

# **Primescan D 7100/D 8200/D 8400**

## **Operation**

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## Designated Use

The Primescan D 7100/D 8200/D 8400 is a drum scanner and only to be used for this purpose – in accordance with the manuals. Do not use the unit as a surface for depositing objects or liquids.

The ventilation outlets should not be obstructed.

## Notes on Safety



Attention: Connectors and outlets of the house installation must always be easily accessible so that, in the case of an emergency, the unit can be disconnected completely from the power supply by pulling out the power connector.

The fuse is not accessible to the operator.



Warning: The device may only be repaired by Service personnel.

Do not install the unit in the vicinity of air-conditioning systems and protect it from moisture and direct sunlight.



Warning:

Unauthorized opening of the unit's housing and improper repairs not expressly described in the documentation can lead to considerable danger for the user.

Servicing work must only be performed by authorized specialist personnel. The relevant accident prevention regulations must be observed at all times.

Non-observance of accident prevention regulations can lead to the loss of accident insurance cover.

## About this Documentation

This documentation applies to the Primescan D 7100/  
D 8200/D 8400 drum scanner.

## Previous Knowledge

We assume that you are familiar with the basic functions of Windows NT® /Windows 2000 and/or Apple® Macintosh®.

## Other Documentation

You can find further information in the following documentation:

- Printed documentation:
  - Newcopix 7000 User's Guide
  - Newcopix 7000 Reference
  - Newcopix 7000 Installation
  - Primestation D 7100/D 8200 Operation

For Newcolor 7000:

- Printed documentation:
  - Newcolor 7000 Installation
  - Newcolor 7000 Workflow
- Online Help (reference)

For Linocolor:

- Printed documentation:
  - Linocolor Installation
  - Linocolor Introduction (incl. Color Images)
  - Linocolor User's Guide
- Once you have installed Linocolor, you will find further documentation in the corresponding folder in your target directory, e.g.:
  - Linocolor Reference

- GeoAssistant User's Guide
- JobAssistant User's Guide
- LinoColor Help
- JobAssistant Help

## Conventions Used in This Manual

The following typographical conventions are used in this manual:

- References to other manuals, chapters and sections are colored in [blue](#) (on the screen) and are underlined.

Example:

See [Section Conventions Used in This Manual](#).

- *Italics* are used to indicate menus, names of functions, hardware conditions, switch settings, and system messages.

Example:

Move the switch to *off*.

- Menus, functions and sub-functions are separated by ">".

Example:

Select *File > Open...*

- A plus sign is used to indicate keys that have to be pressed at the same time.

Example:

Press Alt+A.

- "☞" in front of a word indicates that it is explained in the glossary.

## Important Information

Important information in the text is marked by symbols which indicate the following:



Warning: Contains information that must be taken into consideration to protect the user from injury.



Attention: Contains information that must be taken into consideration to prevent damage to hardware or software.



Note: Contains important general or supplementary information about a specific topic.



Prerequisites: Denotes text that contains requirements which must be fulfilled before the steps which follow can be performed.

## Influence of Magnetic Fields on the Monitors

Strong magnetic fields may influence your monitor screen (for example, they might make the edges of the screen unsteady or images flicker). This could be caused by the 50Hz magnetic field coming from the power cables routed along your floors or in the wall.

The following corrective measures are recommended, taking into account the safety regulations for working at monitors in offices:

- place the monitor at a different location
- shield the source (e.g. cable duct)
- change the routing of the power supply cable
- shield the monitor by means of a metal cover

## Any Comments on this Documentation?

We would like to know if our documentation meets your requirements.

- Can you find the information you are looking for? (and quickly enough?)
- Does this documentation help you to solve any problems which might occur?
- Where do you think there is room for improvement? ...

If you would like to make some comments on the documentation, please feel free to send these to us at the following e-mail address:

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It would help us if you could write your comments in English or German.

Important!

Please do not use this e-mail address for improvement suggestions for the product Primescan D 7100/D 8200/D 8400, only for tips, corrections, criticism and suggestions with regard to the corresponding documentation. If you have comments which you would like to make on the improvement or enhancement of our products, please forward these to us using the *Problem Report for Customers and Service Technicians*.

To order documentation, please contact the Heidelberg agency which is responsible for you.

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**Dear Customer**

With the Primescan D 7100/D 8200, you have acquired a high quality, fast drum scanner. Please take the time to read through the following pages and look forward to working with your scanner.

To ensure that the device always works to your complete satisfaction, please observe the following instructions for unpacking and setting up. Once you have removed the packaging, check the scope of delivery as listed on the following page.

**Mains connection**

Warning: The device may only be connected to the mains power supply once you have carried out the instructions in the Unpacking and Setting Up chapter.

## **Standard scope of delivery**

The following parts are included in the scope of delivery of the Primescan D 7100/D 8200:

- Scanning drum 150,  
scanning drum 212 (only for Primescan D 8200)
- Scanning drum cover
- 1 SCSI cable
- 2 power cables
- Documentation
- 1 CD with ICC profiles (valid for Newcolor 7000 and Linocolor)
- Tools
- Polishing materials
- Anti-static cloth
- 1 halogen scanning lamp
- Barcode strips
- Alignment strips for reflection scanning
- 2 screws (for the cover)
- 2 plastic caps
- 1 support (must be screwed to the rear of the device)
- 1 hexagonal headed screw M 10x60

## Unpacking and Setting up

The scanner should be brought as close as possible to the intended installation site on the pallet.



Note:

Space of approx.  
3 m in length

For the pallet, ramp and the area of the unit itself, Primescan D 7100/D 8200 requires a space of approx. 3 m in length as well as a minimum height of 2.25 m for setting up.

- Uneven floor

In the case of uneven floors, we recommend that you:

- allow the Service Dept. to set the device up
- or
- place an aluminum plate 62x62 cm in size and 1 cm thick underneath the device. You will also need a ramp for the aluminum plate. Align the plate horizontally so that it does not wobble.
- Remove accessories from the pallet



Firstly, remove the accessories (e. g. scanning drum, cardboard covers) from the pallet.  
Remove the screws securing the ramp, using the

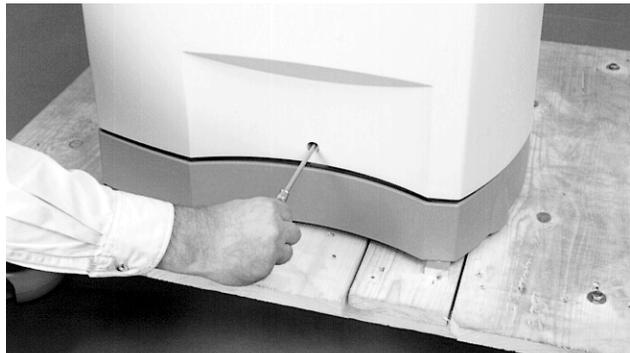
Phillips screwdriver. Then cut through the retaining strap used as an additional restraint. The ramp will be needed later and can be placed near the pallet for the time being.

- Remove the bubble film



Use a pair of scissors to cut through the adhesive tapes and remove the bubble film.

- Unscrew front panel



Unscrew the screw in the lower part of the front panel, using the flat screwdriver.

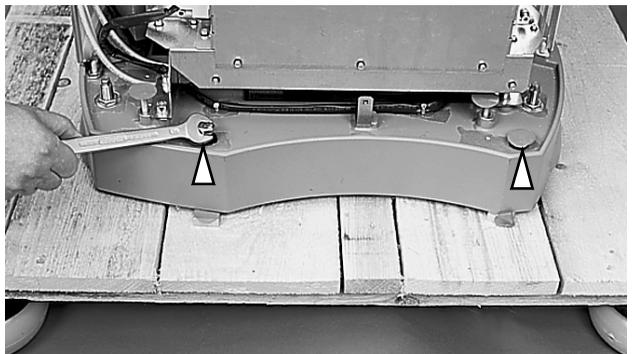
- Remove front panel



Take hold of the outside of the panel with both hands and raise it by approx. 1 cm. The panel can now be pivoted forwards and removed.

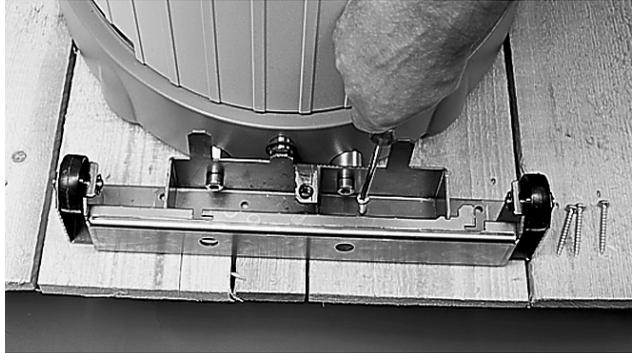
When putting it down, make sure that the panel cannot fall over.

- Remove wood screws



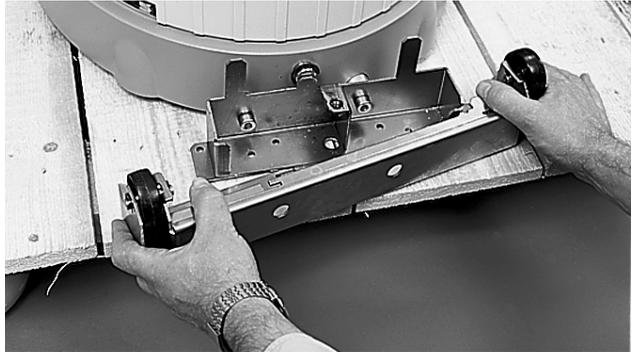
Remove the two wood screws attached to the base, using the 17 mm open-ended wrench.

- Detach transport brackets from the pallet



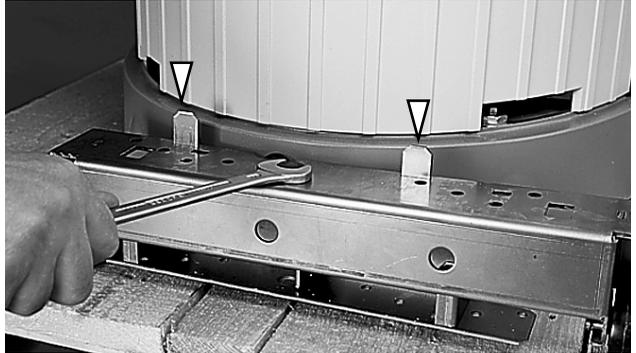
Unscrew the rear transport bracket from the pallet. You will require the Phillips screwdriver for this.

- Remove transport bracket



Pull out the transport bracket from under the bracket attached to the unit.

- Initial use of transport rollers

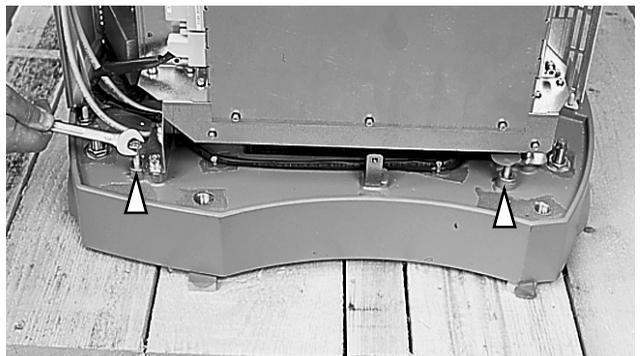


Now turn the dismantled transport bracket round and fit it on to 2 metal prongs on the fitted bracket. Ensure that the bracket is straight. Now tighten up the transport bracket up to the limit on the fitted bracket.

You will need the 17 mm wrench and the M 10x60 screws from the accessories box for this.

The 2 rollers can be put into operation in this way.

- Put two further rollers into operation

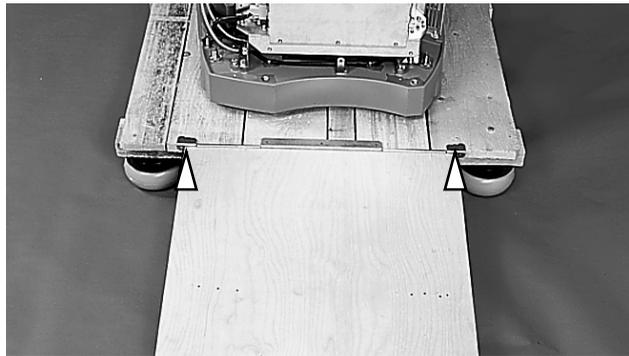


Screw in the two screws on the front side of the scanner up to the limit, using the 13 mm open-ended wrench.



Attention: Screw in the screws up to the limit! In this way, the rollers come out as far as possible, so that the device's feet are not damaged during transport.

- Now remove the 2 spacers exposed under the front of the base.
- Positioning the ramp



The ramp can be positioned at the front or the back, as required.

Use the two pins to hook the ramp into the holes provided in the pallet.

The scanner can be pulled off the pallet from the front or pushed off it from the back. Hold on to the scanner so that it doesn't roll down the ramp under its own weight.

**Note:**

You will need a space approx. 3 m long for the pallet, ramp and the area the unit covers itself.



- Push/pull the scanner to the setting up site

You can now pull/push the scanner to its intended final location.



To negotiate bends, you can rotate the scanner to the right direction by raising the carrying plate on one side.

The following requirements must be fulfilled at the location where the scanner is to be used:

Distance to wall at rear, at least 50 cm  
(in order to remove transport safeguards/allow service access)

Ceiling height, at least 2,25 m  
(in order to raise the cover)

In the case of uneven floors, we recommend that you:

- allow the Service Dept. to set the device up
- or
- place an aluminum plate 62x62 cm in size and 1 cm thick underneath the device. You will also need a ramp for the aluminum plate. Align the plate horizontally so that it does not wobble.

In the case of slight degrees of unevenness, you can adjust the height of the feet later.

Note:

When positioning the scanner, take into consideration the length of the SCSI connection cable between the scanner and your computer!

Observe the length of the  
the

The scanner should be very carefully positioned at the setting up site.

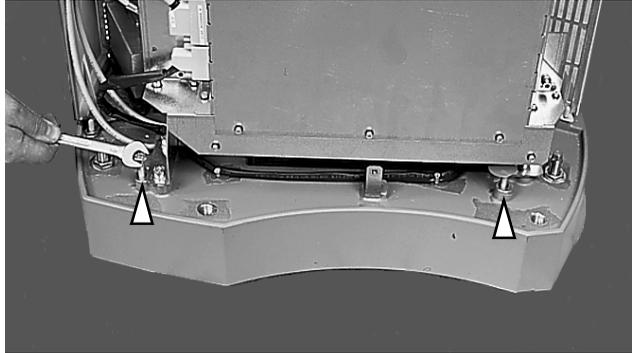


Attention: The scanner must not be moved when standing on the it's feet, as they are not suitable for this and could be damaged.

To be able to change the location at a later date, the scanner must again be placed on its transport rollers.

You should not locate the scanner in the vicinity of air conditioning units and you must protect it from humidity and direct sunlight.

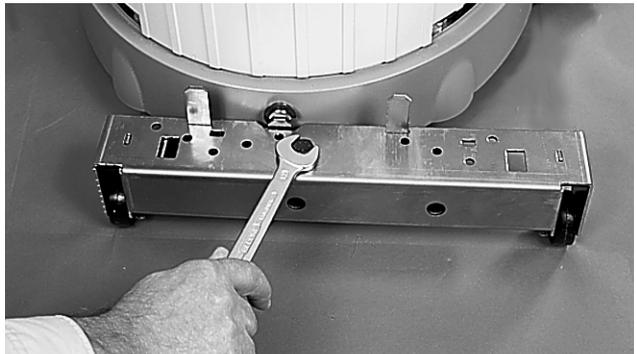
- Retracting the transport rollers



The rollers must be retracted once the scanner has been brought to its intended final location. To do this, turn back the screws until they rotate freely. You will need the 13 mm open-ended wrench for this.

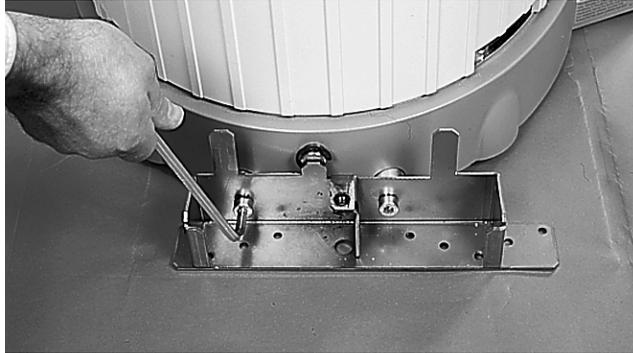
The scanner must not be moved from now on!

- Removing the rear bracket



Now lower and remove the bracket with the rollers using the 17 mm open-ended wrench.

- Remove the bracket



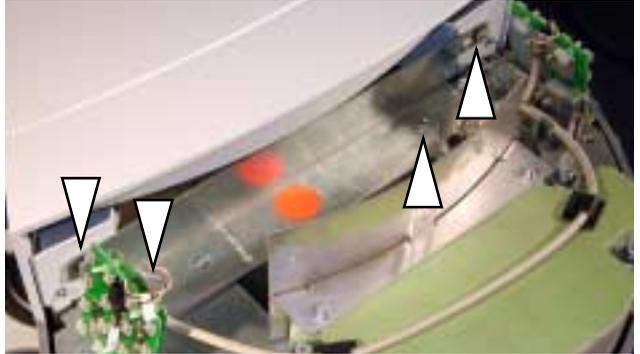
Use the 8 mm Allen wrench to remove the mounting post.

- Remove the upper cover



Undo the adhesive tape and remove the cover.

- Remove the transport safeguard bracket for the drum cover



Loosen the transport safeguard bracket for the drum cover as follows:

1. first unscrew the 2 screws, using the flat screwdriver.
  2. Raise the cover by 5 - 10 cm, so that you can reach the other two screws more easily.
  3. now undo the two screws on the cover, using a 10 mm open-ended wrench.
- Raise the drum cover



Raise the cover manually by about another 45 cm (Fig. D 8400).



