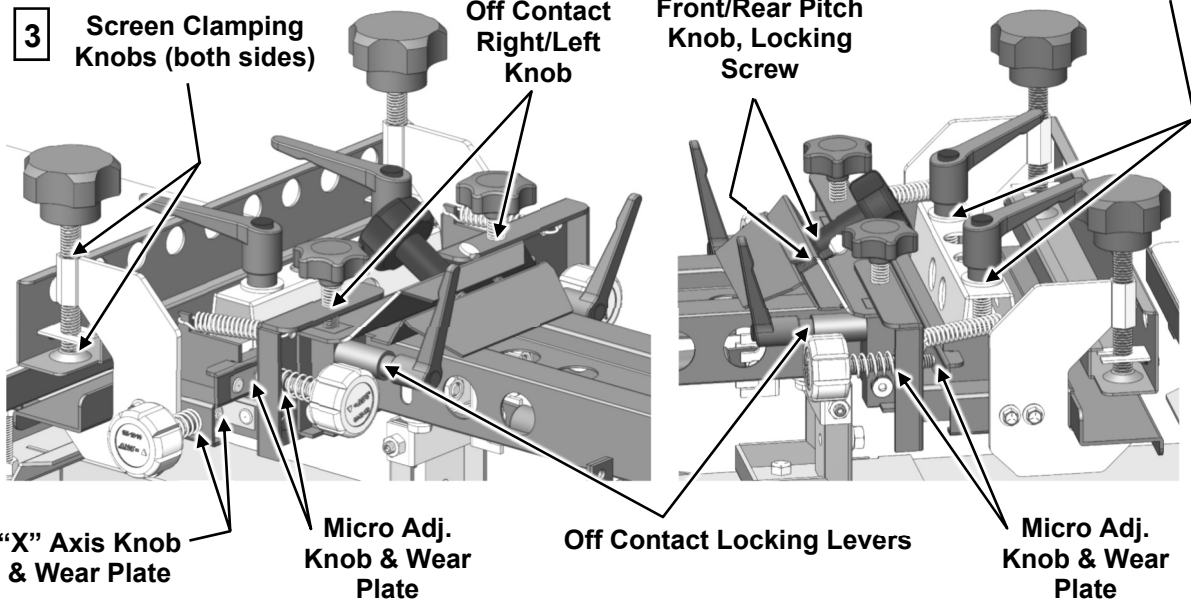


Center Hub Bearings
 Light Machine Oil (1/2 Oz.)



Extension Arm Hinge
 Light Machine Oil
 Several drops monthly
 (both sides)

Gas Spring Pins



3 **Screen Clamping Knobs (both sides)**

Off Contact Right/Left Knob

Front/Rear Pitch Knob, Locking Screw

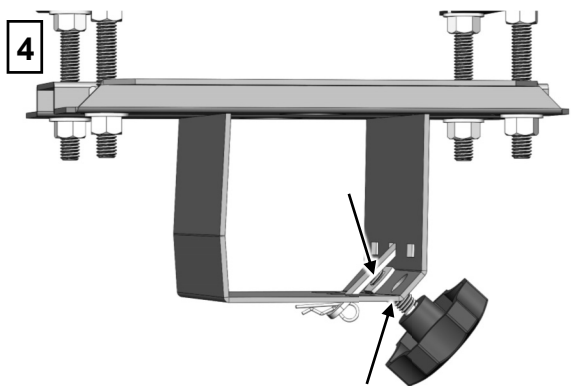
Micro Adj. Locking Levers

“X” Axis Knob & Wear Plate

Micro Adj. Knob & Wear Plate

Off Contact Locking Levers

Micro Adj. Knob & Wear Plate



4

Pallet Corner Clamping Knob
 (lubricate threads and contact point)

Cleaning

- Clean your machine on a daily basis or between each job. Particularly removing lint around moving points and adjustment areas. A clean machine is more likely to be maintained properly than a messy one. Any solvents can be used on the pallet tops for cleaning. The painted surfaces should be cleaned with detergent, like a glass or multi-surface cleaner, to remove lint and dust. Mineral spirits can be used to remove spilled inks. Avoid spraying pallet adhesive on the gas springs to ensure their longevity.

Inspection

- Inspect your machine on a monthly basis for untimely wear or any other signs of problems. This can be done while lubricating and should take no more than a few minutes. Finding a problem early can reduce the cost of downtime and repair.

Notes:

DO NOT use pallet tack HERE



**Applying pallet tack near the edges
can cause the rubber to lift off in
the corners!**



**This condition is worse when the
pallet is heated.**

**Only apply pallet tack to an area
slightly larger than your design.**

**We recommend using liquid
adhesive or double-sided pallet tape
when possible for these reasons as
well as for easier cleanup.**

DO NOT use pallet tack HERE

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