

ThermoFlex Wide II Sleeve Mode

Operator Guide

English

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Safety

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Who Should Use This Operator Guide

This guide is intended for anyone who uses or administers KodakThermoFlex® Wide II Sheet Mode platesetter. It explains how to use the software and points out procedures that are specific to your ThermoFlex Wide II Sleeve Mode system.

To use this guide, you should:

- Have a working knowledge of prepress operations
- Be familiar with the Microsoft® Windows® operating system
- Be familiar with the Apple® Macintosh® operating system

This guide assumes that:

- All the hardware, software, and network components of your Kodak system are installed, configured, and operating correctly.
- Files submitted to the system are free of common errors usually resolved during preflight, such as missing fonts and Adobe® PostScript® errors.

For More Information

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Dangers, Warnings, and Cautions

All danger, warning, caution, and notice paragraphs provide you with safety information. Disregarding safety information can result in personal injury to you or damage to your equipment.



DANGER: Indicates a hazardous situation, which, if not avoided, will result in death or serious injury.



WARNING: Indicates a hazardous situation, which, if not avoided, could result in death or serious injury.



CAUTION: Indicates a hazardous situation, which, if not avoided, could result in minor or moderate injury. It may be used to alert against unsafe practices.

NOTICE: Indicates a property damage message. This word is not used with safety messages.

Important Notes on Safe Operation

Before using the ThermoFlex output device, you *must* read the *ThermoFlex Output Devices Safety Guide*.

If you do not understand something in the safety guide, ask your service representative for an explanation.

This operator guide and the printed visual reference guide for your output device provide recommended procedures for all the operating and maintenance tasks that you can safely perform. The procedures include any safety precautions that apply.

When using the ThermoFlex Wide II Sleeve Mode, you *must* follow *all* of the safety precautions and recommended procedures described in this operator guide, the visual reference guide, and the *ThermoFlex Ouput Devices Safety Guide*.



WARNING: Your failure to read, understand, and follow the information in the safety guide, this operator guide, and the visual reference guide for your output device may result in the incorrect operation of your output device and could create a dangerous situation. This could result in serious injury as well as damage to the output device.

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System Overview

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This chapter provides an overview of your ThermoFlex Wide II Sleeve Mode device. It describes the system, its components, the maintenance supplies, and the media.

ThermoFlex Wide II Sleeve Mode System

ThermoFlex Wide II Sleeve Mode is a high-speed, multi-purpose, computer-to-media device that is developed and manufactured by Kodak Graphic Communications. It is compatible with prepress and flexographic platemaking environments. This device is ideal for trade shops that need the flexibility to produce sleeves for their customers. With this device, you can run digital plates-on-sleeves and continuous sleeves in combination, depending on job requirements.

In sleeve mode, the device receives raster data from the workstation for imaging onto sleeve media that is loaded, imaged, and then unloaded, all from the mandrel.

System Components

Depending on the configuration, your ThermoFlex Wide II Sleeve Mode system may consist of some or all of the following components:

- Device
- Arbor
- Shells (one or more)
- Drum vacuum pump system
- Chiller
- Universal Debris Removal Cabinet (UDRC)
- Production hub
- Transport cart
- Workstation
- TIFF Front End software

This guide contains information about the ThermoFlex Wide II Sleeve Mode device. For all other documentation, see:

- *Print Console Quick Start Guide* and the Print Console online help
- TIFF Front End online help
- Workstation user guide
- *Merlin Recirculating Chillers Thermo NESLAB Manual*
- *Universal Debris Removal Cabinet Operator Guide*
- *Genie Lift Operator Manual*
- *Sleeve Toolkit User Guide*

Process Overview

Continuous Sleeves

These are the high-level steps required when working with continuous sleeves:

1. Using a packaging workflow software such as Prinergy PowerPack® or other third-party workflow, create a step-and-repeat TIFF image.
2. Using Sleeve Toolkit, rectangularize the image.
3. Load a shell on the Production Hub, and then load the shell onto the ThermoFlex arbor. (Skip this step if previous sleeve had same inner diameter.)
4. Slide a sleeve onto the shell.
5. Using Print Console to control the Thermoflex device, image the sleeve.
6. Unload the sleeve from the shell on the Production Hub.
7. UV expose and process the sleeve using equipment supplied by the third party.

Plate-On-Sleeves

These are the high-level steps required when working with continuous sleeves:

1. Using a packaging workflow software such as Prinergy PowerPack or other third-party workflow, create a step-and-repeat TIFF image.
2. Using Sleeve Toolkit, rectangularize the image and define the seams.
3. Cut the plate (cutter supplied by third-party).
4. Mount the plate onto a sleeve (digital plate premounter supplied by third party).
5. Load a shell on the Production Hub, and then load the shell onto the ThermoFlex arbor. (Skip this step if previous sleeve had same inner diameter.)
6. Slide the sleeve onto the shell.
7. Using Print Console to control the Thermoflex device, image the sleeve.
8. Unload sleeve from the shell on the Production Hub.
9. UV expose and process the sleeve using equipment supplied by third-party.

Device

This section shows the parts of the ThermoFlex Wide II Sleeve Mode device.

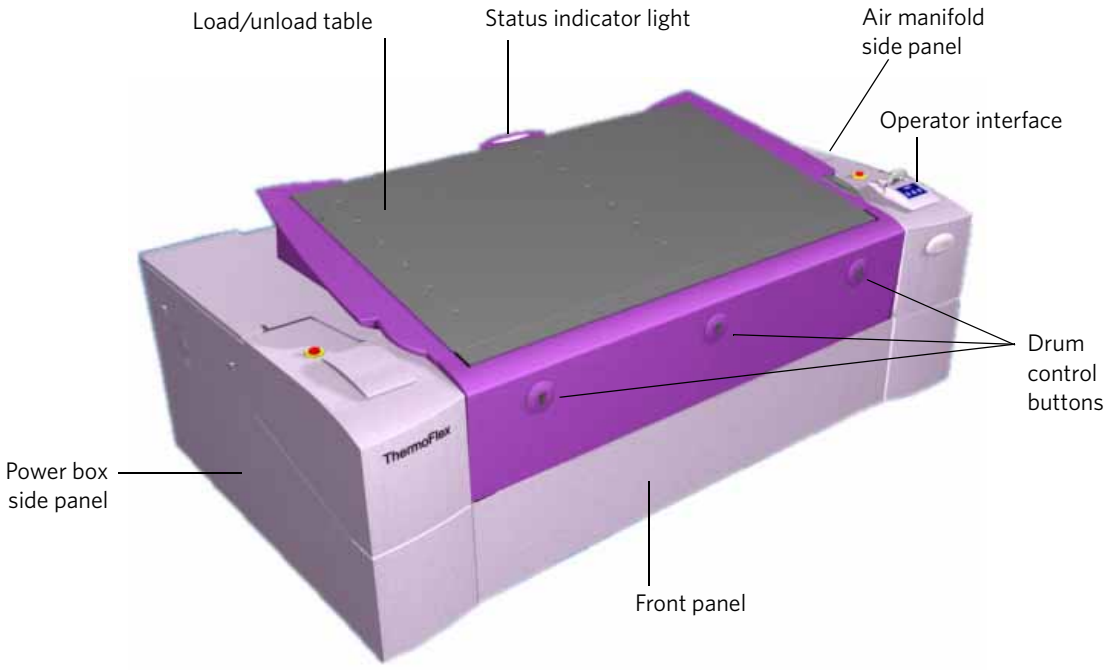


Figure 1: Front view of the device

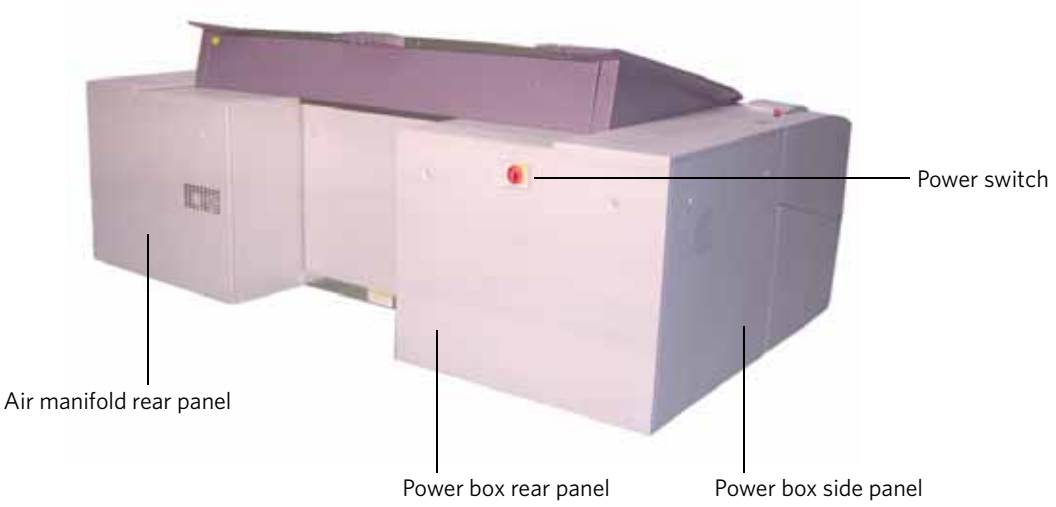


Figure 2: Rear view of the device

Important: Do not open the device more often than is absolutely necessary. Opening access panels is unavoidable but should be kept to a minimum to reduce the accumulation of dust in and around sensitive components.

Accessories

Mandrel

The mandrel supports the sleeve during imaging. The two-piece mandrel is made up of the arbor and a shell.



Figure 3: Mandrel

Arbor

The arbor is used as a replacement for the drum when the device is in sleeve mode. The arbor supports the shell.



Figure 4: Arbor

Shell

The shell is mounted on the arbor and is used to carry the sleeve during imaging. Shells are available in many sizes; these sizes are usually based on desired sleeve diameters.



Figure 5: Shell

Mandrel Air Buttons

The Mandrel Air buttons are located in two areas:

- Beside the tailstock
- Beside the headstock

Use the buttons to move the sleeve on and off the mandrel. When the Mandrel Air button is pressed, it blows air from the mandrel and allows the sleeve to move (as on a cushion of air).

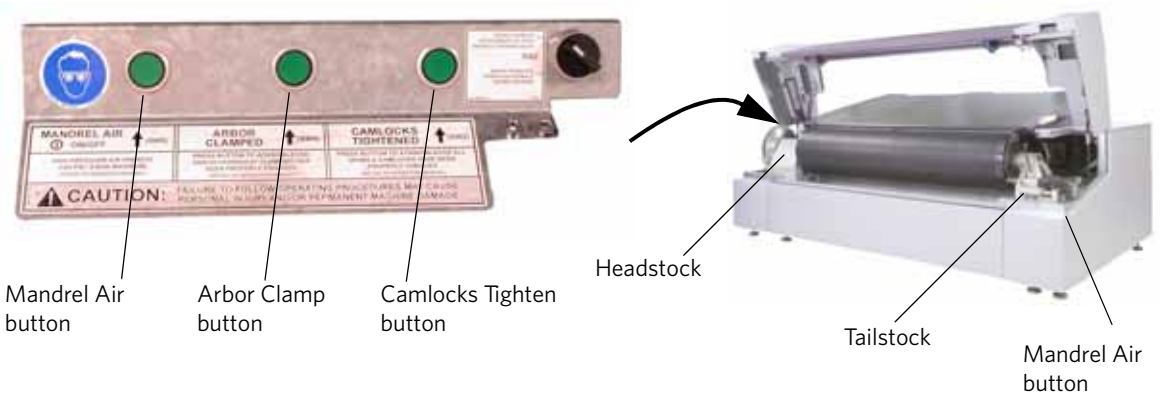


Figure 6: Mandrel Air, Arbor Clamp, and Camlocks Tighten buttons

Camlocks Tighten Button

The Camlocks Tighten button is located beside the headstock. See Figure 6.

When you convert to either drum or sleeve mode, you must tighten the camlocks. After you tighten the camlocks, the Camlocks Tighten button flashes until you press it.

CAUTION: Failure to tighten the camlocks will result in damage to the device.

Arbor Clamp Button

The Arbor Clamp button is located beside the headstock. See Figure 6 on page 10.

When you convert to sleeve mode and have installed a shell, you must tighten the arbor hydraulic clamp. After you have tightened the hydraulic clamp, the Arbor Clamp button flashes until you press it.

CAUTION: Failure to tighten the arbor hydraulic clamp will result in damage to the device.

External System Components

The ThermoFlex Wide II Sleeve Mode system includes the following components in addition to the device and workstation.

Chiller

The chiller is attached to the device and is used to maintain a constant temperature within the thermal head. The chiller is connected to the device by two coolant hoses and a power cable. The chiller operation is controlled by the device.

For more information, see the *Chiller Operator Manual*.



Figure 7: Chiller

Universal Debris Removal Cabinet

The Universal Debris Removal Cabinet (UDRC) is an external device used to remove airborne emissions released by certain types of media during imaging.

The UDRC is available in two configurations:

- UDRC-B
- UDRC-L.

The B configuration has a particulate filter and is vented externally. The L configuration has a particulate filter and a chemical filter and is vented indoors.

The cabinet is connected to the device by a vacuum hose and a data cable.

For more information, see the *Universal Debris Removal Cabinet Operator Guide* (03-4200) and *Replacing the UDRC Filters* on page 67.



Figure 8: UDRC

Production Hub

The production hub is an external device that you use to load and unload shells and sleeves. You can align shells and sleeves with the arbor once the arbor has been mounted in the ThermoFlex Wide II Sleeve Mode device.

The production hub rotates 350° on the base so that the hub can be aligned with the mandrel or a premounting device.

The production hub uses two types of shafts that are held in place on the carriage with a swivel clamp:

- Shell shaft—Use the shell shaft to load and unload shells on the arbor or premounter arbor.
- Processor shaft—Use the processor shaft to load and unload sleeves from the device or from a third-party premounting device.



Figure 9: Production hub showing a shell shaft

The carriage moves forward and backward to align the shaft with the arbor on the device or with a premounting device. An auto-locking wheel on the carriage prevents it from moving while you are loading or unloading onto the production hub.

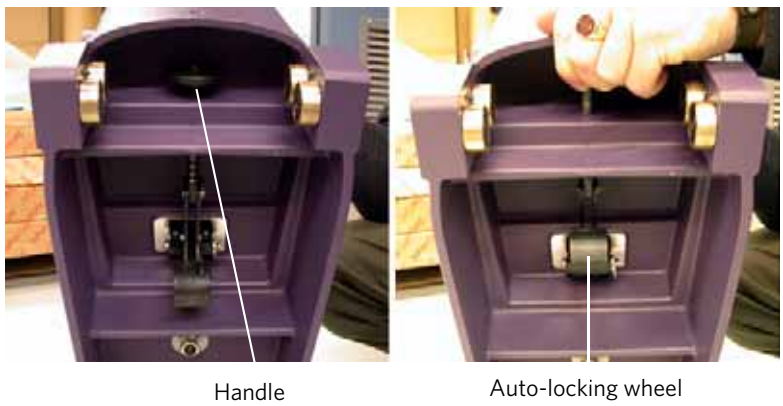


Figure 10: Production hub carriage

Transport Cart

The transport cart is an external device that you use to transport arbors and shells. When you move arbors and shells, you must refer to the weight restrictions displayed on the transport cart safety label. You can also use the transport cart to move sleeves, to keep media handling to a minimum.



Figure 11: Transport cart carrying an arbor

Environmental Specifications

The ThermoFlex Wide II Sleeve Mode should be installed in a clean prepress area (in accordance with *ThermoFlex Sleeve Device Site Preparations and Requirements Guide* (73-3186)).

The ThermoFlex Wide II Sleeve Mode device requires the following operating conditions:

- Temperature: 17° C–25° C (63° F–77° F)
- Relative humidity: 30 percent–70 percent RH, non-condensing[1]
- Prepress platemaking environment

For information on noise emissions in an office environment, see the *ThermoFlex Output Devices Safety Guide*.

Required Operating Conditions

The ThermoFlex Wide II Sleeve Mode device uses a thermal imaging head and does not require a darkroom.

1. Flexographic media is very sensitive to humidity change. All media must be imaged at the same humidity value within the specified range.

Maintenance Supplies

Your device requires the following maintenance supplies:

Use only Kodak-authorized filters. Your device may not operate properly if you try to use a substitute or unauthorized filter.

Table 1: Maintenance supplies from Kodak

Item	Description
Debris filters	The ThermoFlex Wide II Sleeve Mode is equipped with a debris removal system. See *Replacing the UDRC Filters* on page 67.
Intake air filter	Filters that are used in the device to maintain the air quality. See *Intake Air Filter* on page 65.
Air supply filter kit	This kit contains the particulate and coalescing filters for the compressed air supply. See *Compressed Air Supply Filters* on page 57.
Arbor maintenance kit	This kit contains absorbent pads for the arbor. See *Replacing the Arbor Absorbent Pad* on page 54.