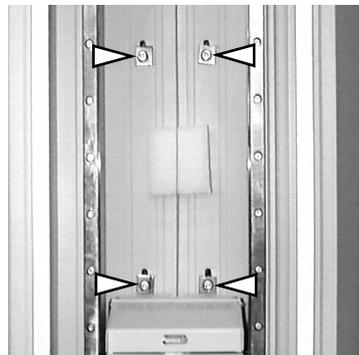
Attention: The cover can no longer be pushed down.

- Fit the unit cover



Fit the cover and secure it, using the M 6x6 screws from the accessories box.

- Removing transport safeguards for the scanning head

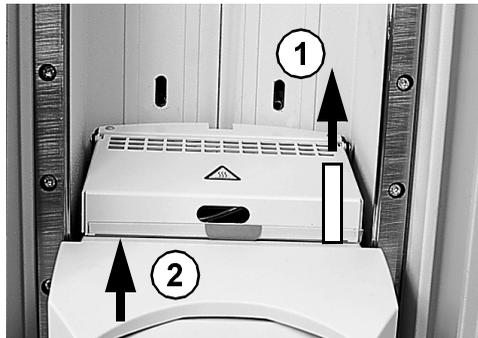


Remove the 4 transport safeguards for the scanning head by firstly unscrewing the 4 screws using the 10 mm open-ended wrench and then removing the wedges still attached with adhesive tape.

Ensure that you do not let the screws and wedges fall into the unit.

Now pull the steel cable forwards and remove the plastic block.

- Remove the transport safeguard for the focus motor (1) (only for the Primescan D 7100, not for Primescan D 8200) and the edge protector (2)



To remove the transport safeguard, it must be pulled upwards. It ensures that the focus motor does not become jammed in the transport position, thus preventing faults occurring during installation.

Subsequently, remove the transparent edge protector. The lamp cover must be raised to do this.

- Remove the transparency arm transport safeguard



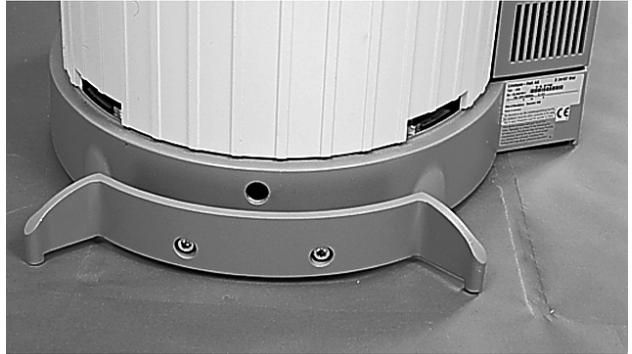
Carefully remove the transport safeguard, which is clamped onto the transparency arm.

- Remove transport safeguard bar



Pull the transport safeguard bar out from the rear of the unit.

- Fit the support



Attention: The scanner must not be put into operation without the supports (safety requirement)!

Use the 8 mm Allen wrench to fit the support to the scanner. This prevents the unit from toppling over. The support must not touch the floor after assembly (important for scan operation – if necessary, adjust the unit's feet, see page 19 and onwards)!

- Connect the SCSI computer cable



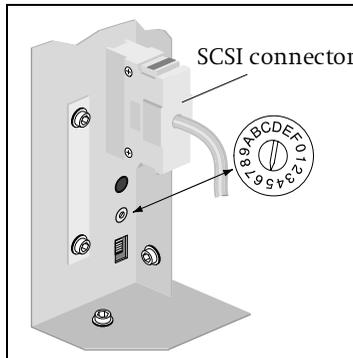
Feed the SCSI cable from the right of the unit through the recess provided and connect it to the electronics. Subsequently secure it at the screened position, using the cable clamp provided for this purpose.



Warning: This is necessary, in order to keep the radiated interference to a minimum.

If the SCSI cable connector does not fit the connection to the SCSI controller on your computer, you must use a corresponding Heidelberg authorized adapter.

- Setting the SCSI address



The scanner is set to SCSI address number 5 on delivery. However, if this address is already allocated, you can select another number between 1 and 6. Numbers 0 and 7 and switch positions 8 - F are already allocated and cannot be used. You will need a small Phillips screwdriver to make the setting.

- Fitting and securing the front panel.



When fitting the front panel, ensure that the 3 nipples at the top and the 2 open elongated holes at the bottom engage in the yellow pins. Then tighten the screw on the front side, using the flat screwdriver.

- Altering the height of the unit's feet

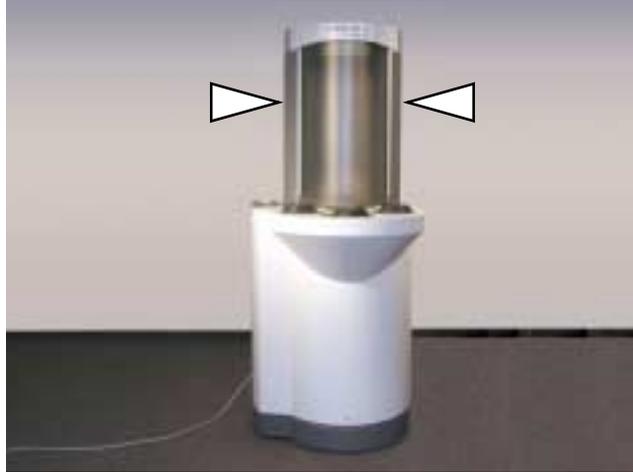
The feet are factory-set in such a way that they do not require further adjustment when the unit is on level ground.

You can only achieve ideal stability for the unit through altering the height of the feet where deviations in floor level are minimal.

In the case of uneven floors, we recommend that you:

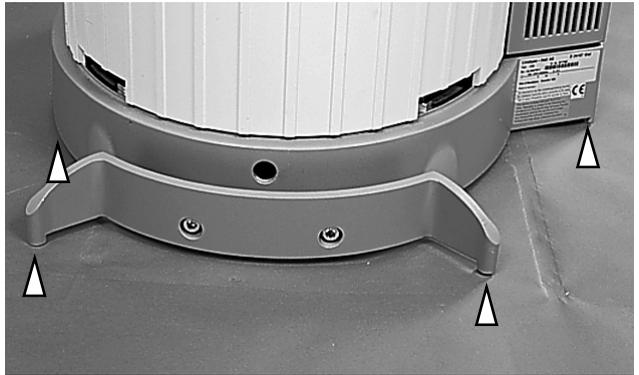
- allow the Service Dept. to set the device up
- or
- place an aluminum plate of a min. of 62x62 cm in size and 1 cm thick underneath the unit. You will also need a ramp for the aluminum plate. Align the plate horizontally so that it does not wobble.

The tendency to wobble must be equal on all sides. You can check this by trying to make the unit wobble diagonally.

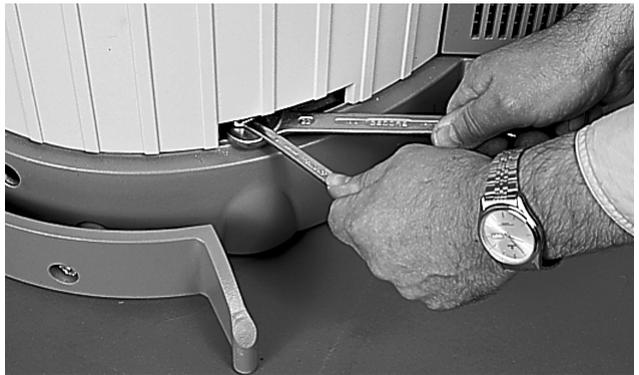


If the tendency to wobble is greater on one side than on the other, you can correct this by increasing the height of the rear foot on the side that the unit tends to lean to (Fig. Primescan D 8400).

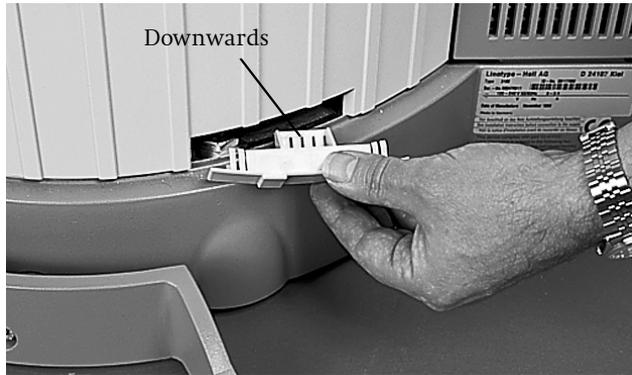
The support and 2 points on the base of the unit must not make contact with the floor. A ground clearance of at least 1 mm must exist. This is vital to ensure a perfect scan operation.



Two open-ended wrenches, size 10 mm and 22 mm respectively, are required to adjust the feet. The foot can be adjusted using the 10 mm wrench, the locknut can be loosened and then re-tightened using the 22 mm wrench.



Once you have adjusted the feet, you can fit the plastic caps on the rear left and the right-hand sides. Observe the fitting position. If a cap can not be fitted, then turn it around.



- Remove the transport safeguard for the (only Primescan D 8200)
1. Connect your Primescan D 8200 to the workstation and install Newcolor 7000 or Linocolor software (see Chapter 2).
  2. Switch the scanner ON and start the software.
  3. The indicator lamps on the unit light up. While the scanner is being initialized, the scanning head moves backwards (position for the 212 drum) from its transport position (position for the 150 drum).

4. As a result, the transport safeguard is released, allowing it to be removed towards the top.



**Dear Customer**

With the Primescan D 8400, you have acquired a high quality, fast drum scanner with drum change function.

Please take the time to read through the following pages and look forward to working with your scanner.

To ensure that the device always works to your complete satisfaction, please observe the following instructions for unpacking and setting up.

Once you have removed the packaging, check the scope of delivery as listed on the following page.

**Mains connection**

Warning: The device may only be connected to the mains power supply once you have carried out the instructions in the Unpacking and Setting Up chapter.

## **Standard scope of delivery**

The following parts are included in the scope of delivery of the Primescan D 8400:

- Scanning drum 150 with chip  
Scanning drum 212 with chip
- Scanning drum cover
- 1 SCSI cable
- 2 power cables
- Documentation
- 1 CD with ICC profiles
- Tools
- Polishing materials
- Anti-static cloth
- 1 halogen scanning lamp
- Barcode strips
- Alignment strips for reflection scanning
- 2 screws (for the cover)
- 2 plastic caps
- 1 support (must be screwed to the rear of the device)
- 1 halogen lamp
- 1 hexagonal headed screw M 10x60
- 2 metal supports (for front right and left)

## Unpacking and Setting up

The scanner should be brought as close as possible to the intended installation site on the pallet.



Note:

Space of approx.  
3.50 m in length

For the pallet, ramp and the area of the unit itself, Primescan D 8400 requires a space of approx. 3.50 m in length as well as a minimum height of 2.25 m for setting up.

- Uneven floor

In the case of uneven floors, we recommend that you:

- allow the Service Dept. to set the device up
- or
- place an aluminum plate 62x74 cm in size and 1 cm thick underneath the device. You will also need a ramp for the aluminum plate. Align the plate horizontally so that it does not wobble.
- Remove accessories from the pallet



Firstly, remove the accessories (e. g. scanning drum, cardboard covers) from the pallet.  
Remove the screws securing the ramp, using the

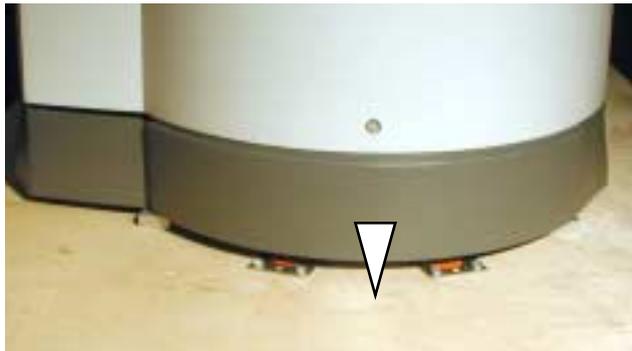
Phillips screwdriver. Then cut through the retaining strap used as an additional restraint. The ramp will be needed later and can be placed near the pallet for the time being.

- Remove the bubble film



Use a pair of scissors to cut through the adhesive tapes and remove the bubble film.

- Remove the plate covering the feet



- Unscrew front panel



Unscrew the screw in the lower part of the front panel, using the flat screwdriver.

- Remove front panel



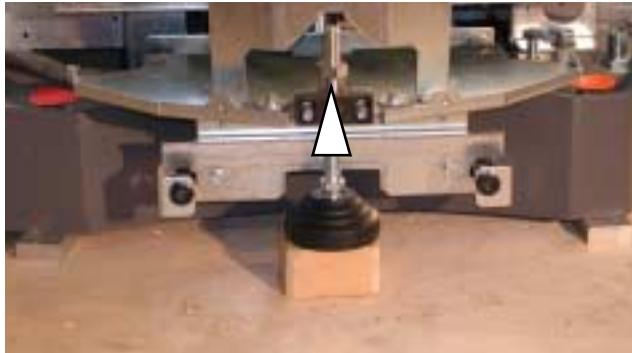
The panel can now be pivoted forwards and removed.

- Remove the transport brackets



Remove the 2 wood screws from the pallet for each of the two transport brackets. You will require the Phillips screwdriver for this. Subsequently loosen the brackets from the magazine table mounting posts, using a flat screwdriver.

- Screw the jointed foot upwards



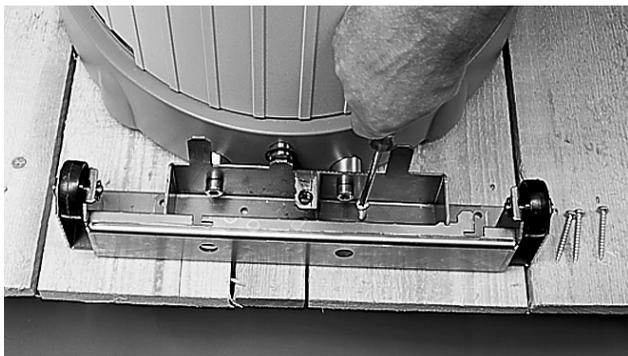
Loosen the jointed foot locking nut, using the 17 mm open-ended wrench. Subsequently screw it right up.

- Remove the wood screws and blocks



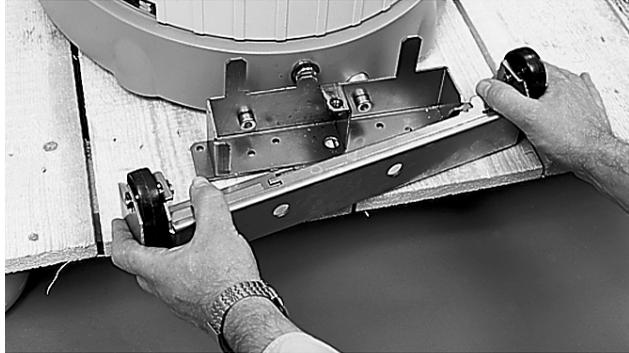
Remove the two wood screws attached to the base, using the 17 mm open-ended wrench.

- Detach transport brackets from the pallet



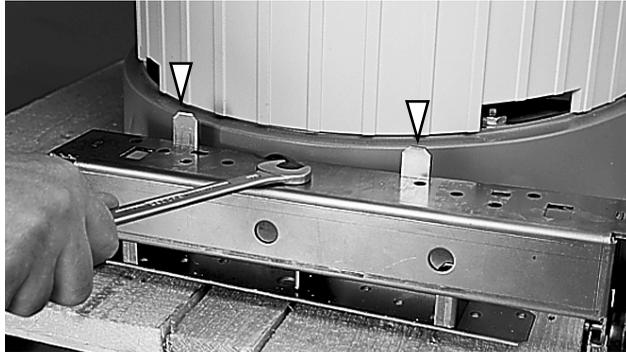
Unscrew the rear transport bracket from the pallet. You will require the Phillips screwdriver for this.

- Remove transport bracket



Pull out the transport bracket from under the bracket attached to the unit.

- Initial use of transport rollers



Now turn the dismantled transport bracket round and fit it on to 2 metal prongs on the fitted bracket. Ensure that the bracket is straight. Now tighten up the transport bracket up to the limit on the fitted bracket.

You will need the 17 mm wrench and the M 10x60 screws from the accessories box for this.

The 2 rollers can be put into operation in this way.

- Put two further rollers into operation

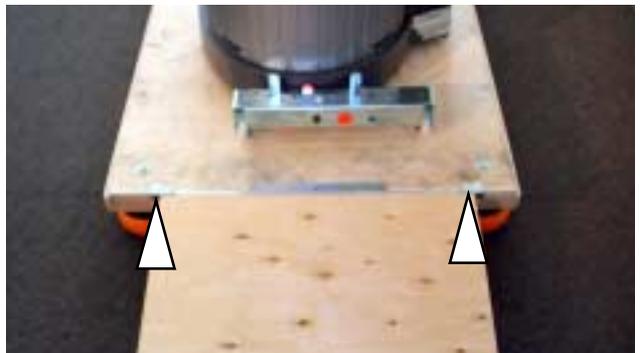


Screw in the two screws on the front side of the scanner up to the limit, using the 13 mm open-ended wrench.



Attention: Screw in the screws up to the limit! In this way, the rollers come out as far as possible, so that the device's feet are not damaged during transport.

- Now remove the 2 spacers exposed under the front of the base.
- Positioning the ramp



The ramp must only be positioned at the rear of the pallet.

Use the two pins to hook the ramp into the holes provided in the pallet.

The scanner must be pulled off the rear of the pallet. Hold on to the scanner so that it doesn't roll down the ramp under its own weight.



Do this by taking hold of the cast iron mounting and not parts of the magazine table.



**Note:**

You will need a space approx. 3.50 m long for the pallet, ramp and the area the unit covers itself.

- Push/pull the scanner to the setting up site

You can now pull/push the scanner to its intended final location.

The following requirements must be fulfilled at the location where the scanner is to be used:

Distance to wall at rear, at least 50 cm  
(in order to remove transport safeguards/allow service access)

Ceiling height, at least 2,25 m  
(in order to raise the cover)

In the case of uneven floors, we recommend that you:

- allow the Service Dept. to set the device up
- or
- place an aluminum plate 62x74 cm in size and 1 cm thick underneath the device. You will also need a ramp for the aluminum plate. Align the plate horizontally so that it does not wobble.

