Maintenance Guide for User

English

Lotem 800 Family

399Z3R770A

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Lotem 800 Family

Maintenance Guide for User

creo™

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RE37,376	5,283,140	5,517,359	5,699,740	5,969,872	6,134,393	6,283,589
4,456,924	5,291,273	5,519,852	5,708,736	5,973,801	6,136,509	6,295,076
4,500,919	5,323,248	5,526,143	5,713,287	5,986,819	6,137,580	6,299,572
4,558,302	5,325,217	5,532,728	5,742,743	5,995,475	6,147,789	6,318,266
4,743,091	5,339,176	5,561,691	5,764,374	5,996,499	6,158,345	6,340,817
4,992,864	5,343,059	5,568,595	5,764,381	5,998,067	6,159,659	6,352,816
5,049,901	5,355,446	5,576,754	5,771,794	6,003,442	6,164,637	6,353,216
5,079,721	5,359,451	5,579,115	5,785,309	6,014,471	6,180,325	6,366,339
5,081,617	5,359,458	5,592,309	5,802,034	6,016,752	6,181,362	6,371,026
5,103,407	5,367,360	5,594,556	5,813,346	6,031,932	6,181,439	6,377,739
5,111,308	5,384,648	5,600,448	5,818,498	6,043,865	6,186,068	6,387,597
5,113,249	5,384,899	5,608,822	5,854,883	6,060,208	6,189,452	6,396,422
5,122,871	5,412,491	5,615,282	5,861,904	6,063,528	6,191,882	6,396,618
5,124,547	5,412,737	5,625,766	5,861,992	6,063,546	6,204,874	6,407,849
5,132,723	5,420,702	5,636,330	5,875,288	6,072,518	6,208,369	6,414,755
5,150,225	5,420,722	5,649,220	5,894,342	6,090,529	6,214,276	6,422,801
5,153,769	5,459,505	5,650,076	5,900,981	6,096,461	6,217,965	6,435,091
5,155,782	5,473,733	5,652,804	5,934,196	6,098,544	6,252,522	
5,157,516	5,481,379	5,680,129	5,942,137	6,107,011	6,260,482	
5,208,818	5,488,906	5,691,823	5,946,426	6,112,663	6,266,080	
5,208,888	5,497,252	5,691,828	5,947,028	6,115,056	6,266,134	
5,247,174	5,508,828	5,696,393	5,958,647	6,121,996	6,267,054	
5,249,067	5,509,561	5,699,174	5,966,504	6,130,702	6,268,948	

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Overview

This document describes the periodic maintenance procedures to be performed on the Lotem 800 Family platesetters. The Lotem 800 Family includes the following:

- Lotem 800 (Fiber Head)
- Lotem 800 II
- Lotem 800 II with Spectrum
- Lotem 800 II Quantum
- Lotem 800 II Quantum with Spectrum
- Lotem 850 Quantum

Lotem Family refers to all the above mentioned machines unless otherwise specified.

Read the relevant *Safety Precautions for User* documentation before performing the periodic maintenance procedures.

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

Table 1: Parts List

Name	Part Number
Cooling unit filter	342A00150
Debris removal filter	57-8792C
Air service unit filters - 3 filters	510K1R130
Air service unit filters - 2 filters	342A10230
Drum holes cleaning kit	510K1R593

The table below summarizes the periodic maintenance schedule. For details on each of the procedures, continue reading this document.

Table 2: Summary of Periodic Maintenance Procedures

#	Periodic Maintenance	Frequency	Replace Every...
1.	Drum vacuum holes	weekly/bi-weekly	
2.	Drum surface	weekly/bi-weekly (Spectrum machines, clean daily)	
3.	Edge detection strip	weekly/bi-weekly	
4.	Air pressure unit	weekly/bi-weekly	6 months
5.	Centering pins	weekly/bi-weekly	
6.	Punch disposal	6 months	
7.	Disposal rollers	weekly/bi-weekly (Spectrum machines, clean daily)	
8.	Unload rollers	weekly/bi-weekly (Spectrum machines, clean daily)	
9.	Cooling unit filter	weekly/bi-weekly	2 months
10.	UDRC	weekly/bi-weekly	6 months



Note: Depending on the media type and expose frequency, perform periodic maintenance either weekly or bi-weekly, unless otherwise mentioned.



