
Vista Series II

Multi Station Screen Printing Press Manual

Manufactured by Ranar



Vista Series II Assembly Instructions

This is an overview of the assembly of the printer. A more detailed assembly is on the following pages.

Open crate or pallet. Unbolt stand and remove. Remove remaining boxes, packing, etc. **please check all boxes to make sure no hardware is thrown away.**

1. Level the base/stand using leveling pad at each corner.



Section 1: Install station arms to the press. Bolt on each station arm to the rotary section, slide under the swivel using the 5/16 bolts, washers, and nuts provided (4 per arm). Now you can attach the station-leveling strut using 1/4- 20 hex bolts provided. This adjuster strut is to level front to back of the rotary arm.

Note: Special leveling shim washers provided to level the station arm right to left. **See Section #1 Station Arm Installation**

Section 2: Lift arm / screen clamp head installation. Depending on how your press is shipped. You may have to place the lift arms on the swivel. This can be done by bolting the screen lift heads to the swivel using 1/4 -20 x 5/8 long hex bolts, washers and lock washer provided.

Section 3: Remove shipping bolt to release lift head. **Note: CAUTION!! Lift head is under tension. Keep fingers away from area around spring**

Section 4: Adjusting spring tension.

Section 5: Installing clamp knobs and bars.

Section 6: Remove shipping nuts and install ratchet knob for screen angle adjustment.

Section 7: Attach platens/ pallet to the rotary station arms. **IMPORTANT:** Make sure the platen bracket has the side knob on the right hand side. Platen bracket slides in first. Slide platen/pallets on all station arms and make sure they are tight before leveling and zeroing out of lift arms with screen frames.

Section 8: Off contact lift arm stop bolt installation

Section 9: Bolt on registration bearing & checking registration bearings

Section 10: Leveling screen to platen, screen angle and zeroing out the print head.

Section 11: Lift arm adjustments, micro, screen angle, off contact

Section 12: Station arm locator, detent spring pin.

Section # 1 Station Arm Installation

1. After bolting station arms to the press, the arms must be leveled.

(A) Start by bolting the station arm to the rotary section to make sure it is level left to right. Attach the station leveling strut using 1/4-20 hex bolts provided. This adjuster strut is to level front to back of the rotary arm. Use a small level on the station arm close to the bolts (Figure 1A). In some cases you may have to place a special washer (.020 thousands thick) under the station arm plate between the rotary section and arm plate on the left or right side bolts (Figure 2A). Normally, only 1 washer per bolt on the right or left side works if needed. Bolt and secure to press to proceed.

(B) Place level on arm and check to level rotary arm. You can turn the station strut to make level and use the lock nut to set level strut.

Parts: Station Arms (4-8 pcs), 5/16 Hex Bolts & Washers, Lock Nuts (16-32 pcs), Shim Washers (8-16 pcs)

Pic #1 Arm to Rotary

Figure 1A (Standard bolting procedure)

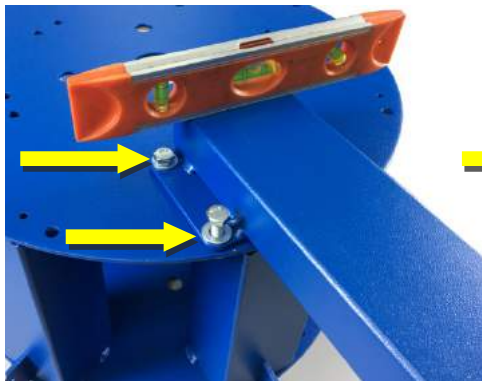
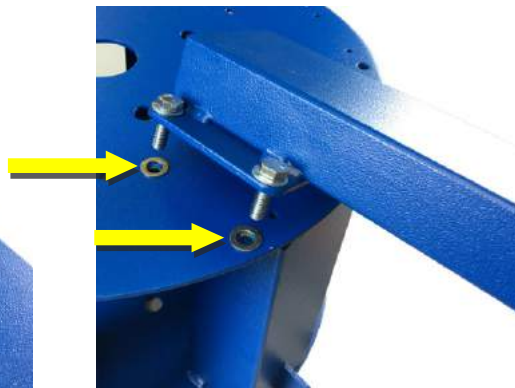
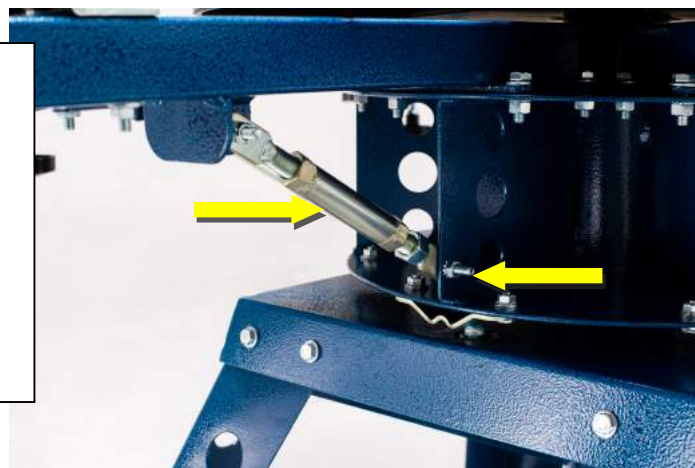


