Maintenance Guide for User

English

Lotem 400 Family/ Lotem 400 Quantum Family

653-00268B-EN

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4,743,091	5,343,059	5,568,595	5,764,381	6,003,442	6,164,637	6,371,026
4,992,864	5,355,446	5,576,754	5,771,794	6,014,471	6,180,325	6,377,739
5,049,901	5,359,451	5,579,115	5,785,309	6,016,752	6,181,362	6,387,597
5,079,721	5,359,458	5,592,309	5,813,346	6,031,932	6,181,439	6,396,422
5,103,407	5,367,360	5,594,556	5,818,498	6,043,865	6,186,068	6,396,618
5,111,308	5,384,648	5,600,448	5,854,883	6,060,208	6,189,452	6,407,849
5,113,249	5,384,899	5,608,822	5,861,904	6,063,528	6,191,882	6,414,755
5,122,871	5,412,491	5,615,282	5,861,992	6,063,546	6,204,874	6,422,801
5,124,547	5,412,737	5,625,766	5,875,288	6,072,518	6,208,369	6,435,091
5,132,723	5,420,702	5,636,330	5,894,342	6,090,529	6,214,276	6,441,914
5,150,225	5,420,722	5,649,220	5,900,981	6,096,461	6,217,965	6,450,092
5,153,769	5,459,505	5,650,076	5,934,196	6,098,544	6,260,482	6,456,396
5,155,782	5,473,733	5,652,804	5,942,137	6,107,011	6,266,080	6,476,931
5,157,516	5,481,379	5,680,129	5,946,426	6,112,663	6,266,134	6,477,955
5,208,818	5,488,906	5,691,823	5,947,028	6,115,056	6,267,054	6,509,903
5,208,888	5,497,252	5,691,828	5,958,647	6,121,996	6,268,948	6,541,181
5,247,174	5,508,828	5,696,393	5,966,504	6,130,702	6,283,589	6,545,772
5,249,067	5,509,561	5,699,174	5,969,872	6,134,393	6,295,076	6,564,018
5,283,140	5,517,359	5,699,740	5,973,801	6,136,509	6,299,572	
5,291,273	5,519,852	5,708,736	5,986,819	6,137,580	6,318,266	
5,323,248	5,526,143	5,713,287	5,995,475	6,147,789	6,352,816	

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653-00268B-EN

Revised January 2004

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Overview

This document describes the periodic maintenance to be performed on the Lotem 400 Family and Lotem 400 Quantum Family platesetters.

The **Lotem 400 Family** includes the following:

- Lotem 400 (Fiber head)
- Lotem 400 Chemistry Free (Fiber head)
- Lotem 400 with MCU
- Lotem Xpose

The **Lotem 400 Quantum Family** includes the following:

- Lotem 400 Quantum
- Lotem 400 Quantum with MCU



Important: *Lotem 400* refers to all the above mentioned machines unless otherwise specified.

Periodic maintenance should be performed by a trained Lotem operator, according to the *Safety Precautions for User* documentation.

Before performing the periodic maintenance procedures, verify that you have the items listed in the table below. If you do not, then order them.

Table 1: List of Parts

Name	Part Number	Machine Type
Cooling unit filter (Intake air filter)	342A00150	Lotem 400 Quantum Family
Debris removal filter (Particulate filter for UDRC-B)	57-8792C	Lotem 400 Quantum Family
Debris removal filter (Chemical filter offset for UDRC-LC)	50-2281B	Lotem 400 Chemistry Free
Debris removal filter (Particulate filter for UDRC-LC)	57-8791C	Lotem 400 Chemistry Free
Air service unit filters - 3 filters (Triple air filter)	510K1R130	Lotem 400 Family / Lotem 400 Quantum Family
Air service unit filters - 2 filters (Medium filters for air unit)	342A10230	Lotem 400 Family / Lotem 400 Quantum Family
Drum holes cleaning kit	510K1R593	Lotem 400 Family / Lotem 400 Quantum Family

The table lists the periodic maintenance schedule. Details of each procedure are provided later in this document.

Table 2: Periodic Maintenance Procedures Checklist

#	Periodic Maintenance	Clean....	Done	Replace Every...
1.	Air unit filter	weekly/biweekly		6 months
2.	Drum vacuum holes	weekly/biweekly		
3.	Entire drum	weekly/biweekly		
4.	Edge detection strip	weekly/biweekly		
5.	Fiber head lens	weekly/biweekly		
Manual machine				
6.	Loading tray	weekly/biweekly		
MCU				
7.	Centering pins / Short pins	weekly/biweekly		
8.	Disposal rollers	weekly/biweekly		
9.	Unload rollers	weekly/biweekly		
10.	Punch disposal	after 6 months		
11.	Paper disposal	when needed		
Quantum				
12.	Cooling unit filter	weekly/biweekly		2 months
UDRC				
13.	Universal Debris Removal Cabinet (UDRC)	weekly/biweekly		6 months



Note: Depending on the media type and frequency of exposure, perform the periodic maintenance procedures on the parts either weekly or biweekly, unless otherwise mentioned.

Performing Maintenance on the Lotem 400

The procedures in this section are for all machine types. The Lotem 400 Quantum and the MCU require additional procedures. See *Maintenance Procedures for the MCU* on page 14 and *Maintenance Procedures for Quantum Machines* on page 18 for details.

Before You Begin



Before starting any of the procedures described in this document, perform the following steps:

1. Open the front door. From the **Routine Functions** menu, click the **Open Front Door** button.
2. Open the rear door.

You are now ready to perform the maintenance procedures. They should take up to half an hour to complete. Perform these procedure weekly or biweekly unless otherwise specified.

Air Pressure Unit

Checking the Air Pressure

Ensure that the air pressure is above 7 atm (103 psi). If it is not, turn the blue knob to adjust the air pressure. (See Figure 1 on page 6.)

Checking the Air Filters

The Air service unit consists of three air filters.

