



**Cutter and
Perforation Cutter**

EOS2 / EOS5

Made in Germany

Edition: 10/2018 - **Part No.** 9003328

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Topicality

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1.1 Instructions

Important information and instructions in this documentation are designated as follows:



Danger!

Draws your attention to an exceptionally grave, impending danger to your health or life.



Warning!

Indicates a hazardous situation that could lead to injuries or material damage.



Attention!

Draws attention to possible dangers, material damage or loss of quality.



Note!

Gives you tips. They make a working sequence easier or draw attention to important working processes.



Environment!

Gives you tips on protecting the environment.



Handling instruction



Reference to section, position, illustration number or document.



Option (accessories, peripheral equipment, special fittings).

Time

Information in the display.

1.2 Intended Use

- The device is intended exclusively as an option for the printers of the EOS series for cutting and perforating suitable materials that have been approved by the manufacturer. Any other use or use going beyond this shall be regarded as improper use. The manufacturer/supplier shall not be liable for damage resulting from unauthorized use; the user shall bear the risk alone.
- Usage for the intended purpose also includes complying with the operating manual, including the manufacturer's maintenance recommendations and specifications.
- The device is manufactured in accordance with the current technological status and the recognized safety rules. However, danger to the life and limb of the user or third parties and/or damage to the device and other tangible assets can arise during use.
- The device may only be used for its intended purpose and if it is in perfect working order, and it must be used with regard to safety and dangers as stated in the operating manual.



Note!

All documentations can also currently be found in the Internet.



Warning!

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

1.3 Safety Instructions

- Disconnect the printer from the electrical outlet before mounting or removing the cutter.
- The cutter may only be operated when it is mounted on the printer.
- Risk of injury, particularly during maintenance, the cutter blades are sharp.
- Work going beyond this may only be performed by trained personnel or service technicians.
- Unauthorized interference with electronic modules or their software can cause malfunctions. Other unauthorized work on or modifications to the device can also endanger operational safety.
- Always have service work done in a qualified workshop, where the personnel have the technical knowledge and tools required to do the necessary work.
- Warning stickers must not be removed, as then you and other people cannot be aware of dangers and may be injured.

1.4 Environment



Obsolete devices contain valuable recyclable materials that should be sent for recycling.

- ▶ Send to suitable collection points, separately from residual waste.

The modular construction of the printer enables it to be easily disassembled into its component parts.

- ▶ Send the parts for recycling.
- ▶ Take the electronic circuit boards to public waste disposal centers or to the distributor.

1.5 Technical Data

Cutter and Perforation Cutter		EOS2	EOS5
for printer type		EOS2	EOS5
Perforating			
Web distance	mm	2.5	
Web width	mm	0.8	
Material			
Width	mm	≤ 45	
Weight cardboard	g/m ²	60 - 240	
Thickness	mm	0.05 - 1.1	
Cutting length	mm	≥ 10	
Cut frequency	1/min	≤ 200	
Power Supply		Cutter connector of the printer	

**Attention!**

The minimum cut length is depending on the media, in particular its adhesive characteristics.

- ▶ Perform preliminary tests. Test the media too, if the media is very hard, very flexible or very thin.

2.1 Removing the Tear-off Plate

Before mounting the cutter the tear-off plate mounted on the printer must be removed.