Figure 2A (Shim washer for leveling arms (if needed))



Pic #2 Adjustor Strut

To verify all platens are level, measure top of platen to floor at printing position. From printing position, rotate each platen and make sure they measure the same distance from top of platen to floor. Make adjustments as needed.

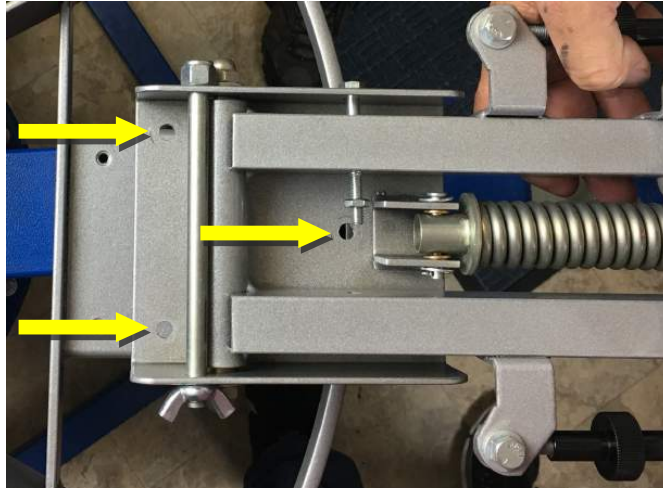


Section #2 Lift Arm Installation

Depending on printer purchased, 4-8 screen lifts

(A) Depending on how your press was packed for shipping you may have to bolt the lift arms/ print heads to the swivel using $\frac{1}{4}$ -20 x $\frac{5}{8}$ hex bolts, washers and lock washer 3 each per head.

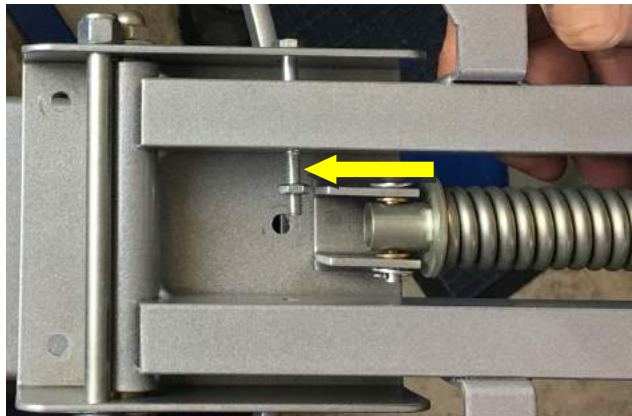
Pic #1 Lift to swivel



Section #3 Release Print Head:

(A) Remove shipping bolt on right side of lift arm to release for operation **!!CAUTION!!** Hold the print head down as it is under pressure and can pop up. Be sure to keep fingers away from area around the spring.