Media

Supported Media

Use only media qualified by Kodak for use in your device. For the most current information on supported media, contact your service representative.

On installation, the device is configured with the media sizes that you will use. The imaging parameters for all qualified media are preset and cannot be changed. However, you can modify the media sizes in Print Console. For more information, see the Print Console online help.



WARNING: Imaging unqualified media may result in the release of unknown airborne emissions that are not properly filtered and may result in exposure to airborne emissions in excess of obligatory regulatory limits and in possible discomfort, illness, injury, and/or disability.



CAUTION: Do not use non approved or light-sensitive media in a ThermoFlex Wide II Sleeve Mode device equipped with a thermal imaging head. Failure to use approved thermal media can seriously damage the device.

Media Sizes Supported

The ThermoFlex Wide II Sleeve Mode supports the following media sizes. The repeat and media width depend on the size of arbor shipped with the device.

Table 2: Media sizes supported

Arbor Size	Repeat	Maximum Width
Small	304.8 mm–444.5 mm 12 in.–17.5 in.[a]	1650 mm 65 in.
Standard	381 mm–1066.8 mm 15 in.–42 in.	1830 mm 72 in.

a. A bridge sleeve or buildup sleeve is required to reach this repeat. This sleeve maximum repeat is 14.999 in.

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Operations

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Turning On the ThermoFlex Wide II Sleeve Mode System

Warm-up Time

The ThermoFlex Wide II Sleeve Mode device can take two to three minutes to warm up after it is turned on. You cannot image media while the device is warming up. Files submitted to be imaged wait on the workstation until the device is ready.

To turn on the device:

1. Turn on the device by turning the power switch clockwise.

   The power switch is located at the rear of the device, on the power box rear panel.

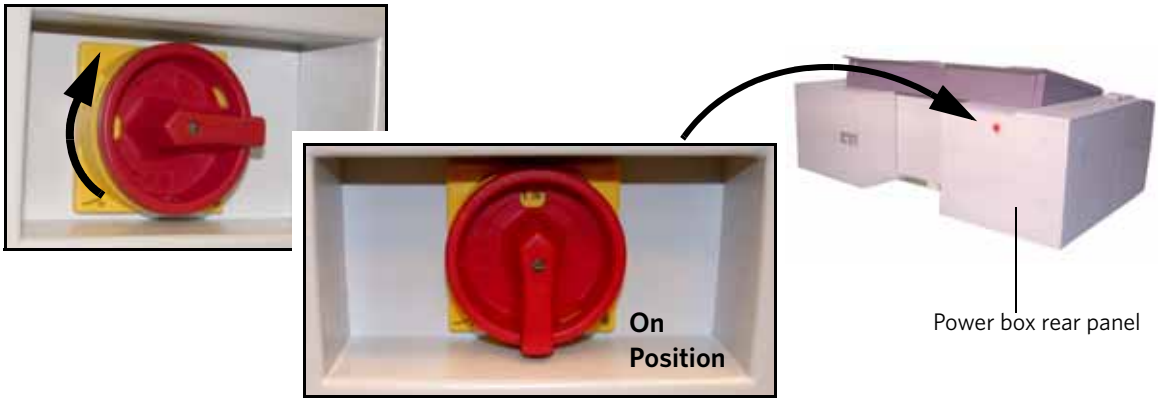


Figure 12: Turning the power switch to the On position

2. Ensure that the workstation is turned on.

   For information on turning the workstation on or off, see your workstation documentation.

3. Start Print Console.

   For details on starting Print Console, see the *Print Console Quick Start Guide*.

   When the device is ready, the status indicator light on the operator interface is off.

Turning Off the ThermoFlex Wide II Sleeve Mode System

You normally leave the workstation running at all times.

For information about quitting Print Console, see the *Print Console Quick Start Guide* or the Print Console online help. For information about shutting down your workstation, see your workstation documentation.

Note: Before you turn off the device, remove all media from the drum or mandrel.

To turn off the device:

1. Turn off the device by turning the power switch counterclockwise.

   The power switch is located at the rear of the device, on the power box rear panel.

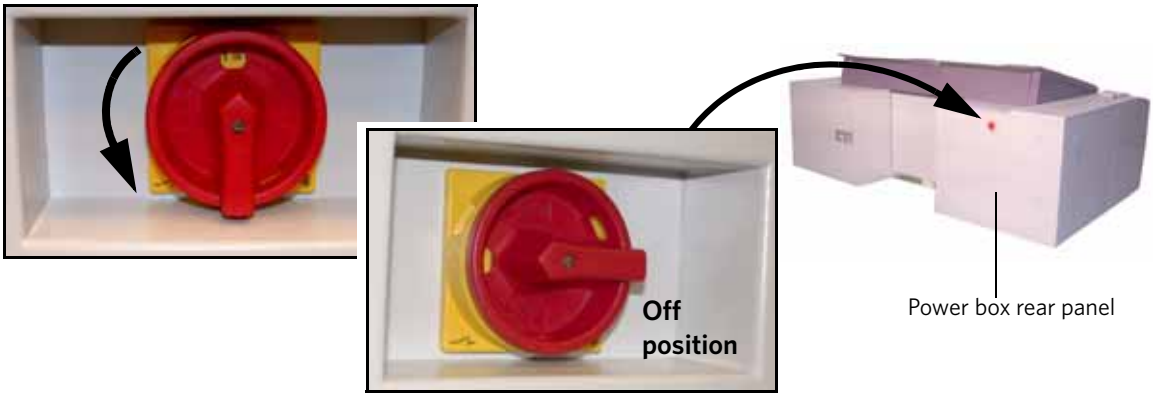


Figure 13: Turning the power switch to the Off position

In Sheet Mode

When the device operates in sheet mode, it uses the imaging drum to image flexographic media (plates and film). The drum is secured to the device with the headstock and tailstock. When the device is not being used in sheet mode, the drum is lowered into the drum cradle.

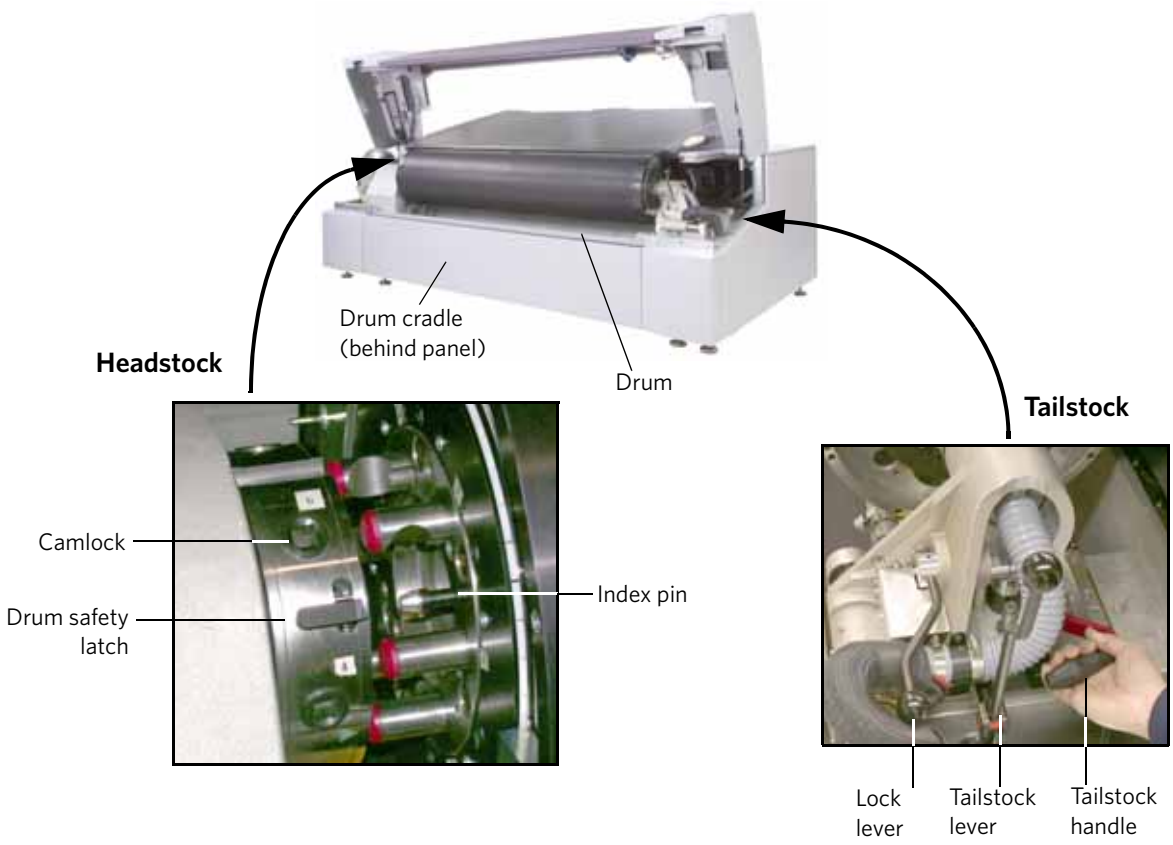


Figure 14: Internal parts for the headstock and tailstock

To convert the device to sheet mode if it is in sleeve mode, see *From Sleeve Mode to Sheet Mode* on page 36.

In Sleeve Mode

To convert the device from Sheet mode to Sleeve mode, see *From Sheet Mode to Sleeve Mode* on page 31.

A device operating in sleeve mode uses an arbor and shell for the basis of sleeve imaging. This combination is known as a two-piece mandrel. You can image either continuous (seamless) sleeve or plate-on-sleeve (POS) formats.

- With continuous sleeve, the continuous photopolymer sleeve is loaded onto the shell. Continuous sleeves only require rectangularization. Rectangularization is achieved using software called Sleeve Toolkit. For information on how to use Sleeve Toolkit, see the *Sleeve Toolkit User Guide* (717-00103A).
- With plate-on-sleeve, you must cut and mount your own media onto a sleeve and then load it onto the shell. This type of sleeve requires both seam definition and rectangularization. See the *Sleeve Toolkit User Guide* (717-00103A).



Figure 15: Imaging in sleeve mode

Imaging Sleeve Media

1. In Print Console, submit the file you want to image.

   For the procedure, see the Print Console online help.
2. Ensure that the device is ready to accept media for imaging.

   Check that:

   - Print Console displays the Load Flexographic Sleeve dialog box. It tells you the size and type of media to load.
   - The Status Indicator lights are off.
3. Make sure the shell size is correct.

   See *Installing Shells* on page 22.
4. Load sleeve media.

   See *Loading Sleeve Media* on page 24.
5. Inspect the media on the sleeve.

   See *Inspecting Sleeve Media* on page 27.

6. Turn the brake override switch to the Brake Operation position.
7. Close the front panel.

   See *Opening and Closing the Front Panel* on page 46.
8. Close the load/unload table.

   The device begins imaging.

Installing Shells

You must have a shell installed over the arbor in order to image a sleeve.

The sleeve size must correspond with the correct shell size. To image a sleeve of a different size, you must remove the existing shell and load the correct size or use a repeat building sleeve.



Figure 16: Shell

To install a shell:

1. Ensure the device is not imaging media.
2. If your shell is stored with the shell support shaft already in it, then use the transport cart to load the shell/shaft onto the production hub. See *Transport Cart Operation* on page 30 and *Production Hub Operation* on page 29.
   a. Undo the swivel clamp on the production hub.
   b. Lower the shell/shaft onto the production hub. The rear of the shaft must be flush with the rear of the swivel clamp.
   c. Tighten the clamp.
3. If your shell is stored without the shell support shaft:
   a. Undo the swivel clamp on the production hub.
   b. Use the transport cart to lower the support shaft onto the production hub. The rear of the shaft must be flush with the rear of the swivel clamp.
   c. Tighten the clamp.
   d. With the aid of a helper, slide the shell onto the support shaft. The shell end with the air holes must go onto the shaft first.
4. Open the front panel of the device.

   See *Opening and Closing the Front Panel* on page 46.
5. Turn the Brake Override switch to the brake override position.

6. Uncouple the tailstock from the arbor:
   a. Pull back on the Lock Lever.
   b. Pull back on the Tailstock Lever.
   c. Lift up on the Tailstock Handle.

   The arbor is now supported only by the headstock.
7. Position the production hub until the shell support shaft lines up with and seats on the arbor.
8. Slide the shell onto the arbor and move the production hub away from the device.
9. Couple the tailstock back to the arbor:
   a. Push to the right on the Tailstock Handle.
   b. Push forward on the Tailstock Lever.
   c. Rotate up on the Lock Lever.

Important: The tailstock must be engaged with the arbor prior to tightening the arbor hydraulic clamp to ensure best sleeve accuracy.

10. The Arbor Clamp button will flash and you will hear a beep.

    You can now tighten the arbor hydraulic clamp with an 8-mm hex key. Tighten the screw until the pin in the center of the screw pushes the hex key out of the screw and prevents further tightening.

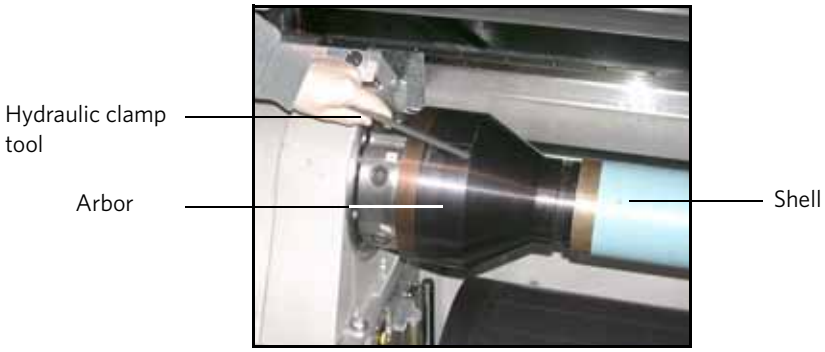


Figure 17: Tighten arbor hydraulic clamp

11. Press the flashing Arbor Clamp button to acknowledge that you have tightened the arbor clamp.

CAUTION: Failure to tighten the arbor hydraulic clamp will result in damage to the device.

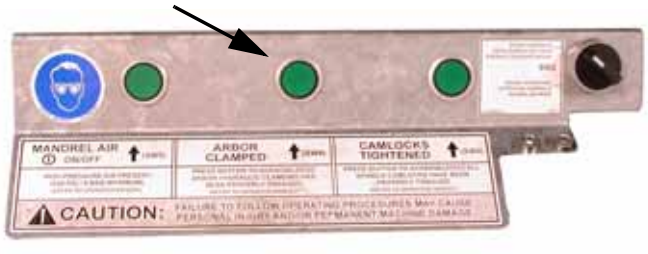


Figure 18: Arbor Clamp button

The Arbor Clamp button stops flashing.

The device is now ready to begin imaging.

12. Turn the Brake Override switch to the brake operation position.

To remove a shell:

1. Ensure the device is not imaging media.
2. Open the front panel.

   See *Opening and Closing the Front Panel* on page 46.
3. Turn the Brake Override switch to the brake override position.
4. If the shell support shaft is not on the production hub, undo the swivel clamp on the production hub, mount the shell shaft, and fasten the swivel clamp.
5. Uncouple the tailstock from the arbor (see *Uncoupling the tailstock* on page 33):
   a. Pull back on the Lock Lever.
   b. Pull back on the Tailstock Lever.
   c. Lift up on the Tailstock Handle.

   The arbor and shell are now only supported by the headstock.
6. Position the production hub so that the shaft can receive the shell from the arbor.
7. Slide the shell off the arbor and onto the shell support shaft.
8. Pull the production hub carriage all the way back away from the device.
9. Use the transport cart to remove the shell or shell/shaft combination from the production hub. See *Transport Cart Operation* on page 30.

   Lower the support arms before moving the cart to a safe location.

Loading Sleeve Media

Sleeves are hollow tubes upon which media are mounted—you can purchase continuous sleeves or premount the media yourself. The sleeves fit over the mandrel and are then imaged.

For details of the media sizes you can use with the ThermoFlex Wide II Sleeve Mode, see *Media Sizes Supported* on page 15.

This section describes two procedures for loading sleeve media:

- With the processor hub and processor shaft
- Without the processor hub and processor shaft

CAUTION: Operators must wear safety goggles when loading sleeve media because air is ejected from holes in the shell under high pressure. Failure to protect your eyes from airborne particles could result in injury.

CAUTION: Failure to use approved thermal media can seriously damage the device. Do NOT use non approved or light-sensitive media in a ThermoFlex Wide II Sleeve Mode equipped with a thermal imaging head.



Figure 19: Sleeve with end cap (on processor shaft)

Loading Sleeves

To load a sleeve onto the shell:

1. Open the front panel.

   See *Opening and Closing the Front Panel* on page 46.
2. Turn the Brake Override switch to the brake override position.
3. Uncouple the tailstock from the arbor:
   a. Pull back on the Lock Lever.
   b. Pull back on the Tailstock Lever.
   c. Lift up on the Tailstock Handle.

