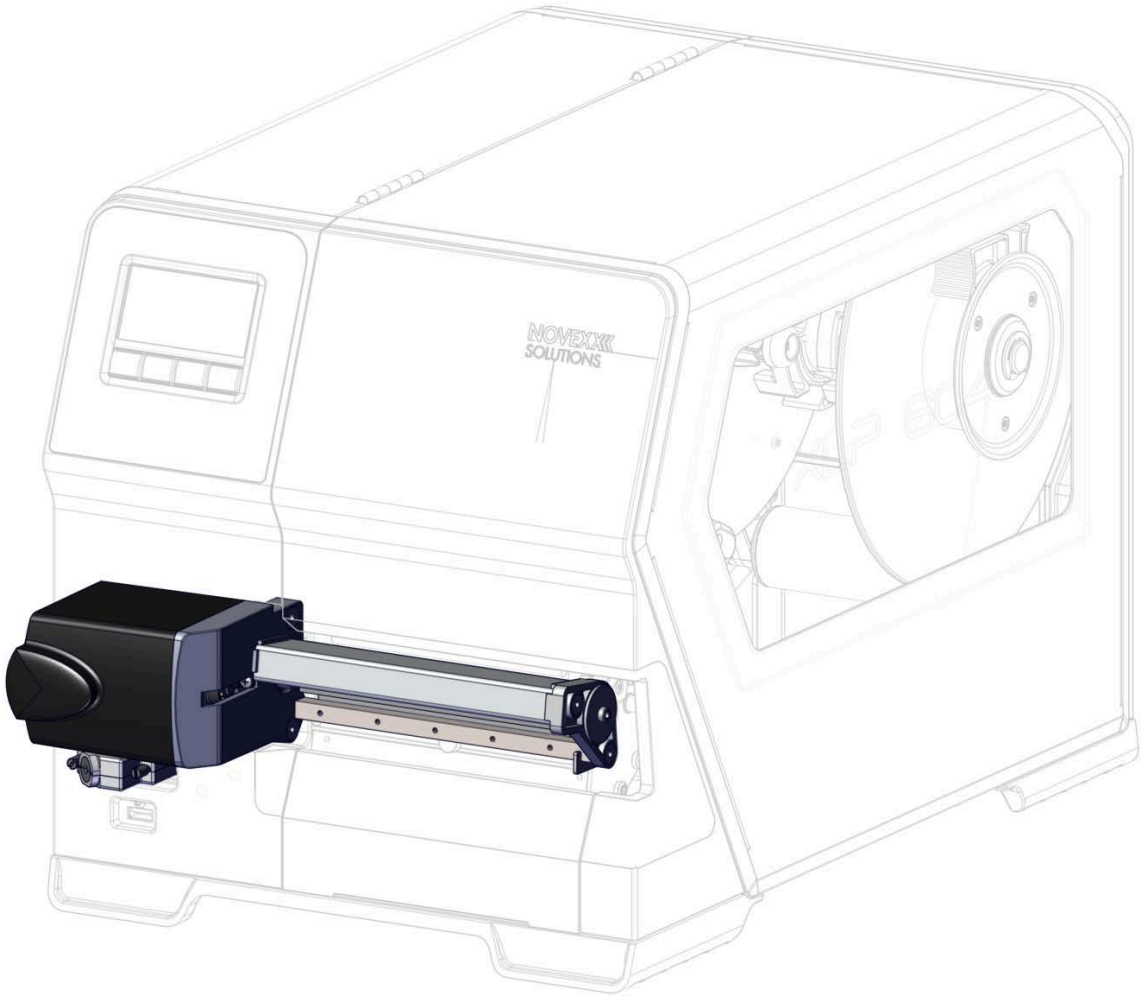
NOVEXX SOLUTIONS

USER MANUAL

Cutter / Cutter 2000



Edition 5 - 04/2023

Contents

Please note! - 3
- General notes - 3
  - Validity of this manual and required compliance - 3
  - How information is represented - 4
- For your safety - 5
  - Safety notes - 5
  - Warning note at the cutter - 5

Product description - 7
- Proper usage - 7
- Technical data - 7
- System requirements - 8

Setting up - 10
- Fitting the cutter - 10
- Activating/deactivating the cutter - 13

Operation / Malfunction / Cleaning - 15
- Operation - 15
- Troubleshooting - 15
- Cleaning - 18

Please note!