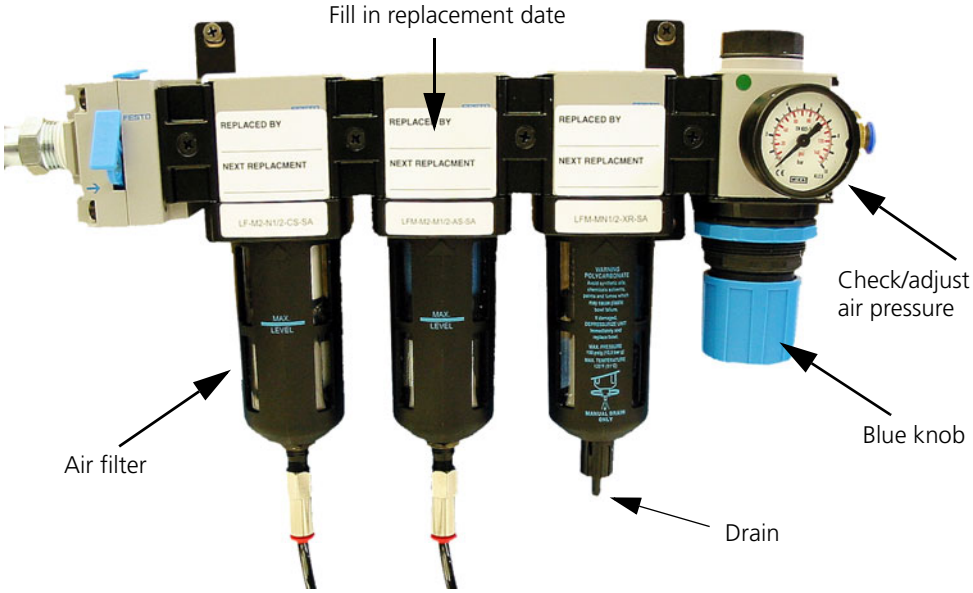


Figure 1: Air pressure unit with three filters

Note: Some machines are equipped with air pressure units that contain only two air filters (see Figure 2 on page 7).

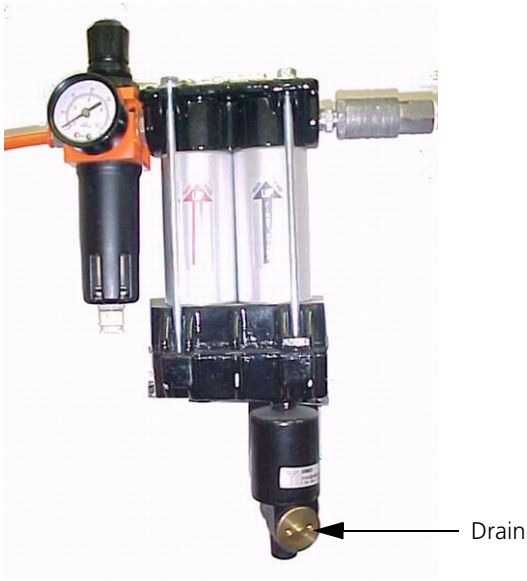


Figure 2: Air pressure unit with two filters

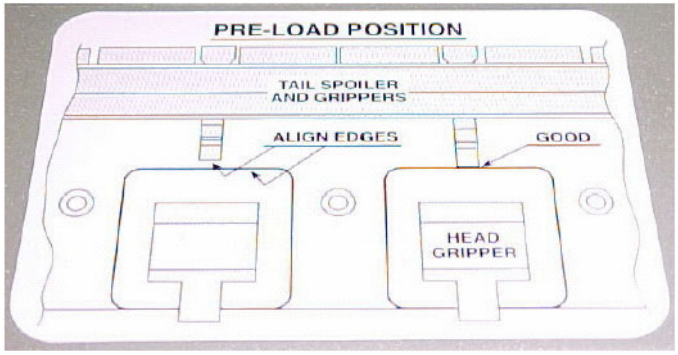
1. Ensure that the air filter is dry.
2. Drain any moisture formed by condensation.

Note: Your service engineer must replace the air pressure unit every six months. Make sure to fill in the date of replacement and stick it on the air pressure unit.

Drum

Note: After cleaning the drum vacuum holes, the drum surface, and the end detection strip, make sure the tail grippers have not moved. If they did move, you must move them to Pre-Load position:

1. Drag the tail gripper to the preload position (as shown in the picture below).



2. In the Hardware dialog box, open the Loading system directory.
3. Double-click **Loading system**.
4. In the Loading System dialog box, click **Restart Plate State**.
5. Click **Pre-load** (in the same dialog box) to move the tail gripper to the correct position according to the defined plate size.

The status indicator shows Ready (blue).

Cleaning the Drum Vacuum Holes

Clean the drum vacuum holes as follows:

1. Turn the drum vacuum *on* during cleaning so that the loosened particles will be sucked through the holes.
2. In Lotem Controller, go to **Utilities > Hardware > Drum System > Drum Vacuum Pump.**
3. Click **Start.**
4. Remove the cleaning jig (shown in Figure 3 on page 9) found in the *Drum Hole Cleaning Kit*, 510K1R593 (*Accessories box*).

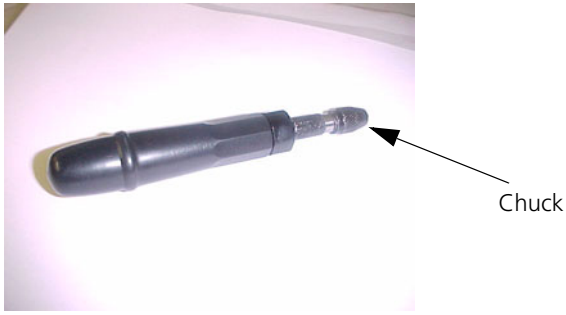


Figure 3: Cleaning jig

5. Open the chuck.
6. Insert the 0.8 mm drill.

Note: Make sure the drill is inserted so that it is long enough, at least 25.4 mm or 1 inch, to completely enter the drum holes.