Important: For platesetters with the Spectrum option, you must perform the following maintenance procedures every day:
1) Clean the drum surface
2) Clean the unload roller
3) Clean the proof loading bar vacuum and rollers
4) Clean the disposal rollers
5) Clean the carriage surface

Before You Begin

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

1. Remove the loading cassette to enable better access to the loading area. Perform the following steps:

   a. Click **Cassette Setup** on the **Main Operations** menu. Then from the submenu that opens, select **Release Cassette**, or:
   click on the cassette on the **Online machine view**. The **Online machine view** will then show the cassette outside the machine.



Figure 1: Main window showing the released cassette

   b. The pins that lock the cassette inside the platesetter are released. You will hear a tone indicating that the cassette lock is released.

   c. Go to the front of the cassette, and with your foot release the stoppers that lock the wheels of the cassette.

   d. Pull out the cassette.

   e. Roll the cassette to the location of the plates.

2. From the application, open the front doors as follows:



   a. From the **Routine Functions** menu, click the **Open Front Door** button.

   b. The door locking mechanism is released for 30 seconds. During these 30 seconds push the door slightly inward.

   c. The door releases. Lift the door to open it completely.

   When the front door is open, the safety interlocks are activated. As a result, machine systems such as drum motor and laser system do not operate. The machine is in **Service** mode (**Status** indicator is purple) and the **Interlock** indicator appears below the **Status** indicator with the name of the open door.



Note: You can interactively open the door by clicking on the front door in **Online machine view**.



3. To open the rear door,

   a. From the **Routine Functions** menu, click the **Open Rear Door** button.

   b. Repeat steps 2b and 2c above.

After you complete the above, proceed to perform the following periodic maintenance procedures. The periodic maintenance in its entirety should take up to half an hour to complete. Perform these procedures weekly or bi-weekly unless otherwise specified.

Drum

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. To do this on the PC Controller go to **Utilities > Hardware > Drum System > Drum Vacuum Pump**. The dialog box opens.

Note: For machines using software version 3.60.09, go to **Utilities > Hardware > Drum System > Drum Solenoids > Drum Vacuum Pump.**

2. Click **Start.**
3. Remove the cleaning jig (see *Figure 2*) located in the *Drum Hole Cleaning Kit, 510K1R593*, (Accessories kit).

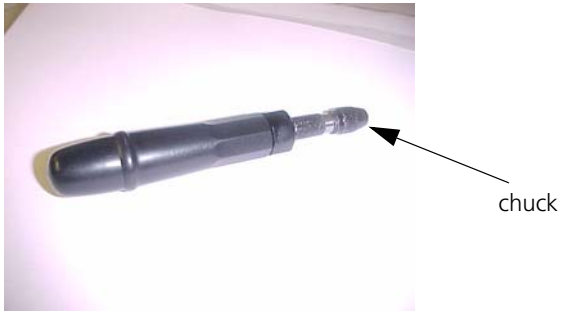


Figure 2: Cleaning jig

4. Open the chuck.
5. Insert the 0.8 mm drill.
6. Tighten the chuck.
7. Swivel the drill to open and clean the drum holes (see *Figure 3 on page 7*).
8. On the PC Controller, click **Stop** in the open dialog box.
9. On the distribution box, turn off the main power switch.