   The arbor and shell are now only supported by the headstock.
4. Move the sleeve gently, but firmly, onto the end of the shell.

   The edge of the sleeve should just cover the air holes on the end of the shell. Do not force the sleeve any further.
5. Press the air bearing button near the tailstock to turn the air on.
6. Gently push the sleeve onto the shell until the end of the sleeve is flush with the end of the shell.

   Do not force the sleeve any further.
7. Press the air bearing button to turn the air off.

8. Couple the tailstock back to the arbor:
    a. Push to the right on the Tailstock Handle.
    b. Push forward on the Tailstock Lever.
    c. Rotate up on the Lock Lever.

The device is now ready to begin imaging the sleeve.

Loading Sleeves Using the Production Hub and Processor Shaft (Optional)

To load a sleeve on the production hub:

1. Remove the end piece from one side of the processor shaft and store it in a safe location.
2. Screw the production hub adapter into the processor shaft where the end piece was removed.
3. Insert the production hub adapter end of the processor shaft into the processor shaft adapter on the production hub.
4. Open the swivel clamp on the production hub and mount the processor shaft adapter. Fasten the swivel clamp.
5. Screw in the arbor adapter where the end piece was removed.
6. Put the sleeve clamp onto the processor shaft and slide it to the far end of the shaft—the gasket side of the clamp faces the device.
7. With the aid of an assistant, install an end cap and intermediate disk in the sleeve and slide it onto the processor shaft. Take care not to touch the media on the sleeve.

To load a sleeve onto the shell:

1. Open the front panel.

    See *Opening and Closing the Front Panel* on page 46.
2. Turn the Brake Override switch to the brake override position.
3. Uncouple the tailstock from the arbor:
    a. Pull back on the Lock Lever.
    b. Pull back on the Tailstock Lever.
    c. Lift up on the Tailstock Handle.

    The arbor and shell are now only supported by the headstock.
4. Position the production hub until the arbor adapter on the processor shaft lines up with and seats on the arbor.
5. Move the sleeve gently, but firmly, onto the end of the shell—push from the end of the sleeve with the end cap.

    The edge of the sleeve should just cover the air holes on the end of the shell. Do not force the sleeve any further.

6. Press the air bearing button near the tailstock to turn the air on.
7. Grab the sleeve at its tailstock end and push firmly towards the headstock.
8. Stop pushing when the sleeve is flush with the end of the shell.
9. Press the air bearing button to turn the air off.
10. Unlock the production hub carriage and pull it away from the device.
11. Couple the tailstock back to the arbor:
    a. Push to the right on the Tailstock Handle.
    b. Push forward on the Tailstock Lever.
    c. Rotate up on the Lock Lever.

The device is now ready to begin imaging the sleeve.

Inspecting Sleeve Media

If using plate-on- sleeve media, you should inspect the loaded sleeve prior to imaging.

Plate-On-Sleeve Media

Prior to closing the front panel, check the loaded sleeve for:

- Damage during handling
- The correct index position

If you discover any problems, cancel the job, remove the sleeve, and repair the problem.

To inspect plate-on-sleeve media:

1. Rotate the drum:
    a. Turn the Brake Override switch to the brake override position.
    b. Rotate the drum by hand to inspect the media.
2. Check the media using raking light (a reflected, low-angle light).

    Very small bumps and ripples do not cause image artifacts. Large bumps are caused by dust and debris being trapped between the media and the sleeve. They will cause image artifacts.

    If there are significantly large debris bumps, cancel the job and remove the sleeve to remount the media.
3. When you finish inspecting the media, turn the Brake Override switch to the brake operation position.
4. Close the front panel and the load/unload table to begin the imaging process.

Continuous Sleeve

There should be no need to inspect continuous sleeves because they are purchased direct from the manufacturer.

Unloading Sleeve Media

When the Unload dialog box is displayed on the workstation, you can remove the imaged sleeve from the device.

This section describes two procedures for unloading sleeve media:

- With the processor hub and processor shaft
- Without the processor hub and processor shaft



CAUTION: Operators must wear safety goggles when unloading sleeve media because air is ejected from holes in the shell under high pressure. Failure to protect your eyes from airborne particles could result in injury.

Unloading Sleeves

To unload sleeves:

1. Ensure that the device has finished imaging.

   When imaging is finished:

   - The workstation displays the Unload dialog box.
   - The Status Indicator light flashes blue.
2. Open the front panel.

   See *Opening and Closing the Front Panel* on page 46.
3. Uncouple the tailstock from the arbor:

   a. Pull back on the Lock Lever.

   b. Pull back on the Tailstock Lever.

   c. Lift up on the Tailstock Handle.

   The arbor is now supported only by the headstock.
4. Push the Arbor Air button next to the tailstock and pull the sleeve off the shell.
5. Stop the arbor air once the shell air holes have been cleared. Then completely remove the sleeve from the shell.

Unloading Sleeves Using the Production Hub and Processor Shaft (Optional)

To unload sleeves:

1. Ensure that the device has finished imaging.

   When imaging is finished:

   - The workstation displays the Unload dialog box.
   - The Status Indicator light flashes blue.

2. Open the front panel.

   See *Opening and Closing the Front Panel* on page 46.

3. Uncouple the tailstock from the arbor:

   a. Pull back on the Lock Lever.

   b. Pull back on the Tailstock Lever.

   c. Lift up on the Tailstock Handle.

   The arbor is now supported only by the headstock.

4. The processor shaft and arbor adapter should still be mounted on the production hub.

   If not, see *Loading Sleeves Using the Production Hub and Processor Shaft (Optional)* on page 26.

5. Position the production hub so that the processor shaft lines up with and seats on the arbor.

6. Push the Arbor Air button next to the tailstock and pull the sleeve off the shell.

7. Stop the arbor air once the shell air holes have been cleared. Then completely remove the sleeve from the shell.

8. Pull the production hub all the way back and turn it away from the arbor.

9. Put an end cap in the open end of the sleeve and put a clamp on the processor shaft with the gasket side facing inwards.

10. Center the sleeve on the shaft and tighten the end cap clamp closest to the production hub carriage. Move the other clamp up against the other end cap.

11. Use a clamp tightener on the processor shaft to squeeze the sleeve in between the two clamps.

12. Tighten both clamps with a 6-mm hex key and remove the clamp tightener.

13. Remove the arbor adapter and screw in the processor shaft end piece.

14. Position the support arms of the transport cart under the processor shaft and grab the clamped sleeve assembly with the tailstock hook in the groove on the clamp. Remove it from the processor shaft adapter on the production hub.

15. Remove the production hub adapter from the shaft and screw in the other processor shaft end piece.

16. Transport the shaft and sleeve to the exposure unit and processor line.

Production Hub Operation



WARNING: Before rotating the production hub, ensure that no equipment or personnel are in the path of the production hub shaft. The shaft could cause serious injury and/or damage to the device.



Figure 20: Production hub

To operate the carriage:

1. Pull and hold the handle on the underside of the carriage.
2. Move the carriage to the desired position.
3. Release the handle to lock it into place.

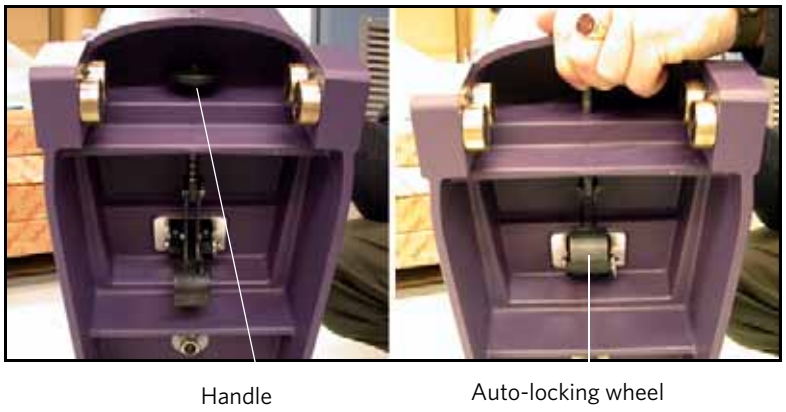


Figure 21: Underside of the production hub carriage

Transport Cart Operation

To raise and lower the load:

1. Center the load.
2. Raise the load by firmly grasping the winch handle and rotating it clockwise.
3. Lower the load by firmly grasping the winch handle and rotating it counterclockwise. After lowering the load to the desired position, turn the winch handle clockwise (raise load) one-quarter turn to set the brake.

To transport an arbor:

➢ Move the locking pin on the transport cart hook to the upper hole.



Figure 22: Locking pin in upper hole

To transport a shell or sleeve:

➢ Move the locking pin on the transport cart hook to the lower hole.

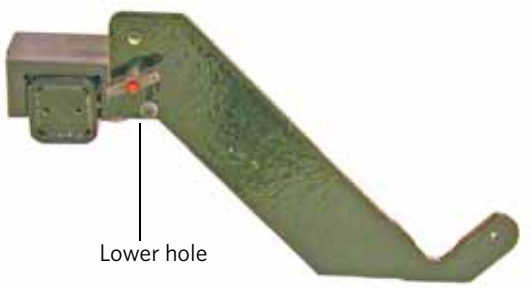


Figure 23: Locking pin in lower hole

After Each Use

Select a safe storage location for the transport cart that has a firm, level surface, is weather protected, and is clear of obstructions and traffic.

From Sheet Mode to Sleeve Mode

If your device is currently in sheet mode and you want to switch to sleeve mode, the drum must be lowered so that the mandrel can be mounted.

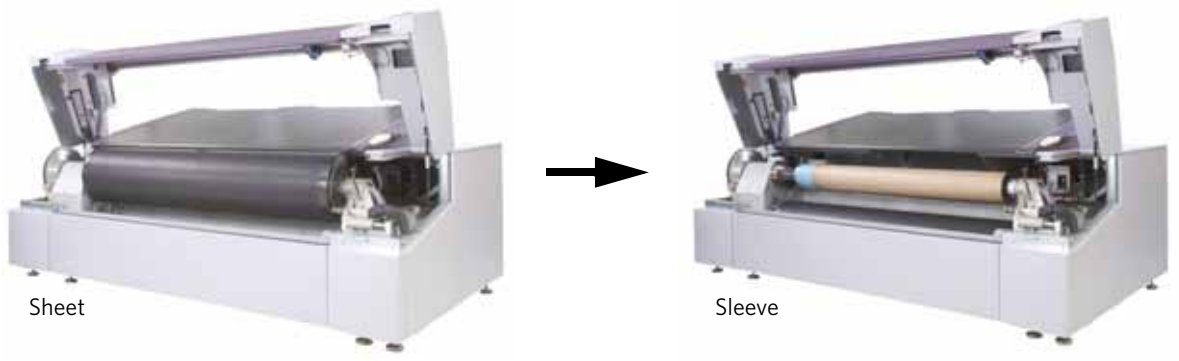


Figure 24: Changing from sheet to sleeve mode

To switch from sheet mode to sleeve mode:

1. Using Print Console, submit a sleeve job.
2. Ensure the device is not imaging media.
3. Open the front panel.

   See *Opening and Closing the Front Panel* on page 46.
4. Turn the Brake Override switch to the brake override position.

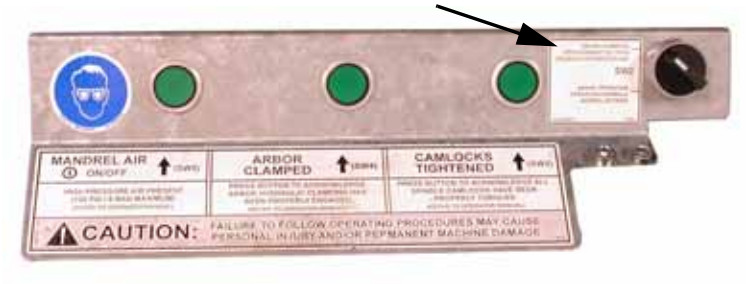


Figure 25: Turn drum Brake Override switch to override

5. Loosen the camlocks on the headstock spindle using the torque wrench (counterclockwise direction).

   You do not need to follow a sequence for loosening the camlocks.



Figure 26: Loosen camlocks on spindle with torque wrench

6. Rotate the drum until the Drum Safety Latch is accessible from the front. Do not move the safety latch until step 8.

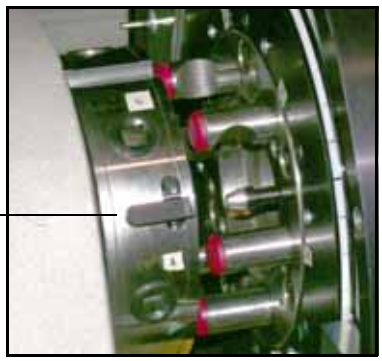


Figure 27: Drum Safety Latch

7. Raise the drum cradle by pressing the Up Hoist switch.

   You must keep the switch continuously pressed. The drum cradle will automatically stop and you will hear a beep when it reaches its predesignated height.

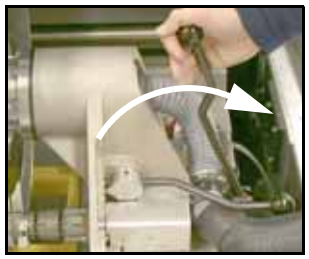


Figure 28: Hoist switch—up

8. Uncouple the tailstock from the drum:
   a. Pull back on the Lock Lever.
   b. Pull back on the Tailstock Lever.
   c. Lift up on the Tailstock Handle.



Lock Lever



Tailstock Lever



Tailstock Handle

Figure 29: Uncoupling the tailstock

9. Pull down on the Drum Safety Latch while moving the Transfer Lever on drum cradle up and to the left.

   The drum now sits on the drum cradle without any headstock or tailstock attachments.

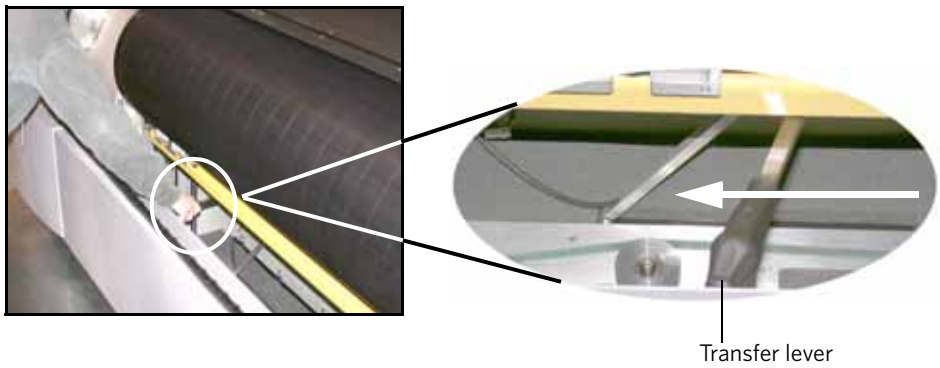


Figure 30: Slide the drum onto the drum cradle

10. Lower the drum into the drum cradle compartment by pressing the Down hoist switch.



Figure 31: Hoist switch—down

11. Place the drum blanket over the drum when the drum is at the bottom of the drum cradle compartment.
12. Using a lint-free cloth and 100 percent isopropyl alcohol, clean the mating surfaces of the headstock spindle and the arbor's headstock side. Make sure there is no debris that will prevent a good mechanical connection between the arbor and spindle.
13. Using a fresh lint-free cloth, apply a light coating of a light oil such as WD-40®.
14. Using the transport cart, move the arbor into its imaging position.

    See *Transport Cart Operation* on page 30.



Figure 32: Move arbor into position with transport cart

15. Rotate the spindle until the index pin aligns with the index pinhole on the headstock spindle.

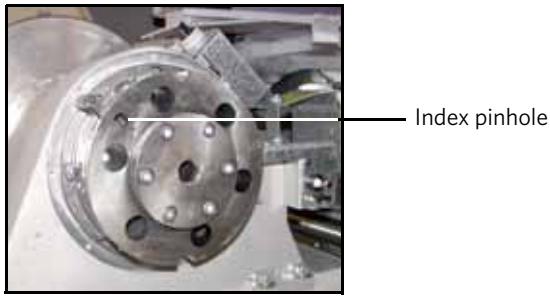


Figure 33: Align index pin with index pinhole on headstock

16. Push the arbor into the headstock spindle.
17. Using a lint-free cloth and 100 percent isopropyl alcohol, clean the tailstock journal of the arbor.
18. Using a fresh lint-free cloth, apply a light coating of WD-40 or other light oil on the tailstock journal of the arbor.
19. Couple the tailstock to the arbor:
    a. Push to the right on the Tailstock Handle.
    b. Push forward on the Tailstock Lever.
    c. Rotate up on the Lock Lever.

    Important: The tailstock must be engaged with the arbor prior to tightening the camlocks to ensure best sleeve accuracy.
20. Lower the support arms of the transport cart and remove it.
21. Tighten the camlocks on the headstock spindle using the torque wrench (clockwise direction).