7. Tighten the chuck.
8. Swivel the drill to open and clean the drum holes.
9. In Lotem Controller, in the Open dialog box, click **Stop**.
10. Close the Lotem Controller application and shut down the Windows Operating system.
11. On the distribution box, turn off the main power switch.



Figure 4: Drum vacuum holes

Cleaning the Drum Surface

After cleaning the drum vacuum holes, use a cloth dampened in alcohol to clean the entire drum surface. Clean the grooves.



Figure 5: Cleaning the drum and grooves

Cleaning the Edge Detection Strip

➢ Use a cloth dampened in alcohol to clean the edge detection strip. Figure 6 below shows the edge detection strip on the Lotem 400 machine. See Figure 7 for the location of the edge detection strip on the Lotem Quantum 400 machine.

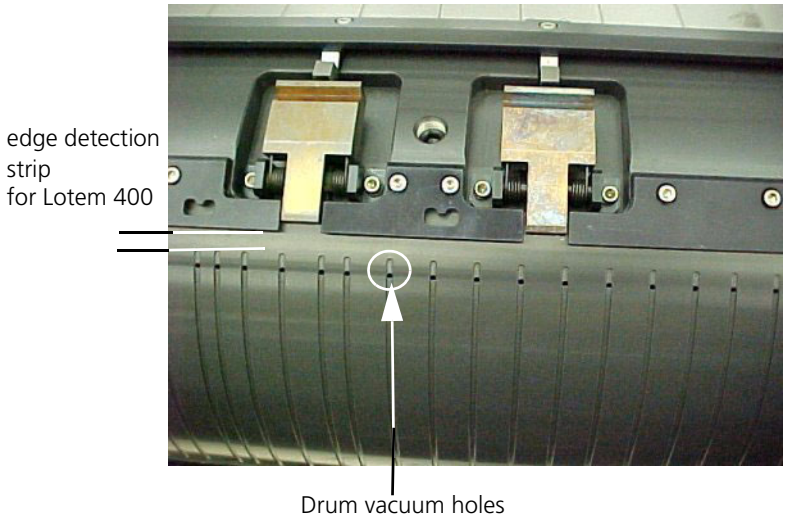


Figure 6: Drum vacuum holes - Lotem 400

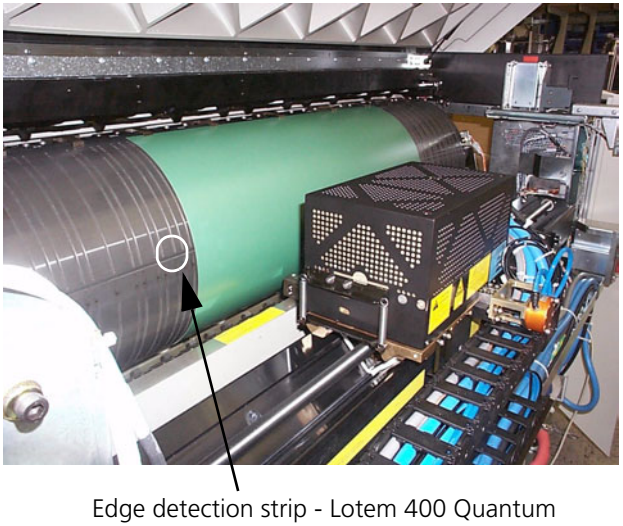


Figure 7: Drum and edge detection strip, Lotem 400 Quantum

Cleaning the Fiber Head Lens

Note: Only for Lotem 400 and Lotem 400 Xpose machines.

1. Verify that the carriage is in close to end position. To do this, in Lotem Controller, go to **Utilities** menu and select **Hardware > Expose System > Carriage System** . Move carriage to position **809** and click **Start**.

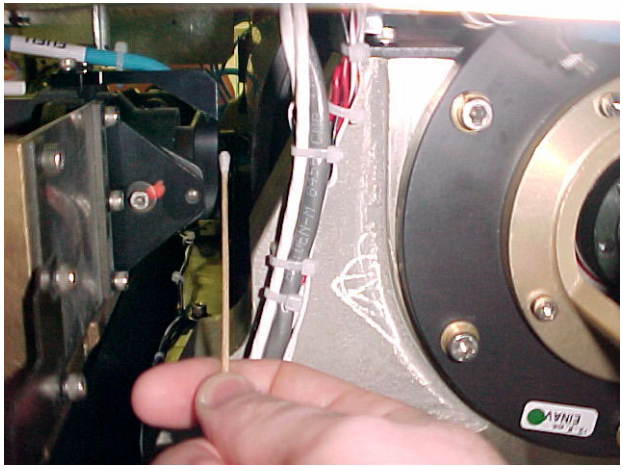


Figure 8: Cleaning the fiber head lens (local 3 side)

2. Open the front door.
3. Open the right side door.
4. Open the service panel with a screw driver.
5. Access the head lens with a long dry Q-tip and clean.

Maintenance Procedure for Manual Machines

The following procedure should be performed on manual machines in addition to the regular maintenance procedures outlined earlier in this manual.

Cleaning the Loading Tray

➢ Use a press blanket cleaner (not alcohol) to clean the tray rollers.

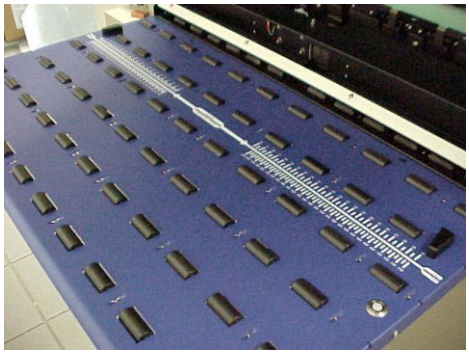


Figure 9: Loading tray rollers, Lotem 400

Cleaning the Loading Wheel

➢ Use a press blanket cleaner (not alcohol) to clean the loading wheel.