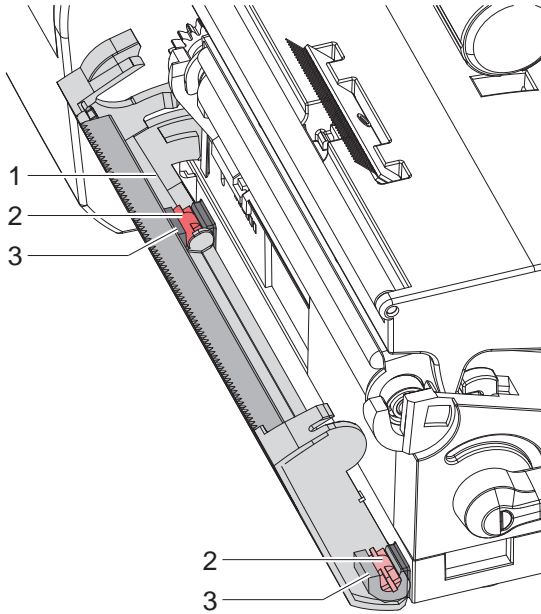


Figure 1 Removing the tear-off plate

- ▶ Fold down the tear-off plate (1), pull the axles (2) of the tear-off plate out of the holders (3) and remove the tear-off plate.

2.2 Mounting the Cutter

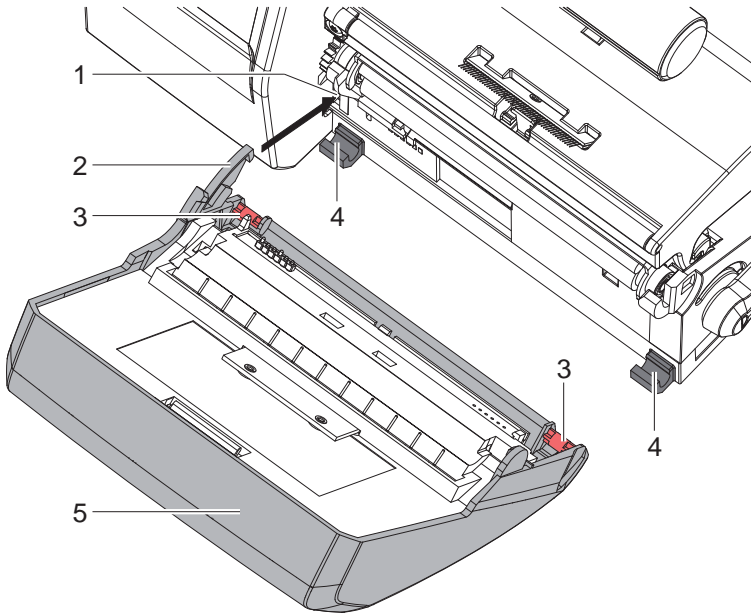


Figure 2 Mounting the cutter

1. Put snap arm (2) of the cutter (5) into the guide (1).
2. Push the axles (3) into the holders (4).
3. Fold up cutter (5) so that it snaps in on the printer.

3.1 Loading Material

- ▶ Fold down the cutter.
- ▶ Insert labels for tear-off mode ▷ Operator's manual of the printer.
Place the media strip between the printhead and the drive roller, so that the front edge of the strip reaches through the cutter.

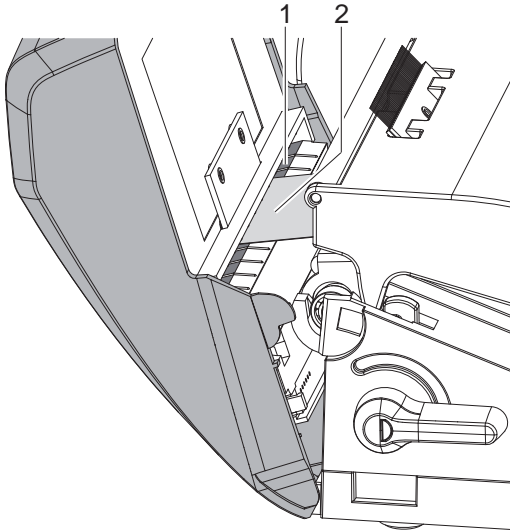


Figure 3 Guiding the labels into the cutter

- ▶ Guide the labels (2) into the slot (1) and fold up the cutter.
- ▶ Insert ribbon ▷ Operator's manual of the printer.

