USER MANUAL

TPTCM60III
TPTCM60IIIL
TPTCM112III
TPTCM112IIIL

CUSTOM®

CUSTOM S.p.A.
Via Berettine 2/B
43010 Fontevivo (PARMA) - Italy
Tel. : +39 0521-680111
Fax : +39 0521-610701
http: www.custom.biz

Customer Service Department:
www.custom4u.it

THE IMAGES USED IN THIS MANUAL ARE USED AS AN ILLUSTRATIVE EXAMPLES. THEY COULDN'T REPRODUCE THE DESCRIBED MODEL FAITHFULLY.

UNLESS OTHERWISE SPECIFIED, THE INFORMATION GIVEN IN THIS MANUAL ARE REFERRED TO ALL MODELS IN PRODUCTION AT THE ISSUE DATE OF THIS DOCUMENT.

GENERAL INSTRUCTIONS

CUSTOM S.p.A. declines all responsibility for accidents or damage to persons or property occurring as a result of tampering, structural or functional modifications, unsuitable or incorrect installations, environments not in keeping with the equipment's protection degree or with the required temperature and humidity conditions, failure to carry out maintenance and periodical inspections and poor repair work.

GENERAL SAFETY INFORMATION

Your attention is drawn to the following actions that could compromise the characteristics of the product:

- Read and retain the instructions which follow.
- Follow all indications and instructions given on the device.
- Make sure that the surface on which the device rests is stable. If it is not, the device could fall, seriously damaging it.
- Make sure that the device rests on a hard (non-padded) surface and that there is sufficient ventilation.
- Do not fix indissolubly the device or its accessories such as power supplies unless specifically provided in this manual.
- When positioning the device, make sure cables do not get damaged.
- [Only OEM equipment] The equipment must be installed in a kiosk or system that provides mechanical, electrical and fire protection.
- The mains power supply must comply with the rules in force in the Country where you intend to install the equipment.
- Make sure that there is an easily-accessible outlet with a capacity of no less than 10A closely to where the device is to be installed.
- Make sure the power cable provided with the appliance, or that you intend to use is suitable with the wall socket available in the system.
- Make sure the electrical system that supplies power to the device is equipped with a ground wire and is protected by a differential switch.
- Before any type of work is done on the machine, disconnect the power supply.
- Use the type of electrical power supply indicated on the device label.
- These devices are intended to be powered by a separately certified power module having an SELV, non-energy hazardous output. (IEC60950-1 second edition).
- [Only POS equipment] The energy to the equipment must be provided by power supply approved by CUSTOM S.p.A.
- Take care the operating temperature range of equipment and its ancillary components.
- Do not block the ventilation openings.
- Do not insert objects inside the device as this could cause short-circuiting or damage components that could jeopardize printer functioning.
- Do not carry out repairs on the device yourself, except for the normal maintenance operations given in the user manual.
- The equipment must be accessible on these components only to trained, authorized personnel.
- Periodically perform scheduled maintenance on the device to avoid dirt build-up that could compromise the correct, safe operation of the unit.
- Do not touch the head heating line with bare hands or metal objects. Do not perform any operation inside the printer immediately after printing because the head and motor tend to become very hot.
- Use consumables approved by CUSTOM S.p.A.

THE CE MARK AFFIXED TO THE PRODUCT CERTIFY THAT THE PRODUCT SATISFIES THE BASIC SAFETY REQUIREMENTS.

The device is in conformity with the essential Electromagnetic Compatibility and Electric Safety requirements laid down in Directives 2014/30/EU and 2014/35/EU inasmuch as it was designed in conformity with the provisions laid down in the following Standards:

- EN 55032 *(Electromagnetic compatibility of multimedia equipment - Emission Requirements)*
- EN EN55024/EN55035 *(Electromagnetic compatibility of multimedia equipment - Immunity requirements)*
- EN IEC/EN62368-1 *(Audio/video, information and communication technology equipment)*

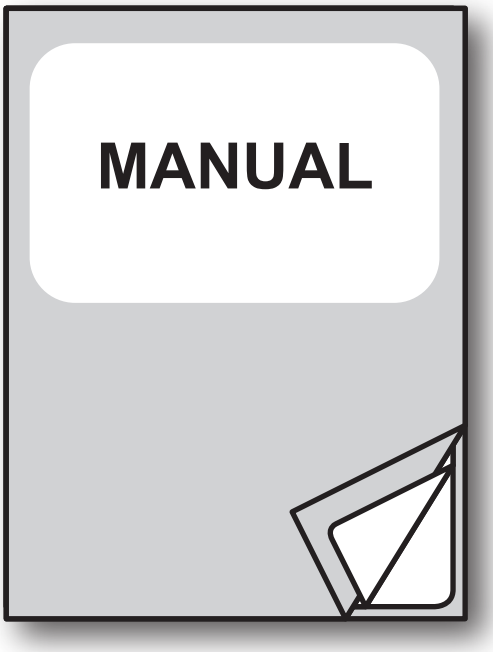
The device is in conformity with the essential requirements laid down in Directives 2014/53/EU about devices equipped with intentional radiators. The Declaration of Conformity and other available certifications can be downloaded from the site www.custom4u.it.

GUIDELINES FOR THE DISPOSAL OF THE PRODUCT

The crossed-out rubbish bin logo means that used electrical and electronic products shall NOT be mixed with unsorted municipal waste. For more detailed information about recycling of this product, refer to the instructions of your country for the disposal of these products.

- Do not dispose of this equipment as miscellaneous solid municipal waste, but arrange to have it collected separately.
- The re-use or correct recycling of the electronic and electrical equipment (EEE) is important in order to protect the environment and the wellbeing of humans.
- In accordance with European Directive WEEE 2012/19/EU, special collection points are available to which to deliver waste electrical and electronic equipment and the equipment can also be handed over to a distributor at the moment of purchasing a new equivalent type.
- The public administration and producers of electrical and electronic equipment are involved in facilitating the processes of the re-use and recovery of waste electrical and electronic equipment through the organisation of collection activities and the use of appropriate planning arrangements.
- Unauthorised disposal of waste electrical and electronic equipment is punishable by law with the appropriate penalties.

The format used for this manual improves use of natural resources reducing the quantity of necessary paper to print this copy.



For details on the commands,
refer to the manual with code **772000000003100**

For further information about the use of “PrinterSet” tool
refer to the manual with code **782000000001800**

TABLE OF CONTENTS

1 INTRODUCTION 9

2 IDENTIFICATION OF THE MODELS 11

3 DESCRIPTION 13
3.1 Box contents 13
3.2 Device components: external views 16
3.3 Product label 22
3.4 Key functions: power up 23
3.5 Key functions: standby 24
3.6 Status messages 25

4 INSTALLATION 27
4.1 Fastening 27
4.2 Connections 31
4.3 Pinout 32
4.4 Driver and SDK 35

5 OPERATION 37
5.1 Adjusting paper width 37
5.2 Switch the device on 40
5.3 Loading the paper roll 41
5.4 Fixing the paper on rewinder 43
5.5 Issuing ticket 46

6 CONFIGURATION 65
6.1 Configuration by keys 65
6.2 Configuration by software 67
6.3 Configuration by file 69
6.4 Device status 71
6.5 Communication parameters 72
6.6 Operating parameters 73
6.7 Alignment parameters 76
6.8 Hexadecimal dump 77

7 ALIGNMENT 79
7.1 Enable alignment 80
7.2 Calibration 89
7.3 Labels gap detection sensor autoset procedure 91
7.4 Alignment parameters 95
7.5 Printing area 99

8 MAINTENANCE 101
8.1 Paper jam 101
8.2 Planning of cleaning operations 104
8.3 Cleaning 105
8.4 Firmware upgrade 113

9 SPECIFICATION 115
9.1 Hardware specifications 115
9.2 Character specifications 121
9.3 Device dimensions 122
9.4 Device dimensions with paper roll holder 128
9.5 Device dimensions with paper roll holder 130
9.6 Power supply and power cord dimensions 132
9.7 Paper specification 134
9.8 Character sets 136

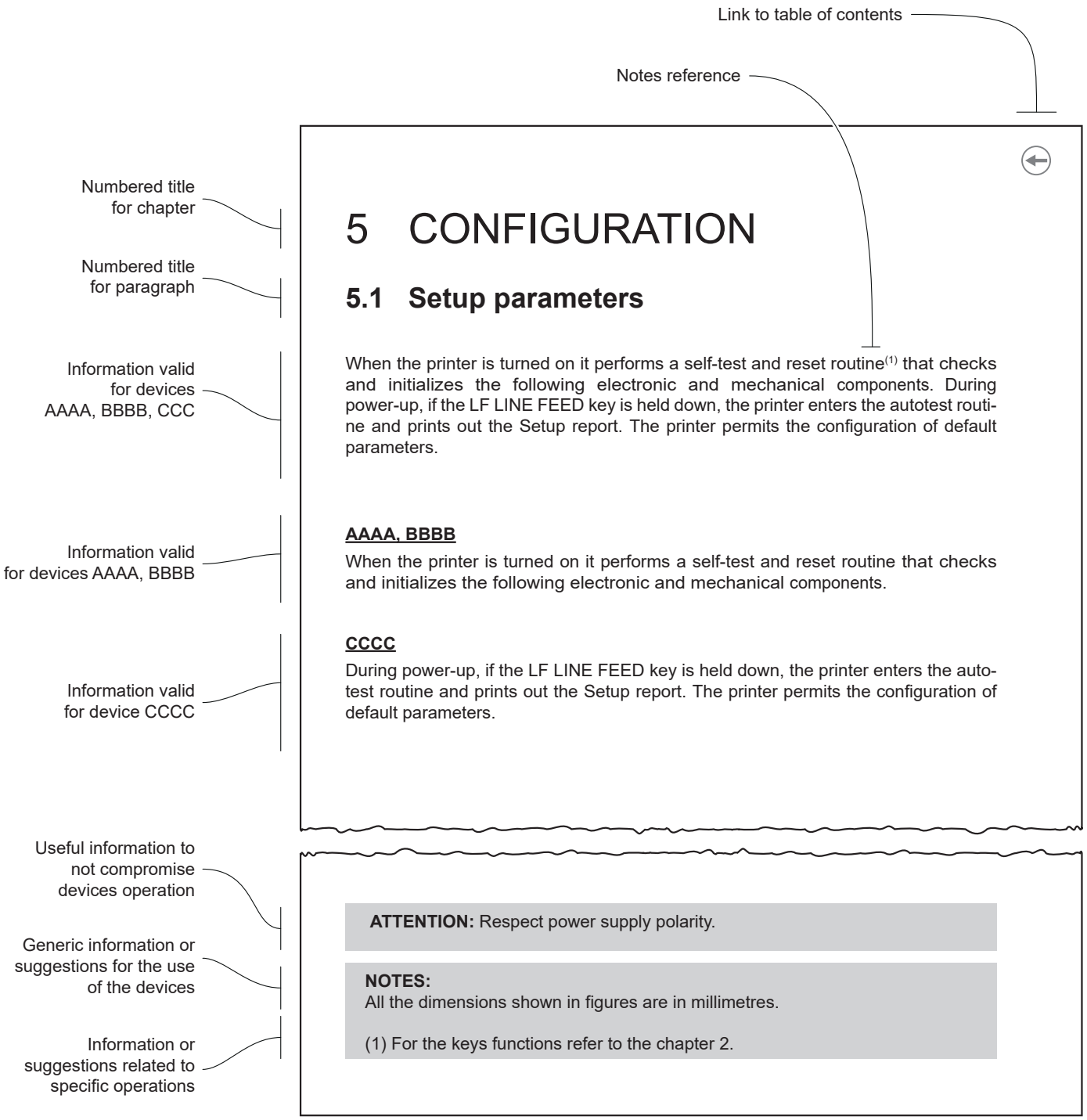
10 CONSUMABLES 139

11 ACCESSORIES 141

12 TECHNICAL SERVICE 145

1 INTRODUCTION

This document is divided into sections and chapters. Each chapter can be reached by the index at the beginning of this document. The index can be reached by the button on each page as shown in the diagram below.



2 IDENTIFICATION OF THE MODELS

NOMENCLATURE	DESCRIPTION
TPTCM60III EJC	TPTCM60III with ejector group and 200 dpi printhead
TPTCM60IIIL	TPTCM60III labels configuration with 200 dpi printhead
TPTCM112III	TPTCM112III base configuration with 200 dpi printhead
TPTCM112III 300 DPI	TPTCM112III base configuration with 300 dpi printhead
TPTCM112III STRONG CUT	TPTCM112III with strong cut autocutter and 200 dpi printhead
TPTCM112III EJC	TPTCM112III with ejector group with 200 dpi printhead
TPTCM112III EJC 300 DPI	TPTCM112III with ejector group with 300 dpi printhead
TPTCM112IIIL	TPTCM112III labels configuration with 200 dpi printhead
TPTCM112III CL	TPTCM112III continuous labels configuration with 200 dpi printhead

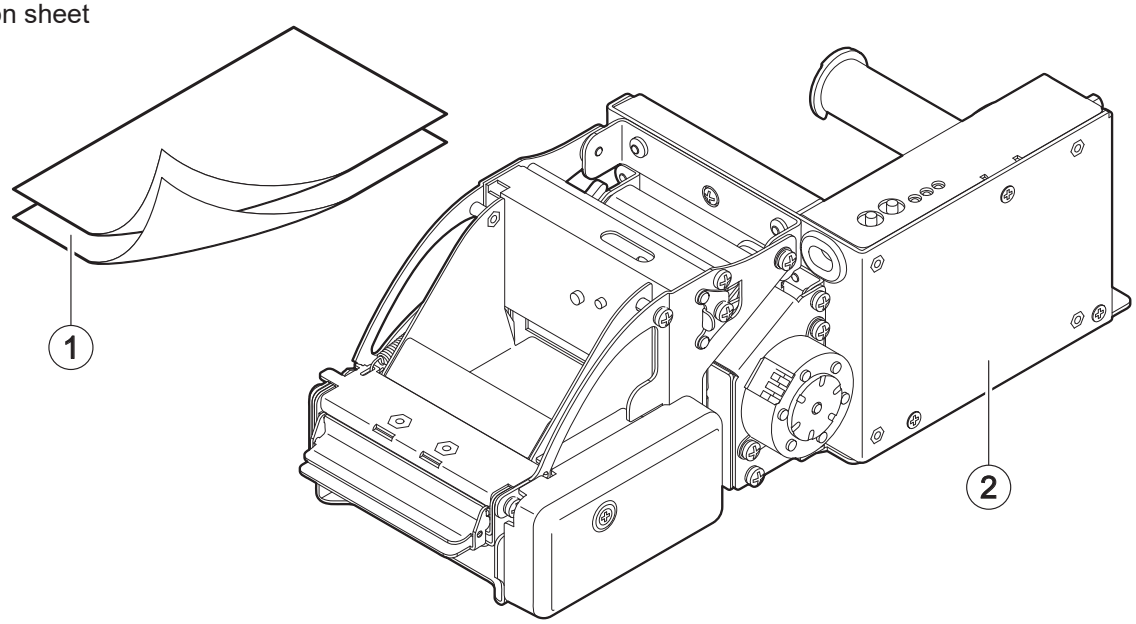
3 DESCRIPTION

3.1 Box contents

Remove the device from its carton being careful not to damage the packing material so that it may be re-used if the device is to be transported in the future.
Make sure that all the components illustrated below are present and that there are no signs of damage. If there are, contact customer service.

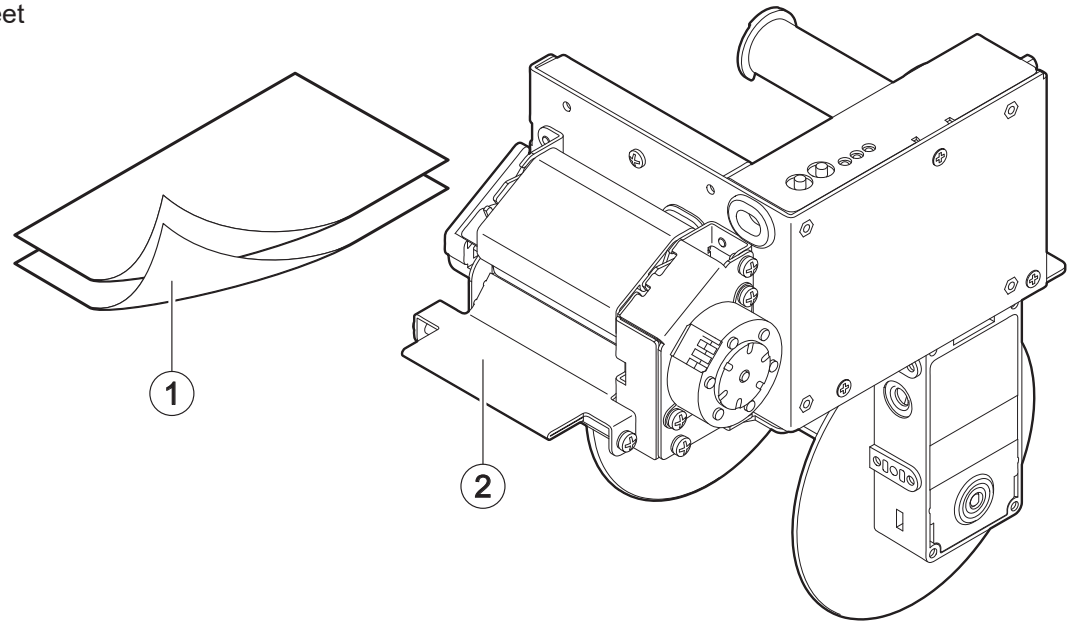
TPTCM60III EJC

1. Installation instruction sheet
2. Device



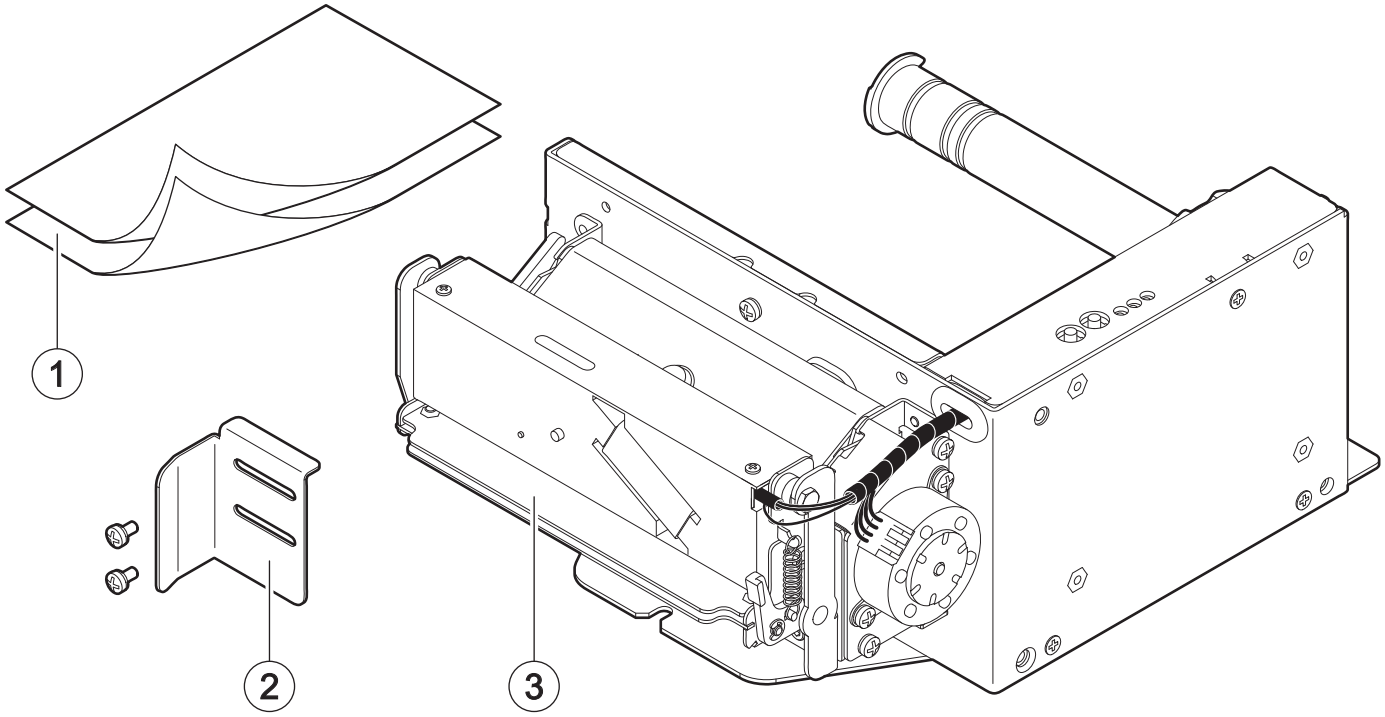
TPTCM60IIIL

1. Installation instruction sheet
2. Device



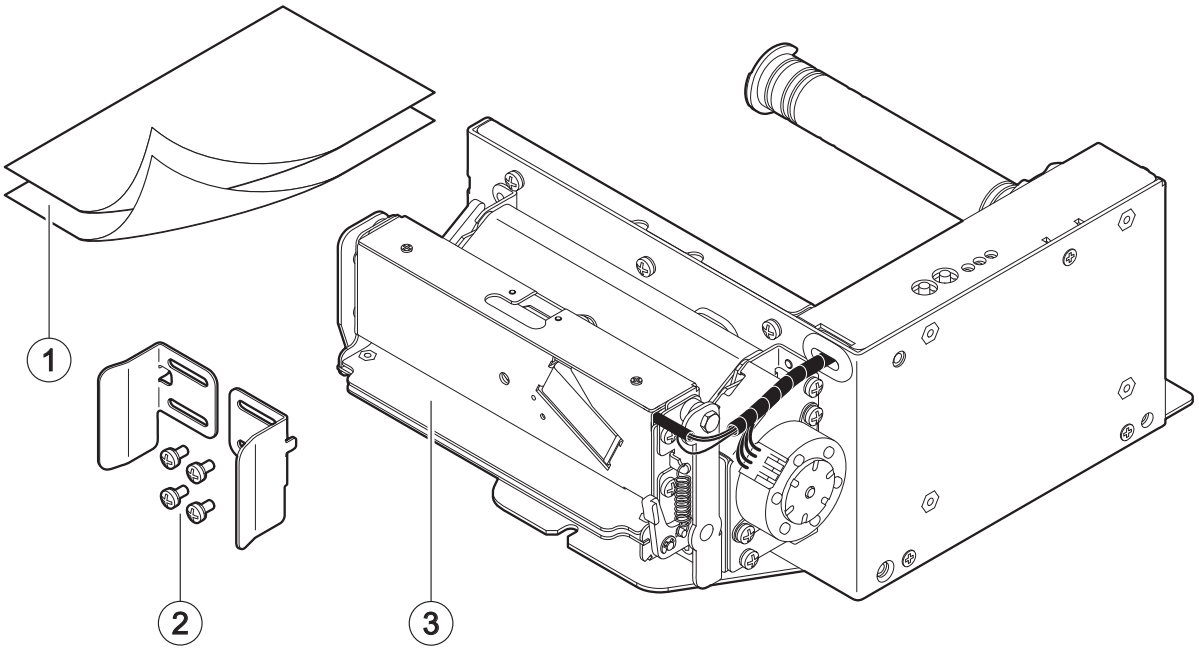
TPTCM112III, TPTCM112III 300 DPI

1. Installation instruction sheet
2. Paper guide bracket with fixing screws (x 2)
3. Device



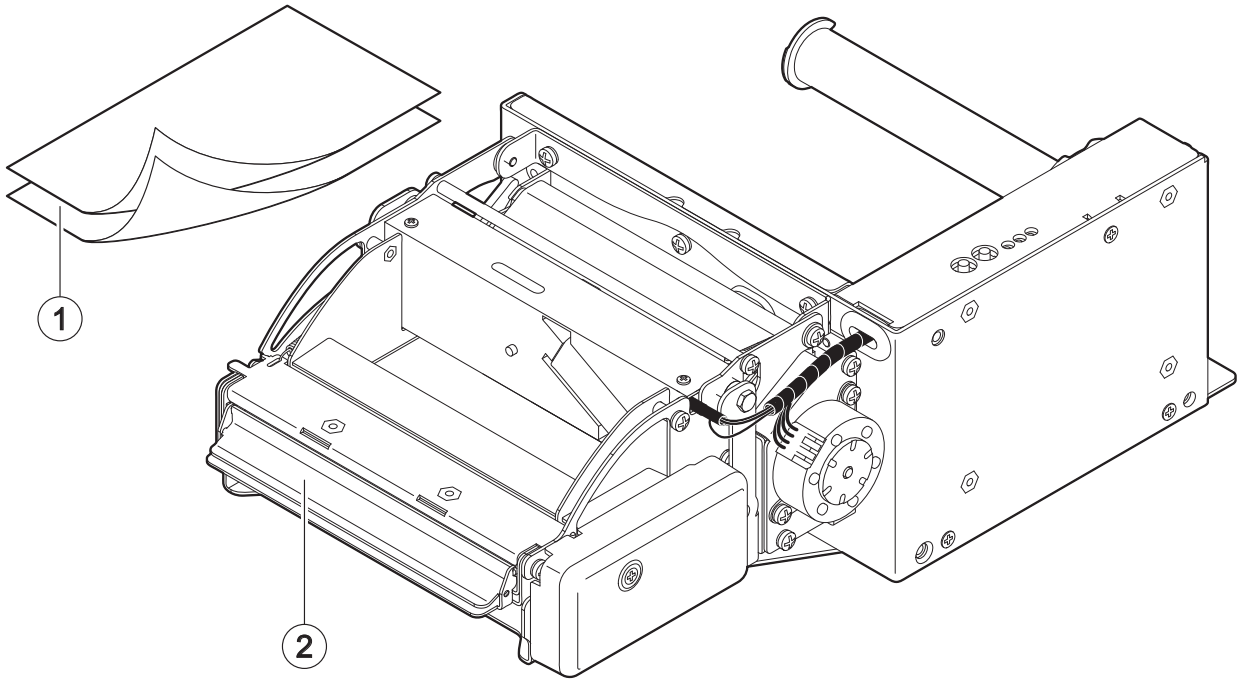
TPTCM112III STRONG CUT, TPTCM112III CL

1. Installation instruction sheet
2. Paper guide brackets (internal and external) with fixing screws (x 4)
3. Device



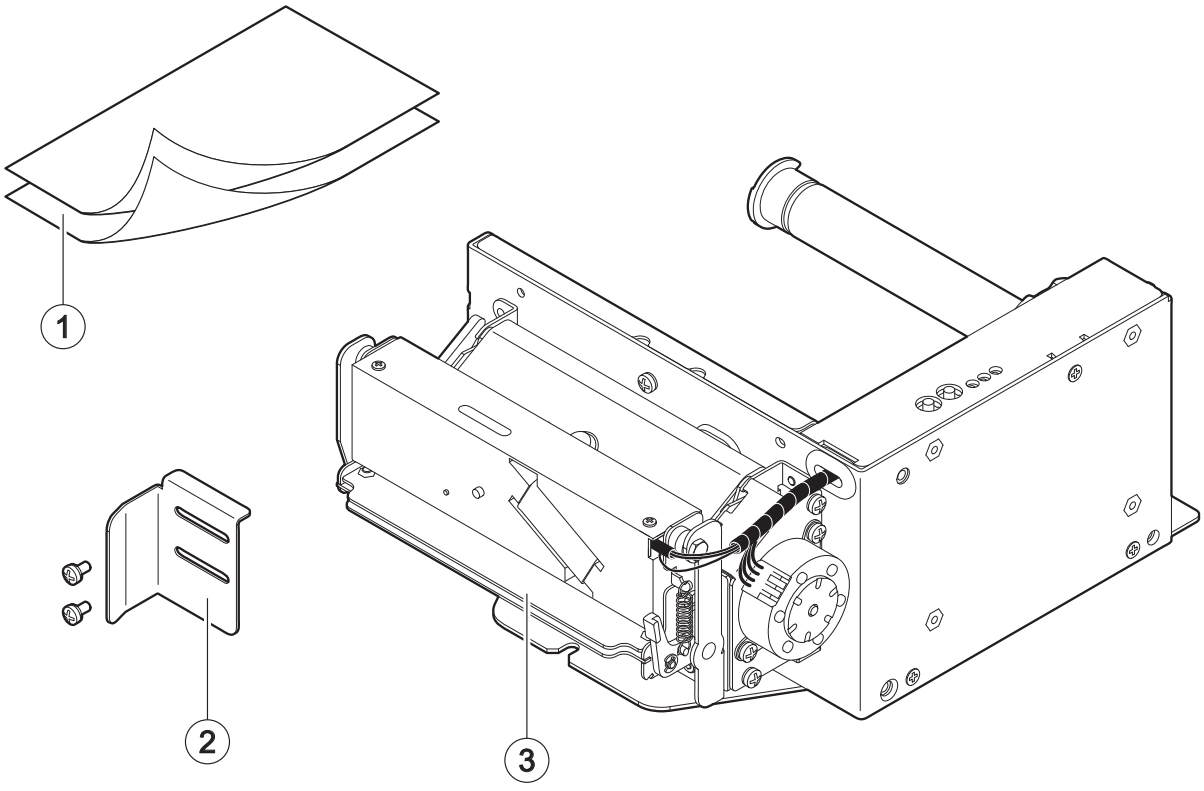
TPTCM112III EJC, TPTCM112III EJC 300 DPI