    Torque is properly set when the torque wrench makes an audible “click”.

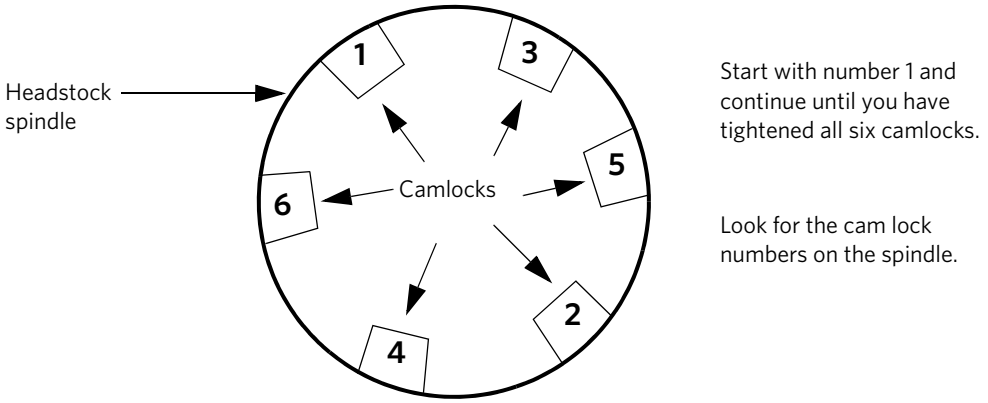


Figure 34: Tighten camlocks in specified order

22. Press the flashing Camlock Tighten button to acknowledge that you have tightened the camlocks.

CAUTION: Failure to tighten the camlocks will result in damage to the device.

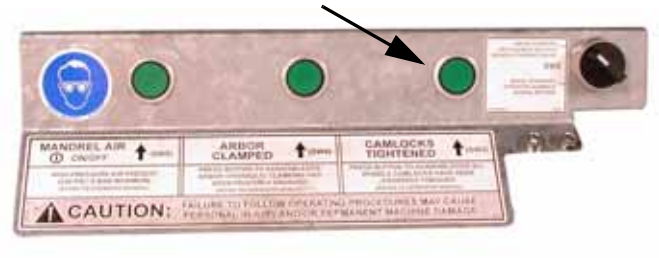


Figure 35: Camlocks Tighten button

The Camlocks Tighten button stops flashing.

23. Turn the Brake Override switch to the normal position.
24. Close the front panel.

    See *Opening and Closing the Front Panel* on page 46.

    The device is now ready to operate in sleeve mode.

From Sleeve Mode to Sheet Mode

If your device is currently in sleeve mode and you want to switch to sheet mode, the shell and arbor must be removed so that the drum can be raised.

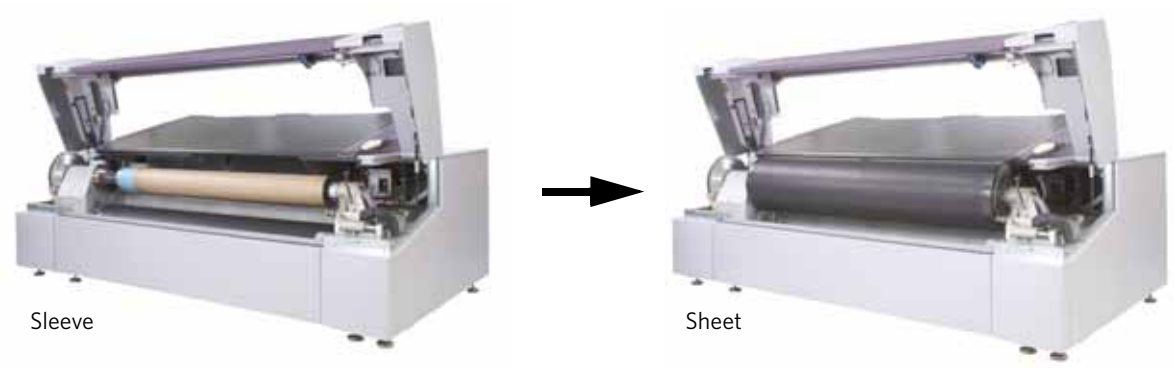


Figure 36: Changing from sleeve to sheet mode

To switch from sleeve mode to sheet mode:

1. Using Print Console, submit a sheet job.
2. Ensure the device is not imaging media.
3. Open the front panel.

   See *Opening and Closing the Front Panel* on page 46.

4. Remove the shell from the arbor.

   See the instructions for removing a shell under *Installing Shells* on page 22.

5. Couple the tailstock to the arbor:
   a. Push to the right on the Tailstock Handle.
   b. Push forward on the Tailstock Lever.
   c. Rotate up on the Lock Lever.
6. Turn the drum Brake Override switch to the brake override position.
7. Loosen the camlocks on the headstock spindle using the torque wrench.

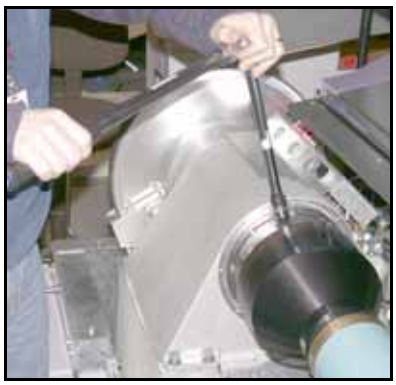


Figure 37: Loosen camlocks on spindle using torque wrench

You do not need to follow a sequence for loosening the camlocks.

Position the transport cart under the arbor and raise the support arms until they lightly support the arbor.

See *Transport Cart Operation* on page 30.



Figure 38: Position transport cart to remove arbor

8. Uncouple the tailstock from the arbor:
   a. Pull back on the Lock Lever.
   b. Pull back on the Tailstock Lever.
   c. Lift up on the Tailstock Handle.

   The tailstock end of the arbor now sits on the support arms of the transport cart.

9. Pull down on the Safety Latch and manually shift the arbor out of the headstock.

   The arbor now sits fully on the support arms.

10. Use the transport cart to remove the arbor:

    a. Raise the support arms until the arbor is fully clear of the headstock and tailstock.

    b. Move the transport cart away from the device.

    c. Lower the support arms and move arbor to a safe location.

11. Using a lint-free cloth and isopropyl alcohol, clean the mating surfaces of the headstock spindle. Make sure there is no debris that will prevent a good mechanical connection between the drum and the spindle.

12. Using a fresh lint-free cloth, apply a thin film of WD-40 or other light oil to the surfaces.

13. Remove the drum blanket from the drum.

14. Raise the drum from the drum cradle compartment by pressing the Up Hoist switch.

    You must keep the switch continuously pressed. The drum will automatically stop when it reaches its predesignated level and you will hear a beep.



Figure 39: Hoist switch—up

15. Clean the mating surface of the drum where it will mount onto the headstock spindle.

16. Align the index pin on the drum with the safety latch on the headstock by rotating the spindle, and then move the Transfer Lever on the drum cradle up and to the right.

    This action slides the drum pins into the headstock spindle holes.

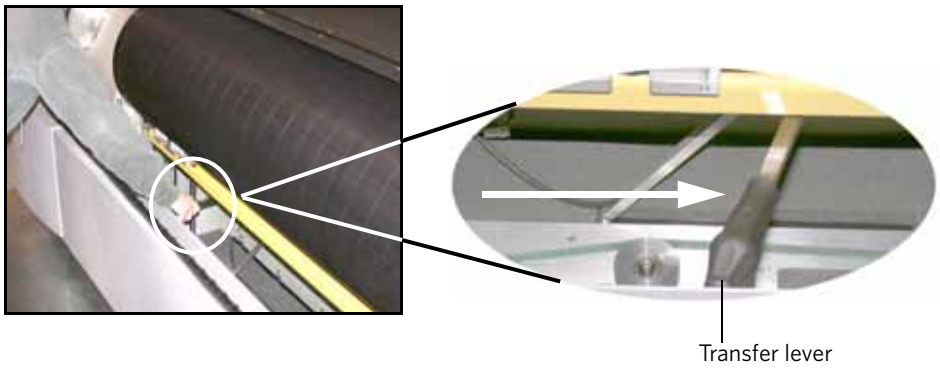


Figure 40: Slide the drum onto the drum cradle

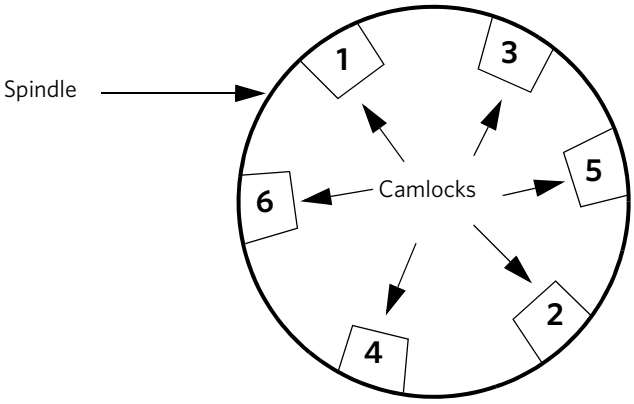
17. Using a lint-free cloth and 100 percent isopropyl alcohol, clean the tailstock journal of the drum.
18. Using a fresh lint-free cloth, apply a thin layer of WD-40 or other light oil.
19. Couple the tailstock to drum:
    a. Push to the right on the Tailstock Handle.
    b. Push forward on the Tailstock Lever.
    c. Rotate up on the Lock Lever.

    The Camlocks Tighten button flashes and you will hear a beep.
20. Lower the drum cradle into the drum cradle compartment by pressing the Down hoist switch. You will hear a beep when the drum hoist is all the way down.



Figure 41: Hoist switch—down

21. Tighten the camlocks on the headstock spindle using the torque wrench until they lock.



Start with number 1 and continue in sequence until you have tightened all six camlocks.

Look for the camlock numbers on the spindle.

Figure 42: Tighten camlocks in specified order

22. Press the flashing Camlocks Tighten button to acknowledge that you have tightened the camlocks.

CAUTION: Failure to tighten the camlocks will result in damage to the device.

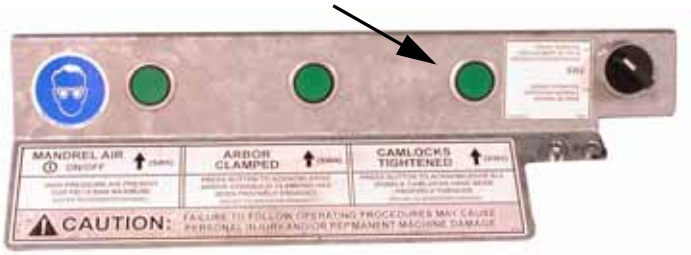


Figure 43: Camlocks Tighten button

The Camlocks Tighten button stops flashing.

23. Turn the Brake Override switch to the brake operation position.
24. Close the front panel.

See *Opening and Closing the Front Panel* on page 46.

The device is now ready to operate in sheet mode.

4 Maintenance

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Cleaning the Shell Surface 54
Replacing the Arbor Absorbent Pad 54
Cleaning the Shell Air Holes 56
Replacing Air Filters 56
Checking the Chiller Coolant Level 67
Replacing the UDRC Filters 67

This chapter describes the standard maintenance procedures that are required to keep the ThermoFlex Wide II Sleeve Mode device operating properly.

Maintenance Schedule

Table 3 on page 43 outlines the maintenance required to achieve optimum performance and quality from your device. Failure to perform this maintenance can result in poorer performance and can cause serious damage to your device. Although it requires several hours of scheduled downtime, regular maintenance ensures that your device is properly maintained and minimizes unscheduled downtime.

Keep records of when you perform maintenance on the device.

If you have a Kodak service contract, you should schedule service visits by a service representative every six months. However, if your operating conditions require maintenance more frequently, we strongly recommend that you perform these maintenance procedures prior to a service visit.

Important: Before performing any maintenance procedure, ensure that the device is not imaging media and turn off the device. If you turn off the device while it is imaging, the imaging process stops and the plot is lost.

Table 3: Schedule of recommended maintenance procedures

Frequency	Description	Action	Maintenance Procedure
Daily	Arbor surface and hydraulic clamps	Clean	See page 53
Daily	Shell surface	Clean	See page 54
Weekly	Debris removal nozzle	Clean	See page 47
Weekly	Exterior surfaces	Clean	See page 44
Weekly	Intake air filter	Inspect	See page 65
Monthly	Compressed air filter bowls	Clean	See page 57
Monthly	TFX Head window	Inspect	See page 50
Every three months	Intake air filter	Replace	See page 65
Every six months	Compressed air supply filters	Replace	See page 57
Every six months	External chiller coolant	Check	See the *Chiller Operator Manual*
As needed	Arbor absorbent pads	Replace	See page 54
As needed	Shell air holes	Clean	See page 56
As needed	UDRC filters	Replace	See *Replacing the UDRC Filters* on page 67 and the *Universal Debris Removal Cabinet Operator Guide*

For part replacement information, see Appendix A, *Part Numbers*.

Required Tools and Supplies

The following tools and supplies are required to perform the operator maintenance tasks:

Tools

- 1.5-mm hex key wrench
- 3-mm hex key wrench
- #4 flathead screwdriver
- 6-in. adjustable wrench
- Flashlight

Supplies

- 100 percent pure isopropyl (denatured) alcohol
- 50 percent solution of isopropyl alcohol and water
- Glass cleaner
- Clean dry cloths
- Lint-free rags or tissues
- Long-handled cotton swabs
- Latex gloves
- Antistatic spray
- WD-40 or other light oil

Cleaning Exterior Surfaces

Clean the exterior of the ThermoFlex Wide II Sleeve Mode weekly.

Cleaning the exterior surfaces of the device preserves the appearance and finish, and ensures that visual indicators and markings are clearly visible. More importantly, regular cleaning reduces the amount of dust that can fall into the device when access panels are removed or opened. The most sensitive areas for dust accumulation are the front panel, air manifold rear panel, air manifold side panel, and the power box side panel.

Reliable and high-quality output depends on keeping the exterior of the device clean.

Clean the debris removal cabinet exterior weekly. See the *Universal Debris Removal Cabinet Operator Guide* (03-4200).

To Clean Exterior Surfaces:

1. Vacuum all access panel seams to remove any accumulated dust.

   It may be sufficient to simply wipe the surfaces clean with a dry cloth if it is done frequently, and if the environment is relatively dry and free of vapors.

2. Wipe all exterior surfaces with a clean cloth dampened with water and mild detergent.

   Thoroughly remove all soap residue with a clean, damp cloth.

WARNING: Do not let water or other liquids get inside the device. This can result in serious injury or death from electrical shock as well as damage to the device.

To remove stains:

➢ Immediately wipe the stain with a cloth dampened with water and mild detergent.

If stains are persistent and do not come off with mild detergent and water, try using slight amounts of isopropyl alcohol, glass cleaner, or a mild household cleaner.

CAUTION: Avoid the regular use of chemical cleaners that contain acetone, as these could damage the exterior of the device. Read and follow all directions provided by the acetone manufacturer. Failure to do so can result in injury to you or damage to the device.

Accessing the Interior of the Device

Regular maintenance and troubleshooting require access to some internal areas of the device. The following sections describe how to access these areas.

Important: Opening access panels is unavoidable, but should be kept to a minimum to reduce the accumulation of dust in and around sensitive components.

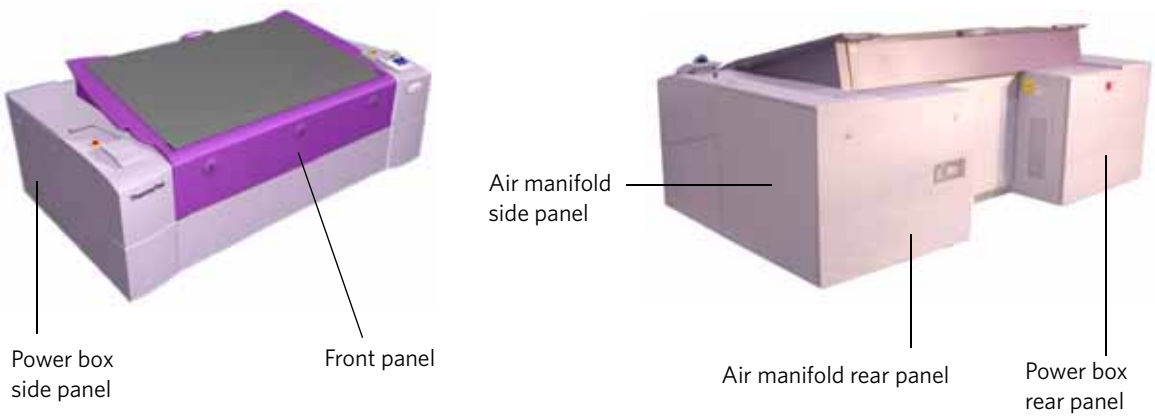


Figure 44: Panels to access the interior

The front panel, the air manifold rear panel, and the power box side panel provide limited operator access to the interior of the device.