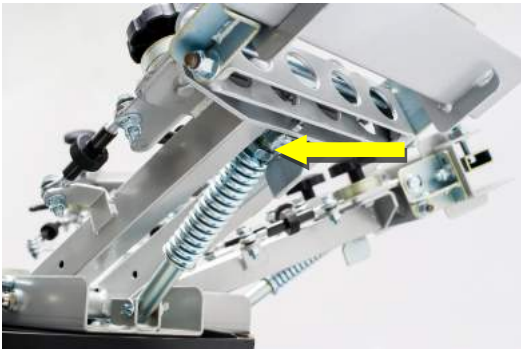
Pic #2 Lift arm shipping bolt



Section #4 Spring Tension:

(A) Adjusting spring tension the Elite Series presses have a unique adjustable compression spring tension system. To do this there is a removable 3/8 bolt at the rear of the print head that also serves as a lift stop for up position. To adjust the spring tension, remove the bolt. This is done by hand using the wing nut. There is 5/8" nut at the top of the spring that can be adjusted for different weight screen frames and desired screen angle. To do this, lift up on the screen lift to take the weight off and reach under the head to adjust the nut either up or down on the threaded swing bolt to desired position.

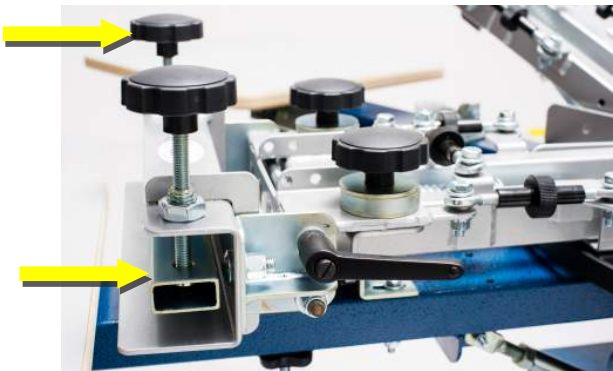
Pic #3 Spring



Section #5 Screen Clamp Bar Installation

1. Thread clamp knob into and thru the screen clamp bracket 2 per bracket
2. Position clamp bar below knobs
3. Insert 5/16 shaft collar into each end of clamp bar with allen wrench key inserted to allen socket set screw.
4. Lift the clamp bar with shaft collar in it up to the clamp knob, to slide onto the clamp knob and tighten the set screw onto it. Repeat opposite side. Maintenance: Light lubricant as needed.

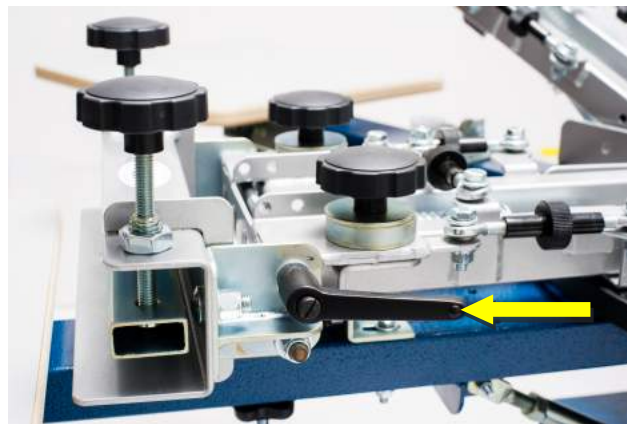
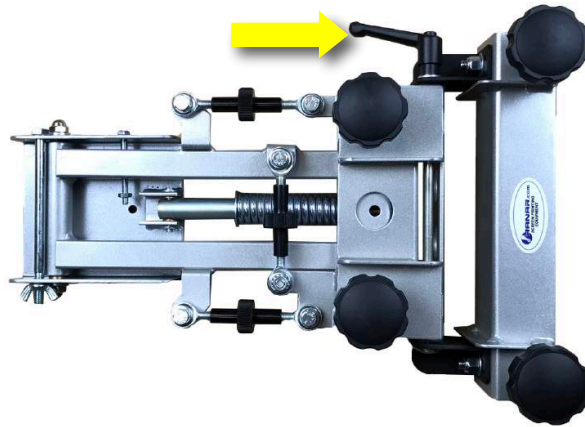
Parts: Clamp Knobs (8-16 pcs) 5/16 Shaft Collars (8-16), Clamp Bar (4-8 pcs) tools: 3/32 Allen Wrench



Section #6 Angle Adjustment Ratchet Handle

1. Remove Shipping nuts and replace with adjustable ratchet handles, which lock the screen angle adjustment.
2. The ratchet handle can be adjusted to different locations by pushing the center button and pulling the handle to disengage the teeth. Then you can move the handle to any position desired.
3. These handles lock the screen angle adjustment.