1. Installation instruction sheet
2. Device



TPTCM112IIIL

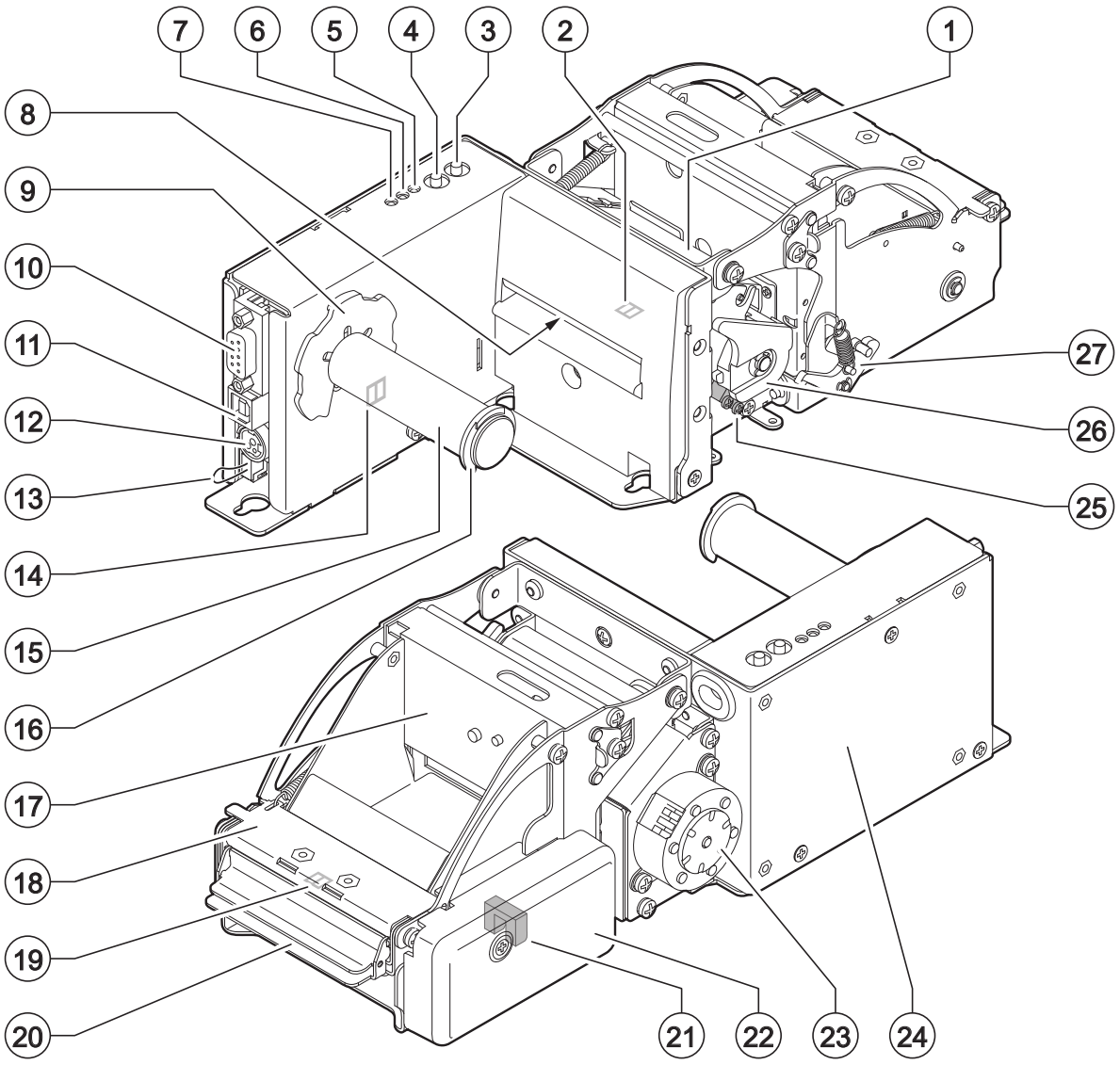
1. Installation instruction sheet
2. Paper guide bracket with fixing screws (x 2)
3. Device



3.2 Device components: external views

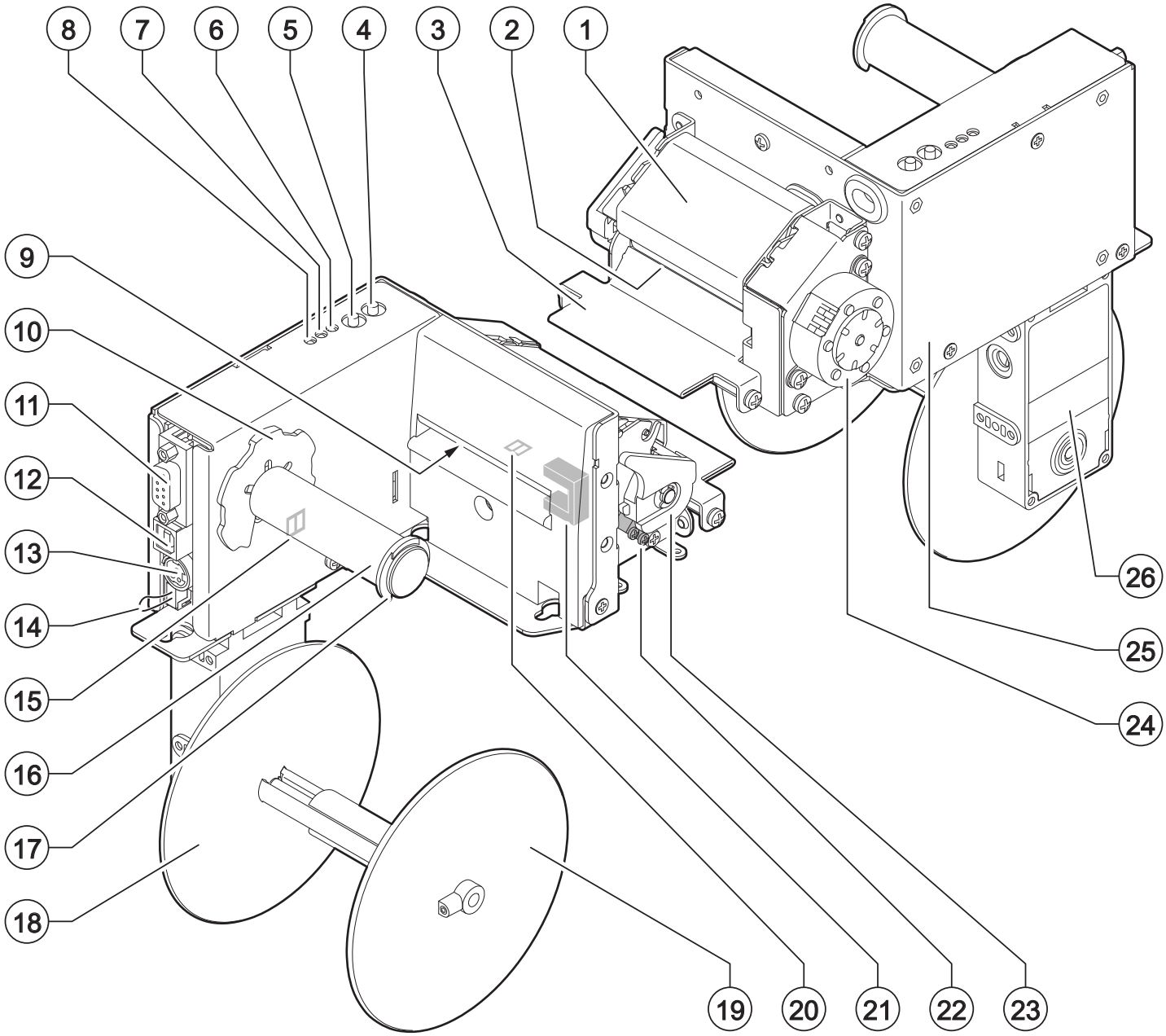
TPTCM60III EJC

1. Printing mechanism + head temperature sensor
2. Sensor for paper presence in input
3. LF LINE FEED key
4. FF FORM FEED key
5. POWER ON led
6. STATUS led
7. Low paper led
8. Paper input
9. Internal ring for roll blocking
10. RS232 serial port
11. USB port
12. Power supply port
13. Connector for low paper sensor + cap (for optional adjustable paper roll)
14. Low paper sensor
15. Roll holder pin 60 mm
16. External ring for roll blocking
17. Cutter
18. Inspection cover for ejector
19. Sensor for paper presence in output
20. Paper out
21. Sensor for ejector position
22. Cover for ejector gears
23. Printing mechanism motor
24. Device chassis
25. Sensor for print head lifted
26. Printing mechanism lifting lever
27. Lifting lever for ejector



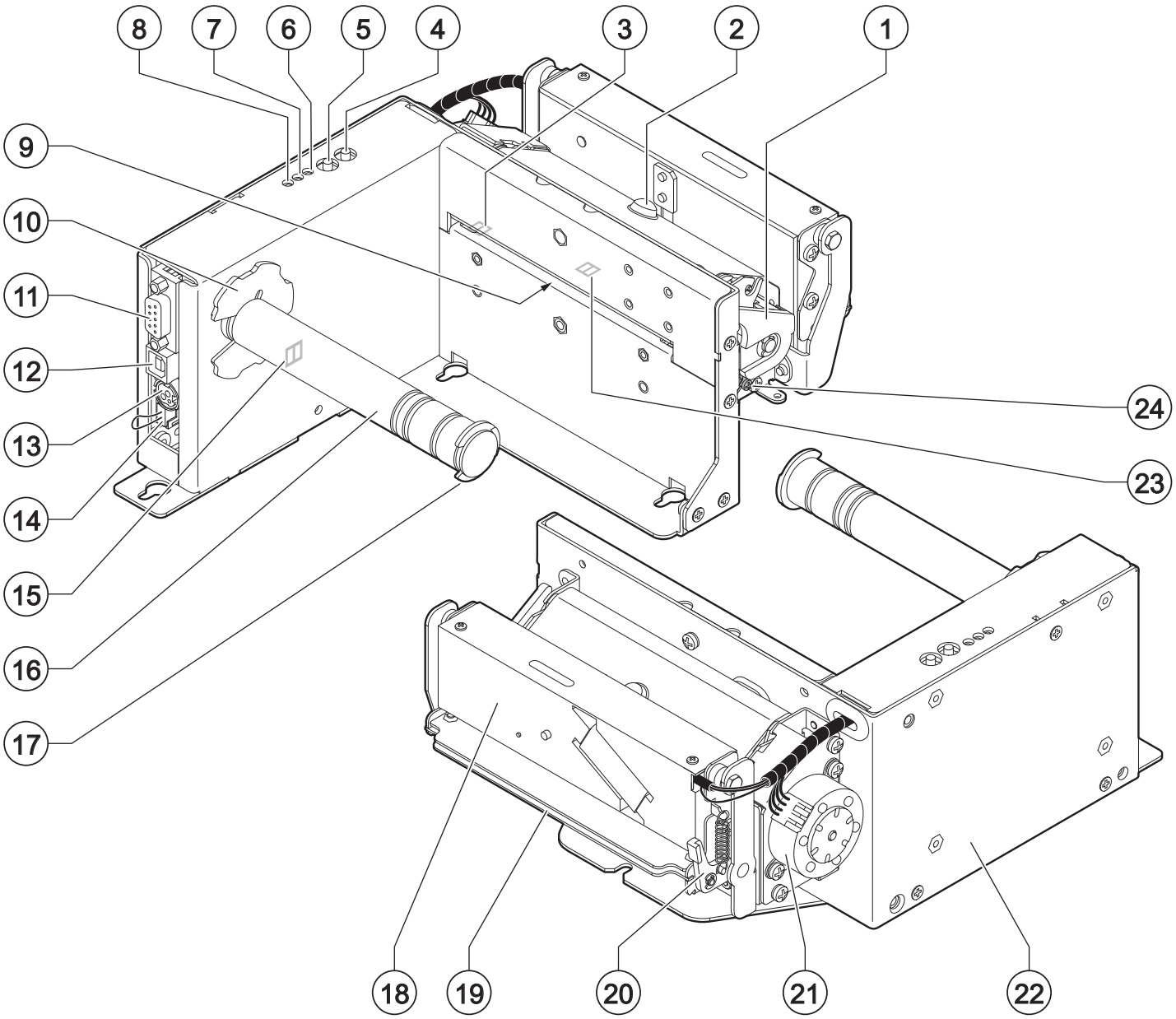
TPTCM60IIIL

1. Printing mechanism + head temperature sensor
2. Paper out
3. Peeler
4. LF LINE FEED key
5. FF FORM FEED key
6. POWER ON LED
7. STATUS LED
8. Low paper LED
9. Paper input
10. Internal ring for roll blocking
11. RS232 serial port
12. USB port
13. Power supply port
14. Connector for low paper sensor + cap (for optional adjustable paper roll)
15. Low paper sensor
16. Roll holder pin 60 mm
17. External ring for roll blocking
18. Roll locking disc (fixed)
19. Roll locking disc (adjustable)
20. Sensor for paper presence in input
21. Fork sensor for labels gap detection
22. Sensor for print head lifted
23. Printing mechanism lifting lever
24. Printing mechanism motor
25. Device chassis
26. Rewinder motor



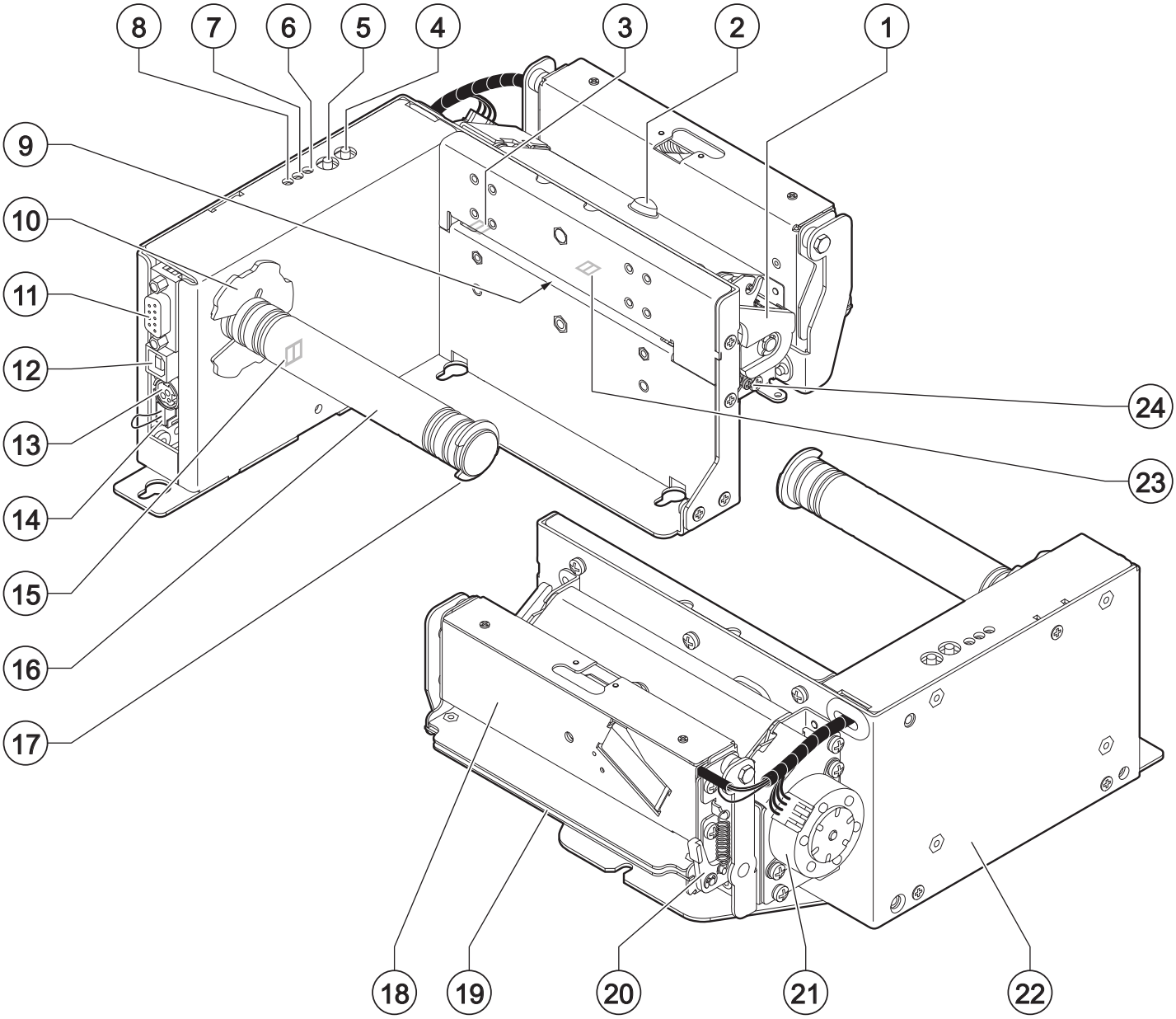
TPTCM112III, TPTCM112III 300 DPI, TPTCM112III CL

1. Printing mechanism lifting lever
2. Printing mechanism + head temperature sensor
3. Sensor for black mark alignment
4. LF LINE FEED key
5. FF FORM FEED key
6. POWER ON LED
7. STATUS LED
8. Low paper LED
9. Paper input
10. Internal ring for roll blocking
11. RS232 serial port
12. USB port
13. Power supply port
14. Connector for low paper sensor + cap (for optional adjustable paper roll)
15. Low paper sensor
16. Roll holder pin 80, 86, 100, 112 mm
17. External ring for roll blocking
18. Cutter
19. Paper out
20. Lifting lever for cutter
21. Printing mechanism motor
22. Device chassis
23. Sensor for paper presence in input
24. Sensor for print head lifted



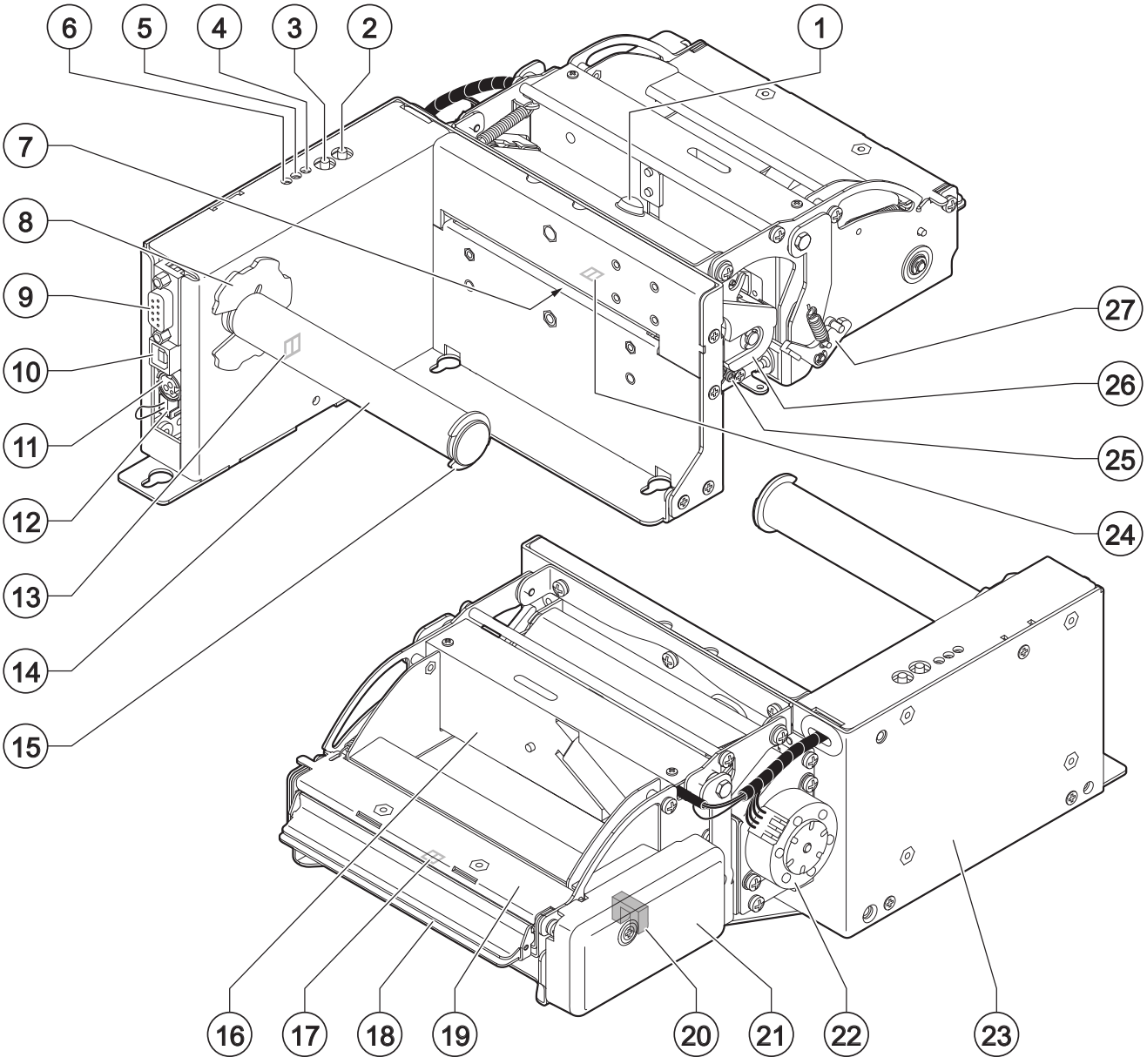
TPTCM112III STRONG CUT

1. Printing mechanism lifting lever
2. Printing mechanism + head temperature sensor
3. Sensor for black mark alignment
4. LF LINE FEED key
5. FF FORM FEED key
6. POWER ON LED
7. STATUS LED
8. Low paper LED
9. Paper input
10. Internal ring for roll blocking
11. RS232 serial port
12. USB port
13. Power supply port
14. Connector for low paper sensor + cap (for optional adjustable paper roll)
15. Low paper sensor
16. Roll holder pin 80, 86, 100, 112 mm
17. External ring for roll blocking
18. Strong Cut cutter
19. Paper out
20. Lifting lever for cutter
21. Printing mechanism motor
22. Device chassis
23. Sensor for paper presence in input
24. Sensor for print head lifted



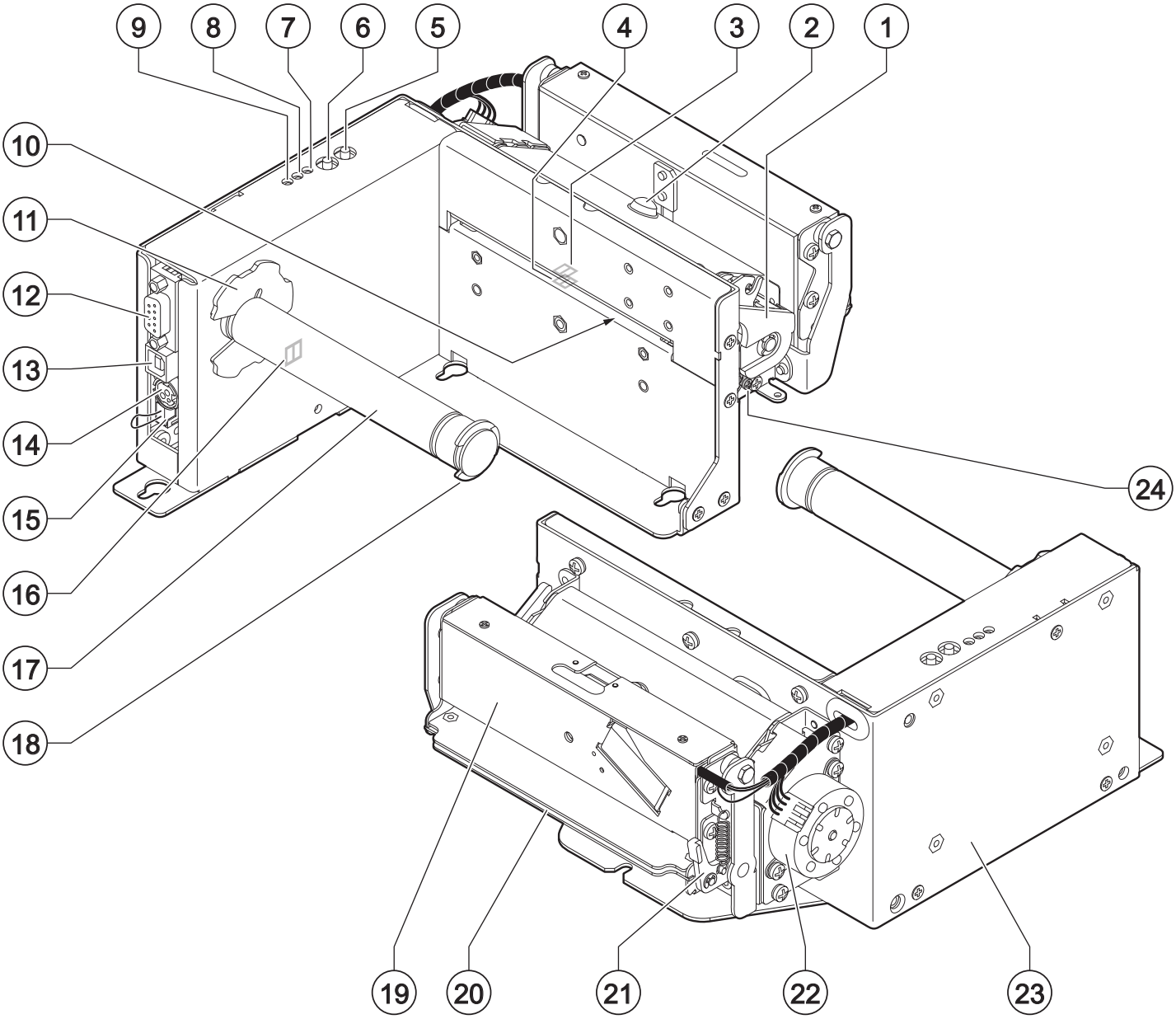
TPTCM112III EJC, TPTCM112III EJC 300 DPI

