



1 Major Safety and Handling Instructions

1.1 What Is in this Chapter

Introduction



This chapter lists general safety prescriptions to be taken into account before you start processing or maintenance.

Take a few minutes to read this chapter attentively. Thus, personal injury or (permanent) damage to the processor or printing plates can be prevented.

Overview

This chapter covers the following topics:

| Topic                                       | See     |
|---|---------|
| What Is in this Chapter                     | page 3  |
| General Safety Measures                     | page 4  |
| Safety Instructions concerning Plate Input  | page 6  |
| Safety Instructions concerning Plate Output | page 7  |
| Performing an Emergency Stop                | page 8  |
| Safety after Opening Top Cover              | page 10 |
| Handling Instructions concerning Chemicals  | page 11 |



See also 'Agfa's Environmental Guidelines' on page 42.  
See also 'Maintenance' on page 51.

### 1.2 General Safety Measures



Read the following safety measures attentively and completely before you start operating the LITHOSTAR LP 68 ULTRA or carrying out the maintenance instructions described in this Instruction Manual. Strictly proceed as described in the manual.

#### Machine usage

Only use and maintain the LITHOSTAR LP 68 ULTRA for the purpose described in this manual.

#### Repairs and troubleshooting

Repairs and troubleshooting other than described in this Instruction Manual can only be carried out by Agfa service technicians.



Unless explicitly stated in this Instruction Manual, never open or remove any covers or other parts of the processor secured by means of screws, for example. Only Agfa service technicians are allowed to do so.

#### Power

Turn off the main switch before you carry out any intervention.



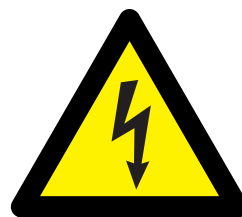
Make sure the processor is in 'Inactive' mode before you turn off the main switch.



While carrying out software maintenance procedures, leave the power on.

#### Shock Hazard

Make sure power is switched off before opening areas marked with the symbol illustrated below:



Only Agfa service technicians are allowed to open areas marked with the shock hazard label.

#### Electrical Connections

The LITHOSTAR LP 68 ULTRA has interfaces to connect to other equipment. Connecting the LITHOSTAR LP 68 ULTRA to other equipment is only permitted if the interface circuits of the other equipment comply with the requirements of Safety Electric Low Voltage (SELV) as defined in IEC950.

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**High temperature**

The wash, rinse and finisher tray operate at 40 °C.



**DANGER:** risk of scalding due to the high temperatures of the chemicals and the heating elements inside the processor.



During continuous operation the zone around the ventilation openings in the top cover above the drying section will heat exceeding safe limits. Do not touch the cover in the ventilation openings zone. A label warns the operator not to touch this zone.

**Fuses**

The LITHOSTAR LP 68 ULTRA is equipped with fuses(F1, F2 and F3) to protect the apparatus against internal short-circuits and overloads. Although the fuses can be accessed by the operator the fuses must not be used to switch off the LITHOSTAR LP 68 ULTRA. If an internal error occurs, one of the fuses will burn on. The operator may renew only once. If the fuse(s) burn on again, the Agfa Service Center must be informed to repair the LITHOSTAR LP 68 ULTRA. Due to safety reasons, renewing the fuse more than ones is not allowed.

**Incorporated safety devices**

Never bypass or turn off the incorporated safety and security devices.

### 1.3 Safety Instructions concerning Plate Input

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#### Damaged printing plates

Never re-insert damaged printing plates into the processor.

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#### Printing plate edges

Plate edges and corners may be fine and sharp and might cause cuts and wounds



Use of safety gloves is recommended with particular plates. Also handle plates with care to avoid injuries to others.



Never feed more than one plate at a time.  
Never feed strange objects into the machine.  
Never feed damaged plates.

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#### Printing plate edges



The user must take care that no loose clothing gets stuck between the feeder rolls as this will lead to serious injury.

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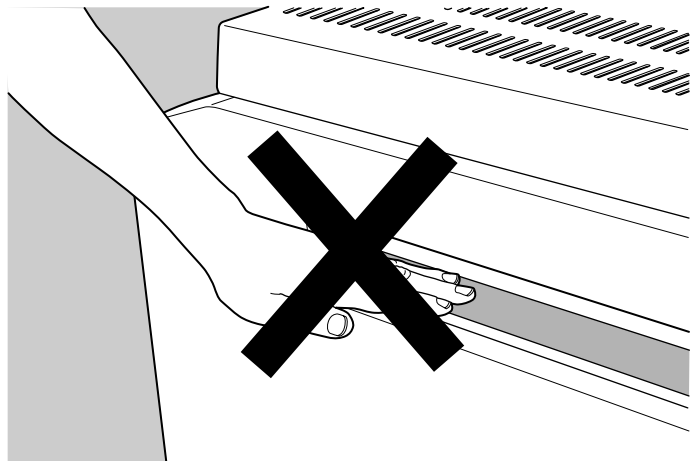
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## 1.4 Safety Instructions concerning Plate Output

### Exit rollers



Keep your fingers away from the exit section.



Do not remove plates until they have fully exited the machine.

### 1.5 Performing an Emergency Stop

#### What is it used for

You may need to stop processing immediately because:

- a printing plate is jamming or fed in skewed
- there is risk of personal injury.

#### Two ways

No special emergency stop button has been provided. Therefore, the main switch also functions as an emergency stop.

You have two ways of performing an emergency stop:

- simply switch off the processor using the main switch (See below)
- deactivate the processor by opening the cover (See below).



Please also refer to 'Switching the Processor On/Off vs. (De)Activating the Processor' on page 26.

#### An emergency stop using the main switch

Follow the procedure below to perform an emergency stop using the main switch:

| Step | Action  |
|------|---|
| 1    | Turn off the main switch.   |
| 2    | After 10 seconds, turn on the main switch again.<br>Remove jammed plates manually, if possible. |




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## 1.5 Performing an Emergency Stop, *continued*

### An emergency stop by opening the top cover

Follow the procedure below to perform an emergency stop by opening the top cover:

| Step | Action  |  |
|------|---|--|
| 1    | Open the top cover.<br>After a few seconds, the following screen pops up: <div data-bbox="901 857 1268 956" data-label="Image"> </div>  |  |
|      | If ...  | Then ...   |
| 2    | the processor did not enter 'Jammed' mode   | press the I-button to deactivate the processor.<br>The rollers open automatically.<br>Proceed with step 3. |
|      | the processor entered 'Jammed' mode   | remove any jammed plates.  |
| 3    | Close the top cover once the danger has been eliminated.<br> The message above disappears automatically.<br>There will be no need for you to press the I-button. |  |
| 4    | Press the I-button to re-enter 'Ready' mode.  |  |

### 1.6 Safety after Opening Top Cover

#### Splashing danger in wash zone

The printing plates are washed with high pressure waterjets (spray bar). Due to the high pressure the water will splash about when opening the wash tray cover. Chemicals might splash next to the tray inside the apparatus, on the clothing of the operator, on the skin of the operator or on the eyes of the operator.

- Always wear glasses or safety goggles to protect your eyes against the splashing of chemicals.
- Always wear glasses and gloves when handling chemicals or while working in the chemical section of the processor.
- If your eyes come into contact with chemicals, rinse them with clean and cold running water abundantly. If your eyes are irritated, immediately consult an ophthalmist.
- If your skin comes into contact with chemicals, wash it abundantly with clean and cold running water.

#### Injuring danger in the roller lifting zones

Keep your fingers away from the roller lifting zones and driving/cams mechanism.

#### Labelling

The labels below must draw your attention to this danger:



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## 1.7 Handling Instructions concerning Chemicals

### Chemicals and SDS

Take into account the following safety measures and recommendations before handling chemicals:

- Consult the appropriate Safety Data Sheets (SDS) before handling chemicals.
- Do not use other chemicals than the ones recommended by Agfa.
- Always place the tanks in the trolley, the operator must ascertain that the correct chemicals are used.
- Respect the color codes, the plunger color must be identical to the label on the connected tank.
- Never pour chemicals directly into the trays.
- Refer to SDS for more safety information on L5300b Lithostar Finisher.
- Refer to SDS for more safety information on L5000b Lithostar Developer.

### How to obtain SDS

Your local Agfa sales organisation will send you Safety Data Sheets. Read them very carefully and store them with this Manual.

### SDS contents

What you will find in Safety Data Sheets:

- Address of your local Agfa organisation  
Emergency telephone N°
- Composition of Chemicals
- Hazards identification
- First-Aid measures
- Fire-fighting measures
- Accidental release measures
- Handling and storage
- Exposure control and personal protection
- Physical and chemical properties
- Information on stability and reactivity
- Toxicological information
- Ecological information
- Disposal information
- Transport information
- Regulatory information.

### 1.7 Handling Instructions concerning Chemicals, *continued*

#### Avoiding personal injuries



Take into account the safety measures listed below to avoid injuries while or after handling chemicals:

- Do not exaggerate the use of chemicals or water in order to avoid trays from overflowing.
- Do not drain chemicals into public sewage systems without checking local regulations.
- Never blend chemicals in one tank, unless stated otherwise.
- Always follow the instructions on the label of the tank.
- Always wear glasses or safety goggles to protect your eyes against the splashing of chemicals.
- Always wear glasses and gloves when handling chemicals or while working in the chemical section of the processor.
- If your eyes come into contact with chemicals, rinse them with clean and cold running water abundantly. If your eyes are irritated, immediately consult an ophtalmist.
- If your skin comes into contact with chemicals, wash it abundantly with clean and cold running water.
- Avoid inhaling chemical vapours. Provide adequate ventilation in order to keep airborne concentrations well below occupational exposure limits and to prevent any discomfort at the workplace. Direct exhaust vents to the outside of the building.
- Always label waste containers with the label illustrated on page 50 .

