



# ICDS 10" (254mm) Digital UV Coating System with Auto Pump

## User Manual

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# Chapter 1

## Symbology: Notes, Caution, Remarks, Warnings

Below is a guide to the symbols used throughout this manual.



**NOTE:**

A NOTE symbol indicates important information that helps you in your install / operation.



**CAUTION:**

A CAUTION symbol indicates that special attention and care should be taken to avoid injury or damage.



**REMARKS:**

A REMARK symbol provides you with additional information such as options that are available.



**WARNING:**

UV Light – Avoid looking directly at UV Light. Use only with shielding in place. Protect eyes & skin from exposure to UV Light.



**WARNING:**

HOT / WARM metal surface



**WARNING:**

HIGH VOLTAGE



**WARNING:**

Keep hands and fingers clear. Sever injury may occur. Do Not operate without guards in place.



**WARNING:**

EXPLOSIVE HAZARD



# Introduction

## *Your New iColor Coating and Curing System*

Uninet thanks you for the purchase of the iColor coater. The iColor coater is a unique offline UV coating & curing system. In this manual we will discuss the following topics:

- Introduction
- Equipment Specifications
- Unpacking
- Installing
- iColor Coater
- Safety & Precautions
- Operation
- Maintenance & Troubleshooting
- Coating & Consumables

Please familiarize yourself with the content of this manual before unpacking, installing and operating the iColor coater. In an effort to ensure safety, please read and pay close attention to all safety related comments.

I

## **UNITED STATES**



## Equipment Specifications

<b>SPECIFICATIONS</b>	<b>STANDARD</b>	<b>METRIC</b>
Maximum Sheet Size	10" x Virtually Any Length	254mm x Virtually Any Length
Minimum Sheet Size	Business Card	Business Card
Speed	up to 80 feet/minute	up to 24 meter/minute
Stock Weight	7pt. to 30pt.	150 up to 600 g/m <sup>2</sup>
UV Lamp - Solid State UV	70 watts to ~200 watts (Infinitely Variable)	70 watts to ~200 watts (Infinitely Variable)
Total Weight	Approx. 200 lbs.	Approx. 91 kgs.
Electrical	208-230v/1Φ/50-60Hz/25amps	208-230v/1Φ/50-60Hz/25amps
Noise Level	< 60 dB	< 60 dB



## Safety & Precautions

Before unpacking, installing and operating the iColor Coater, please make sure you read and follow these safety instructions.

**The iColor coater can be installed by the customer after reading and following the detailed directions provided in this manual.**



**CAUTION:** The operator of the iColor coater must take extreme caution during the running of the machine to prevent the possibility of a Fire!

When feeding stock you must make sure it is exiting the machine, i.e. not getting jammed in the delivery area or it will catch on Fire!



**CAUTION:** A **Class A,B,C** fire extinguisher and a metal garbage can with a metal lid should be located in close proximity to the iColor coater system in case a coated sheet gets caught under the lamp and catches fire.



**Class A** extinguishers are for ordinary combustible materials such as paper, wood, cardboard and most plastics.

**Class B** fires involve flammable or combustible liquids such as gasoline, kerosene, grease and oil.

**Class C** fires involve electrical equipment, such as appliances, wiring, circuit breakers and outlets. Never use water to extinguish class C fires - the risk of electrical shock is far too great!



**CAUTION:** Those coatings cannot be used which build an explosive atmosphere when being heated up under the UV Dryer.



**CAUTION:** A licensed / certified electrician **MUST** connect iColor coater to the plant power.



**CAUTION:** Do not connect or disconnect any power cables or perform any maintenance to the iColor coater while the system is powered on.



**WARNING:** Some of the components (i.e. UV lamp housing, bulb and duct) of the iColor coater system may become hot during normal operation. Use care when handling or touching these components.

## Safety & Precautions (continued)



**WARNING:** The UV bulb is extremely hot during use. Never touch this bulb as a severe burn/injury could result.



**WARNING:** DO NOT touch the UV light bulb with your hands as it will shorten the life of the bulb. If the bulb is touched immediately wipe the area with isopropyl alcohol (IPA). DO NOT wipe the bulb with IPA unless the bulb is cool.



**WARNING:** When working around the UV unit with the power on you must wear the UV Safety Glasses (provided) to protect your eyes from direct or indirect (reflection from paper) exposure to the UV rays. UV rays can severely damage your eyes.



**CAUTION:** When handling the UV Coating, please use safety gloves (provided) for skin protection.



**CAUTION:** Please read and observe the UV coating Material Safety Data Sheets (MSDS) for the various personal, work and environmental recommendations. The MSDS sheets should be easily accessible in the event of an emergency.



**CAUTION:** Keep UV coating away from heat and/or open flame. Keep UV containers in a cool and dry location. Do not allow UV coating to freeze.

## **CLEAN, CLEAN, CLEAN!**



*It is extremely important to clean and maintain your iColor coater properly in order to produce the outstanding coating output that your customers expect.*

*If you do not properly clean and maintain your iColor coater, it will not perform properly.*

*Also, failure to clean and maintain your iColor coater will void your warranty.*

## Safety & Precautions (continued)

At Uninet, Safety is our number one priority!

Interlocking Guards, Fixed Guards and Warning Labels are used when necessary and are clearly visible, to protect all operators. If a safety sticker becomes damaged, please contact Uninet to purchase a replacement!

Please find below a visual representation of our Safety Guards. If the front safety guard is opened, the conveyor will shut down immediately, the UV light will drop to the lowest setting and the reflector housing will rotate to the idle position. The fan will continue to operate. If the rear safety guard is opened the UV lamp, conveyor & fans will instantly shut down. Upon closing the rear guard, the fan will begin to operate and begin running the cooling cycle. You may turn on the UV at this time, however note it could take up to 2 minutes for the lamp to engage.



Figure - Front Safety Guard



Figure - UV Chamber Access Panel  
(Rear Safety Guard)

## Chapter 2

### Features, Advantages & Benefits

Uninet's coating and curing systems offer digital, offset and hybrid printers a quick and easy way to apply and cure UV, aqueous, specialty coatings and primers on a variety of substrates. The versatile iColor coater system offers features and benefits that result in high quality output and increased productivity in an ever-increasing competitive market.

This unique system provides:

- Ease of operation and maintenance
- A rub resistant finish to every printed piece
- Durability and protection of the printed sheet for repeated handling and mailing

This system is also able to:

- Apply aqueous coatings as well as water based primers ,such as Sapphire, to papers and plastics to be printed with the HP Indigo
- Flood coat a 10" (254mm) x unlimited length product
- Provide faster job turnaround
- Reduce time to bindery
- Apply various finishes: (gloss, satin, specialty and primer)
- Handle a variety of substrates and thicknesses



**NOTE:** The iColor coater is rated to handle a minimum stock weight of 100# text (150 gsm), but some lighter stocks may work depending on grain direction and surface finish when running sheets, when running roll to roll, (50# text (75 gsm)) stocks may be run.

- Coat product at a competitive rate (typically less than one penny per side)
- Control coating thickness on the fly with the patented Uninet Coating Unit
- Less than 2 minute coating change and clean up with the patented Uninet Vac

# Operator Do's & Don'ts

## Do's:

1. Follow safety rules.
2. Take great care to prevent fires .
3. Read the manual and follow the instructions.
4. Clean the Coating Station regularly and for each job setting.
5. Keep the rollers clean.
6. Lubricate Uninet Coating Unit Gears once a week.
7. Use the correct size Allen key for the corresponding size bolts.
8. Follow daily wash up procedures.
9. Follow end of the day procedures.



**WARNING:** Use only coatings that do not build up an explosive atmosphere when being heated (for example: "Flammable Limit" mentioned in the MSDS sheet as "Not Usable").

10. Prior to running a job make sure of the following:
  - a. The lamp system is up and running and set to the suggested wattage
  - b. Conveyor speed is set to suggested speed
  - c. Coating unit pressure is properly set
  - d. There is ample coating in the nip of the coating unit - if using optional UV automatic sensor, make sure sensor light is on
  - e. The correct coating is being used for your job
  - f. You have a supply of lint free rags and cleaner available
  - g. When feeding stock be sure it is existing the UV chamber...stock that does not exit the UV chamber will result in a FIRE
11. Always mix your coating prior to use.
12. UV coating has a shelf life of approximately 6 months, so always use the oldest coating first.
13. UV Coating is temperature sensitive, store in a climate controlled area. Cold coating may result in a less than adequate gloss level and/or finish.



**CAUTION: VERY IMPORTANT** - When shutting the system down for the day, it is **VERY IMPORTANT** that you completely clean the coating unit and set the metering controls to the **"END OF DAY POSITION"**. Failure to set the roller pressure to the **"END OF DAY POSITION"** may result in a form roller flat spot which is NOT covered by our warranty!



## Operator Do's & Don'ts (continued)

### Do's: Cont...

15. In case of fire, open UV Chamber Access Panel (this will automatically turn off the lamp) and carefully remove the paper to a near by metal trash can. A Class A, B, C fire extinguisher and metal garbage can with a metal lid should be located in close proximity to the iColor Coater. See Safety & Precautions section for fire extinguisher details.