GENERAL NOTES

Validity of this manual and required compliance

Contents

The complete operating manual for the attachement cutter (referred to in the following as “cutter”) consists of the following parts:

Manual	Target group	Medium	Availability
User manual	Operating personnel	PDF file	NOVEXX Solutions website www.novexx.de
Service manual	Service personnel		NOVEXX Solutions Partner Portal www.novexx.com
Spare parts catalogue			

The present user manual refers exclusively to the cutter. It is intended to help in proper installation and operation of the cutter.

For information on configuring the printer for operation with a cutter, see the operating manual of the printer.

For technical questions not covered in this user manual:

► Follow the instructions of the service manual for the cutter and for the applied printer or

► Request a service technician from our sales partner.

Our sales partner's customer service department is available especially for configuration settings and malfunctions.

Liability

NOVEXX Solutions reserves the right:

- To make changes in design and components, and to use equivalent other parts than those specified in line with technological progress.
- To change information in this manual.

Any obligation to extend these changes to machines previously delivered is excluded.

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How information is represented

Explanation of symbols

To enhance readability and make information easier to find, different types of information are identified:

► Instruction with no order of tasks assigned

1. Numbered instructions introduced by preceding text
2. The specified order must be followed!

‖ Special note for action that must be performed. ‖

- Enumeration of features
- Other feature

The Experts symbol identifies activities that are reserved exclusively for qualified and specially trained personnel.

Warning Notes

Warning notes are specially highlighted::

WARNING!
Warning notes with the signal word WARNING refer to risks that can result in severe or fatal injuries! The note contains safety measures to protect affected persons.
► Instructions must be followed without exception.

CAUTION!
Warning notes with the signal word CAUTION refer to risks that can result in property damage or personal injury (minor injuries). The note contains instructions for preventing damage.
► Instructions must be followed without exception.

Illustrations

Illustrations appear in the text where required. References to the illustrations are shown in brackets, if necessary (see table).

Reference to illustration	Application
none	• Only one illustration • Reference to the illustration is obvious • No position number in the illustration
(A)	• Only one illustration • Reference to the illustration is obvious • Position number in the illustration

Reference to illustration	Application
(see fig. above)	• Several illustrations • No position number in the illustration
(see fig. above, pos. A)	• Several illustrations • Position number(s) in the illustration

Table 1: Different references to illustrations.

Parameters

Parameters in the parameter menu are represented in the format Menu name > Parameter name in grey type.

FOR YOUR SAFETY

Safety notes

WARNING!
Sharp cutter edges!
Hazard of getting your fingers cut by the cutter blades!

► Cleaning of the cutter must be done very carefully and with the printer switched off.
► Do not reach into the area of the rotating blade during printing/cutting operation.
► Do not use the cutter as a handle to carry the printer.
► Only operate the cutter, if it is fitted firmly to the printer.
► Switch off the printer before any operation that requires touching the cutter (e.g. fitting, cleaning, inserting label material).

CAUTION!
Damaging the cutter blades!

► Don´t use sharp edged objects to clean the cutter blades.

The safety instructions above apply in particular to the cutter. For safe operation of the relevant printer with connected cutter, it is essential to also read and observe the safety instructions in the user manual of the printer.

Warning note at the cutter

The warning note „CAUTION! Rotating knife“ warns of the hazard of cut injuries at the hands by the rotating blade.

CAUTION!
Warning notes on the printer provide important information for the operating personnel.

► Do not remove warning notes.
► Replace missing or illegible warning notes.

Article number of the warning label: A8932

Fig. 1: Position of the warning label at the cutter.

Product description

PROPER USAGE

Cutter 2000	Attachment cutter for label printers of the types 64-xx, AP 5.4, XLP 50x, XLP 51x
Cutter	Attachment cutter for label printers of the types XLP 60x

The attachement cutter (subsequently referred to as "cutter") is designed for cutting label material after it has been printed. The printer provides power for the cutter motor via a socket on the front, which is also used for receiving signals relating to the position of the round blade.