- To access the arbor/shell, open the front panel.
- To access the compressed air supply filters, open the air filter rear panel.
- To access the circuit breaker switch, open the power box side panel.

Important: You cannot access the power box rear panel on the device when the power is on. It should be removed only by a service representative.

Note: Opening or removing panels will turn off power to the laser. It takes up to two minutes for the laser to warm up after the panels are closed or replaced. You cannot image media while the laser is warming up.

Opening and Closing the Front Panel

Before opening the front panel, make sure that nothing is on top of the front panel.

You must open the front panel to:

- Change from sheet mode to sleeve mode
- Change from sleeve mode to sheet mode
- Load and unload sleeves

CAUTION: Most of the time, the front panel will be locked. You must follow these instructions to open the front panel. Use of excessive physical force will damage the panel.

To open the front panel with air connected:

1. Push the table handle away from you to slide the load table open.

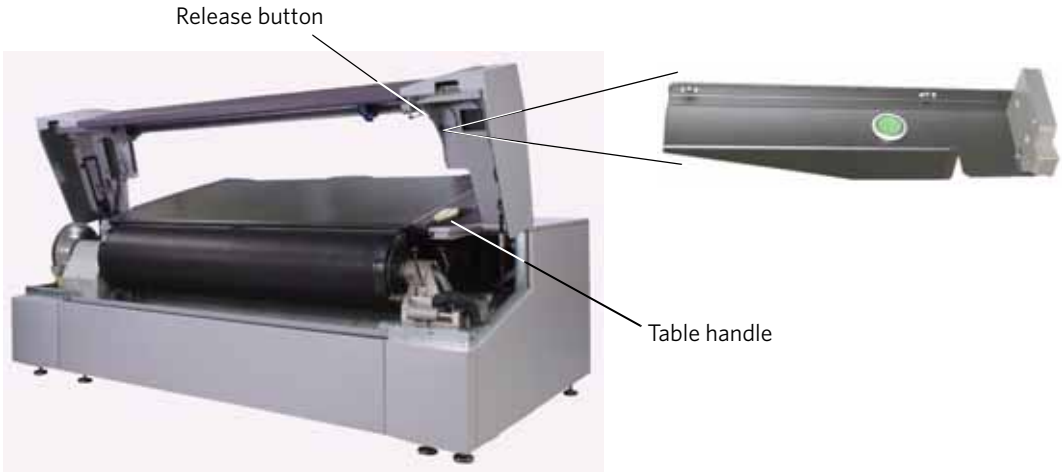


Figure 45: Raised front panel

2. Press the Release button on the inside front panel to unlock the panel.
3. Lift the front panel.

To open the front panel without air connected:

➢ Insert a T-handle hex key into the hole on the right side of the panel to disengage the latch. The hex key handle must be pushed downwards to lift the latch.

To close the front panel:

The kicker cylinder retracts very slowly. Do not attempt to force the cover closed faster than the kicker cylinder will allow.

1. Close the front panel.

   Ensure the front panel is fully closed and latched.
2. Slide the load/unload table closed.

Removing and Replacing the Access Panels

Remove the following access panels for access to:

- Power box side panel—access to the circuit breaker
- Air manifold rear panel—access to the compressed air supply filters

To remove an access panel:

1. Using a flathead screwdriver, turn the twist latches 180° counterclockwise.
2. Gently tilt the panel back and lift it off its locating pins to remove it.

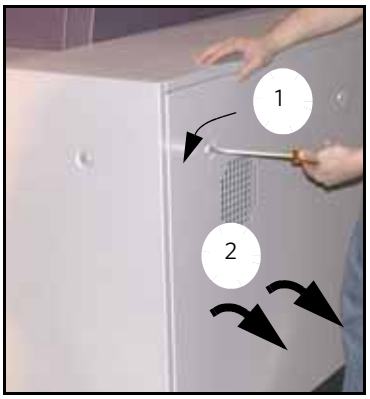


Figure 46: Removing an access panel—power box rear panel shown

To replace an access panel:

1. Position the panel on its locating pins, and push it into its upright position.
2. Using a flathead screwdriver, turn the latches 180° clockwise.

   The panel is secured.

Cleaning the Debris Removal Nozzle

Clean the debris removal nozzle weekly.

During normal usage, the debris removal nozzle accumulates a layer of ablated debris. As this layer builds in thickness, airflow through the nozzle is reduced. Eventually, the nozzle will become so constricted that ablated debris from the media will be redeposited back onto the media and negatively affect the final image quality.

To remove the debris removal nozzle for cleaning:

1. Ensure the device is not imaging media and the front panel and all access panels are closed.
2. In Print Console, from the **Device** menu, select **Home**.

   This command places the TFX Head in an easily accessible position on the tailstock side of the device.

3. Open the front panel.

   See *Opening and Closing the Front Panel* on page 46.

   The debris removal system is mounted in front of the thermal head as shown in Figure 47.

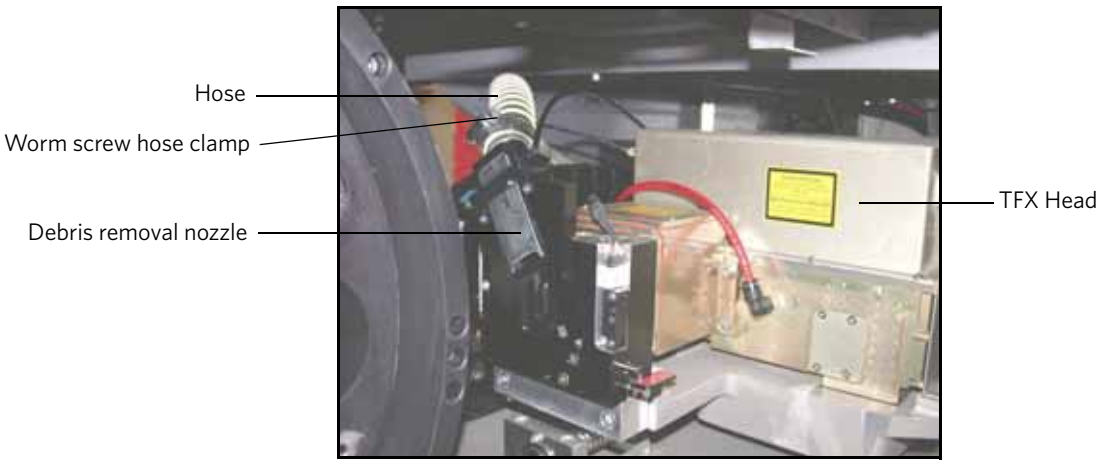


Figure 47: Debris removal assembly

4. Pull the debris removal nozzle (along its guides) and the attached hoses diagonally upward until they are clear of the debris removal block.



Figure 48: Pull up on debris removal nozzle

5. Release the worm screw hose clamp holding the vacuum hose to the debris removal nozzle (see Figure 47).
6. Remove the thin air pipe (nozzle pressure tap hose) from the nozzle at the quick release fitting.

   The debris removal nozzle is ready for cleaning.

WARNING: Do not image without the debris removal nozzle. The debris may be harmful to operators as well as machine components and will lead to poor collection efficiency.

To clean the debris removal nozzle:

1. If you have a suction dome and compressed air available, blow the excess debris out of the nozzle under the dome.

   This step is not a requirement and can be bypassed.

2. Using lots of long handled cotton swabs and a 50 percent solution of isopropyl alcohol, clean out the interior passages of the debris removal nozzle.

   Note: The interior passages of the debris removal nozzle do not need to be spotlessly clean, but there should be no significant visible buildup of debris.

3. Wipe down the outer surfaces of the debris removal nozzle with the alcohol solution and a lint-free tissue or cloth.

CAUTION: Make sure all components are completely dry or the future buildup of debris will occur more quickly—the debris will readily adhere to the wet surfaces.

To install the debris removal nozzle:

1. Reconnect the vacuum hose to the debris removal nozzle and tighten the worm screw hose clamp. The hose clamp must be oriented at the top of the nozzle so that it can slide into its slot.



Figure 49: Orient the clamp at top of debris removal nozzle

2. Reconnect the thin air pipe to the debris removal nozzle at the quick release fitting.
3. Slide the debris removal nozzle back into its guides until it is seated in the bottom of the slot.
4. Close the front panel.

   See *Opening and Closing the Front Panel* on page 46.

5. In Print Console, from the **Device** menu, select **Cancel Home**.

TFX Head Window

The TFX Head window should be inspected:

- Monthly
- When artifacts occur
- When the debris removal nozzle is found to be clogged during nozzle inspection.
- When the debris removal filter has not been replaced and is clogged.

During normal usage, the TFX Head window may accumulate a layer of ablated debris. As this layer builds in thickness, it will affect the image quality and the ability of the head to function properly.

Important: Have the replacement window ready to be quickly unwrapped, but do not unwrap it until immediately before installing it on the head.

Removing the Window

1. Ensure the device is not imaging media.
2. In Print Console, from the **Device** menu, select **Home**.

   This command places the TFX Head in an easily accessible position.
3. Open the front panel.

   See *Opening and Closing the Front Panel* on page 46.

   The debris removal system is mounted in front of the thermal head (see Figure 50).
4. Remove the nozzle unit by pulling it diagonally upwards and away from the nozzle block assembly.

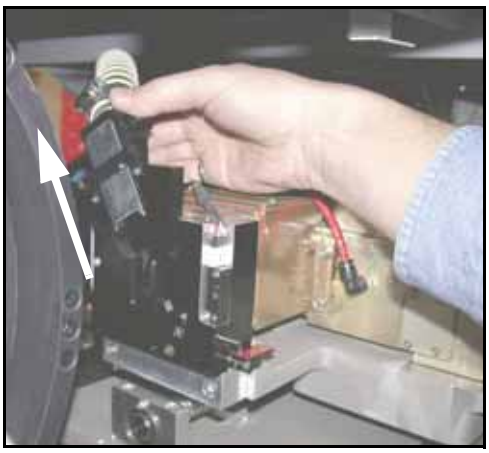
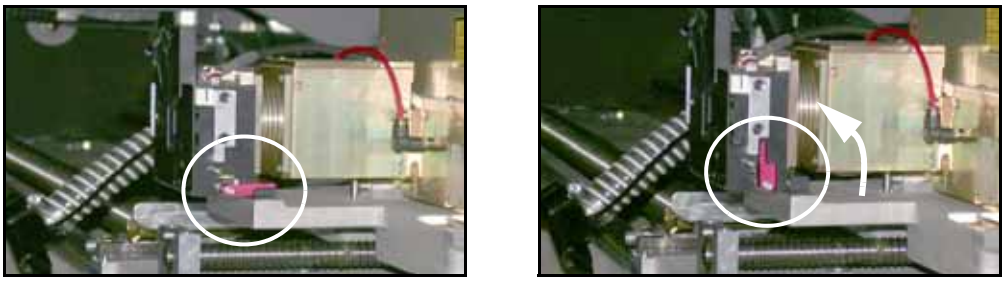


Figure 50: Remove the debris removal nozzle

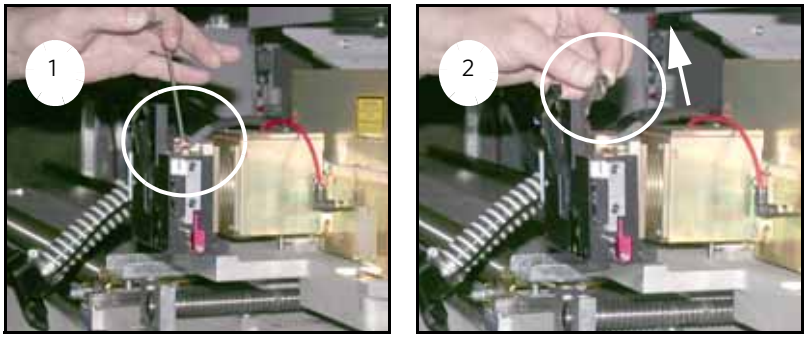
5. Turn the red release lever 90° counterclockwise (towards the drum) to the open position so that the nozzle block assembly moves away from the head.



Closed Open

Figure 51: Move release lever to open position

6. Loosen (do not remove) the capscrew securing the clamp bar and rotate the clamp bar up to the open position.



Capscrew Clamp

Figure 52: Accessing the window

7. Using a 3-mm hex key or similar bent tool, hook and lift the window out of its guides by the small hole in the window frame.

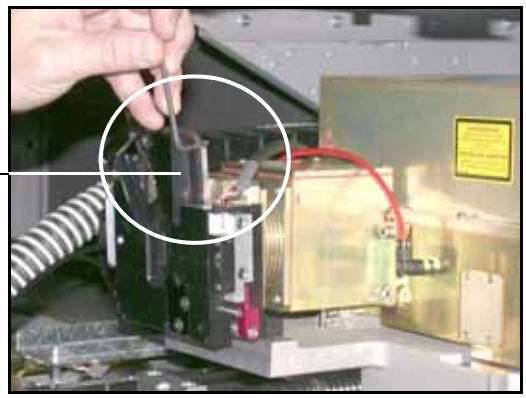


Figure 53: Remove the window

Important: Do not leave the front window off for any longer than is necessary. Dust may enter the head and affect its performance.

Note: Do not touch the glass surfaces—hold the window by the steel frame only.

Inspecting the Window

Inspect the window for excessive debris buildup or scratches by shining the light from a flashlight on the window at an angle that best shows the lens contamination or damage.

If the window is relatively clean of debris, install it back into the device without cleaning it. If the window needs cleaning, continue to the *Cleaning the Window* section, next. If the window is scratched or damaged in any way, replace it with a new one. See *Installing the Window* on page 53.

Cleaning the Window

Wear finger cots, powder-free latex, or nitrile gloves when handling the window. Hold it by the steel frame only—do not touch the glass surfaces. Use only HPLC grade acetone or IPA solvents for cleaning. Do not use Windex® spray, Methyl Ethyl Ketone (MEK), or Kodak lens-cleaning solutions.

To clean the window:

1. Dip a plastic-handled cotton swab in acetone or IPA.

   A quick shake after dipping often gets rid of any excess acetone. Keep the time between dipping and cleaning to a minimum, as solvents will dissolve the glue holding the swabs, and possibly the plastic rod as well, contaminating the surface.

   Note: Do not dip the swab into the container of solvent, as it will contaminate the remainder of the solvent in the container. Also, do not use wooden-handled swabs, because the solvent breaks down the glue on the swab and leaves residue on the lens.

2. Begin cleaning near the center of the lens and roll towards and across the edge.
3. Rotate the swab slowly against the surface as you wipe it, so that each part of the glass surface sees a new, clean portion of the swab. Apply light pressure, similar to the pressure applied when spreading mustard or mayonnaise on a slice of bread.

   The direction of rotation should be against the direction of the stroke. As the swab rotates, it brings clean solvent in contact with the surface. Do not rotate the swab more than 360° and only use each swab once. Typical cleaning can use in excess of 20 swabs.
4. Repeat the procedure until the entire lens surface has been cleaned.
5. Reinspect the window with the flashlight.

   If debris or streaking is still visible, clean the window again. It is not unusual to have to clean the window multiple times to get it clean.
6. Reinstall the window and continue with normal operation.

   See *Installing the Window*, next.

   Note: Fingerprints left on the glass surface must be cleaned immediately. Do not store a window with a fingerprint or smudge on the lens. Fingerprint oils are slightly acidic and will permanently etch the glass surface over time, causing permanent damage.

Installing the Window

1. If you are installing a new window, unwrap the window and blow it clean with clean, dry compressed air.

   Using the same bent tool as before, slide the window down the front surface of the head nosepiece into its locating grooves. A slight resistance may be felt as the window frame slides over the rubber O-ring on the front of the nosepiece.

   There is a red dot on one side of the steel frame. The red dot must be at the top of the window and facing forward (away from the head—toward the mandrel/sleeve).



Figure 54: Window for TFX Head

2. Close the window clamp bar and tighten the clamp screw.
3. Rotate the release lever to the closed position.
4. Install the Debris Removal Nozzle.
5. Close the front panel.
6. In Print Console, from the **Device** menu, select **Cancel Home**.

Cleaning the Arbor

Clean the arbor, especially the hydraulic clamps, daily, after use.

Cleaning the arbor will prolong its life, maintain the accuracy of the device, and prevent corrosion of the surface of the arbor. The most important surfaces to clean are the hydraulic clamps, but cleaning the entire outer surface of the arbor will ensure that the arbor remains in good, clean condition for many years.

To clean the arbor:

1. Open the front panel.

   See *Opening and Closing the Front Panel* on page 46.

2. If required, remove the sleeve.

   See *Inspecting Sleeve Media* on page 27.

3. Turn the Brake Override switch to the brake override position.

   This allows the arbor to move freely.

4. Wipe the arbor, including the hydraulic clamping sections, using a lint-free cloth and 100 percent isopropyl alcohol.

5. Wipe again with a fresh lint-free cloth moistened with a small amount of WD-40 or other similar light oil, to prevent corrosion from forming on the surfaces.