2 LITHOSTAR Basics

2.1 What Is in this Chapter

Introduction

This chapter provides you with general information on the LITHOSTAR LP 68 ULTRA.

Overview

This chapter covers the following topics:

| Topic  | See     |
|--|---------|
| What Is in this Chapter                                    | page 13 |
| About Agfa LITHOSTAR                                       | page 14 |
| Parts of the LITHOSTAR LP 68 ULTRA                         | page 15 |
| Processing Printing Plates using the LITHOSTAR LP 68 ULTRA | page 16 |



See also Technical Specifications.

### 2.2 About Agfa LITHOSTAR

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#### Agfa LITHOSTAR

The Agfa LITHOSTAR is a high-speed platemaking system for both analogue and digital plate exposure. It combines the ease of handling and the stability of aluminium printing plates with the speed and quality of the silver halide technology.

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#### LITHOSTAR printing plates

LITHOSTAR printing plates are based on Agfa's Diffusion Transfer Reversal (DTR) process, used in high-quality products for many years.

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#### LITHOSTAR LP 68 ULTRA

The Agfa LITHOSTAR LP 68 ULTRA is a plate processor elaborated for Agfa LITHOSTAR offset printing plates. It features the highest quality, productivity, reliability and ease of use.

If properly used and maintained, the processor will prove to be an efficient printing plate production tool for many years.

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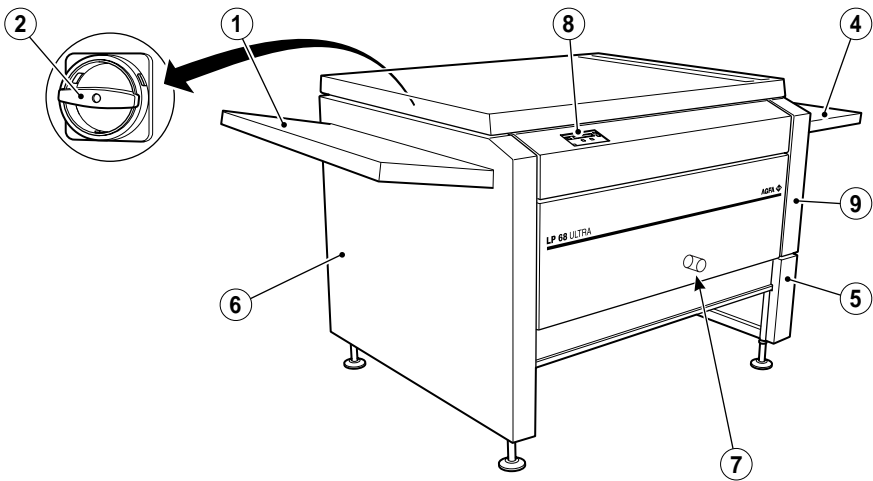
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2.3 Parts of the LITHOSTAR LP 68 ULTRA

Illustration

The illustration below indicates the parts of the LITHOSTAR LP 68 ULTRA:



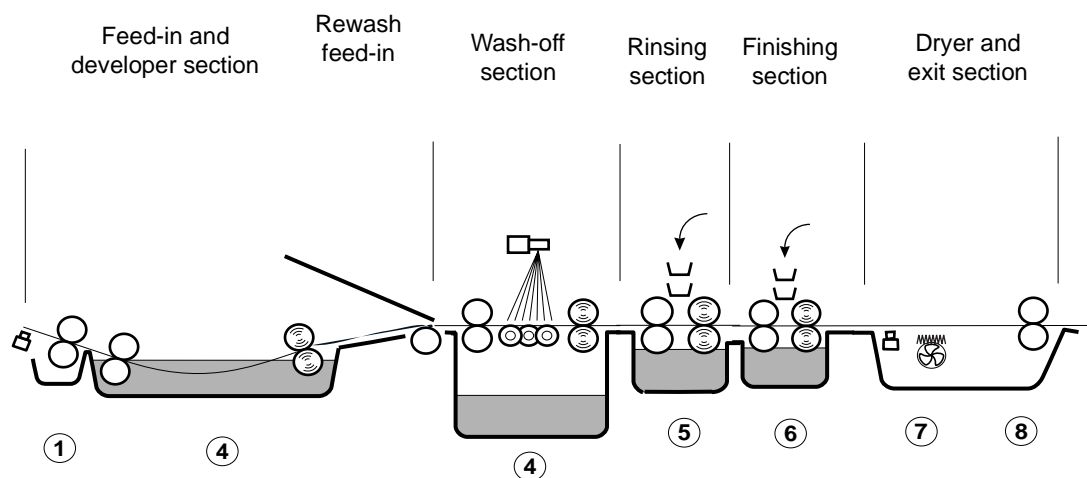
Parts

| Number | Description                                   |
|--------|---|
| 1      | Input table (NOT STANDARD)                    |
| 2      | Main switch                                   |
| 3      | Rewash cover (NOT STANDARD) (not illustrated) |
| 4      | Output table (NOT STANDARD)                   |
| 5      | Rear leg assembly                             |
| 6      | Front cover (inaccessible for the user)       |
| 7      | Connection to water supply                    |
| 8      | Control panel                                 |
| 9      | Rear cover                                    |

### 2.4 Processing Printing Plates using the LITHOSTAR LP 68 ULTRA

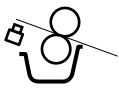
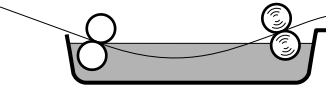
#### Schematic representation

The basic functioning of the LITHOSTAR LP 68 ULTRA is represented in the illustration below. It gives a schematic overview of the different stages in the process. The numbers at the bottom of the illustration refer to the stage numbers in the process description.



#### Process description

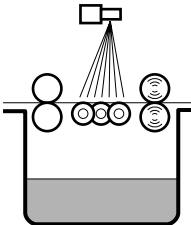
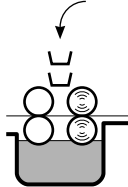
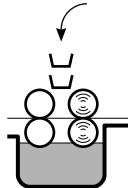

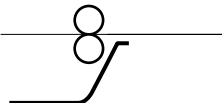
The table below explains the different stages in the process and the corresponding sections:

| Stage | Corresponding section  | Description  |
|-------|--|--|
| 1     | Feed-in section<br>   | The operator inserts a printing plate into the processor via the input table.<br>An optical sensor detects the presence of a plate on the input table.<br>A pair of feed-in rollers transports the printing plate into the developer section after the acceptance delay to enable proper positioning of the plate. |
| 2     | Developer section<br> | A pair of rollers submerges the printing plate in the developer.<br>A pair of squeegee rollers presses excess of developer off and transports the printing plate to the diffusion section.   |



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| Stage | Corresponding section   | Description   |
|-------|---|---|
| 3     | (Rewash)wash-off section<br> | <p>A pair of rollers transports the printing plate into the wash-off section.</p> <p>The processor sprays rinsing solution (coming from the rinsing section) under high pressure on the printing plate, in order to remove the coated layers from the plate.</p> <p>The washed printing plate is sprayed with rinsing solution coming from the rinsing section. It can be regarded as a kind of cascade finishing.</p> <p>A pair of squeegee rollers presses excess of liquid off and transports the printing plate to the rinsing section.</p> |
| 4     | Rinsing section<br>         | <p>The washed printing plate is sprayed with rinsing solution coming from the finishing section. It can be regarded as a kind of cascade finishing.</p> <p>The rinsing section further cleans the plate with used finisher from the finisher section. The less carry-over from the wash-off comes into the finishing section, the longer the hydrophobising effect of the finisher lasts.</p> <p>A pair of squeegee rollers presses excess of rinsing solution off and transports the printing plate to the finishing section.</p>              |
| 5     | Finishing section<br>      | <p>The finisher:</p> <ul style="list-style-type: none"> <li>• hydrophobises the silver image on the printing plate</li> <li>• applies a gum layer to avoid oxidation of the printing plate.</li> </ul> <p>A pair of squeegee rollers presses excess of finisher off and transports the printing plate to the dryer section.</p>   |
| 6     | Dryer section<br>          | <p>One axial ventilator generates a stream of air.</p> <p>Electrical heaters heat the air in the dryer.</p> <p>The stream of air dries both sides of the finished printing plate.</p>   |
| 7     | Exit section<br>           | <p>A pair of rollers transports the printing plate out of the processor.</p> <p>An optical sensor detects the feed-out of the printing plate.</p>   |

**Rewash feed-in**

The rewash feed-in section (not standard) allows you to re-insert a printing plate into the processor, while skipping the developing and diffusion sections.

3      Prescriptions and Precautions

3.1    What Is in this Chapter

Introduction



This chapter lists the prescriptions and precautions to be taken into account before you start processing or doing maintenance.

Take a few minutes to read this chapter attentively. Thus, personal injury or (permanent) damage to the processor or printing plates can be prevented.

Overview

This chapter covers the following topics:

| Topic   | See     |
|---|---------|
| What Is in this Chapter                                   | page 18 |
| Before You Start Processing                               | page 19 |
| General Prescriptions and Precautions                     | page 20 |
| Prescriptions and Precautions Concerning Full Waste Tanks | page 21 |
| Prescriptions and Precautions Concerning Rollers          | page 23 |



See also 'Agfa's Environmental Guidelines' on page 42.  
See also 'Maintenance' on page 51.