The cut can be triggered after each label, after the umpteenth label or at the end of a print job. Printer control offers 3 different cut modes. Among other, the label can be pulled back under the print head after the cut and can be further printed without leaving an unprinted stripe (Real 1:1 mode).

TECHNICAL DATA

Suitable label material

The cutter blade cuts self-adhesive, cardboard and synthetic materials up to 240 g/m² and up to a material thickness of 0.9 mm – considering the following exceptions:

> CAUTION!
> Damaging or soiling the cutter blades!
> Risk of malfunction of the cutter or damaging the blades!
>
> ► The 8" wide cutter must not be used for materials exceeding 160 g/m².
>
> ► Fiber strengthened materials (e.g. Tyvek) must not be cut.
>
> ► If using self-adhesive material, cut between the labels. Otherwise, the adhesive will stick to the cutter blades and will have a negative effect on the cutting function.

Cut width

Cutters of varying widths are intended for use with printers with different print widths to allow labels to be cut up to the maximum material width of the printer being used.

Double cut

With the double cut function, the operator can remove gaps from the label material where required. Here the cut gap can be set from 1 to 5 mm.

SYSTEM REQUIREMENTS

Matching cutter

Cutters of the suitable type in the appropriate width can be operated with the following printers:

Printer	Cutter type	Cutter width	Article number
AP 5.4 / XLP 504 / XLP 514	Cutter 2000	4“	A1168
64-04 / 64-05		5“	A1169
64-06 / XLP 506 / XLP 516		6“	A1170
64-08		8“	A1171
XLP 604	Cutter	4“	N103321

CAUTION!
Malfunction or no function when using an unsuitable cutter type
► Only use Cutter or Cutter 2000 on the specified printer types

Fig. 2: Identifying feature: Sticker with article number on the cutter (here: Cutter 2000 with 4“ width).

Preparation for peripheral devices

For using the printers with a cutter, they must be especially equipped. This so called peripherals preparation consists mainly of an additional output stage board for the motor of the peripheral device and of some additional connection cables. From the outside, the peripheral preparation can be identified by the D-Sub connector (A) on the front side of the printer:

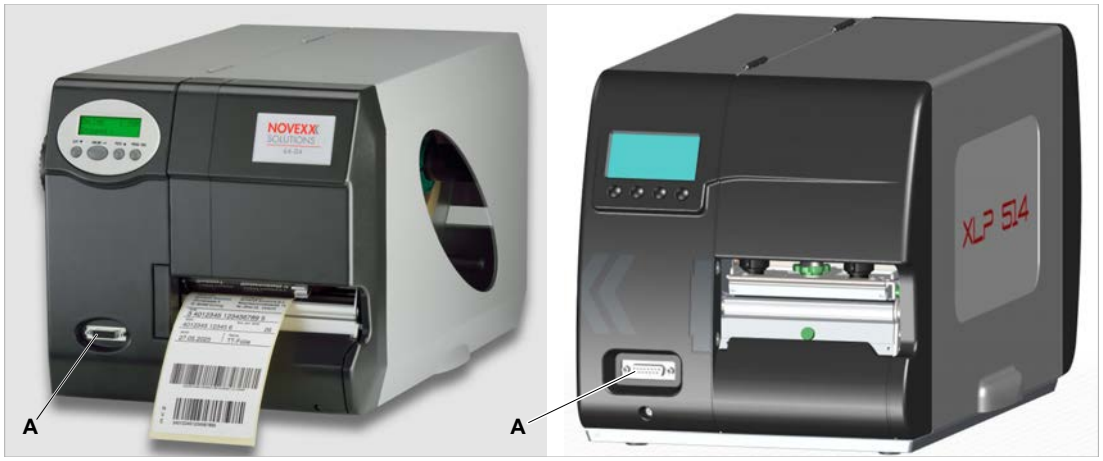


Fig. 3: The D-Sub connector is an indicator for the peripheral preparation of the printer (left: 64-04, right: XLP 514).

Setting up

FITTING THE CUTTER

The cutter is secured to the printer by two screws and an adjustment plate. By moving the adjustment plate, the cutting line can be set parallel to the print image.

> The cutter is mounted in the same way on all printers. The illustrations show the mounting on a 64-04.