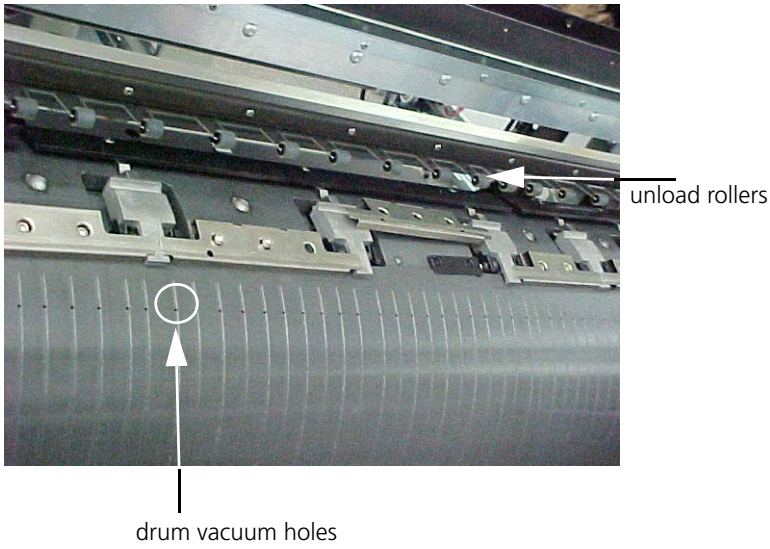


Figure 3: Drum vacuum holes

Drum Surface

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



Figure 4: Cleaning the drum

Edge Detection Strip

Note: The following procedure is necessary *only* for *Quantum* and *Type II* machines.

➢ Use a cloth dampened in alcohol to clean the grooves and the edge detection strip.

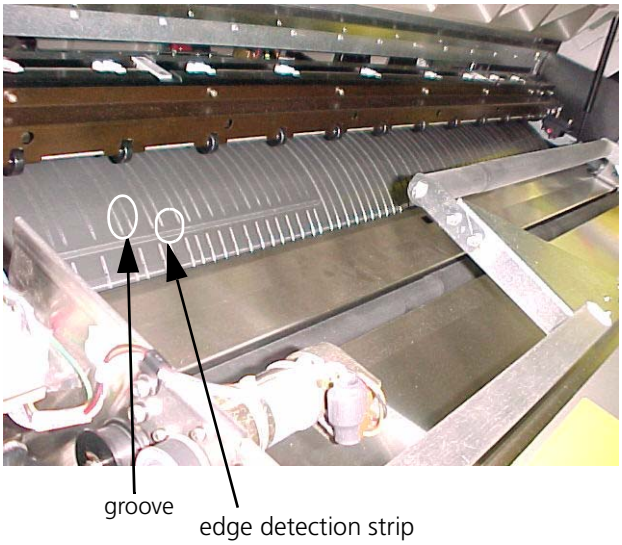


Figure 5: Drum and edge detection strip

Air Pressure Unit

Air Filters

The air service unit consists of 3 air filters.



Figure 6: Air pressure unit - 3 filters

Note: Some machines are equipped with air pressure units that contain only 2 air filters (see *Figure 7 on page 10*).



Figure 7: Alr pressure unit - 2 filters

1. Ensure that the air filter is dry.
2. Drain any condensation that exists.
3. Replace every 6 months — make sure to enter the date of replacement on the supplied sticker and stick it on the air pressure unit.

Air Pressure

Ensure that the air pressure is above 7 atm. If it is not, turn the blue knob to adjust the air pressure. See *Figure 6 on page 9*.

Centering Pins

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

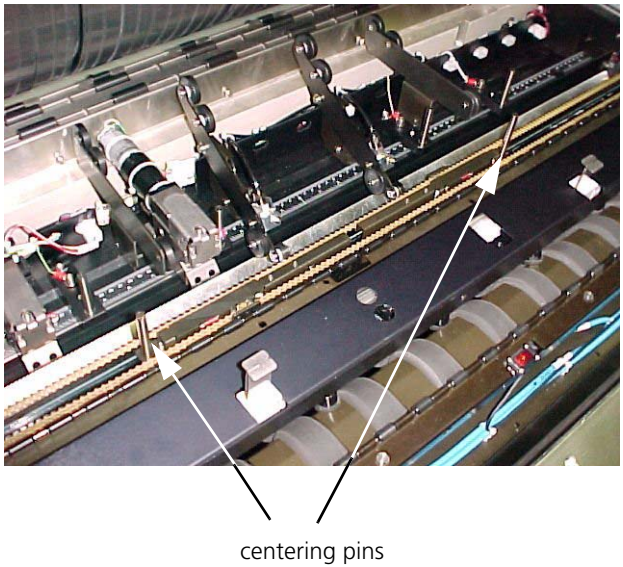


Figure 8: Lotem 800 front view, centering system

Punch Disposal

The punch slugs are collected into the punch container, which must be periodically emptied. 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 check depends on the number of plates you expose.