   Cleaning the arbor is complete.

6. Turn the Brake Override switch to the brake operation position.
7. Close the front panel.

   See *Opening and Closing the Front Panel* on page 46.

Cleaning the Shell Surface

Clean the shell surface daily, before use.

You must clean the shell surface to reduce the likelihood of scratching from dirt or dust particles.

To clean the shell surface:

1. Ensure that the device is not imaging media.
2. Open the front panel.

   See *Opening and Closing the Front Panel* on page 46.

3. Turn the Brake Override switch to the brake override position.

   This allows the shell to move freely.

4. Wipe the shell, including the hydraulic clamps, using a lint-free cloth and 100 percent isopropyl alcohol.
5. After cleaning is complete, turn the Brake Override switch to the brake operation position.
6. Close the front panel.

   See *Opening and Closing the Front Panel* on page 46.

Replacing the Arbor Absorbent Pad

The arbor absorbent pad absorbs oil that works its way to the surface of the arbor. When you see oil on the surface of the arbor near the spray cap, the pad must be replaced.

The arbor absorbent pad is located inside the arbor spray cap and the arbor spray cap is attached to the arbor (headstock side).

Replace the arbor absorbent pad as needed.

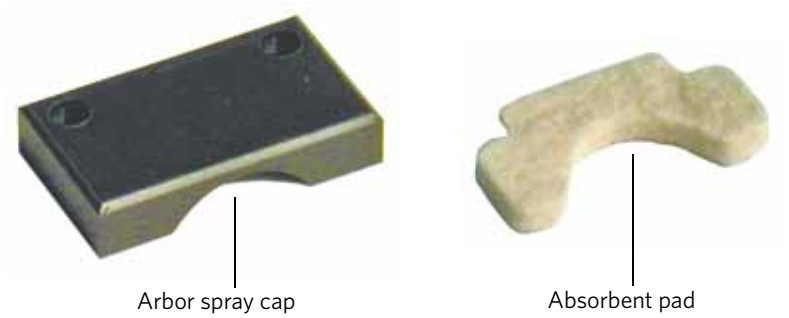


Figure 55: Arbor spray cap and absorbent pad

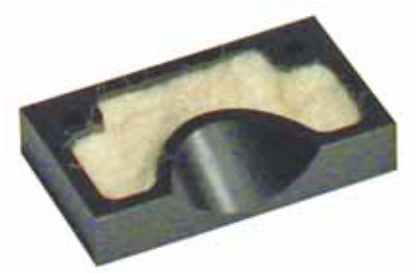
Twenty pads are shipped with the device. You can order more absorbent pads from Kodak. See Appendix A, *Part Numbers*.

To replace the arbor absorbent pad:

1. Ensure that the device is not imaging media.
2. Open the front panel.

   See *Opening and Closing the Front Panel* on page 46.
3. Turn the Brake Override switch to the brake override position.

   This allows the arbor to rotate freely.
4. Remove the two screws holding the arbor spray cap using the 1.5-mm hex key wrench.
5. Remove the old absorbent pad.



Turn over the arbor spray cap to reveal the absorbent pad.

Figure 56: Absorbent pad inside arbor spray cap

6. Insert a new absorbent pad.

   Replacement is complete.
7. Attach the spray cap onto the arbor using the two screws.

   Tighten the screws only slightly to avoid stripping the threads.
8. Close the front panel.

   See *Opening and Closing the Front Panel* on page 46.

Cleaning the Shell Air Holes

Clean the shell air holes periodically. Over time, debris get trapped in the shell air holes and may restrict the air flow. The trapped debris will also affect sleeve loading and unloading. A simple visual inspection of the air holes will determine if there is a problem.



CAUTION: Wear safety goggles during this procedure because air is ejected from the shell holes under high pressure. Failure to protect your eyes from airborne particles could result in injury. Do not place any unprotected part of your body in the line of the air jets.

To clean the shell air holes:

1. Ensure that the device is not imaging media.
2. Open the front panel.

   See *Opening and Closing the Front Panel* on page 46.
3. Make sure the mandrel air is on.

   See *Mandrel Air Buttons* on page 9.
4. Using a small tool such as a 1.5-mm hex key wrench, dislodge any material collected in the air holes.
5. When the cleaning is completed, close the front panel.

   See *Opening and Closing the Front Panel* on page 46.

Replacing Air Filters

There are two air filtration systems in the device:

- Compressed air supply filter system—two filters inside the air manifold rear panel
- Cooling-air filter system—access the intake air filter by removing the power box filter panel

Inspect and replace these filters regularly.

Frequency of Filter Replacement

Replace the compressed air supply filters every six months. See *Maintenance Schedule* on page 42.

Do not use the appearance of filters to determine when the filters should be cleaned or replaced. They can seem dirty before they need to be replaced if there is coarse dust in the operating environment, and they can appear clean when they need to be replaced if there are smaller particulates in the air.

For customers with service contracts, this will be done by a service representative during the six-month service visit. However, if your operating conditions require air supply filter replacement more often, we strongly recommend that you perform this maintenance procedure between service visits.

Compressed Air Supply Filters

There are two compressed air supply filters:

- 5-micron

  This filter is white.

- 0.01-micron (micro mist)

  This filter is black.

The filters are located inside the air filter rear panel. These filters clean and dry the compressed air that is supplied to the device pneumatics.

CAUTION: Turn off the compressed air before replacing the compressed air supply filters. Failure to turn off the compressed air pressure before replacing the compressed air supply filters can result in personal injury and/or damage to the device.

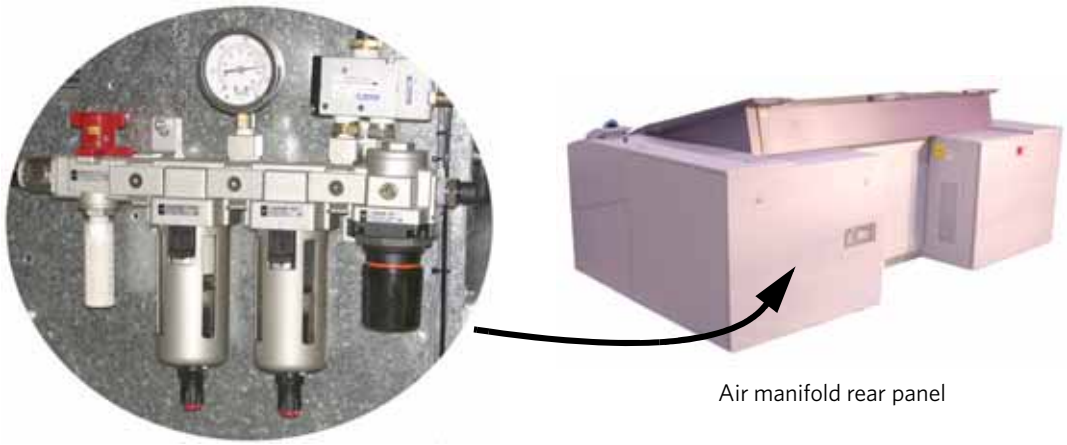


Figure 57: Location of compressed air supply filter system

The compressed air supply filters can become clogged if they are not replaced every six months—more frequently in dusty environments. Clogged filters can cause air pressure problems in the device. If a filter is allowed to fail, contaminants can damage the air system in the device.

All compressed air supply filters should be replaced at the same time. Do not replace one filter and not the other.

The compressed air must be turned off before you replace the compressed air supply filters. When you turn off the compressed air, the air bleeds completely out of the device and the pressure gauge on the filtration device reads zero. When you turn the air pressure back on, normal air pressure on the filtration device should read between 120 and 130 psi.

Replacement Parts

You can order replacement parts for the compressed air supply filter system from Kodak. See Appendix A, *Part Numbers*.

CAUTION: Read and follow all precautions provided by the manufacturer of the filters used in the compressed air supply system. Failure to do so can result in personal injury or damage to the device.

Inspecting the Compressed Air Supply Filters

Inspect the compressed air supply filters weekly.

When you inspect the filter bowls, check for water or oil. If there is any water or oil, notify the service representative for your air compressor.

The water or oil comes from the external compressed air supply system. It is important to have the external air supply system inspected and repaired before the ThermoFlex Wide II Sleeve Mode is permanently damaged.

CAUTION: Failure to remove air pressure from the device before removing an air filter could result in the following problems:
• Unfiltered air in sensitive areas of the device, which will eventually degrade and damage the device.
• High-pressure air in the filter elements and bowl, making disassembly difficult and dangerous, resulting in possible personal injury and/or damage to the device.
• A very loud noise that could damage your hearing.

To inspect the filters:

1. Ensure that the device is not imaging media.
2. Turn the orange air shutoff valve clockwise to the Off position to turn off the compressed air supply.

   See Figure 58 on page 59.
3. Check the filter bowls for any accumulation of water or oil, and for any cracks in the filter bowl.

CAUTION: Notify your air compressor manufacturer and your service representative immediately if you find water or oil in the filter bowls.

Replacing the 5-Micron Filter

Replace the 5-micron filter every six months.

To replace the 5-micron filter:

1. Ensure that the device is not imaging media.
2. Remove the air filter rear panel.

   See *Removing and Replacing the Access Panels* on page 47.
3. Turn the orange air shutoff valve clockwise to the Off position to turn off the compressed air supply.

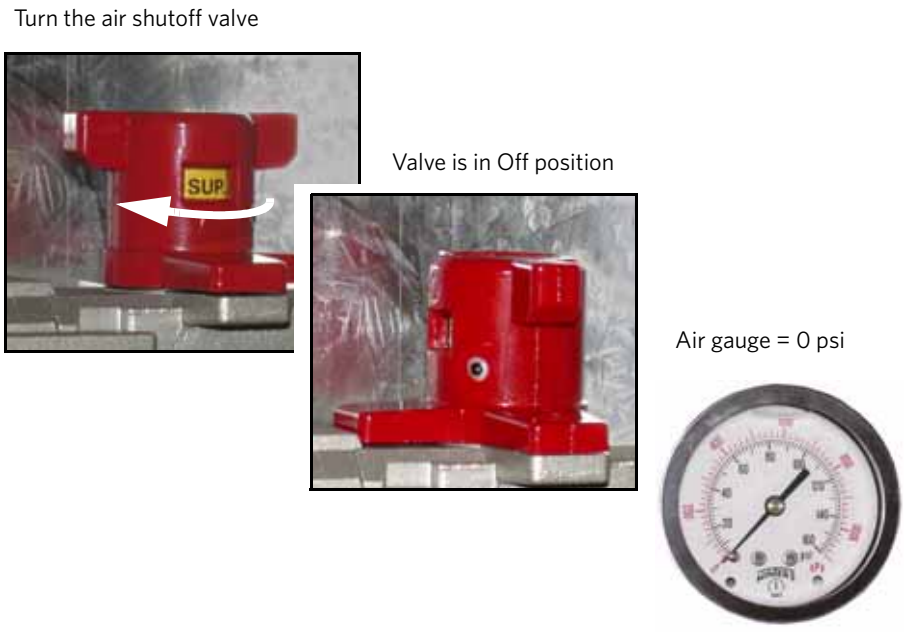


Figure 58: Turn off the compressed air

CAUTION: Failure to turn off the compressed air system before replacing a compressed air filter can result in injury and/or damage to the device.

4. Pull down the black tab on the side of the 5-micron filter bowl.

   This releases the lock on the bowl.

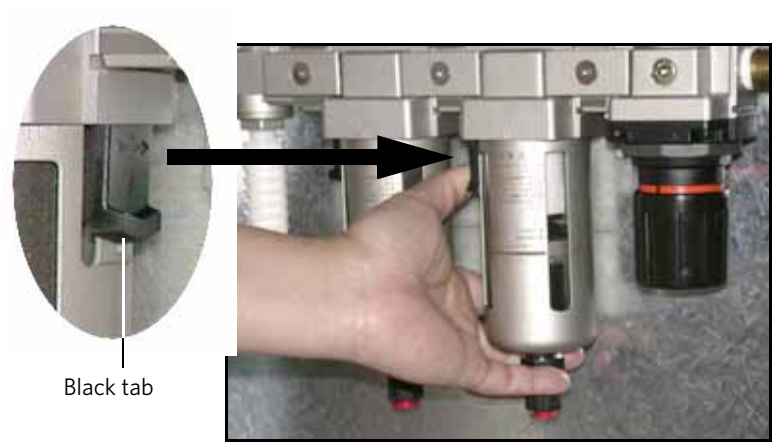


Figure 59: The 5-micron filter bowl

Rotate the bowl to the left, until the markings on the filter bowl align with the markings on the filter body. Pull down on the filter bowl to remove it.

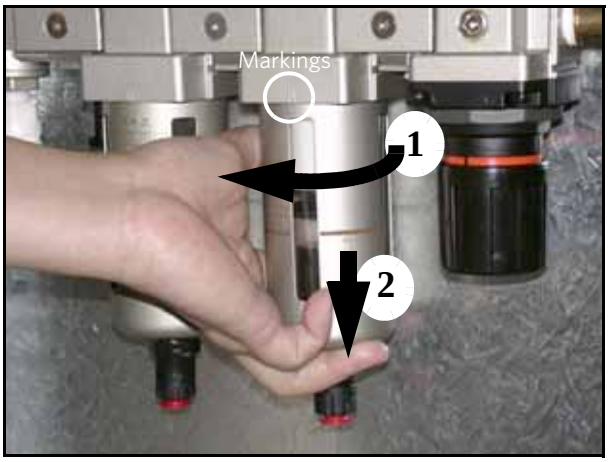


Figure 60: Remove the 5-micron filter bowl

5. Turn the black plastic disk clockwise to remove the filter assembly.

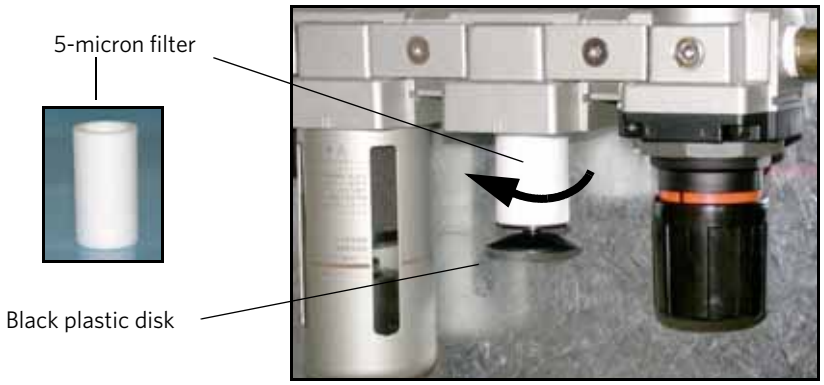


Figure 61: Remove the 5-micron filter

6. Install a new 5-micron filter, and screw the black plastic disk back into the unit until it is hand-tight.
7. Remove the rubber O-ring on the top of the filter bowl by pulling it off.
8. Check the filter bowl for water or oil.

   If there is water or oil, have your air supply inspected by qualified personnel.

   Examine the filter bowl for any damage or deterioration such as crazing or cracking. Inform your service representative immediately if replacement is necessary.

WARNING: Do not use chemical solvents or aggressive cleaning solutions for cleaning the compressed air supply filter bowls. This can cause cracking or crazing on the plastic parts. When these plastic parts are exposed to high air pressure, there is the possibility of the parts exploding and causing serious injury and/or damage to the device.

9. Replace the rubber O-ring.

   Apply a thin coat of synthetic grease to the O-ring.

10. Reinstall the filter bowl by aligning with the marks on the filter body. Push up and turn to the right until you hear a click.

    If you have not replaced the 0.01-micron filter, skip steps 11 and 12, and proceed to *Replacing the 0.01-Micron Filter* on page 61.

11. Turn the orange air shutoff valve counterclockwise to turn the compressed air supply back on.

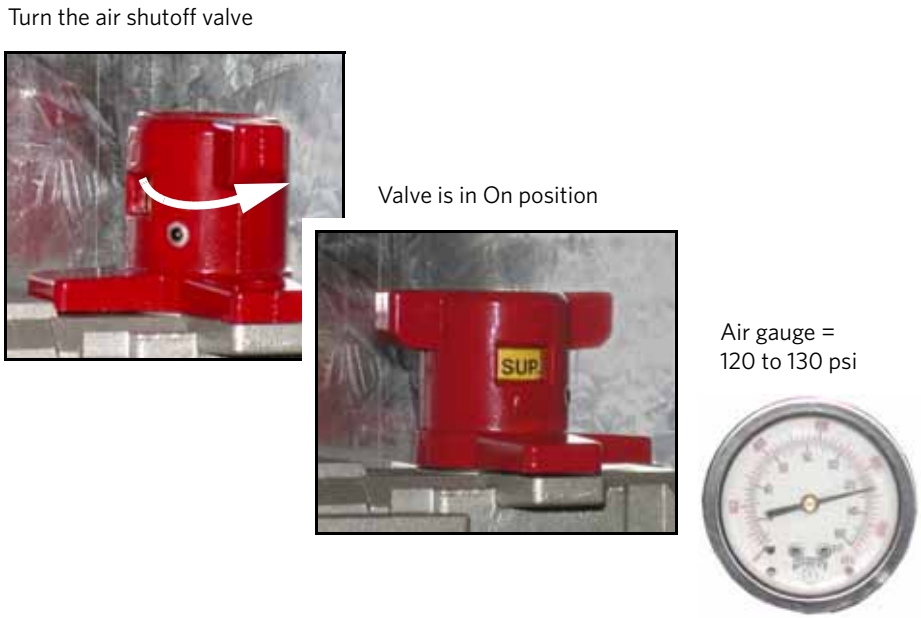


Figure 62: Turn on the compressed air supply

The air pressure gauge on the filtration unit should read approximately 120 to 130 psi. If it does not, adjust the external air supply.