Before you begin

Tools:

- Hex socket screwdriver 2,5 / 3 mm
- (64-xx) Socket wrench, size 8
- (XLP 50x/XLP 51x) Torx screwdriver T20

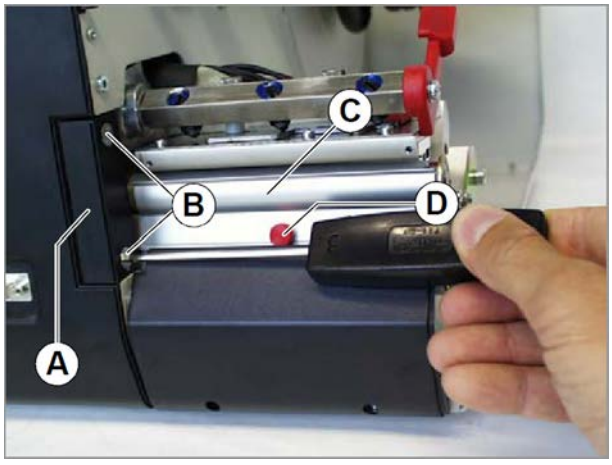
About this task

WARNING!
Sharp cutter blades!
Hazard of getting your fingers cut by the cutter blades.

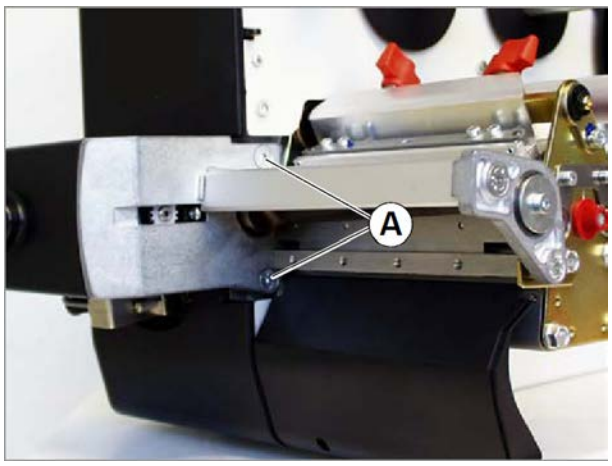
► Switch off the printer and disconnect the power cable before fitting the cutter.

Procedure

1. Remove the tear-off edge (C) by unscrewing the thumb screw (D).
2. Remove the cover on the cutter flange (A) by unscrewing the two screws (B).

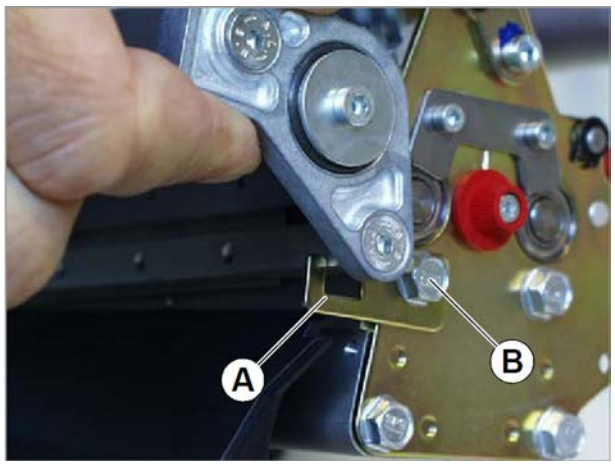


3. Screw on the cutter in place of the cutter flange cover. To do this use the fastening screws of the cutter cover (2x Allen M 5x20). Initially just screw them in slightly.

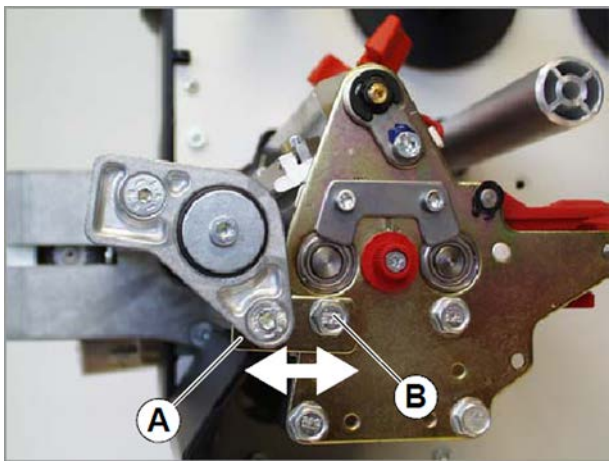


4. Attach the adjustment plate by unscrewing the top left screw (B) on the print unit, place the adjustment plate (A) underneath, and then tighten the screw again - initially only lightly.