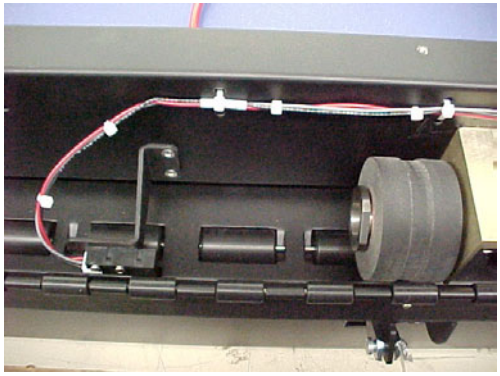


Figure 10: Loading wheel

Maintenance Procedures for the MCU

The following procedure should be performed on machines with MCU in addition to the regular maintenance procedures outlined earlier in this manual.

Cleaning the Centering and the Short Pins

Use a cloth dampened with alcohol to clean the centering and short pins.

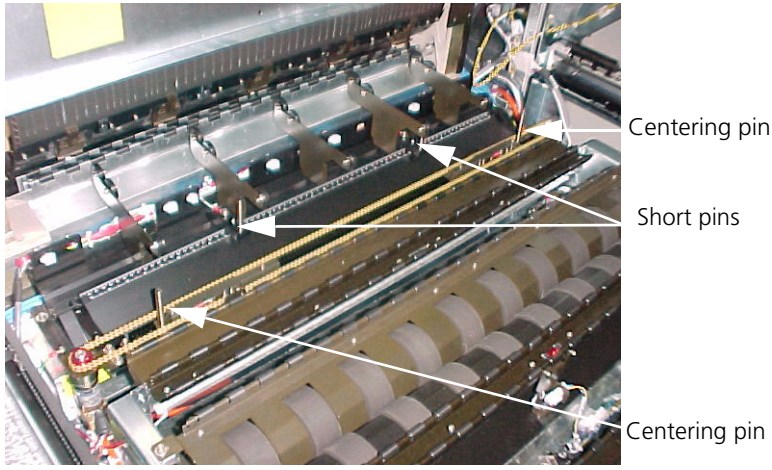


Figure 11: Lotem 400 with MCU, front view: centering system

Cleaning the Disposal Rollers

1. Use a press blanket cleaner (not alcohol) to clean the disposal rollers.
2. Remove any pieces of paper that are stuck inside.



Figure 12: Disposal rollers, Lotem 400 with MCU

Cleaning the Unloading Rollers

- Clean the unloading tray, the rollers, and the surface with a press blanket cleaner.

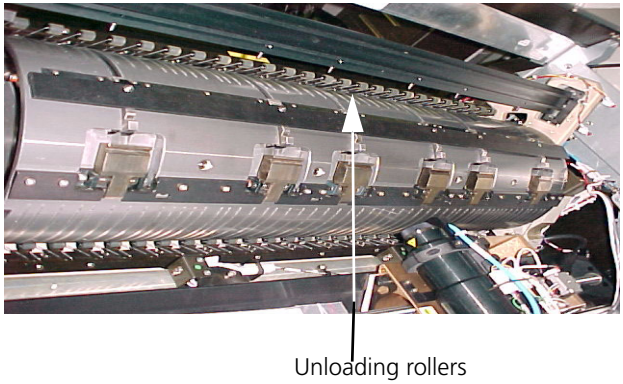


Figure 13: Unloading rollers

Emptying the Punch Disposal

The punch container collects the punch slugs and must be emptied periodically. To determine when the container is full, you should examine it periodically. There is no sensor in the system that detects when the

container is full, so you must periodically perform a visual check. The frequency of this visual examination depends on the amount of work you perform.

To check the punch container and empty it when necessary:

1. On one side of the machine, look inside and check the level of punch slugs of the punch container.
2. Use a vacuum cleaner to empty the punch container.



Figure 14: Punch slug

3. Dispose the punch slugs.

Emptying the Paper Disposal

After 30 exposures, a warning message appears in the main Lotem Controller window showing the current paper count. After 49 exposures, the error message informs you that you will not be able to continue exposing after the next exposure unless you empty the paper disposal bin.

The following indications appear when you cannot continue exposing plates until the paper is removed:



- The status indicator says **Attention**.
- A message in the Message dialog box requests that you remove the paper.

To empty the paper disposal bin:

1. Open either the right or left door of the paper disposal bin (the door's location is shown in Figure 15).
2. Pull out the paper.

CAUTION: Make sure the disposal rollers are not moving. Make sure there are no plate remains in the cabinet.

3. Close the door.



Figure 15: Paper disposal door (right door)

Maintenance Procedures for Quantum Machines

The following procedure should be performed on Quantum machines in addition to the regular maintenance procedures outlined earlier in this manual.

Replacing the Cooling Air Filter Unit

The cooling air filter unit is located on the left side door. You should replace the filter every two months. In very dusty environments, replace this filter more often.