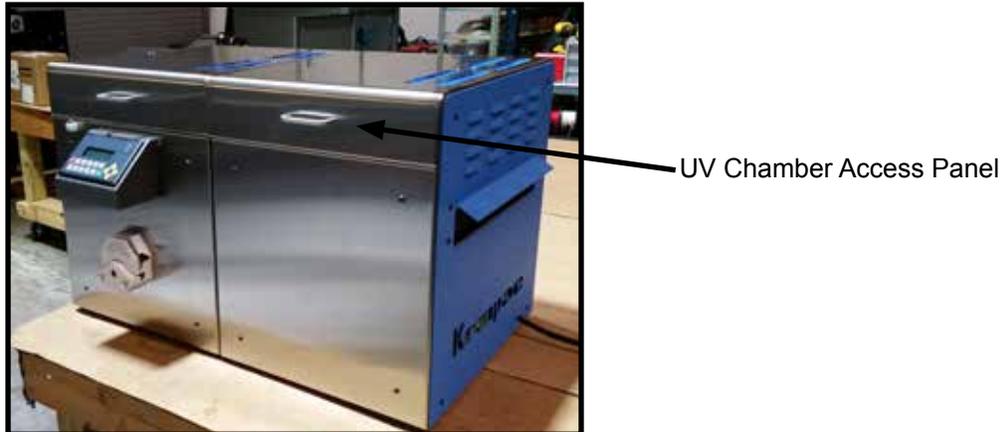


Figure - UV Chamber Access Panel

### Don'ts:

1. **DO NOT** service the machine with the power on.
2. **DO NOT** run the coating unit without the safety covers in place.
3. **DO NOT** make any adjustments while the coating unit is running.
4. **DO NOT** make any repair work while the coating unit is running.
5. **DO NOT** run the coating unit with excessive pressures on the impression roller.
6. **DO NOT** run the coater unit without the seals in place. The rollers will be damaged. (This damage will not be covered by the warranty)
7. **DO NOT** forget to perform the end of day procedure.



**WARNING:** Do not use Flammable Non-Approved coatings.

8. **NEVER** leave the coating unit in the ON position, when running light weight stocks, without paper going through the system. This will continue to apply coating to the impression roller. The excess coating that builds up will be scraped off by the doctor blade resulting in extra waste and unnecessary wear of the doctor blade.
9. **NEVER** attempt to clean the machine while it is running. You can advance the impression roller by using jog button on the touch screen. **DO NOT** use the Jog button with the Coating Unit ON Impression as this will dump the contents of the coating unit.



## Chapter 3

### Unpacking your iColor UV Coater

Your iColor coater has been inspected prior to delivery. Please take note if any items are missing or damaged.

Once your iColor coater has been placed in your facility you can begin unpacking the equipment and supplies.



**NOTE:** It is the responsibility of the customer to provide any and all the necessary rigging equipment needed to off load the iColor coater and/or position the equipment.

1. Carefully remove the strapping, plastic & protective padding. If reusable, nylon ratchet tie downs have been used, remove by using the release handle. If plastic strapping, please cut with a razor blade. Take care not to damage your iColor coater when cutting with a razor.
2. Remove the boxes or packages that may have been included and place them in safe keeping until needed.
3. With a minimum of two people, carefully lift the iColor coater from the wooden weight support bracket and place clear of the skid.



**WARNING:** The approximate weight of the iColor coater is 200lbs. (91kgs). Take care when lifting or positioning the equipment as bodily injuries or damage to the equipment could occur.

4. Position the iColor coater in your desired location.

## Installing your iColor coater - Electrical

Once you have placed your iColor coater it is time to install the equipment. The iColor coater can be installed by Certified iColorTechnician / iColor Dealer or by the customer after reading and following the detailed directions provided in this manual.



**CAUTION:** A licensed / certified electrician **MUST** connect the iColor coater to the plant power.

1. Place the iColor coater in the desired operating location. Remember to provide at least 3 feet (1 meter) of space around the iColor coater for operation and service.
2. The iColor coater is equipped with approximately 8ft of electrical cord.
3. Have the Electrician connect the iColor coater cord to the existing plant power.
4. If it is necessary to hardwire the equipment, it is very important that it is completed by a licensed / certified electrician.



Figure - Electrical cord



**WARNING:** Once the power is connected, be sure to have the Electrician check with an electrical meter prior to turning the system on. Too much power will blow the breaker or cause severe damage to the equipment. Too little power and the system will not power up.

## Installing your iColor coater - Drip Pan

1. Turn the Main Power disconnect to the OFF position!
2. Make sure the Drip Pan Plug is securely installed in the Drip Pan. If not, do so by pulling the rubber plug through the drain hole until secure.
3. Install the Drip Pan in the mounting bracket below the impression roller by tilting the rear of the pan (high back), insert the high back behind the impression roller, level off the drip pan and place in the mounting bracket . Be sure the Drip Pan is facing the correct direction.

Drip Pan Plug

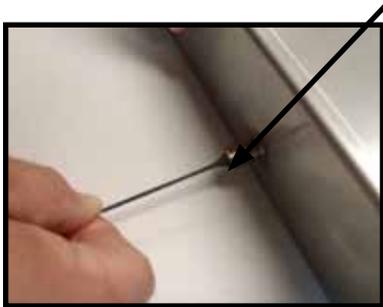


Figure - Drip Pan Plug

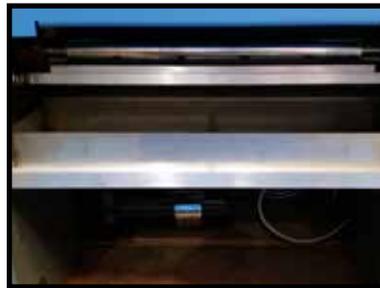


Figure - Drip Pan

Drip Pan Installed Correctly

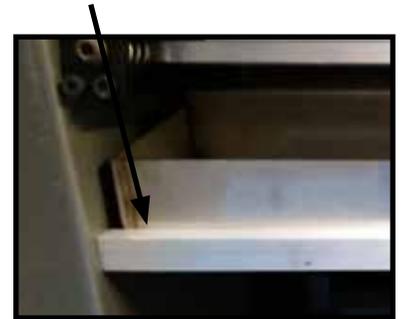


Figure - Drip Pan Close Up

# Installing / Replacing your iColor coater - UV Lamp

1. Turn the Main Power disconnect to the OFF position.
2. Remove Control Panel mount and unplug control panel (OP Side).
3. Remove both side covers using a 3mm Allen key.
4. Take care to unplug the Coating Pump (OP Side).
5. Lift the rear UV chamber safety cover to access the UV reflector & bulb.
6. It is recommended that you also remove the black heat sink for additional access to the UV bulb.



Figure - Remove NOP Side Cover



Figure - Remove OP Side Cover

7. Disconnect the bulb wires from the terminal block, on each side, using a Flat Head screwdriver.
8. Using a 4mm Allen key, remove UV bulb access cover on both OP & NOP side.

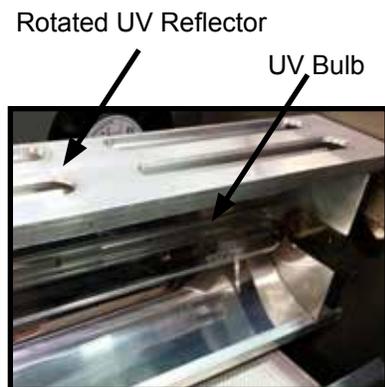


Figure - Rotated UV Reflector / UV Bulb

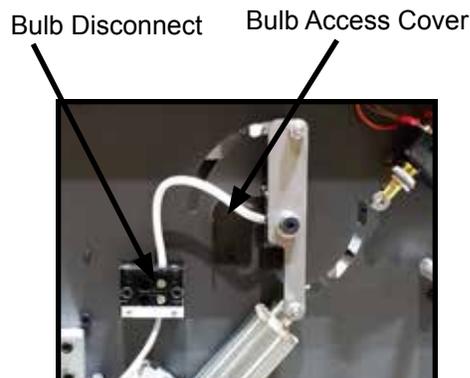


Figure - Bulb Disconnect (UV bulb access cover)



Figure - Bulb Disconnect (UV bulb access cover removed)



## Installing / Replacing your iColor coater - UV Lamp (continued)

9. With the UV bulb access covers and heat sink removed. Taking care not to touch the UV bulb, gently pull UV bulb by the white end cap through either the OP or NOP side UV bulb access hole.



Figure - Rotated UV Reflector with Heat Sink Removed

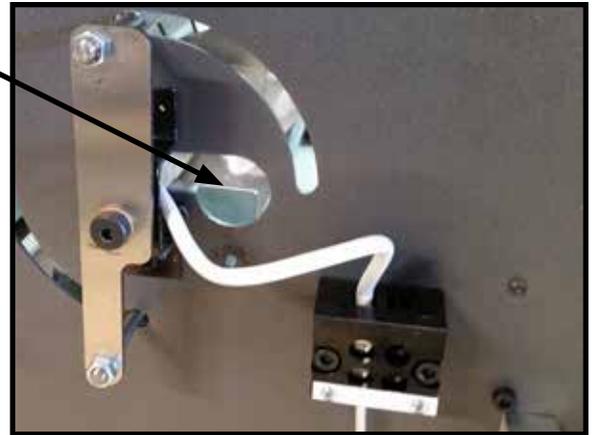


Figure - UV Bulb Access Hole

10. Carefully unwrap the New bulb. Take care NOT to touch the glass surface with your fingers as it will cause the bulb life to decrease. Gently slide the bulb through the access hole and place ends in mounts.



**NOTE:** If you accidentally touch the bulb with your fingers or hands be sure to clean the bulb with Isopropyl Alcohol (IPA) as soon as possible

11. Reinstall Bulb Access Covers making sure the tab is on top of the bulb end caps. This will ensure the bulb remains properly seated in the mounts. (Failure to do so will result in bulb breakage when the shutter is activated).
12. Connect the wires to the terminal blocks. Make sure to place the wire into the terminal block above the incoming wire.

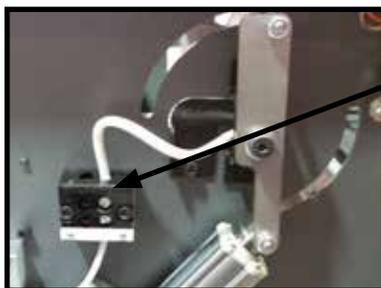


Figure - Bulb Connect (Non- Operators Side)

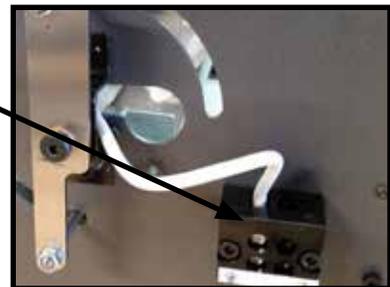


Figure - Bulb Connect (Operators Side )

13. Replace the Heat Sink and close the UV chamber safety cover.
14. Plug in Coating Pump.
15. Replace the Side Covers, plug in Control Panel, reinstall Control Panel Mount.