In the case of slight degrees of unevenness, you can adjust the height of the feet later.

Note:

Observe the length of the SCSI cable!

When positioning the scanner, take into consideration the length of the SCSI connection cable between the scanner and your computer!

The scanner should be very carefully positioned at the setting up site.



Attention: The scanner must not be moved when standing on its feet, as they are not suitable for this and could be damaged.

To be able to change the location at a later date, the scanner must again be placed on its transport rollers.

You should not locate the scanner in the vicinity of air conditioning units and you must protect it from humidity and direct sunlight.

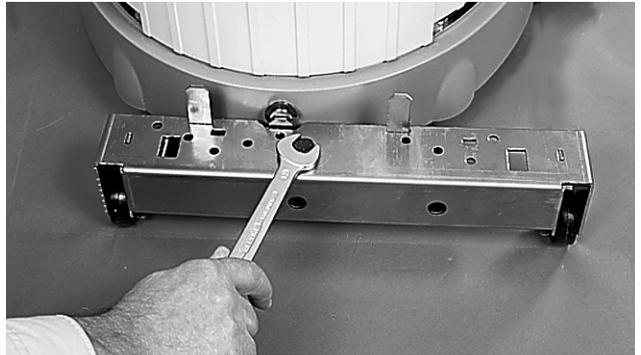
- Retracting the transport rollers



The rollers must be retracted once the scanner has been brought to its intended final location. To do this, turn back the screws until they rotate freely. You will need the 13 mm open-ended wrench for this.

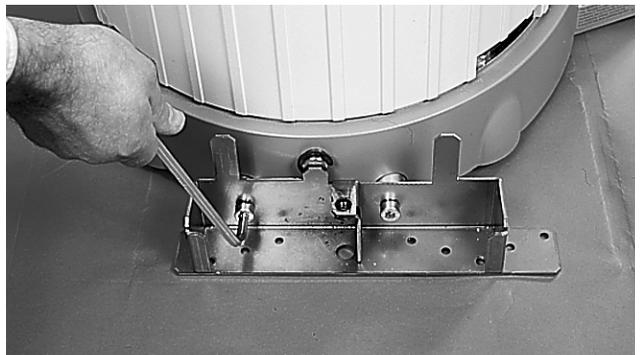
The scanner must not be moved from now on!

- Removing the rear bracket



Now lower and remove the bracket with the rollers using the 17 mm open-ended wrench.

- Remove the bracket



Use the 8 mm Allen wrench to remove the mounting post.

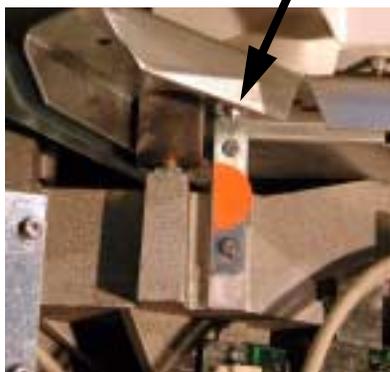
- Removing the clamping pads

Raise the drum cradle and remove the 8 clamping pads.



- Removing the transport plates

Remove the 2 screw from each of the two transport plates, right and left on the unit, using the flat screwdriver.

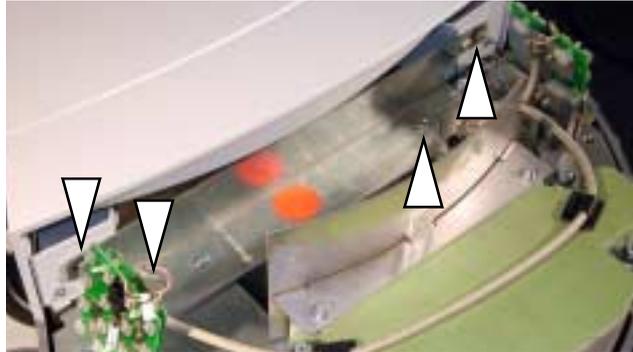


- Remove the upper cover



Undo the adhesive tape and remove the cover.

- Remove the transport safeguard bracket for the drum cover



Loosen the transport safeguard bracket for the drum cover as follows:

1. first unscrew the 2 screws, using the flat screwdriver.
2. Raise the cover by 5 - 10 cm, so that you can reach the other two screws more easily.
3. now undo the two screws on the cover, using a 10 mm open-ended wrench.

- Raise the drum cover



Raise the cover manually by about another 45 cm.



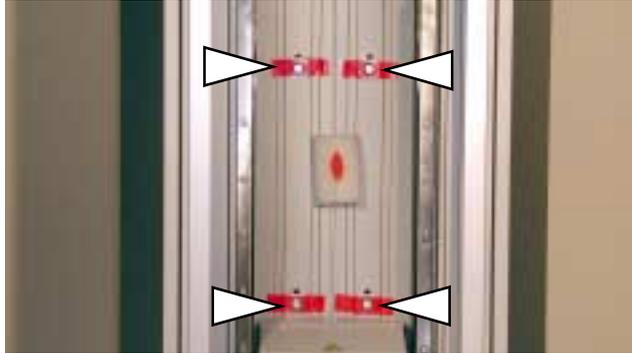
Attention: The cover can no longer be pushed down.

- Fit the unit cover



Fit the cover and secure it, using the M 6x6 screws from the accessories box.

- Removing transport safeguards for the scanning head



Remove the 4 transport safeguards for the scanning head by firstly unscrewing the 4 screws using the 10 mm open-ended wrench and then removing the wedges still attached with adhesive tape.

Ensure that you do not let the screws and wedges fall into the unit.

Now pull the steel cable forwards and remove the plastic block.

- Remove the edge protector



The lamp cover must be raised to remove the transparent edge protector.

- Remove the transparency arm transport safeguard



Carefully remove the transport safeguard, which is clamped onto the transparency arm.

- Remove transport safeguard bar



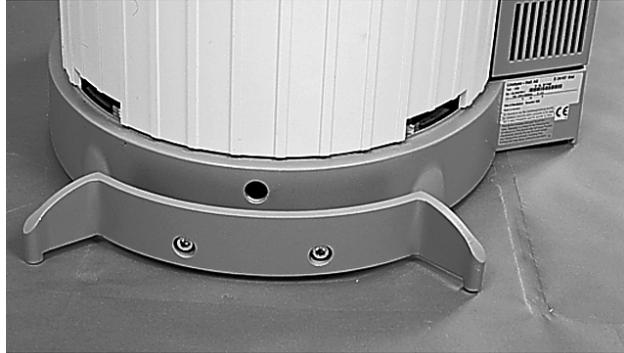
Pull the transport safeguard bar out from the rear of the unit.

- Fit the supports



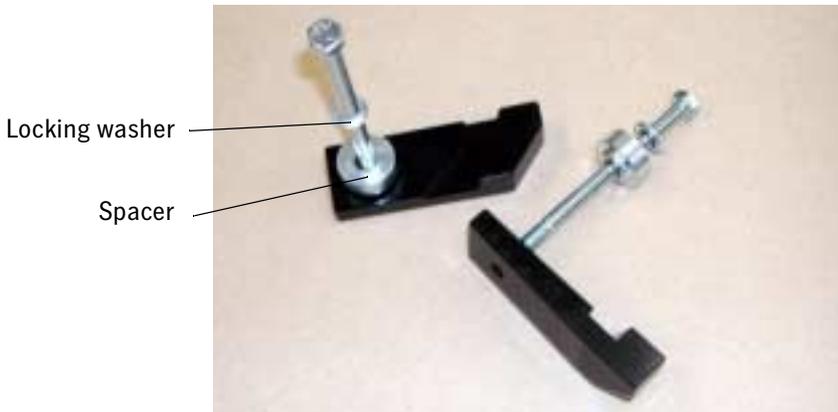
Attention: The scanner must not be put into operation without the supports (safety requirement)!

- Fitting the rear support



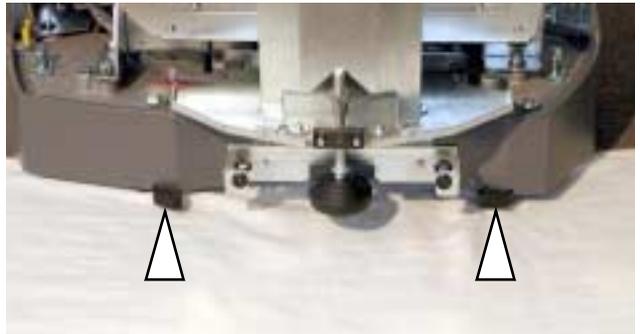
Use the 8 mm Allen wrench to fit the support to the scanner. This prevents the unit from toppling over.

- Fitting the front supports



Screw the two supports, left and right, under the scanner. The 10 mm open-ended wrench and one M 6x85 hexagonal headed screw, spacer and locking washer per support are required to do this. You must use the two holes, to which the unit

was screwed to the pallet with by means of the wood screws. Fit a spacer and locking washer under the head of the screw and screw the support to the scanner. The supports are a safety measure, to prevent the scanner from toppling forwards, if the scanner is burdened on the magazine table at the front.



The supports and screws must not make contact with the ground. At least 1 mm ground clearance must exist, so that the unit stands on its sprung feet. This is vital to ensure a perfect scan operation. (important for scan operation - if necessary adjust the feet, see also [Page 2-24](#))

- Connect the SCSI computer cable



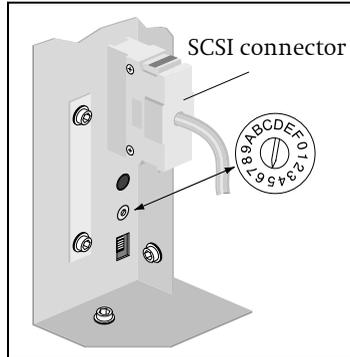
Feed the SCSI cable from the right of the unit through the recess provided and connect it to the electronics. Subsequently secure it at the screened position, using the cable clamp provided for this purpose.



Warning: This is necessary, in order to keep the radiated interference to a minimum.

If the SCSI cable connector does not fit the connection to the SCSI controller on your computer, you must use a corresponding Heidelberg authorized adapter.

- Setting the SCSI address



The scanner is set to SCSI address number 5 on delivery. However, if this address is already allocated, you can select another number between 1 and 6. Numbers 0 and 7 and switch positions 8 - F are already allocated and cannot be used. You will need a small Phillips screwdriver to make the setting.

- Altering the height of the unit's feet

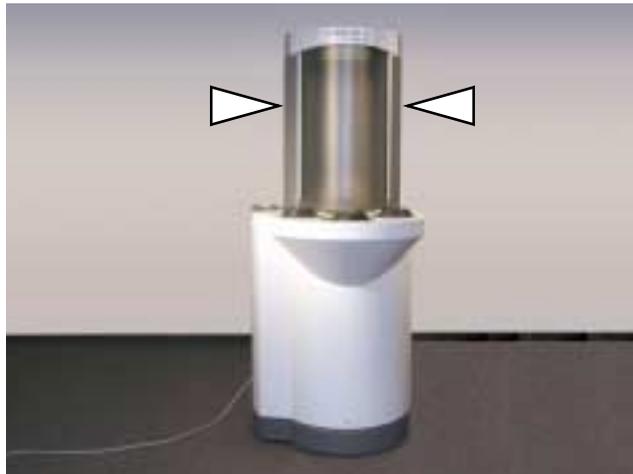
The feet are factory-set in such a way that they do not require further adjustment when the unit is on level ground.

You can only achieve ideal stability for the unit through altering the height of the feet where deviations in floor level are minimal.

In the case of uneven floors, we recommend that you:

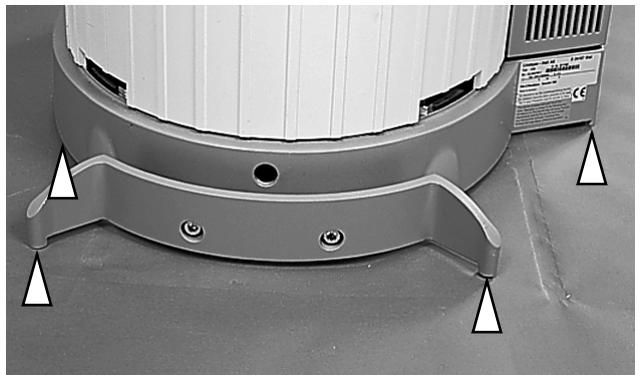
- allow the Service Dept. to set the device up  
or
- place an aluminum plate of a min. of 62x74 cm in size and 1 cm thick underneath the unit. You will also need a ramp for the aluminum plate. Align the plate horizontally so that it does not wobble.

The tendency to wobble must be equal on all sides. You can check this by trying to make the unit wobble diagonally.



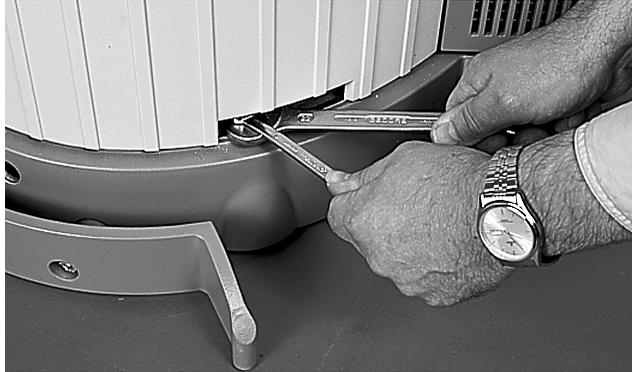
If the tendency to wobble is greater on one side than on the other, you can correct this by increasing the height of the rear foot on the side that the unit tends to wobble to most.

The front and rear supports and 2 points on the base of the unit must not make contact with the floor. A ground clearance of at least 1 mm must exist. This is vital to ensure a perfect scan operation.

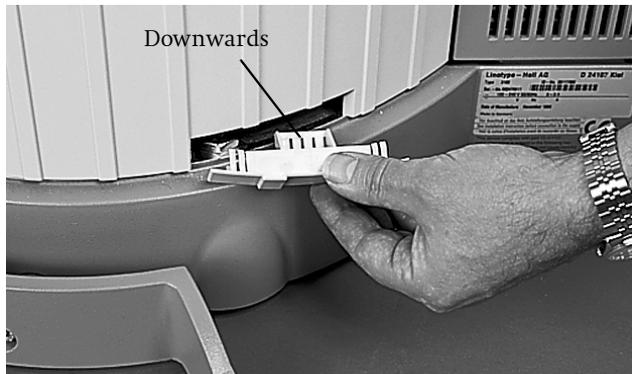


Two open-ended wrenches, size 10 mm and 22 mm respectively, are required to adjust the feet. The foot can be adjusted using the 10 mm wrench,

the locknut can be loosened and then re-tightened using the 22 mm wrench.



Once you have adjusted the feet, you can fit the plastic caps on the rear left and the right-hand sides. Observe the fitting position. If a cap can not be fitted, then turn it around.



- Screw the front jointed foot out

Screw the front jointed foot out, to make contact with the floor. The magazine table must be aligned horizontally by adjusting the foot. Secure it in position by tightening the locking nut. You will require the 17 mm open-ended spanner for this.

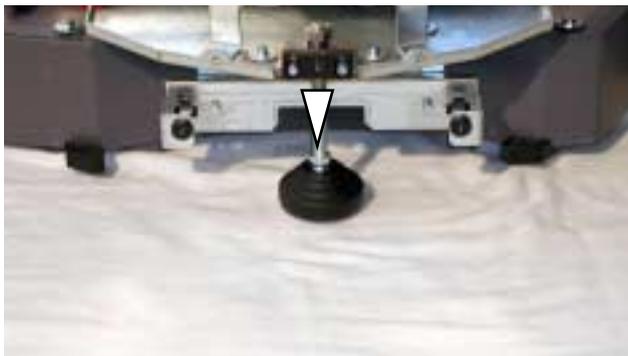
Tips for horizontally aligning the magazine table:

You can either

- Place a scanning drum on the magazine table and compare the position with the drum cover or use a ruler to measure the distance, top and bottom, from the drum to the scanner body

or you can

- use a spirit level.

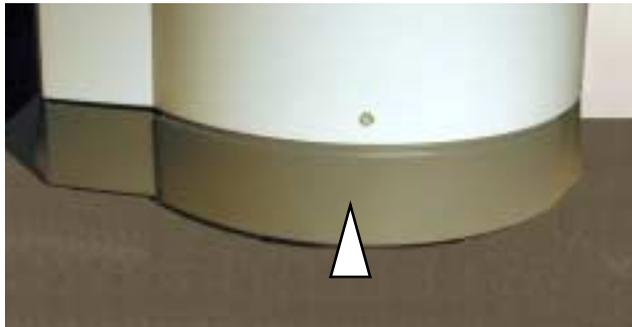


- Fitting and securing the front panel.



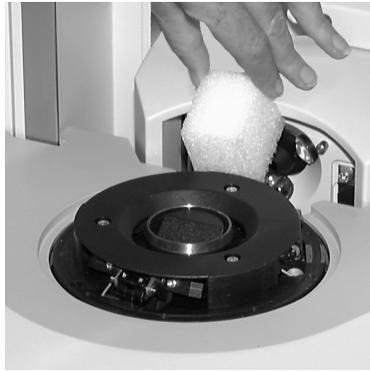
Tilt the top of the front panel towards the unit. Then guide the top edge of the front panel into the groove in the unit, until it fits the unit. Subsequently press the bottom of the panel towards the unit and screw it down using the flat screwdriver.

- Fitting the plate covering the feet



- Remove the transport safeguard for the scanning head
1. Connect your Primescan to the workstation and install Newcolor 7000 or Linocolor software (see Chapter 2).

2. Switch the scanner ON and start the software.
3. The indicator lamps on the unit light up. While the scanner is being initialized, the scanning head moves backwards (position for the 212 drum) from its transport position (position for the 150 drum).
4. As a result, the transport safeguard is released, allowing it to be removed towards the top.