1. Open the left side door of the machine.
2. Pull out the filter frame. The clips snap off (see Figure 16 on page 19).

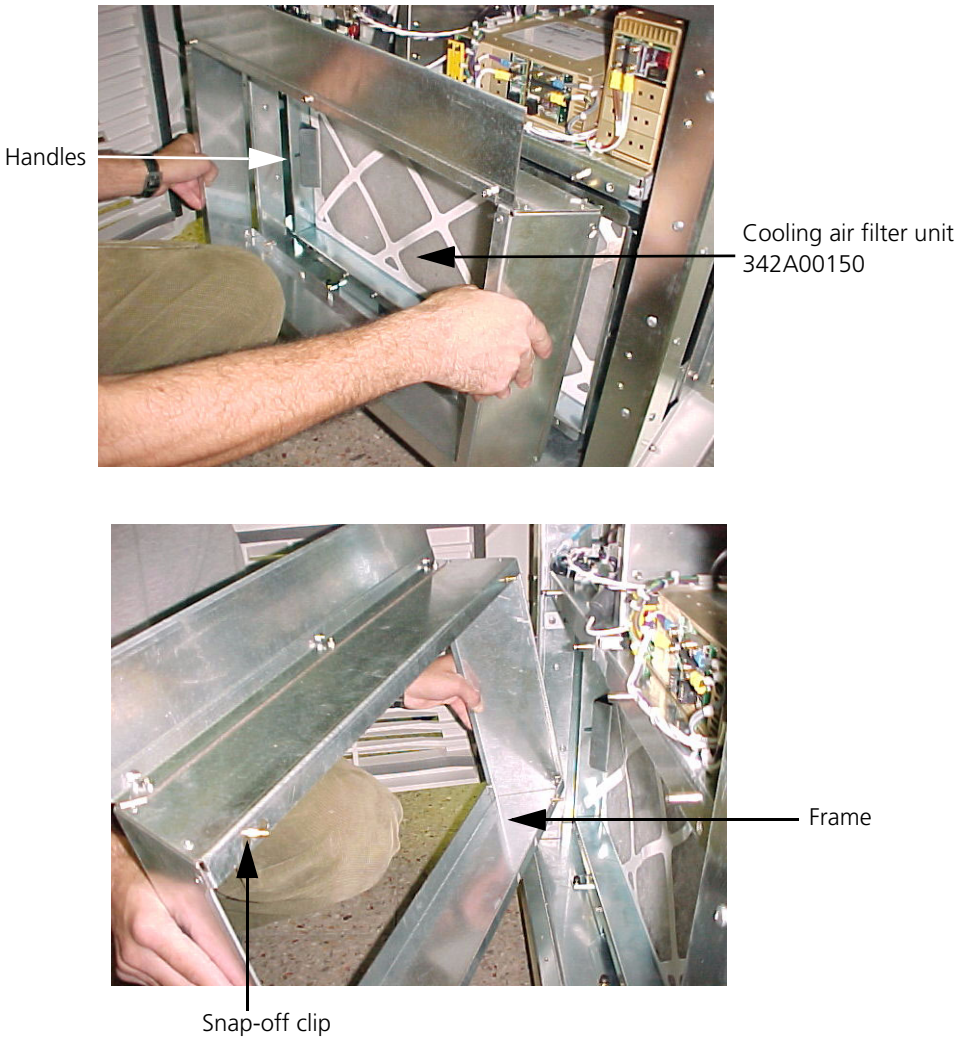


Figure 16: Cooling air filter unit

Note: Some machines are equipped with screws rather than snap-off clips. On such machines, release the 6 screws (type 8-32, length = 3/8 inches) and pull off the air filter cover, as shown in Figure 17 on page 20.

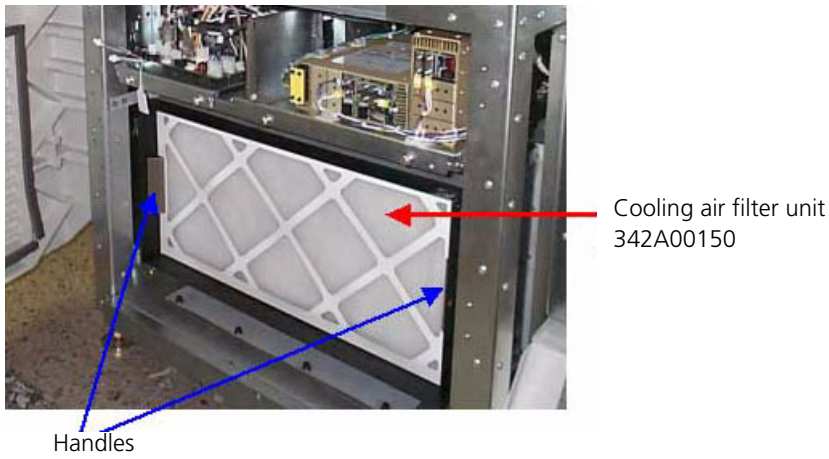
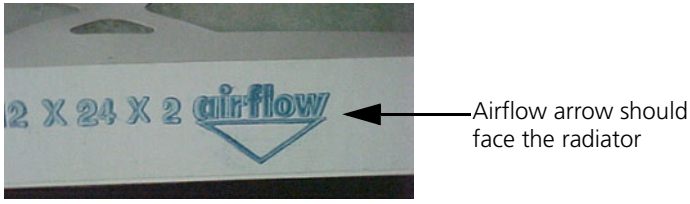


Figure 17: Frames with screws

3. Lift the handles, located on the left and right sides, push them halfway up, and pull them outwards.
4. Replace the cooling air filter unit. Assemble the new unit with the arrow facing the radiator side



5. Assemble the air filter cover following steps 2 and 3 in the reverse order.

Completion of Lotem Maintenance

When you have completed the maintenance procedures, follow these steps:

1. Close all the doors.
2. Turn on the machine.
3. Make sure the machine is in the **Ready** mode.

Universal Debris Removal Cabinet (UDRC)

Maintenance Schedule

Table 3 outlines the maintenance required to achieve optimum performance of the UDRC and to decrease the number of service calls you make.

Table 3: Maintenance schedule for the UDRC-B configuration

Maintenance	Action	Description of procedure
UDRC-B particulate filter, 57-8792	Replace every 6 months.	See page 22
UDRC-L particulate filter, 57-8791	Replace every 6 months.	See page 27
UDRC-L processless (chemical) filter, 50-2281B	Replace when warning message appears on Lotem Controller. This is approximately every 6 months, depending on the plate size and plate quality exposed.	See page 31
UDRC interior surfaces	Clean when replacing particulate filter.	See page 23
UDRC exterior surfaces	Clean as required.	See page 37

For Your Safety

The UDRC is fitted with a lid open/filter presence switch that protects against exposure to airborne emissions (particulate debris). If the cabinet lid is opened while imaging is in progress, the imaging process stops and the plot is lost.

The UDRC will not operate without a particulate filter or when the particulate filter is full.