# Chapter 4

## Make Ready & Operating Instructions

*You will soon be on your way to coating and curing!*

Once the iColor coater is installed by you or your iColor certified technician and connected by a licensed electrician you will be able to start coating and curing. Please follow the step-by-step instructions on the operation of the iColor coater to guarantee success.



Figure - iColor coater System

## iColor Coater - Digital Control Panel

The iColor coater Digital Control Panel:

- Provides quick & easy control of the iColor coater at the touch of a button
- Manually pump coating to the coating unit when needed
- Alerts when rear guard is open
- Adjust UV bulb intensity & belt speed on-the-fly
- Jog forward / reverse



**CAUTION:** DO NOT use the Jog button with the Coating Unit ON Impression as this will dump the contents of the coating unit.



Figure - Digital Control Panel

# iColor Coater - Digital Control Panel (continued)



**NOTE:** The Control Panel is “**NOT**” a touchscreen and is only controlled by the function keys.

## HOME SCREEN

Get to this screen by pressing the “F0” Function Key in any screen

F1 = Belt Screen

F2 = UV Lamp Screen

F3 = Coating Pump Screen

F4 = Forward / Reverse Job Screen

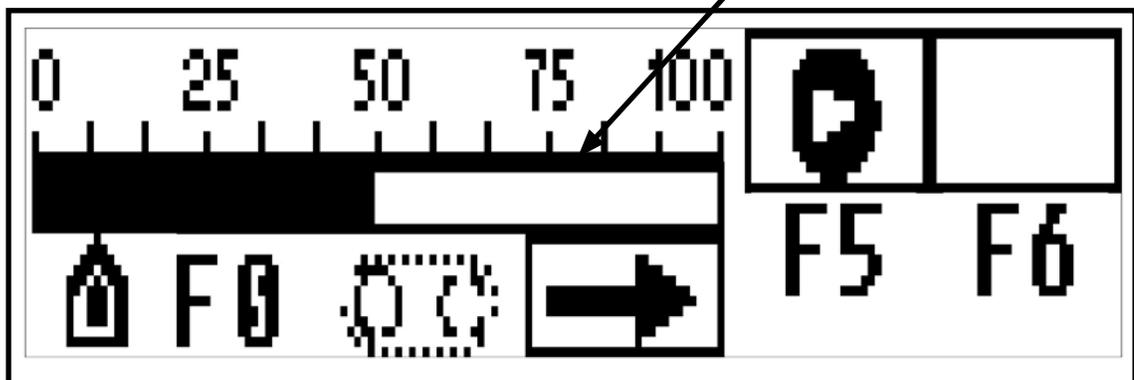


## BELT SCREEN

Get to this screen by pressing “F1” Function Key from the Home Screen

- The speed is controlled by the Left & Right Arrow Keys, whether the belt is ON or OFF
- Press “F5” Function Key to Turn ON Belt (The belt will not turn on if the Front Guard is “OPEN”)
- Press “F6” Function Key to Turn OFF Belt
- Press “F0” Function Key to return to the Home Screen

Belt Speed Scale  
(Shown in percentage  
of machine speed)



## iColor Coater - Digital Control Panel (continued)



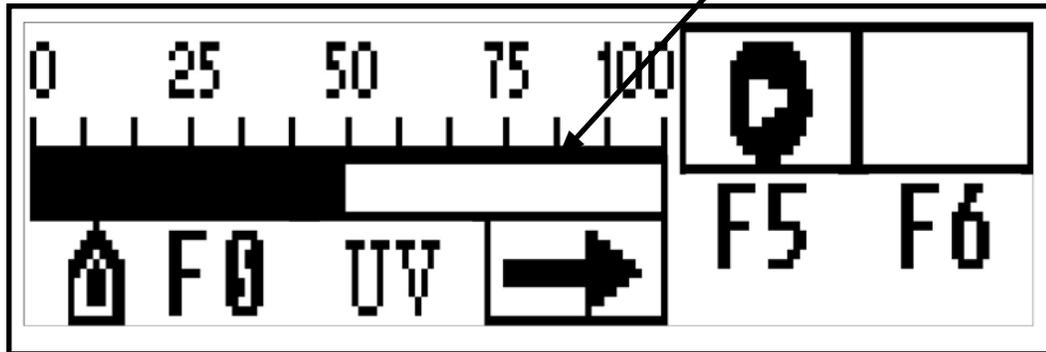
**NOTE:** This machine is equipped with “Rotating UV Reflector” technology which enables the lamp to be turned on without the belt in motion. This allows you to warm up the system during set up or work with the front guard open while the lamp is ON.

### UV LAMP SCREEN

Get to this screen by pressing “F2” Function Key from the Home Screen

- The UV Bulb Intensity is controlled by the Left & Right Arrow Keys. This can **ONLY** be adjusted when the lamp & belt are ON.
- Press “F5” Function Key to Turn ON Lamp
- Press “F6” Function Key to Turn OFF Lamp
- Press “F0” Function Key to return to the Home Screen

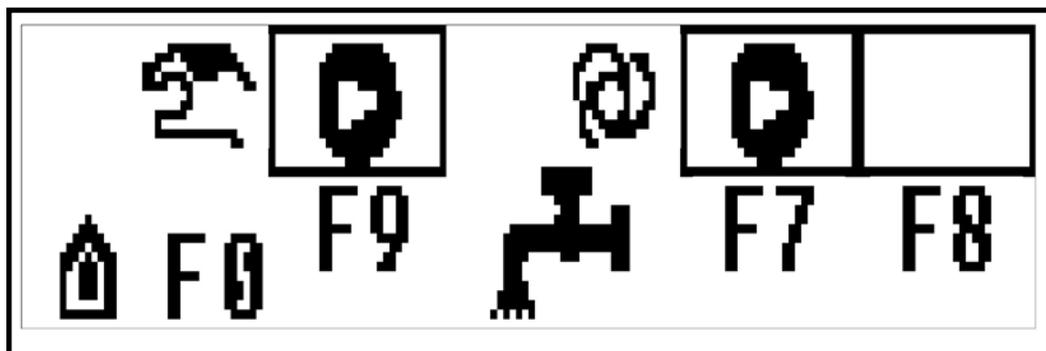
UV Intensity Scale  
(Shown in percentage  
of lamp intensity)



### PUMP SCREEN

Get to this screen by pressing “F3” Function Key from the Home Screen

- Press “F9” Function Key to turn ON the MANUAL pump. (Pump will stay ON as long as you hold the button)
- Press “F7” Function Key to turn ON the AUTO Pump option (If Equipped w/ Sensor or Probe)
- Press “F8” to turn OFF the AUTO Pump option (If Equipped w/Sensor or Probe)
- Press “F0” Function Key to return to the Home Screen

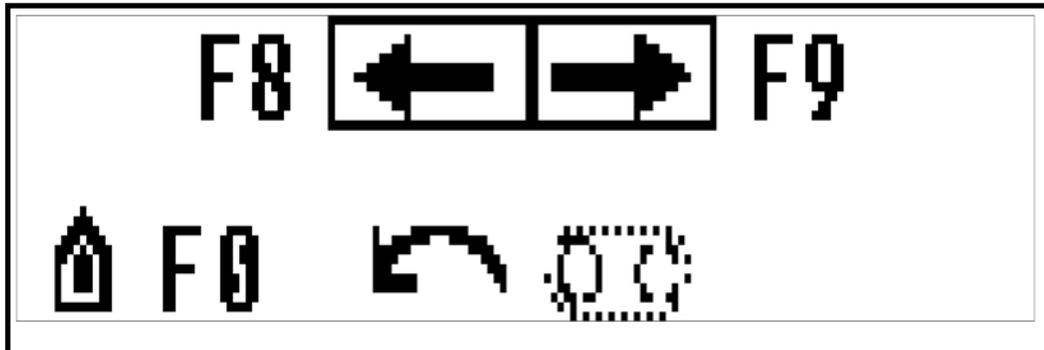


## iColor Coater - Digital Control Panel (continued)

### JOG SCREEN

Get to this screen by pressing “F4” Function Key from the Home Screen

- Press “F8” Function Key to FORWARD Jog the Belt
- Press “F9” Function Key to REVERSE Jog the Belt
- The Machine will jog for as long as you hold the button



### REAR GUARD OPEN SCREEN

This screen appears whenever the Rear Guard is Open. When in this screen all functions are disabled.



## Establishing iColor Coating Unit Settings

The iColor coater is equipped with our “Patented” Coating Unit. This unique metering control design provides a quick & EZ adjustment of the coating thickness, on the fly. Applying an even and precise thin layer of coating, the Coating Unit produces the highest gloss and a perfect finish every time.

The iColor Coating Unit has Six (6) main settings with additional positions between each settings for precise coating control:

- (< 0) Position - END OF DAY POSITION (Do Not Coat in this Position)
- (0) Position - This is the calibration setting position (Do Not Coat in this Position)
- (1) Position - Lowest pressure (Heaviest Film of Coating)
- (2) Position - Medium Low pressure (Normal to Heavy Film of Coating)
- (3) Position - Medium pressure (Normal Film of Coating)
- (4) Position - Highest pressure - DO NOT EXCEED (Thin Film of Coating)



**REMARKS:** The recommended Coating Unit pressure setting is between (2) and (3).

Coating Unit Metering Gauge Adjustment



Figure - Coating Unit Settings



Figure - Coating Unit End Of Day Position All the Way Up



**CAUTION:** When shutting the system down for the day, it is **VERY IMPORTANT** that you set the coating unit metering controls to the “**END OF DAY POSITION.**” Failure to set the roller pressure to the “**END OF DAY POSITION**” may result in a form roller flat spot which is **NOT** covered by our warranty!



**NOTE:** The Coating Unit form roller and metering roller are calibrated (set parallel) at the factory and are set in the (0) position. Should the rollers need to be calibrated, please follow the Roller Calibration Procedure on the next page.

## Testing the Coating Unit Calibration



**NOTE:** In order to properly calibrate the Coating Unit, please be sure the coating unit is as clean and dry as possible. Any coating on the rollers will cause inaccurate results.