12. Replace the air filter rear panel to cover the air supply filters.

    See *Removing and Replacing the Access Panels* on page 47.

Replacing the 0.01-Micron Filter

Replace the 0.01-micron filter every six months.

To replace the 0.01-micron filter:

1. Ensure that the device is not imaging media.
2. Remove the air filter rear panel.

   See *Removing and Replacing the Access Panels* on page 47.

3. Turn the orange air shutoff valve clockwise to the Off position to turn off the compressed air supply.

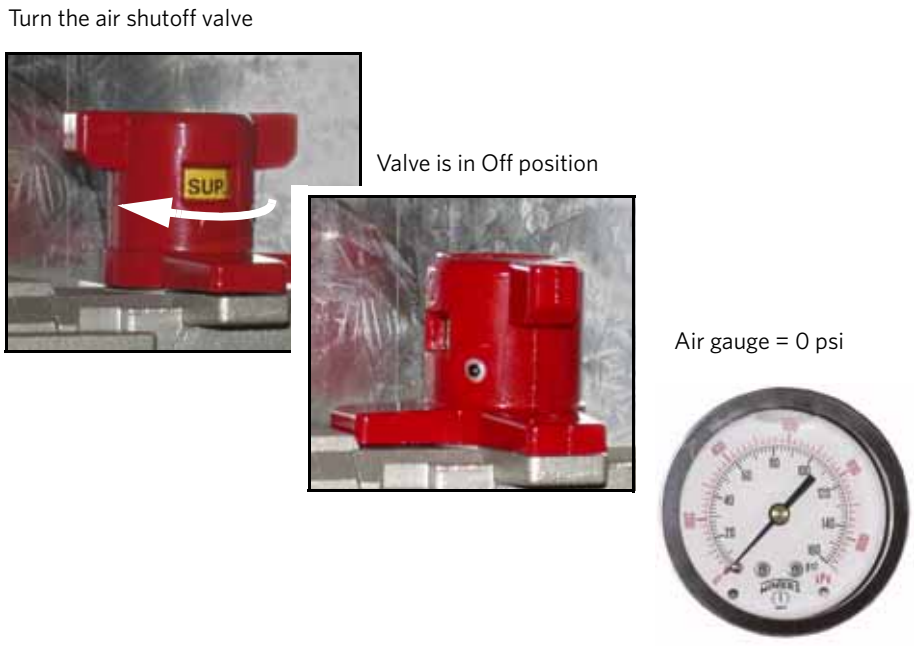


Figure 63: Turn off the compressed air

CAUTION: Failure to turn off the compressed air system before replacing a compressed air filter can result in injury and/or damage to the device.

4. Pull down on the black tab on the side of the 0.01-micron filter bowl.

   This releases the lock on the bowl.

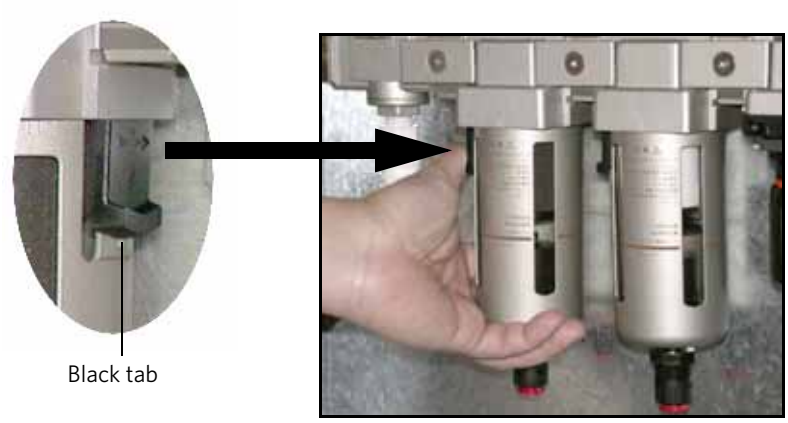


Figure 64: The 0.01-micron filter bowl

Rotate the bowl to the left, until the markings on the filter bowl align with the markings on the filter body. Pull down on the filter bowl to remove it.

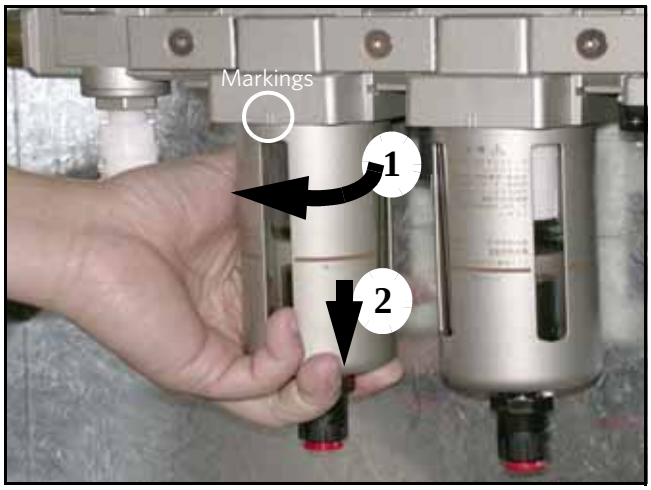


Figure 65: Remove the 0.01-micron filter bowl

5. Rotate the 0.01-micron filter counterclockwise to unscrew and remove it.

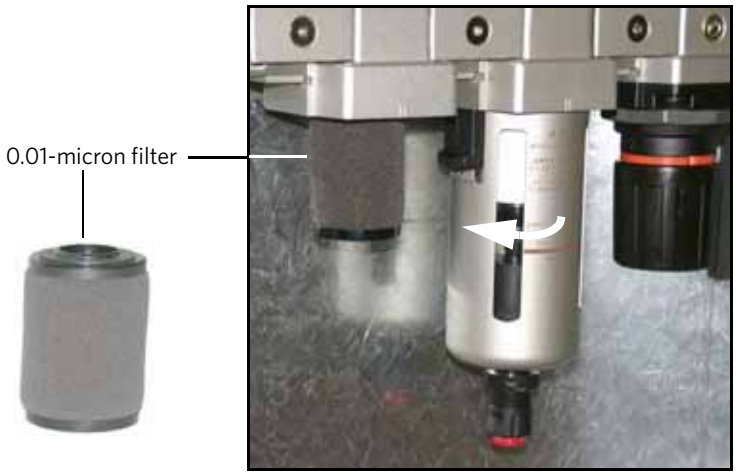


Figure 66: Remove the 0.01-micron filter

6. Install a new 0.01-micron filter by screwing the new filter into the unit until it is hand-tight.
7. Remove the rubber O-ring on the top of the filter bowl by pulling it off.
8. Check the filter bowl for water or oil.

   If there is water or oil, have your air supply inspected by qualified personnel.

   Examine the filter bowl for any damage or deterioration such as crazing or cracking. Inform your service representative immediately if replacement is necessary.

WARNING: Do not use chemical solvents or aggressive cleaning solutions for cleaning the compressed air supply filter bowls. This can cause cracking or crazing on the plastic parts. When these plastic parts are exposed to high air pressure, there is the possibility of the parts exploding and causing serious injury and/or damage to the device.

9. Replace the rubber O-ring.

   Apply a thin coat of synthetic grease to the O-ring.
10. Reinstall the filter bowl by aligning with the marks on the filter body. Push up and turn to the right until you hear a click.

    If you have not replaced the 5-micron filter, skip steps 11 and 12, and proceed to *Replacing the 5-Micron Filter* on page 58.
11. Turn the orange air shutoff valve counterclockwise to turn the compressed air supply back on.



Figure 67: Turn on the air supply

The air pressure gauge on the filtration unit should read approximately 120 to 130 psi. If it does not, adjust the external air supply.

12. Replace the air filter rear panel to cover the air supply filters.

    See *Removing and Replacing the Access Panels* on page 47.

Intake Air Filter

The intake air filter for the power box unit is located behind the power box filter panel at the rear of the device.



Figure 68: Intake air filter panel

Frequency of Replacement

Replace this filter every three months. In dirtier environments, replace it more often.

Replacement Parts

You can order the recommended replacement intake air filter from Kodak. See Appendix A, *Part Numbers*.

Replacing the Intake Air Filter for the Power Box

When installing the new filter, the side of the filter with the metal mesh faces in toward the device.

To replace the power box intake air filter:

1. Using your fingers, unscrew the knurled knob to remove the power box filter panel.



Figure 69: Replacing the power box intake air filter

2. Remove the old filter out of the frame.
3. Clean the filter panel frame.

   Vacuum the frame or wipe it with a dry cloth.
4. Install a new intake air filter into the filter panel frame.

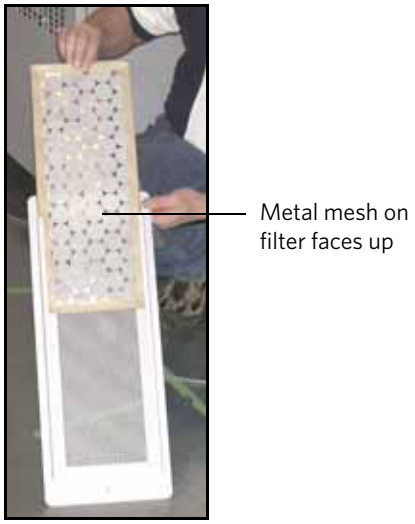


Figure 70: Intake air filter—correct side up

5. Close the filter panel.

   Turn the knurled knob to lock the filter panel securely into position.

Checking the Chiller Coolant Level

You should do a visual maintenance check of the chiller coolant level every six months. If the fluid is low, add enough Dowtherm® premixed coolant to fill the plastic container. You can order replacement coolant from Kodak. See Appendix A, *Part Numbers*.

For more information on checking the chiller fluid level, see the *Merlin Recirculating Chillers Thermo NESLAB Manual*.

Replacing the UDRC Filters

The interval at which you replace filters depends on media type, amount of media used, and frequency of imaging.

The ThermoFlex Wide II Sleeve Mode is offered with two options for the removal of gaseous and particulate emissions generated during imaging:

- External ventilation (standard, UDRC-B configuration)
- Indoor exhaust with chemical filtration (UDRC-L configuration)

For the UDRC-B configuration, the particulate filter should be replaced after approximately 600 square meters (6460 sq. ft.) of imaged area. The estimated lifetime assumes 100 percent imaged area. Customers are responsible for estimating the actual cumulative imaged area.

For the UDRC-L configuration, the device automatically checks the debris removal system to determine the remaining life of the particulate and chemical filters. An error message appears in Print Console when the filters should be replaced.

For more information concerning the frequency of filter changes, have the service representative check the appropriate media technical note.



CAUTION: Failure to replace particulate filters when required will lead to the degradation of your image quality.



WARNING: Failure to replace chemical filters could result in hazardous chemicals being released into the workplace environment.

You can order the replacement filter from Kodak. See Appendix A, *Part Numbers*.

For more information on replacing the Universal Debris Removal Cabinet filters, see the *Maintenance* chapter in the *Universal Debris Removal Cabinet Operator Guide* (03-4200).

5

Troubleshooting

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Power Failures 79

This chapter describes common errors and problems that can occur with the ThermoFlex Wide II Sleeve Mode and explains how to resolve them. For a list of common error messages and recommended solutions, see *Error Messages and Recommended Solutions* on page 73.

Operator Recoverable Errors

When the device detects a problem, it does one of the following:

- Continues operation (see *Warning Messages*, next)

  If the device can continue processing without your intervention, the problem is reported in the Message Log on the workstation.

- Suspends operation (see *Error Messages* on page 70)

  The device stops and the problem is reported in the Messages pane in Print Console. If the condition requires immediate intervention, the Error light on the operator interface flashes.

  Errors that suspend operations require your intervention before the device can recover and resume imaging.

Warning Messages

Warning messages alert you to conditions that could potentially cause problems, but do not stop the imaging process. For example, when the debris removal unit detects that a particulate filter is almost full, a warning message appears on Print Console telling you to have a replacement filter on hand.

Warning messages are a good indication that servicing is required in the near future. Typical examples of this kind of message include:

- compressed air pressure is low
- exposure head is overheating
- power supply voltage is out of range

Typically, warning messages do not appear in Print Console. Instead, they go directly to the History pane as part of the historical record. However, some warning messages may appear on the Messages pane for a short period of time before going to the History pane.

Error Messages

When a system operation error occurs, an error message appears in the Messages pane in Print Console and the system shuts down. If the device has already started plotting when an error is discovered, the partially exposed media is ejected.

An example of an error message is:

MDH: Please press RESUME to reload media or EJECT to cancel current image

You must correct errors before the device can resume imaging.

After the error message is corrected, it is copied to the History pane.

Suspend Conditions

A suspend condition prevents the device from operating. A suspend condition occurs when there are errors or problems with the system, such as media that is misaligned or a flyoff.

Example of a Suspend Condition

The information in the suspend condition dialog box indicates the type of problem and suggests a course of action.



Figure 71: An example of a suspend condition dialog box in Print Console

Here is an example of a suspend condition as it appears in the operator guide. It states the problem and its solution.

Error Message	Solution
MDH: Drumlift lever disabled, Resume to enable. [Error #: 41042]	The drumlift lever has timed out. You need to re-enable the drumlift lever to make it active. **To correct the error:** ➢ Click **Resume** to activate the drumlift lever.

When a suspend condition occurs:

- The device stops.
- The yellow light on the operator interface flashes.
- A Suspend prompt appears in Print Console.

Up to four options are available in Print Console when a suspend condition occurs. If a button is grayed out, it is not available.

Table 4: Suspend condition options

Option	Result
Resume button	Click this button to try the operation again.
Release button	Click this button to tell the device to release the media so that it can be easily removed.
Eject button	Click this button to cancel the job and unload the media.
Media Removed button	Click this button after you remove the media, to indicate that you have manually intervened to fix a problem—for example, you have manually removed a misaligned media. **Important:** You must remove the media before you click the **Media Removed** button.

Recovering From a Suspend Condition

In most cases, the recommended procedure for recovering from a suspend condition is as follows:

1. Click the **Resume** button in Print Console. If the device does not resume imaging, go to step 2.
2. If the **Eject** button is available:
   a. Click it to cancel the job.
   b. Unload the media from the mandrel.

   If the device does not resume imaging, go to step 3.

3. If the **Release** button is available:
   a. Click it to tell the device to release the media.
   b. Manually remove the media.
   c. Click the **Resume** or **Media Removed** button to continue.

   If the device does not resume imaging, go to step 5.
4. If the **Media Removed** button is available:
   a. Manually remove the media.
   b. Click the **Resume** or **Media Removed** button to continue.

   If the device does not resume imaging, go to step 6.
5. Reset the device from Print Console. For instructions, see the Print Console online help.

   If the device does not resume imaging, go to step 7.
6. Quit Print Console.
7. Turn off the device.
8. Restart the device.

Important: If the problem persists, contact a service representative.

Error Messages and Recommended Solutions

This section describes most of the error messages that appear in Print Console when errors or problems occur with the ThermoFlex Wide II Sleeve Mode.

Important: If you cannot find a description and recommended solution for a specific error message, try the procedure for recovering from a suspend condition on page 72. If that does not work, contact your service representative.

Even when you solve a problem yourself, you should report any recurring errors to your service representative. If, as part of the recommended operator action, you are to contact a service representative, report the error number (also called prompt number) to help the support person resolve the problem.

Important: Opening access panels is unavoidable, but should be kept to a minimum to reduce the accumulation of dust in and around sensitive components.

Note: The ThermoFlex Wide II Sleeve Mode device takes up to two minutes to warm up after it is restarted. You cannot image media while the device is warming up. Files submitted to be imaged wait on the workstation until the device is ready.

Classifying Errors

All error messages have a message number (also called the prompt number). They are listed numerically in ascending order.

Messages appear in Print Console with a prefix, for example, MDH (Media Handling):

MDH: Turn brake drum switch override off

This is to differentiate these messages from other messages that relay information about other parts of the device.

The prefix is used primarily as an internal tool to organize the many types of messages; knowing the various error categories is not necessary to solving the error.

If, as part of the recommended solution you are to contact a service representative, report the error number to help the support person resolve the problem.