WARNING:
•Do NOT interfere with the lid open/filter presence switch.
•Do NOT attempt to open the cabinet lid while the output device is imaging.
•Wait for the power indicator light to turn off before you open the UDRC.
•When replacing the filter, follow the printing media MSDS guidelines, where available.

Failure to heed the above warnings could result in exposure to airborne emissions in excess of applicable regulatory limits and in discomfort, illness, injury, and/or disability.

Note: Dispose of used particulate filters according to federal, state/provincial, and municipal regulations and the media manufacturer guidelines (MSDS or other documents) for the respective media.

The UDRC-B Particulate Filter

The UDRC-B particulate filter removes particulate emissions. The blower draws the particulate debris into the filter compartment where the debris is trapped in the particulate filter.



Figure 18: Particulate filter for the UDRC-B

You can order replacement filters from Creo. The replacement filter part number is 57-8792C.

Frequency of Filter Replacement

The life of the particulate filter depends primarily on the type of media you use, since media release different amounts of particulate debris. The workstation displays messages advising you of the particulate filter's condition:

- `Debris Removal: The particulate filter is almost full. Please ensure a replacement filter is on hand.`
- `Debris Removal: The particulate filter is full. You must replace the particulate filter to continue imaging.`

If the "filter full" message appears during imaging, the current plot is completed, but you must replace the filter to continue with further imaging. To maximize filter life, replace the particulate filter when the "filter full" message displays.



Important: It is recommended that you always keep a spare particulate filter on hand.



Important: If your output device is running unattended, we highly recommend that you replace the filter shortly after the "filter almost full" message appears. This helps avoid an unplanned shutdown of your output device during unattended operations. However, to maximize filter life, you can put the partly used filter back into the UDRC if an operator is going to be present while the output device is running.

Replacing the UDRC-B Particulate Filter

Important: Where (1) people are sensitive to airborne emissions in concentrations below the applicable regulatory limits, and/or (2) a MSDS is not available, wear a smock, protective gloves, and respiratory protection while replacing a filter.

Important: Remember to read the safety information regarding this procedure. See *For Your Safety* on page 21.

To replace the particulate filter:

1. Ensure that your output device is not imaging a plate or film and that the power indicator light is off.
2. Open the cabinet lid by pressing down with the heel of your hand while releasing the latch with your fingers (see Figure 19).

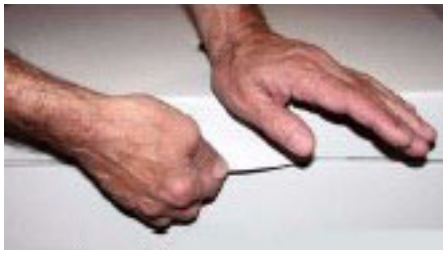


Figure 19: Opening the UDRC latch

3. Remove the used particulate filter by lifting the filter straight up by means of the two D-rings (see Figure 20 on page 25).

CAUTION: The hole in the top of the filter can have a very sharp edge. If you use this hole to lift the filter, you may cut your fingers.



Figure 20: Removing the particulate filter

4. Place the used filter in a bag for disposal.
5. Clean the interior of the UDRC filter compartment:
   a. Remove the particulate filter spacer from the bottom of the filter compartment.
   b. Wipe the interior surface of the filter compartment with clean rags dampened with water and mild detergent.
   c. Remove all residue by wiping thoroughly with a clean, damp rag.
   d. Wipe the inside of the inner lid and the deck.



WARNING: Do not let water run into the UDRC. This can result in serious personal injury or death from electrical shock, as well as damage to the equipment.

6. Reinstall the particulate filter spacer.

   Orient the filter spacer as shown in Figure 21 on page 26.

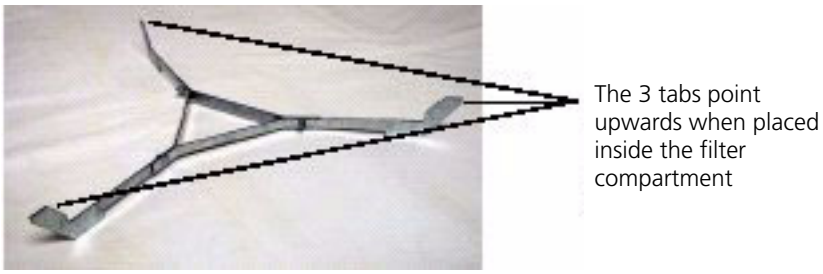


Figure 21: Correct orientation for the particulate filter spacer

7. Install the new particulate filter in the filter compartment, with the gasket facing up.

   Ensure that the filter is fully seated on the particulate filter spacer. The spacer centers the filter inside the filter compartment (see Figure 22).



Figure 22: Particulate filter correctly seated on the spacer

   When replacing filters, be careful not to bang the filter against the upper edge of the compartment. Damage to the edge can cause an air leak from the outside into the compartment, reducing the flow from the debris collection nozzle. Depending on the extent of the air leak, filter life will be reduced and a low flow error message may appear on your workstation.

8. Close the cabinet lid by pressing down on it until you hear a click.
9. Wash your hands.

The UDRC-L Particulate Filter

The UDRC-L particulate filter removes particulate emissions. The blower draws the particulate debris and chemical compounds into the filter compartment where the particulate debris is trapped in the particulate filter.



Figure 23: Particulate filter for the UDRC-L

You can order replacement filters from Creo. See the Configuration label on the back of the UDRC for the replacement filter part number.

Frequency of Filter Replacement

The life of the particulate filter depends primarily on the type of media you use, since various media release different amounts of particulate debris. The workstation displays messages advising you of the particulate filter's condition:

- Filter almost full

```
Debris Removal: The particulate filter is almost full.
Please ensure a replacement filter is on hand.
```

- Filter full

```
Debris Removal: The particulate filter is full. You must
replace the particulate filter to continue imaging.
```

If the "filter full" message displays during imaging, the current plot is completed, but you must replace the filter to continue with further imaging. To maximize filter life, replace the particulate filter when the "filter full" message displays.