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### 3.2 Before You Start Processing



Before you start using the processor, read the following prescriptions attentively.

#### Follow instructions

Always follow the instructions given by Agfa.

Take into account all the instructions and safety measures given in this manual and in other Agfa publications in order to avoid problems related to quality, safety and health.

#### Agfa LITHOSTAR consumables only

Use Agfa LITHOSTAR consumables only.

The use of Agfa chemicals and products ensures a permanent high quality when processing printing plates with the LITHOSTAR LP 68 ULTRA.

#### Handling chemicals

Handle all chemicals with care.

Consult the Safety Data Sheets (SDS) before handling chemicals and always follow the safety instructions on the labels of the chemical tanks.



Please refer to 'Handling Instructions concerning Chemicals' on page 11 for more information concerning SDS.

#### Waste collection

Collect the waste for treatment.



Please refer to the corresponding Safety Data Sheet.

You can obtain addresses of authorised waste collecting companies from your local Agfa representative.

### 3.3 General Prescriptions and Precautions



Read the following prescriptions and precautions attentively before processing or carrying out maintenance work.

#### Maintenance

During and after maintenance, keep the following prescriptions in mind:

- Never interchange the developer, finisher and waste tanks.
- Make sure that no tools or foreign matters remain in the processor after maintenance.
- Never lubricate a roller cam shaft or the main drive shaft to prevent soiling the processing solutions.
- Never open all manual drain valves simultaneously, to avoid mixing of the various solutions inside the processor. Drain trays separately. See "Draining Trays before Cleaning" on page 60'.
- After maintenance, make sure that all four manual drain valves behind the right-hand cover of the processor are closed (See the illustration on page 60).
- Clean the trays if you do not refill the trays immediately after you have emptied them.
- Carry out a 'holiday filling' to avoid odour problems if you will not use the processor for a long time (holidays, ...).

#### Assembly

If you have disassembled parts of the processor for cleaning, carefully assemble all parts and rollers. Before the processor enters an active state, make sure that:

- the gutter system and the separate gutters of the rinsing and finishing sections fit correctly into position.
- both partition plates of the wash-off section fit correctly into position.
- the printing plate guide at the rear side of the diffusion section fits correctly into position.
- the printing plate guide on the bottom of the developer tray has been installed correctly.
- the rewash cover is closed correctly before you close the front upper cover.
- the anti-oxidation cover on top of the developer section is properly positioned.
- the covers on top of the wash, rinse and finishing sections are properly closed.
- the air lock on top of the upper finishing section squeegee roller, i.e. no. 13, is positioned correctly.



See also 'Prescriptions and Precautions Concerning Rollers' on page 23.

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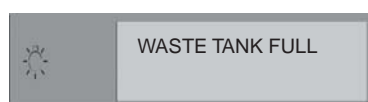
### 3.4 Prescriptions and Precautions Concerning Full Waste Tanks



The following prescriptions and precautions allow you to prevent problems with the waste tank.

#### Waste tank full

If the waste tank gets almost full during operation or while emptying the trays, the following window will appear on the control panel:



The processor will stop operating when the waste tank is full.

Overflow of the waste tank is impossible thanks to a vent hole provided at tank level. See 'Draining Trays before Cleaning' on page 60.



### 3.4 Prescriptions and Precautions Concerning Full Waste Tanks, *continued*

#### While cleaning



Avoid leaving the processor alone while cleaning trays. After the message appears on the display, you still have enough time to close the drain valve of the tray you are draining.

If you are prompted to replace the waste tank, proceed as follows:

| Step | Action   |
|------|--|
| 1    | Close all drain valves.<br> Refer to 'Drains and Valves' on page 54 for details.                                |
| 2    | Replace the full waste tank with an empty one.<br> Refer to 'Replacing the Waste Tank' on page 57 for details. |



The diffusion tray is not provided with a drain valve, so the cleaning water is drained directly to the waste tank.

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### 3.5 Prescriptions and Precautions Concerning Rollers



The following prescriptions and precautions allow you to prevent damage to the rollers or the processor.

#### Handling rollers

Be careful not to damage the rollers when you take them out of the processor:

- Make sure that the rubber surface of a roller does **not** rest on the edge of a sink or a tray.
- Make sure that there is **no** contact between the gears and the rubber surfaces when you place rolls on top of each other.

#### Keep feed-in rollers dry

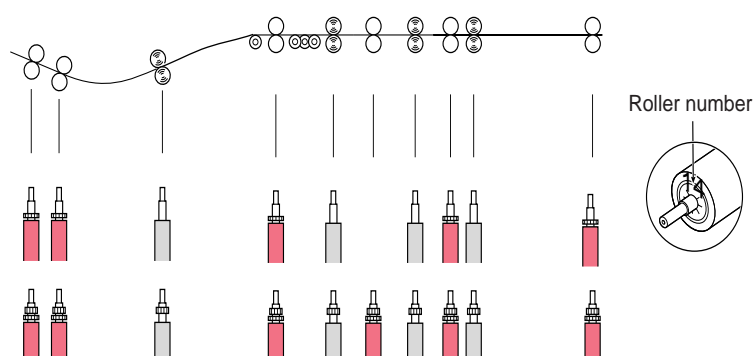
The feed-in rollers should never come into contact with developer or any other liquid. Moistened feed-in rollers might cause image quality problems for subsequent plates.

Therefore:

- Never pull back a printing plate once it has been picked by the feed-in rollers.
- In case of a plate jam in the developer section, always release the jammed printing plate by pulling or pushing it towards the rear side of the processor.
- In case of moistened feed-in rollers, always clean them with water and dry them using a clean cloth. See 'Cleaning Rollers, Tray Components' on page 61.

#### Roller location

Before the processor enters an active state, make sure that the lower and upper rollers are placed back at their correct locations. Make sure that the number on the right-hand side of the roller corresponds with the number on the left-hand side of the frame of the processor.



### 3.5 Prescriptions and Precautions Concerning Rollers, continued

#### Lower rollers

Before the processor enters an active state, make sure that all lower rollers have been installed correctly.

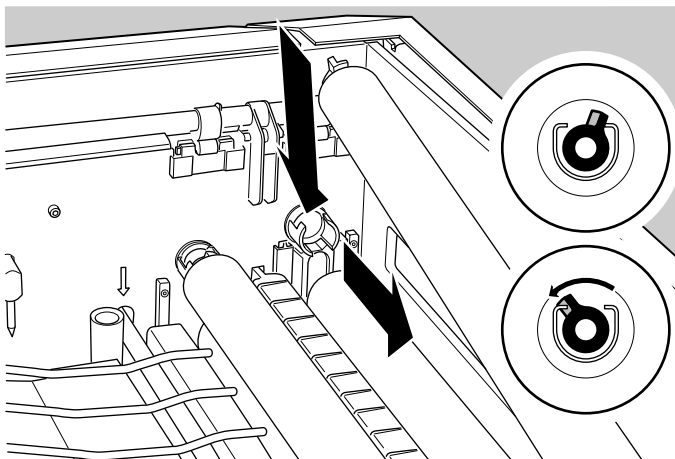
If a lower roller has been provided with a gear, make sure that this gear engages correctly when installing the corresponding upper roller.

#### Upper rollers

Before the processor enters an active state, make sure that all upper rollers have been installed correctly and pushed towards the left-hand side as far as possible.



Make sure the fastener on the right-hand side of the rollers fits correctly into its holder. Lock it securely and make sure that all gears engage correctly.





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## 4 Operating the LITHOSTAR LP 68 ULTRA

### 4.1 What Is in this Chapter

#### Introduction

This chapter contains procedures for processing and rewashing printing plates.

#### Overview

This chapter covers the following topics:

| Topic   | See     |
|---|---------|
| What Is in this Chapter   | page 25 |
| Switching the Processor On/Off vs. (De)Activating the Processor | page 26 |
| Starting-Up the LITHOSTAR LP 68 ULTRA                           | page 28 |
| How to Switch the Processor Off                                 | page 30 |
| Operating the Processor   | page 31 |



See also 'Performing an Emergency Stop' on page 8 and the chapters 'The Control Panel' on page 32 and 'System profile Menu of the Lithostar LP 68 ULTRA' on page 36.

### 4.2 Switching the Processor On/Off vs. (De)Activating the Processor

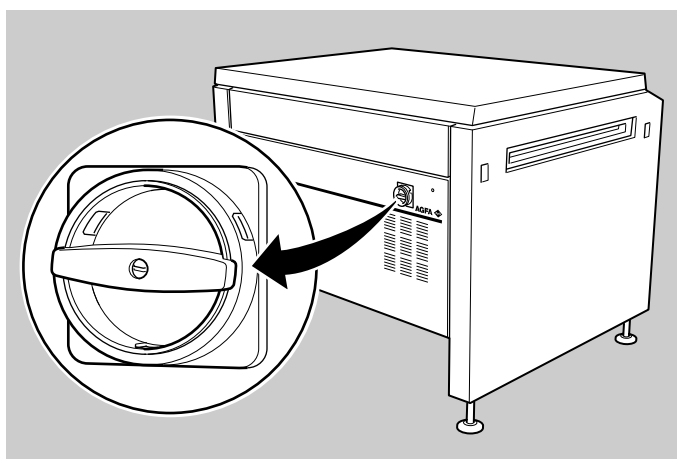
#### Difference



The LITHOSTAR LP 68 ULTRA normally needs not be shut down entirely, i.e. switched off. However, during periods of inactivity or maintenance activities, the processor must be deactivated. The difference is explained below.