Calibrating a Coating Unit involves measuring and adjusting the metering roller to form roller to make them as parallel as possible.



Coating Unit Metering Gauge Adjustment

Figure - Coating Unit Calibration

## Testing The Coating Unit Calibration

1. Move each metering arm so that the pointer is in line with the zero on the metering gauges.
2. At approximately 25mm (1 inch) from each end of the form/metering roller nip, roll two strips of bond paper, 25mm x 250mm (1" x 10") of 80 g/m<sup>2</sup> (20lb or .004) between the rollers.
3. Pull each strip vertically from the nip, while preventing the rollers from rotating. Assess, the resistance between the rollers.
4. If you have equal tight resistance, No adjustment required.
5. Reset the metering gauges to your desired operating setting.
6. If you have unequal resistance, you must calibrate one or both of the metering gauges. (See Calibrating the Coating Unit in the next section)

## Calibrating the Coating Unit

1. Remove the Coating Unit from the iColor coater by performing the following steps.
  - a. Using a 4mm Allen wrench, remove the (4) four Coating Unit Spring Rod Mounting Bolts
  - b. Using a 4mm Allen wrench, remove the (4) four Coating Unit Mounting Pivot Bolts
  - c. Tilt the unit on an angle and pull straight out through front opening.



Figure - Coating Unit Spring Rod Mounting Bolts

4mm Spring Rod Mounting Bolts



Figure - Coating Unit Mounting Pivot Bolts

4mm Mounting Pivot Bolts

2. Rotate each lever so that the pointer is in line with the zero on the metering gauges.
3. At approximately 25mm (1 inch) from each end of the form/metering roller nip, roll two strips of bond paper, 25mm x 250mm (1" x 10") of 80 g/m<sup>2</sup> (20lb or .004) between the rollers.
4. Pull each strip vertically from the nip, while preventing the rollers from rotating. Assess, the resistance between the rollers.
5. Adjust each clicker till an even tight "drag" is felt on each side - regardless of the number on the number gauge.



6. Then loosen the clicker arm locking screw.
7. Turn the clicker so that the pointer is in line with the zero on the number gauge - (0) Position.
8. Tighten the clicker arm locking screw.
9. Reinstall the Coating Unit.

Clicker arm locking screw



# Setting Form to Impression Roller Pressure

1. Set the Coating Form Roller to the Impression Roller Pressure



**NOTE:** Make sure the Coating Unit is completely clean with NO coating in the unit!

- a. Take a sheet of the stock that you plan to coat and cut (2) two 1" x 12" (25mm x 305mm) strips.
- b. Slide the strips of the paper half way of its length, between the Form & Impression Roller, into the machine at each side.
- c. Adjust the Impression "Clicker Knobs" until there is a **LIGHT**, even drag on each of the strips.
- d. Check that you can see a slight gap between the Form Roller and Impression Roller. If the rollers are touching there is too much pressure!



**NOTE:** Turning the Impression Clicker Knob Clockwise will decrease the pressure between the Form Roller and Impression Roller and Counterclockwise will increase the pressure between the Form Roller and Impression Roller. It is critical that the drag on both sides is even.

Impression Clicker Knob



Figure - Form to Impression Roller Pressure

## Power ON the iColor Coater



**CAUTION:** Operator should first put on UV Safety Glasses and protective gloves before running the iColor coater.

Apply power to the iColor coater System as follows:

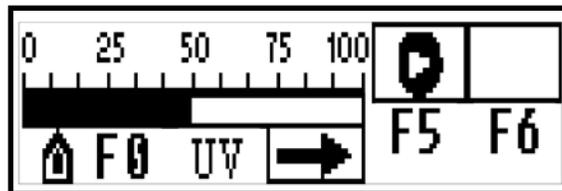
1. Turn the Main Power Switch, located on the back of the machine, to the ON position.
2. Go to the Lamp Screen by pressing “F2” from the Home Screen, Press “F5” to Turn the Lamp ON.



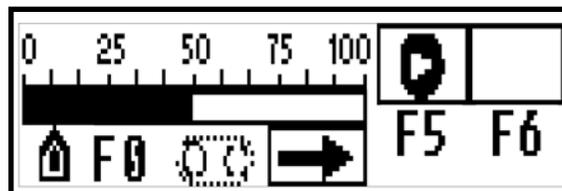
**NOTE:** This machine is equipped with “Rotating UV Reflector” technology which enables the lamp to be turned on without the belt in motion. This allows you to warm up the system during set up or work with the front guard open while the lamp is ON.

3. Go to the Belt Screen by pressing “F1” from the Home Screen, Press “F5” to Turn the Belt ON.
  - a. The average time that the UV lamp takes to reach full capacity can vary from 30 seconds to 2 minutes. When the lamp reaches full capacity it will automatically drop to the pre-set number.
  - b. The lamp intensity becomes adjustable once warm up sequence is complete.
  - c. The average cool down time is ~ 4 minutes.
  - d. If starting from cold or hot conditions, the lamp may take longer to ignite.

### UV LAMP SCREEN



### BELT SCREEN



## Make Ready the Coating Pump & Unit

Before you begin coating a job, the Coating Unit should be cleaned of any excess coating left over from the previous runs. For best results use UV Klean and/or Aque Klean as a part of your daily cleaning procedure



**NOTE:** Clean the Coating Unit, Impression Roller and Doctor Blade Assembly after each shift and/or after each job if necessary.



**NOTE:** If using an Aqueous coating or primer, it is important to clean the coating unit, impression roller and doctor blade assembly immediately following the completion of your job.

1. Be sure to mix your coating well (shake the bucket) prior to use.
2. Make sure the hose is secure in the coating pump and is in the proper coating bucket.
3. Be sure to adjust the Metering Pressure to the desired setting before filling. If left in the **“END OF DAY POSITION”** while filling, coating could leak through the gap.
4. Go to the Pump Screen by pressing “F3” from the Home Screen.
5. Press “F9” to turn ON the MANUAL pump. (Pump will stay ON as long as you hold the button)
6. Press “F7” to turn ON the AUTO Pump option (If Equipped w/ Sensor)



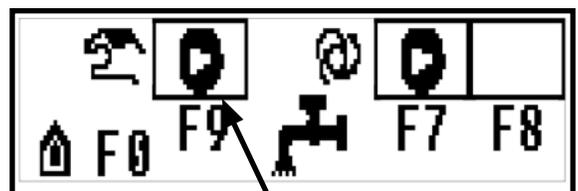
**NOTE:** If your iColor coater is equipped with the Automatic Coating Sensor, see the next section on “Setting the Optional Automatic Coating Sensor” before completing the set up.



Figure - Coating Pump

Coating Pump

### PUMP SCREEN



Manual Coating Fill Button

## Setting the “Optional” Automatic UV Coating Sensor



**NOTE:** If your iColor coater is equipped with the Automatic Coating Sensor proceed with setting the coating sensor. If it is NOT, proceed to the next page.

Your Automatic Coating Sensor is preset in the factory. Before you begin the coating process it is important that you test the settings and make the appropriate adjustments for your current job.

1. Turn the Main iColor coater Power Button to the ON position.
2. If the sensor light is AMBER:
  - a. Turn ON the auto pump by pressing F7 in the pump screen  
**(Note:** The “optional” coating sensor will not operate if the machine is not running)
  - b. Turn ON the belt by pressing F5 in the belt screen
  - c. Carefully watch as the Coating Unit is filled with coating.
    - i. If the coating automatically stops near the imaginary fill line, NO adjustment is required.
    - ii. If the coating does not automatically stop once it reaches the imaginary fill line, immediately open the front guard to stop the belt and auto pump.
      - a. With the safety cover open, adjust the sensor, by turning the screw clockwise with a small flat head screwdriver until the light turns OFF
    - iii. If the coating stops before it reaches the imaginary fill line.
      - a. Lift the safety cover.
      - b. Adjust the sensor, by turning the screw counterclockwise with a small flat head screwdriver, until the light turns AMBER.
3. If the sensor light is OFF:
  - a. Lift the safety cover.
  - b. Adjust the sensor, by turning the screw counterclockwise with a small flat head screwdriver, until the AMBER light turns on.
  - c. Return to step 2a and continue setting the coating sensor.



Figure - UV Coating Sensor

Sensor Adjustment Screw

Imaginary Coating Fill Line



Figure - Coating Fill Line

## Coating Information



**WARNING:** Use only coatings that do not build up an explosive atmosphere when being heated under a UV/IR Dryer. (For example: “Flammable Limit” mentioned in the MSDS sheet as “Not Usable”).

- The most important thing you need to know about coating is, in most cases, MORE IS NOT BETTER. With the exception of absorbent paper and ink, more coating is not an improvement
- More coating adds weight and stiffness to your product, which is undesirable in most cases and will cost you more money
- Coating, like paint, can come in a variety of brands and qualities. It is very important that you use a good quality coating like Uninet UV/Aqueous Coating
- Always shake the coating well before use
- Coating can separate due to excessive heat and cold. It should be stored in a climate-controlled area
- Uninet recommends storing & using your coatings at a temperature between 70°- 90° F (21°- 32° C). Temperatures lower than 70° F (21° C) could cause the coating to thicken, resulting in a textured appearance.
- If left untouched for any period of time it will need to be re-mixed prior to use
- You can mix coatings from the same manufacturer if they are the same type i.e. mix gloss with gloss
- NEVER mix coatings from different manufacturers or of different types



## Production Considerations

The iColor coater, in many ways, far exceeds the production needs for most jobs. We recommend that, prior to production; you review some of the following suggestions for trouble free and reduced cost operation.

1. Slower is smoother. Coating needs time to settle (flow out). There are a few ways to accomplish this:
  - b. Slowing down the conveyor (which increases flow out time)
  - c. Using a thin viscosity coating (somewhat limited by your print engine)
  - d. Warming the coating (which increases flow out)

The challenge is to balance the look of the product with desired production speed. If you are using a toner based printer you must keep in mind that your toner will re-wet at around 120°F (40°) or slightly above. In order to get the best look you have to match the speed of the conveyor with the lamp intensity. Generally the belt speed will be between 25 - 50% with the lamp intensity between 50 - 75%.