Important: We recommend that you always keep a spare particulate filter on hand.

Important: If your output device will be running unattended, we highly recommend that you replace the filter shortly after the "filter almost full" message displays. This helps avoid an unplanned shutdown of your output device during unattended operations.

The next time the output device will be running attended, you can maximize filter life by putting the partly-used filter back into the UDRC and using it until it is full.

Replacing the UDRC-L Particulate Filter

To replace the particulate filter:

1. Ensure that your output device is not imaging a plate or film, and the power indicator light is off.
2. Open the cabinet lid by pressing down with the heel of your hand while releasing the latch with your fingers (see Figure 24).

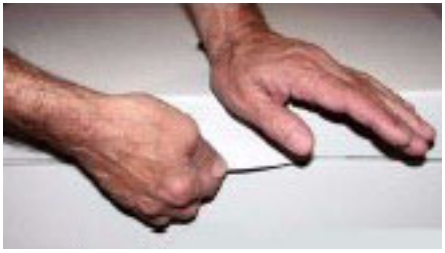


Figure 24: Opening the UDRC latch

3. Remove the used particulate filter by lifting the filter straight up using the two D-rings (see Figure 25 on page 29).

Important: Where (1) people are sensitive to airborne emissions in concentrations below the applicable regulatory limits, and/or (2) a MSDS is not available, wear a smock, protective gloves, and respiratory protection while replacing a filter.

Important: Remember to read the safety information regarding this procedure. See *For Your Safety* on page 41.

CAUTION: The hole in the top of the filter can have a very sharp edge. If you lift the filter using this hole, you may cut your fingers.



Lift the used filter straight up using the two D-rings

Figure 25: Removing the particulate filter

4. Place the used filter in a bag for disposal.
5. Clean the interior of the UDRC filter compartment:
    a. Remove the spacer and chemical filter from the bottom of the filter compartment (see Figure 26 on page 29 and Figure 29 on page 31). Since you are not replacing the chemical filter, place it on a sheet of paper out of the way.
    b. Wipe the interior surface of the filter compartment with clean rags dampened with water and mild detergent.
    c. Remove all residue by wiping thoroughly with a clean, damp rag.
    d. Wipe the inside of the inner lid and the deck.



WARNING: Do not let water run into the UDRC. This can result in serious personal injury or death from electrical shock, as well as damage to the equipment.

6. Reinstall the chemical filter—with the gasket facing down (see Figure 26).



Figure 26: Reinstalling the chemical filter

When replacing the filter:

- Be careful not to bang the filter against the upper edge of the compartment. If you damage the edge, you could cause an air leak from the outside into the compartment, reducing the flow from the debris collection nozzle. Depending on the extent of the air leak, filter life is reduced and a low flow error message may appear on your workstation.
- Ensure that the gasket for the chemical filter is not damaged while installing. If the gasket is damaged, airborne emissions may by-pass the chemical filter and be released into the room.
- If the chemical filter appears to be off center, do not attempt to slide the filter sideways to center it. This may damage the contact pins in the bottom of the filter compartment. Instead, pick up the filter at least one inch (25 mm), position it so the filter is visually centered, and then lower it into position.

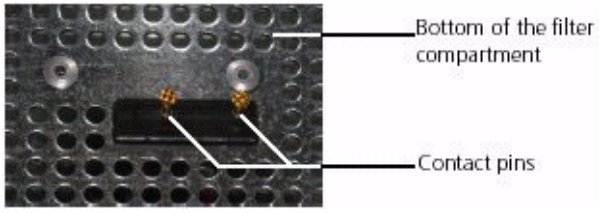


Figure 27: Contact pins

7. Reinstall the spacer on top of the chemical filter. Ensure that the spacer is oriented correctly and the filter is centered (see Figure 28 below and Figure 29 on page 31).

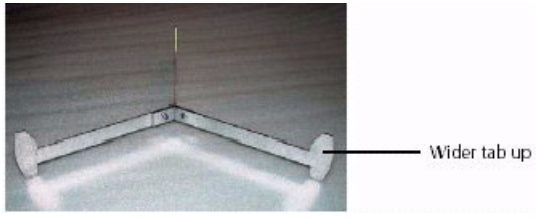


Figure 28: Correct orientation of the chemical filter spacer

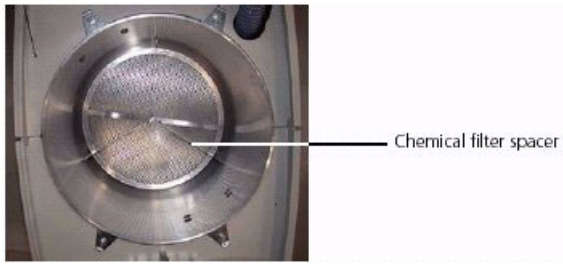


Figure 29: Reinstalling the chemical filter spacer

8. Install the new particulate filter in the filter compartment with the gasket facing up.

   Ensure that the filter is fully seated on the chemical filter spacer (see Figure 30). The spacer centers the filters inside the filter compartment.



Figure 30: UDRC-L filters correctly seated on the spacer

9. Close the cabinet lid by pressing down on it until you hear a click.
10. Wash your hands.

The Chemical Filter

The chemical filter removes airborne gaseous emissions. The blower draws the particulate debris and chemical compounds into the filter compartment where the chemical compounds are trapped in the chemical filter.

You can order replacement filters from Creo. See the Configuration label on the back of the UDRC for the replacement filter part number.

Frequency of Filter Replacement

The life of the chemical filter depends primarily on the type of media you use, since various media release different amounts of chemical compounds.

A built-in sensor in the chemical filter monitors the remaining life. The firmware recognizes all qualified media and allows the filter to operate for the longest possible time.