Note: The punch container has two sections for the left and right punch slugs. You need to check and empty each section separately.

To check the Punch container and empty it when necessary:

1. At the left and right sides of the machine, look underneath and check the level of punch slugs in both sections of the punch container.
2. To empty the punch container (located underneath the paper disposal bin), open the left or right punch container opening (shown in the figure below).

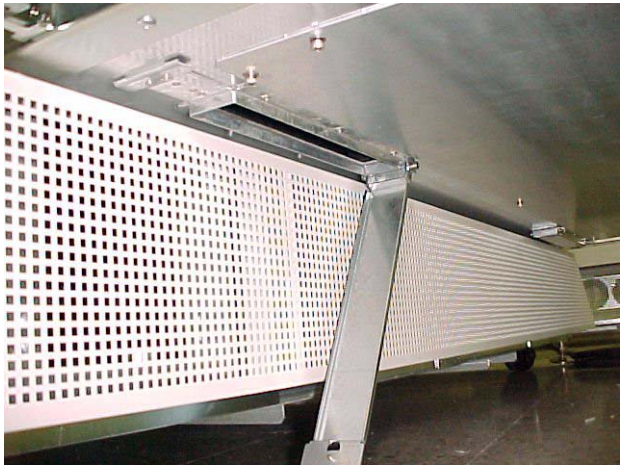


Figure 9: Opening the punch container

Tip: You can place a suitable box under the left or right opening to collect the punch slugs.

3. Close the punch container opening.
4. Dispose the punch slugs.

Disposal Rollers

1. Use a cloth dampened with alcohol to clean the disposal rollers.
2. Remove any pieces of paper stuck inside.

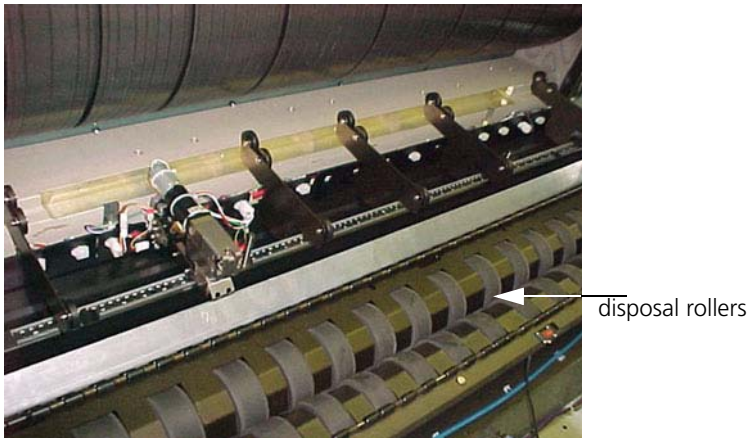
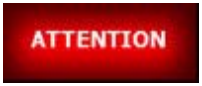


Figure 10: Disposal rollers

Paper Disposal

After 30 exposures, a message appears on the PC controller main window showing the current paper count. After 49 exposures, the 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:



- Status indicator shows **Attention**.
- A message in the Message dialog box requests that you remove the paper.

To empty the paper disposal bin:



Note: Do not open the paper disposal bin while the paper disposal motor is working. In software version 3.60.xx and higher, you can open the doors while the machine is operating, however you must remove the paper within 30-40 seconds, otherwise this might cause a failure.

1. Open the right or left door of the paper disposal bin (door location is shown in the *Figure 11 on page 15*).
2. Pull out the paper.
3. Close the door.



Figure 11: Paper disposal door (right side)

Unload Rollers

➢ Clean the unloading tray, which includes the unloading rollers and the tray surface, with a rubber cleaner.