1. Printing mechanism + head temperature sensor
2. LF LINE FEED key
3. FF FORM FEED key
4. POWER ON LED
5. STATUS LED
6. Low paper LED
7. Paper input
8. Internal ring for roll blocking
9. RS232 serial port
10. USB port
11. Power supply port
12. Connector for low paper sensor + cap (for optional adjustable paper roll)
13. Low paper sensor
14. Roll holder pin 112 mm
15. External ring for roll blocking
16. Cutter
17. Sensor for paper presence in output
18. Paper out
19. Inspection cover for ejector
20. Sensor for ejector position
21. Cover for ejector gears
22. Printing mechanism motor
23. Device chassis
24. Sensor for paper presence in input
25. Sensor for print head lifted
26. Printing mechanism lifting lever
27. Lifting lever for ejector



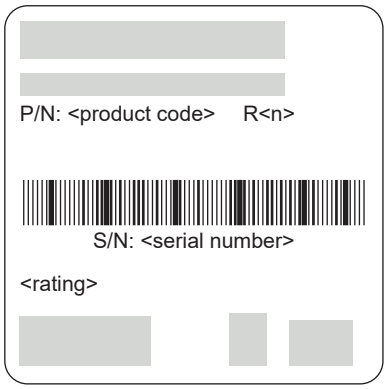
TPTCM112IIIL

1. Printing mechanism lifting lever
2. Printing mechanism + head temperature sensor
3. Upper sensor for labels gap detection
4. Lower sensor for labels gap detection
5. LF LINE FEED key
6. FF FORM FEED key
7. POWER ON LED
8. STATUS LED
9. Low paper LED
10. Paper input
11. Internal ring for roll blocking
12. RS232 serial port
13. USB port
14. Power supply port
15. Connector for low paper sensor + cap (for optional adjustable paper roll)
16. Low paper sensor
17. Roll holder pin 101, 112 mm
18. External ring for roll blocking
19. Cutter
20. Paper out
21. Lifting lever for cutter
22. Printing mechanism motor
23. Device chassis
24. Sensor for print head lifted

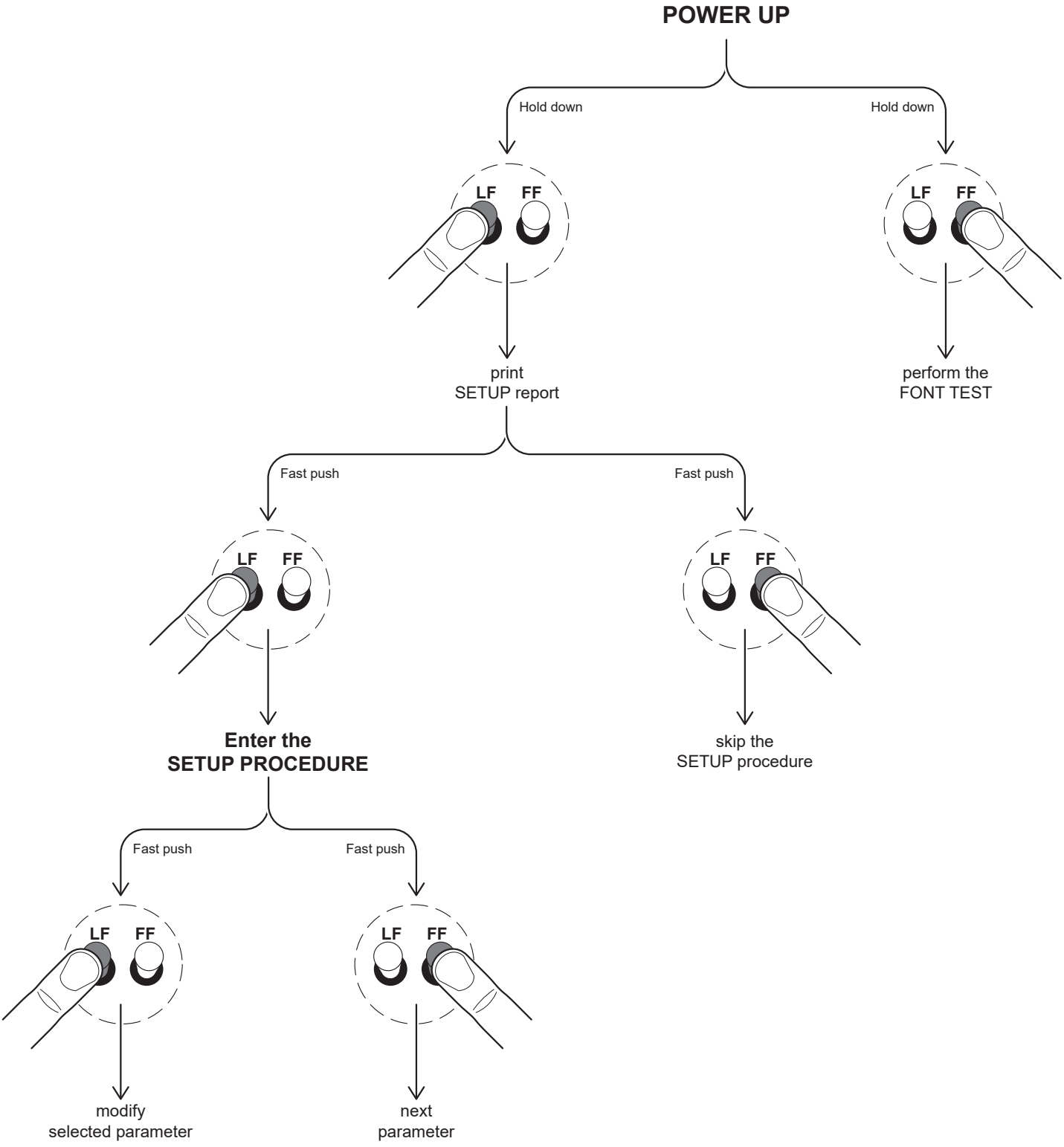


3.3 Product label

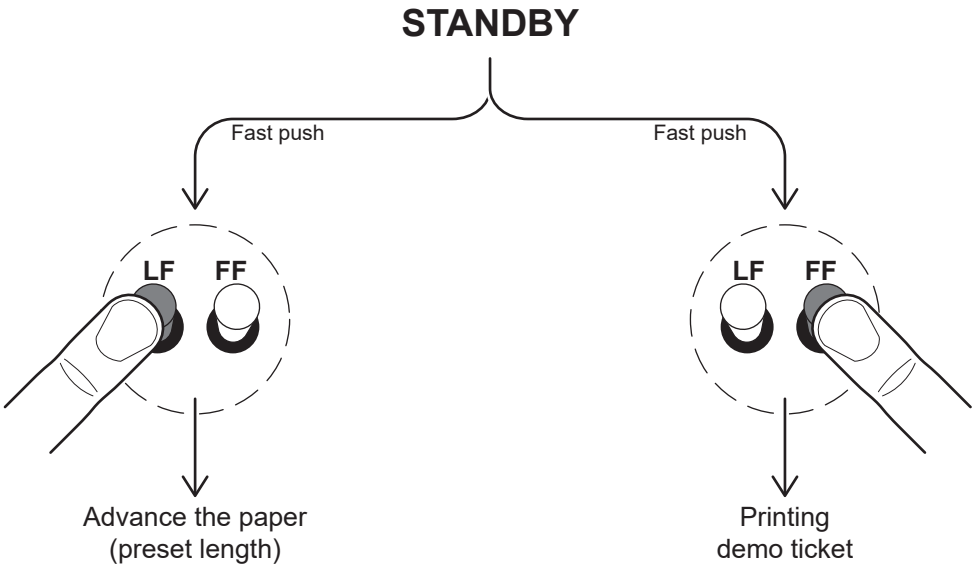
The main data used to identify the machine are shown on the label attached to the bottom of the device.
In particular, it shows the electrical data for the connection to a power source. It also shows the product code, the serial number and the hardware revision (R).



3.4 Key functions: power up



3.5 Key functions: standby



3.6 Status messages

The three status LED indicate hardware status of device. Given in the table below are the various LEDs signals and the corresponding device status.

POWER ON LED

Signals the status of the powered device.

STATUS LED		DESCRIPTION
-	OFF	DEVICE NOT POWERED
GREEN	ON	DEVICE POWERED

LOW PAPER LED

Signals the status of the powered device.

STATUS LED		DESCRIPTION
-	OFF	PAPER IN ABUNDANCE
RED	ON	LOW PAPER

STATUS LED

Signals the hardware status of device.

STATUS LED		DESCRIPTION
-	OFF	DEVICE OFF
YELLOW	ON	DEVICE ON: NO ERROR
	x 2	PRINTHEAD OVERHEATED
	x 3	PAPER END
	x 4	POWER SUPPLY VOLTAGE INCORRECT
	x 5	RECEPTION ERROR (PARITY, FRAME ERROR, OVERRUN ERROR)
	x 6	COMMAND NOT RECOGNIZED
	x 7	COMMAND RECEPTION TIME OUT
	x 8	PRINTHEAD LIFTED
	x 9	PAPER JAM
	x 10	AUTOCUTTER ERROR
	x 11	RAM ERROR
	x 12	EXTERNAL MEMORY ERROR

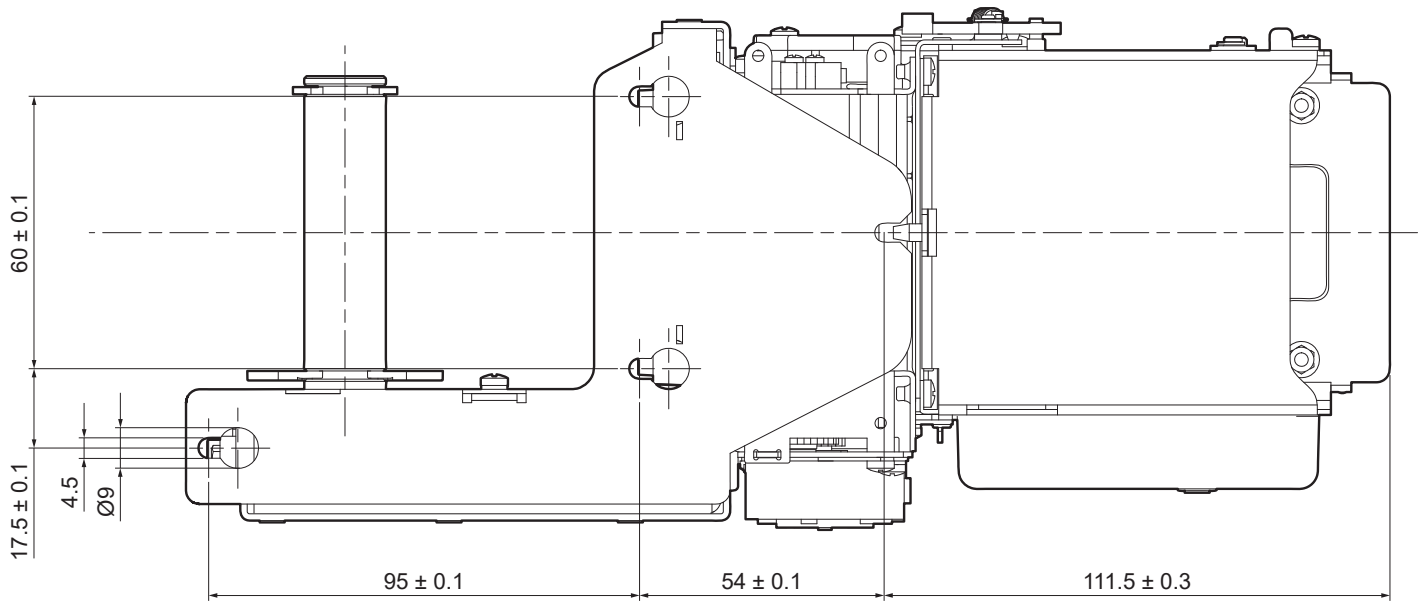
4 INSTALLATION

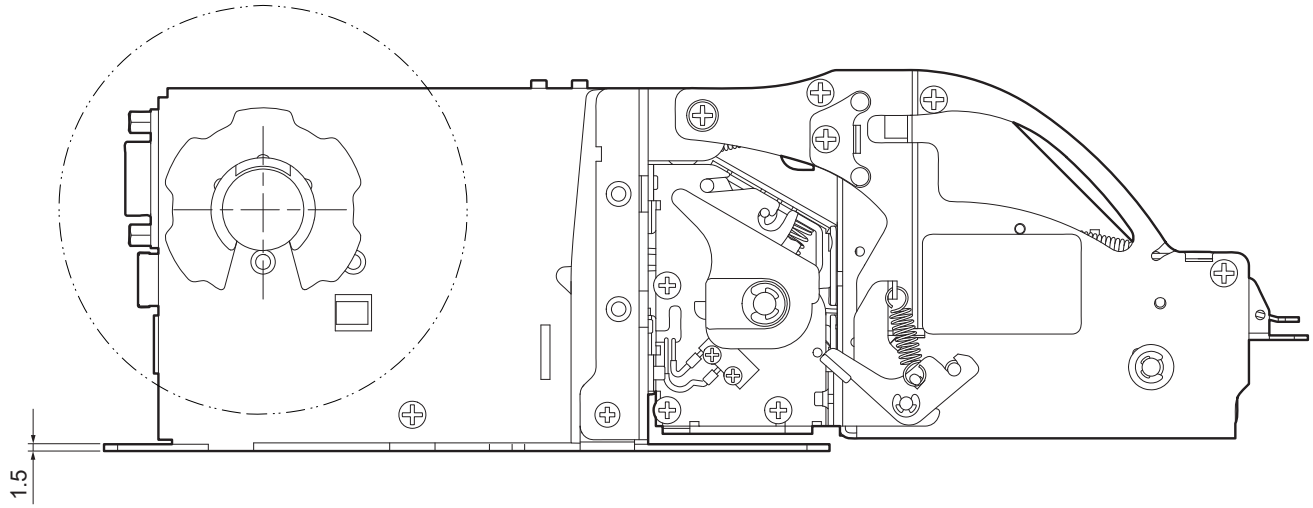
4.1 Fastening

All the dimensions shown in following figures are in millimetres.

TPTCM60III EJC

The device is provided with three fixing holes on the bottom of device (see following figure).
To install the device on a panel, use three M4 screws.

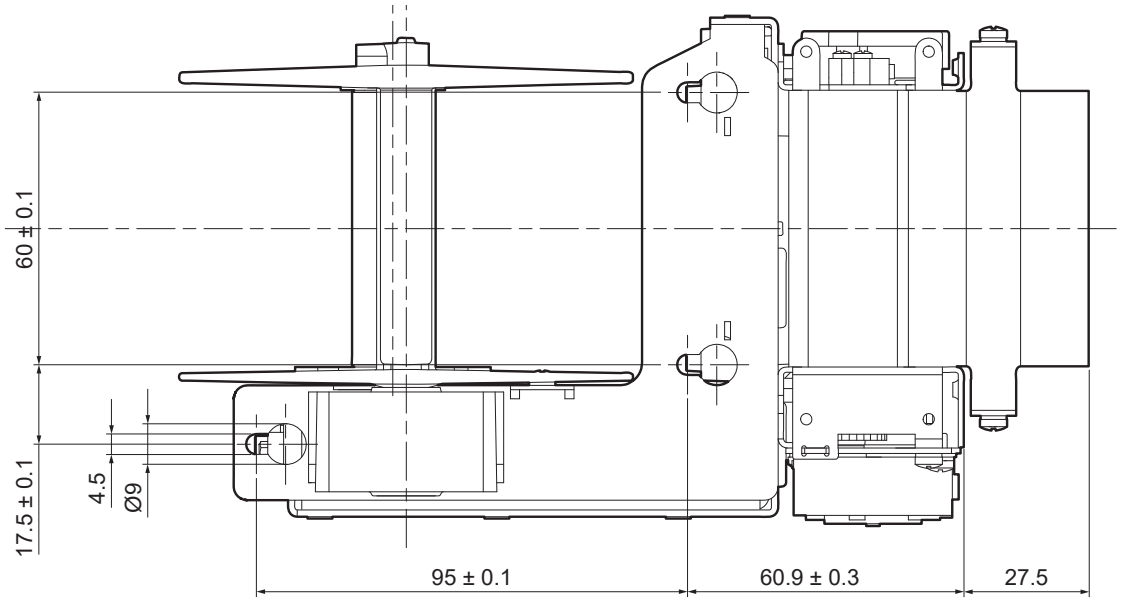


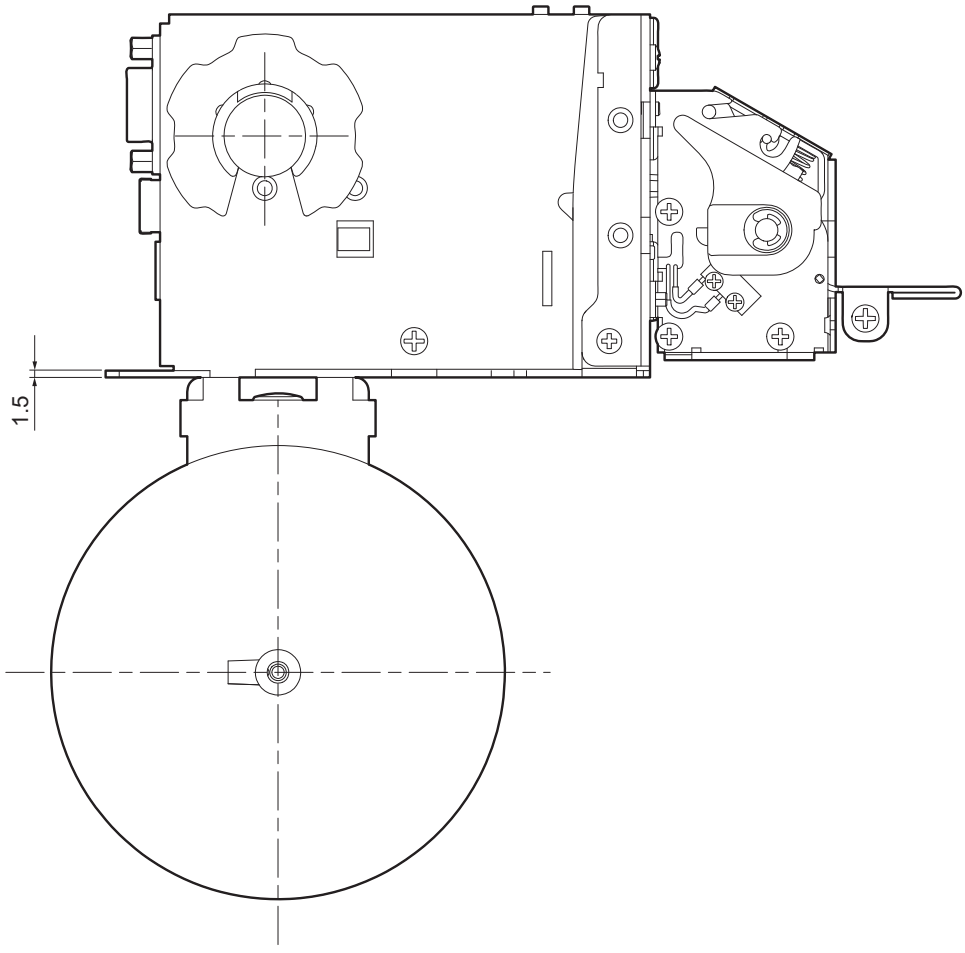


TPTCM60IIIL

The device is provided with three fixing holes on the bottom of device (see following figure).
To install the device on a panel, use three M4 screws.

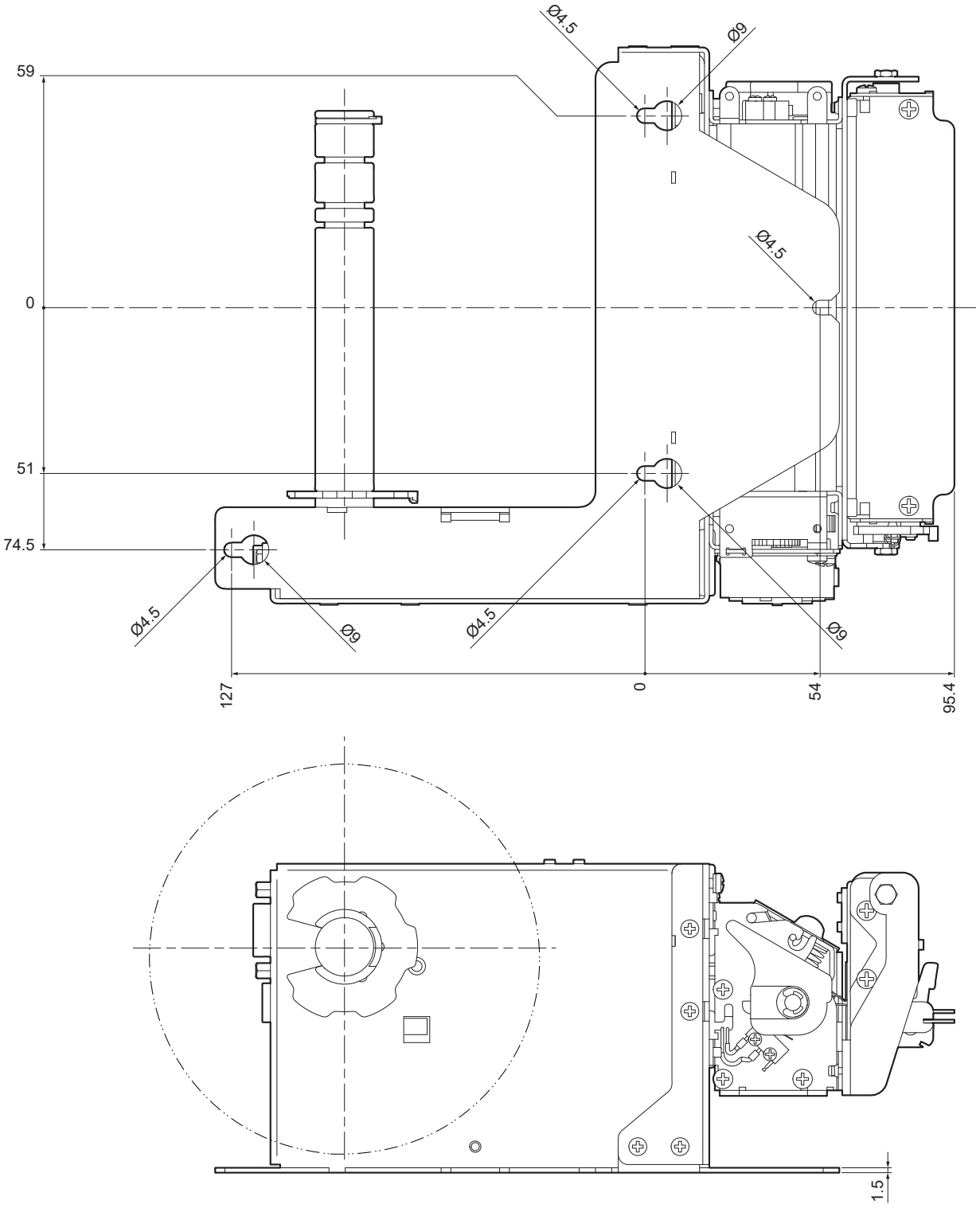
Prepare the panel considering the presence of the rewinder and the paper path (see paragraph 5.4 and paragraph 9.3).