Table 5: Numerical listing of error messages

Numerical Listing	
Error Message	**Recommended Operator Action**
MPC: Specified thickness of gapless media must be 0 [Error #: 38156]	The workstation has sent a non zero value for the thickness of the image. When imaging sleeves, the thickness cannot be a non zero number. **To correct the error:** 1. Click **Resume**. Or: 2. Reset the device. See *Resetting the Device* on page 79.
MPC: Could not find seam after <Number of attempts> attempts [Error #: 38168]	The device has made a number of attempts but failed to find the seam for the media. **To correct the error:** 1. Click **Eject**. 2. Check the following: • That the seam is of sufficient width • That the plate is mounted correctly • That the plate is free of damage and imperfections 3. Resubmit the job. 4. Reload the media.
MPC: Seam could not be verified for fine search [Error #: 38169]	The imaging head has not detected the media. **To correct the error:** 1. Click **Eject**. 2. Check the following: • That the seam is of sufficient width • That the plate is mounted correctly • That the plate is free of damage and imperfections 3. Resubmit the job. 4. Reload the media.

Numerical Listing (Continued)	
MPC: Seam not found using fine search [Error #: 38170]	The imaging head has not detected the media. **To correct the error:** 1. Click **Eject**. 2. Check the following: ▪ That the seam is of sufficient width ▪ That the plate is mounted correctly ▪ That the plate is free of damage and imperfections 3. Resubmit the job. 4. Reload the media.
MDH: Drumlift lever in unexpected position <Direction> [Error #: 41041]	During an exchange, the drumlift lever is not in the expected position. **To correct the error:** ➢ Ensure the drumlift lever is in the correct position.
MDH: Drumlift lever disabled, RESUME to re-enable [Error #: 41042]	**To correct the error:** ➢ Click **Resume** to re-enable the drumlift lever.
MDH: Move tailstock to fully disengaged position before moving drumlift up [Error #: 41050]	You are raising the drum on the hoist but the tailstock is not fully out of the way. **To correct the error:** 1. Ensure the tailstock is fully disengaged: ▪ Pull back on the Lock Lever. ▪ Pull back on the Tailstock Lever. ▪ Lift up on the Tailstock Handle. 2. Click **Resume** or press the Hoist switch to lift the drum up.

Numerical Listing (Continued)	
MDH: Measured mandrel diameter different from expected: Measured <MeasuredDiameter> - Expected <ExpectedDiameter> [Error #: 41052]	The measured diameter of the mandrel is incorrect. **To correct the error:** 1. Check that the sleeve is mounted correctly. 2. Check the sleeve for any imperfections. If there are any, remove and replace sleeve. 3. If the above steps check out okay, click **Resume**. If the error occurs again, take the following action: ➢ Reload the sleeve to another position and rotate the sleeve, if possible.
MDH: Cannot focus at position <Position>mm, check seam data and offset [Error #: 41063]	The calculation for the focus is at a position off the mandrel. **To correct the error:** 1. Check that the seam data is correct. 2. Check that subscan offset is correct.
PRD: Drumlift hoist in up position [Error #: 45212]	The drumlift is right up against the drum. The drumlift has been inadvertently raised or the sensor is obstructed. It is not safe to image until the drumlift is lowered. **To correct the error:** 1. Check the position of the drumlift. 2. If it is raised, press the Hoist switch to lower the drumlift. 3. If the drumlift is in the lowered position, check the sensor for obstructions.

Dr. Watson Errors

Dr. Watson errors are generated by the Windows NT® operating system. When a Dr. Watson error happens, the Dr. Watson dialog box appears.

To recover from a Dr. Watson error:

1. Click **OK** to close the Dr. Watson dialog box.

   It may take a few minutes for the **OK** button to become available.
2. Restart the workstation.

   For additional instructions, see the workstation documentation.

If restarting the workstation doesn't help, call your service representative.

Resetting the Emergency Stop Switch

If you accidentally press the Emergency Stop switch:

- Two Emergency Stop switches are located on either end of the front panel.
- Two are located on either end of the inside of the front panel.

You must reset the Emergency Stop switch before the device can return to normal operations.

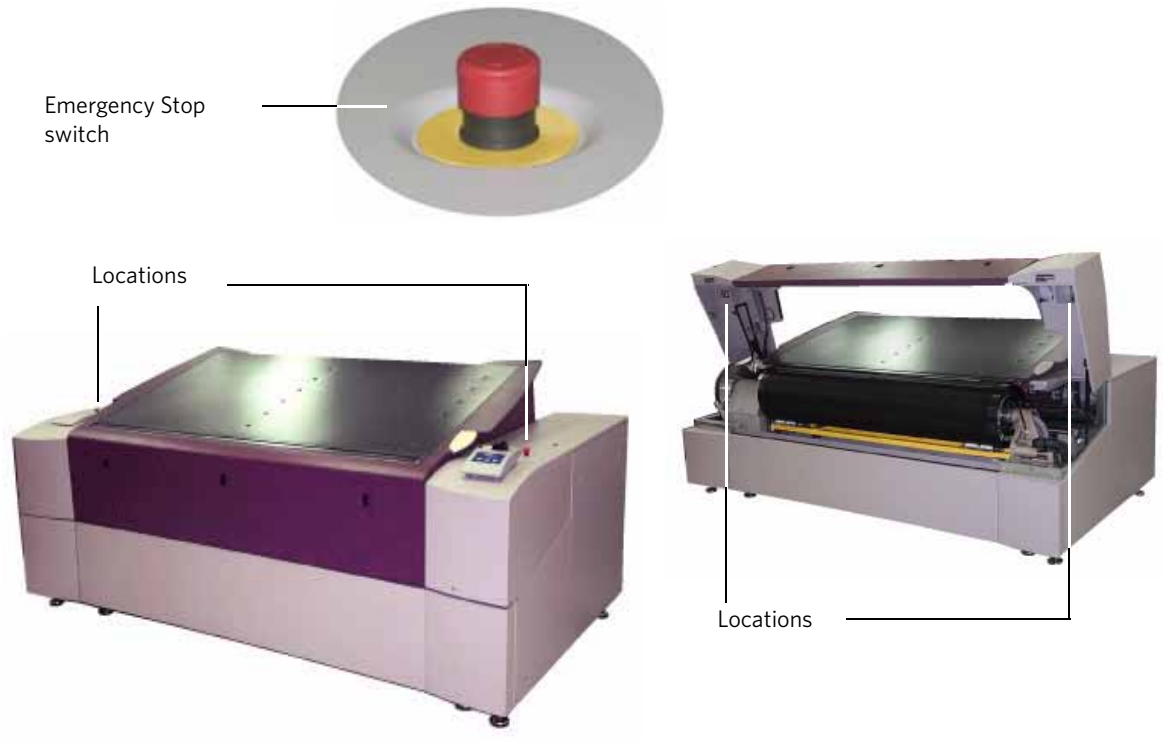


Figure 72: Emergency Stop switches

To reset the Emergency Stop switch:

➢ Rotate the Emergency Stop switch 90º clockwise.

Resetting the Device

Use the **Reset** command in the Print Console **Device** menu to reset the device to its idle or ready state. For example, if you canceled an image, but the device didn't unload the media, you could use the **Reset** command to reset the device to an idle state, causing the device to unload the media.

Important: The device takes up to two to three minutes to warm up after it has been restarted or reset.

Note: If the **Reset** command is unavailable in Print Console, turn off the device for about five seconds and then turn it back on.

To reset the device:

➢ In Print Console from the **Device** menu, select **Reset**.

The device should reset itself. If it does not, turn off the device and restart the entire system.

Resetting the Emergency Stop Switch on page 78*Resetting the Emergency Stop Switch* on page 78Image Quality Problems

If you experience any image quality problems, contact your service representative immediately.

Power Failures

If there is a power failure, the ThermoFlex Wide II Sleeve Mode shuts down immediately.

The workstation is equipped with an Uninterruptible Power Supply (UPS). It gives the workstation time to shut itself down in an orderly fashion when the power fails.

However, the device does not have such protection and shuts down immediately. It retains its last state and, if nothing changed while it was off, it attempts to recover when power is restored.

Sometimes automatic recovery is not possible. To recover the device will require operator intervention. Follow the prompts as they appear on the workstation.

When a power failure occurs, we recommend that you turn off the device using the power switch shown in Figure 13 on page 19. Once power has been restored, you can turn on the device again.

Tripped Circuit Breaker

After a power failure, if the power does not come back on, it's possible that the device tripped one of the circuit breakers. You can reset the circuit breaker manually by resetting the tripped circuit breaker switch.

The circuit breaker switches are located behind the power box side panel.

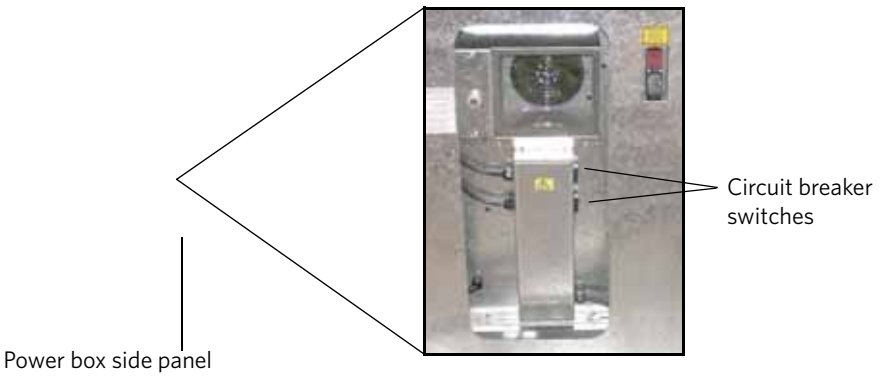


Figure 73: Location of circuit breaker switches

To reset a tripped circuit:

1. Turn off the device.

   See *Turning Off the ThermoFlex Wide II Sleeve Mode System* on page 18.
2. Remove the power box side panel.

   See *Removing and Replacing the Access Panels* on page 47.
3. Press the circuit breaker switch to reset it.
4. Replace the power box side panel.

   See *Removing and Replacing the Access Panels* on page 47.
5. Restart the device.

   See *Turning On the ThermoFlex Wide II Sleeve Mode System* on page 18.

   If the power does not start properly, contact your service representative.

Loss of Air Pressure in the Device

Compressed air is supplied to the device from an external air compressor. If a power failure also affected the air compressor, air pressure inside the device will be slowly lost. If air pressure does not return to normal, contact your service representative.

A

Part Numbers

Parts List 82

Parts List

For the latest parts list and part numbers, consult the most recent version of the *Maintenance Supplies Price List and Order Form*, available from Kodak Graphics Communications Order Management (orderdesk@Kodak.com).

Description	Kodak Part Number
Absorbent felt pads kit (20 pads)	512-00267
Air supply filter kit	328-00001
Premixed coolant	090-00326
Filter bowl/guard	55-1280
Intake air filter	55-0346
Chemical filter for UDRC-LF	50-2315
Chemical filter spacer for UDRC-LF	57-9014
Particulate filter for UDRC-LF	252-01131
Particulate filter for UDRC-BX	57-8792
Particulate filter spacer	57-8697

Glossary

ablate	During the imaging process, parts of the media are released as dust and particles into the atmosphere.
arbor	The device which takes the place of the drum in sleeve mode. The arbor supports the shell. The shell and the arbor form the mandrel.
away side	When you face the device, this is the side toward the headstock.
CMYK	Cyan, magenta, yellow, and black. Printing colors for process color production.
continuous sleeve	A sleeve with media that have no seam.
crazing	Stress lines that appear on plastic parts, usually caused by inappropriate cleaning.
densitometer	A device that is sensitive to the amount of light transmitted or reflected by paper of film. It is used to check the accuracy, quality, and consistency of output.
device	A platesetter, proofsetter, or filmsetter that is part of an imaging system.
dot gain	In printing, a defect in which dots print larger than they should, causing darker tones and stronger colors.
end caps	Plastic type disks that fit into the ends of the sleeve. They provide support for the sleeve during processing.
error message	When a system operation error occurs, an error message appears in Print Console and the system shuts down. You must resolve the problem before you can continue with regular operations.
file	An electronic text description of one or more images, using the TIFF format.
film	A cellulose-type media upon which an image is exposed. The ThermoFlex Wide II Sleeve Mode produces one exposed film per image. See also *media*.
GATF	Graphic Arts Technical Foundation
home side	When you face the device, this is the side toward the tailstock.
image	An electronic bitmap that is plotted onto a printing media. The device receives images from the workstation and produces exposed, undeveloped media.
imposition	A means of arranging pages on the front and back of a press sheet to ensure the correct order after the sheet is folded and trimmed.

intermediate disks	Plastic disks that fit into the middle of the sleeve. They provide support during processing.
mandrel (two-piece)	Refers to the combination of arbor and shell. The arbor is a single universal piece, while the shells come in multiple sizes.
media	Refers to the physical material—plates or film—onto which an image is plotted.
media type	Refers to a certain type of plate or film. Media types are typically configured during installation of the device by a service representative.
native application file	A file for a job that was created using page layout software, such as QuarkXPress®.
page imposition	The process of printing several pages onto one sheet of media to minimize the amount of trimming required.
page setup	In workstation software, a collection of specifications for a page, including resolution and orientation.
particulate filter	A filter containing a porous material that traps the particulate debris released during imaging.
PDF	Portable Document Format. Adobe System's PDF is a reliable file format for storing line art, images, and text (including all required fonts) for pages.
plate-on-sleeve (POS)	A sleeve that requires the cutting and mounting of media onto it.
Postscript	A page description language developed by Adobe Systems that is used to describe type and visual elements so that they can be output on devices with Postscript interpreters.
Postscript file	A file written in a page description language created from a native application file.
PPD	Postscript Printer Description file. A computer file containing information on the parameters and options associated with a specific Postscript device, such as the ThermoFlex Wide II Sleeve Mode.
Print Console	A device control software that delivers files to the device for imaging. Print Console creates a rasterized image of a PostScript file—a PostScript 3™ software RIP (raster image processor). The software RIPs PostScript files to create the images that are exposed onto media.
process colors	See *CMYK*
processor shaft	Long metal rod used in conjunction with the production hub to install or remove sleeves.
production hub	Mechanical apparatus that is used in transferring shells and sleeves to and from the arbor. The hub is bolted to the floor and is located as the central point for mounting, cutting, and imaging.
prompt number	A number that identifies an error message
raking light	A reflected low angle light that is used for inspecting media.

raster	Digitized (bitmapped) images defined pixel by pixel in rows and columns. See also *RIP*.
rectangularization	The process of placing the data from TIFF files into a format that the device can use. That is, it adjusts the output of the imposition.
registration	The alignment of plotted separations (to each other on a media) that produce one printed image.
repeating building sleeve	A sleeve that fits over an existing mandrel. It allows you to image at different sizes without the expense of purchasing a different size shells.
resolution	The degree of detail with which an image is reproduced, usually measured in dots per inch (dpi) or lines per inch (lpi). The higher the resolution, the greater the detail in which the image will be produced.
RGB	Red, green, and blue color model used by computer monitors to display color.
RIP	Raster Image Processor. Creates bitmap images from Postscript files which are then sent to the device for imaging.
seam definition	The process of creating a media seam path on the sleeve relative to the raster data.
SCSI	Small Computer System Interface. This type of connection is used to send image data from the workstation to the device.
shell	A long, hollow polymer-coated tube that hydraulically locks to the arbor to create a mandrel. Shells come in different sizes to allow imaging of different size sleeves.
shell shaft	A long metal shaft that is used in conjunction with the production hub to install or remove shells and/or sleeves.
sleeve	A cylindrical plate carrier. Specifically, it is a photopolymer tube onto which media are mounted. The sleeve is then inserted onto a mandrel for imaging.
sleeve mode	Imaging media on the mandrel and sleeve.
special color	See *spot color*.
spot color	A color which requires a special ink—that is, an ink which cannot be created by using process colors.
submitting	The process of putting a file in the queue for imaging.
suspend condition	A condition that prevents the device from continuing to image a media.
SWOP®	Specifications for Web Offset Publications
thermal	Kodak SQUAREspot® thermal imaging technology
thermal imaging head	A device that uses laser-generated infrared (IR) thermal energy to transfer images into the emulsion of IR-sensitive media.

throughput	The efficiency with which images are interpreted and produced.
UDRC	See *Universal Debris Removal Cabinet*.
UGRA	Swiss Association for the Promotion of Research
UPS	Uninterruptible Power Supply. A device used to supply power temporarily to the workstation during a power failure.
Universal Debris Removal Cabinet	The Universal Debris Removal Cabinet is the key component of the debris removal system. It consists of the filter compartment, plastic enclosure, filters, blower, and electrical controls.
vignette	A design element whereby gradations of color are displayed throughout an object in an image.
workstation	A high-speed computer running the Windows NT operating system and Print Console. It is connected to a local area network (LAN) over which it receives TIFF files.
workstation software	See *Print Console*.

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