2. It is sensible to use the lowest level of energy needed to do a job. For example: running the lamp on a setting of 50% would save you nearly 50% of the energy required to power the bulb on the maximum setting.
3. The coating should be stored in a climate-controlled environment. As coating gets colder it thickens and is much harder to deal with. Ideally coating likes to be at a temperature between 70-90°F (21-32°C). This allows for good flow out and a smooth look.
4. Paper can make a tremendous difference in the way your coating looks, especially absorbent paper. The same job run on the same printer with different paper can coat differently. The most noticeable effect of absorbent paper is that after being coated the printed area looks good however the unprinted area appears to have not received enough coating. Three potential solutions are to increase the belt speed, increase the amount of coating going to the paper or use a thicker coating.
5. When operating the iColor coater, the form roller **SHOULD NOT** be in contact with the impression roller except the very ends of the roller that are slightly larger due to the pressure from the seals. Even this small amount of contact can be eliminated by making sure that the coating lever is in the OFF position when not feeding paper. This will eliminate the possibility of any coating getting onto the reverse side of the product being run.
6. Any time you stop the coater check for stray coating. If any is found, clean with a lint free rag and Uninet approved cleaning solution. This will help to insure trouble free operation of your coater.



## Production Considerations (continued)

7. Some papers when coated have a tendency to curl, which could cause them not to exit the coater. Constantly monitor the delivery area to make sure this does not happen.
8. When working at the delivery end of the coater you **MUST** wear UV blocker glasses to protect your eyes from the reflected UV rays from the exiting paper. This is similar to sitting under an umbrella at the beach and still getting sun burnt from the sun's rays reflected off of the water.
9. When shutting the system down for the day, it is **VERY IMPORTANT** that you completely clean the coating unit and set the metering controls to the "**END OF DAY POSITION**". Failure to set the roller pressure to the "**END OF DAY POSITION**" may result in a flat spot on the form roller that will show up on your coated material. This problem is **NOT** covered by our Warranty.
10. You should get into a habit of lightly scratching an occasional piece of coated material to make sure that the coating does not scratch off. This can indicate coating that is under cured (not enough lamp intensity or the bulb is starting to go bad), coating that is over cured (too much lamp intensity) or that you are using the wrong coating for your print engine. This will also prevent you from running a complete job and then finding out that the coating scratches off during shipping.



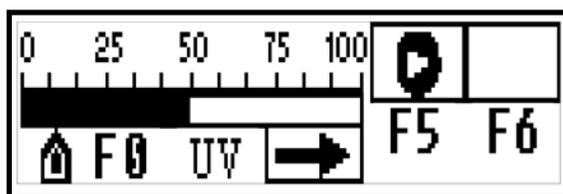
## Testing & Evaluating the Coating Finish

You are now ready to begin Testing & Evaluating the coating finish.

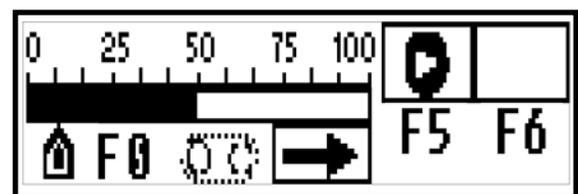
1. Turn the Power Button, UV Lamp & Belt ON per the previous “Power ON” instructions
  - a. The average time that the UV lamp takes to reach full capacity can vary from 30 seconds to 90 seconds. When the lamp reaches full capacity it will automatically drop to the pre-set number.
  - b. The lamp intensity becomes adjustable once warm up sequence is complete.
  - c. The average cool down time is ~ 4 minutes.
  - d. If starting from cold or hot conditions, the lamp may take longer to ignite.
2. Check & Set the Form to Impression Roller pressure setting.
3. Set the Belt Speed to the desired setting.
4. Set the UV Lamp Intensity to the desired setting and wait for the UV lamp to reach full capacity.
5. Now you are ready to begin feeding the product.
6. Feed one (1) sheet and retrieve to check desired finish.
7. If the desired finish is not achieved - see the next section titled “Five Kwik & EZ Ways to Perfect the Coating Finish.”



Figure - Form to Impression Roller Pressure



UV LAMP SCREEN



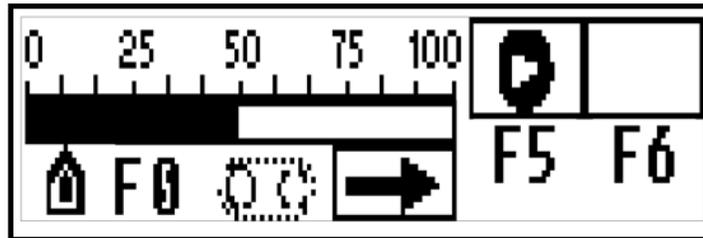
BELT SCREEN

# Five Kwik & EZ Ways to Perfect the Coating Finish

1. Increasing/Decreasing Belt Speed.

## BELT SCREEN

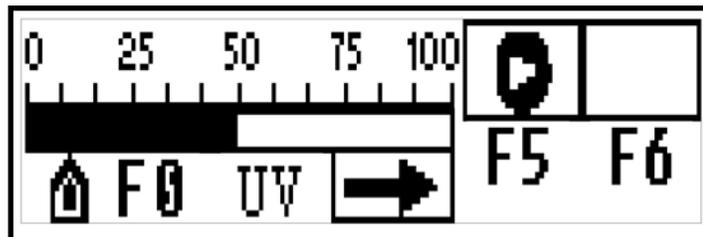
- The speed is controlled by the Left & Right Arrow Keys, whether the belt is ON or OFF



2. Increasing/Decreasing UV Lamp Intensity.

## UV LAMP SCREEN

- The UV Bulb Intensity is controlled by the Left & Right Arrow Keys. This can **ONLY** be adjusted when the lamp & belt are ON.



3. Increasing/Decreasing Coating Unit Pressure.
  - a. Increasing pressure will Decrease the amount of Coating.
  - b. Decreasing the pressure will Increase the amount of Coating.
4. Increasing/Decreasing Form to Impression Roller Pressure.
  - a. Increase pressure if areas on sheet have little or no coating.
  - b. Decrease pressure if the Form Roller is contacting the Impression Roller.
5. Changing Coating.



Figure - Coating Unit Pressure



Figure - Impression Roller Pressure



Figure - Coating



# Chapter 5

## Troubleshooting & Maintenance

This section highlights troubleshooting and maintenance guidelines for your iColor coater. For additional assistance, please contact our Uninet Coating Support & Solutions Team .

### Coating:

1. If the coating metering controls are set and the finished product appears in need of more coating or has no coating at all, you will need to increase the Form Roller to Impression Roller pressure.
2. If the coating is better on one side (left or right) than the other, you will need to adjust the Form Roller to Impression Roller parallel adjustment. (See the Setting the Form to Impression Roller Pressure section in this Operators Manual)
3. If you have decreased the Form Roller to Impression Roller pressure and are still getting too much coating on the job, you will need to adjust the coating metering controls on the Coating Unit.
4. The coating metering controls will generally be run between 2 to 3. There is an adjustment on the left and right side for fine-tuning the amount of coating. Remember MORE IS NOT BETTER.
5. A larger number on the dial will give you a smaller amount of coating on the job.
6. If the coating scratches off frequently when tested with your finger nail, it may indicate that your UV Bulb needs to be replaced. Contact UniNet Customer Service.
7. After running several test sheets, if the printed area looks good but the unprinted area looks like it requires more coating, your paper may be absorbent. This can be fixed by decreasing the coating unit pressure and/or changing to a higher viscosity coating.

### Testing for Absorbent Paper, Toner & Ink

1. With the iColor coater Belt ON (UV OFF) run and coat one (1) sheet through the iColor coater and remove it.
2. Set this paper aside for 2 or 3 minutes and then inspect it. If it appears that almost no change has occurred to the coating, then your print media and paper are not the absorbent type.
3. If either the print media or the paper appears to be losing the coating, then one or the other is absorbent. This is not a coater problem but a paper or print media problem.



## Troubleshooting Guidelines

<b>PROBLEM</b>	<b>POSSIBLE CAUSE</b>	<b>POSSIBLE REMEDY</b>
UV Bulb is not turning on	<ul style="list-style-type: none"> <li>a. Main disconnect off</li> <li>b. Main breaker tripped</li> <li>c. Rear guard open</li> <li>d. Internal breakers tripped</li> <li>e. E-Stop is pressed</li> <li>f. Solid State power supply</li> <li>g. Room is too cold</li> </ul>	<ul style="list-style-type: none"> <li>a. Turn to on</li> <li>b. Reset</li> <li>c. Close guard, check switch</li> <li>d. Check circuit breakers</li> <li>e. Reset E-Stop</li> <li>f. Consult Solid State power supply troubleshooting</li> <li>g. Heat room</li> </ul>
Main drive motor will not start	<ul style="list-style-type: none"> <li>a. No power to the unit</li> <li>b. Main disconnect off</li> <li>c. Safety guard(s) open</li> <li>d. E-Stop is pressed</li> </ul>	<ul style="list-style-type: none"> <li>a. Check incoming power panel</li> <li>b. Turn to on</li> <li>c. Close guard(s), check switch</li> <li>d. Reset E-Stop</li> </ul>
Main motor is on but the Belt is not running	<ul style="list-style-type: none"> <li>a. Loose Belt</li> </ul>	<ul style="list-style-type: none"> <li>a. Check Belt</li> </ul>
Coating getting on the backside of the sheet	<ul style="list-style-type: none"> <li>a. Form to Impression roller pressure is too tight</li> </ul>	<ul style="list-style-type: none"> <li>a. Decrease the Form to Impression roller pressure</li> </ul>
Coating is not even on the sheet	<ul style="list-style-type: none"> <li>a. Form to Impression roller is not even</li> <li>b. Form to Metering roller nip pressure is too light</li> <li>c. Form to Metering roller nip pressure is not even</li> <li>d. Not enough coating in the nip</li> </ul>	<ul style="list-style-type: none"> <li>a. Adjust Form to Impression roller so that it is even</li> <li>b. Increase the Form to Metering roller pressure</li> <li>c. Make sure pressure is even</li> <li>d. Add more coating to the nip by pressing the coating fill button</li> </ul>
Coating is not curing	<ul style="list-style-type: none"> <li>a. Old UV Bulb</li> <li>b. Conveyor running too fast</li> <li>c. Old coating</li> </ul>	<ul style="list-style-type: none"> <li>a. Replace UV Bulb</li> <li>b. Slow down conveyor</li> <li>c. Check coating receive date, purchase new coating</li> </ul>