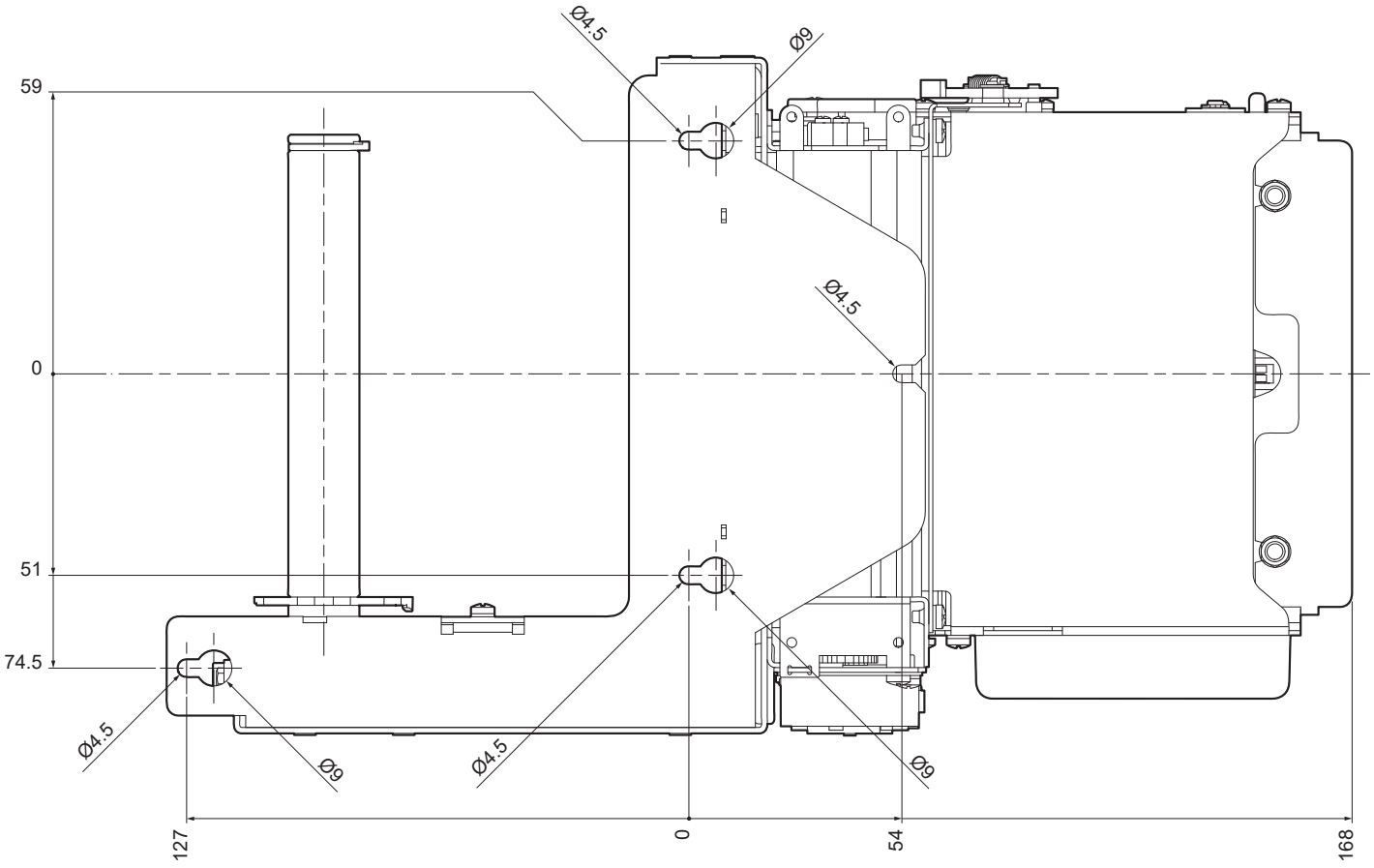
TPTCM112III, TPTCM112III EJC, TPTCM112III STRONG CUT, TPTCM112IIIL, TPTCM112III CL

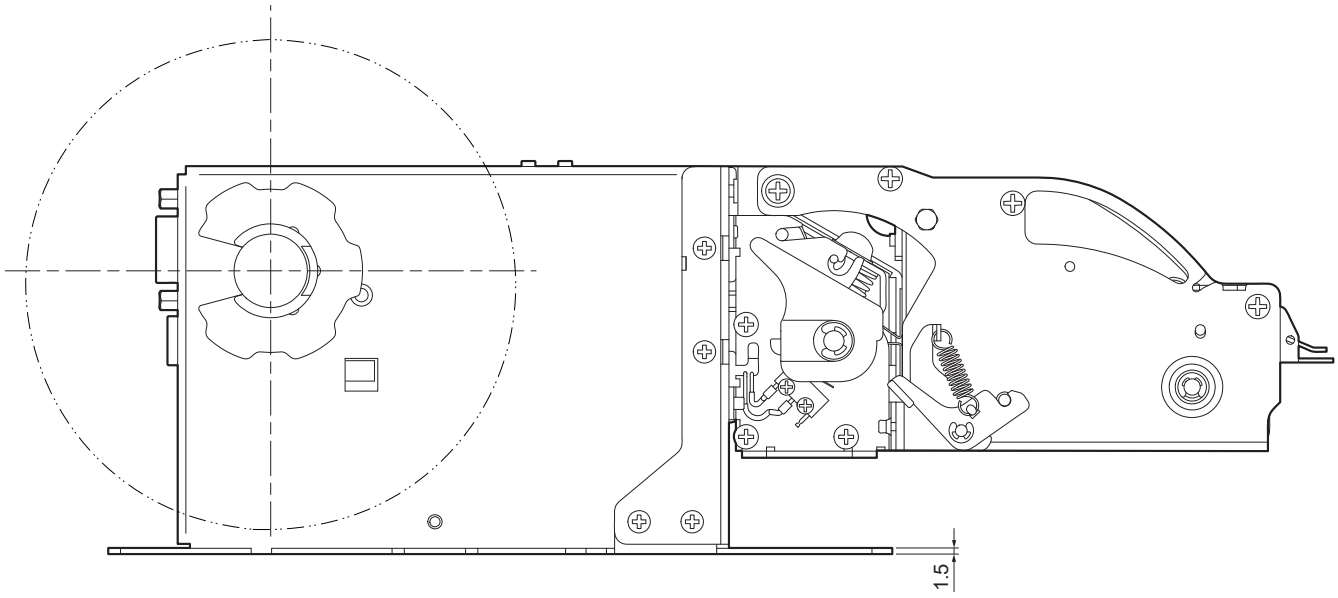
The device is provided with four fixing holes on the bottom of device (see following figure).
To install the device on a panel, use four M4 screws.



TPTCM112III EJC, TPTCM112III EJC 300 DPI

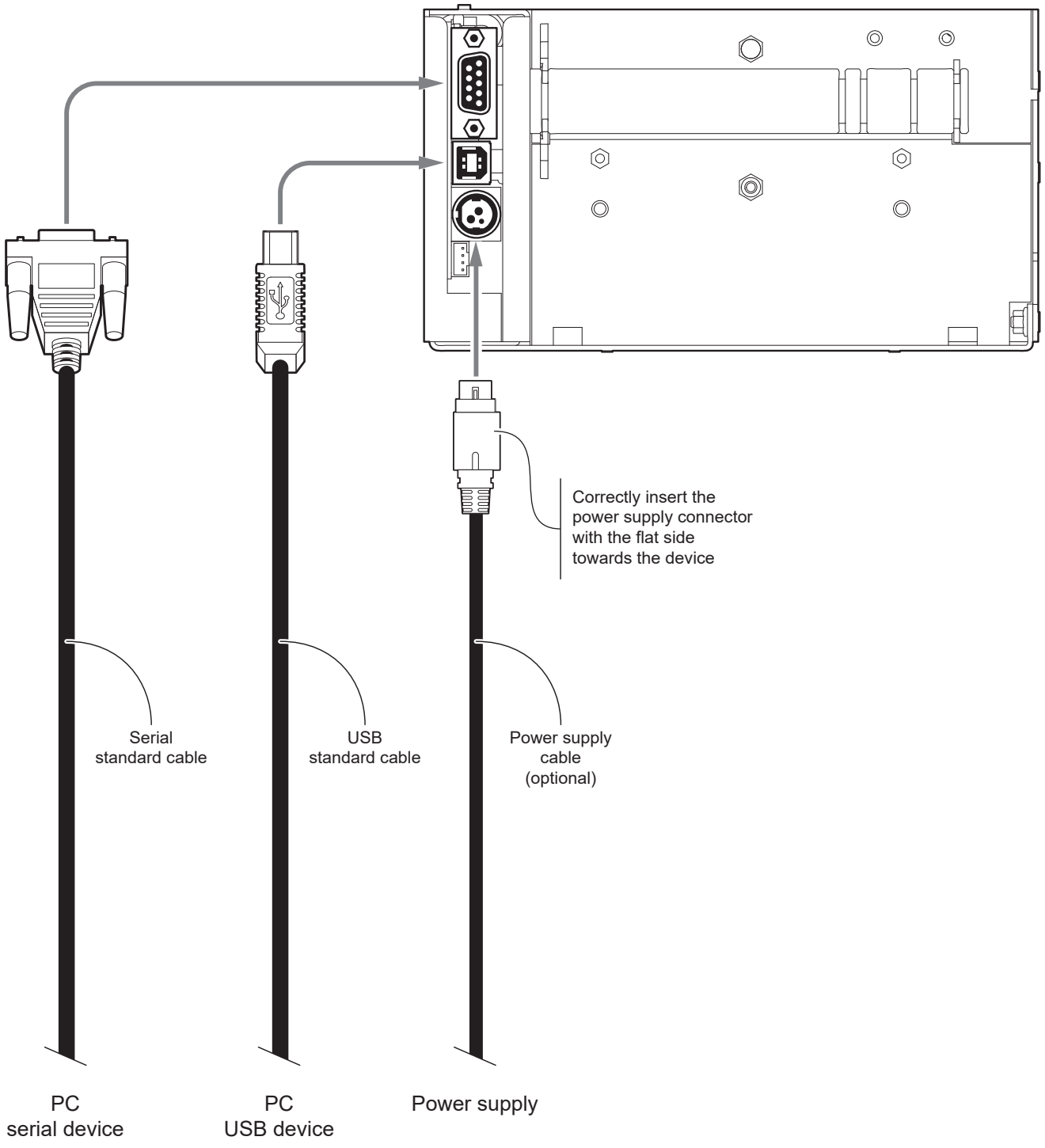
The device is provided with four fixing holes on the bottom of device (see following figure).
To install the device on a panel, use four M4 screws.





4.2 Connections

The following figure shows the possible connections for the device. When the RS232 and USB communication cables are connected to the device at the same time, communication takes place via the USB port.



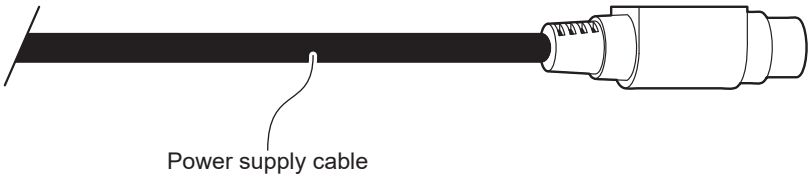
ATTENTION: In some conditions, we recommend the installation of a ferrite core on the power supply cable.

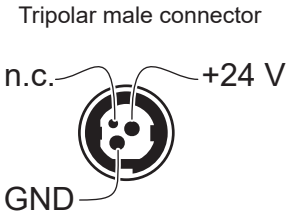
4.3 Pinout

POWER SUPPLY
Tripolar female connector

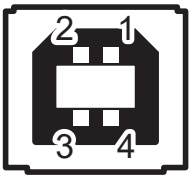
J19	1	GND
	2	+24 Vdc
	3	GND
	4	Frame GND

The following figure shows the connector pinout of power supply cable:



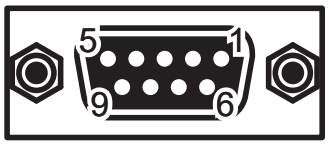


ATTENTION:
Respect power supply polarity.



USB INTERFACE
Female USB type B connector

J12	1	USB0_VBUS (out)
	2	USB0_D-
	3	USB0_D+
	4	GND



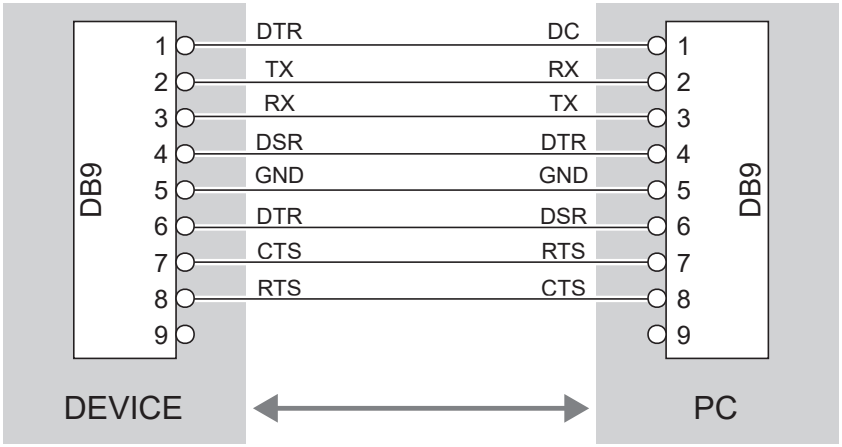
RS232 SERIAL INTERFACE

Female DB9 connector

J10	1	DT	
	2	TX	During transmission, takes the values -VRS232 and + VRS232 depending on data
	3	RX	During reception, takes the values -VRS232 and +VRS232 depending on data
	4	DS	
	5	GND	
	6	DT	When +VRS232, device is power on
	7	CT	
	8	RT	When +VRS232, device is ready to receive data
	9	VCC	

Given the presence of the RS232 standard, logic value “0” corresponds to the voltage value +VRS232 (voltage value between +3Vdc and +15Vdc) and logic value “1” corresponds to the voltage value -VRS232 (voltage value between -3Vdc and -15Vdc.

DEVICE > PC connection
The following picture shows an example of connection between the device and a personal computer using a 9 pin RS232 serial connector:



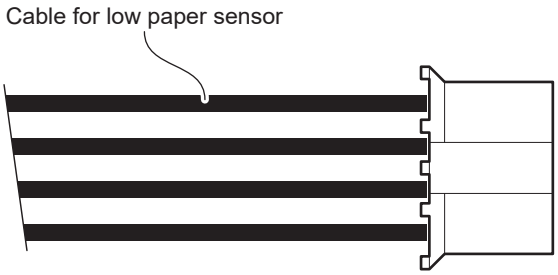
When use a serial cable, we recommend the installation of a ferrite core on the power supply cable.

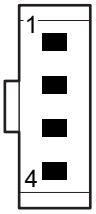
LOW PAPER

4 ways male JST connector (S4B-PH-K-S)

J17	1	VCC	
	2	QF-EXT	(in)
	3	QF-INT	
	4	GND	

The following figure shows the pinout of the connector of the cable for low paper to use for the device:





Female JST connector series PHR-4

PIN	Cable color	Signal
1	Red	+5V
2	Blue	NPE (input)
3	Black	n.c.
4	Yellow	GND

4.4 Driver and SDK

The drivers for the following operating system are available in the website www.custom4u.it:

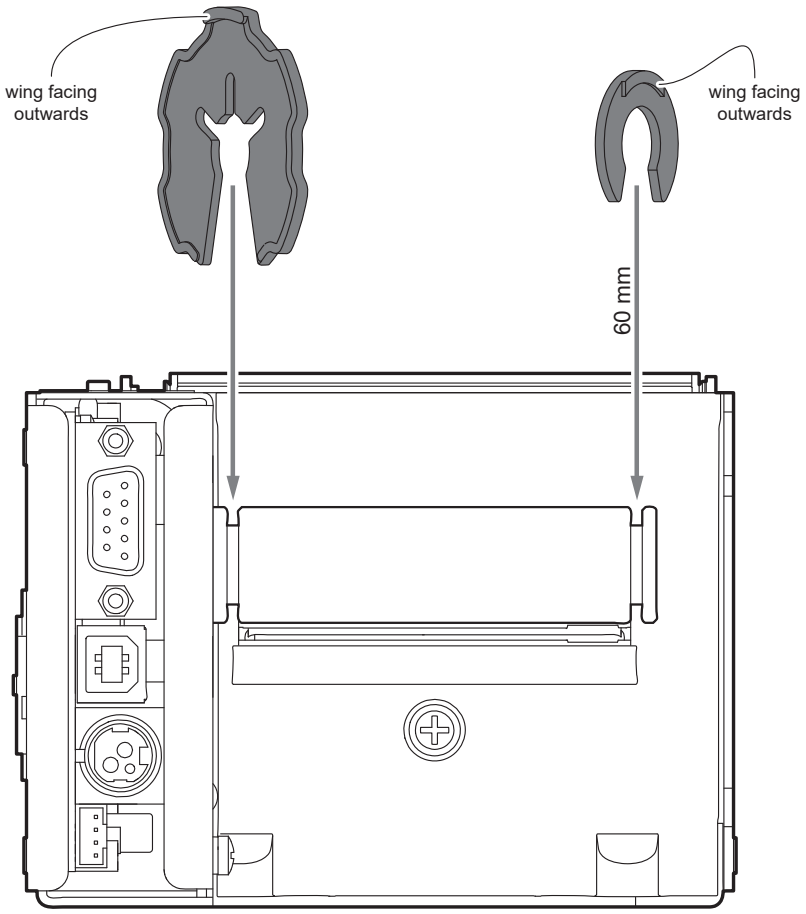
OPERATING SYSTEM	DESCRIPTION	INSTALLATION PROCEDURE
Windows	Driver for Windows XP	From the START menu, press Run and type-in the path where the SW was saved on your PC, then click OK. Follow the instructions that appear on the screen to install the driver.
	Driver for Windows VISTA (32/64 bit)	
	Driver for Windows 7 (32/64 bit)	
	Driver for Windows 8 (32/64 bit)	
	Driver for Windows 8.1 (32/64 bit)	
	Driver for Windows 10 (32/64 bit)	
	Self-installing driver for Virtual COM (32/64 bit) (see paragraph 6.5)	
Linux	32/64 bit	Follow the instruction get back on the “Readme.txt” file. You can find it in the software package downloaded in advance.

5 OPERATION

5.1 Adjusting paper width

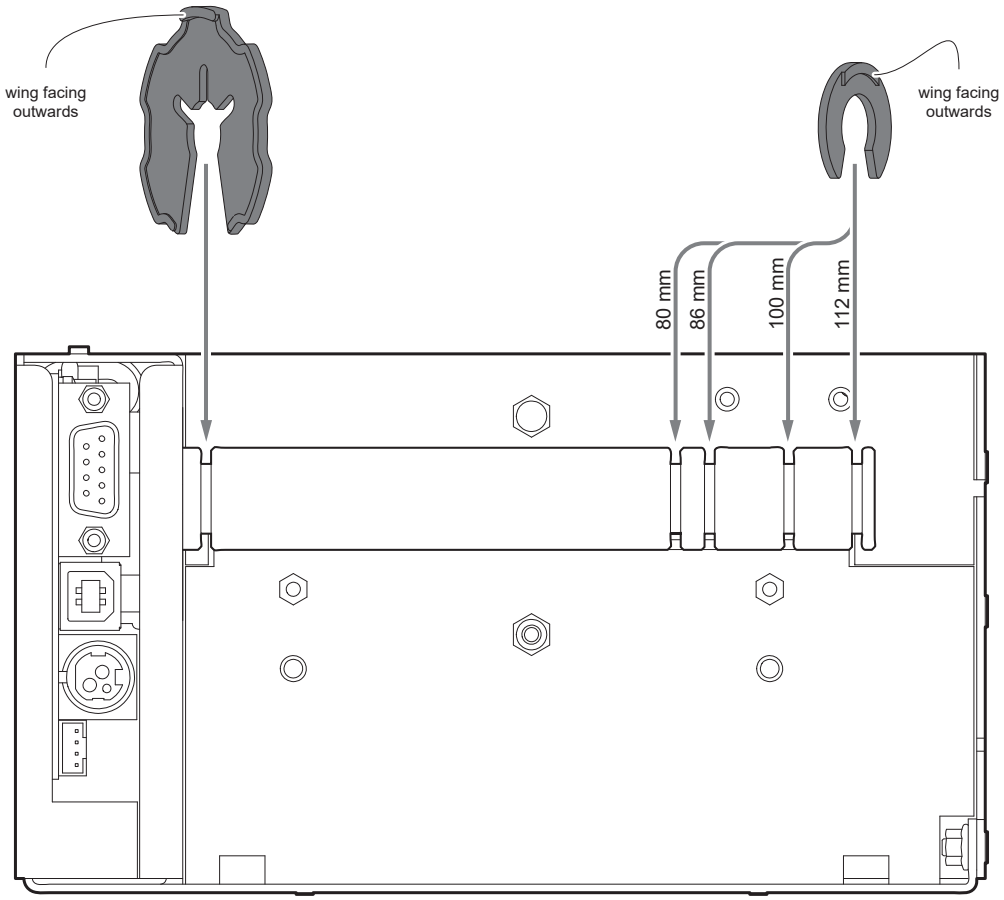
TPTCM60III EJC, TPTCM60IIIL

The devices manage only 60 mm paper width roll. However, it is necessary to correctly place the two rings for roll blocking (internal and external) to ensure the right paper alignment inside the device.

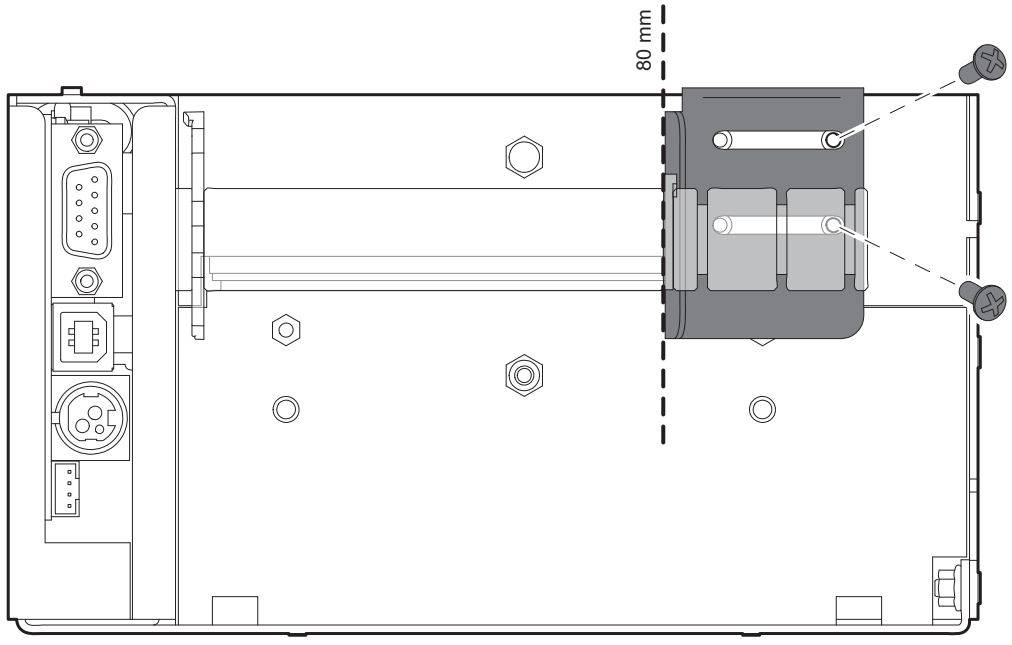


TPTCM112III, TPTCM112III 300 DPI, TPTCM112III EJC, TPTCM112III EJC 300 DPI, TPTCM112IIIL

Paper width may be set to 80, 100 or 112 mm by assembling the internal adjustment ring and modifying the position of the external adjustment rings to ensure the right paper alignment inside the device (see the following figure).

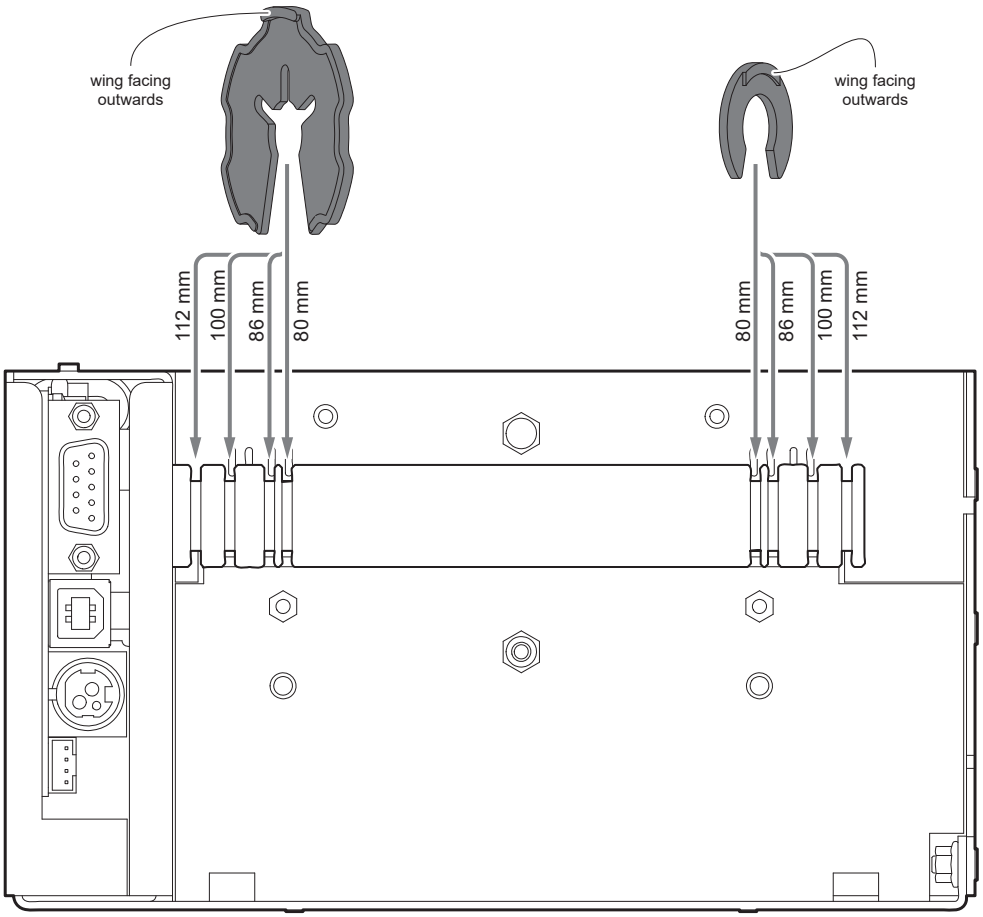


To manage paper width of 80, 86 or 100 mm, fix and correctly place the paper guide bracket provided with the device. The following figure shows an example of bracket fixing for 80 mm paper width.

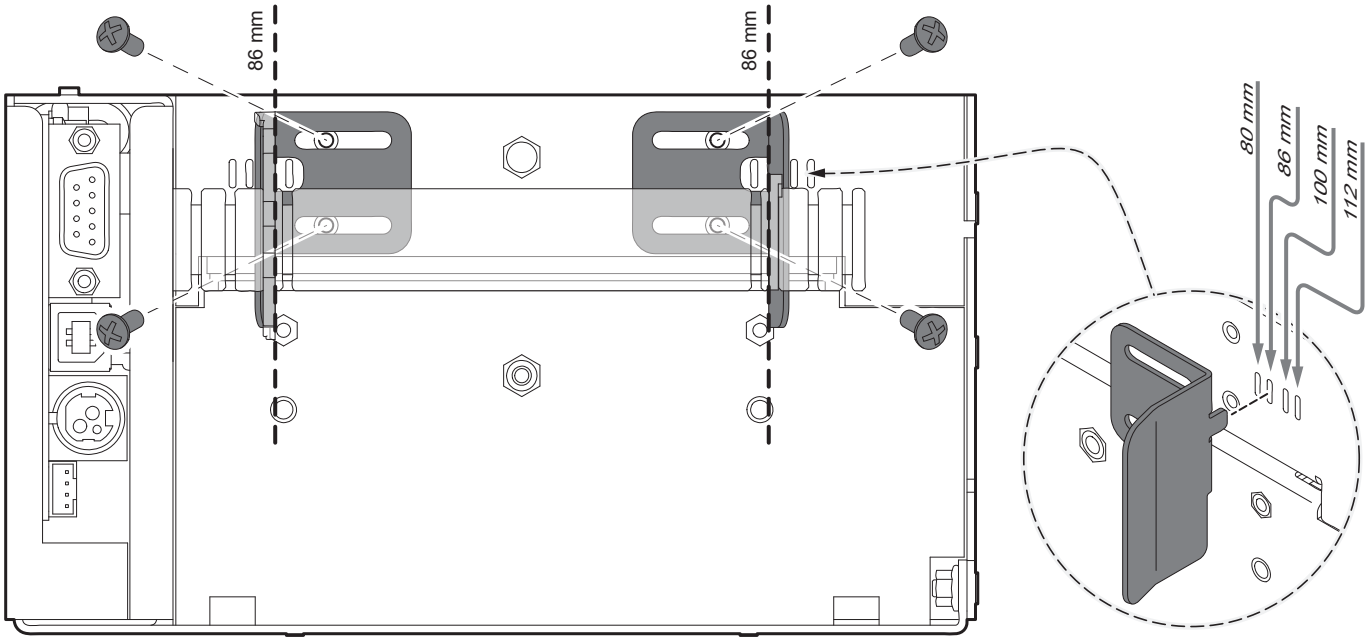


TPTCM112III STRONG CUT, TPTCM112III CL

Paper width may be set to 80, 86, 100 or 112 mm by modifying the position of the adjustment rings (internal and external) to ensure the right paper alignment inside the device (see the following figure).