The workstation displays messages advising you of the chemical filter's condition:

- Filter almost expired

  ```
  Debris Removal: The chemical filter has almost expired.
  Please ensure a replacement filter is on hand.
  ```

- Filter expired

  ```
  Debris Removal: The chemical filter has expired. You
  must replace the chemical filter and reset the output
  device to continue imaging.
  ```

If the "filter expired" message displays during imaging, the current plot is completed, but you must replace the filter to continue with further imaging.

To maximize filter life, replace the chemical filter when the "filter expired" message displays.



Important: We recommend that you always keep a spare chemical filter on hand. In addition, keep the chemical filter in its original sealed package until ready for use.



Important: If your output device will be running unattended, we highly recommend that you replace the filter shortly after the "filter almost expired" message displays. This helps avoid an unplanned shutdown of your output device during unattended operation.

The next time the output device will be running attended, you can maximize filter life by putting the partly-used filter back into the UDRC and using it until it expires.

When you replace the chemical filter, you must reset the output device.

Replacing the Chemical Filter

Important: Where (1) people are sensitive to airborne emissions in concentrations below the applicable regulatory limits, and/or (2) a MSDS is not available, wear a smock, protective gloves, and respiratory protection while replacing a filter.

Important: Remember to read the safety information regarding this procedure. See *For Your Safety* on page 21.

To replace the chemical filter:

1. Ensure that your output device is not imaging a plate or film, and the power indicator light is off.
2. Open the cabinet lid by pressing down with the heel of your hand while releasing the latch with your fingers (see Figure 31).

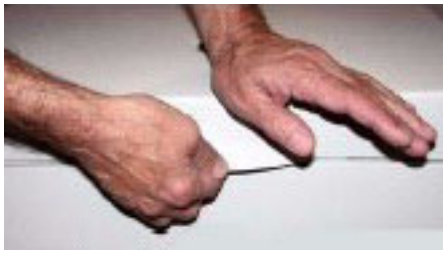


Figure 31: Opening the UDRC latch

3. Remove the particulate filter by lifting the filter straight up using the two D-rings (see Figure 32).



Figure 32: Removing the particulate filter

CAUTION: The hole in the top of the filter can have a very sharp edge. If you lift the filter using this hole, you may cut your fingers.

Since you are not replacing the particulate filter, place it on a sheet of paper out of the way.

4. Remove the chemical filter spacer (see Figure 33).

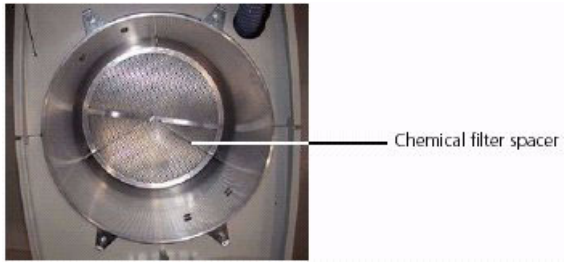


Figure 33: Removing the chemical filter spacer

5. Remove the used chemical filter (see Figure 34).

   Place the used filter in a bag for disposal (you can use the bag that the new filter came in).



Figure 34: Removing the chemical filter

6. Clean the interior of the UDRC filter compartment:
    a. Wipe the interior surface of the filter compartment with clean rags dampened with water and mild detergent.
    b. Remove all residue by wiping thoroughly with a clean, damp rag.
    c. Wipe the inside of the inner lid and the deck.
7. Install the new chemical filter with the gasket facing down.

When replacing the filter:

- Be careful not to bang the filter against the upper edge of the compartment. Damage to the edge can cause an air leak from the outside into the compartment, reducing the flow from the debris collection nozzle. Depending on the extent of the air leak, filter life will be reduced and a low flow error message may appear on your workstation.
- Ensure that the gasket for the chemical filter is not damaged while installing. If the gasket is damaged, airborne emissions may by-pass the chemical filter and be released into the room.
- If the chemical filter appears to be off center, do not attempt to slide the filter sideways to center it. This may damage the contact pins in the bottom of the filter compartment. Instead, pick up the filter at least one inch (25 mm), position it so the filter is visually centered, and then lower it into position.

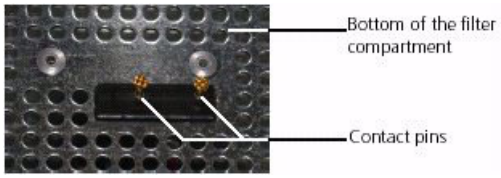


Figure 35: Contact pins

8. Reinstall the spacer on top of the chemical filter.

WARNING: Do not let water run into the UDRC. This can result in serious personal injury or death from electrical shock, as well as damage to the equipment.

Ensure that the spacer is oriented correctly and the filter is centered (see Figure 36).

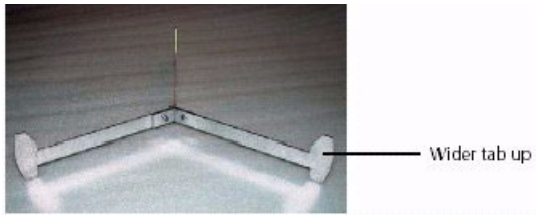


Figure 36: Correct orientation for the chemical filter spacer

9. Reinstall the particulate filter in the filter compartment with the gasket facing up.

Ensure that the filter is fully seated on the chemical filter spacer. The spacer centers the filters inside the filter compartment (see Figure 37).



Figure 37: UDRC-L filters correctly seated on the spacer

10. Close the cabinet lid by pressing down on it until you hear a click.
11. Wash your hands.
12. Reset the output device.

Cleaning the Cabinet's Exterior Surface

You should clean the exterior surface of the UDRC as required. Cleaning the exterior surface of the UDRC preserves the appearance and finish.

To clean exterior surfaces:

1. Wipe all exterior surfaces with clean rags dampened with water and mild detergent.
2. Wipe off all detergent residue with a clean, damp rag.



CAUTION: The use of isopropyl alcohol may damage the appearance of the UDRC.



WARNING: Do not let water run into the UDRC. This can result in serious personal injury or death from electrical shock, as well as damage to the equipment.