Parts: Ratchet Handles (8-16 pcs)



Section #7 Platen Installation

1. Before placing platens on station arms, install all knobs & lock nuts. Check that the platen bracket is secure to platen.

Note the knob on the side must be on the right side when on the press station arm.

2. Slide on the arm and tighten with knobs. **Do not over tighten!** As there are 3 knobs that can hold the platen in place sufficiently

Parts: Platens 16x18 (4-8 pcs) Platen Brackets (4-8 pcs), Knobs & Lock nuts (3) per platen.



Section #8 Off Contact Lift Stop Bolt Installation

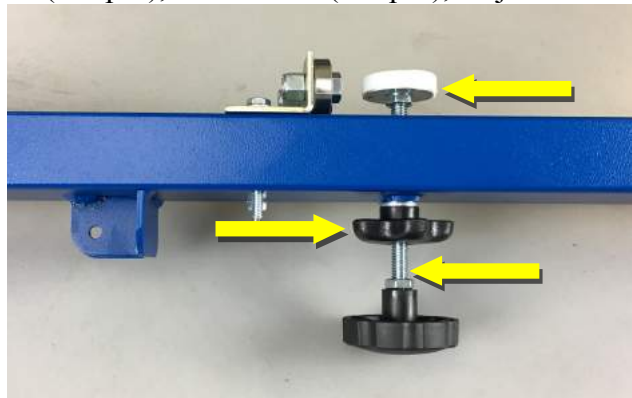
1. Install off contact bolts thread into station arm. This is bolt with plastic white face this serves as an off contact and the lift stop for the down position

2. From underneath thread on locking knob

3. Thread the adjuster knob and lock nut. Secure knob on bolt with lock nut.

4. Make sure the stop is threaded down and out of the way at this time as not to interfere with print head. See section 9

Parts: Off Contact/ Lift Stop Bolt (4-8 pcs), Lock Knob (4-8 pcs), Adjuster Knob (4-8 pcs), Lock Nut (4-8 pcs)



Section #9 Install Registration Bearing Assembly

1. Install registration-bearing bracket to station arm and center to arm with $\frac{1}{4}$ - 20 x 2" long hex bolts, washers, lock nuts. (2) Per bearing bracket. There are 2 slots in the mounting bracket. Be sure to that the key engages the bearings. Location should be the same for all arms.

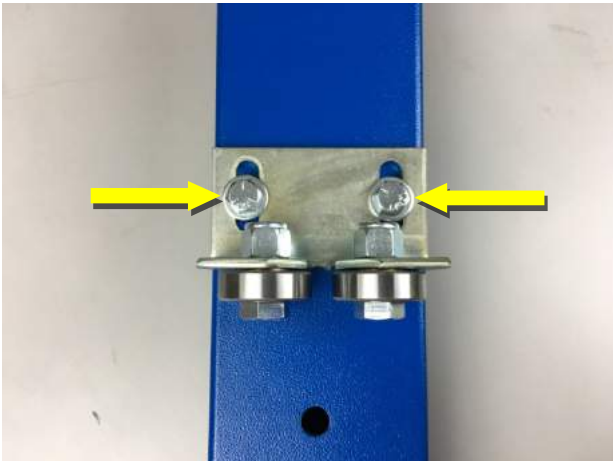
Note: Do not over tighten registration bearing bracket bolts as crushing the arm tubing will cause the bearing to close and the registration key will not freely glide between the bearing and bind.

2. Check that all lift heads lower down and the key freely glides into the bearing assembly.

Note: If the key does not go into bearing freely you will have to check that the bracket has been installed correctly, or the bearings have to be adjusted. Loosen 1 or both bolts holding the bearings. They have enough play to adjust so that the steel key glides into the gap engaging both bearings. The bearings should both roll into place without binding. This will cause the index key on the lift arm to wear out or damage the bracket. This is important, as this is the heart of your press registration system. If there is any side-to-side movement it will cause your registration to be out.