‖ The square axle of the cutter unit must rest in the square recess of the adjustment plate (A). ‖



5. If necessary, position the adjustment plate with the help of the screw so that the cut line and print image are parallel.



6. Tighten all three fastening screws.
7. Plug the connector (A) of the motor cable into the socket on the front of the printer.

> CAUTION!
> Hazard of damaging the electronics
> ► Under no circumstances should the plug be attached or removed when the device is switched on.

8. Carrying out a function test.
   AP 5.4 / 64-xx: Call SERVICE FUNCTIONS > Cutter test.

   > The cutter does not need to be activated for the test.

   XLP 50x / XLP 51x / XLP 60x: Press the button below the icon.

   > The cutter must be activated before the test (read the following chapter).

ACTIVATING/DEACTIVATING THE CUTTER

After installation, the cutter must still be activated by setting the corresponding parameters in the parameter menu.

Prerequisite: The cutter is ready fit and connected. The printer is switched on.

WARNING!
Danger of cutting hands and fingers!
Activating a non-existent option (peripheral device) can cause the device to malfunction.

► Never touch the knife blade with your fingers while operating the cutter/printer.
► Only activate options which are mounted and connected properly.

64-xx / AP 5.4

Activating the cutter:

► Set the parameter SYSTEM PARAMETER > Periph. device to “Cutter”.

The printer will now be reset. The cutter is rotated automatically to its correct starting position. In the parameter menu PRINT PARAMETERS show up the following parameters for setting the cut:

- Cut mode
- Cut speed
- Cut position
- Double cut
- Cut width

Additional information about the parameter functions can be found in the user manual of the printer, topic section “Info printouts and parameters”.

Deactivating the cutter:

► Set the parameter SYSTEM PARAMETER > Periph. device to “None”.

XLP 50x / XLP 51x / XLP 60x

Activating the cutter:

► Set the parameter Options > Selection > Periph. device to “Cutter”.

The printer will now be reset. The cutter is rotated automatically to its correct starting position. In the parameter menu shows up additionally the submenu Cutter, which contains the following parameters for setting the cut:

- Cut mode
- Cut speed
- Cut width
- Cut position
- Double cut
- Rest position

Additional information about the parameter functions can be found in the user manual of the printer, chapter “Product description > Parameter menu > Cutter parameters”.

Deactivating the cutter:

► Set the parameter Options > Selection > Periph. device to “None”.

XLP 60x without ribbon saving option from firmware version BEL-V6.0 onwards:

After deactivating a peripheral device (Options > Selection > Periph. device = “None”), the stepper motor output stage must be reassigned its function. The following dialog appears:

► Select “Peripheral” and confirm with key 4.

Operation / Malfunction / Cleaning

OPERATION

The cutter is ready for operation, if it is ready fitted, connected and activated. The cut can be triggered by pressing a button at the operation panel or automatically via the print job.

Inserting label material

► Insert the label material following the instructions in the user manual of the printer. Place the beginning of the material web so that it reaches some millimeters into the cutter.

Triggering a cut manually

► 64-0x / AP 5.4: Toggle to Offline mode. Press the Cut button.

► XLP 50x / XLP 51x / XLP 60x: Toggle to the “Home” screen. Press the button under the icon.

Triggering a cut automatically

► Integate the Easy Plug command #ER with the appropriate parameters into the print job or provide the appropriate setting in the label layout software.

EXPERTS Writing print jobs without layout software requires knowledge of the command languange Easy Plug. For details refer to the Easy Plug manual.

TROUBLESHOOTING

There are many possible causes for a malfunction of the cutter. Here are explained remedies for those causes, which can be done by the operator himself.

If the malfunction has not one of the below mentioned caues, please contact a service technician. Further causes are explained in the service manual of the cutter.

WARNING!
Sharp cutter edges!
Hazard of getting your fingers cut by the cutter blades!

► Switch off the printer before any operation at the cutter (e.g. fitting or cleaning).