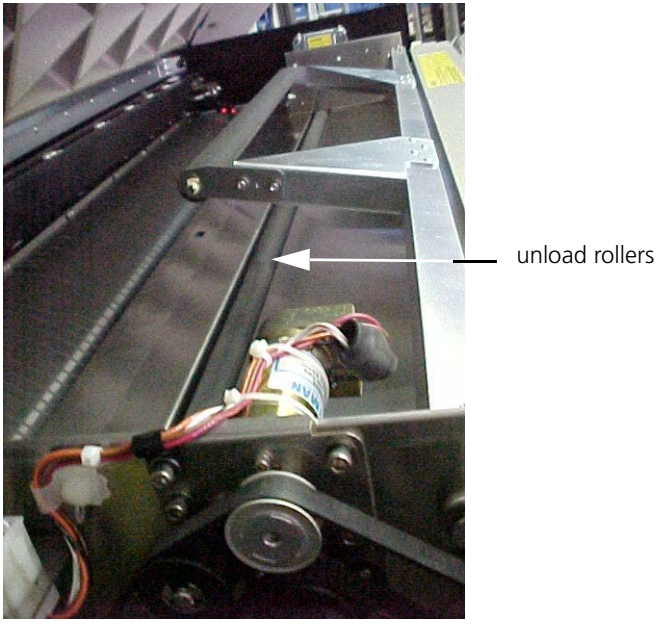


Figure 12: Unload rollers on Lotem 800 machines with omron interlocks

Cooling Unit Filter

Note: The following procedure is necessary *only* for *Quantum* and *Type II* machines.

The air intake pre-filter is located on the left side door. It should be replaced at least once a month. In dirtier 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 13 on page 17*).