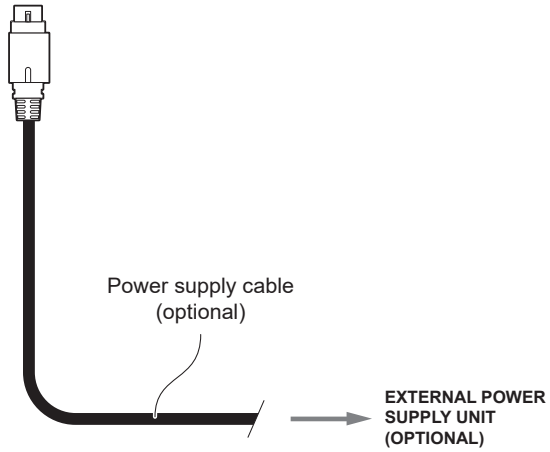


To manage paper width of 80, 86 or 100 mm, fix and correctly place the two paper guide brackets provided with the device. The following figure shows an example of bracket fixing for 86 mm paper width.



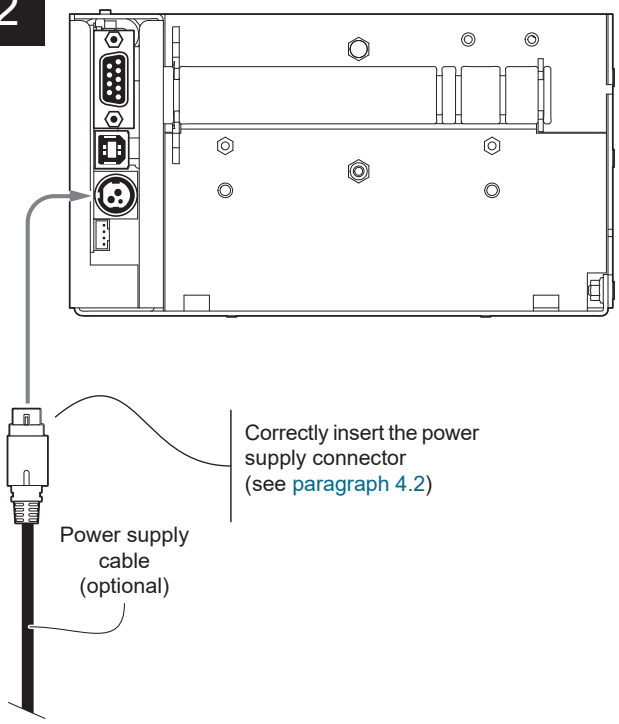
5.2 Switch the device on

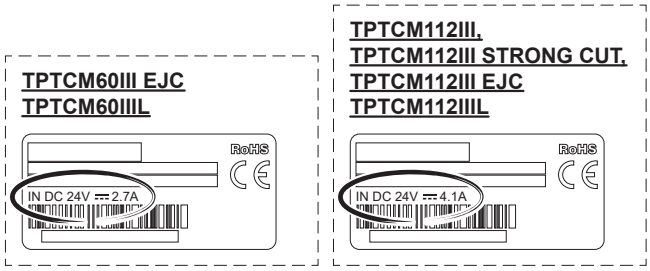
1



Connect the power supply cable
to an external power supply unit.

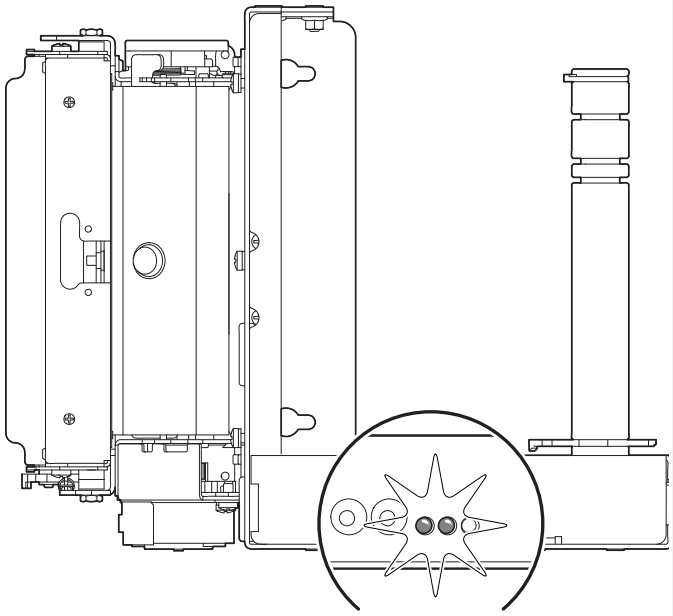
2





Connect the power supply cable to the device.
Use the type of electrical power supply
indicated on the label.

3



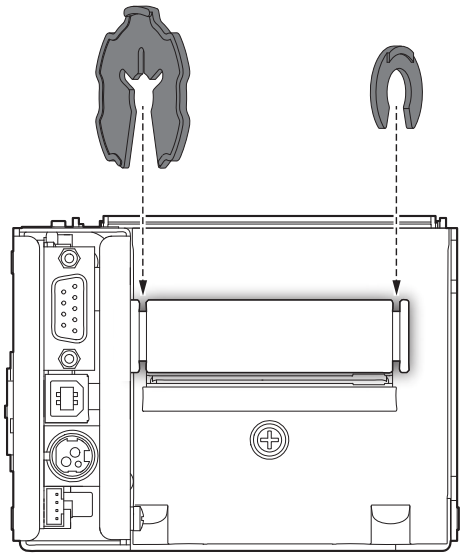
The status LED (yellow) and the power on LED (green)
turn on and the device is ready.

5.3 Loading the paper roll

To load the paper proceed as follows.
At every change of paper, check inside the device to locate and remove any scraps of paper.

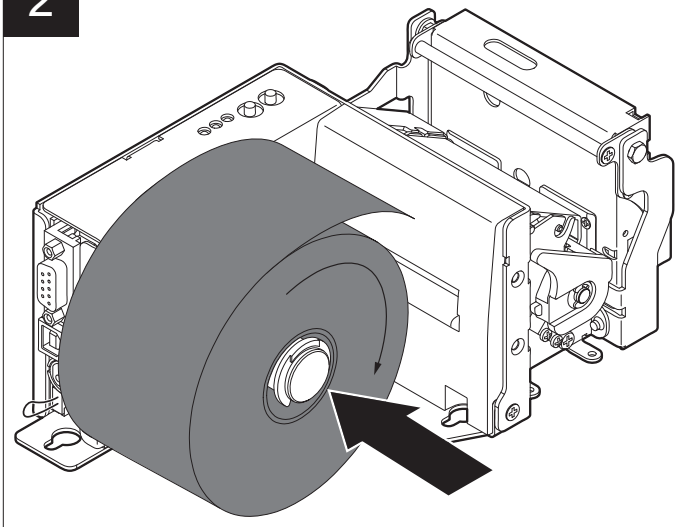
TPTCM60III EJC, TPTCM60IIIL

1



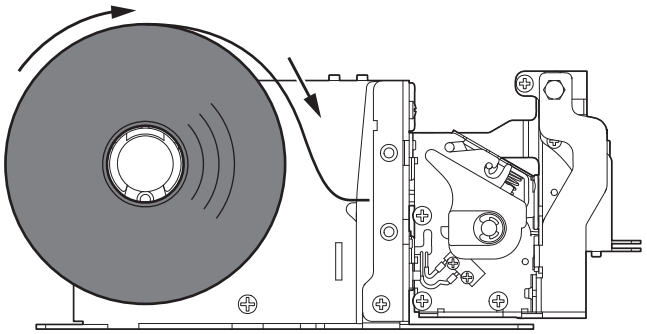
Assemble the two rings
(see paragraph 5.1)

2



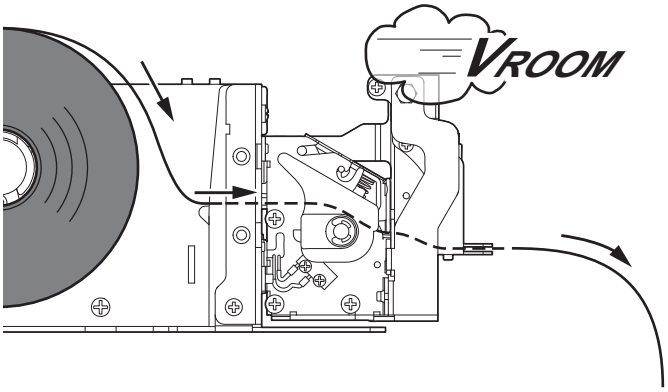
Insert the paper roll on the pin
so that it unrolls correctly.

3



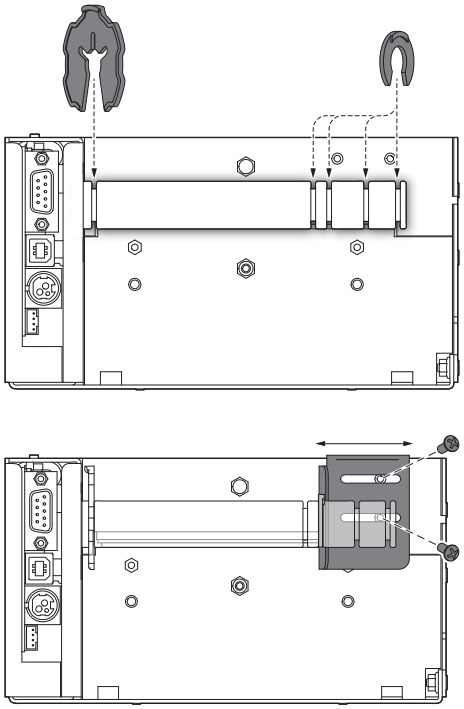
Insert the paper into the input mouth.

4



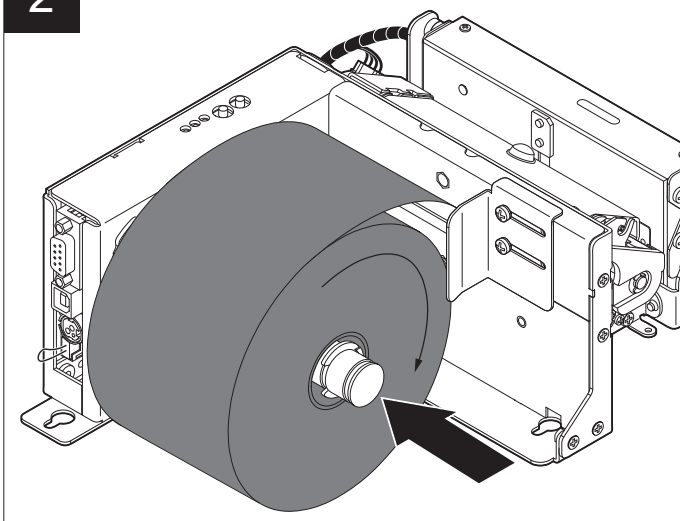
Wait until the paper is
automatically loaded and cut.

1



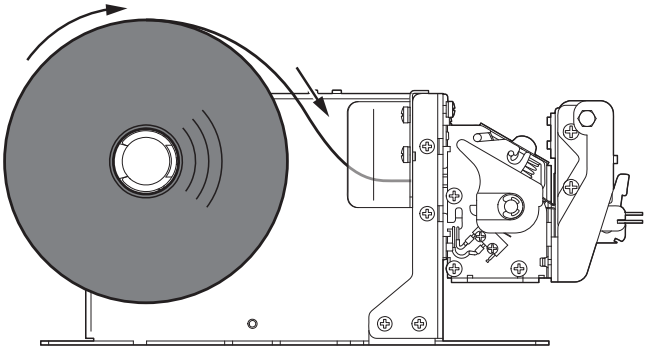
If necessary, adjust the paper width by assembling the two rings and the paper guides (see paragraph 5.1).

2



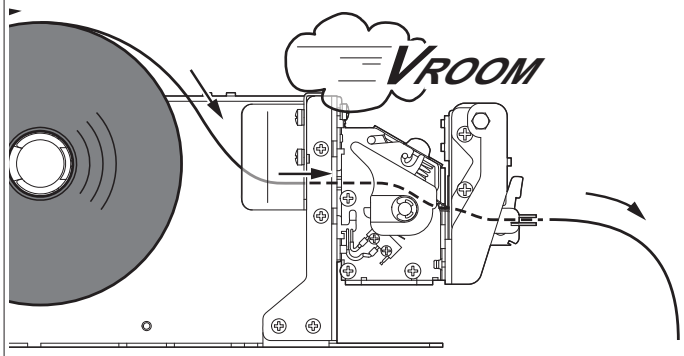
Insert the paper roll on the pin so that it unrolls correctly.

3



Insert the paper into the input mouth. Be sure that the paper is correctly positioned into paper guides.

4

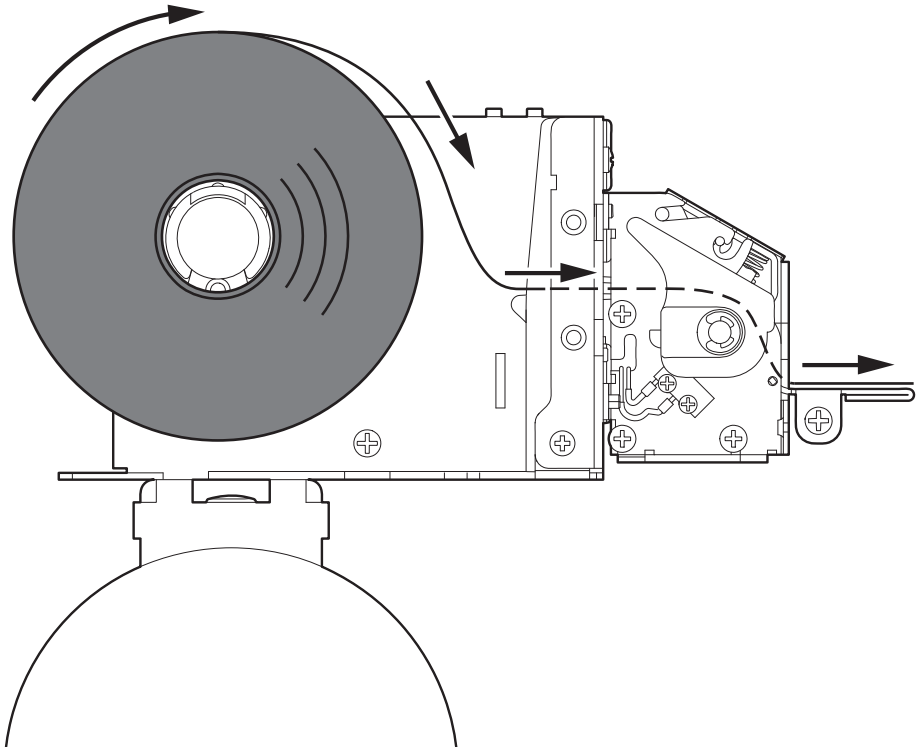


Wait until the paper is automatically loaded and cut.

5.4 Fixing the paper on rewinder

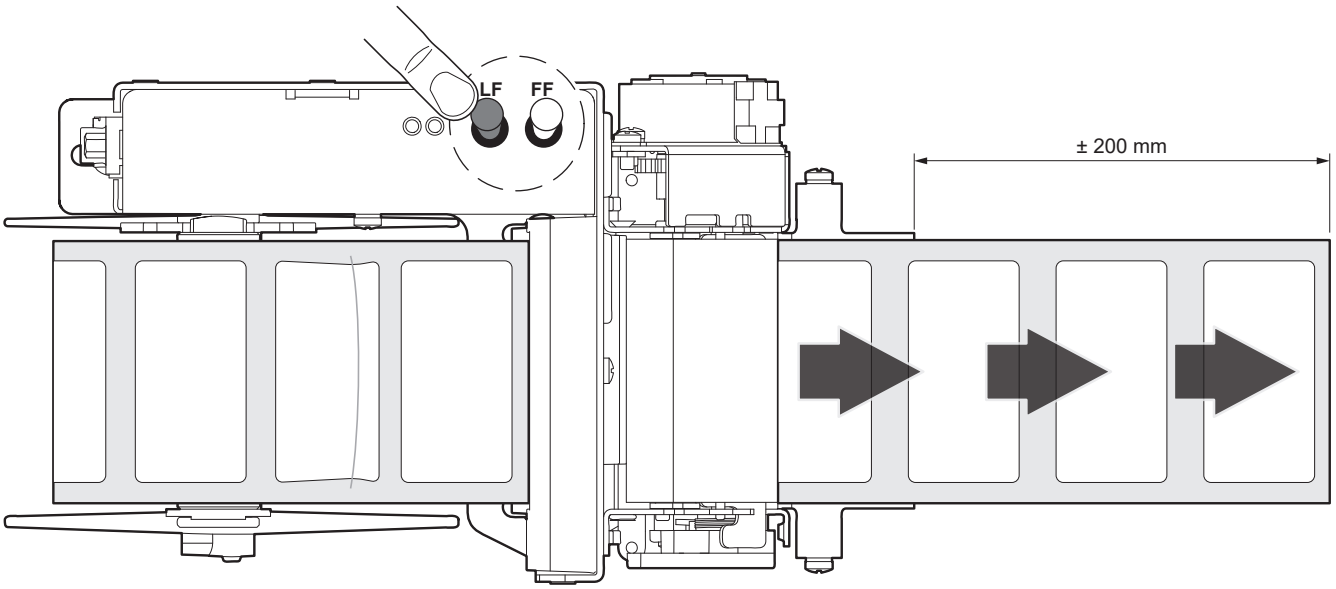
TPTCM60IIIL

1



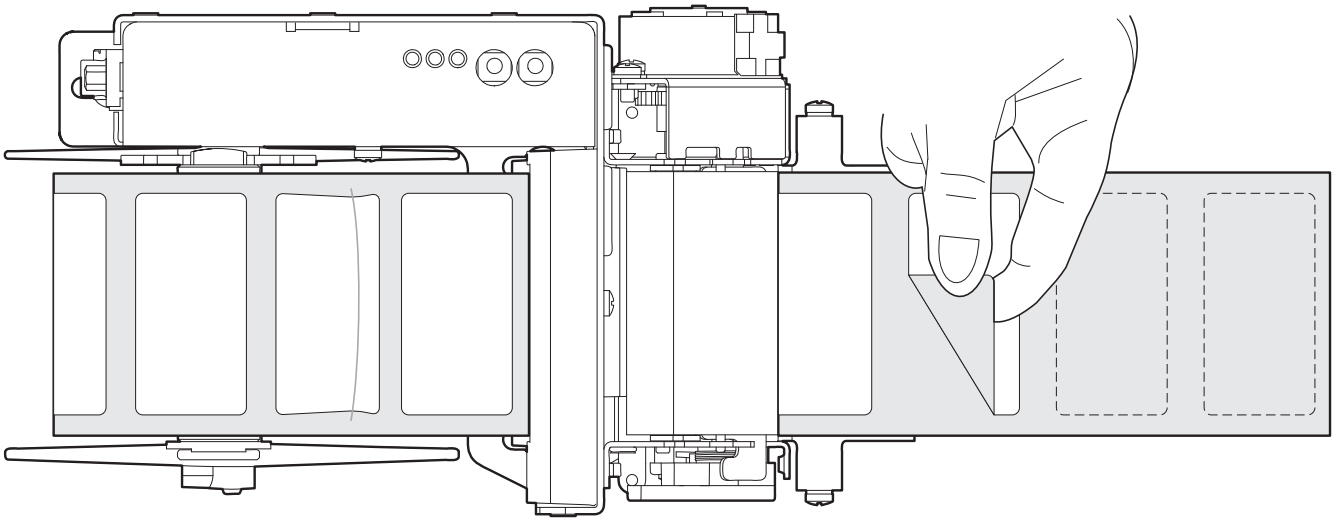
Insert the paper into the device (see paragraph 5.3).

2



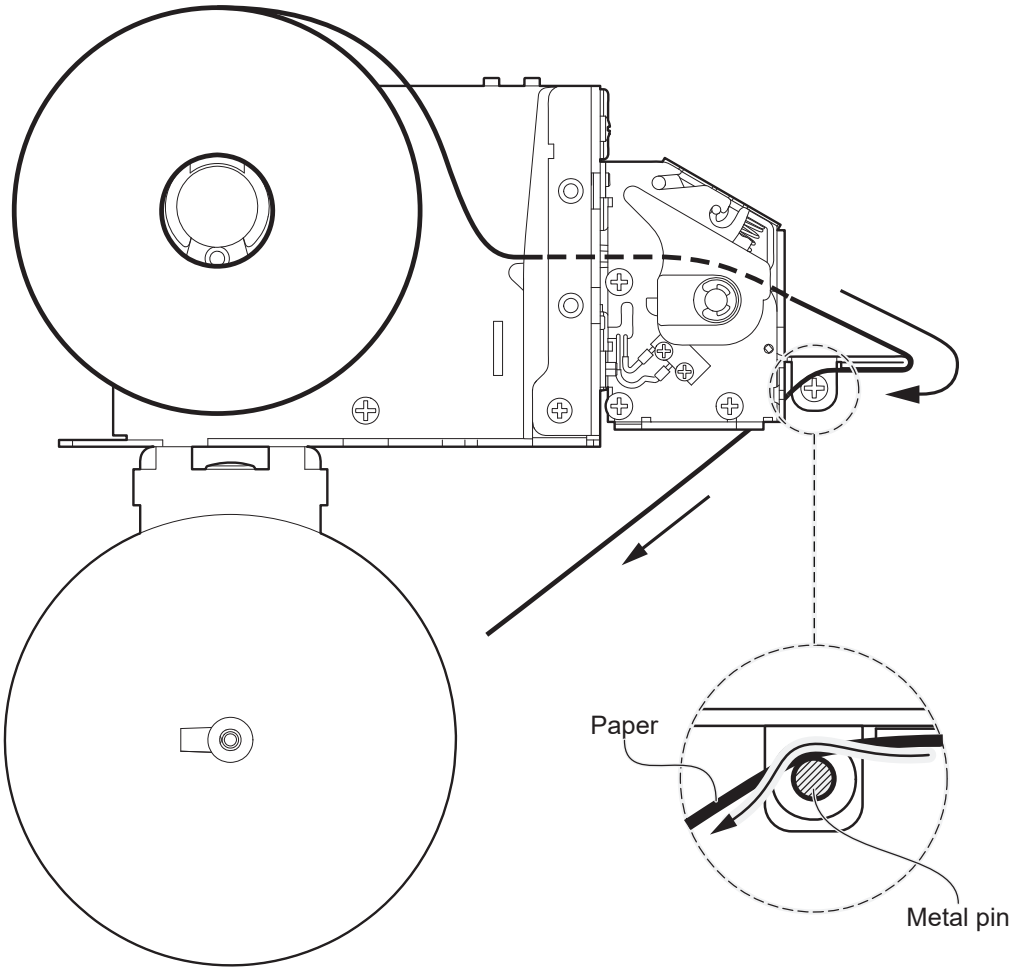
Press the LF LINE FEED button repeatedly to advance
the paper of at least 200 mm beyond the edge of the peeler.

3



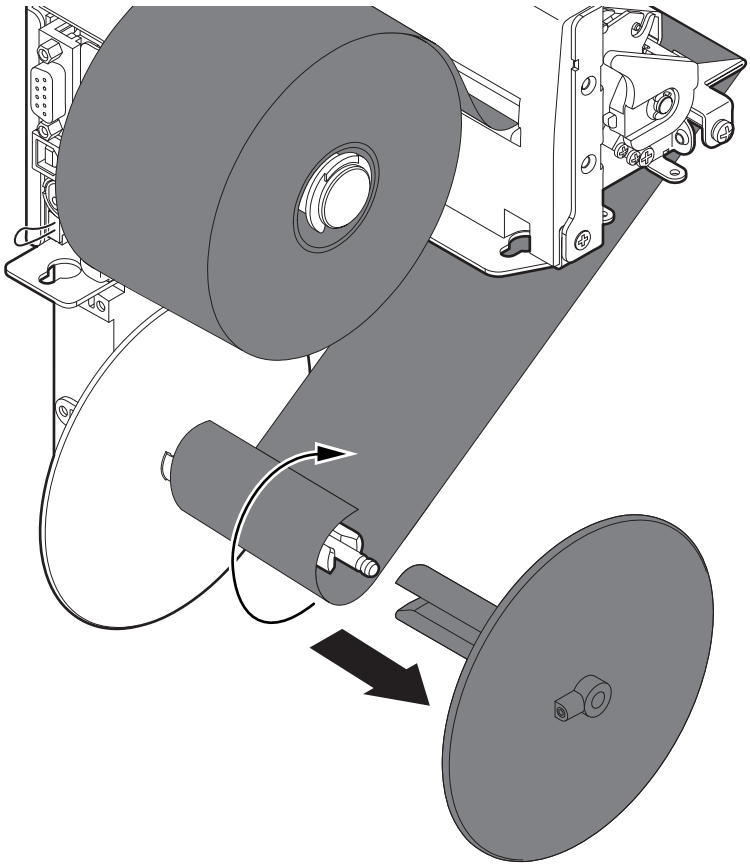
Remove all labels on the media, beyond the paper mouth.