#### Switching on and off

You can only switch the processor on or off using the main switch:



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## 4.2 Switching the Processor On/Off vs. (De)Activating the Processor, *continued*

### Activation vs. deactivation

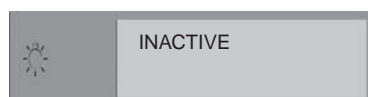
You can activate or deactivate the LITHOSTAR LP 68 ULTRA manually or automatically:

- **Manually**

You switch from 'Inactive' mode to 'Ready' mode when required by pressing the I-button on the display.



If you press the I-button while the processor is in 'Processing' mode, it will deactivate once the printing plate has exited.



- **Automatically**

You program the active and inactive periods for the processor. The processor is activated automatically at the programmed time.



See the diagram "How to operate the control panel" further this manual.

### Warm-up and filling time

Total warm-up and filling time is max. 25 min.

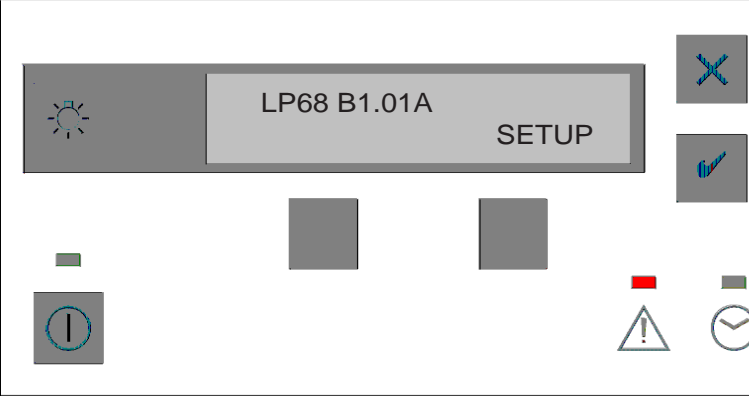


4.3    Starting-Up the LITHOSTAR LP 68 ULTRA

Difference

Bearing in mind the difference between switching on and off vs. activating and deactivating, the procedure below describes how to start up the processor after a shutdown.

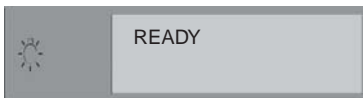
How to proceed after a shutdown

Follow the procedure below to start up the processor after a shutdown:

| Step | Action   |   |
|------|--|---|
| 1    | Switch on the main switch: see on page 27<br>The following screen pops up:<br><div></div>   |   |
| 2    | If ...   | Then ...  |
|      | you press the bot-<br>tom-right button   | the control panel setup screen appears.<br>See 'Control Panel Setup Screen' on page 33<br>for more details. |
|      | you do not press the<br>bottom-right button  | the LITHOSTAR LP 68 ULTRA will initialise.<br>Proceed with step 3.  |
| 3    | After initialising, the following screen appears:<br><div></div><br><div> The maintenance bar in the top-left corner indicates the need for maintenance. The longer the black bar, the higher the need for maintenance. See 'Maintenance' on page 51 for details.</div> |   |

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| Step | Action   |
|------|--|
| 4    | <p>Press the I-button to enter 'Ready' mode.</p> <p>After warm-up and filling time, which takes approx. 25 minutes, the following screen pops up:</p>  |


### 4.4 How to Switch the Processor Off



Only switch off the LITHOSTAR LP 68 ULTRA when it will be inactive during a longer period of time. There is no need to switch the processor off over the weekend.

#### Shutdown

Follow the procedure below to shut down the processor:

| Step | Action   |
|------|--|
| 1    | Press the I- button to enter 'Inactive' mode.<br><br> After a few seconds, the rollers open automatically preventing them from sticking together. |
| 2    | Wait a few moments until the rollers are opened.   |
| 3    | Switch off the main switch: refer to page 26 of this chapter.  |

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## 4.5 Operating the Processor



First read 'Major Safety and Handling Instructions' on page 3 as well as 'Prescriptions and Precautions' on page 18.

### How to process printing plates

Follow the procedure below to process printing plates: The Control Panel

| Step | Action  | Comment   |
|------|---|---|
| 1    | Check that the printing plate is not damaged.   |  Damaged printing plates may jam or may even damage the processor.   |
| 2    | Make sure that the processor is in 'Ready' mode.  | See Troubleshooting further in this manual.   |
| 3    | Position the printing plate at the left of the input table, and push it gently against the feed-in rollers until the processor picks up the printing plate. |  Positioning the printing plate in the middle of the input table will ensure even processing.<br><br> Never pull back a printing plate once it has been taken up by the processor. If you do anyway, you may damage the printing plate and moisten the feed-in rollers.<br>Always clean moistened or soiled feed-in rollers. |
| 4    | Wait until the processor is in 'Processing & Ready' mode again.   | <p>The processor will beep when it is ready to accept a new printing plate.</p> <p>This will avoid overlapping of printing plates. If printing plates overlap, the processor will detect an unknown format or a too long printing plate.</p>  |
| 5    | Insert the next printing plate.   |  Never insert more than one plate at a time.   |
| 6    | Remove processed printing plates from the output table before the next printing plate exits the processor.  | This will avoid scratches.  |
|      |  Wait until they have fully exited the processor.                        |   |

## 5 The Control Panel

### 5.1 What Is in this Chapter

---

#### Introduction

This chapter provides you with information on the control panel of the LITHOSTAR LP 68 ULTRA.

---

#### Overview

This chapter covers the following topics:

| Topic  | See     |
|--|---------|
| What Is in this Chapter                          | page 32 |
| Control Panel Setup Screen                       | page 33 |
| Adjustings                                       | page 35 |
| System profile Menu of the Lithostar LP 68 ULTRA | page 36 |

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5.2 Control Panel Setup Screen

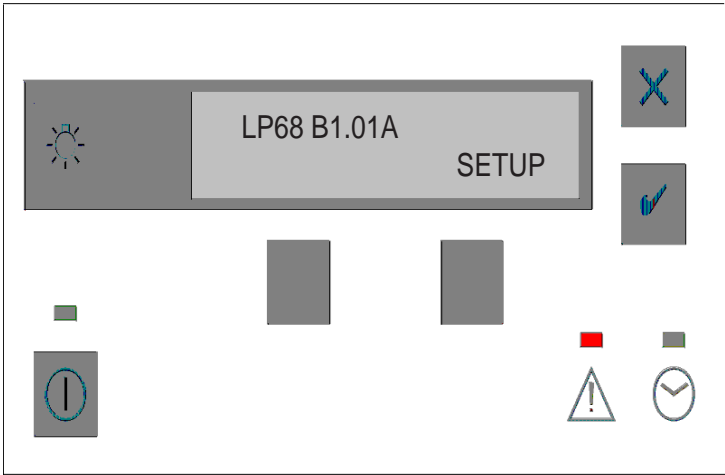
**Description**

When starting up the LITHOSTAR LP 68 ULTRA, you can enter a setup menu enabling you to set:

- display contrast
- background lighting

**Setup screens**






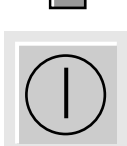
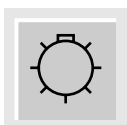
If you start the LITHOSTAR LP 68 ULTRA, the following screen appears:



**Display and buttons & explanation**

The setup screen contains a number of buttons, which are explained below:

| Pos. | Button                              | Description  |
|------|-------------------------------------|--|
| 1    | <div>INACTIVE<br/>MAINT% MENU</div> | <p>Two lines appear on the display:</p> <p>First line: <b>Indicate the status of the processor</b></p> <p>Second line: <b>Operating actions, use the selection buttons below the display:</b></p> <p>* &lt;&lt;and&gt;&gt;: leaf through the menu</p> <p>* - :value decrease</p> <p>* + :value increase</p> <p>Push on the "Enter" button after every right selection.</p> |

| Pos. | Button  | Description   |
|------|---|---|
| 2    |    | <b>Cancel button</b><br>Press this button to discard changed settings   |
| 3    |    | <b>Confirm button</b><br>Press the button to discard changed settings   |
| 4    |   | <b>Green LED indication on top</b><br>Green LED means the processor is switching on to the mains. The LP 68 U setup appears on the display. |
| 5    |  | <b>Red LED indication.</b><br>Action is necessary by the user.<br>Follow the instruction on the display                                     |
| 6    |  | <b>Soft key</b><br>The function of button is described on the second line of the display.   |
| 7    |  | <b>I-button to switch the processor inactive or active.</b><br>Green LED above the switch means the processor is active.                    |
| 8    |  | <b>Background lighting.</b>   |

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## **5.3 Adjustings**

---

### **Introduction**

This chapter provides information about adjusting the background lighting and the contrast.

---

### **Illustration of the adjusting**

See the diagram “How to operate the control panel” further this manual.

### 5.4 System profile Menu of the Lithostar LP 68 ULTRA

---

#### Introduction

The System Profile Menu allows you to verify specific settings, adjust some of those settings and view statistics.

---

#### Illustration of the System Profile Menu.

See the diagram “ How to operate the control panel” further this manual.

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## 6 Verifying Temperatures of Chemicals

### Why

Solution temperatures are checked by the processor and adjusted, if necessary. So, normally you need not check those temperatures, but when the processor does not enter 'Ready' mode, this may be a useful check.