## Troubleshooting Guidelines

PROBLEM	POSSIBLE CAUSE	POSSIBLE REMEDY
Coating finish appears “Orange Peel” or not smooth	<ul style="list-style-type: none"> <li>a. Too much coating being applied</li> <li>b. Coating viscosity is too thick</li>   <li>c. Coating stored in a cold room</li> <li>d. Belt speed is too fast</li> <li>e. “Optional” Oscillating roller not installed</li> </ul>	<ul style="list-style-type: none"> <li>a. Increase Form to Metering roller pressure</li> <li>b. Change to a thinner coating, making sure that the coating is correct for the printer type and substrate you are using</li> <li>c. For best results, store the coating in a climate control room 70-90°F (21-32°C)</li> <li>d. Decrease belt speed</li> <li>e. The appearance of most all coatings can be improved with the addition of the “Optional” Oscillating roller. (See the Complete Roller section of the Consumables page or contact Uninet Customer Service for more information)</li> </ul>
Coating scratching off	<ul style="list-style-type: none"> <li>a. Improper coating solution</li> <li>b. Not enough curing power</li> <li>c. Belt speed is too fast</li> <li>d. Too much curing</li> <li>e. Old UV Bulb</li> </ul>	<ul style="list-style-type: none"> <li>a. Make sure coating is correct for print type and substrate</li> <li>b. Increase UV intensity</li> <li>c. Decrease belt speed</li> <li>d. Decrease UV intensity</li> <li>e. Replace UV Bulb</li> </ul>



## Daily UV Cleanup Procedure



**NOTE:** Uninet recommends the inspection of the Safety Guards every three (3) months!

1. Reverse the input and output hose from the pump and depress the coating fill button until the hose is empty.
2. If your iColor coater is equipped with the optional Automatic Coating Sensor, the lack of coating in the nip will cause the pump to turn on and put the coating in the hose back into the bucket. If you are using the manual pump, you must press F9 from the pump screen.
3. Turn the UV Lamp OFF! Turn the Belt OFF!
4. Remove the excess coating from the Coating Unit by using the Vac. or Bulb Syringe
5. Remove the two hoses from the Coating Unit and place into a plastic bucket with rags (to prevent dripping).



**NOTE:** It is Important that you remove the hose kit prior to cleaning the Coating Unit as coating and/or cleaner may flow out of the hose nozzle.

6. Pour a small amount of **UV Klean** into the coating unit and run it for 30 seconds. Run for another 30 seconds to clean the rollers. Turn OFF the belt, open the safety guard and remove **UV Klean** from the nip with the Vac or Bulb Syringe. Repeat until all coating is removed.



**CAUTION:** Never put the Vac nozzle or Bulb Syringe into the nip with the machine run-ning as damage to the rollers can occur, which is NOT covered by the roller warranty!

7. Remove and clean the coating drip pan with **UV Klean**.
8. Remove and clean the doctor blade with **UV Klean**.
9. While you have the Doctor Blade and the Drip Pan removed, completely clean the Impression roller with **UV Klean**. Reinstall drip pan & doctor blade.
10. Turn the coating unit controls to the “**END OF DAY POSITION**” to prevent flat spots on the rollers.
11. Turn the Main Power Switch OFF!



## Weekly or Holiday UV Cleanup Procedure

Perform the “**UV Daily Cleanup Procedure**” plus the following:

1. Rinse the hose kit with **UV Klean** by either of the following methods:
2. Put both ends of the hose into a container with a small amount of **UV Klean** and energize the pump by running the iColor coater. Allow the pump to circulate the **UV Klean** for one to two minutes.
3. Disconnect the hoses from the pump, then pour a small amount of **UV Klean** into each hose and slosh back and forth until the **UV Klean** flows freely in the hoses and then discard the **UV Klean** into a cup with a paper towel and dispose of in the trash (no biohazard will exist).
4. Remove the Coating Unit seals from the backing plate kit by the spring clip, manually clean the seals and the ends of the rollers with **UV Klean** and reinstall.



**CAUTION:** Never run the equipment with the seals removed as this will cause damage to the rollers, which is NOT covered by the roller warranty!

5. Remove the coating drip pan and clean with **UV Klean**.
6. Remove the doctor blade and clean with **UV Klean**.
7. While you have the Doctor Blade and the Drip Pan removed, completely clean the Impression roller with **UV Klean**. Reinstall drip pan & doctor blade.
8. Dispose of all coating, rags and cleaner as directed per your local regulations.
9. Pour the contents of the Vac into a disposable container filled with rags or paper towels and dispose of per your local regulations.
10. Turn the coating unit controls to the “**END OF DAY POSITION**” to prevent flat spots on the rollers.
11. Turn the Main Power disconnect to the OFF position!

### Keep It Clean with Complete UV Klean

It is extremely important to properly clean and maintain your iColor coater. UniNet recommends **UV Klean** as a part of your daily UV coating clean-up procedure.

- Water miscible
- Low VOC
- No oily residue
- Meets US & Canadian environmental regulations



## Aqueous Coating & Primer Cleanup Procedure



**NOTE:** Due to the fact that the aqueous coatings and primers air dry; the following procedures must be done **IMMEDIATELY** upon completion of the job:

1. Reverse the input and output hose from the pump and depress the coating fill button until the hose is empty.
2. If your iColor coater is equipped with the optional Automatic Coating Sensor, the lack of coating in the nip will cause the pump to turn on and put the coating in the hose back into the bucket. If you are using the manual pump, you must press F9 from the pump screen.
3. Turn the UV Lamp OFF! Turn the Belt OFF!
4. Remove the excess coating from the Coating Unit by using the Vac or Bulb Syringe.
5. Remove the two hoses from the Coating Unit and place into a plastic bucket with rags (to prevent dripping).



**NOTE:** It is Important that you remove the hose kit prior to cleaning the Coating Unit as coating and/or cleaner may flow out of the hose nozzle.

6. Pour a small amount of **Aque Klean** into the coating unit and run the Coater for 30 seconds. Turn the coating lever to ON and run it for another 30 seconds to clean the rollers. Turn OFF the belt, open the safety guard and remove **Aque Klean** from the nip with the Vac or Bulb Syringe. Repeat until all coating is removed.



**CAUTION:** Never put the Vac nozzle into the nip with the machine running as damage to the rollers can occur, which is NOT covered by the roller warranty!

7. Add Cleaning Seals
8. Remove the Coating Unit seals from the backing plate kit by the spring clip, manually clean the seals and the ends of the rollers with **Aque Klean** and reinstall.



**CAUTION:** Never run the equipment with the seals removed as this will cause damage to the rollers, which is NOT covered by the roller warranty!

9. Remove and clean the coating drip pan with **Aque Klean**.
10. Remove and clean the doctor blade with **Aque Klean**.
11. While you have the Doctor Blade and the Drip Pan removed, completely clean the Impression roller with **Aque Klean**. Reinstall drip pan & doctor blade.



**NOTE:** It is **VERY IMPORTANT** that the doctor blade is completely cleaned of aqueous coating and/or primer as any leftover residue will harden making it much harder to clean & maintain.

## Aqueous Coating & Primer Cleanup Procedure (continued)



**NOTE:** Because Aqueous coating and primers dry in a solid form (Typically within in 5 Minutes of stopping the operation) it is **EXTREMELY** important to remove all coating since this can affect the smoothness of the Form and Impression Roller.

12. While you have the doctor blade and the drip pan removed, completely clean the Impression roller with **Aque Klean**. Reinstall drip pan & doctor blade.
13. Completely flush and clean the hose kit with warm soapy water.
14. Rinse the hose kit with **Aque Klean** by either of the following methods:
  - a. Put both ends of the hose into a container with a small amount of **Aque Klean** and energize the pump by running the iColor coater. Allow the pump to circulate the **Aque Klean** for one to two minutes.
  - b. Disconnect the hoses from the pump, pour a small amount of **Aque Klean** into each hose and slosh back and forth until the **Aque Klean** flows freely in the hoses and then discard the **Aque Klean** into a cup with a paper towel and dispose of in the trash (no biohazard will exist).
13. Dispose of all coating, rags and cleaner as directed per your local regulations.
14. Pour the contents of the Kompac Vac into a disposable container filled with rags or paper towels and dispose of per your local regulations.
15. Turn the Coating Unit metering controls to the “**END OF DAY POSITION**” to prevent flat spots in the roller, which is NOT covered by the roller warranty.
16. Turn the Main Power Switch OFF!

### Keep It Clean with **Aque Klean**

It is extremely important to properly clean and maintain your iColor coater. UniNet recommends **Aque Klean** as a part of your daily Aqueous coating clean-up procedure.

- Water miscible
- Low VOC
- No oily residue
- Meets US & Canadian environmental regulations



## Lubrication Schedule

**COATING UNIT/IMPRESSION ROLLER GEARS** - It is very important to Grease the Coating Unit Gears, Impression Roller Gear and Optional Oscillating Roller every 80 - 100 hours.