4



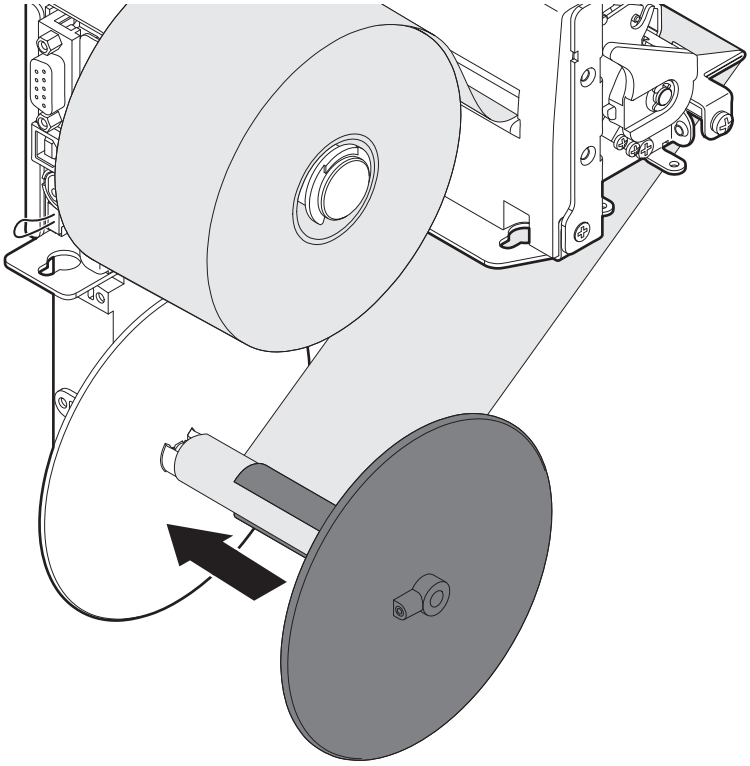
Pull the paper toward the rewinder respecting the path indicated by the arrows.

5



Remove the rewinder plastic disk and
wrap the paper around the pin as indicated by the arrow.

6



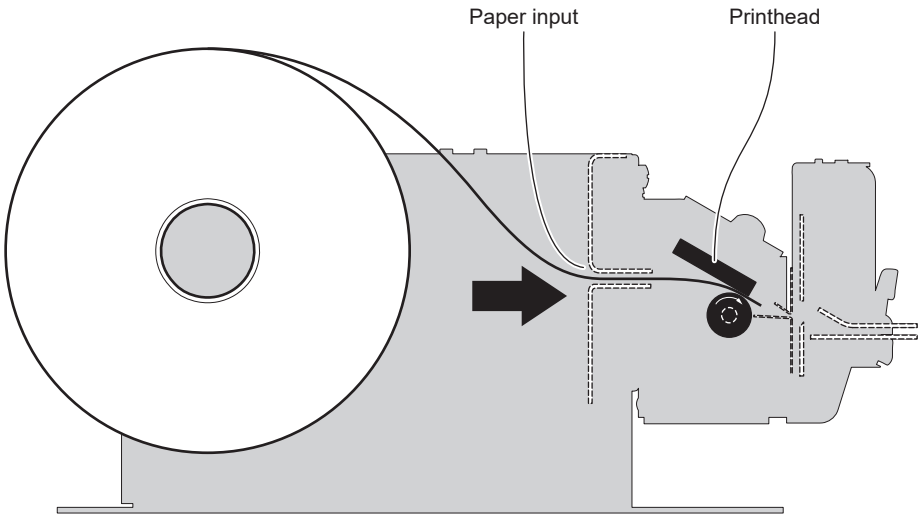
Block the paper by inserting the plastic disk.

5.5 Issuing ticket

The device allows you to choose between different operating modes for the issuance of printed tickets.
The operating modes shown in the following images, depend on the settings of the configuration parameters and commands sent to the device.

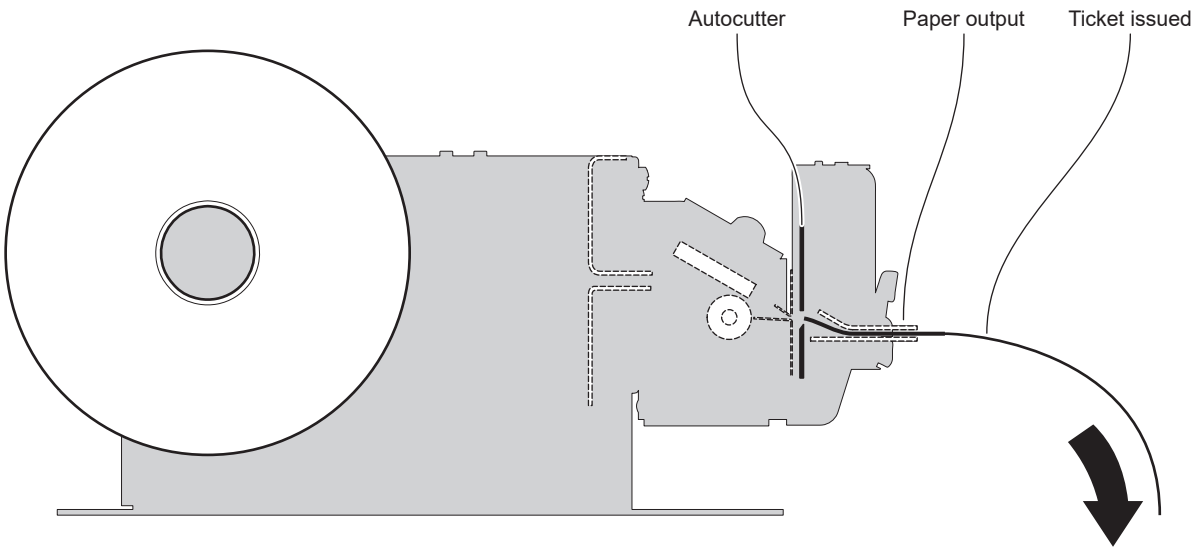
“PRINT” mode - TPTCM112III, TPTCM112III 300 DPI, TPTCM112III STRONG CUT, TPTCM112IIIL, TPTCM112III CL

1



The device starts the ticket printing.

2

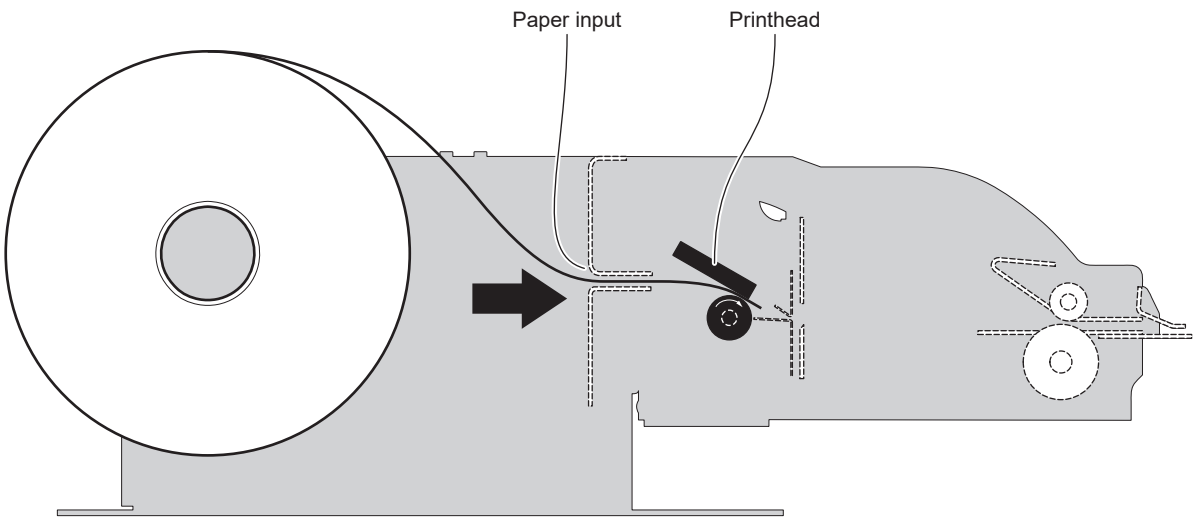


When printing ends, the device cuts the ticket printed that is issued from the paper output.

NOTE: To enable this operating mode, you need to send a cut command when the printing ends (see commands manual).

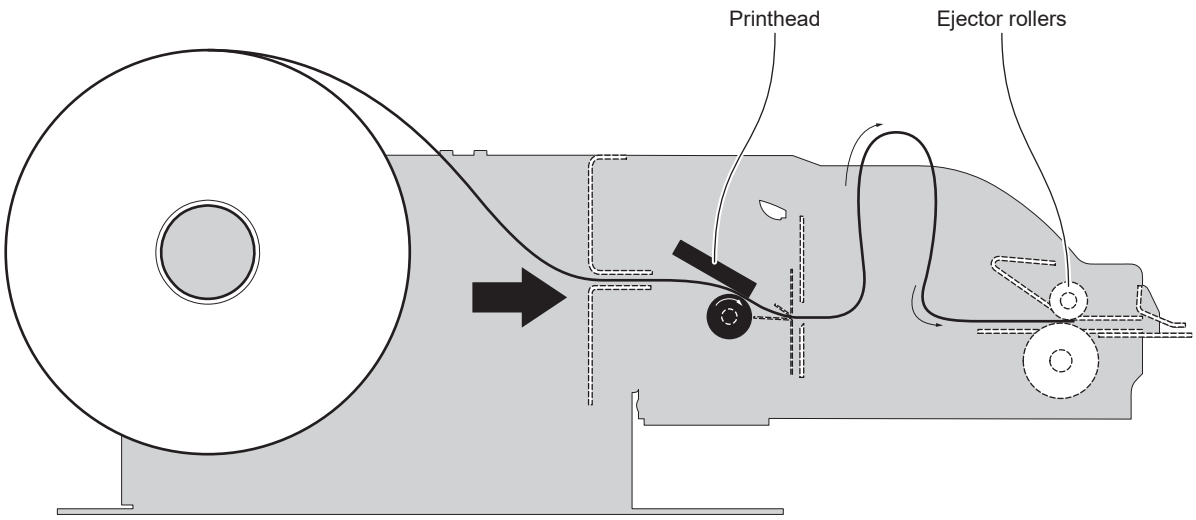
“EJECT” mode (continuous mode disabled) - TPTCM60III EJC, TPTCM112III EJC, TPTCM112III EJC 300 DPI

1



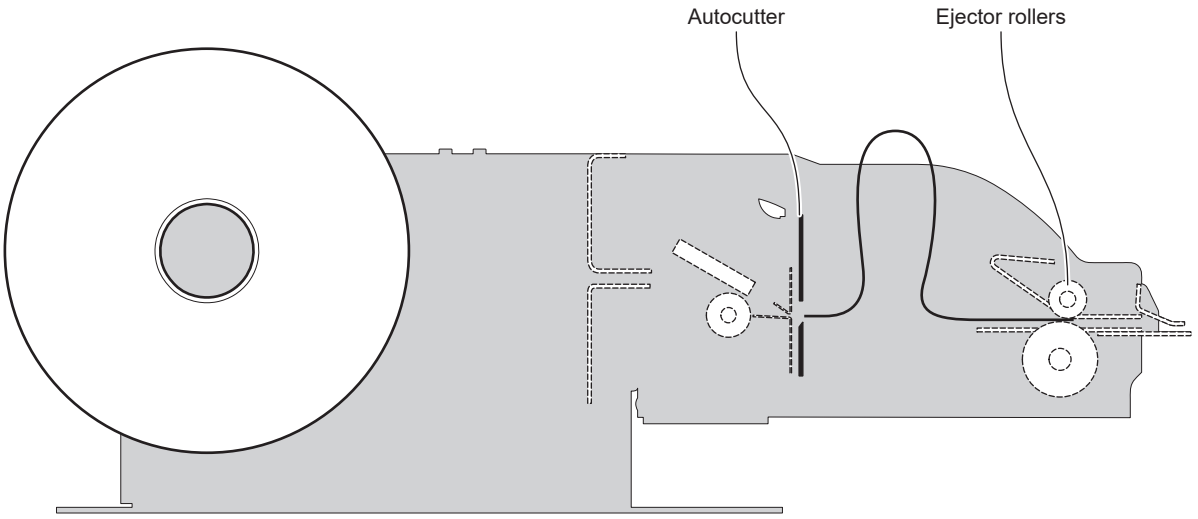
The device starts the ticket printing.

2



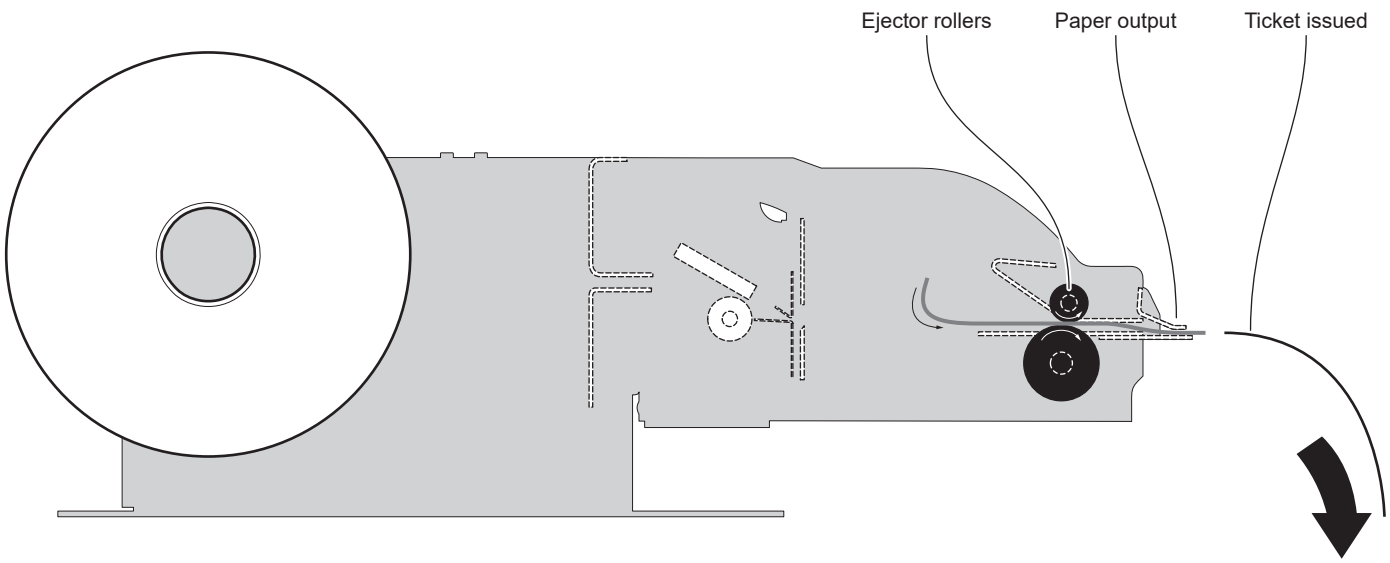
The ticket advances ahead to the ejector and is caught between the ejector rollers.
The printed part of ticket is collected into the ejector group while the device continues printing.

3



When printing ends, the device cuts the ticket printed

4

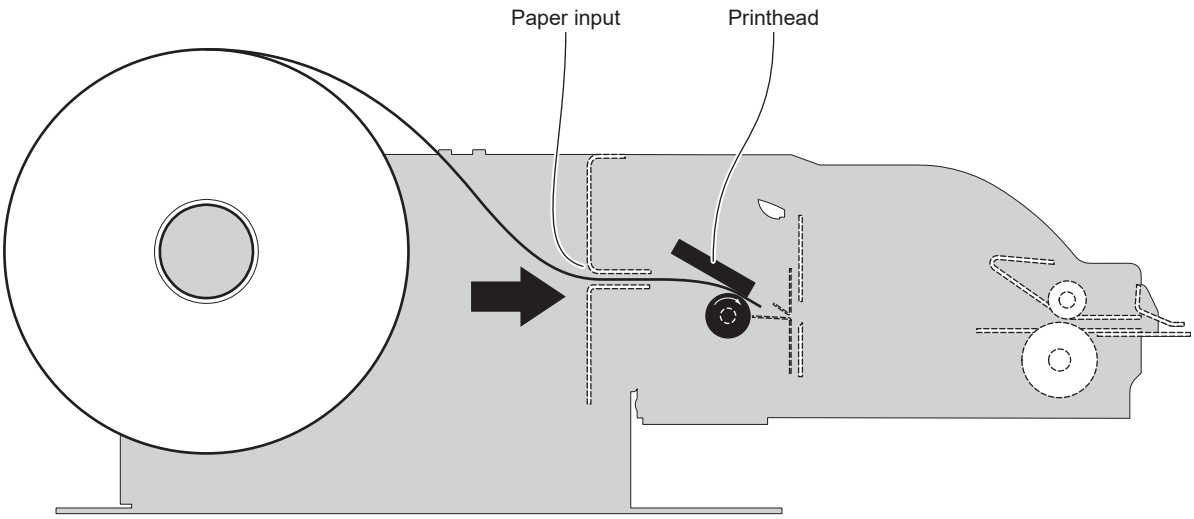


The device directly ejects the ticket

NOTE: To enable this issuing mode, you need to correctly set the operation mode of the ejector with the command 0x1D 0x65 (see commands manual).

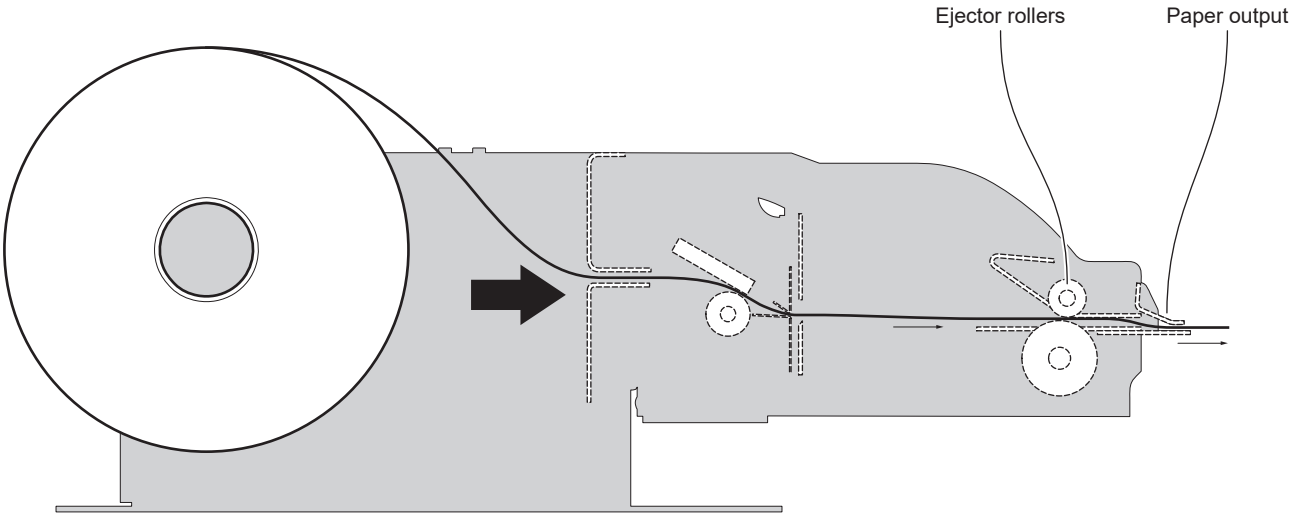
“EJECT” mode (continuous mode enabled) - TPTCM60III EJC, TPTCM112III EJC, TPTCM112III EJC 300 DPI

1



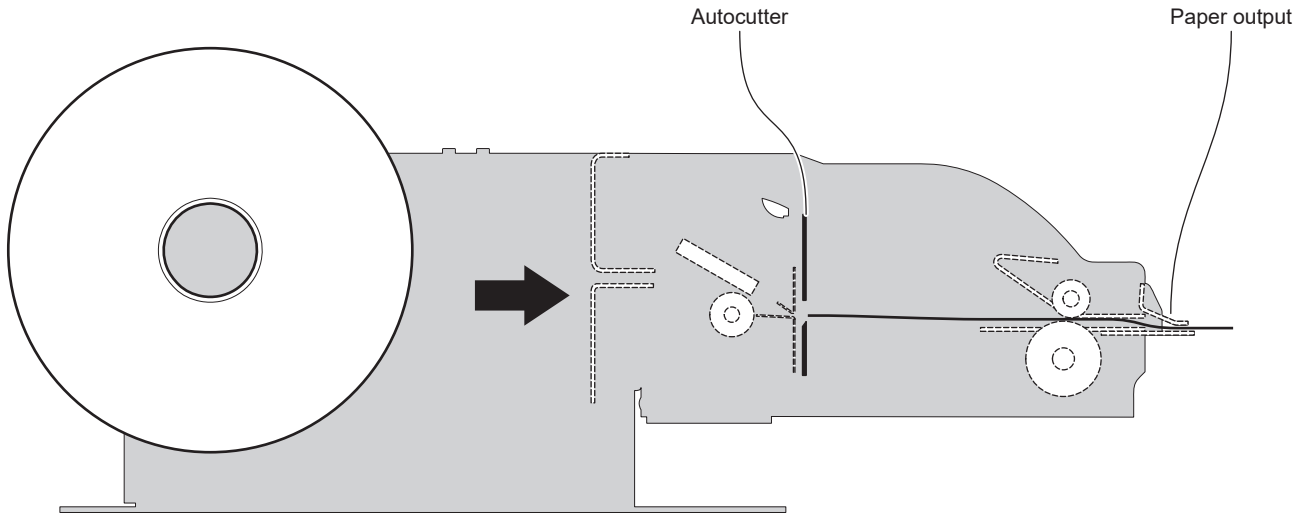
The device starts the ticket printing.

2



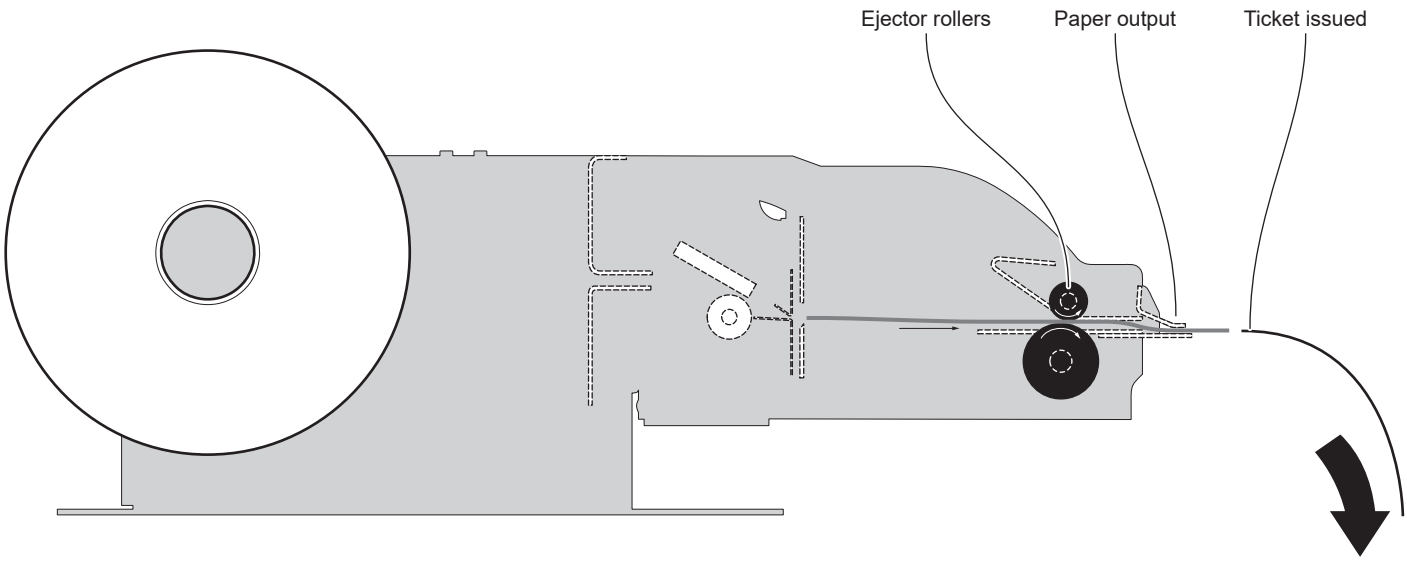
The ticket goes beyond the ejector rollers and
starts to come out of the paper output.

3



When printing ends, the device cuts the ticket printed.

4

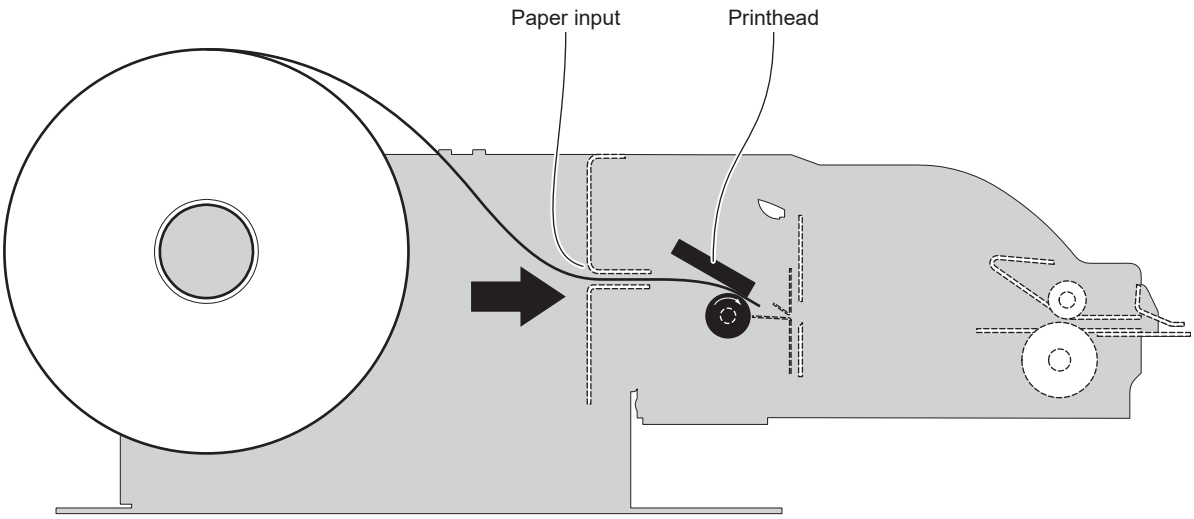


The device ejects the ticket.

NOTE: To enable this issuing mode, you need to correctly set the operation mode of the ejector with the command 0x1D 0x65 (see commands manual).

