

# Cutter 1/2/3/5 for Thermal/ Thermal Transfer Printers of the A- and M-Series

Art.-No. 5942308, 5943256, 5945801, 5948030

**Operator's Manual** 

Edition 12/03



# **Product Description**

The Cutters 1, 2, 3 and 5 are peripheral devices for the A- and M-series printers.

With the cutter unit installed, labels or continuous material may be cut when desired.

Cutter options include a choice of : cut after each label, cut after a specific quantity of labels, or cut at the end of a print job.

The cutters are powered and controlled directly by the peripheral port of the printer. For cutter operation, the printer firmware will extend the label for cutting based on specified displacements, then automatically backfeed the label, so that after making a cut, the label roll will be repositioned and ready for printing the next label.

Optional cutter trays are available for the Cutters 1 and 5.

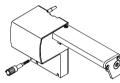




Fig. 1 Cutter, Cutter tray 4

# **Technical Specification**

Cutter	1	2	3	5
PartNo.:	5942308	5943256	5945801	5948030
for printer type	A3, A4	A6	A8	A3, A4, M4
Media width (in/mm)	up to 4.7 / 120	up to 7.1 / 180	up to 9.3 / 235	up to 4.7 / 120
Minimum cut length				
(in/mm)	.08 / 2	.08 / 2	.08 / 2	.08 / 2
Material thickness				
(g/sqm)	up to 200	up to 300	up to 300	up to 300
Power supply	Peripheral connector of the printer			



## NOTICE !

The minimum cut length is depending on the media, in particular its adhesive characteristics. Before use tests of the media are recommended. You should test the media too, if the media is very hard or very thin.

Cutter tray	4	
PartNo.:	5946995	
for printer type	A3, A4, M4	
for cutter	1,5	
Material width (in / mm)	up to 4.7 / 120	
Length of the cut pieces		
(in / mm) :	up to 3.9 / 100	
Stack height (in / mm) :	up to 1.4 / 36	

# **Safety Instructions**



## CAUTION !

- The printer must be switched off before attaching the cutter !
- The cutter may only be used when it is mounted on the printer !
- Do not try to cut any materials which exceed the maximum width or thickness specifications.
- Do NOT touch the area of the moving blades !

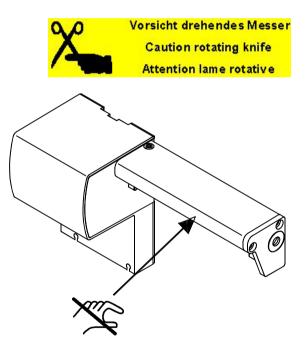


Fig. 2 Do NOT touch the blades

# Mounting the Cutter and the Cutter Tray

In order to install the cutter and cutter tray, the front cover and tear-off plate are to be removed. The removal of the dispense plate or the rewind guide plate of the P-, respectively the R-printer-version can be done in comparable way.

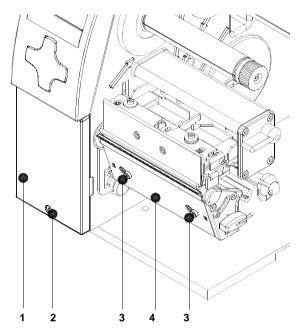


Fig. 3 Removal of the front cover and the tear-off plate



#### CAUTION !

The printer must be switched off before attaching the cutter !

- 1. Open the media cover.
- 2. Loosen the screw (2).
- 3. Remove the front cover (1).
- 4. Loosen the screws (3).
- 5. Slide the tear-off plate (4) to the right and remove it.