## Panels



Attention: Before connecting the unit, ensure that all panels have been correctly fitted to it.

## Installation

The unit must be installed once you have unpacked it and pushed it to its intended final position. The following steps are necessary for this:

- Connect Primescan to the workstation
- Connect Primescan to the power supply
- Switch Primescan ON
- Install Newcolor 7000 or Linocolor software
- Installing calibration data

## Connecting Primescan to the workstation



**Warning:** The connection cable must be current-free when connected. Only connect the power cable after connecting the connection cable. This will protect you from a possibly fatal electric shock if there is a short circuit in one of the units and it also protects the electronics from failure through voltage pulses in the case of potential differences.



**Attention:** To maintain radio interference suppression regulations, only use screened data cables with screened plugs. Only use Heidelberg Prepress approved connection cables and adapters.

Observe the length of theof the SCSI cable!

The has an SCSI connection. In all cases, insert an SCSI interface card into your computer, to which only the scanner will be connected. Commands are transmitted from the workstation to the Primescan and image data is transmitted from the Primescan to the workstation via this link. The Primescan can be connected to any other device, which has an SCSI connection, by means of the connection cable - observe the length of the cable when setting up the system.

Connect the SCSI cable for the Primescan to the SCSI port of your computer.

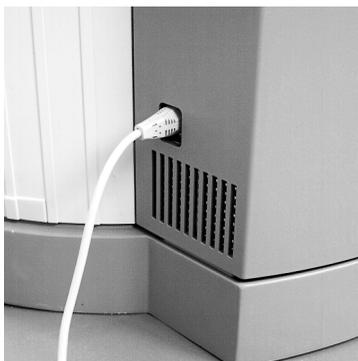
If the SCSI cable connector does not fit the connection to the SCSI controller on your computer, you must use a corresponding Heidelberg authorized adapter.

If, in addition to the Primescan and the operating unit, other SCSI devices are connected to the SCSI bus, the Primescan must always be the last link in the chain, as the SCSI bus in the Primescan has a terminator.

The SCSI bus must not exceed a total length of 6 m, otherwise you may encounter operational difficulties.

## **Connecting Primescan to the mains power supply**

In-house power receptacles and sockets must always be easily accessible, so that the unit can be disconnected completely from the power supply, in the case of an emergency, by pulling out the power plug.



The power supply is connected via one of the power cables with a three-pin plug, included in the scope of delivery. The unit must only be operated with a protective earth connection.

The power connection is located at the rear, left-hand side of the unit.

The fuse is not accessible to the operator.



**Warning:**

In case of failure, the unit may only be repaired by the Service Department.

Do not install the unit in the vicinity of air-conditioning systems and protect it from moisture and direct sunlight.

Unauthorized opening of the unit's housing and improper repairs not expressly described in the documentation can lead to considerable danger for the user.

Servicing work must only be performed by authorized specialist personnel. The relevant accident prevention regulations must be observed at all times.

Non-observance of accident prevention regulations can lead to the loss of accident insurance cover.

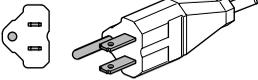
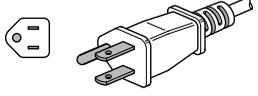
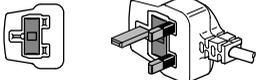
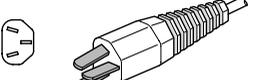
Connection to the power supply must be made using one of the power cables supplied according to the available power supply. National regulations must be observed when connecting the unit using power cables or adapters, which are not supplied by Heidelberg Prepress.

Power cables used in the USA and Canada must be of SJT standard at least.



Note: Regarding the power supply cable

When connecting 100 – 127 V or 220 – 240 V AC, select a connection cable from the table below taking national regulations into consideration.

Plug type	Area of application	Connection voltage	Regulations	Type of cable
	North America 125V 10A	115 -120 V	ANSI C 73,11 NEMA 5-15-P IEC 83	UL Listed CSA Certified Type SJT, 18AWG
	Japan 125V 10A	100 V	JIS C3102 UL 817 CSA C22.2 No.21	JIS C3102 UL Listed CSSA Certified Type SJT, 18AWG
	Europe 250V 10/16A	230 V	IEC 83	<HAR> H05VV-F
	United Kingdom 250V 10/16A	220 -240 V	B.S. 1363 IEC 83 IEC 127	<HAR> H05VV-F
	Australia 240V 10A	240 - 250 V	A.S. C112	<HAR> H05VV-F
	North America 250V 10A	240 V	ANSI C 73,20 NEMA 6-20-P IEC 83 UL 198,6	UL Listed CSA Certified Type SJT, 18AWG
	Japan 250V 10A	200 V	JIS C 3102	JIS C310 TYPE SJT 3/18AWG

## Switching Primescan ON



Operate the ON/OFF switch on the unit.

The indicator lamps light up.

For Newcolor 7000:

First start the scanner and then the PC with Newcolor 7000, otherwise Newcolor will not find the scanner.

For Linocolor:

The scanner software boot procedure and initialization of the unit are performed automatically, provided that Linocolor has been started and the scanner was selected under "Import/Source" in Linocolor.

## Scanner software

In order to operate the scanner, you can install the following software:

To operate the Primescan D 7100/D 8200, you can use the Newcolor 7000 or (and) Linocolor software.

The Primescan D 8400, with its loading magazine function, can only be operated using the Newcolor 7000 software.

## Installing Newcolor 7000 software

Please refer to the *Newcolor 7000 Installation* documentation for a precise, detailed description of the installation procedure.

## Installing the Linocolor software

Please refer to the *Linocolor Installation* documentation for a precise, detailed description of the installation procedure.

## Installing the calibration data

The specific calibration data for your scanner is supplied as ICC profiles on a CD. The CD is applicable for both Newcolor 7000 and Linocolor.

Keep the CD in a safe place!



Attention: Keep the CD in a safe place.

For Newcolor 7000:

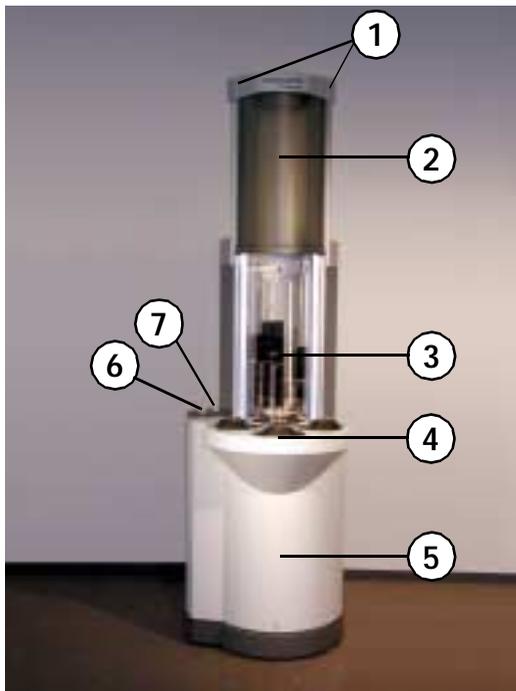
The CD is requested when installing Newcolor 7000 and the ICC profiles are transferred to the program. You can create new ICC profiles yourself, with the help of the program.

For Linocolor:

If you want to load new ICC profiles for you scanner at a later date, click on *ICC profiles for Primescan D 7100/ D 8200* (from the "Primescan Profiles CD") in the Linocolor installation window.

The CD is requested during the installation procedure.

### General View Primescan D 7100/D 8200/D 8400



- |   |                 |   |                        |
|---|-----------------|---|------------------------|
| 1 | Indicator lamps | 4 | drum magazine (D 8400) |
| 2 | Drum cover      | 5 | Front panel            |
| 3 | Scanning drum   | 6 | Drum change key        |
|   |                 | 7 | ON/OFF button          |

(here: Fig. Primescan D 8400)

## General notes

### Susceptibility of Monitors to Magnetic Fields

Strong magnetic fields may have an influence on the monitor screen, e.g. could cause unstable screen edges or flickering.

This could be caused by the 50 Hz magnetic field emitted from power lines routed underground or inside the wall.

The following corrective measures are recommended, taking into account the safety regulations for working at monitors in offices:

- Move the monitor to another place
- Shield the cause, e.g. cable duct
- Re-route the power cables
- Shield the monitor by means of a metal cover

### Optical Parts

Please avoid any contact by metallic objects with optical parts.

For information on the cleaning of optical parts, refer to *Cleaning the Optics, Chapter 7*.

## Product and performance features of Primescan

The Primescan is a universal, high-quality and fast drum scanner.

The unit is simple to operate via the PC with the color image processing program Newcolor 7000 or via the Power Macintosh with Linocolor (Linocolor (D 8400 only via Newcolor 7000).

- Templates

Reflection, transparency, color and black-and-white, contone or line art, positive or negative and screened printed originals.

- Copix option

The Copix option allows you to redigitalize film sets (Primescan D 8200/D 8400 allows you to use the 212 Copix drum in addition to the 150 Copix drum). This enables you to re-use archived, screened originals, which can be scanned and further processed within a digital workflow.

- Large-size scanning drum

In addition to the 150 mm diameter drum, the Primescan D 8200/D8400 also allows you to fit a larger drum with a diameter of 212 mm, giving you a usable format of 645 x 500 mm.

- Easy, production-oriented job preparation

The Primestation D 7100/D 8200 original mounting device can be used to prepare exchangeable scanning drums away from the scanner whilst the scanner continues to process other jobs.

- The Primescan D 8400 is an automatic drum changer as it is equipped with a drum magazine. Jobs on all 4 drums can be processed by the Newcolor software.

- Optimized file sizes for the required output format and screen

The user receives precisely calculated file sizes. The digital scan processor calculates scales from 20% to 3000%, up to 1700% in the case of Primescan D 8200/D8400 with the large 212 mm drum.

- Color format conversion and calculation of color corrections
- Automatic aperture selection
- Automatic focusing
- High resolution thanks to multiplier dot scanning
- Geo Assistant (Linocolor option), Crop Assistant (Newcolor 7000) and Image Type Assistant (Newcolor 7000) for the framing and detection of originals
- JobAssistant for batch scanning
- ColorAssistant for optimized and consistent scans (automatic original analysis)
- Processing data from other sources
- Modification of ICC profiles

## Overall configuration

The system environment consists of an operating unit, operating software and the output devices.

For system requirements, please refer to:

For Newcolor 7000: the *Newcolor 7000 Installation Manual*.

For Linocolor: the *Linocolor Installation Manual, Chapter 1*.

## Indicator Lamps



Continuously lit up:  
Scanner is switched ON

Flashing slowly:  
Scanner is active

Flashing quickly:  
Error

Not lit up:  
Scanner is switched OFF

## Scanning Drums

Drums with a diameter of 150 mm can be used. Primescan D 8200/D 8400 also allows you to use drums with a diameter of 212 mm. The drums are included in the scope of delivery.



Attention: The Primescan specifications stipulate, that only parts supplied or approved by Heidelberg Prepress should be used in the unit, as otherwise faults or even the withdrawal of approval may result.

This applies in particular to the Primescan scanning drums, which, for cases of high speed or automatic tensioning, must fulfill specific safety requirements specified by the trade association.

Only original Heidelberg Prepress scanning drums guarantee safe operation in the scanner in respect to bonding, material, geometry, and the safety-related query elements required to comply with trade association approval standards.

## Scanning Area

The scanning area for transparency and reflection modes is the same. The maximum usable area is

- 450 x 480 mm for Primescan D 7100
- 645 x 500 mm for Primescan D 8200

## Scanning time

The scanning time depends upon:

- Quality selection
- Scanning type
- Original size
- Scale factor
- Recording screen
- Workstation performance
- Scanning drum size

## Scanning lamp

The same halogen lamp is used for both the transparency and the reflection scanning modes.

See also *Changing Lamps, Chapter 7*.



Attention: The Primescan must only be operated with all panels fitted (fire prevention housing)!

## **ON / OFF switch**



The mains power supply to the unit is switched ON and OFF by means of the ON / OFF switch.

## **Switching ON**

Switch the scanner ON and then the PC with Newcolor or the McIntosh PC with Linocolor, to enable the scanner to be found. The indicator lamps light up.

The scanning lamp switches ON.

The scanner can only be operated once it has been booted and initialized by the Newcolor/Linocolor program.

## **Switching OFF**

Check that the scanning process has finished.

Switch the unit OFF using the ON / OFF switch.

**i** Note: The scanner can be switched OFF at any time. Scanning processes in progress will be aborted by doing this. An error message appears on the monitor.

## Scanning drum change



The drum change key is used to open the cover and release the drum for changing. Once the drum has been changed, the cover is closed again by pressing the key and the drum is locked. The unit is ready for scanning.

### Note:

During the scanning process, the drum change key functions as an abort key. The job in progress will be aborted immediately. An error message appears on the monitor.

- Lamp in the switch

ON: Drum change can be performed.

OFF: Drum change not permitted.

Flashing: Unit is active, the drum can be stopped by pressing the key. The current activity will be aborted. The drum is released.

- Removing the scanning drum

The drum can be removed easily by slightly tilting and lifting it.

You can pick up the 150 mm drum in the flange groove (see fig.) and the 212 mm drum beneath the glass body.



**Warning:**

The cover must not be opened if the scanning drum is still rotating (danger of injury)!

**Power failure**

In an emergency, e.g. in the case of a power failure, the cover can be pushed up by hand once the drum has come to a standstill.

Otherwise, opening the cover by hand is forbidden.

Only applies to Primescan D8200/D 8400

If you change from a large scanning drum to a small scanning drum or vice-versa, the scanning program automatically switches to the correct scanner drum presentation during an overview scan.

However, the scan mode - whether standard or Copix - is maintained even if you replace a Copix drum with a standard drum or vice-versa.

The barcode number on the drum is decisive for this automatic changeover. If the following number allocation is not adhered to, it can lead to abnormal behavior in the scanning program.

Small drum (150 mm):

000001 to 099999

Small drum (150 mm) for Copix:

100001 to 199999

Large drum (212 mm):

200001 to 299999

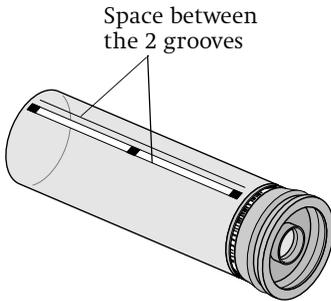
Large drum (212 mm) for Copix:

300001 to 399999

Only for the Primescan D 8400:

You can replace drums in the magazine or insert them in any position, as you wish. The drum number (chip number on the drum) will always be recognized and the relevant presentation appears on the monitor.

### Scanning (general notes)



Once you have mounted the originals and inserted the scanning drum, the actual scanning operation can begin.



Attention: Make sure that the alignment tracks for transparency and reflection modes are not covered up (space between the two grooves). There must be no picture or adhesive strip in this area.

Check whether the alignment strip attached to the drum for reflection scanning alignment is in perfect condition.

The unit is operated from the PC or Macintosh.

First fast scan

Newcolor 7000:



Note: The most important settings for the "first fast scan" can be found in the documentation for *Newcolor 7000 Workflow, chapter 2*.

First fast scan

Linocolor:



Note: The most important settings for the "First fast scan" can be found in the following documentation:

- *Linocolor - User's Guide, Chapter 2*.

For further information, refer to:

- *Linocolor - Reference*
- Batch operation For information on batch processing, scheduling jobs in the print queue etc., refer to:
- *JobAssistant - User's Guide*
- Both latter documents are available on your target volume in the documentation folder after Linocolor has been installed.
- ICC profiles The *Scan Open ICC/Print Open ICC/Print Table Editor* product is available to enable you to create your own ICC profiles. For further information, refer to the respective documentation.
- For Primescan D 8400:
- A precise description of the workflow for the D 8400 can be found in the *Newcolor Workflow Manual*.

## Special operations on the Primescan D 8400

### Loading magazine features

The D 8400 loading magazine can be operated in many ways:

- Large (212 mm), small (150 mm) or a mixture of drums can be used. The scanning drums must possess a chip unit.
- It is automatically recognized, whether a drum is in a magazine position or not.
- You can change drums in the drum magazine or fit drums in any position in the magazine as you wish, the drum number (drum hip number) will always be recognized.
- Also after every drum change in the scanner, each magazine position will be queried and the drum numbers will be determined.
- The drums in the magazine can also be changed during a scanning process. Hard jolts must be avoided when doing so.
- In order to be able to use drums in the loading magazine, they must possess a chip unit. Normal Primescan drums can be retrofitted. The order number for the retrofittable drum chip is: 05538378.
- Drums without chips can still be used in the Primescan D 7100/D 8200 mode.

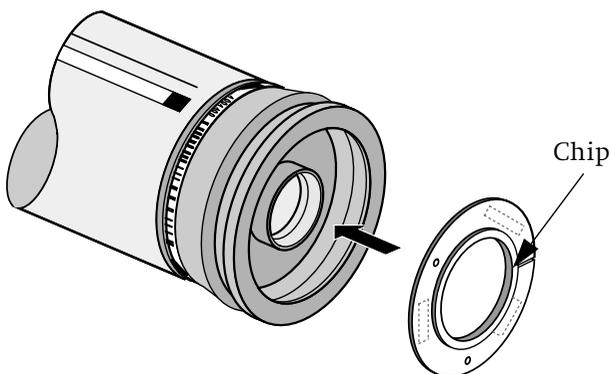
## Scanning drum loading magazine

Only the barcode of the drum can be read in the scanner. All Primescan family scanner drums have a barcode strip.

On the other hand, only the electronic drum code can be read in the loading magazine. For this reason, a drum, which is to be recognized by the loading magazine and used for JobProcessing, must be equipped with a chip. If your Primescan drums do not have a chip fitted, you can glue one on at a later point in time.

### Fitting a chip to the drum:

The chip is in a plastic ring. Clean any grease from the drum flange at the location where the plastic ring is to be stuck to it. Remove the protective film from the 3 self-adhesive strips on the plastic ring. Position the plastic ring in the scanner drum flange. Press it firmly into place. It will fit exactly. The position of the plastic ring to the drum is not important.