### Current temperature v. target value

All four processing solutions have a target value, i.e. an optimum operating temperature listed below:

| Solution                     | Optimum Operating Temperature |
|------------------------------|-------------------------------|
| Developer temperature        | 21 °C                         |
| Wash water temperature       | 40 °C                         |
| Rinsing solution temperature | 40 °C                         |
| Finisher temperature         | 40°C                          |

### When temperatures do not match their target value

While verifying temperatures, you must take into account small fluctuations. If the actual temperature and its target value only differ 1°C, there is no need to call service.

### How to check the current temperature

To check the current temperature of a solution, see the diagram "How to operate the control panel" further this manual.



Note that you cannot manipulate the temperatures shown in these menus.

7      Storing and Treating Plates

7.1    What Is in this Chapter

Introduction

This chapter tells you all about printing plates. It provides you with tips and guidelines to keep your high-quality printing plates in optimum condition.

Overview

This chapter covers the following topics:

| Topic   | See     |
|---|---------|
| What Is in this Chapter                               | page 38 |
| Storage Conditions for Printing Plates                | page 39 |
| Making Manual Corrections and Cleaning after Printing | page 40 |



See Technical Specifications of this binder for more information on the types of printing plates, correctors and cleaning materials.

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## 7.2 Storage Conditions for Printing Plates

### Before processing

Take the following guidelines into account when you store unexposed printing plates:

- Store the printing plates in a dry environment.
- The temperature must be between 20 °C and 32 °C.
- Never expose printing plates to temperatures exceeding 32 °C for more than 24 hours.
- Always put unexposed printing plates back in their light-proof bags (make sure that the bags are closed correctly) or in the Agfa plate safe.
- If the plates have been stored at low temperatures, and in order to avoid condensation, leave the printing plates at least one hour in the darkroom before using them.
- Process printing plates at max. 35 °C.

### After processing or printing

Take the following guidelines into account to store printing plates after processing or after printing:

- temperature between 18 °C and 24 °C
- relative humidity between 40 % and 70 %
- image side against image side
- sheet of interleaving paper between two image sides to avoid scratches.



Rewash the plate before use if it has been stored for more than one month, or if you are in doubt about the storage conditions.

Refer to 'Rewashing Printing Plates' on page 16 for further details.

### 7.3 Making Manual Corrections and Cleaning after Printing

#### Making manual corrections

Before you use the processed printing plate for printing, you may have to make some corrections. You can make:

- negative corrections: remove (parts of) the image from the printing plate
- positive corrections: add image on the printing plate.

#### Negative correction



If necessary, you can wipe off the image from the processed printing plates using a corrector pen or corrector fluid.

Never let negative corrector dry on the printing plate.

Clean off the corrector immediately:

- by rewashing the printing plate (for larger corrections)
- using a cotton swab moistened with finisher (for small corrections).

#### Positive correction



If necessary, you can add image on processed printing plates using a '+' corrector pen.

The '+' corrector must be completely dry before you use the printing plate.

#### Cleaning after printing

Follow the procedure below to clean the printing plates after printing:

| Step | Action  |
|------|---|
| 1    | Remove the ink with Agfa plate cleaner G642b.   |
| 2    | Carefully clean the plate with finisher.        |
| 3    | Wipe the printing plate dry using a cotton pad. |



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## 8 Waste

### 8.1 What Is in this Chapter

#### Introduction

This chapter tells you all about waste generation and waste handling.

#### Overview

This chapter covers the following topics:

| Topic   | See     |
|---|---------|
| What Is in this Chapter                         | page 41 |
| Agfa's Environmental Guidelines                 | page 42 |
| Handling the Different Types of Waste           | page 44 |
| Liquid Chemical Waste                           | page 45 |
| Collecting Liquid Chemical Waste in Waste Tanks | page 46 |
| Daily Consumption of Developer                  | page 47 |
| Daily Consumption of Water                      | page 48 |
| Daily Consumption of Finisher                   | page 49 |
| Daily Waste Generation                          | page 50 |

The values indicated in this chapter are valid for a processor that:

- is used regularly
- processes at least 20 m<sup>2</sup> per day.



See also 'Handling Instructions concerning Chemicals' on page 11 and 'Prescriptions and Precautions Concerning Full Waste Tanks' on page 21.

### 8.2 Agfa's Environmental Guidelines

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**Conformity to guidelines and regulations**

- The LITHOSTAR LP 68 ULTRA processor and the LITHOSTAR consumables (printing plates, chemicals, ...) are designed, engineered and manufactured according to very strict internal Company Environmental Guidelines.
- These guidelines conform to the international rules and recommendations as well as with EC and national regulations.
- Agfa-Gevaert N.V. signed the international 'Responsible Care' commitment.

---

**Hazardous products**

Whenever possible, the use of hazardous products has been avoided or reduced.

---

**Recycling used equipment**

The LITHOSTAR LP 68 ULTRA has been designed in compliance with the relevant legislation on recycling used equipment.

---

**Safe handling**

Agfa-Gevaert N.V. provides both means and information to ensure the safe handling of all its products and equipment before, during and after their use:

- prescriptions for safe installation and use of the equipment
- labels and Safety Data Sheets (SDS) mentioning the appropriate health and safety precautions.

---

**Overall waste flow**

According to the Agfa philosophy of care for the environment, everything possible has been done to reduce the overall waste flow generated by the LITHOSTAR LP 68 ULTRA.

---

**Amount processing liquid per m<sup>2</sup>**

Agfa's R & D Department aimed at improving the way conventional pre-sensitised printing plates are processed in order to reduce the total amount of liquid waste.

Huge amounts of wash water used to be commonplace, but now the volume of processing liquid has been reduced to only about 360 ml for one m<sup>2</sup>, i.e. 170 ml/m<sup>2</sup> (50 ml/h) of developer, 125 ml H<sub>2</sub>O/pumphour of wash-off and 100 ml/m<sup>2</sup> of finisher.

It is obvious that those reduced amounts of waste can easily be treated in existing facilities.

Improved processing concept with (used) finisher in the wash-off section instead of tap water (with both a second cascade of used finisher from the rinse section into the wash-off section as well as a compensation for evaporation).

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**43****General rules and regulations  
concerning chemical waste**

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It is prohibited to drain used processing solutions into surface waters. In most environmentally conscious countries, it is legally forbidden to drain them into public sewer systems. In such cases we advise our customers to have it collected by an authorised waste collecting company for further treatment.

In any case, you must strictly follow the local legal regulations applying to the treatment of (chemical) waste.

### 8.3 Handling the Different Types of Waste

---

#### Different types of waste

The LITHOSTAR LP 68 ULTRA system generates different types of waste, each of which should be treated in a specific way:

- liquid chemical waste
- plastic tanks
- printing plates
- packing material of printing plates.

---

#### Plastic tanks



The developer and finisher tanks are made of polyethylene. They are perfectly recyclable after thorough rinsing.

You can use these tanks as waste tanks for the LITHOSTAR LP 68 ULTRA.

---

#### Printing plates

The used LITHOSTAR printing plates can be collected and recycled using the same techniques as for conventional pre-sensitised offset plates.

The very small amount of silver on the surface of the printing plates does not generate additional problems.

---

#### Packing material of printing plates

The printing plates are supplied in polyethylene bags (or laminate paper) and cardboard boxes. Both materials are perfectly recyclable.

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## 8.4 Liquid Chemical Waste

### 'No drain' philosophy

No drain is required for the LITHOSTAR LP 68 ULTRA.

You can collect the waste flow in one single and correctly labelled waste tank of 20 l.

### Waste flow

The LITHOSTAR LP 68 ULTRA generates only one waste flow. This flow contains the waste solutions from all trays of the processor.

### Mixing waste solutions

The various waste solutions of the LITHOSTAR LP 68 ULTRA are safely mixed in the same tank.

You can safely mix the liquid waste of the LITHOSTAR LP 68 ULTRA with waste solutions from ordinary black-and-white developers.



Before you mix the liquid waste of the LITHOSTAR LP 68 ULTRA with other waste solutions, always ask your waste collecting company for advice.

Do **not** mix the LITHOSTAR waste solution with fixers from film processors. This may produce ammonia if the products are mixed in the wrong proportions.

### Composition

The composition of the liquid chemical waste that the LITHOSTAR LP 68 ULTRA generates is largely comparable to that of the solutions in their original state, with the addition of a residue of gelatine, aluminium and silver from the printing plates.

It is an aqueous alkaline solution with a pH of approx. 11.

### Ag and Al

The overall waste flow has:

- an Ag concentration between 1 and 4 g/l
- an Al concentration of approx. 0.5 g/l.



For the amount of liquid chemical waste generated per day, see 'Daily Waste Generation' on page 50.

### 8.5 Collecting Liquid Chemical Waste in Waste Tanks

#### A justified way of disposal

Collecting the liquid waste in one tank is the best technically and environmentally justified solution. If you take into account storage, handling and transport, this method is also the most cost-effective.

#### Level detection system

The LITHOSTAR LP 68 ULTRA has been equipped with a level detection system to measure the level of chemical liquid in the tank. This will avoid overflow or spillage of chemicals at the customer's premises.

#### Waste tanks

You can use empty developer and finisher tanks for collecting waste.