Maintenance: depending on use spray lubricant

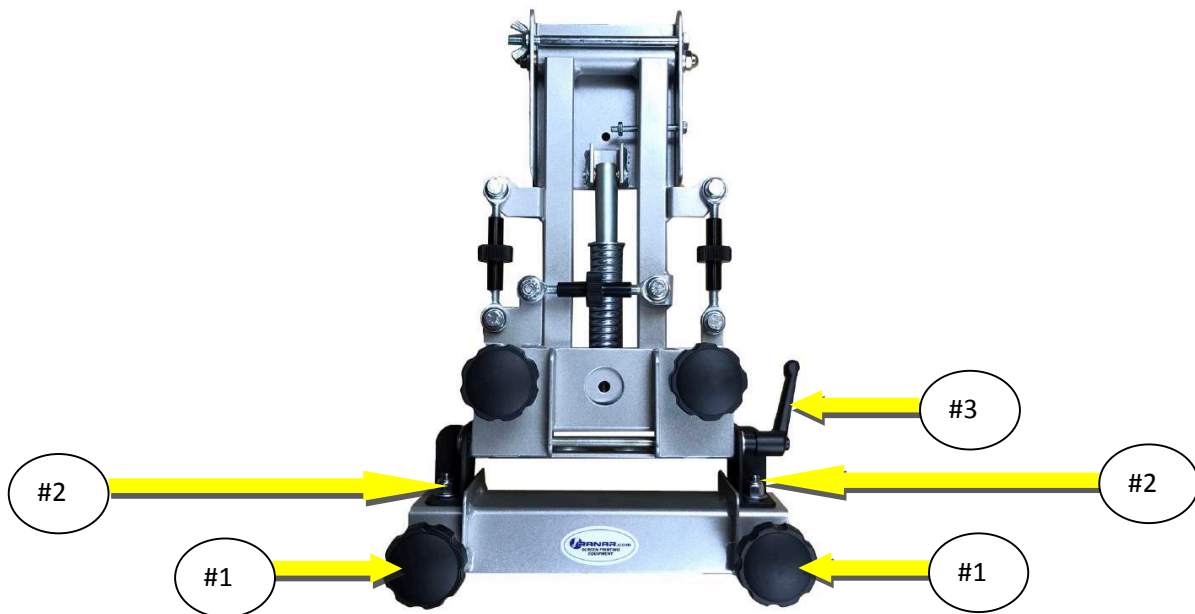
Parts: Bearing Bracket Assembly (4-8pcs), $\frac{1}{4}$ -20 hex bolts 2" long, washers and lock nuts (2) per bracket



Section #10 Zeroing Out the Print Head

The print head must be level and zeroed out prior to use.

1. Start by clamping a screen frame into the screen clamp using the 2 clamp knobs (#1) make sure the frame is flat as you will have to start over.
2. Lower screen to platen then loosen print head leveling bolts (#2) on the back on the clamp, on each side 3/8 nylock nuts. These bolts with 9/16 box wrench can also serve as off contact and warped screen adjustment. Don't over loosen, just enough to allow movement up and down. For initial setup we will be making this on contact to the station platen. This will let the screen settle flat to the platen.
3. Check screen angle and make adjustment. This can be done by loosening the screen angle adjuster handles on each side of the print head located behind the screen clamp (#3). Make sure the screen angle is flat or parallel to the platen.
4. Tighten the print head leveling bolts (#2). Then tighten the ratchet handles (#3).
5. Your screen/print head should be parallel to the station platen. Set the off contact lift stop bolt. Bring up the off contact/lift stop to the bottom of the print head. This serves as the stop for the print head, and an off contact adjustment. To lock the lift stop, turn the locking knob up to the arm and tighten.
6. To use as off contact adjustment, unlock the locking knob, turn the knob up or down to desired off contact. You will have to adjust screen angle to level the screen frame for even off contact. Use the screen angle adjustment covered in paragraph 3. on this page.