The barcode number and the chip number of a drum must be identical. A drum must therefore only have one drum number.

If this is not the case, e.g. when a new barcode strip has been fitted or a chip has been retrofitted to a drum for the loading magazine, this can be altered in the Software Newcolor/Newcopix under *Scan > Special Scanner Functions > > Tag setup*. The position of the drum to be newly tagged can be loaded in any position in the magazine. It will be automatically transported into the scanner - where the barcode will be read - the drum is subsequently deposited in the left-hand magazine position - where the barcode is then written into the chip.

For chip number allocation or alteration please refer to the *Online Help-Reference* Description in Newcolor/Newcopix.

Information on barcode strips can be found in the Chapter *Service and Maintenance*.

### **Primescan D 8400 workflow**

A precise description of the workflow for the D 8400 can be found in the Newcolor/Newcopix *Workflow Manual*.

Here is some additional information regarding workflow

- Switching ON

The loading magazine is automatically activated when the scanner is loaded.

- Drum in the loading magazine

You can place a drum in any position in the magazine. The drum and drum number will be recognized and the relevant presentation appears on the monitor.

- Starting a job

The job, either overview or fine scan, is started by the operator, using the software on the monitor. This may possibly involve a drum change.

- Job processing

If for example a drum, which has undergone an overview scan, is taken from a position in the magazine, this drum can later be used again for the fine scan. Fine scan processing is carried out in the Newcolor Job Assistant queue. The position in the magazine can differ, as the drum is identified by the drum number.



Attention: If a fine scan of a drum, which has meanwhile been fitted with a new image, is processed in the queue, this will be scanned using the geometry from the old original.

- Drum change

The drum magazine only changes drums automatically, if the job for a scan is started in the user interface (either for an overview or fine scan).

The drums in the magazine can also be changed during a scanning process. Hard jolts must be avoided when doing so. The drum in the scanner can only be changed manually.

Manual interruptions must be carried out in the user interface or using the scanner's drum change key.

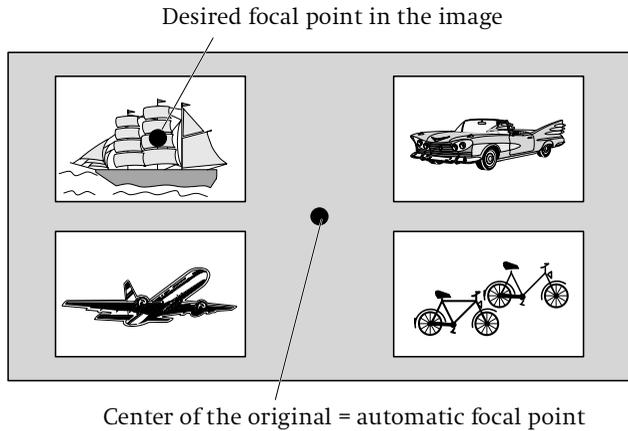
Drums, which are not fitted with a chip can only be placed in the scanner by a manual change and not from the magazine.

**Focus function ON/OFF (only for Linocolor)**

The focus setting for the scanner lens is carried out automatically in the center of the defined scanning area.

Scanning collages

When scanning certain types of originals, e. g. collages, this setting can lead to an incorrect focus value as the center of the original is not on the same focus plane as the individual collage images.



In the case illustrated above, the automatic focus setting at the center of the original can be "disabled" and the focal point positioned by means of a special operation.

Proceed as follows:

1. Perform a prescan on the image section, in which the desired focal point is in the center.

2. Perform a fine scan for the entire image by simultaneously pressing the Shift key and clicking on the *Scan* button in the *Scanner settings* window.

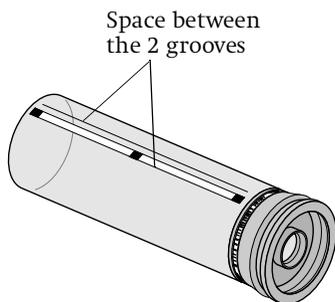
In this way, no new focus value is determined during scanning, and the value of the preceding prescan is used instead.

## Mounting originals

The original is mounted on the drum outside the Primescan. To perform this task, we recommend using the original mounting devices

- Primestation D 7100, for 150 mm drums, or
- Primestation D 8200, for 150 mm and 212 mm drums.

### Important notes for mounting originals



Attention: Make sure that the alignment tracks for transparency and reflection modes are not covered (space between the two grooves). There must be no picture or adhesive strip in this area.

### Optimum quality

- Original near the flange

Always mount originals which are to be greatly enlarged near the flange of the scanning drum.

- Distribution of originals

Distribute originals evenly

Originals must be evenly distributed over the circumference of the scanning drum to keep balance errors in the scanning drum to a minimum.

Counterweight

When scanning reflection transparencies which do not occupy the whole drum circumference, the remainder of the drum should have a similar material mounted to it as a counterweight.

If the balance error is too large, the unit will switch OFF automatically. Large balance errors will inevitably lead to losses in quality.

- Physical factors



Attention:

Physical factors (e.g. temperature changes, scanning drum balance errors, necessary bearing play) have a stronger effect at the open end of the scanning drum than in the vicinity of the flange. Originals should therefore always be mounted in the vicinity of the flange, if possible.

Scales larger than 1000 %

To achieve optimum quality and register accuracy, make sure that with scales larger than 1000 % the originals for this scale range - even with the drum covered in originals - are always mounted in the vicinity of the flange.



Warning!

Caution required for flammable film cleaner!

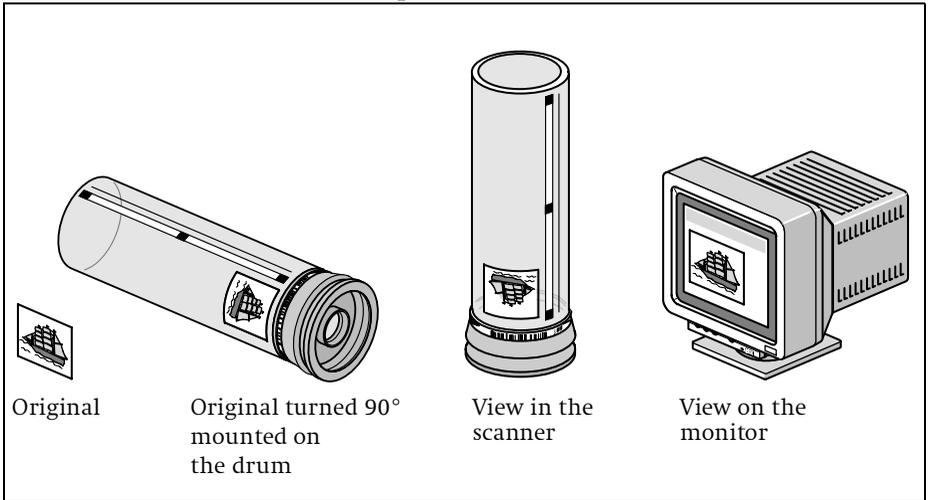
If materials which evaporate easily and therefore generally burn easily, e.g. film cleaner, are used for original mounting instead of the recommended scan gel or Anti-Newton oil, make sure that adequate ventilation is provided. Do not smoke. Open flames and sparks must to be avoided.



Note: You will find information concerning the accessories and consumables required for original mounting in the *Technical Data and Accessories* Chapter.

**Positioning the Original**

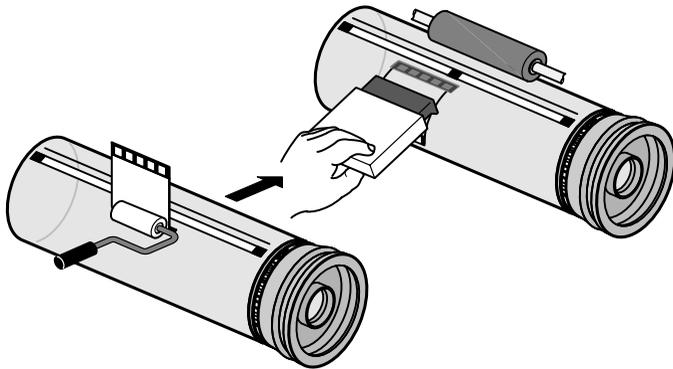
In order to display the originals the right way up on the monitor, the originals must be mounted on the drum at an angle of 90°. The original mounted at the bottom of the drum, i.e. near the flange, is depicted at the top on the monitor.



### Mounting transparencies up to 6x6 cm format

In the case of large enlargement factors, we recommend fixing transparencies up to this size using Anti-Newton oil. Pure liquid paraffin is the most suitable. This procedure is quick and suitable for all scale factors.

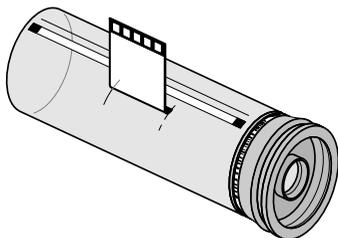
- Clean the transparency and the scanning drum.
- Attach the upper edge of the original using an adhesive strip parallel to the drum groove on the scanning drum.
- Flip up the transparency so that it hinges on the adhesive strip and apply oil behind it using an oil roller or an oil bottle.
- Fix the transparency using the pressure roller for original mounting device Primestation D 7100 or Primestation D 8200 or remove trapped air bubbles using a hand-held wiping blade (squeegee).



- Remove the excess oil, and stick down the transparency on all sides using adhesive tape.
- Clean the upper surface of the transparency.

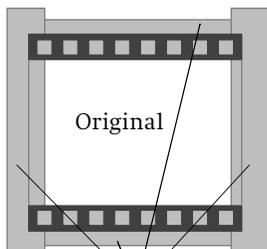
- Check that the oil is distributed evenly under the transparency. If this is not the case, repeat the operation.

### Useful Tips



- Adhesive strips as hinges

The adhesive strip at the top of the transparency should not be much longer than the transparency itself, so that the strip can be used as a hinge when lifting the transparency.

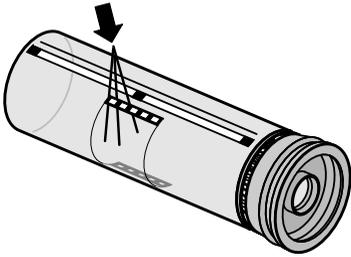


Stick down all sides of the original including the punched holes, so that oil is not spun out during rotation.

To do this, use a special adhesive tape available from:  
 Tesafilm,  
 type 4113, 19 mm wide,  
 Tesa, Beiersdorf AG, Hamburg

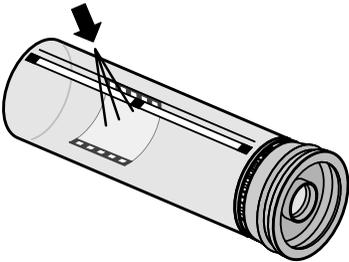
- Avoiding fingerprints

To avoid fingerprints, always handle the transparencies using curved flat tweezers.



- Newton rings

You can most easily recognize Newton rings by looking directly at the transparency. If Newton rings are present, the mounting and fixing procedure must be repeated.



- Air bubbles

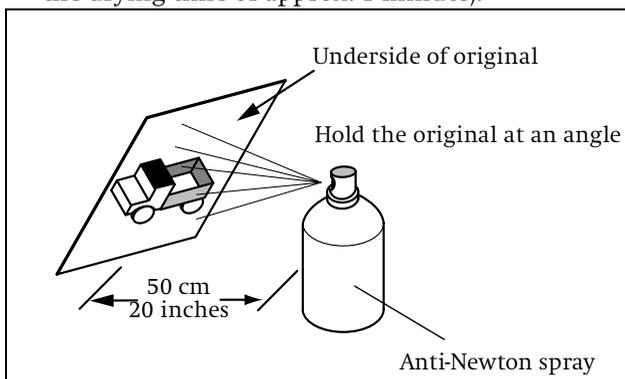
You can most easily recognize air bubbles by looking through the scanning drum onto the transparency to the dark background. You can push out the air bubbles by going over the transparency with a cloth.

## Mounting transparencies from 6 x 9 cm format upwards

If the transparencies have drying hooks and cutting out the unevenness these cause is not permitted by the customer, fixing with oil is not possible. If the unevenness is well outside the image section, then fixing with oil and foil is possible (see *Transparency Mounting Using Foil*).

To avoid Newton rings you can treat transparency originals with anti-Newton spray (enlargement factor less than 500%) or with scan gel (enlargement factor more than 500%).

- Clean the transparency and the scanning drum.
- If necessary, cut out the unevenness caused by the drying hooks.
- Attach an adhesive strip to each of the original edges which are to be at the top and the bottom of the scanning drum.
- Spray the underside of the original with anti-Newton spray, e.g. Alron spray (you must observe the drying time of approx. 1 minute).



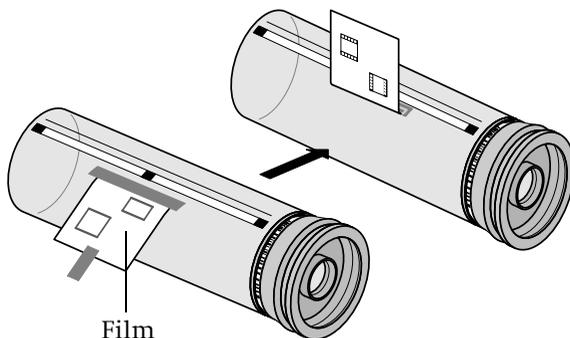
- Attach the original using the upper adhesive strip parallel to the drum groove (do not cover over the alignment tracks).
- Press the original onto the scanning drum by applying even pressure with a soft cloth or using the mounting device pressure roller. Continue to a point beyond the end of the original until the bottom adhesive strip adheres to the scanning drum and the original is secured.
- Clean the upper surface of the transparency.

**Mounting transparencies using film**

Several transparencies are mounted onto the scanning drum - with or without specifying the angle - using oil, gel or other suitable liquids and with the aid of a suitable mounting film (e.g. Chronar-Clean-Film C 42 mounting film).

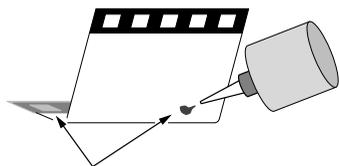
- Clean the transparencies and the scanning drum.
- Cut out the unevenness caused by the drying hooks if necessary.
- Fix the film to a light table, either on the edge of the glass plate or at the upper end.
- Transfer the reference line from the light table onto the upper edge of the film using a ruler and film marker.
- Arrange the transparencies wrong-side up, according to the guidelines or marks on the film, and attach them at the upper edge using short adhesive strips.
- Check the film with transparency for cleanliness.
- Stick the film on the drum parallel to the groove. To do this, pre-fix the film at the top end using

short adhesive strips and then attach them along the whole length.



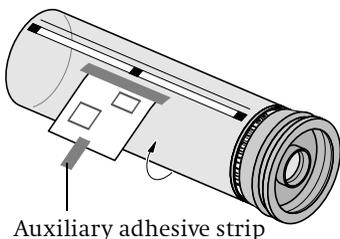
- Flip the film over backwards.

Apply a trace of oil (or similar) along the top edge and, in the case of pronounced angles, along both sides as well on and under the transparency. Apply the amount in accordance with the size of the transparency. If necessary, apply several traces.



Apply oil traces on both sides

- Flip the film back again. Attach an auxiliary adhesive strip to the bottom edge of the film.
- Press the original onto the scanning drum by applying even pressure with a soft cloth or using the mounting device pressure roller. Continue to a point beyond the end of the film until the bottom adhesive strip adheres to the scanning drum and the film is secured.



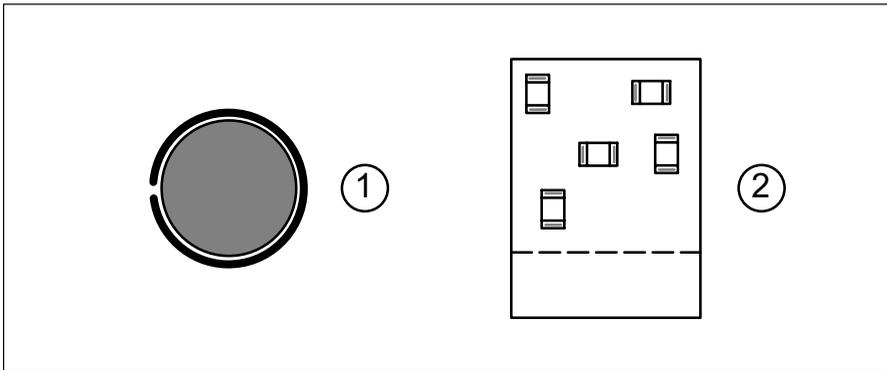
- Attach the film at the bottom end and at the sides using adhesive tape, possibly cleaning away the adhesive edges beforehand.

- Check the results and press out any air bubbles present.

**i** Note: Large transparencies can be fixed using spray or powder and with the help of a suitable film. Anti-Newton films can be used up to an enlargement factor of 400%.

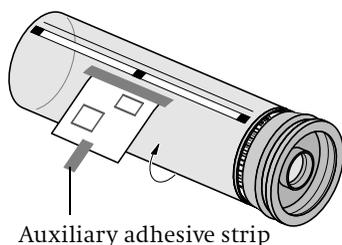
Useful tips

- If possible, the film should be as long as the circumference of the scanning drum in order to keep the balance error to a minimum when scanning (1).
- Arrange the transparencies so that the lower quarter of the film remains free, since the film can deform due to the force exerted on it (2).



## Mounting reflection transparencies using film

- Clean the original using an anti-static cloth or an ion blower.
- Fix the film to a light table, either on the edge of the glass plate or at the upper end.
- Transfer the reference line to the film using a ruler and a film marker.
- Align the original with the rear side upwards (motif side lying on the film) as specified or according to markings and attach them at the upper edge using adhesive strips.
- Stick the film to the drum using an adhesive strip parallel to the drum groove.



**i** Note: If, in the case of delicate originals, attachment using adhesive strips is not possible, you must slide the original under the film and align it according to the reference lines after having already fixed the film to the scanning drum by its upper edge.

- Use the auxiliary adhesive strip to firmly pull the film over the scanning drum and original. At the same time, rotate the drum with the other hand.
- Attach the film all round the lower edge and on both sides.