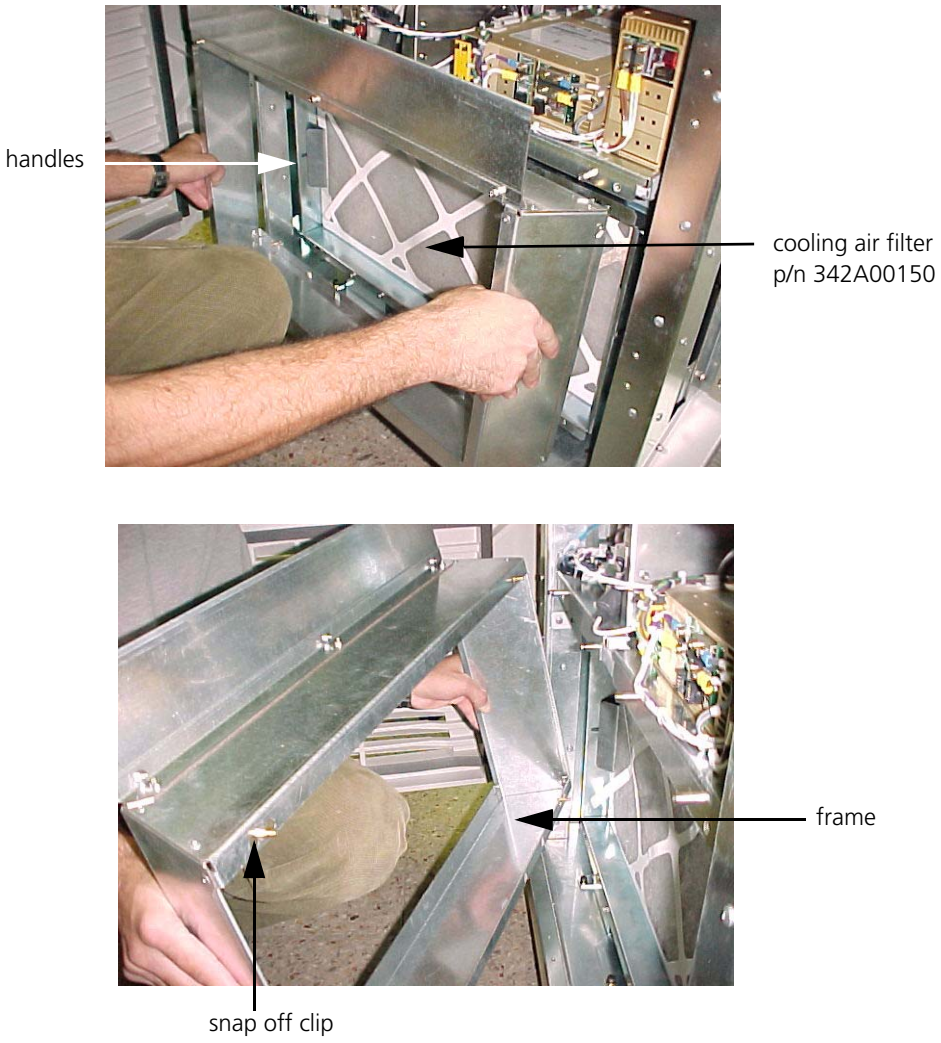


Figure 13: Cooling air filter.

Note: Some machines are equipped with screws rather than snap off clips. On those machines, release the 6 screws (type 8-32, length = 3/8 inches) and pull off the air filter cover, as shown in *Figure 14 on page 18*.

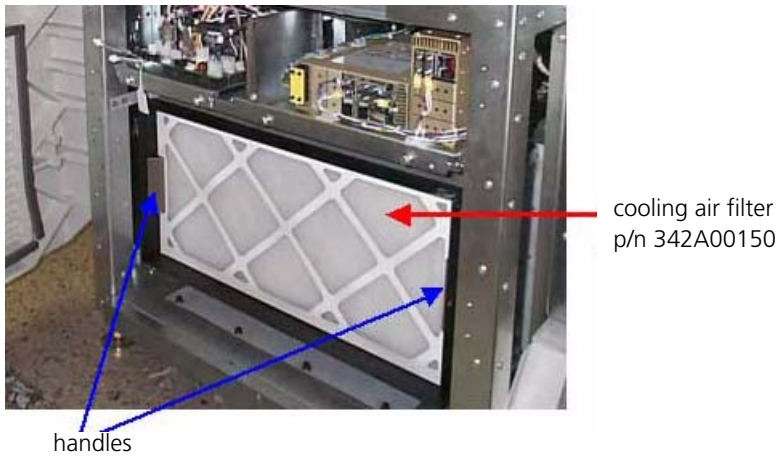
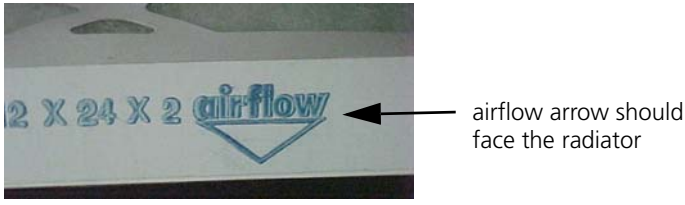


Figure 14: Frames with screws

3. Lift the right and left handles, half way up and then pull them out.
4. Replace the air filter unit and assemble the new unit so that the arrow marked on it faces the radiator side.



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

Proof Loading Bar Vacuum Cups & Rollers

Important: This maintenance procedure is for machines with Spectrum option *only*. It should be performed daily.

- Use a cloth dampened in alcohol to cleanthe proof loading bar vacuum cups and rollers.