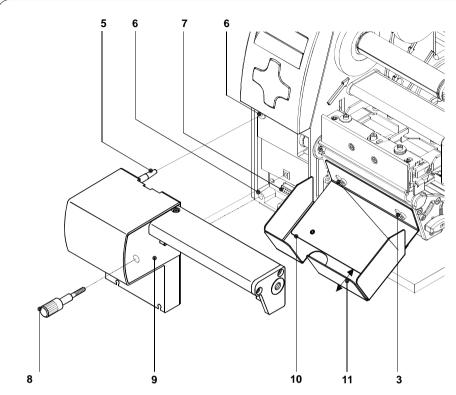


Fig. 4 Mounting the cutter and the cutter tray 4

If you want to operate the cutter without the cutter tray you can skip to step #9. For using the optional cutter tray, the tray must be mounted before the cutter:

- 6. Place the cutter tray (10) on the screws (3) and slide it to the left until it stops.
- 7. Tighten the screws (3).
- The length of the cutter tray (10) may be modified by moving the slide (11).

Installing the cutter assembly:

- Insert the pins (5) of the cutter (9) into the holes (6) of the printer.
  Press the cutter against the printer. That way the plug of the cutter will be connected to the peripheral port (7) of the printer.
- 10. Secure the cutter (9) with the screw (8).

# **Printer Configuration**

Once the cutter is connected to the printer, the printer will automatically recognize it on turn on. Once the cutter is recognized, the printer can be operated in cut mode. The printer can be configured to suit the individual requirements of cut mode in the "Setup" menu. When the cutter is installed, the "Cutter" menu will appear.



#### NOTICE !

Pay attention to the detailed instructions for configuration in the Printer's Operator Manual.

1. For setting the cutter parameters select "Setup" -> "Machine param." -> "Cutter".

t Setup					
Machine param.					
Parameter	Meaning	Selection			
Cutter					
Cut position	Offset of the cut position relative to the rear label edge Default : <b>0,0 mm</b>	+9,9  -9,9			

#### Table 1 Cutter parameters

2. Under "Setup" -> "Print parameters" the method for recognizing the start of label and the method of backfeed when using cut mode can be selected.

Setup					
[	Parameter	Meaning	Selection		
	Label sensor	Method of label sensing Default : <b>Gap sensor</b>	Gap sensor Bottom reflect Endless media		
	Backfeed	Method of backfeed when using the dispense mode or the cut mode Default : <b>smart</b>	smart always		

## Table 2 Parameters "Label sensor" and "Backfeed"

Cut position

The "Cut position" parameter allows to adjust the distance between the cut position and the rear edge of the label. Cut position with the initial offset value of "0" causes to cut in the middle of the gap between two labels. If the real cut position deviates from the middle of the gap, the amount of the cut offset can be altered in the range from -9.9mm to +9.9mm. If the cut position value is positive, the media will be advanced before it is cut, that means the distance between the cut edge and the rear edge of the label increases.

The setting should be made when first operating the printer and cutter, or when changes that will effect all print jobs sent to the printer.

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## NOTICE !

Changes to individual print jobs can be accomplished by changing the software settings.

The offset values from "Cut position" and from software are added together for execution. The software value does not replace the "Cut position" value, but temporariliy adjusts it for the current print job.

## Label sensor

For recognizing the start of label the printer offers besides the two standard methods (Gap sensor / Bottom reflect) the setting "Endless media". This setting should be used when operating with continuous material in cut mode. That way it is possible to realize the movement forward and the cut after loading the media and then pressing the FEED key (see section "Modes of Operation").

## Backfeed

In cut mode, the media will be stopped in a position where the leading edge of the following label has already been moved beyond the printhead. The printer can backfeed the label material from its cut position to the printhead. Therefore, the next label can be printed completely.

A backfeed will always be performed if the parameter is set to "always". If the setting is set to "smart", the backfeed will only be performed if the front label is in its cut position and the printer has not yet received all of the data for printing the following label. Otherwise, the print of the second label will be started, but it will only be completed after the first label has been cut.

# Media Loading

Load the transfer ribbon as described in the Printer's Operators Manual. Load the label media for cut mode similar to the way it would be loaded for tear-off mode.

Place the media strip between the printhead and the drive roller, so that the beginning of the strip reaches into the cutter.

# **Modes of Operation**

The printer is ready for operation when all connections have been made and all materials are loaded correctly.