Disturbances that prevent the round blade from rotating in its initial position cause the error message “5005Cutter”.

Material jam

1. Switch off the printer.
2. Clear the area between cutter and printer of jammed material. If necessary, remove the cutter.
3. Fit the cutter.
4. Switch on the printer.

Soiled cutter

If the cut leads through the adhesive of self-adhesive label material, some glue gathers at the blades. This can block the cutter.

► Clean the cutter blades (see below).

Labels are pulled upwards with the ribbon

If the applied label material is very thin and flexible, it may occur that it is pulled upwards with the ribbon after being printed, instead of running into the cutter. The stripper avoids this effect.

Article numbers:

Printer	Article number stripper
AP 5.4 / XLP 504 / XLP 514	A0799
64-04 / 64-05	A0798
64-06 / XLP 506 / XLP 516	A0800
64-08	A0801

Fig. 4: The stripper - a self-adhesive plastic strip.

Assembly:

1. Remove the cutter from the printer.
2. Clean the rim (A) with some ethyl alcohol.
3. Remove the cover paper from the stripper.
4. Glue the stripper (B) to the rim as illustrated.

‖ The stripper must protrude the rim towards the paper-insertion side (C). ‖

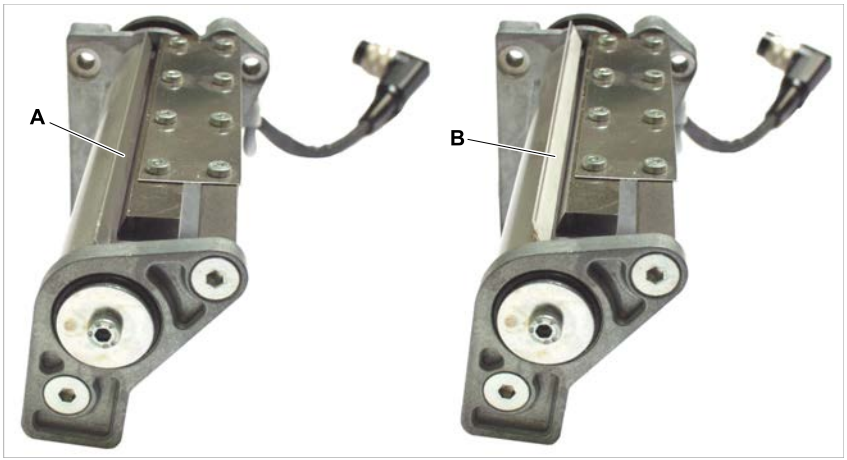


Fig. 5: Attaching the stripper (B).

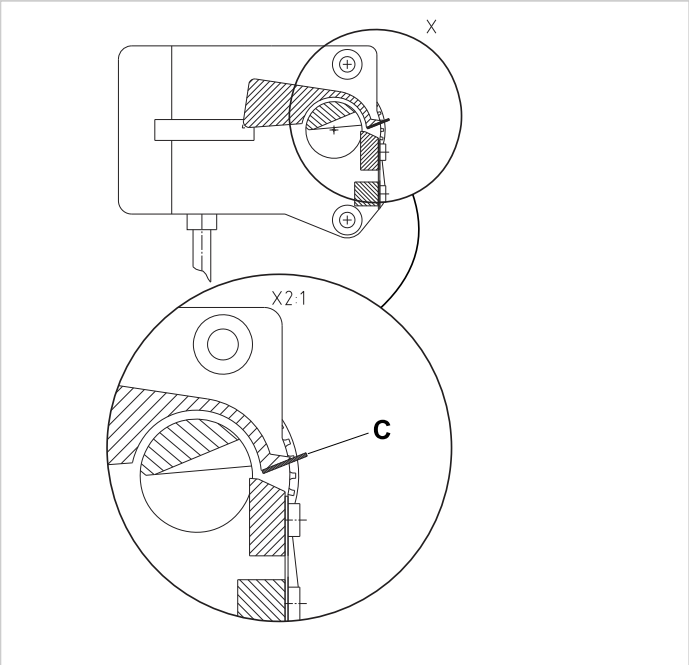


Fig. 6: The stripper (C) must protrude the rim.

CLEANING

During operation of the cutter, particles of dust and paper can accumulate especially around the cutting blades.