#### Labelling waste tanks

Before you use any tank as a waste tank, you must apply a waste tank label over its original label:

##### LITHOSTAR

Lithostar processing waste - alkaline solution pH > 7  
Lithostar Verarbeitungsrückstände - alkalische Lösung pH-Wert > 7  
Déchets de traitement Lithostar - solution alcaline au pH supérieur à 7  
Lithostar verwerkingsafval - Alkalische oplossing pH > 7  
Residuo del proceso Lithostar - Solució alcalina pH > 7  
Residuo di trattamento Lithostar - Soluzione alcalina con pH > 7

#### Ordering labels



Labels are not delivered with the LITHOSTAR LP 68 ULTRA, but you can them using the ordering code: 3ZNWW.

It is possible that the waste tank labels that you ordered from Agfa contain more information. Some instructions concerning the local regulations may be added.

#### Disposal

Have the correctly labelled waste tanks collected by an authorised waste collecting company for environmentally justified treatment.

#### Waste collecting companies

Inform the waste collecting company about the nature of the LITHOSTAR liquid chemical waste.

You can obtain the addresses of authorised waste collecting companies from your local Agfa representative.

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## 8.6 Daily Consumption of Developer



All below-mentioned consumptions only apply when the Waste Reduction is switched OFF.

### In the developer tray

Developer is replenished in the developer tray in function of:

- the processed printing plate surface
- time (to prevent oxidation).

For values, refer to the summary table on page 50.

### Composition



Refer to the Safety Data Sheet on Developer for information on the composition of developer.

### Rewash

During a rewash operation, there will be **no** replenishing in the developer tray.

### Additional replenishment in case of $< 10 \text{ m}^2/\text{day}$



The developer replenishing algorithm assumes that at least  $10 \text{ m}^2$  per day is processed (= 1.5 l of developer). If, during a working day, less than  $10 \text{ m}^2$  has been processed, the processor will compensate for these unprocessed  $\text{m}^2$  by adding some fresh developer.

This additional replenishment will take place when the processor is warming up for the (first) active period of the next working day. If the processor has not left the active state, this will take place the next morning.

### Replacing aged developer

In order to avoid processing problems due to aged developer, take the following into account:

- Replace the developer in the developer tray if the processor has been inactive for more than 72 hours. A message on the display will prompt you to do so.
- Replace an opened developer tank after 1 week.



8.7    Daily Consumption of Water

In the wash-off tray

As compensation for evaporation and to improve washing-off property. For values, refer to the summary table on page 50.



8.8 Daily Consumption of Finisher

|                          |  |  |
|--------------------------|--|--|
| In the finisher tray     |  | Finisher is replenished in the finisher tray in function of the processed printing plate surface. [1]  |
| Composition              |   | Refer to the Safety Data Sheet for information on the composition of finisher.   |
| Rewash                   |  | During a rewash operation, there will be replenishing in the finisher tray.  |
| Additional replenishment |  | <p>Active replenishment to compensate for evaporation. [1]</p> <p>This additional replenishment will take place when the processor is warming up for the (first) active period of the next working day. If the processor has not left the active state, this will take place the next morning.</p> <p>[1] For values, refer to the summary table on page 50.</p> |

### 8.9 Daily Waste Generation

#### Summary

The table below provides a summary of the consumption of water and chemicals per tray:

| Tray      | Content                       | Source                      | Replenishment           | Additional replenishments  | Rewash |
|-----------|-------------------------------|-----------------------------|-------------------------|----------------------------|--------|
| Developer | developer                     | developer tank              | • 170 ml/m <sup>2</sup> | • 50 ml/h                  | no     |
| Wash-off  | finisher + % H <sub>2</sub> O | rinse overflow              | • 125 ml water/pumphour | – 25 ml/h H <sub>2</sub> O | yes    |
| Rinse     | finisher                      | overflow from finisher tray | –                       | –                          | –      |
| Finisher  | finisher                      | finisher tank               | • 100 ml/m <sup>2</sup> | –                          | yes    |

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## **9 Maintenance**

### **9.1 What Is in this Chapter**

#### **Introduction**

This chapter informs you on when and how to maintain the LITHOSTAR LP 68 ULTRA.

#### **Overview**


This chapter covers the following topics:

| <b>Topic</b>                             | <b>See</b> |
|--|------------|
| What Is in this Chapter                  | page 51    |
| Before Starting Maintenance              | page 52    |
| Drains and Valves                        | page 54    |
| Replacing the Developer or Finisher Tank | page 55    |
| Replacing the Waste Tank                 | page 57    |
| Cleaning Frequency                       | page 59    |
| Draining Trays before Cleaning           | page 60    |
| Cleaning Rollers, Tray Components        | page 61    |
| Rinsing Trays                            | page 62    |
| Cleaning Trays                           | page 63    |
| Cleaning the metal strainer              | page 64    |
| Cleaning the Circulation Circuits        | page 65    |
| Removing Rollers                         | page 66    |
| Re-installing Rollers                    | page 68    |

9.2    Before Starting Maintenance


Maintenance required

Maintenance is required when the following warning appears on the display :



Maintenance required  
Maint.      MENU

When full maintenance is required.



Small Maint. Required  
Maint.      MENU

Only when small maintenance is required.

Maintenance mode

Before you start maintenance, you have to activate the Maintenance menu. Thus, the LITHOSTAR LP 68 ULTRA knows that maintenance activities are being carried out.

How to enter maintenance mode

Proceed as follows to enter maintenance mode:

| Step | Action   |
|------|--|
| 1    | Press the I-button to enter 'READY' mode:  |
| 2    | Press the maintenance menu button. The circulation pumps of all trays will be activated when covers are closed and there is sufficient level in the tanks. |



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## Basic Maintenance



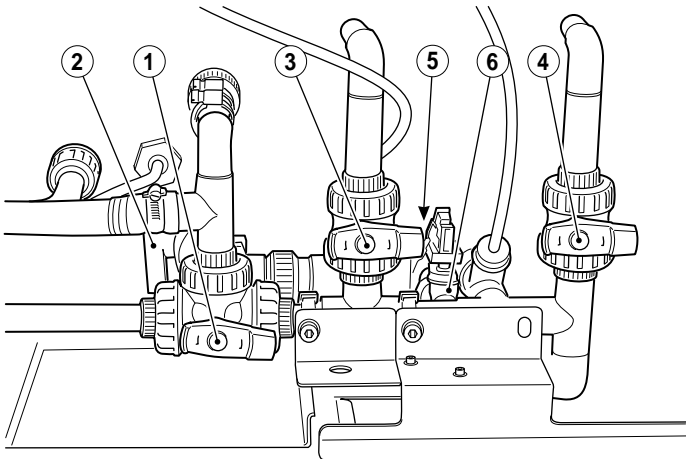
Never use detergents, abrasives or chlorinated solvents! Never use fluffy sponges or cloths!

| "Small maintenance" required  | "Full maintenance" required   |
|---|---|
| <b>After 600 m<sup>2</sup> or biweekly cleaning</b>   | <b>After 1200 m<sup>2</sup> or 30 days</b>  |
| You need: (warm) tapwater - brush - sponge (Spontex) - rubber safety gloves - safety goggles  | You need: (warm) tapwater - brush - sponge (Spontex) - rubber safety gloves - safety goggles  |
| 1. Press the I- button to enter the 'inactive' mode.  | Proceed as described for "small maintenance", but apply the maintenance procedure to <b>all the trays</b> , to <b>all the rollers</b> as well as to the <b>metal strainer</b> . |
| 2. Press the  button twice: circulation starts and the rollers open.                             |   |
| 3. Drain the developer and rinsing trays (circulation will stop when the trays are empty).  |   |
| 4. Open the upper covers and then manually fill the developer and rinsing trays with water.   |   |
| 5. Close the upper covers to restart circulation and then let it run for 15 minutes.  |   |
| 6. Drain the developer and rinsing trays.   |   |
| 7. Remove the rollers 2, 3, 8, 10 & 12 and clean them in a sink with warm water. After that, clean the developer and rinsing trays with the tap water hose with sprayer (optional). |   |
| 8. Reinstall the rollers and close the drain valves.  |   |
| 9. Terminate maintenance by pressing the  button.  |   |
| 10. Press the I-button to restart the processor.  |   |

9.3    Drains and Valves

Illustration

The illustration below indicates the valves and drains of the LITHOSTAR LP 68 ULTRA:



Valves and drains

| Number | Description                  |
|--------|------------------------------|
| 1      | Developer drain valve        |
| 2      | Wash water drain valve       |
| 3      | Rinsing solution drain valve |
| 4      | Finisher drain valve         |
| 5      | Connection to water supply   |
| 6      | Water valve                  |

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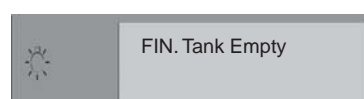
## 9.4 Replacing the Developer or Finisher Tank

### When replacing

You have to replace an opened tank:

- developer: after one week (aged developer decreases processing quality)
- finisher: after one month (aged finisher decreases processing quality)
- when the developer or finisher tank is empty.

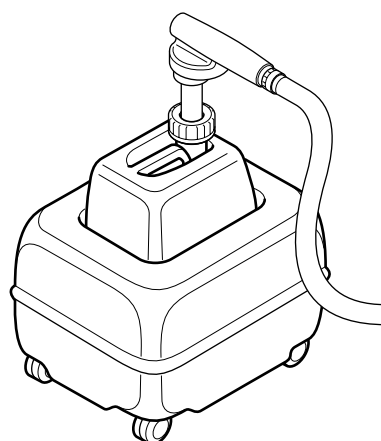
The following message will appear on the display:



If the message appears on the display, you can still process 1 m<sup>2</sup>. After that, the processor will enter 'Wait' mode if you do not replace the tank.