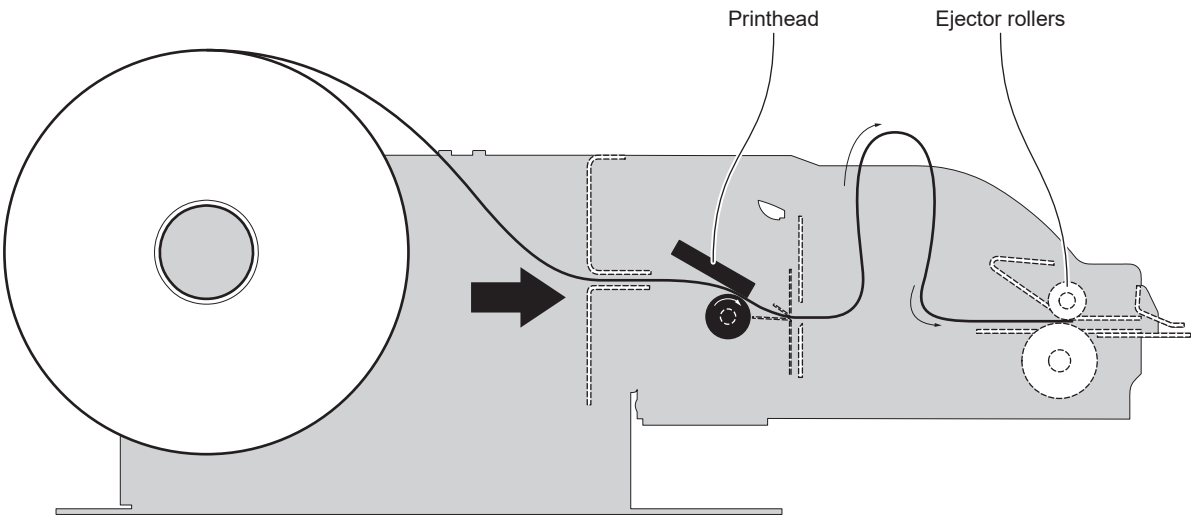
“PRESENT” mode (continuous mode disabled) - TPTCM60III EJC, TPTCM112III EJC, TPTCM112III EJC 300 DPI

1



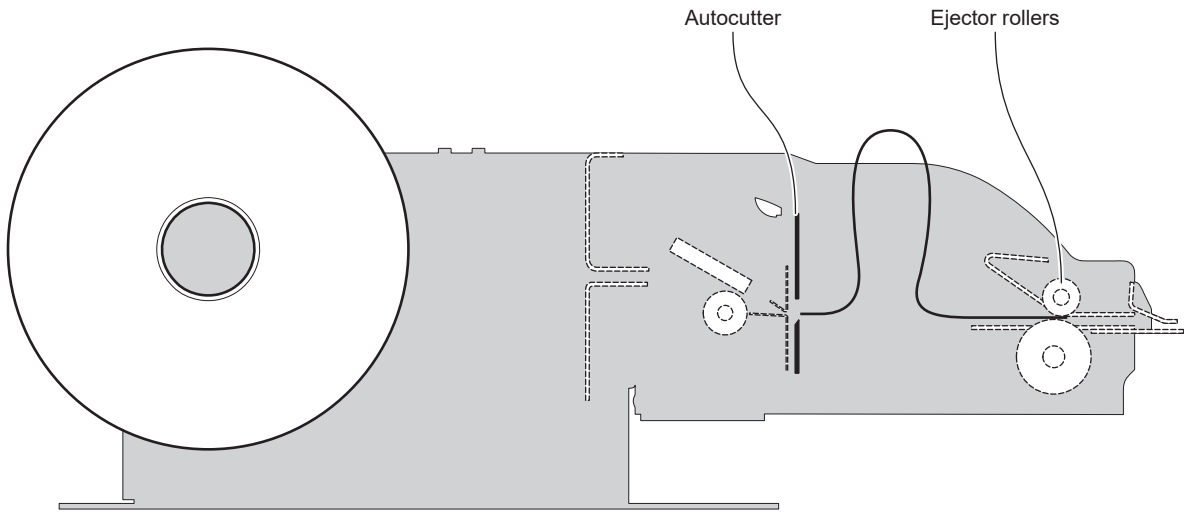
The device starts the ticket printing.

2



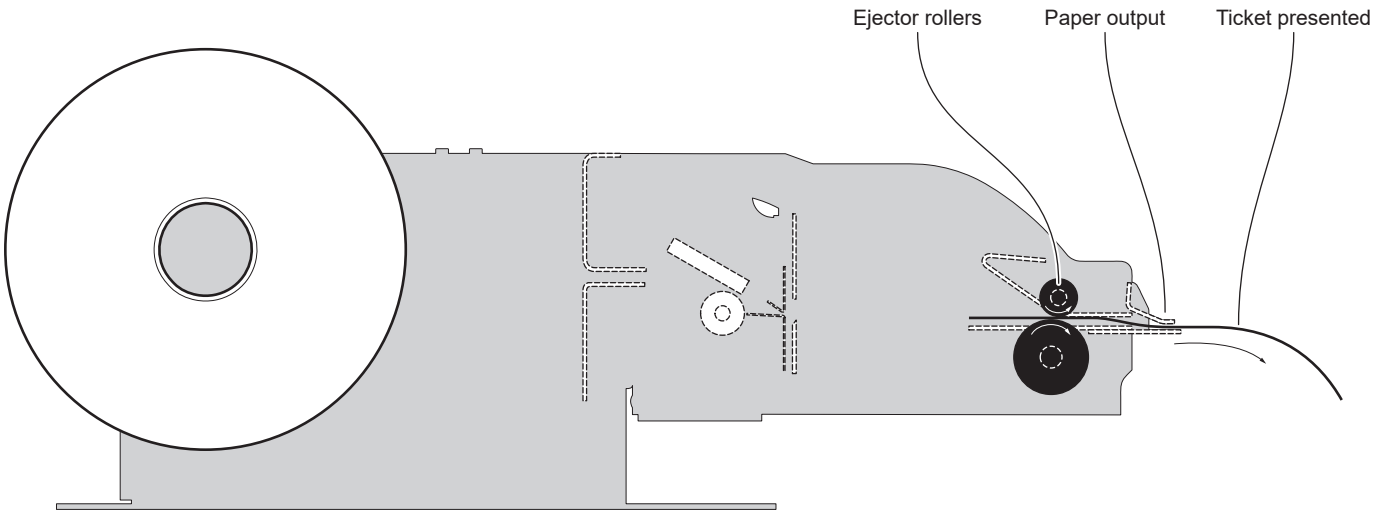
The ticket advances ahead to the ejector and is caught between the ejector rollers.
The printed part of ticket is collected into the ejector group while the device continues printing.

3



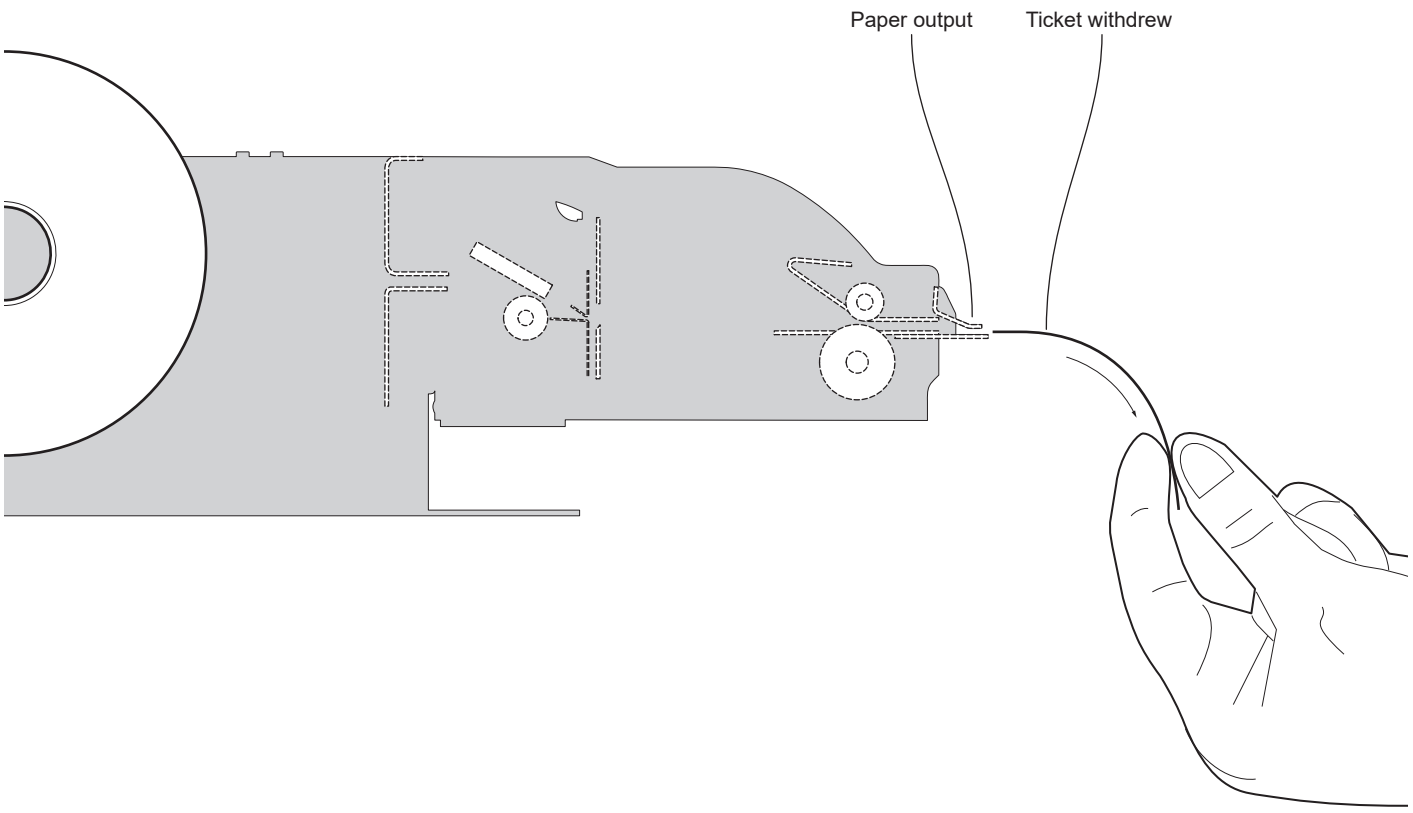
When printing ends, the device cuts the ticket printed.

4



The device presents the ticket printed on the paper output.

5

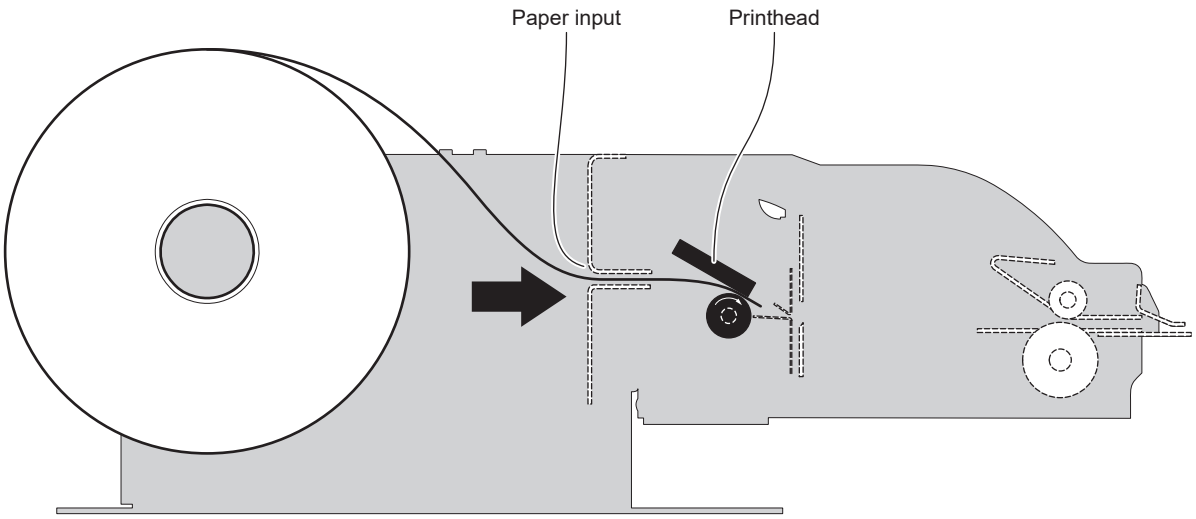


The user withdraws the ticket from the paper output.

NOTE: To enable this issuing mode, you need to correctly set the operation mode of the ejector with the command 0x1D 0x65 (see commands manual) and the setup parameter "Automatic Ejecting" (see chapter 6).

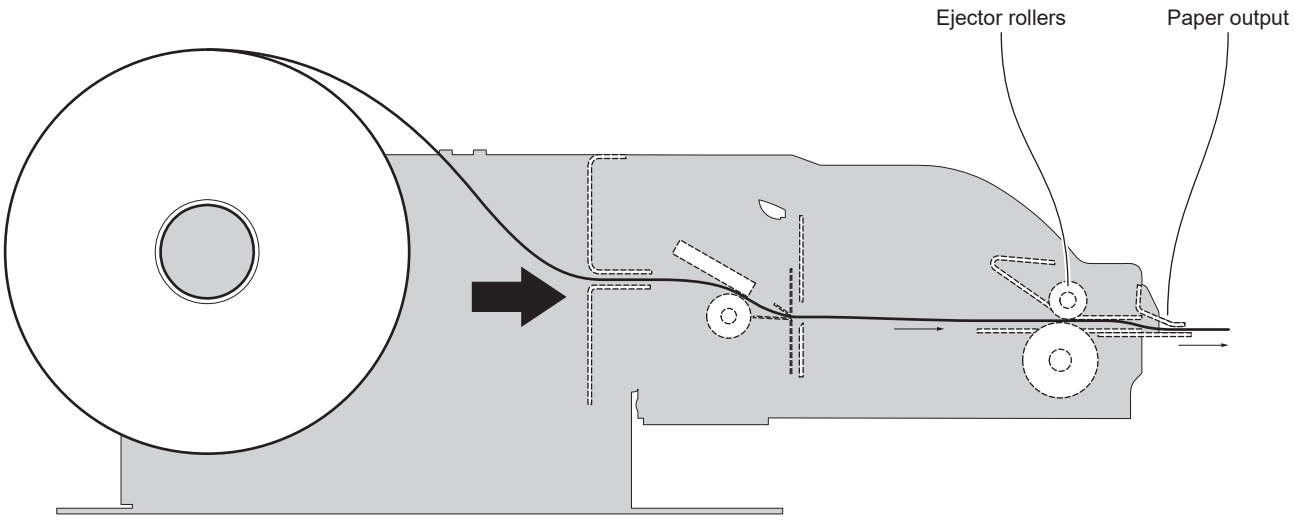
“PRESENT” mode (continuous mode enabled) - TPTCM60III EJC, TPTCM112III EJC, TPTCM112III EJC 300 DPI

1



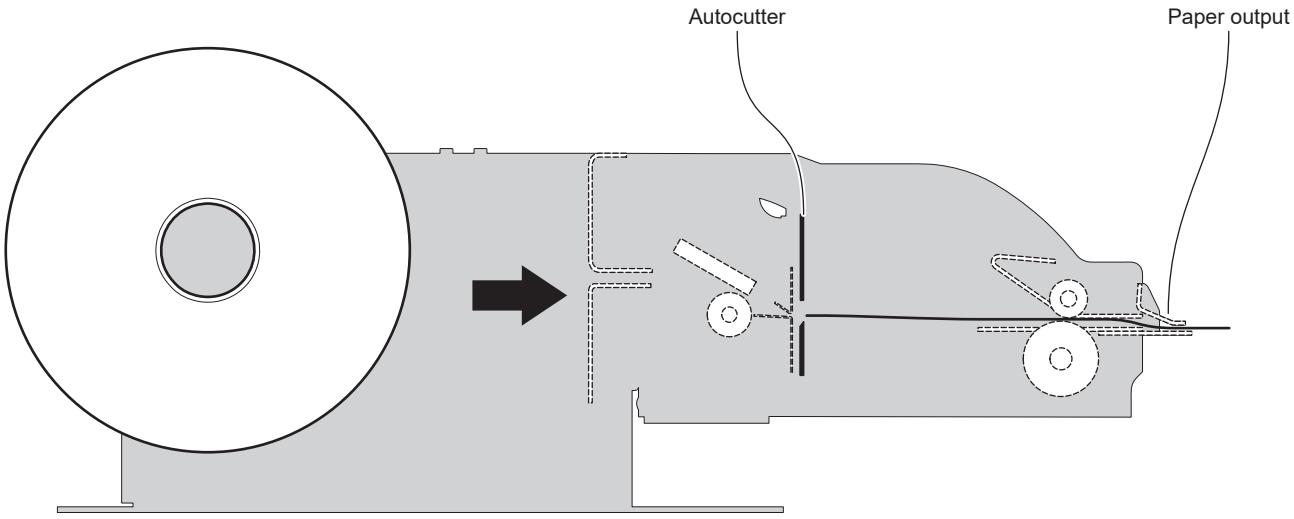
The device starts the ticket printing.

2



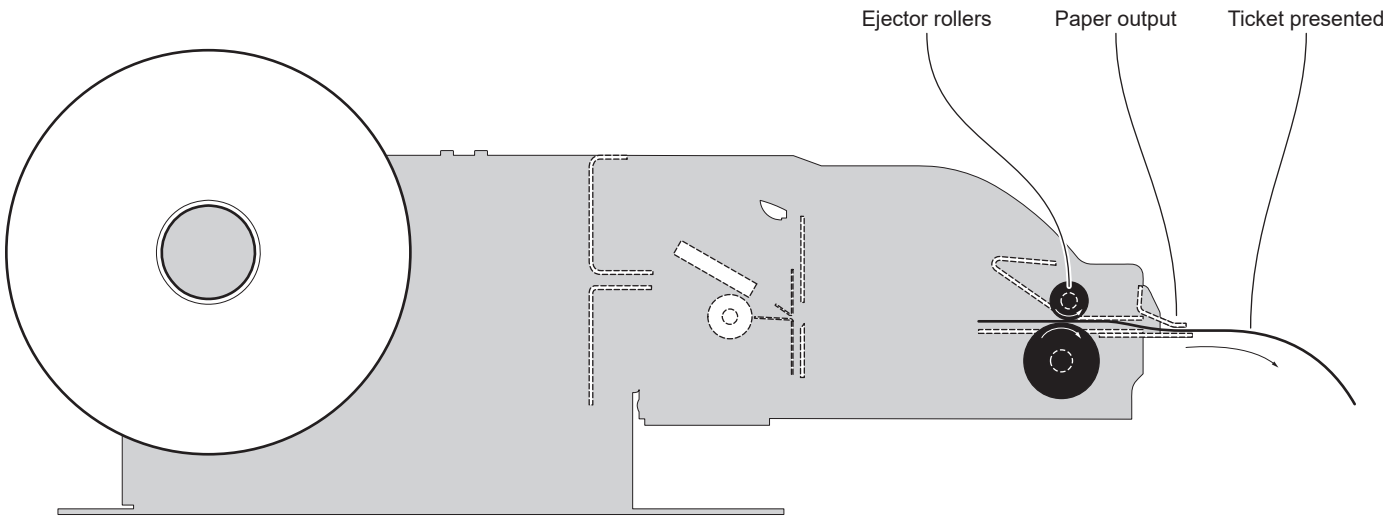
The ticket goes beyond the ejector rollers and
stanrts to come out of the paper output

3



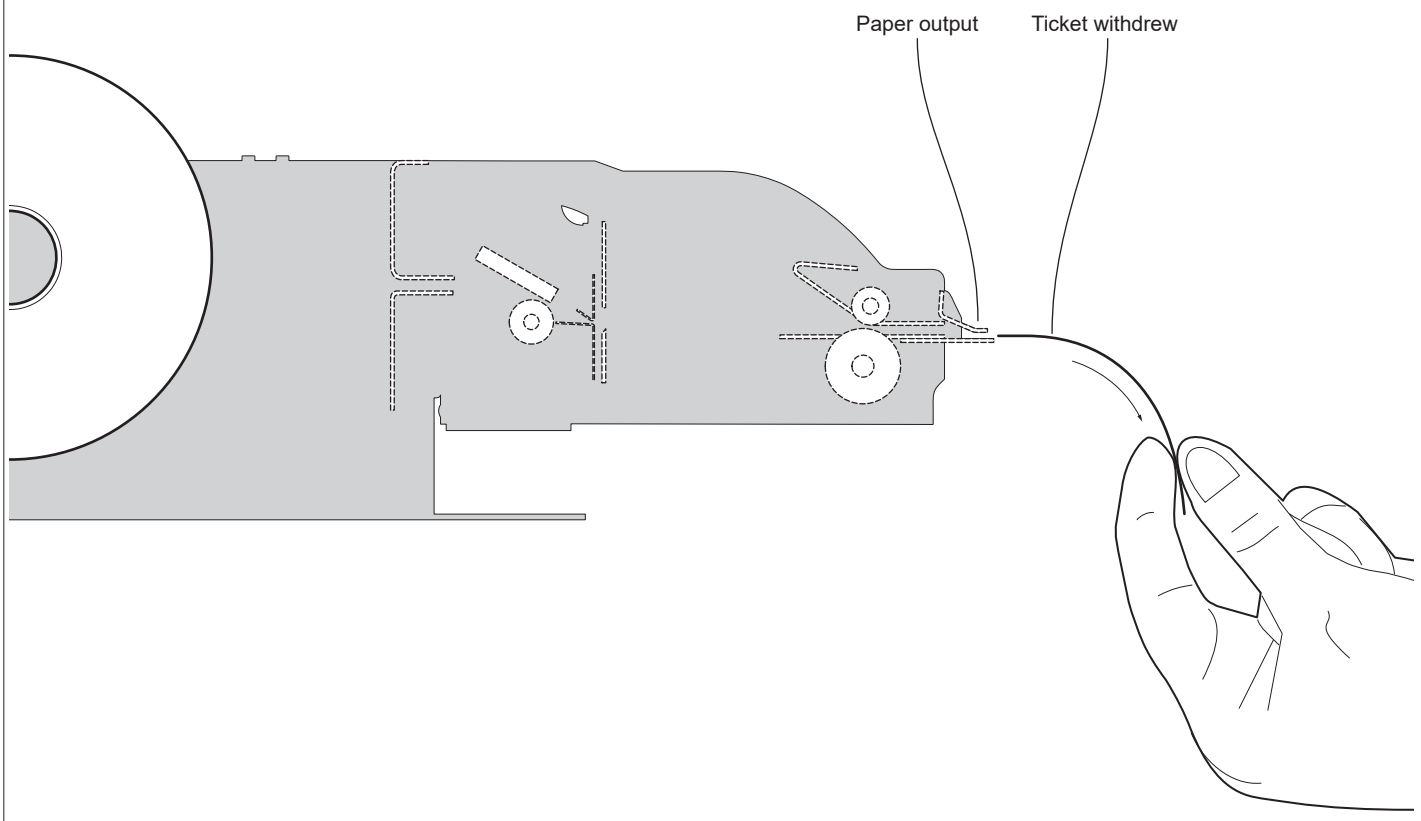
When printing ends, the device cuts the ticket printed.

4



The device presents the ticket printed on the paper output.

5

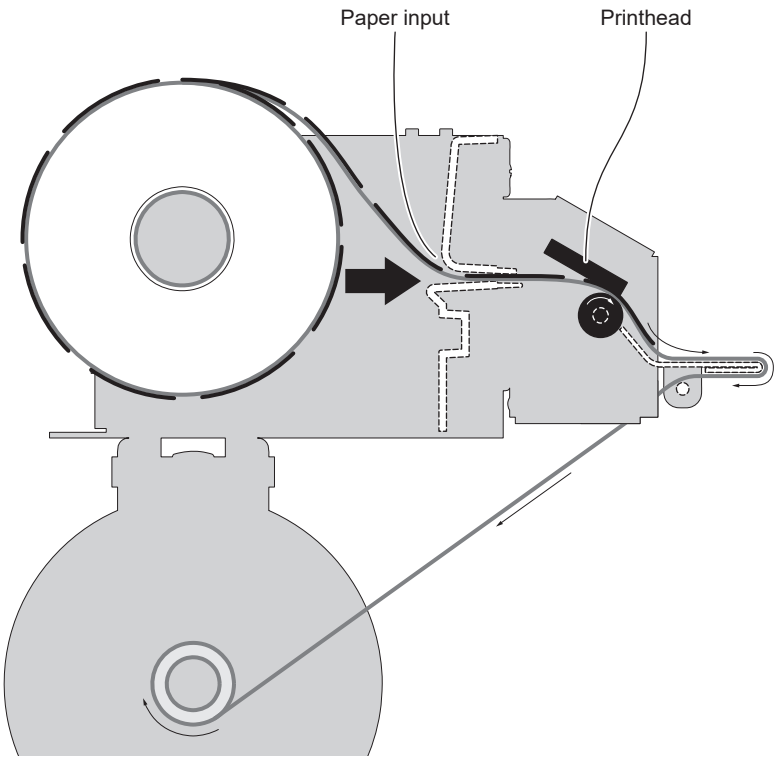


The user withdraws the ticket from the paper output.

NOTE: To enable this issuing mode, you need to correctly set the operation mode of the ejector with the command 0x1D 0x65 (see commands manual) and the setup parameter "Automatic Ejecting" (see chapter 6).