3.2 Reference to the Programming

- ▶ Insert labels for tear-off mode ▷ Operator's manual of the printer.
Place the media strip between the printhead and the drive roller, so that the front edge of the strip reaches through the cutter.
- ▶ Insert ribbon ▷ Operator's manual of the printer.
- ▶ Activate the commands for perforation or cut-off in the software.
For direct programming use the following commands:

C p Perforation command

C Cut-off command

Both commands may be combined, but C p has a lower priority.

▷ Programming Manual

Using the sequence :

C 3

C p

the material will be perforated two times and afterwards cut off.

- ▶ Configure the cut parameters ▷ 4. Printer Configuration



Note!

The cut parameters are only accessible with cutter installed.



Attention!

In several label software solutions the perforation command C p is not implemented. Perforating material via such a software is not possible.

- ▶ For direct programming use the following command :

O Cn n...Value between 0.0 and 10.0



Note!


If the label software has no setting for the perforation level, i.e. O Cn is not implemented, the adjustment also may be done using the printer setup ▷ 4. Printer Configuration.

3.3 Standard Operation

- ▶ Switch on the printer.
The cutter performs a synchronization action.

**Note!**

To operate the cutter with continuous material in the printer menu Setup -> Labels -> Label sensor the setting *Continuous media* has to be selected. Otherwise no synchronization cut is carried out.

- ▶ Press  . For synchronization the media will be moved forward and cut off.
That synchronization is not necessary when the printhead was not opened between print jobs, even if the printer was powered off between print jobs.
- ▶ Send a print job.
All labels in a print job will be printed without stopping and be perforated or cut as chosen in the software : after each label, after a specific quantity of labels, or at the end of a print job.

**Note!**

Between the print jobs a direct cut can be released by pressing  on the control panel.



Note!

The values of the setup are basic settings for the current printer/cutter combination.

After changing the cutter or printer a re-adjustment may be necessary.

Changes required for processing different print jobs should be implemented by additional offsets available in the software.



The offset values from setup and software are added together for execution.

For detailed instructions for configuration

▷ Configuration Manual of the printer.


Cut Parameters

- ▶ Start menu.
- ▶ Select  Setup >  Cutting.

Parameter	Meaning	Default
 <i>Cut position</i>	Offset of the cut position relative to the rear label edge. The setting can also be adjusted by the software. The settings of configuration and software are added together.	0.0 mm
 <i>Perforation level</i>	Setting of the perforation depth. The setting can also be adjusted by the software. The settings of configuration and software are added together.	0


Backfeed

- ▶ Start menu.
- ▶ Select  Setup >  Printing.

Parameter	Meaning	Default
 <i>Backfeed</i>	<p>Method for backfeeding the label medium.</p> <p>Backfeeding is necessary in the cutting and peel-off modes since a label is pushed out passed the front edge of the next label above the print line when peeling off/cutting.</p> <p><i>always:</i> Backfeeding occurs independently of label contents.</p> <p><i>smart:</i> Backfeeding only occurs when the next label is not yet completely prepared when peeling off/cutting the current label. Otherwise, the second label is pushed on and completed after removal of the first label without backfeeding.</p>	<i>smart</i>

Label Sensor

- ▶ Start menu.
- ▶ Select  Setup >  Labels.

Parameter	Meaning	Default
 <i>Label sensor</i>	<p>Method for detecting the starting end of the label.</p> <p><i>Gap Sensor:</i> Detection using changes in the transparency between the label and label gap.</p> <p><i>Bottom-Reflect:</i> Detection using reflex marks on the bottom of the medium.</p> <p><i>Continuous media:</i> Checking the existence of media only.</p>	<i>Gap sensor</i>



Warning!

- ▶ Disconnect the printer from the electrical outlet.



Warning!

Risk of injury. The cutter blades are sharp.



Notice!

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.

- ▶ Clean the drive roller and the cutter blades often.