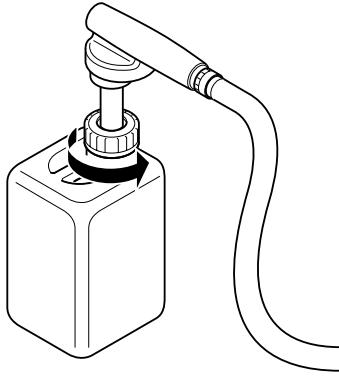


### Tank holder

It is important that you place the standard 20-l tanks in the optional tank holders. Thus, you avoid problems with chemical solution flow. The tank holders are not delivered together with the processor but can be ordered separately.



### How to replace a developer or finisher tank

Follow the procedure below to replace a developer or finisher tank:

| Step | Action  |
|------|---|
| 1    | Place a full tank in the empty slot of the tank holder.   |
| 2    | Remove the cap from the full tank.  |
| 3    | Loosen the cap connecting the plunger to the empty tank.<br>   |
| 4    | Pull the plunger out of the empty tank.<br> Do not lay the plunger down after removing it from the empty tank.   |
| 5    | Insert the plunger into the full tank immediately. The plunger and the bottom of the tank must contact.<br> Carefully store the cap of the full tank in order to re-use it for closing full waste tanks. |
| 6    | Tighten the connector in order to connect the plunger to the tank.  |



Keep in mind that developer tanks are red-coded whereas finisher tanks are blue-coded.

If necessary, use the special wrench which has been supplied with the processor to loosen the cap.



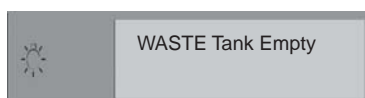
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## 9.5 Replacing the Waste Tank

### When

You have to replace a waste tank when it is full. The following message will prompt you to do so:



When this message appears on the display while you are draining trays, you still have the time to close the drain valve of the tray you are draining.

### Ways of filling the waste tank

The waste tank is filled in two ways:

- manually, using the drain valves.
- automatically, through the overflow pipes in the trays.

### Disposal of full waste tanks

Full waste tanks have to be collected by an authorised waste treatment company.



Refer to the chapter 'Waste' on page 41 and to 'Handling Instructions concerning Chemicals' on page 11 as well as to 'Prescriptions and Precautions Concerning Full Waste Tanks' on page 21.

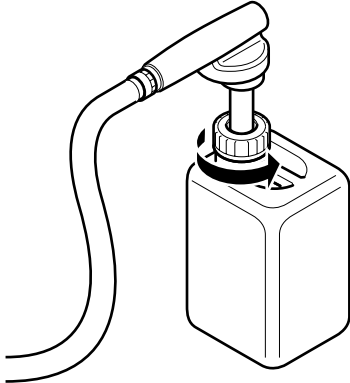


### In case of 120-l tanks

If you use optional 120-l tanks, carefully check empty developer and finisher bags on flaws, i.e. cracks or tears, before using them in a 120-l waste tank.

### Replacing the Waste Tank, *continued*

#### How to replace a full waste tank

Follow the procedure below to replace a waste tank:

| Step | Action   |
|------|--|
| 1    | Place an empty tank in the fourth slot of the tank tray.   |
| 2    | Loosen the cap connecting the plunger to the waste tank.<br>  |
| 3    | Pull the plunger out of the full waste tank.<br> Do not lay the plunger down after removal from the waste tank.             |
| 4    | Insert the plunger into the empty developer or finisher tank.<br> Make sure the plunger and the bottom of the tank contact. |
| 5    | Tighten the connector in order to connect the plunger to the waste tank and make sure the levelling hole is not covered.   |
| 6    | Close the full waste tank using a cap.   |
| 7    | Press the ✓ button to confirm that the waste tank has been replaced.   |

#### Labelling



Make sure the new waste tank has been provided with a proper label.  
Refer to 'Collecting Liquid Chemical Waste in Waste Tanks' on page 46.

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## 9.6 Cleaning Frequency

### Why cleaning

To retain processing quality, cleaning is essential and must be considered the very issue in maintaining your LITHOSTAR LP 68 ULTRA. You will avoid a lot of problems when you clean the processor as described in this chapter.

Consequences of bad or lack of cleaning may be:

- low image quality after processing
- increased jam frequency.

### Two levels of cleaning

Two levels of cleaning have to be considered when it comes to maintaining the optimum processing results of the LITHOSTAR LP 68 ULTRA.

- Every 600 m<sup>2</sup> or 2 weeks (whatever comes first)
- Every 1200 m<sup>2</sup> (or 30 days)

### Every 600 m<sup>2</sup> or 2 weeks

Proceed as follows to clean the LITHOSTAR LP 68 ULTRA every 600 m<sup>2</sup> or 2 weeks (whatever comes first) - small maintenance-

| What to do      | Topic                          | See     |
|-----------------|--------------------------------|---------|
| Drain all trays | Draining Trays before Cleaning | page 60 |
| Rinse all trays | Rinsing Trays                  | page 62 |

### Every 1200 m<sup>2</sup> or 30 days

Proceed as follows to clean the LITHOSTAR LP 68 ULTRA every 1200 m<sup>2</sup> (or at least every 30 days) -major maintenance-

| What to do                     | Topic                             | See     |
|--------------------------------|-----------------------------------|---------|
| Drain all trays                | Draining Trays before Cleaning    | page 60 |
| Remove rollers                 | Removing Rollers                  | page 66 |
| Clean rollers                  | Cleaning Rollers, Tray Components | page 61 |
| Clean all trays                | Cleaning Trays                    | page 63 |
| Clean all circulation circuits | Cleaning the Circulation Circuits | page 65 |
| Re-assembling sections         | Re-installing Rollers             | page 68 |

9.7    Draining Trays before Cleaning

Manual draining

At regular intervals, all trays need cleaning. Consequently, trays need to be drained and refilled after cleaning.

Frequency of manual draining

Trays need cleaning after 1200 m<sup>2</sup> of processed plate or after a period of 30 days if less plate is processed.

Waste tank level



Please check the waste tank level before you start draining the trays. If required, first replace it.

Refer to 'Replacing the Waste Tank' on page 57 and to 'Prescriptions and Precautions Concerning Full Waste Tanks' on page 21 before draining trays.

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9.8 Cleaning Rollers, Tray Components

After 30 days





Tray components must also be cleaned regularly, i.e. after total processed plate surface exceeds 1200 m<sup>2</sup> or every 30 days, in order to maintain favourable processing conditions.  
Dirt and sludge may stick to the rollers or conveyor systems and must be removed.

Use pure cold or tepid water for cleaning purposes, never use soap, detergents, abrasives or chlorinated solvents for cleaning tray components. Also avoid using fluffy sponges or coarse fabric.

How to clean components

Follow the procedure below to clean rollers as well as other tray components:

| Step | Action  |
|------|---|
| 1    | Clean the sink, in which you wish to clean rollers and tray components.   |
| 2    | Open the covers to shut down the circulation pump.  |
| 3    | Press the I-button to deactivate the processor.   |
| 4    | Enter 'Maintenance' mode.<br> Refer to 'Before Starting Maintenance' on page 52.             |
| 5    | Clean all rollers and tray components using warm water.   |
| 6    | Dry all rollers and components using a clean cloth.   |
| 7    | Re-install all rollers and tray components.<br> Refer to 'Re-installing Rollers' on page 68. |



Refer to 'Cleaning Frequency' on page 59 for information on when to clean components.

### 9.9 Rinsing Trays

#### Bi-monthly



Chemicals pollute the trays and the rollers. Hence, regular cleaning is essential to retain optimum washing and developing conditions.

Use pure cold or tepid water for cleaning purposes, never use soap, detergents, abrasives or chlorinated solvents to clean trays. Also avoid using fluffy sponges or coarse fabric.






Refer to 'Replacing the Waste Tank' on page 57 and to 'Prescriptions and Precautions Concerning Full Waste Tanks' on page 21 before cleaning trays.

#### Wash tray vs. other trays

The cleaning procedure for the wash tray slightly differs from that of the developer, rinsing and finishing trays.

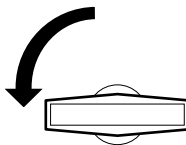
#### How to clean the wash tray

Follow the procedure below to clean the wash tray:

| Step | Action   |
|------|--|
| 1    | Make sure 'Maintenance' mode is activated.<br> Refer to 'Before Starting Maintenance' on page 52 for details.     |
| 2    | Carefully remove the rollers and other components from the wash tray.<br> Refer to 'Removing Rollers' on page 66. |
| 3    | Drain the wash tray but do not yet press the button.<br> Refer to 'Draining Trays before Cleaning' on page 60.    |
| 4    | Place the hose with water tap in the drain hole of the wash tray and fill the wash tray with 1 cm of fresh water.  |
| 5    | Clean the wash tray using a soft brush.  |
| 6    | Remove water and sludge using a water vacuum cleaner.  |
| 7    | Rinse the wash tray using the hose with water tap in order to remove remaining sludge or dirt.   |

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| Step | Action   |
|------|--|
| 8    | Open the wash water drain valve and drain the remaining waste water from the wash water circulation circuit.<br> |
| 9    | Close the wash water drain valve as well as the right cover.   |
| 10   | Press the button to confirm that maintenance is terminated.<br>The processor will automatically refill trays and re-enter 'Ready' mode.  |

**Cleaning the other trays**

To clean the other trays, proceed as described above, but there is no need for using a vacuum cleaner to remove sludge or dirt.