## Useful tips

Originals, especially water-colors, are often not flat but wavy. They should therefore be tautened the scanning drum 1 or 2 days before scanning and should be tautened again directly prior to scanning.

### Angled original mounting

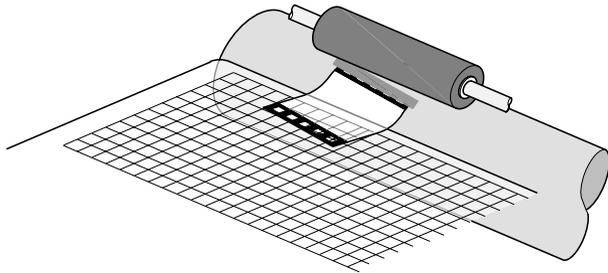


Note: The Primestation D 8200 original mounting device also has reference edges (2 degrees) on the original table. These serve as an aid for mounting originals for Copix scanning.

#### Aligning Originals according to Motif

If you wish to align your original according to the motif (e.g. edge of a house, tree, etc.), proceed as follows:

- Place the original so close to the top of the Primestation D 7100/D 8200 table, that the upper edge could be adhered to the drum.
- Align the original according to the motif on the table gridlines and stick the upper edge to the drum.



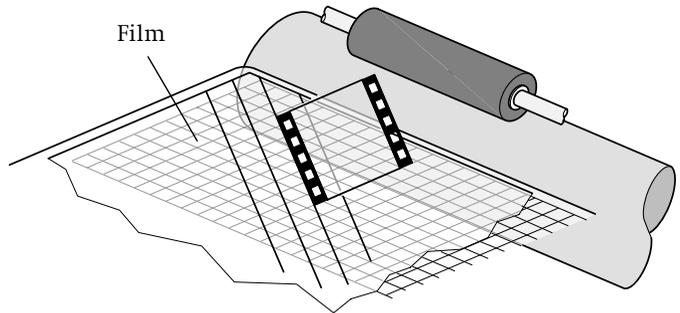
- Perform the rest of the mounting procedure as already described for the various original sizes.

#### Aligning the original according to a prescribed angle

If you wish to mount your original according to a prescribed angle (e.g. for an advertising insert), proceed as follows:

- Pull one or more lines of the desired angle on a film to the upper edge of the film.

- Place (and possibly affix) the film onto the table of the Primestation D 7100/D 8200 and align it on the gridlines or to an edge of the table until the upper edge of the film touches the drum.
- Align the original according to one of these lines on the film, and stick the upper edge of the original onto the drum.



- Perform the rest of the mounting procedure as already described for the various original sizes.

## Maintenance work



Attention: In addition to the maintenance work to be carried out by the user, which is listed in this documentation, further maintenance work - including that during the warranty period - must be carried out by the Service Department. This maintenance work does not constitute part of the warranty.

### Checking the scanning drum for scratches

If there are scratches on the scanning drum, polish the area using a polishing cloth and polish (order no. 00129038), until the scratches are no longer visible.

### Cleaning agents



Attention: When using cleaning agents, observe the manufacturer's instructions.

Refer to safety instructions on [Page 7-6](#)..

### Cleaning the scanning drum

Rub the scanning drum with a cleaning cloth to remove dirt. Dampen the cleaning cloth with cleaning agent to remove smears and old Anti-Newton coatings.

Commercially available cleaning agents:

- Scanning drum cleaner from Messrs. Neumann and Partner.
- RF5337B from Messrs. Röbel and Fiedler.

## Cleaning the optics

The scanning lens can be cleaned in the drum change position.



Attention: Do not clean the optics unless they are actually dirty. Owing to the special surface coating of the lens, frequent wiping with a dry cloth may cause damage.

To determine the extent of the dirt, use a flashlight.

Cleaning may be necessary when a scattered light effect becomes visible or even measurable on the edges of the original (perforation).

The lens can be cleaned with a clean cotton bud - only use each cotton bud once!

- Dust and lint can be removed with air (lens cleaning bellows), a soft optics brush, or a clean dry cotton bud.
- Oil and gel can be removed with a cotton bud which has been slightly moistened in spectroscopically pure acetone.



Attention: As acetone dissolves plastics and color paints, it should not come into contact with either of these materials and should be used very selectively. For this reason, the cotton buds must have a wooden stem, as plastic stems may be dissolved by the acetone and can soil the optics, causing irreparable damage.



Attention: The acetone should not come into contact with the scanning drum or painted parts.

After you have cleaned the lens, you should go over it with spectroscopically pure isopropanol.

The same applies here: Only use cotton buds once.

The lamp used for reflection scanning should be cleaned in a similar way, although dirt here is relatively unimportant.

Drum or film cleaners should only be used as a last resort, as these can leave deposits on the surface of the optics after drying. In all cases, the optics must be gone over with a dry cotton bud after cleaning.

If you have any questions regarding cleaning, ring the Service Department or you can send very dirty optics to the Service Department for cleaning!

You can find the order numbers for the necessary accessories and consumables in *Technical Data and Accessories, Chapter 8*.

Refer to safety instructions on [Page 7-6..](#)

## Cleaning the unit



Warning: Always isolate the unit from the power supply prior to cleaning it using liquids, by disconnecting the power plug.



Warning: The unit is not completely isolated from the power supply by simply switching it OFF at the power switch.

The unit's surfaces can be cleaned using a dry cloth.

If the unit is very dirty, it can be cleaned using a damp cloth, dipped in a solution of washing-up liquid and water and then well wrung out.

Make sure that no liquid can ingress the unit and do not allow moisture to reach the power connection socket on the rear of the unit.

Do not use any abrasive cleaning agents or solvents.

Refer to safety instructions on [Page 7-6](#)..

## Cleaning originals

To obtain optimum scanning results, clean and maintain the originals as required.

### "Inspecting" the Originals before Cleaning



Hold transparency originals against a dark background and then in front of and against a light background. Observe the original from different angles and distances. Determine whether it is soiled or not and if so, the type of soiling.

### Preparing originals for cleaning

Avoid electrostatic charges (e.g. by grounding).

Switch on an anti-static device, wait approx. 1 minute and run a pin through the brush to remove the dust.

Pull on lint-free gloves.

Remove dust from the original (for example, by moving it through the anti-static device and brushing it).

Place the original flat on a clean, smooth, even plate with the dirty side up and secure it if necessary.

Refer to the following table when selecting cleaning material for the originals:

Cleaning Material/ Equipment	Name / Supplier (example)	Remarks
Dark pads (approx. 500mm x 500mm)	Black cloth	
Lint-free (low-lint) gloves	Polyester gloves, MAB 02, Messrs. Basan FRANKFURT	
Absorbent, lint-free (low-lint) cloths	Kleenex Professional Wipes, Code 7107, Messrs. Kimberly Clark	Order no. 02336154
Oil-free compressed air	Compressed air 67, Messrs. Kontakt Chemie, RASTATT	Order no. 02065436
Anti-static brush, with grounding	Antistatic brush, CW 101/SW 141, Messrs. Kinetronics	
Anti-static device	Anti-static device 1212, Messrs. Kinetronics	
Ethanol, spectroscopically pure	Chemical suppliers	
Adhesive roller	Nagaoka Rolling Cleaner	
Angled tweezers with spoon tips metal or plastic	Laboratory suppliers	Order no. 04160770



Warning: Cleaning agents such as ethanol are flammable, therefore:

- Do not smoke during cleaning
- Avoid electrostatic discharges

Only use cleaning agents drop by drop to exclude the danger of deflagration

**Oily residues or water-based liquids**



Dab up liquids using a lint-free cloth.  
(then clean with ethanol)

**Cleaning with ethanol  
(dried-on fingerprints; adhesive tape deposits, dry smudges - except for acetone rings)**



- Cleaning with ethanol

Refer to safety instructions on [Page 7-6](#).

Spray or sprinkle the entire surface to be cleaned with ethanol (use sparingly).



- Wipe off the ethanol

Moisten a lint-free cloth with a small amount of ethanol and remove the liquid by wiping the cloth in the same direction, applying a small amount of pressure. A thin film of alcohol (which will evaporate) should remain on the surface.

Cleaning has been successful when the film of alcohol does not form any drops and evaporates without leaving any streaks, otherwise repeat the process!

If you also wish to clean the other side of the original, lift the original and wipe the glass plate dry. Then clean as described above. (Then proceed as in section "Removing dust")

## Removing dust

Carefully pull the original through the anti-static device.

Remove dust from the original using a grounded, anti-static brush and oil-free compressed air.

Do not blow the compressed air over the original in short blasts, as this would cause condensation. Use a steady stream of air over the original!

Never use compressed air if the original is already in the unit!

**Cleaning with film cleaner****(Soiling which could not be removed by dabbing and cleaning with ethanol)**

Depending upon the type of original, other cleaning agents (e.g. naphtha, film cleaner or similar) can be used to supplement ethanol. Call upon previous experience in this case.

If you use other agents, you should always finish off cleaning with ethanol.

**Removing dust with an adhesive roller****(dust that could not be removed following normal procedures)**

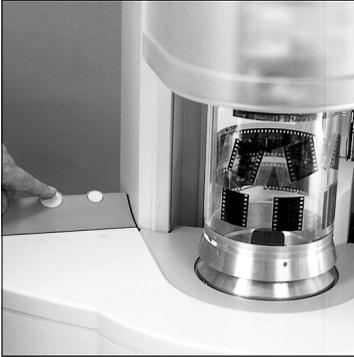
Place the original flat on a clean, smooth, even plate with the surface to be cleaned facing up.

Roll the adhesive roller over it without stopping.

The original becomes electrostatically charged - the roller must be dry before use (clean using water).

Lift the original. (then proceed as for normal dust removal).

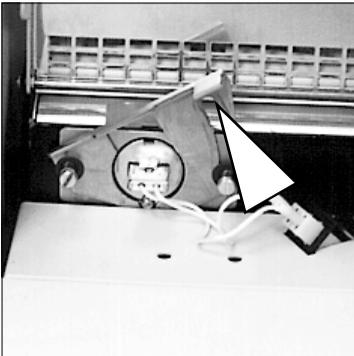
## Changing lamps



- The cover lifts upwards by pressing the drum change switch.



- Remove the drum.



- Open the lamp cover upwards



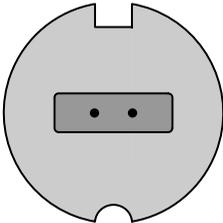
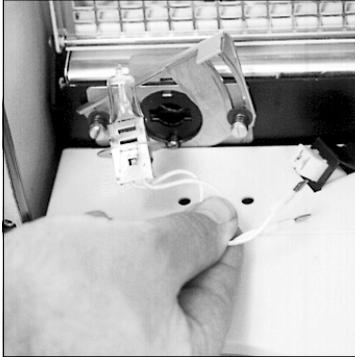
Warning:

The cover and the lamp are hot!

Open the cover for the lamp connection upwards.

The lamp goes OFF automatically.

- Push the lever upwards. This exposes the lamp fitting for easy access.



- Undo the plug-in connections for both cables.  
Take the lamp out of the fitting at the cables.
  
- Fit a new lamp - this can only be fitted in one way. Refit the plug-in connections, press down the lever and close the cover.

## Fitting the alignment strip for reflection scanning

This process is only necessary if the alignment strip is dirty or defective. The scanning drums have the barcode strips fitted on delivery.

Alignment strips are included in the scope of delivery.

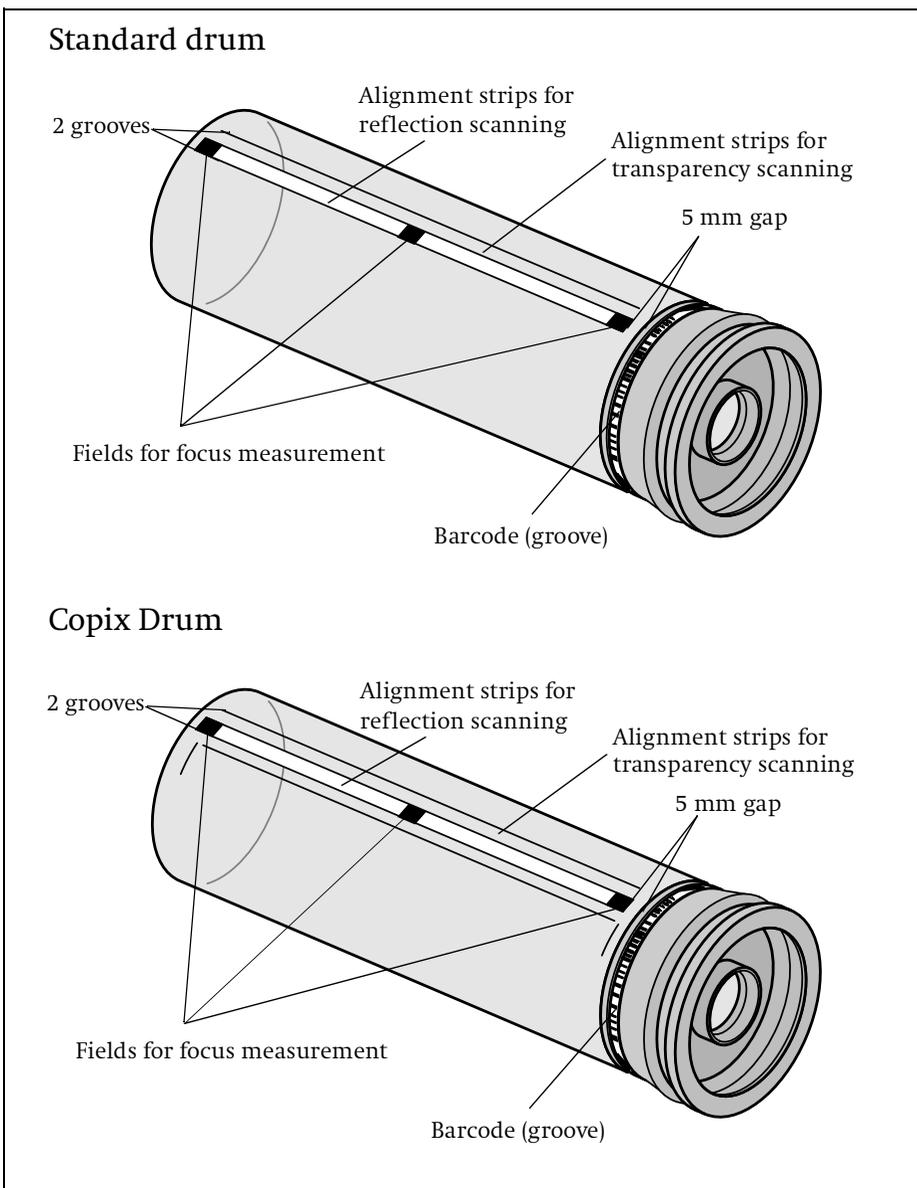


Attention: Before you fit a new strip, first remove all adhesive remains of the old strip. The drum must be completely clean and free of grease.

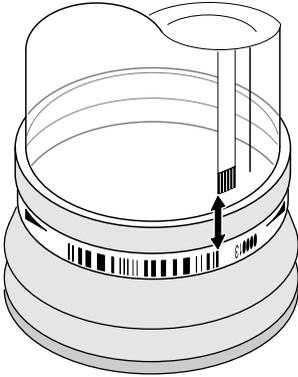
The strip is applied to the inside, parallel to the groove in the direction of feed. Prefabricated strips are included in the scope of delivery for this purpose. A gap of approx. 1 cm remains between the grooves, as an alignment track for transparency scanning. Make sure that the strip begins 5 mm from the flange end of the drum with a field for focus measurement. The distance to the open end of the drum can vary (the 212 mm drum is longer than the 150 mm drum).

Make sure that the alignment track for the transparency mode remains free.

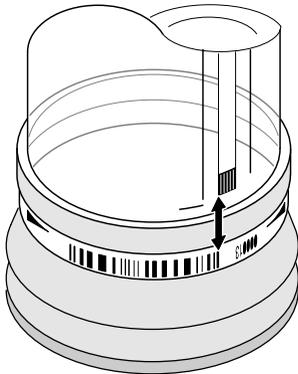
These fitting instructions apply to all Primescan drums, i.e. for standard and Copix drums with diameters of 150 and 212 mm.



## Fitting barcode strips



Standard drum with  
Barcode strips



Copix drum with  
Barcode strips

This step is only necessary if the barcode strip is dirty or defective. The scanning drums have the barcode strips fitted on delivery.

Barcode strips are included in the scope of delivery.

- Different types of barcode strip

Different barcode strips are available for the 150 mm and 212 mm drums:

Small drum (150 mm):

000001 to 099999

Small drum (150 mm) for Copix:

100001 to 199999

Large drum (212 mm):

200001 to 299999

Large drum (212 mm) for Copix:

300001 to 399999



**Attention:** Before you fit a new strip, first remove all the adhesive remains of the old strip from the groove. The groove must be completely clean and free of grease.

Apply the barcode strip into the groove provided for this purpose. Make sure that the 1st barcode mark is aligned in such a way that it is flush with the groove at the side of the alignment strip for reflection scanning - tolerance threshold  $\pm 1$  mm (see sketch).

These fitting instructions apply to all Primescan drums, i.e. for standard and Copix drums with diameters of 150 and 212 mm.

## Fitting the drum chip (only for Primescan D 8400)

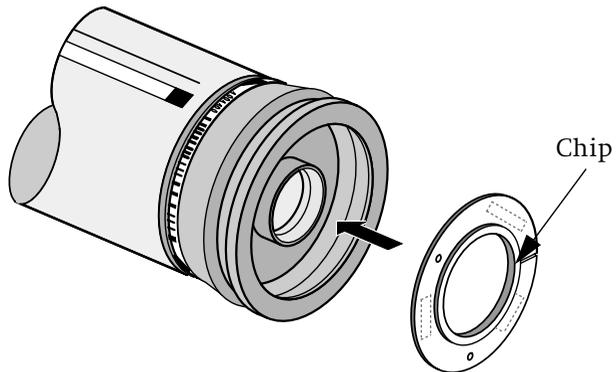
This step is necessary because:

Only the barcode of the drum can be read in the scanner. All Primescan family scanner drums have a barcode strip.