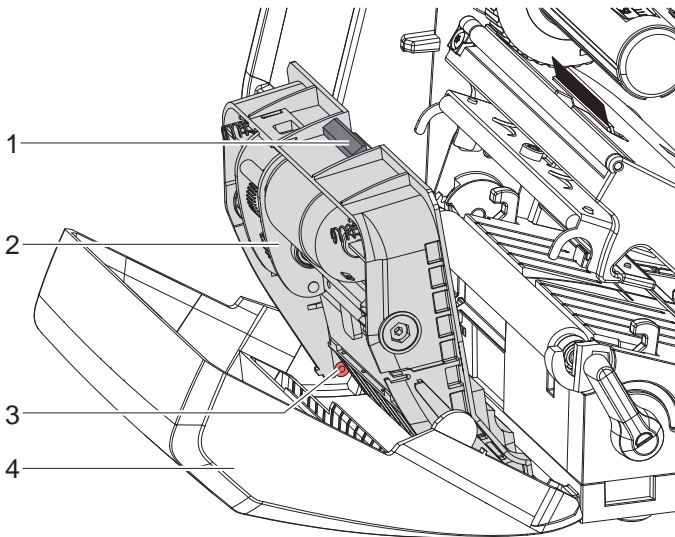


Figure 4 Dismount the cutter

1. Fold down cutter.
2. Push release push button (1) and lift blade unit (2) from the cover (4).
3. If the blades are only slightly dirty it is sufficient to clean them with a soft cloth and continue with point 5.

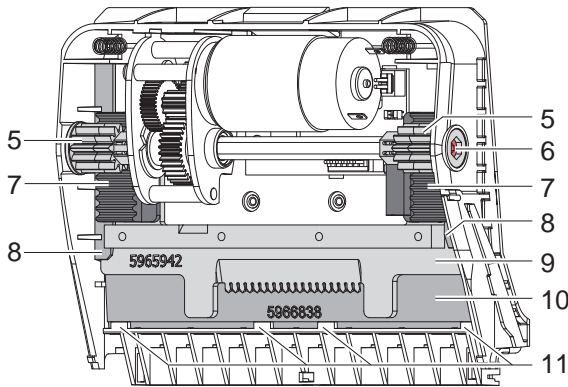


Figure 5 Replacing the Blades

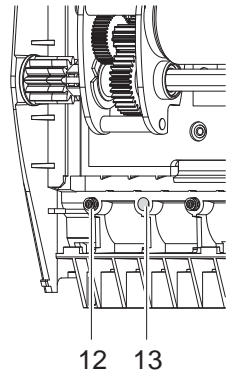


Figure 6 Springs

4. If the blades are very dirty with residues of adhesive or if they are worn, change blades:
 - ▶ Turn the shaft (6) clockwise using a torx wrench TX10 until the gear racks (7) cannot engage anymore.
 - ▶ Pull the upper blade (9) out of the guides (8).
 - ▶ Take out the lower blade (10).
 - ▶ Remove deposits on the blades with label remover and a soft cloth.
 - ▶ If necessary, replace the blades.
 - ▶ Push the lower blade down into the guides (11).
 - ▶ If necessary, put the springs (12) back into the spring retainers (13).
 - ▶ To re-mount the upper blade push the lower blade down on the cover and push the upper blade into the guide until the gear racks (7) can engage with the gear wheels (5).
 - ▶ Turn the shaft (6) counterclockwise using a torx wrench TX10 until the blade reaches the upper limit.
5. Fit the blade unit (3) according to Fig. 4 into the axes (2) and fold it towards the cover (4) until it snaps in.
6. Fold the cutter up to the printer.

6.1 Reference to the EU Declaration of Conformity

The cutters and perforation cutters of the EOS series comply with the relevant fundamental regulations of the EU Rules for Safety and Health:

- Directive 2014/30/EU relating to electromagnetic compatibility
- Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment

EU Declaration of Conformity

▷ <https://www.cab.de/media/pushfile.cfm?file=3432> 



6.2 FCC

NOTE : This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. The equipment generates, uses, and can radiate radio frequency and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user may be required to correct the interference at his own expense.