After loading the media it is necessary to locate top of form by pressing the FEED key. The media will be moved forward and then cut.

#### NOTICE !

To operate the cutter with continuous material configure the printer under "Setup" -> "Print parameters" -> "Label sensor", the setting "Endless media" has to be selected. Otherwise no cut is carried out.

For A-series printers locating the top of form is not necessary when the printhead was not opened between print jobs. Even if the printer was powered off between print jobs.

## NOTICE !

To operate the cutter the cut mode must be activated in the software ! For direct programming use the C-command (see Programming Manual) !

Once the cutter is mounted on the printer and is ready for operation, the printer can be used in cut mode.

All labels in a print job will be printed without stopping and be cut as chosen in the software: after each label, after a specific quantity of labels, or at the end of a print job.



# Cleaning

## WARNING !

Before starting any maintenance, turn the printer OFF and disconnect the printer from the electrical outlet!

During the normal operation of the cutter, particles of dust and paper can accumulate inside the cutter. Remove these particles with a soft brush or a vacuum.

When cutting through the label material instead of the label gap remains of adhesive may accumulate on the blades.

If operating in backfeed mode, such remains of adhesive may be deposited on the drive roller as well.

Therefore both, the drive roller and the cutter blades, must be cleaned often.

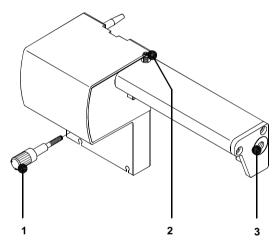
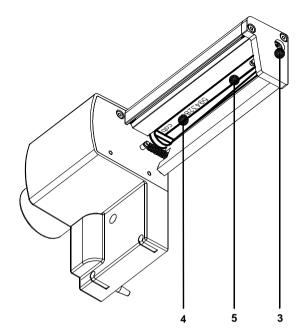


Fig. 9 Cleaning the cutter

- 1. Loosen the screw (1) and remove the cutter from the printer.
- 2. For cleaning the drive roller open the print head and remove the media from the printer.
- Loosen the screw (2) about 5 mm from the profile of the cutter. Now you can turn the axle (3) of the circular blade with a screwdriver for slotted head screws (slot width 7mm).
- 4. Remove all deposits both at the drive roller and the cutter blades with isopropyl alcohol and a soft cloth.



#### CAUTION ! Risk of injury ! The cutter blades are sharp !



# Fig. 10 Locating circular blade in position

- 5. Turn the axle (3) of the circular blade (5) with the screwdriver for slotted head screws so that the inscription (4) of the blade points downward.
- 6. Tighten the screw (2) for arresting the circular blade.



## CAUTION !

If you tight screw (2) too strong, you could damage the screw thread.

7. Now the cutter can be remounted on the printer.



# **EU - Conformity Declaration**

We declare herewith that as a result of the manner in which the machine designated below was designed, the type of construction and the machines which, as a result have been brought on to the general market comply with the relevant fundamental regulations of the EU Rules for Safety and Health. In the event of any alteration which has not been approved by us being made to any machine as designated below, this statement shall thereby be made invalid.

Description: Cutter Type: Cutter 1 Cutter 2 Cutter 3 Cutter 5

98/37/EU

EN 55022:1998

Applied EU Regulations and Norms:

- EC Machinery Regulations
- Machine Safety
- EC Low Voltage Regulations

73/23/EEC EN 60950:1992+A1:1993+A2:1993

EN 292 Part 2 - 1995-06

- Data and Office Machine Safety

- EC Electromagnetic Compatibility Regulations 89/336/EEC

- Threshold values for the Interference of Data Machines

This declaration is valid only when the cutter is used together with a printer of the A series. Manufacturer: cab - Karlsruhe

Signed for, and on behalf of, the Manufacturer :

cab Produkttechnik Sömmerda Gesellschaft für Computerund Automationsbausteine mbH 99610 Sömmerda

Sömmerda, 14.06.02

Cerem and

Erwin Fascher Managing Director



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