► Remove these particles with a soft brush or with a vacuum cleaner.

More cleaning effort is required, if the cutter doesn´t cut through the label gap, but through the label material including the glue layer. The glue deposits at the blades and must be removed regularly. Remove the cutter for cleaning.

> At this occasion, it is a good advice to clean the print roller too. This is a place, where the glue also deposits, especially if the printer operates in „Real 1:1 mode“ mode with backwards movement of the label web (Instructions can be found in the user manual of the printer).

WARNING!
Sharp cutter edges!
Hazard of getting your fingers cut by the cutter blades!

► Cleaning of the cutter must be done very carefully and with the printer switched off.
► Only operate the cutter, if it is fitted firmly to the printer.

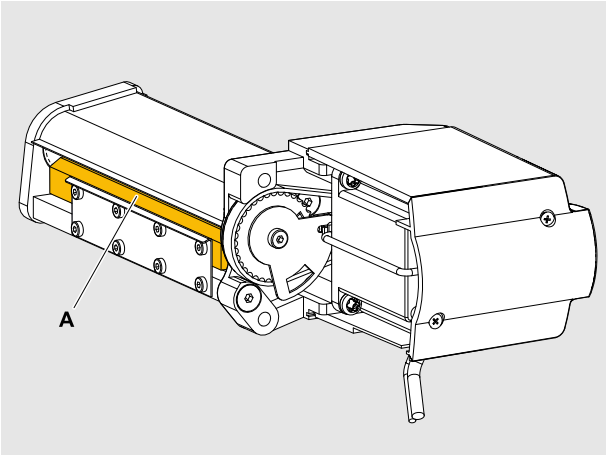
Before you begin

Cleaning agent: Ethyl alcohol or isopropyl alcohol

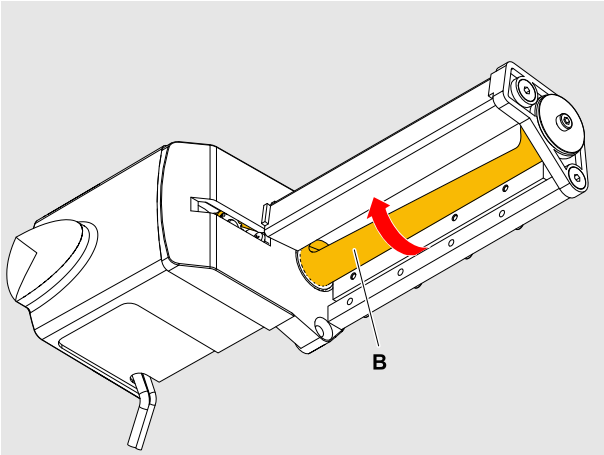
Procedure

1. Switch off the printer.
2. Remove the cutter.
3. Moisten a cloth with ethyl alcohol and wipe the fixed blade (A) with it.

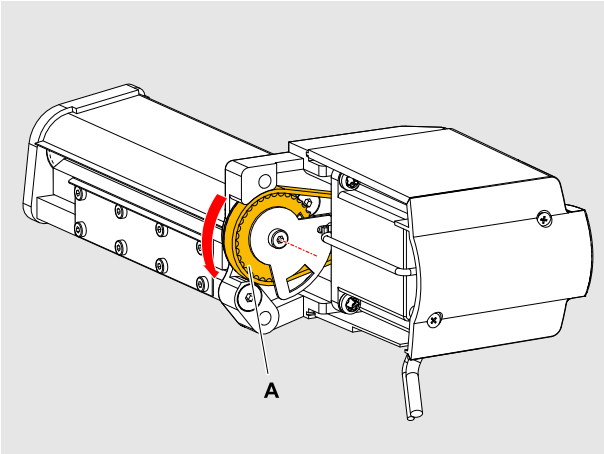
> CAUTION!
> Damaging the cutter blades!
> ► Don´t use sharp edged objects to clean the cutter blades.



4. Moisten a cloth with ethyl alcohol and wipe the round blade (B) with it.



5. Rotate the round blade stepwise by moving the toothed belt (A).



6. Repeat steps 4 and 5 until all glue residues are removed.
7. Fit the cutter.
8. Switch the printer on again.
   The cutter will be initialized, that is it will be rotated in its ground position.

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