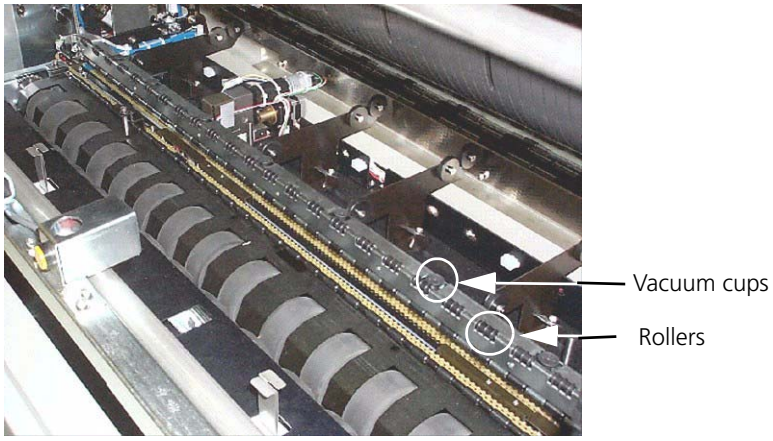


Figure 15: Proofing bar vaccum cups and rollers

Carrier Surface

Important: This maintenance procedure is for machines with Spectrum option *only*. It should be performed daily.

Before loading the carrier on the drum, you must make sure it is clean from dust and any other particles.

- Before placing the carrier on the proofing tray, use a cloth dampened in alcohol and clean both sides of the carrier.

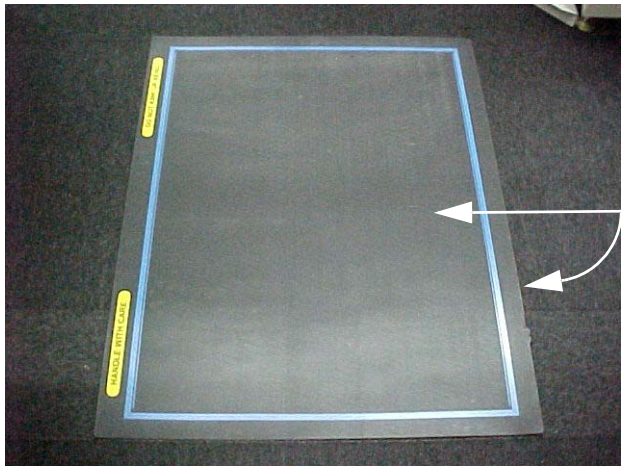


Figure 16: Carrier

After Completing Periodic Maintenance Procedures

When the above maintenance procedures are completed, do the following:

1. Close all the doors.
2. Turn on the machine. (For machines with an MCU, also turn on the MCU and switch to 24 volt).
3. Use the cheater found in the accessories kit. Place it on the cassette opening on the front panel.



Figure 17: Cheater placed on front panel

4. Make sure the machine is in the **Offline** mode.
5. On the PC Controller, click **Cassette Setup**. Then from the menu that opens, select **Release Cassette**.
6. Remove the cheater.
7. Insert the loading cassette and make sure that 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

Description Maintenance	Procedure	Clean/replace
UDRC-B particulate filter	See page 23	Replace the filter after 10,000 m^2 of plates are exposed, or every 3 months.
UDRC interior surfaces	See page 24	Clean when replacing particulate filter.
UDRC exterior surfaces	See page 28	Clean as required.

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 opening 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 possible discomfort, illness, injury, and/or disability.

Note: Dispose of used particulate filters according to federal, state/provincial, and municipal regulations, and the media manufacturers' 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 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-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 22.

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 19*).



Figure 19: Opening the UDRC latch

3. Remove the used particulate filter by lifting the filter straight up using the two D-rings (see *Figure 20 on page 26*).

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.



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*.

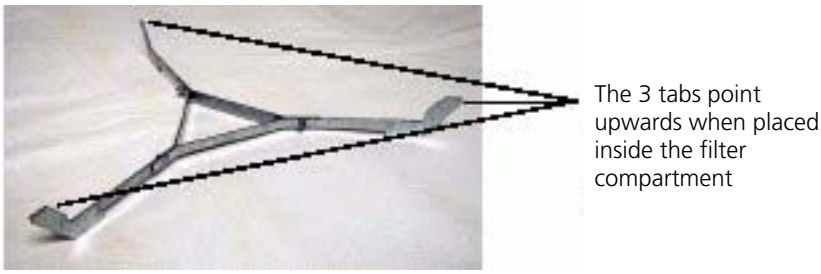


Figure 21: Correct orientation for the particulate filter spacer

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.

Cleaning the Cabinet Exterior Surface

You should clean the exterior 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.