Operator's Manual





T2212 PRINTER PERFORATOR

Doc. # 412-121039 revision 1

Copyright

This documentation as well as translation hereof are property of TE Connectivity (TE).

The replication, conversion, duplication or divulgement of the whole manual or parts of it for other intentions than its original intended purpose demands the previous written authorization by TE Connectivity.

Trademark

Windows is a registered trademark of the Microsoft Corporation.

Editor

Regarding questions or comments please contact TE Connectivity.

Topicality

Due to the constant further development of our products discrepancies between documentation and products can occur.

Please check with your local TE Connectivity Representative for the latest update.

For technical support please use Technical Support link below, for regional contact details:

Technical Support

1	Introduction	4
1.1	Instructions	4
1.2	Intended Use	5
1.3	Safety Instructions	6
1.4	Environment	6
1.5	Technical Data	7
2	Mounting	8
2.1	Removing the Tear-off Plate	8
2.2	Mounting the Perforator	
3	Operation	10
3.1	Loading Material	
3.2	Reference to the Programming	
3.3	Standard Operation	
4	Printer Configuration	13
5	Cleaning and Replacing the Blades	15
6	Licenses	17
6.1	Reference to the EU Declaration of Conformity	17
6.2	FCC	

4 1 Introduction 4

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 Introduction

1.2 Intended Use

 The device is intended exclusively as an option for the T2212 printers for perforating suitable materials that have been approved by TE Connectivity. Any other use or use going beyond this shall be regarded as improper use. TE Connectivity 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!

This, and further TE documents can be downloaded from TE.COM at the following link.

http://www.te.com/commerce/DocumentDelivery/DDEController



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.

6 1 Introduction

1.3 Safety Instructions

 Disconnect the printer from the electrical outlet before mounting or removing the perforator.

- The perforator may only be operated when it is mounted on the printer.
- Risk of injury, particularly during maintenance, the perforator 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. <u>Technical Support</u>
- 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 Introduction 7

1.5 Technical Data

Perforator		
for printer type		T2212 PRINTER
Perforating		
Web distance	mm	2.5
Web width	mm	0.8
Material		
Width	mm	≤ 45
Weight cardboard	g/m²	60 - 240
Thickness	mm	0.05 - 1.1
Cutting length	mm	≥ 10
Cut frequency	1/min	≤ 200
Power Supply		Perforator 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.

8 2 Mounting

2.1 Removing the Tear-off Plate

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

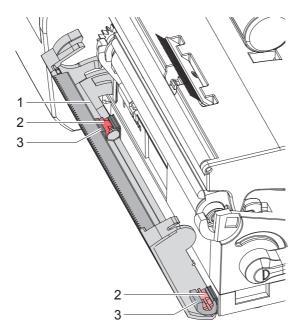


Figure 1 Removing the tear-off plate

► Gently pull the Tear off plate forward (1), pull the axles (2) of the tear-off plate out of the holders (3) and remove the tear-off plate.

2 Mounting 9

2.2 Mounting the Perforator

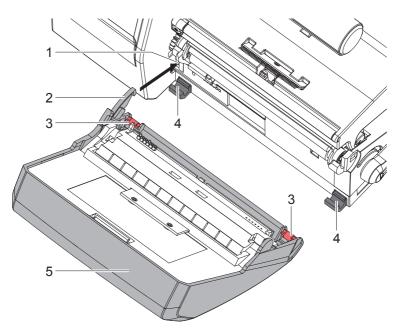


Figure 2 Mounting the perforator

- 1. Put snap arm (2) of the perforator (5) into the guide (1).
- 2. Push the axles (3) into the holders (4).
- 3. Gently push the perforator unit forward (5) so that it snaps onto the printer.

10 3 **Operation**

3.1 **Loading Material**

- ▶ Gently pull the perforator unit forward as shown in Figure 3,
- ▶ Insert labels or continuous tube between the Printhead and drive roller, so that the front edge reaches through the perforator unit.

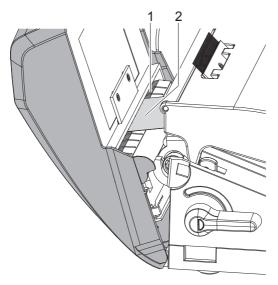


Figure 3 Guiding labels and tube into the perforator unit

- ► Guide labels or tube (2) into slot (1), then engage the perforator unit by gently pushing the perforator unit back on the printer.
- Insert ribbon.
 - Operator's manual of the printer (TE Document 412-121037).

3 Operation 11

3.2 Standard Operation

Switch on the printer.
The perforator performs a synchronization action.



Note!

To operate the perforator 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.

12 4 Printer Configuration



Note!

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

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

Changes required for print jobs should be made in the label printing software.

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

Cut Parameters

Start menu.



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

4 Printer Configuration

Backfeed

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

Parameter		Meaning	Default
Backfee	d	Method for backfeeding the label medium.	smart
<i>7#</i> /		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.	
		always: Backfeeding occurs independently of label contents.	
		smart: 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.	

Label Sensor

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

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



Warning!

▶ Disconnect the printer from the electrical outlet.



Warning!

Risk of injury. The perforator 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 perforator blades often.

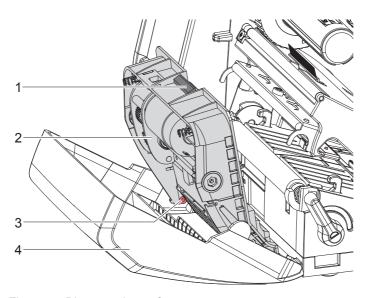


Figure 4 Dismount the perforator

- 1. Gently pull the perforator unit forward.
- 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.

5

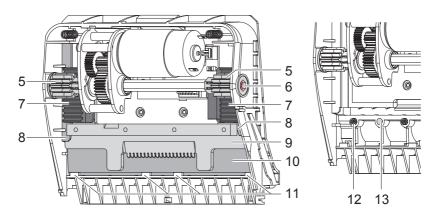


Figure 5 Replacing the Blades

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. Gently push the perforator unit onto the printer.

16 6 Licenses 16

6.1 Reference to the EU Declaration of Conformity

The perforators of the T2212 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

Please follow the link below, to download the latest T2212 Perforator, EU Declaration of Conformity, TE document, T2212-Perforator-CE-EU-C-of- C.



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.