Section #11 Micro Adjustment X,Y,Z

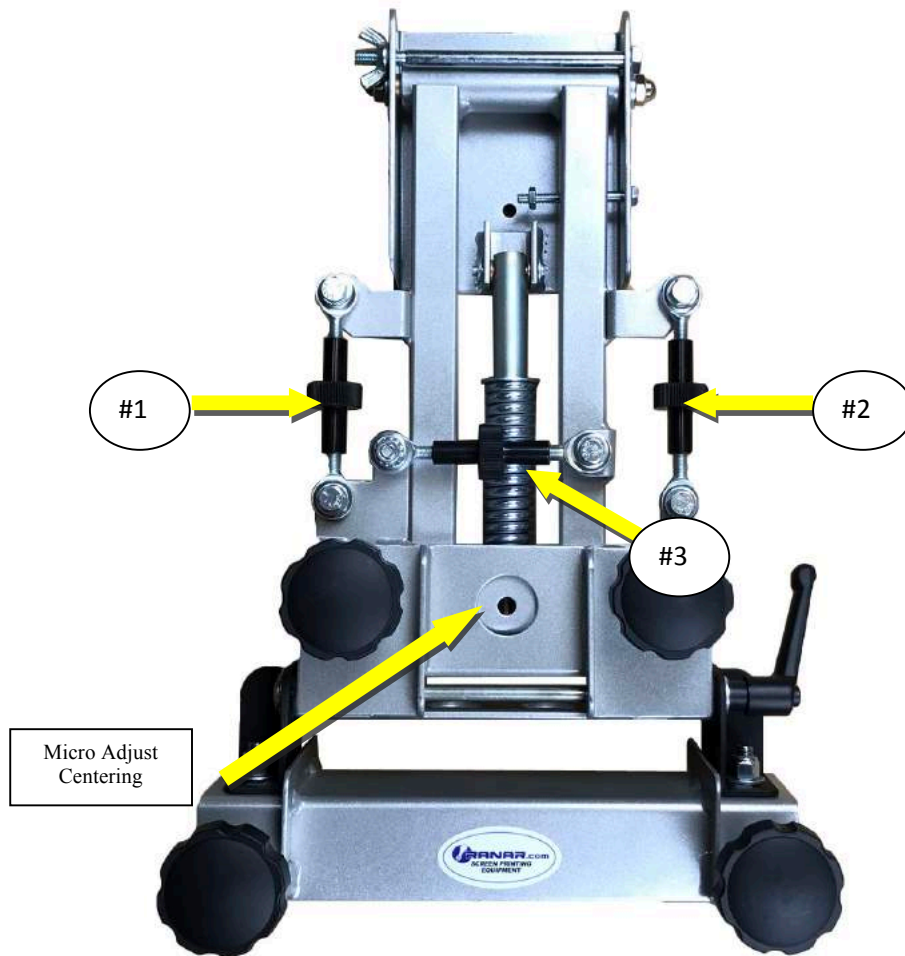
1. Micro adjustment operation; There are 3 micro adjusters and 2 locking knobs on each print head. The 2 adjusters on the side move forward (#1) and away (#2) from the printer. By turning the adjuster to the left with each hand the screen will come towards you and away to the right. By turning one you will be moving only one side. The center is for right and left movement. You can go in many directions depending on the combination you turn the adjusters.

2. There are 2 holes with visual centering of the micro adjustment reference. You can zero out the micro registration by looking at the small center hole and larger out hole.

3. The micro adjust has been factory set. If you need to check, under each micro adjust lock knob there is a washer and the micro ring that is locked by a 3/8 nylock nut which can be adjusted. The adjustment should be tight by loosening enough to allow movement of the micro adjusters.

Maintenance: light lubricant to knobs and adjusters, and under the micro adjustment bracket.