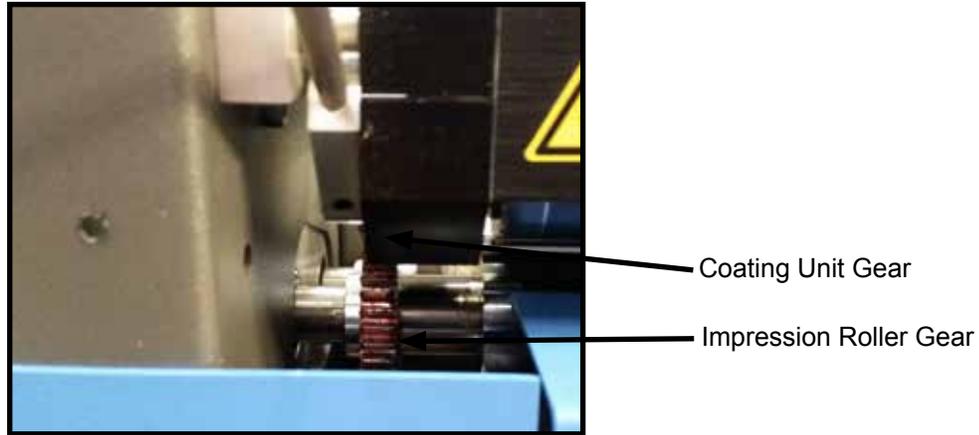


Figure - Lubrication Locations

**DRIVE SPROCKETS** - It is very important to Grease the NOP side Drive Sprockets at least twice a year. Please Note you must remove the side covers to access these Sprockets. Below is an image of the NOP Side Drive Sprocket.

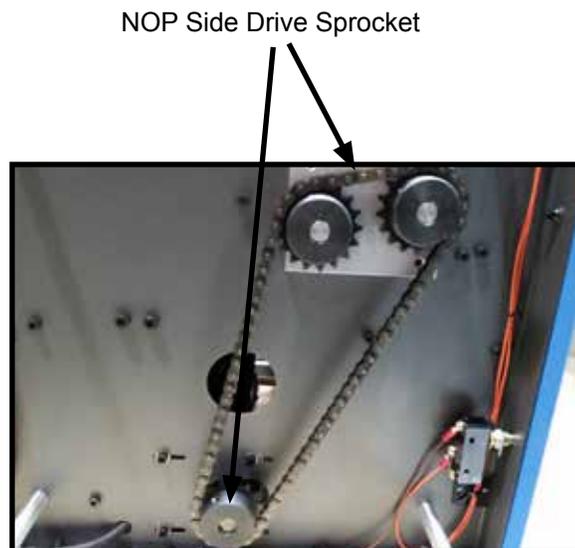


Figure - NOP Side Drive Sprocket

## Replacing the Doctor Blade Procedure

The iColor coater is equipped with a Doctor Blade system designed to remove any excess coating that reaches the Impression roller.

There should always be a gap between the Form and Impression roller - which is why the iColor coater can successfully apply UV and Aqueous coating & primers and perform two-sided coating with a perfect finish every time. This unique design along with our "Patented" coating unit prevents coating from appearing on the first side of the sheet, after coating the second side, as occurs with traditional "roller coaters".

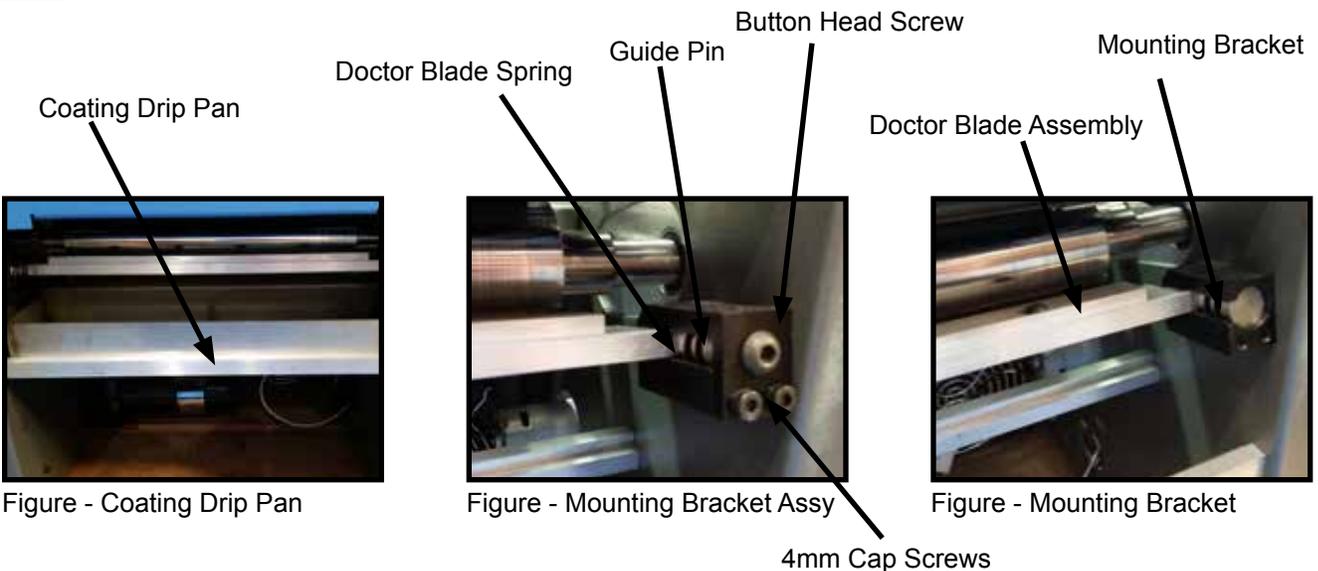
The Doctor Blade is an important part of the coating process and should be cleaned and replaced as needed.

To remove the Doctor Blade Assembly:

1. Turn the Main Power Switch OFF!
2. Remove the Coating Drip Pan.
3. Remove the Button Head Screw, on each side, using a 5mm Allen key
4. Remove the (2) two Cap Screws, on each side, using a 4mm Allen key
5. Remove the Guide Pin and Doctor Blade Spring, on each side and set aside.
6. Remove the Doctor Blade Assembly from the mounting bracket and place on a work bench.



**NOTE:** The Doctor Blade should be changed when streaks (lines) begin to appear on the Impression roller



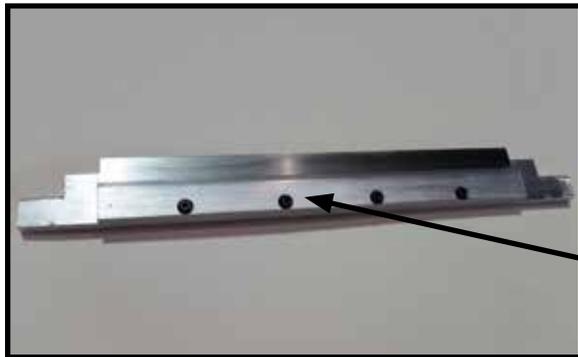
## Replacing the Doctor Blade Procedure (continued)



**CAUTION:** Always use Genuine Uninet Parts. The use of other than a genuine Uninet Doctor Blade could cause damage to the Impression Roller and Void the Warranty.

To change the Doctor Blade:

1. Place the Doctor Blade Assembly on a flat surface.
2. Loosen the four (4) mounting screws using a 3mm Allen key.



3mm mounting screws

Figure - Doctor Blade Assembly

3. Remove the Doctor Blade and dispose of accordingly.



**CAUTION:** Use caution when handling the Doctor Blade as the edges are sharp

4. Install a new Genuine Uninet Doctor Blade.



**NOTE:** Be sure the stepped edge of the Doctor Blade is facing downward and that the doctor blade is all the way seated in the cutout area.

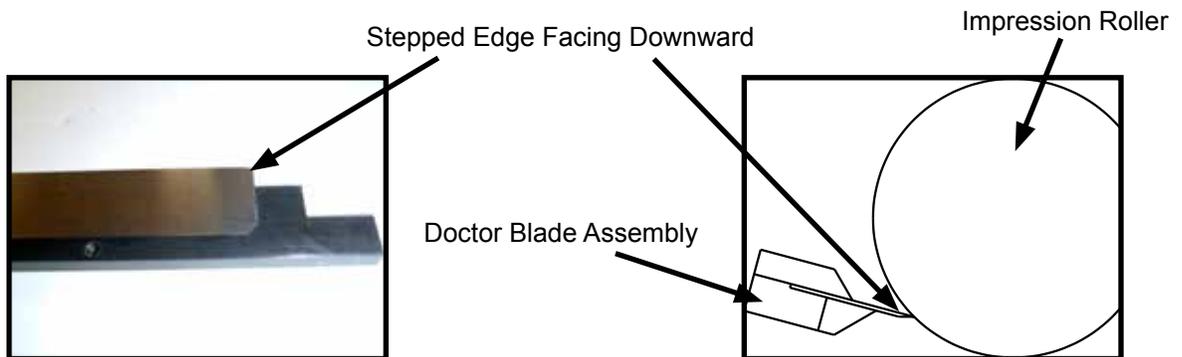


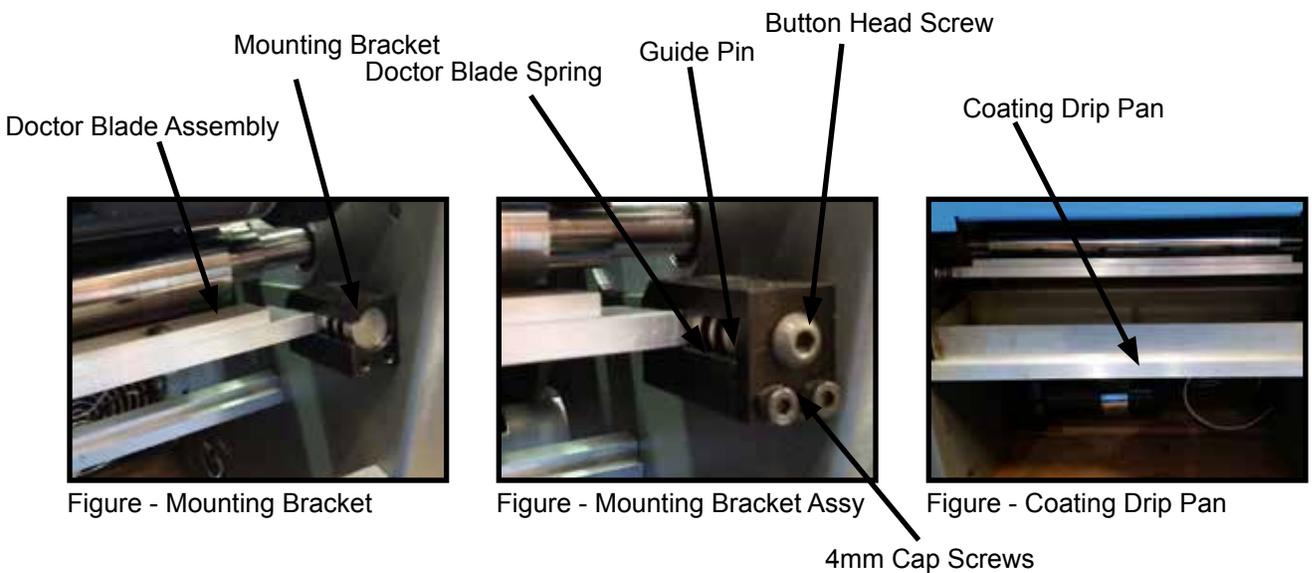
Figure - Doctor Blade Installation

Figure - Doctor Blade Configuration



## Replacing the Doctor Blade Procedure (continued)

5. Tighten the four (4) mounting screws using a 3mm Allen key.
6. Insert the Doctor Blade Assembly into the mounting bracket.
7. Replace the Doctor Blade Spring and Guide Pin
8. Tighten the two cap screws, on each side, using a 4mm Allen key
9. Tighten the Button Head Screw, on each side, using a 5mm Allen key