**9.10 Cleaning Trays**

Refer to the "FLUSH/CLEANING TOOL" User Instructions further in this manual.  
The "FLUSH/CLEANING TOOL" can be ordered separately.

### 9.11 Cleaning the metal strainer

#### Safety



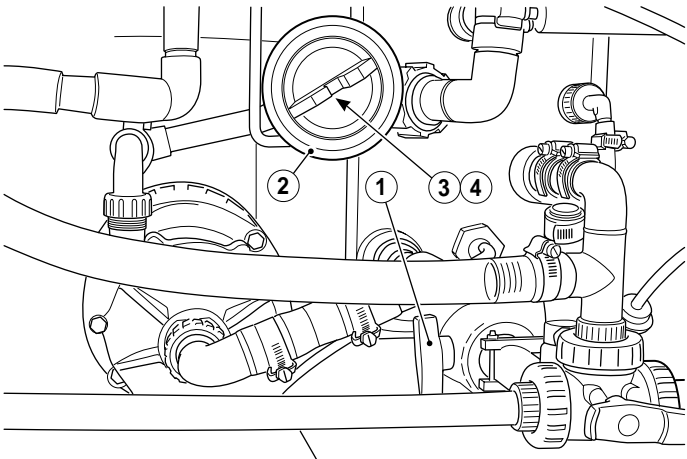
Always wear safety goggles and safety gloves.

Be sure to strictly follow the safety precautions set out in 'Major Safety and Handling Instructions' in the User Manual.

Before you start cleaning, make sure the processor is idle in maintenance mode.

#### How to clean the metal strainer

Follow the procedure below to clean the metal strainer:

| Step | Action   |
|------|--|
| 1    | Open the cover on the right side of the processor.<br> |
| 2    | Open the wash water drain valve (1) to drain the wash tray and the strainer house (2)  |
| 3    | After the wash tray and the strainer house are emptied, remove the strainer cover (3).   |
| 4    | Remove the metal strainer (4) from the strainer house (2)  |
| 5    | If the metal strainer is clogged, clean it in a sink; use warm tap water and a brush. Replace the metal strainer if necessary.             |
| 6    | Install the metal strainer (4) and the cover (2).  |
| 7    | Close the drain valve (2).   |
| 8    | Close the side cover (1).  |
| 9    | Press the I-button to restart the processor.   |



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## **9.12 Cleaning the Circulation Circuits**

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**When**

You have to clean one or more of the circulation circuits when:

- the developer, finisher and/or waste tanks have been interchanged accidentally
  - the solutions have been soiled with oil or grease.
- Assembly of Section Components

9.13   Removing Rollers

Why removing tray components

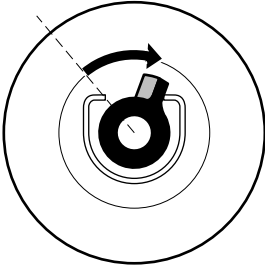



All trays need cleaning regularly. To clean trays efficiently, you must remove all rollers and conveyor systems. Thus, you will be able to properly clean all tray sides.

Refer to 'Prescriptions and Precautions Concerning Rollers' on page 23.

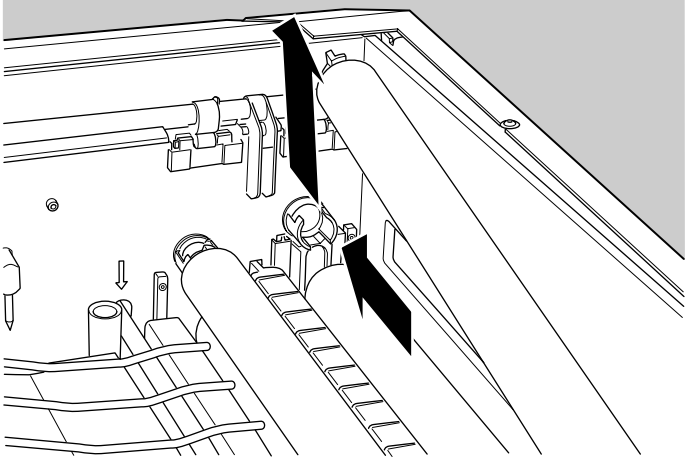
How to remove upper rollers

Follow the procedure below to remove upper rollers:

| Step | Action   |
|------|--|
| 1    | Press the I-button to enter 'Inactive' mode.<br>The rollers open automatically.  |
| 2    | Release the roller by sliding the fastener at the right-hand roller side towards the opposite side of its holder.<br>                                      |
| 3    | Pull the shaft of the roller carefully out of its holder at the left-hand side of the processor.<br> Beware not to damage roller gears or the drive system. |


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| Step | Action  |
|------|---|
| 4    | <div>Lift the roller fastener out of its holder and remove the roller.</div> <div></div> |

How to remove lower rollers

Follow the procedure below to remove lower rollers:

| Step | Action  |
|------|---|
| 1    | Pull the roller towards the right-hand processor side as far as possible.   |
| 2    | <div>Lift the left-hand side of the roller out of its holder.</div> <div> Beware not to damage roller gears or the drive system.</div> |
| 3    | Pull the roller towards the left-hand processor side to lift the right-hand side of the roller out of its holder.   |
| 4    | Lift the roller out of the section.   |

### 9.14 Re-installing Rollers

#### Introduction



A total number of 20 rollers and various other components must be re-installed into their correct places after you have cleaned the LITHOSTAR LP 68 ULTRA and it can enter an active state again.

For safe and trouble-free operation, it is essential that the rollers and the other components should be placed into their holders correctly.

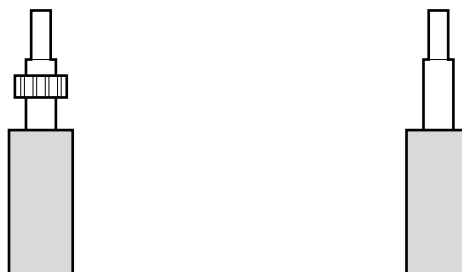
Refer to 'Prescriptions and Precautions Concerning Rollers' on page 23 for more information on roller positions.

#### Different rollers

It is important that you know the difference between lower / upper rollers on the one hand and squeegee / conveyor rollers on the other to properly re-install rollers after cleaning. The difference is illustrated below.

#### Lower v. upper squeegee rollers

The difference between an upper and a lower squeegee roller (grey) is illustrated below.



#### Lower v. upper conveyor rollers

The difference between an upper and a lower conveyor roller (red) is illustrated below.



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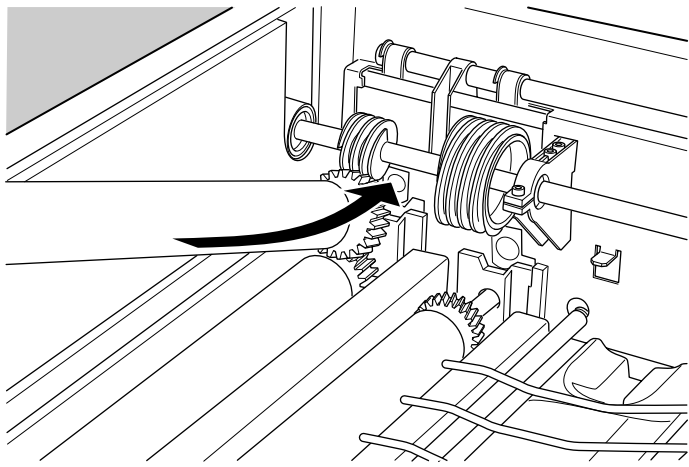
**How to install lower rollers**

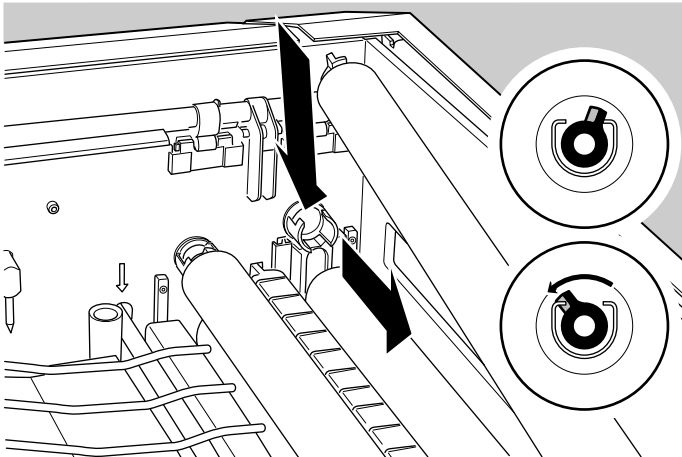

To install lower rollers, proceed as follows:

| Step | Action   |
|------|--|
| 1    | Place the shaft of the lower roller into its holder at the left-hand side of the processor.  |
| 2    | Lower the roller to the level of its holder at the right-hand processor side.                |
| 3    | Place the shaft of the lower roller into its holder at the right-hand side of the processor. |

**How to install upper rollers**

To install upper rollers, proceed as follows:

| Step | Action  |
|------|---|
| 1    | <div>Place the shaft of the roller into the roller holder at the left-hand side of the processor.</div> <div></div> |

| Step | Action  |
|------|---|
| 2    | <p>Push the roller down and make sure that the roller fastener on the right-hand roller side fits correctly into its holder.</p>   |
| 3    | <p>Push the roller towards the left-hand side as far as possible. (See illustration above.)</p> <div style="display: flex; align-items: center;">  <p>Make sure that any gears on the left-hand roller side engage properly with the gears of upper or lower rollers.</p> </div> |