Parts: Micro Adjuster set (3)

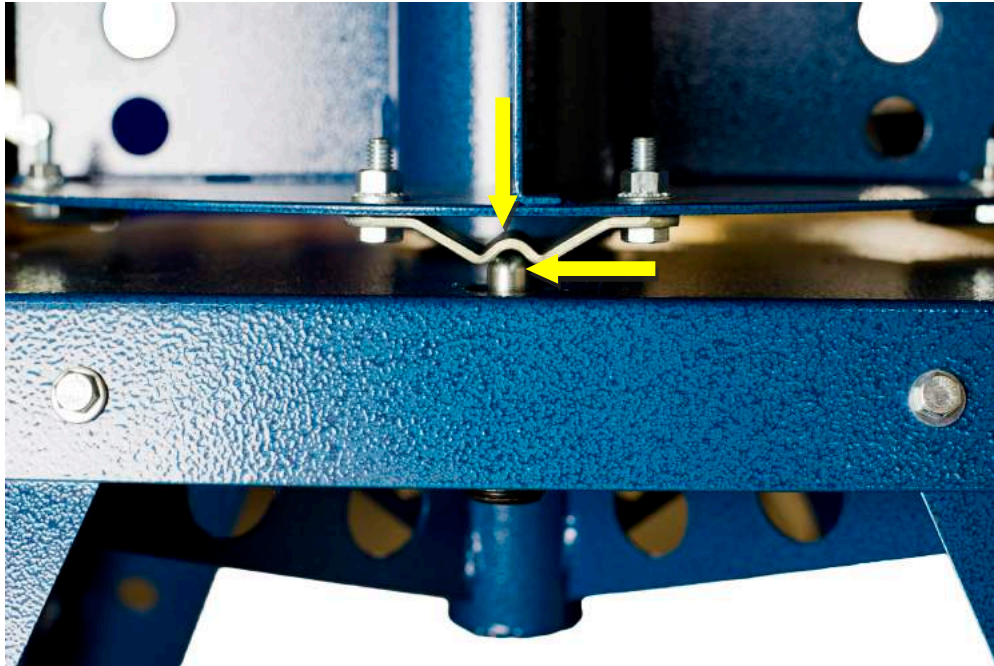


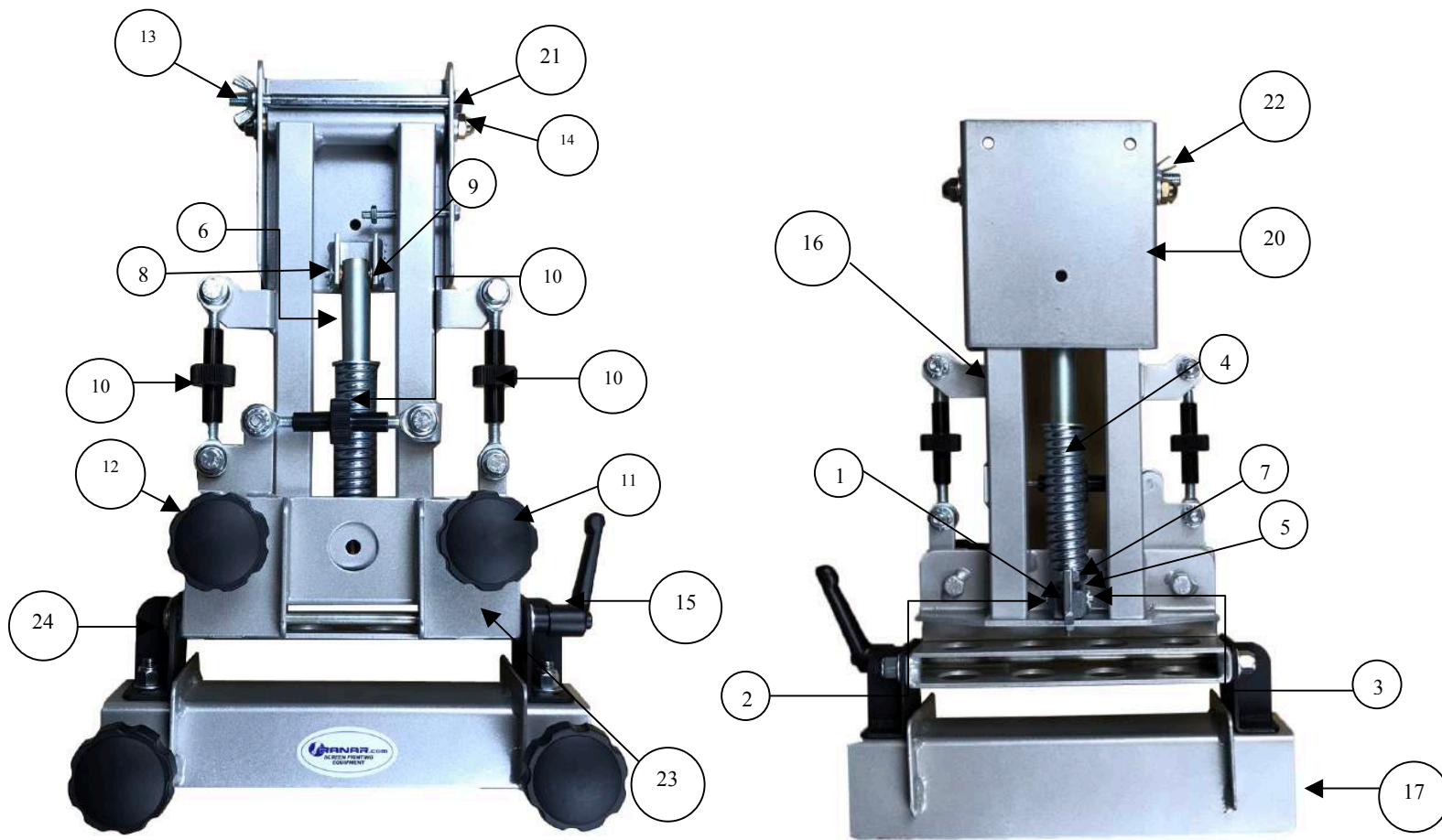
Section #12 Station Location Spring Pin

There are 2 station detent pins on the elite series presses factory installed. If adjustment is needed you can adjust the pressure of the pin by turning with an allen wrench to compress the inner spring in the center from the bottom. You can also adjust the height of the pin by loosening the nut and turn to desired height and locking them.

Maintenance: Add grease yearly as needed to the pin and brackets.

Parts: Station Location Plunger Assembly (2), Station Location Bracket (4-8)





Lift Parts

1. INDEX KEY
2. INDEX KEY BUSHING (2)
3. INDEX KEY CLEVIS PIN
4. SPRING
5. SWING BOLT
6. SWING BOLT TUBE
7. SWING BOLT NUT
8. SWING BOLT TUBE BUSHINGS ½ (2)
9. SWING BOLT TUBE CLEVIS PIN ¼
10. MICRO ADJUSTER (3)
11. MICRO ADJUST LOCK KNOB (2)
12. MICRO ADJUST WASHER & RING & NUT UNDER LOCK KNOBS
13. ACORN NUT
14. AXLE PIN
15. RATCHET HANDLE
16. LIFT ARM ASSEMBLY
17. SCREEN SUPPORT
18. ANGLE LOCK KNOB (Elite Series Model Only)
19. ANGLE ADJUST KNOB BOLT ASSEMBLY (Elite Series Model Only)
20. LIFT BASE
21. LIFT STOP
22. LIFT STOP WING NUT/ BOLT ASSEMBLY
23. MICRO BRACKET
24. SCREEN SUPPORT BRACKET LEFT/RIGHT

*CENTER ROTATION BEARINGS (4) 1-¾ DIAMETER BOLT FLANGE BEARING

* CENTER SHAFT (1)

Section #13 Registration Problems

1. Make sure the Micro locking knobs are tight.
2. Image out side to side: Check registration bearing, if loose between bearings. Adjust so the steel key rolls into place and not binding
3. Make sure print head is not loose, check bolts
4. Check index key bolts.
5. Check if the screen is hitting at the shirt neck end. This may cause the key not to engage the registration bearing.

Image is out “front to back”

1. Make sure when screen is in the down position; it is parallel to the platen.
2. If the screen hits first at the shirt collar end, adjust the pitch angle by bringing the screen up.
3. If the screen hit at the bottom of the shirt first, adjust down on the screen.

Image off center platen-to-platen registration

1. Check to see if registration-bearing bracket is centered to station arm
2. Registration bearing bracket loose
3. Platen bracket loose or off center.