On the other hand, only the electronic drum code can be read in the loading magazine. For this reason, a drum, which is to be recognized by the loading magazine and used for JobProcessing, must be equipped with a chip. If your Primescan drums do not have a chip fitted, you can glue one on at a later point in time.

Fitting a chip to the drum:

The chip is in a plastic ring. Clean any grease from the drum flange at the location where the plastic ring is to be stuck to it. Remove the protective film from the 3 self-adhesive strips on the plastic ring. Position the plastic ring in the scanner drum flange. Press it firmly into place. It will fit exactly. The position of the plastic ring to the drum is not important.



**Technical data**

Scanning mode	Multiplier scanning
Resolution	10,800 dpi max.
Detail contrast (USM)	Digital (program controlled)
Focus	Computer-controlled
Max. scanning speed	1800 rpm (small drum 150 mm) 1320 rpm (large drum 212 mm)
Max. usable format	480 x 450 mm (small drum 150 mm) 500 x 645 mm (large drum 212 mm)
Scale range	20 - 3000 % (Small drum, 150 mm) 20 -1700 % (large drum 212 mm)
Max. thickness of originals	2,0 mm
Standard interface	SCSI (image data and communication)
SCSI address	5 (preset)
D 7100/D 8200 dimensions (width x height x depth)	627 mm x 1586 x 627 mm, 2206 mm height with the drum cover open
D 8400 dimensions (width x height x depth)	830 mm x 1586 x 627 mm, 2206 mm height with the drum cover open
Power supply	100 -240 V ± 10 % single-phase
Mains frequency	47 - 63 Hz
Rated current	3.0 - 6.0 A
Power consumption	Approx. 500 W
Ambient temperature	18 to 28 °C
Air humidity	30 - 80 % (non-condensing)
Operating weight	approx. 250 kg for D 7100/D 8200, approx. 280 kg for D 8400
Noise emission	55 dB (A)

**Accessories**

<b>Not part of standard delivery</b>	<b>Order no.:</b>
Transparency squeegee	04088883
Tweezers	04160770
Rubber blower (ion blower)	00346608
Foam roller	04214153
Anti-Newton spray	00129100
Anti-static cloth	00057606
Mounting film	03004570
Optics cleaning set (without fluids)	02064626
Drum cleaning set (can only be ordered through designated agents)	04089545
100 cotton bud cleaners	02132923
Drum polishing material	00129038
Halogen lamp	02777150
Barcode strip / white strip, 150 mm drum	05191548
212 mm drum	05331617
White strip (50 pieces)	05281660
Standard scanning drum, 150 mm	05117682
Standard scanning drum, 212 mm	05304040
Copix scanning drum, 150 mm	05252652
Copix scanning drum, 212 mm	05304067
Standard scanning drum, 150 mm (with chip)	05535387
Standard scanning drum, 212 mm (with chip)	05535409
Copix scanning drum, 150 mm (with chip)	05535395
Copix scanning drum, 212 m (with chip)	05535417
Chip for scanning drum	05538378
Drum cover, for 150 mm drum	04960343
Drum cover, for 212 mm drum	04090209

<b>Not part of standard delivery</b>	<b>Order no.:</b>
Primestation D 7100 original mounting device	05517192
Primestation D 8200 original mounting device	05517184

**Consumables**

- Special adhesive tape, Tesafilm, type 4113, 19 mm wide, Tesa, Beiersdorf AG, Hamburg
- - Alron anti-Newton spray,  
- Alron scan gel, Reg. No. 33068  
- Scan drum cleaner

Messrs. Neumann and Partner  
 Billeweg 20  
 22851 Norderstedt  
 Tel.: 040/5249143  
 Fax.: 040/5245526

- WALKISOFT Cloth  
 perforated roller, 60 g/m<sup>2</sup>, 20 x 14 cm  
 Use film cleaner, type DC 2001

Kami Vertriebs GmbH,  
 Lübener Str. 6  
 90471 Nürnberg  
 Tel.: 0911/803694  
 Fax.: 0911/807757

- Cloth, 30 x 36 cm,  
 Article no. 7262/60  
 Tenca Chemische Union, operating hygiene
- Mounting film Chronar-Clean-Film C 42, 300 x 400 mm,  
 available through Agfa representatives

- Scanner drum cleaner  
Multi-purpose cleaner, foam based (FOAM CLEANER) and  
concentrated cleaner (SURFACE CLEANER)  
  
Rotanium Products  
Am Nordkanal 8  
D-47877 Willich  
Telephone: 02154/95670  
Telefax: 02154/6478
- Azeton, Ethanol or Isopropanol for cleaning  
  
Chemical suppliers
- Drum cleaner RF5337B  
  
Messrs. Röbel and Fiedler  
Chemische Fabrik GmbH  
77955 Ettenheim/Germany

Refer to safety instructions on [Page 7-6](#).

## Standards

The unit complies with the safety regulations of the following standards.

## Approvals

GS:	(Germany)
CE:	Conformity Declaration (Europe)
UL:	E 156891 (NWGQ) (USA)
cUL:	E 156891 (NWGQ 7) (Canada)
GOST	Russia

## General

GSG	(Equipment safety regulation, Germany)
98/37EG	Machine directive (Europe)
73/23/EWG	Low voltage directive (Europe)

## Mechanical safety

EN 292	(Europe)
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**Electrical safety**

EN 60950	(Europe)
IEC 60950	(International)
UL 60950	(USA)
CSA C22.2 No. 60950	(Canada)
EN 60204-1	(Europe)
IEC 60204-1	(International)

**Electromagnetic compatibility (EMC)**

EMVG	Laws on electromagnetic compatibility of equipment (Germany)
89/336/EWG	European council EMC directive (Europe)

**Noise emission  
(radio interference and noise voltage)**

- EN 55022, threshold value B (Europe)
- EN 61000-3/-2 (Europe)
- EN 61000-3/-3 (Europe)
- CISPR 22 mod., threshold value B (International)
- FCC, CFR 47, Part 15, Subpart B, Class A (USA)
- ICES-003, Class A (Canada)

**Interference resistance**

EN 55024	(Europe)
CISPR 24	(International)

**Radio interference suppression**

For adherence to electromagnetic compatibility according to directive 89/336/EEC, it is necessary to only operate the scanner with all covers correctly installed.

Ensure compliance with the radio interference suppression regulations if you connect other electrical equipment to this unit by following the instructions given by the manufacturer of this unit regarding correct installation and maintenance.

It can be assumed that the units you are going to connect comply with radio interference suppression regulations if they are marked with the conformity mark of the European Union (CE) and all instructions regarding installation, operation and maintenance are adhered to.

## Disposal of the unit

The unit contains harmful substances. It must be handed over to an approved waste disposal company and not be disposed of as household waste. Addresses are available at the environmental office responsible or from the environmental manager at Heidelberg Prepress in Kiel.

Only disposal of the Primescan D 7100/D 8200 is described here. Disposal instructions for the Primescan D 8400 can be found inside the unit.

## Harmful substances

The following table lists all parts which contain harmful substances and should therefore be disposed of/recycled separately. The parts can be identified with the aid of the drawings that follow.

<b>Designation</b>	<b>Pollutant</b>
- Power supply unit - AE electronics - Frequency converter - Maxi-board - Multiplier unit - Color separator	Tetrabrombisphenol A, lead (among others)
- Counterweight (in the base)	Lead
- Mirror unit, head assembly	Lead

The cable insulation can contain PVC. All capacitors are PCB-free. The electronic PCB's and parts of the cladding contain flame-retardants, state-of-the-art technology allows uncomplicated thermal re-cycling in appropriately equipped plants.

**Materials**

The following table lists the most important parts, which do not contain harmful substances and which can undergo environmentally safe recycling. The parts can be identified with the aid of their designation in the drawing.

<b>Designation</b>	<b>Material</b>
- Bearing block - Base - Counterweight (in the head) - Housing	GG 15 DIN 1691, paint-finished with Wabedur-2K-PUR paint, Messrs. Wallburg GmbH
- Cladding - Back panel - Cover	TSG, paint finished with Wabedur-2K-PUR paint, Messrs. Wallburg GmbH
- Stand	Aluminum, AlMgSi 0.5, paint finished with Wabedur-2K-PUR paint, Messrs. Wallburg GmbH
- Top cover - Cover	Galvanized steel



Note: Stand is yellow chromed ! Must be taken into consideration on disposal.

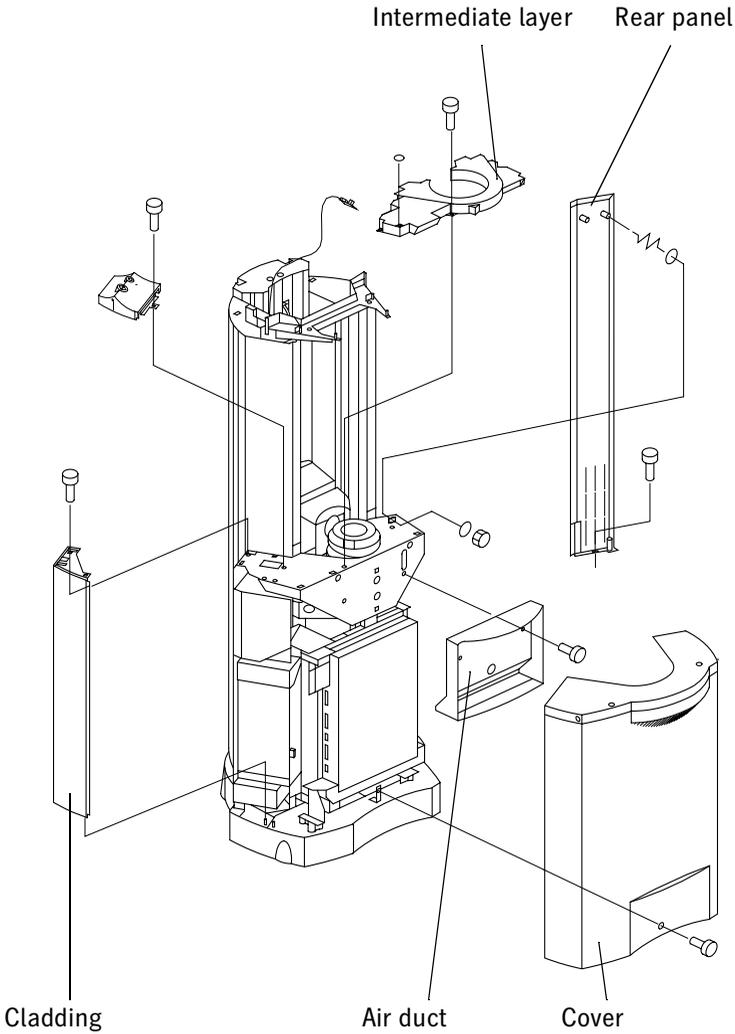
**Dismantling**

The following sequence is recommended for dismantling. Observe the drawings at the end of this section.

The unit must only be dismantled by an approved waste disposal company; these dismantling instructions do not apply for customers !

<b>Work step</b>	<b>Note</b>
1. Unscrew cover (1x) and remove it	Refer to fig. 1
2. Unscrew cladding and back panel (2x and 3x)	Refer to fig. 1
3. Unscrew air duct and intermediate layer (2x and 3x)	Refer to fig. 1
4. Unscrew rear cover (2x)	Refer to fig. 2
5. Unscrew cover, complete with hood (6)	Refer to fig. 2
6. Remove the power supply unit	Remove cover first, refer to fig. 3
7. Remove the frequency converter	Remove cover first, refer to fig. 3
8. Unscrew the maxi-board (4x)	Can be dismantled complete with holder, Refer to fig. 6
9. Unscrew the head assembly (3x)	Refer to fig. 4
10. Unscrew the bearing block (4x)	Refer to fig. 7

<b>Work step</b>	<b>Note</b>
11. Remove AE electronics and color separator with cover	remove cover first, refer to fig. 4
12. Unscrew the lighting unit (2x) and unhook	Refer to fig. 5
13. Unscrew lens plate with mirror assembly (2 each)	Refer to fig. 5



**Figure 1**

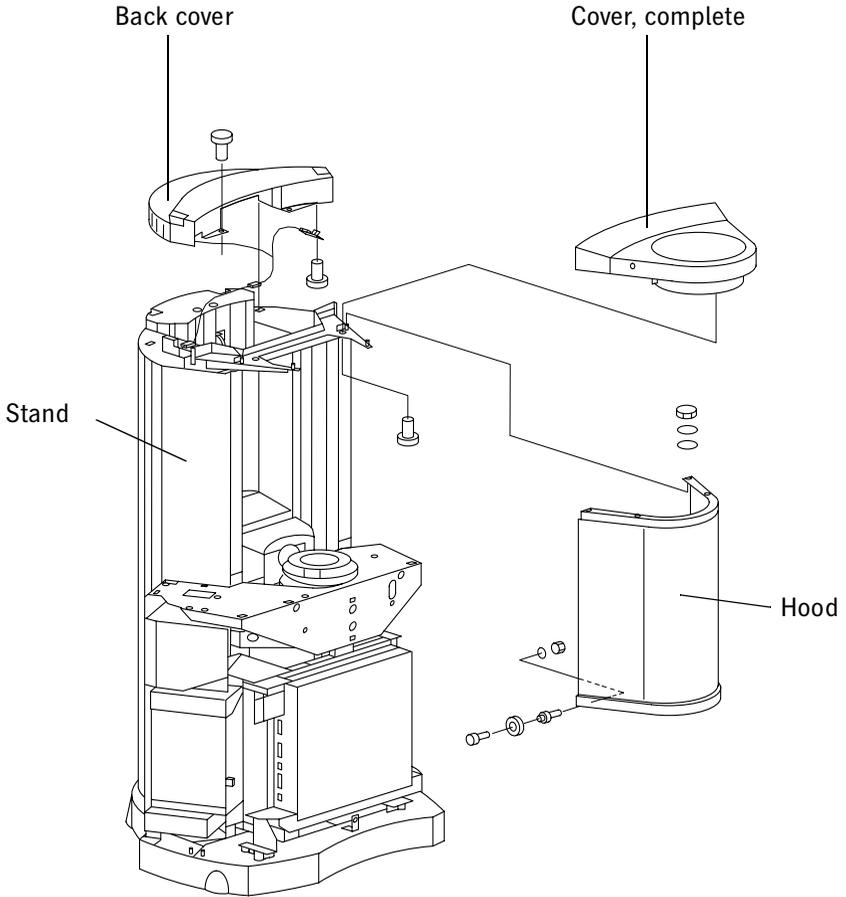


Figure 2

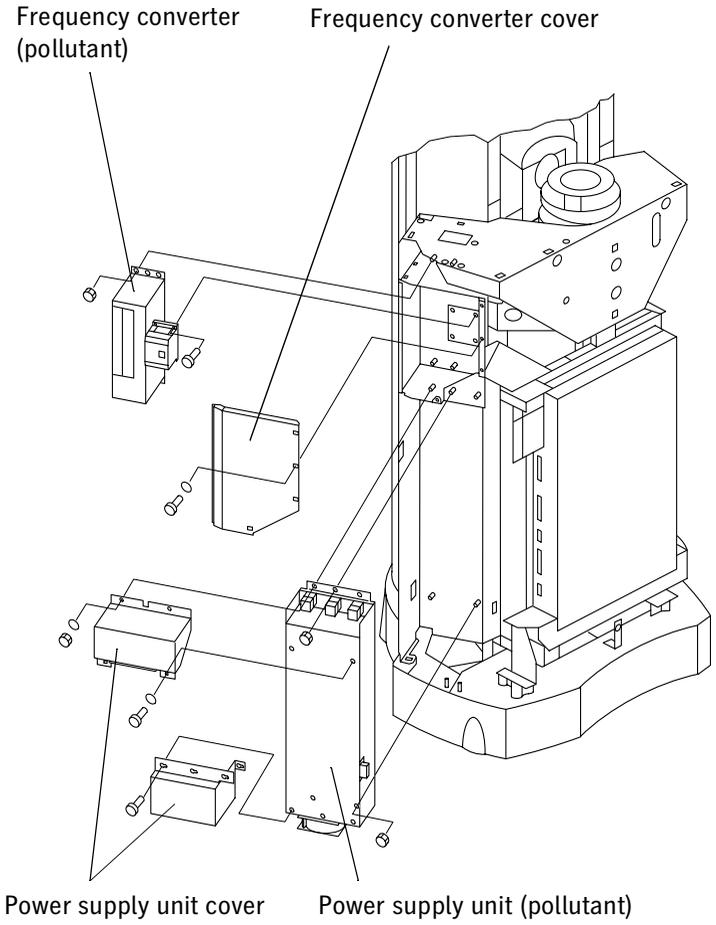
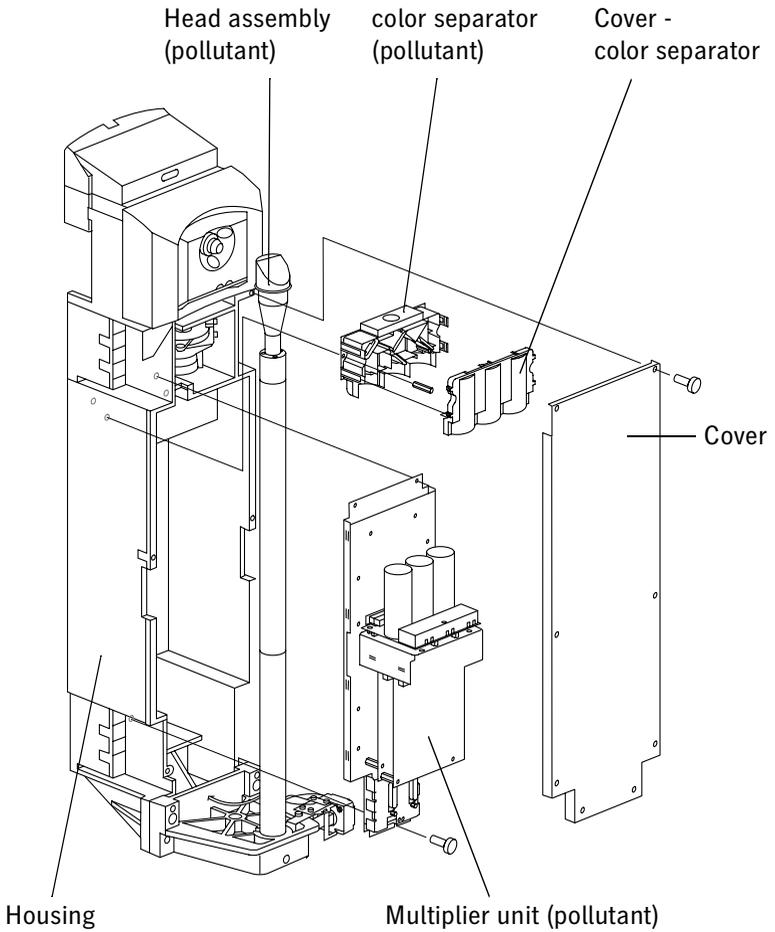