10. The Doctor Blade should “Float” in the mounting bracket when pulled back
11. Install the Coating Drip Pan.

## Tracking the Conveyor Belt

The iColor coater is designed for a long life and production. The Conveyor Belt has been tracked in manufacturing based on normal operating conditions.

To test if your belt is tracking correctly, turn the Belt & UV on and let it run for approximately 5 - 10 minutes under normal operating conditions (i.e. 50% speed & 75% UV intensity). If the belt appears to walk in one direction or the other, perform the following steps.

1. Loosen the (2) two Flange Bearing Locking Nuts, on either side, with a 17mm wrench



**NOTE:** The Rear Panel is removed from the image below to show a clear view of the Flange Bearing Locking Nuts.

2. Facing the belt, If the belt is walking to the Right, tighten the Right Tracking Bolt or Loosen the Left Tracking Bolt approximately one eighth of a turn.
3. Facing the belt, If the belt is walking to the Left, tighten the Left Tracking Bolt or Loosen the Right Tracking Bolt approximately one eighth of a turn.



**CAUTION:** Do Not Overtighten the Tracking Bolts as this will damage the Conveyor Belt. The belt should be just tight enough to hold with some force but still rotate.

4. After making your adjustments, let the system run for 5 minutes and evaluate. Continue if necessary.
5. Once the belt is tracking, tighten the (2) two Flange Bearing Locking Nuts, on either side, with a 17mm wrench.
6. Turn equipment Off or continue your production.

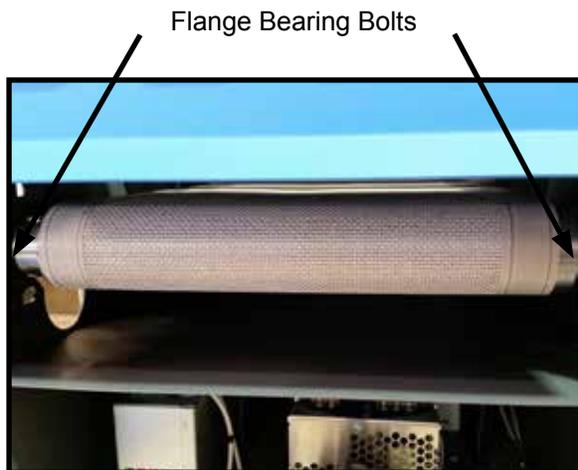


Figure - Belt Tracking Flange Bearing Bolts

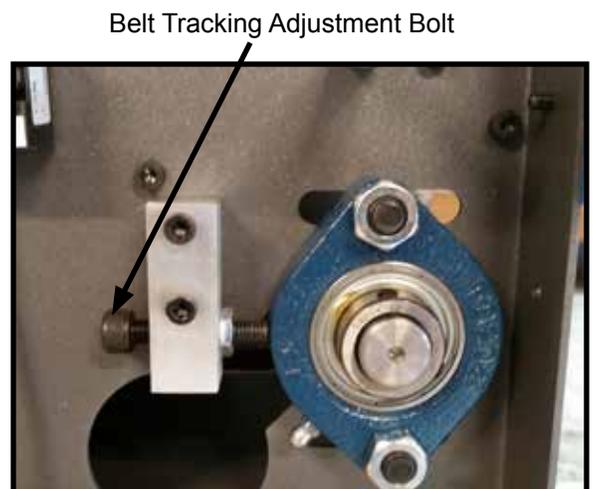


Figure - Belt Tracking Adjustment Bolt

## Replacing the Conveyor Belt

The iColor coater is designed for a long life and production. Should the conveyor belt become damaged or worn and needs to be replaced contact Uninet Customer Service



**CAUTION:** The act of replacing your conveyor belt should be performed by a Qualified Uninet Technician or your Authorized Uninet Coating Equipment Dealer.



**NOTE:** Before removing the old belt, be sure to take note of how the belt is routed through the machine

1. Loosen the (2) two Flange Bearing Locking Nuts, on either side, with a 17mm wrench.
2. Loosen the Conveyor Belt by loosening the Belt Tracking Bolts, on either side, with a 6mm allen.



**NOTE:** Loosen the Belt Tracking Bolts just enough so the Belt Pin pulls out freely. Loosening the bolts too much will result in the bolts coming out of the flange bearing blocks.

3. Remove the old belt by removing the belt pin with a pair of Needle Nose pliers.
4. Install the New Belt, making sure to route the belt properly, and secure the Belt Pin in place.
5. Tension the belt until the belt no longer “slips” on the conveyor roller when pulled - by tightening the Tracking Bolts on the OP & NOP sides.
6. Turn UV & Belt ON and “Track” the belt based on the “Tracking the Conveyor Belt” instructions on the previous page. Belt can be moved left or right by increasing/decreasing the tension bolts.

Flange Bearing Locking Nuts

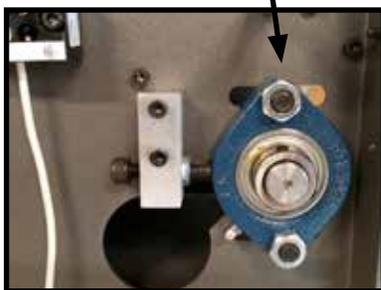


Figure - Belt Tracking Flange Bearing Locking Nuts

Belt Tracking Adjustment Bolt

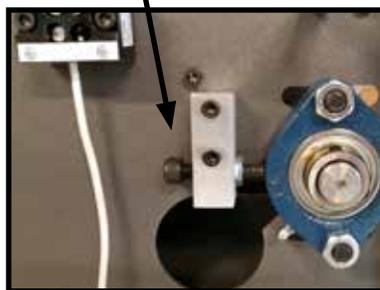


Figure - Belt Tracking Adjustment Bolt

Belt Pin

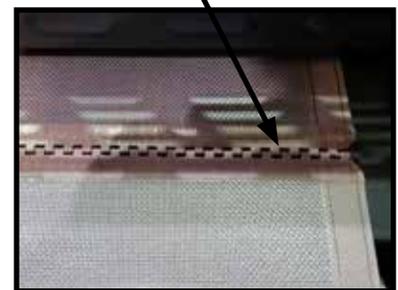


Figure - Belt Pin

## Decimal & Millimeter Conversion Table

<b>DECIMAL AND MILLIMETER EQUIVALENTS OF FRACTIONAL PARTS OF AN INCH</b> (TO CONVERT TO MM, MULTIPLY INCHES BY 25.4 - TO CONVERT TO INCHES MULTIPLY MM BY .0397 OR DIVIDE BY 25.4)					
INCHES	INCHES	MM	INCHES	INCHES	MM
1/64	0.01563	0.397	33/64	0.51563	13.097
1/32	0.03125	0.794	17/32	0.53125	13.494
3/64	0.04688	1.191	35/64	0.54688	13.890
1/16	0.0625	1.587	9/16	0.5625	14.287
5/64	0.07813	1.984	37/64	0.57813	14.684
3/32	0.09375	2.381	19/32	0.59375	15.081
7/64	0.10938	2.778	39/64	0.60938	15.478
1/8	0.125	3.175	5/8	0.625	15.875
9/64	0.14063	3.572	41/64	0.64063	16.272
5/32	0.15625	3.969	21/32	0.65625	16.669
11/64	0.17188	4.366	43/64	0.67188	17.065
3/16	0.1875	4.762	11/16	0.6875	17.462
13/64	0.20303	5.159	45/64	0.70313	17.859
7/32	0.21875	5.556	23/32	0.71875	18.256
15/64	0.23438	5.953	47/64	0.73438	18.653
1/4	0.25	6.350	3/4	0.75	19.050
17/64	0.26563	6.747	49/64	0.76563	19.447
9/32	0.28125	7.144	25/32	0.78125	19.844
19/64	0.29688	7.541	51/64	0.78688	20.240
5/16	0.3125	7.937	13/16	0.8125	20.637
21/64	0.32813	8.334	53/64	0.82813	21.034
11/32	0.34375	8.731	27/32	0.84375	21.431
23/64	0.35938	9.128	55/64	0.85938	21.828
3/8	0.375	9.525	7/8	0.875	22.225
25/64	0.39063	9.922	57/64	0.89063	22.622
13/32	0.40625	10.319	29/32	0.90625	23.019
27/64	0.42188	10.716	59/64	0.92188	23.415
7/16	0.4375	11.113	15/16	0.9375	23.812
29/64	0.45313	11.509	61/64	0.95313	24.209
15/32	0.46875	11.906	31/32	0.96875	24.606
31/64	0.48438	12.303	63/64	0.98438	25.003
1/2	0.5	12.700	1	1.00000	25.400