Figure 3



**Figure 4**

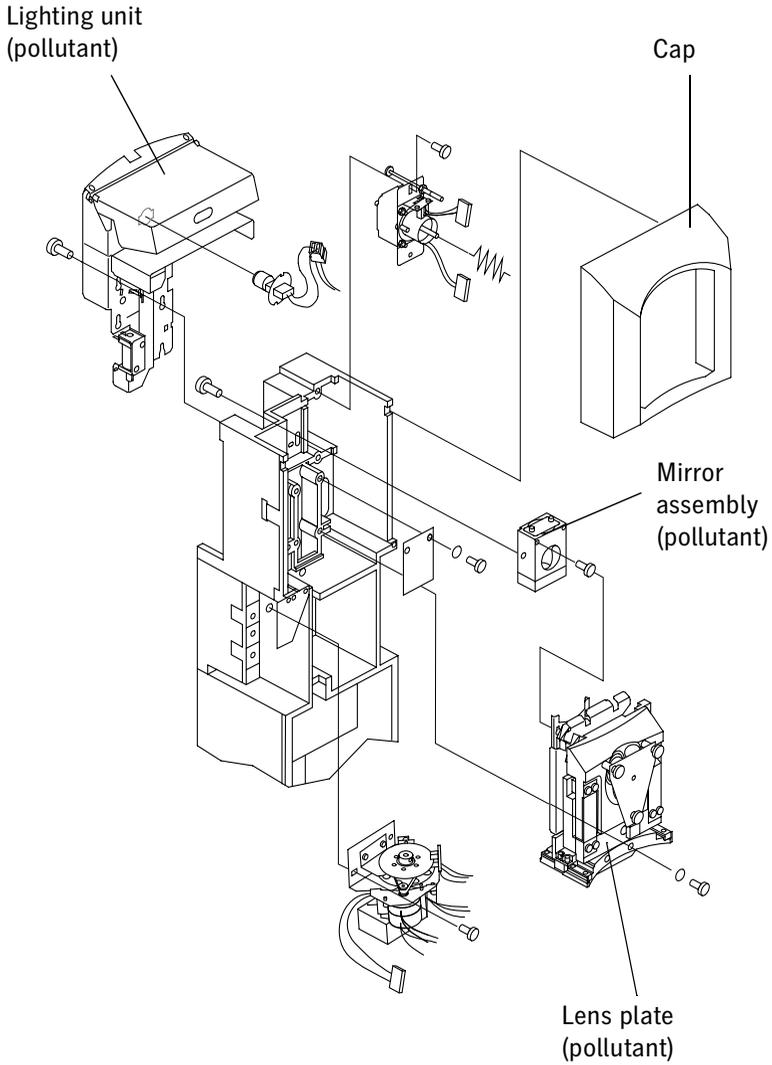


Figure 5

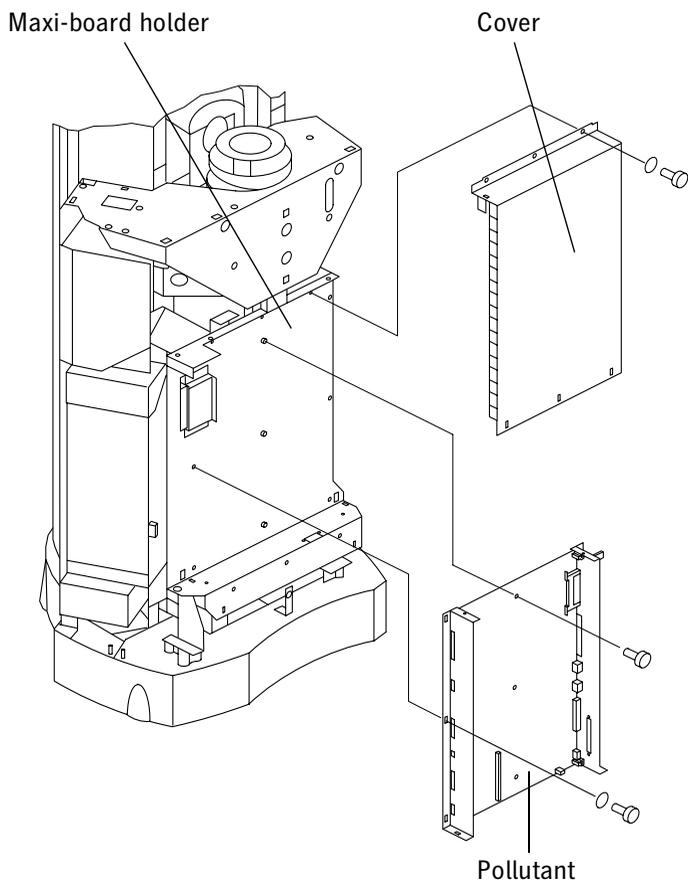
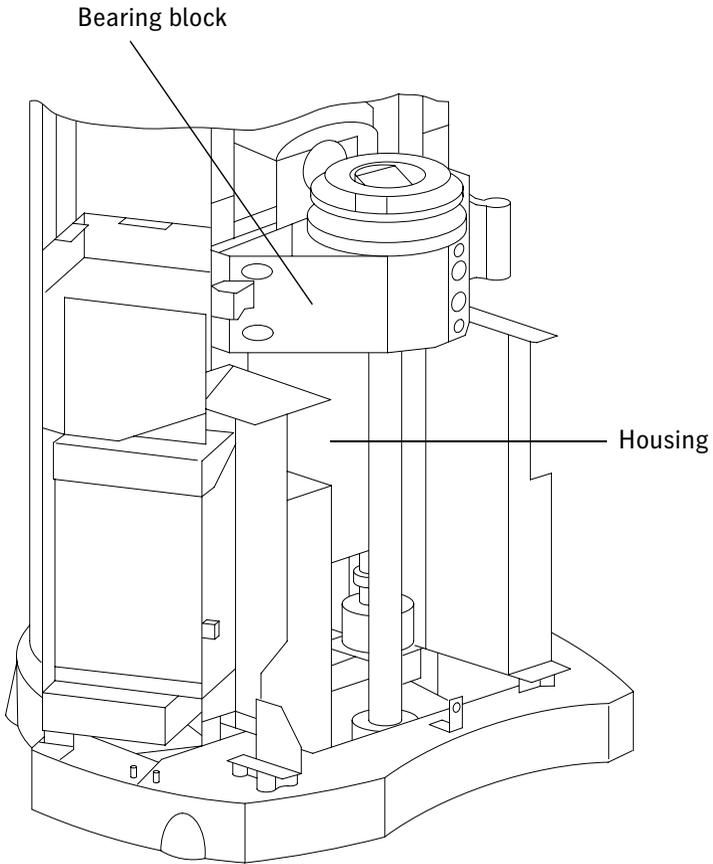


Figure 6



**Figure 7**

HEIDELBERG

EG-Konformitätserklärung

gemäß der Maschinenrichtlinie 89/392/EWG
und der Niederspannungsrichtlinie 73/23/EWG
und der EG-Richtlinie 89/336/EWG über die Elektromagnetische Verträglichkeit

EC Declaration of Conformity

in accordance with the Directive of Machinery 89/392/EEC
and the Low Voltage Directive 73/23/EEC
and the Directive of Electromagnetic Compatibility 89/336/EEC

Hersteller / manufacturer : Heidelberg Druckmaschinen AG
Adresse / address : Siemenswall
D- 24107 Kiel, Germany

erklärt, daß die Produkte
declares, that the products

Produktname / product name : Primescan D 7100 / D 8200 / D 8400
Geräteart / product class : Scanner
Typenbezeichnung / type designation : 3160-xx

Seriennummer / serial number :

Herstelldatum / date of manufacture :

Produktname / product name : Primestation D 7100 / D 8200
Geräteart / product class : Vorlagenmontage / Mounting Device
Typenbezeichnung / type designation : 3160.340 / 3163

Seriennummer / serial number :

Herstelldatum / date of manufacture :

übereinstimmt mit den Bestimmungen der oben genannten EG-Richtlinien.
conforms with the above mentioned Directives.

Angewandte Normen und technische Spezifikationen:
Applicable Standards :

- EN 60204-1:1997 Elektrische Ausrüstung von Maschinen
- EN 60950:1992 Sicherheit von Einrichtungen der Informationstechnik
+ A11:1998 einschließlich elektrischer Büromaschinen
- EN 55022:1998, Klasse B EMV-Produktnorm Störaussendung
- EN 61000-3-2:1995 EMV-Norm Oberschwingungsströme
- EN 61000-3-3:1995 EMV-Norm Spannungsschwankungen und Flicker
- EN 50082-2:1995 EMV-Fachgrundnorm Störfestigkeit

Kiel, 25. Januar 2001

Heino Schadwald
Senior Vice President

Handwritten signature and stamp of Heidelberg Druckmaschinen AG

Ort / place Datum / date Name / name Unterschrift / signature Stempel / stamp



GB, IRL	<p><b>EC Declaration of Conformity :</b>                  Heidelberg Druckmaschinen AG declares, that the product described overleaf conforms to the following relevant provisions :</p> <ul style="list-style-type: none"> <li>- Directive 98/37/EC relating to machinery</li> <li>- Directive 89/336/EEC relating to electromagnetic compatibility</li> <li>- Directive 73/23/EEC relating to electrical equipment designed for use within certain voltage limits</li> </ul>
F, B, L	<p><b>DÉCLARATION «CE» DE CONFORMITÉ:</b>                  Heidelberg Druckmaschinen AG affirme que le produit décrit au verso correspond aux références suivantes adéquates :</p> <ul style="list-style-type: none"> <li>- Directive 98/37/CE relatives aux machines</li> <li>- Directive 89/336/CEE relatives à la compatibilité électromagnétique</li> <li>- Directive 73/23/CEE relatives au matériel électrique destiné à être employé dans certaines limites de tension</li> </ul>
DK	<p><b>EF-overensstemmelseserklæring :</b>                  Heidelberg Druckmaschinen AG erklærer, at det produkt, der er beskrevet efterfølgende, opfylder følgende relevante bestemmelser :</p> <ul style="list-style-type: none"> <li>- Raadets direktiv 98/37/EF lovgivning om maskiner</li> <li>- Raadets direktiv 89/336/EØF lovgivning om elektromagnetisk kompatibilitet</li> <li>- Raadets direktiv 73/23/EØF lovgivning om elektrisk materiel bestemt til anvendelse inden for visse spændingsgrænser</li> </ul>
E	<p><b>DECLARACIÓN «CE» DE CONFORMIDAD :</b>                  Heidelberg Druckmaschinen AG declara que el producto descrito al dorso corresponde a las siguientes disposiciones relevantes :</p> <ul style="list-style-type: none"> <li>- Directiva 98/37/CE sobre máquinas</li> <li>- Directiva 89/336/CEE relativas a la compatibilidad electromagnética</li> <li>- Directiva 73/23/CEE sobre el material eléctrico destinado a utilizarse con determinados límites de tensión</li> </ul>
FIN	<p><b>EY-VAATIMUSTENMUKAISUUSVAKUUTUS:</b>                  Heidelberg Druckmaschinen AG ilmoittaa, että kääntöpuolella kuvattu tuote vastaa seuraavia asiaan kuuluvia määräyksiä :</p> <ul style="list-style-type: none"> <li>- Direktiivi 98/37/EY koneita koskevan jäsenvaltioiden lainsäädännön lähentämisestä</li> <li>- Direktiivi 89/336/EY koneita koskevan jäsenvaltioiden lainsäädännön lähentämisestä</li> <li>- Direktiivi 73/23/EY tietyillä jänniteluueilla toimivia sähkölaitteita koskevan jäsenvaltioiden lainsäädännön lähentämisestä</li> </ul>
GR	<p><b>Κατατική δήλωση συμμόρφωσης σύμφωνα με :</b>                  Heidelberg Druckmaschinen AG δηλώνει, ότι το ακόλουθες Βεργιγραφόμενο Βροϊόν εκληρεί τις ακόλοζες σχετικές διατάξεις :</p> <ul style="list-style-type: none"> <li>- ΕΟΚ/οδηγία 98/37/ΕΟΚ για μηχανές</li> <li>- ΕΟΚ/οδηγία 89/336/ΕΟΚ για ηλεκτρομαγνητική ανεκτικότητα</li> <li>- ΕΟΚ/οδηγία 73/23/ΕΟΚ για ηλεκτρικά είδη εξοβλισμού, Βου Βροορίζονται για χρήση εντς καθορισμένων ορίων τάσης</li> </ul>
I	<p><b>Dichiarazione CE di conformità :</b>                  Heidelberg Druckmaschinen AG dichiara che il prodotto descritto a tergo è conforme alle seguenti disposizioni :</p> <ul style="list-style-type: none"> <li>- Direttiva 98/37/CE relative alle macchine</li> <li>- Direttiva 89/336/CEE relative alla compatibilità elettromagnetica</li> <li>- Direttiva 73/23/CEE relative al materiale elettrico destinato ad essere adoperato entro taluni limiti di tensione</li> </ul>
NL	<p><b>EG-VERKLARING VAN OVEREENSTEMMING:</b>                  Heidelberg Druckmaschinen AG verklaart dat de aan de ommezijde beschreven produkten aan de volgende bestemmingen van belang voldoen :</p> <ul style="list-style-type: none"> <li>- Richtlijn 98/37/EG betreffende machines</li> <li>- Richtlijn 89/336/EEG inzake elektromagnetische compatibiliteit</li> <li>- Richtlijn 73/23/EEG inzake elektrisch materiaal bestemd voor gebruik binnen bepaalde spanningsgrenzen.</li> </ul>
P	<p><b>Declaração CE de conformidade :</b>                  Heidelberg Druckmaschinen AG declara que o produto descrito no verso corresponde às seguintes determinações relevantes :</p> <ul style="list-style-type: none"> <li>- Directiva 98/37/CE respeitantes às máquinas</li> <li>- Directiva 89/336/CEE respeitantes à compatibilidade electromagnética</li> <li>- Directiva 73/23/CEE no domínio do material eléctrico destinado a ser utilizado dentro de certos limites de tensão</li> </ul>
S	<p><b>EG-FÖRSÄKRAN OM ÖVERENSSTÄMMEELSE</b>                  Heidelberg Druckmaschinen AG deklarerar, att produkten enl. bilagad beskrivning motsvarar följande gällande bestämmelser :</p> <ul style="list-style-type: none"> <li>- Rådets direktiv 98/37/EG om maskiner</li> <li>- Rådets direktiv 89/336/EEG om elektromagnetisk kompatibilitet</li> <li>- Rådets direktiv 73/23/EEG om elektrisk utrustning avsedd för användning inom vissa spänningsgränser</li> </ul>



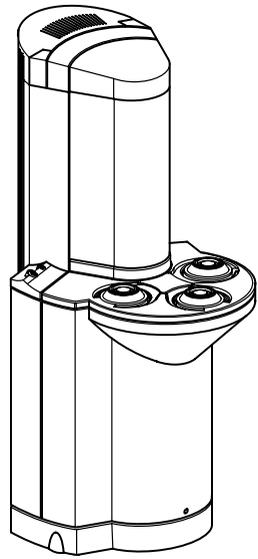
<b>HEIDELBERG</b>		
Typ 3160-10/3160-30		D 24107 Kiel
Fabrik-Nr.		Bau-Nr 0517658
~ 100-240V	50/60Hz	6-3 A
~ 100-240V	60Hz	6-3 A
Date of Manufacture		
Made in Germany		

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulation.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

The system setup must be observed before connection to the mains



## **Quality assurance**

If any hardware or software problems arise, please contact one of our local branches or the Heidelberg agency responsible for you.

### **"Central call desk"**

Customers in Germany should contact our "Central Call Desk" on (0 18 03) 23 23 33 if problems arise. In the case of operational faults, any intervention by technicians is coordinated by the downstream service control center.

Please contact the Heidelberg representative responsible for you if you are a customer outside of Germany.

The "Central Call Desk" is open from Monday to Friday, 7 a.m. to 6 p.m.. Your queries will be dealt with immediately.

Answering any user queries after the guarantee period is a service which can only be given after purchasing a "Heidelberg Infoline-Box". This also applies for telephone advice regarding operating malfunctions or for user-specific problem analyses.

### **Problem report for customers and service technicians**

Please use the enclosed Problem Report in cases where you have detected general product defects or where you find that there is room for improvement for particular products.

The Problem Report should not be used to clarify queries concerning the use or operation of our products! In these cases, please contact your Heidelberg representative/branch office responsible for you, or call our "Central Call Desk".

It is advisable to copy the form before using it so that an original is always available for later use.



Note: The serial number or the service number of the device which is causing problems or is defective, must always be specified.

Specify the exact names of the products (unit description, software and version).

A separate form should be used to describe each problem. The exact environment, in which the problem occurs, should also be specified, e.g. error messages, serial/service no. of the unit, modification status, software and version used, etc.

Please also state your full address, customer no. and, if possible, telephone number, fax number and e-mail address.

Please send the Problem Report to your local branch or your Heidelberg agency.

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