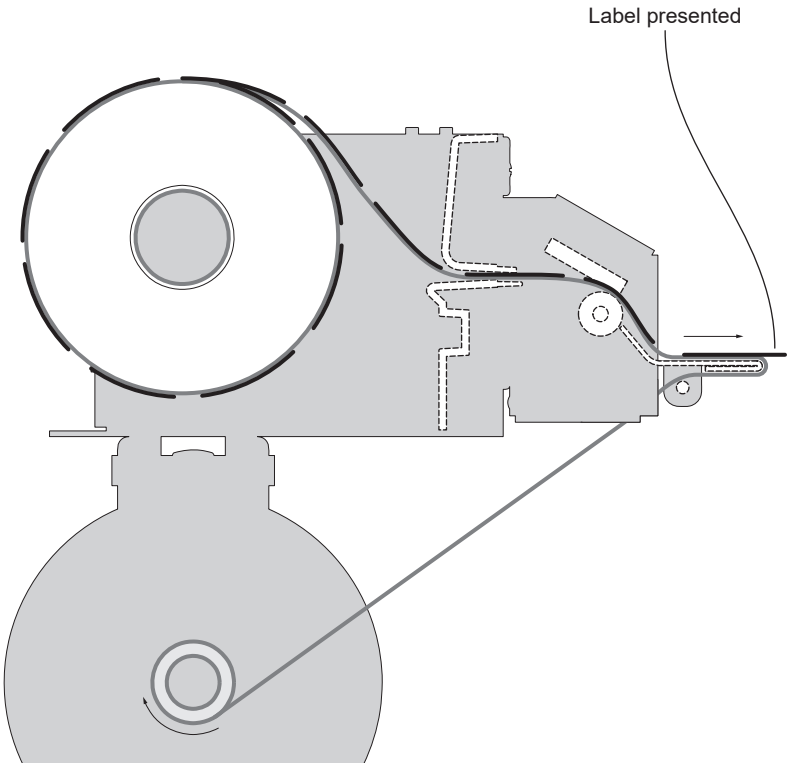
“PRESENT” mode - TPTCM60IIIL

1



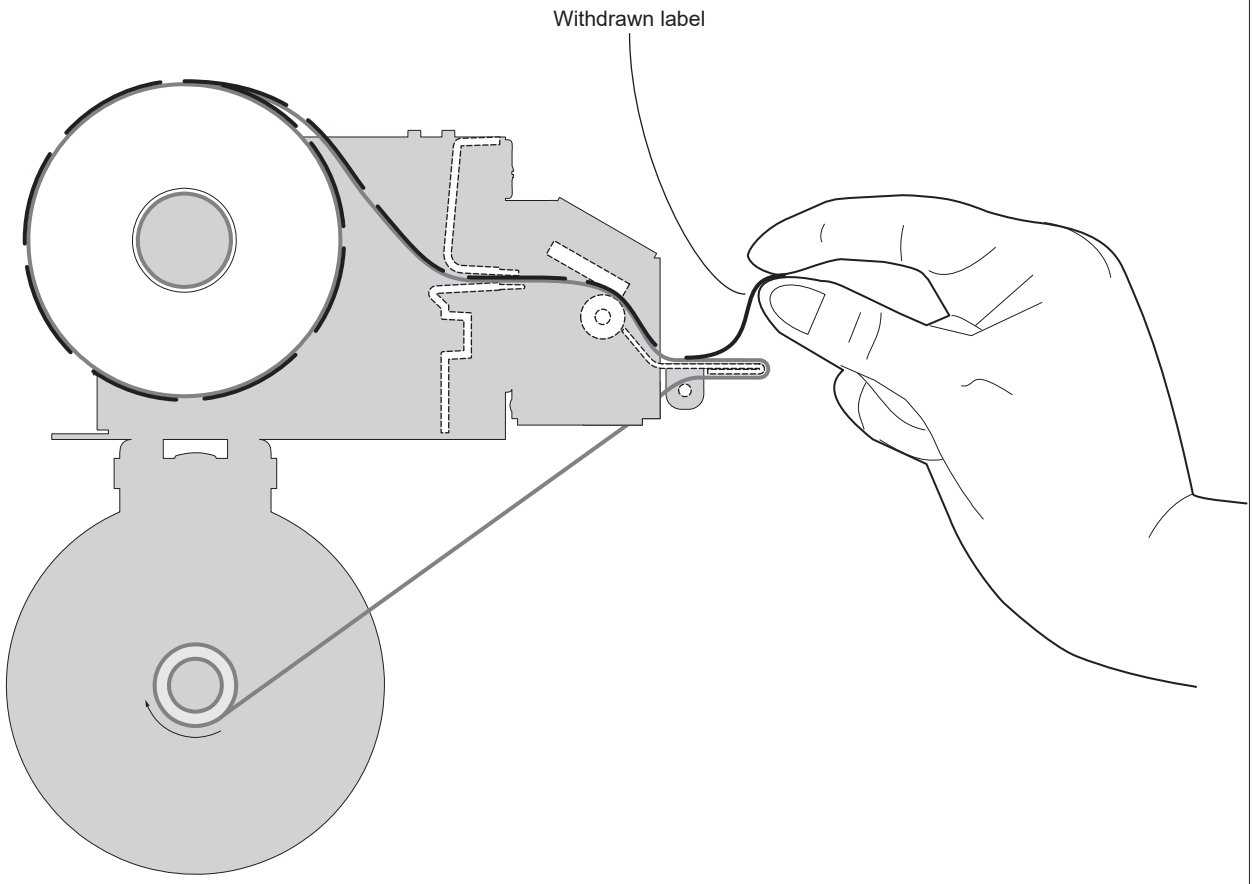
The device performs the label printing.

2



When printing ends, the device presents the label printed on the output peeler.

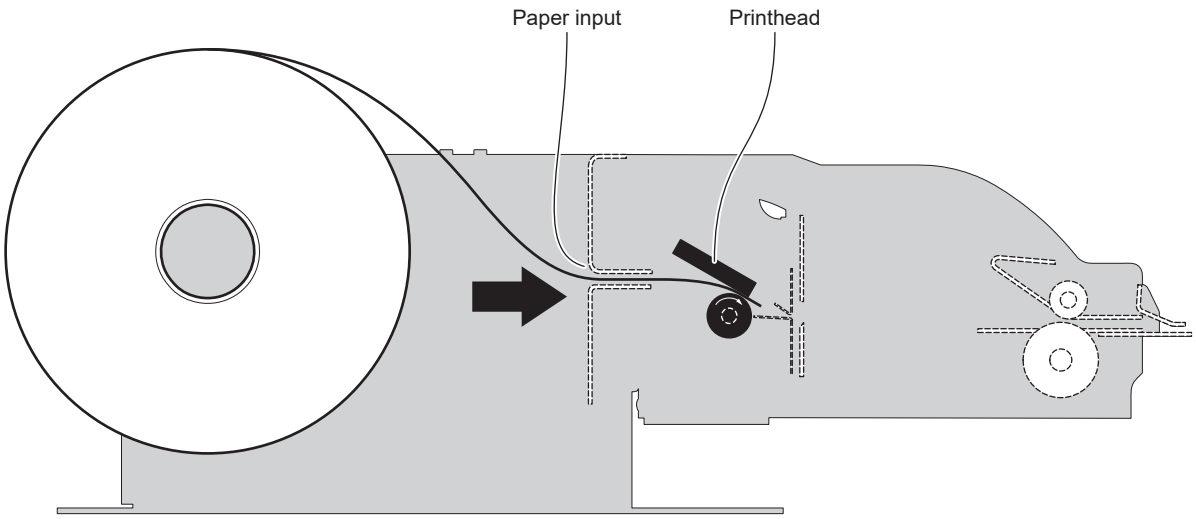
3



The user withdraws the printed label.

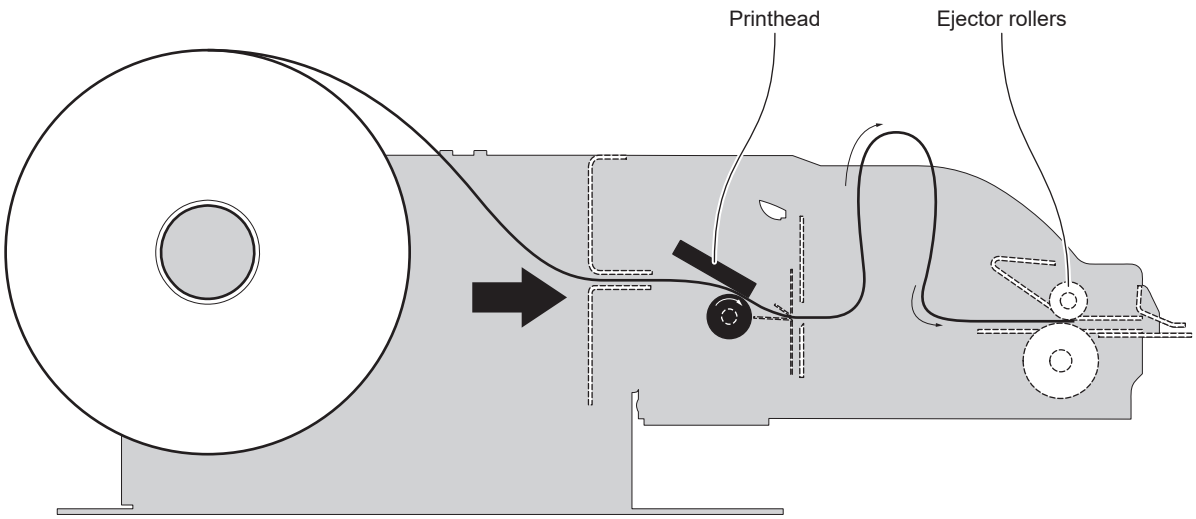
“PRESENT/EJECT” mode (continuous mode disabled) - TPTCM60III EJC, TPTCM112III EJC, TPTCM112III EJC 300 DPI

1



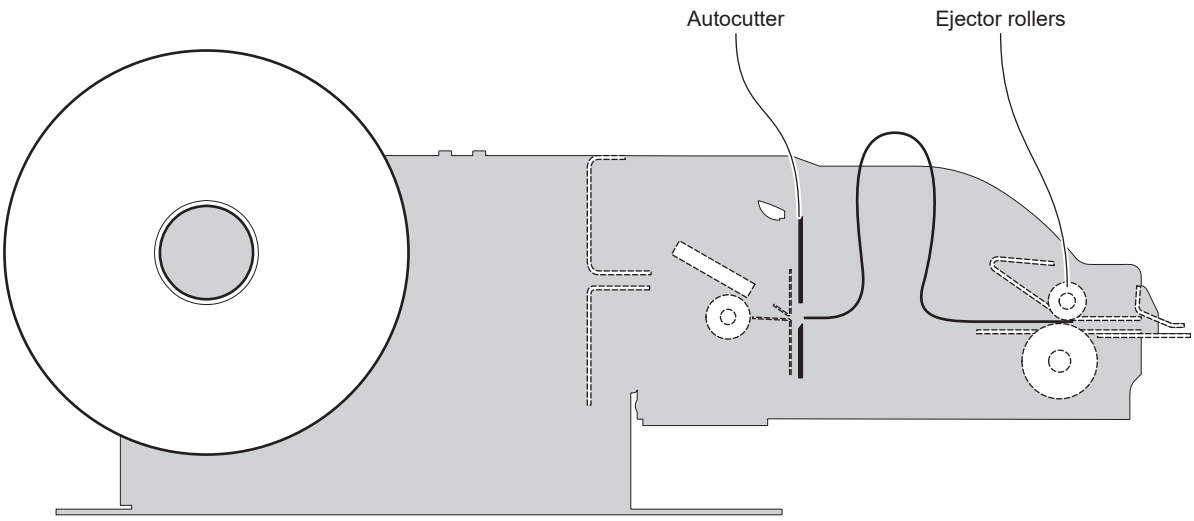
The device starts the ticket printing.

2



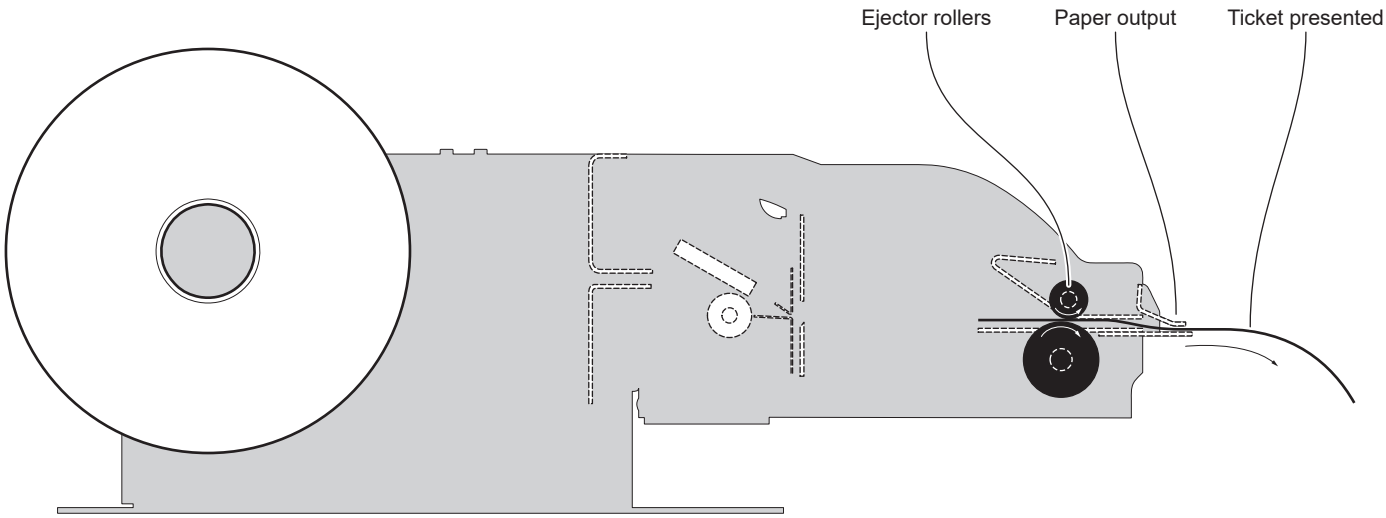
The ticket advances ahead to the ejector and is caught between the ejector rollers.
The printed part of ticket is collected into the ejector group while the device continues printing.

3



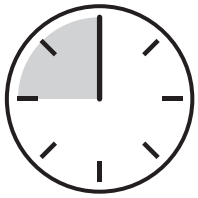
When printing ends, the device cuts the ticket printed.

4



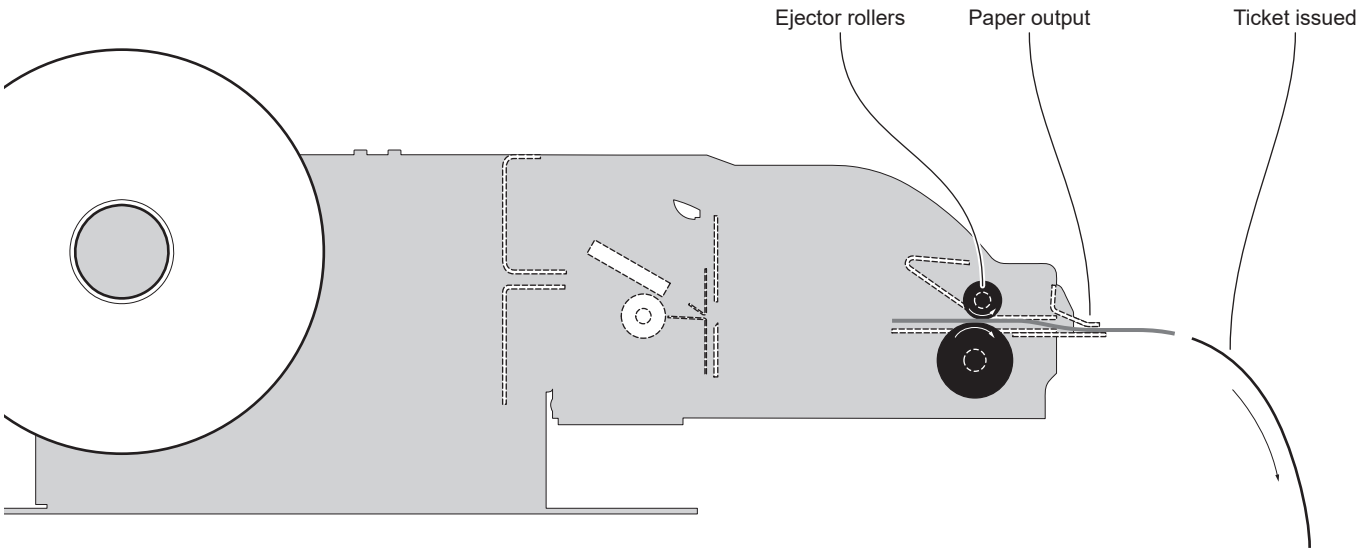
The device presents the ticket printed on the paper output.

5



The ticket is waiting on the paper mouth for a preset period of time.

6

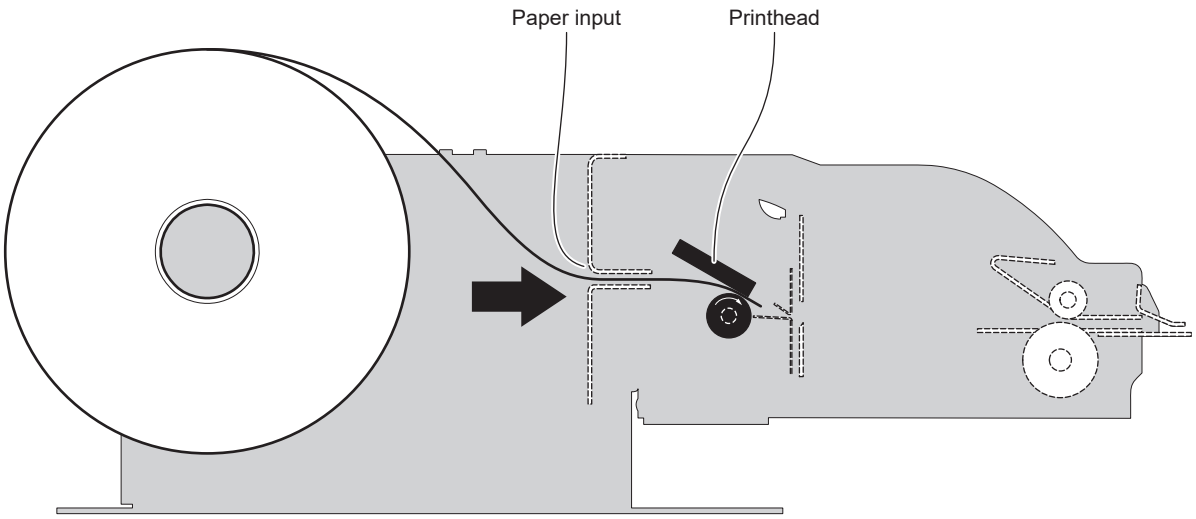


The device ejects the ticket.

NOTE: To enable this issuing mode, you need to correctly set the operation mode of the ejector with the command 0x1D 0x65 (see commands manual) and the setup parameter "Automatic Ejecting" (see chapter 6).

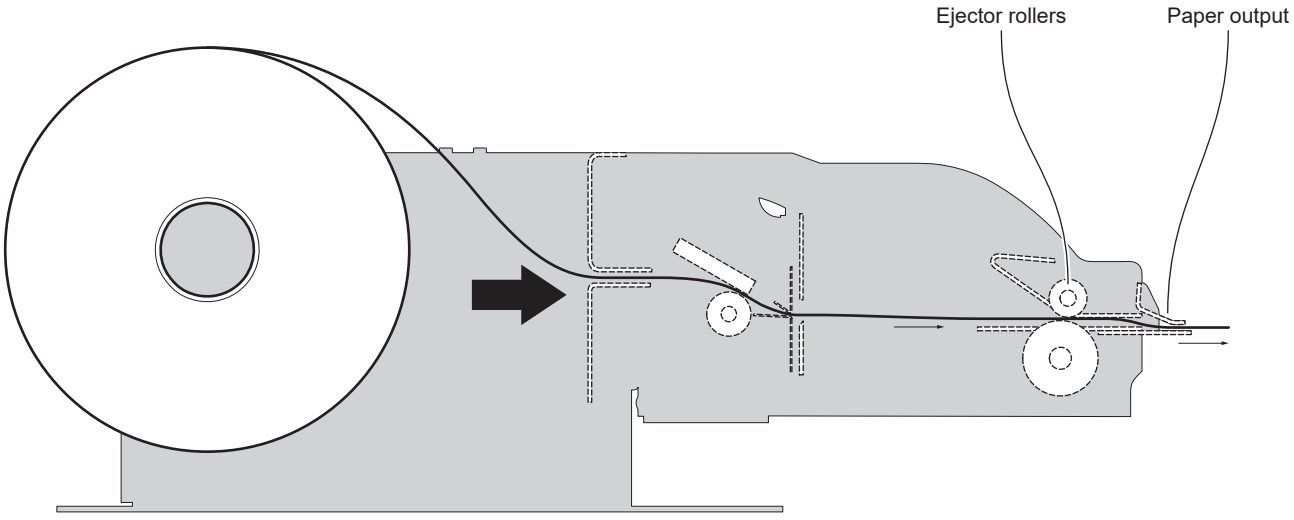
“PRESENT/EJECT” mode (continuous mode enabled) - TPTCM60III EJC, TPTCM112III EJC, TPTCM112III EJC 300 DPI

1



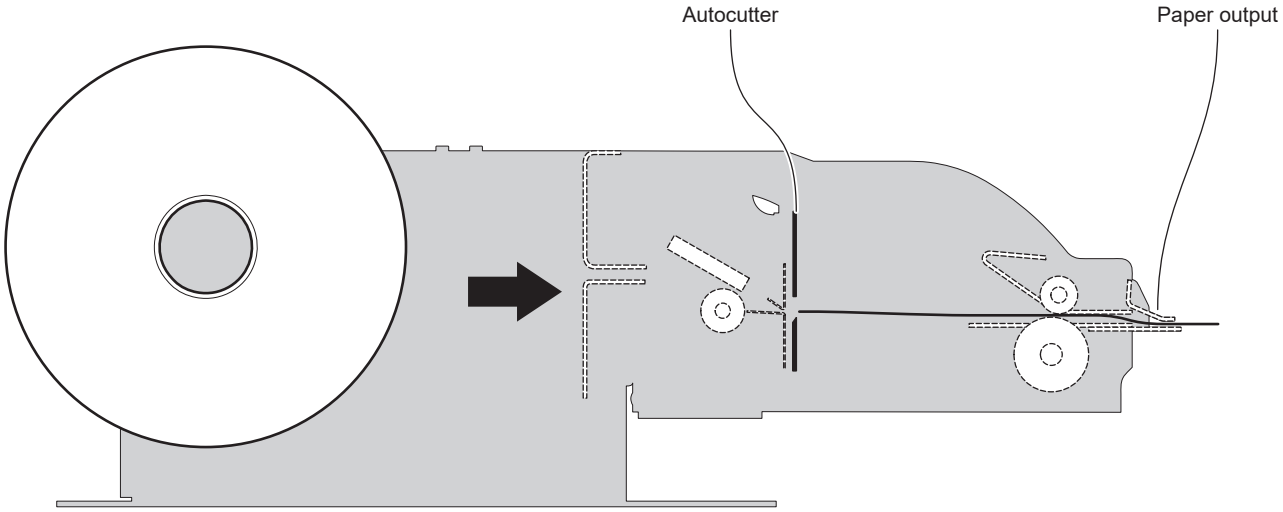
The device starts the ticket printing.

2



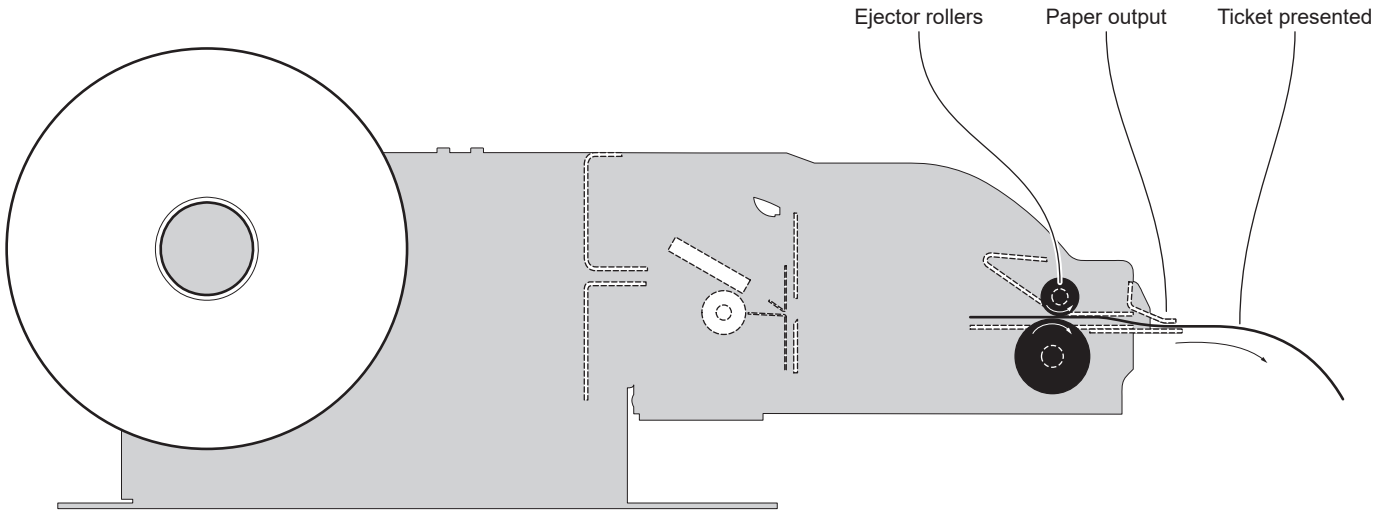
The ticket goes beyond the ejector rollers and
stanrts to come out of the paper output.

3



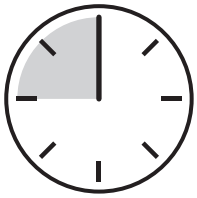
When printing ends, the device cuts the ticket printed.

4



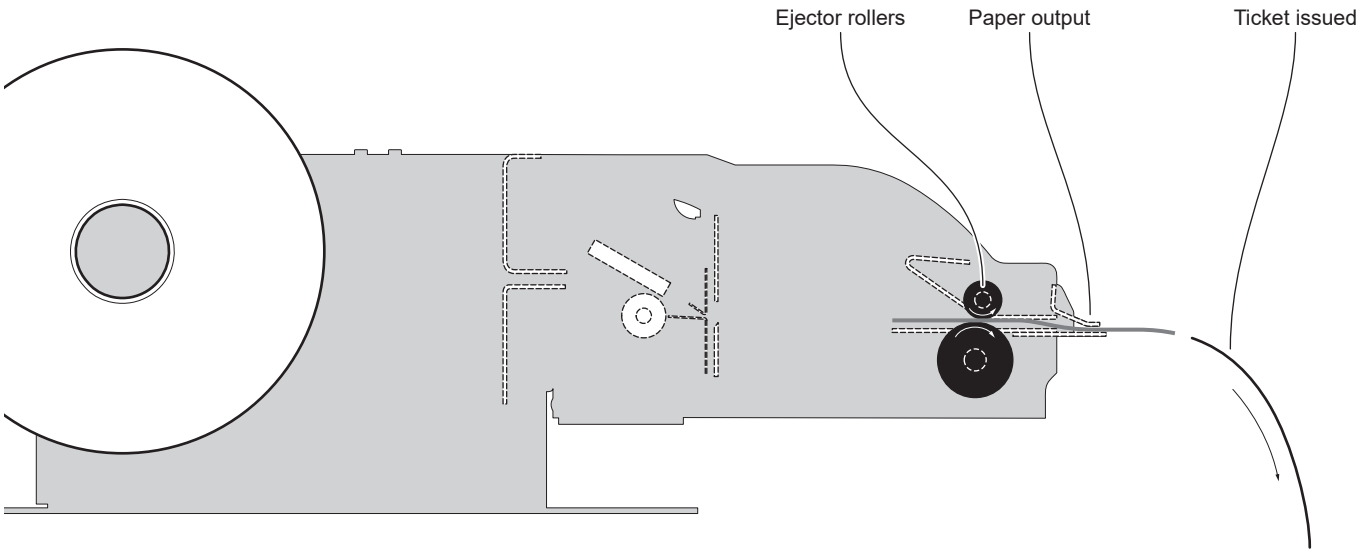
The device presents the ticket printed on the paper output.

5



The ticket is waiting on the paper mouth for a preset period of time.

6



The device ejects the ticket.

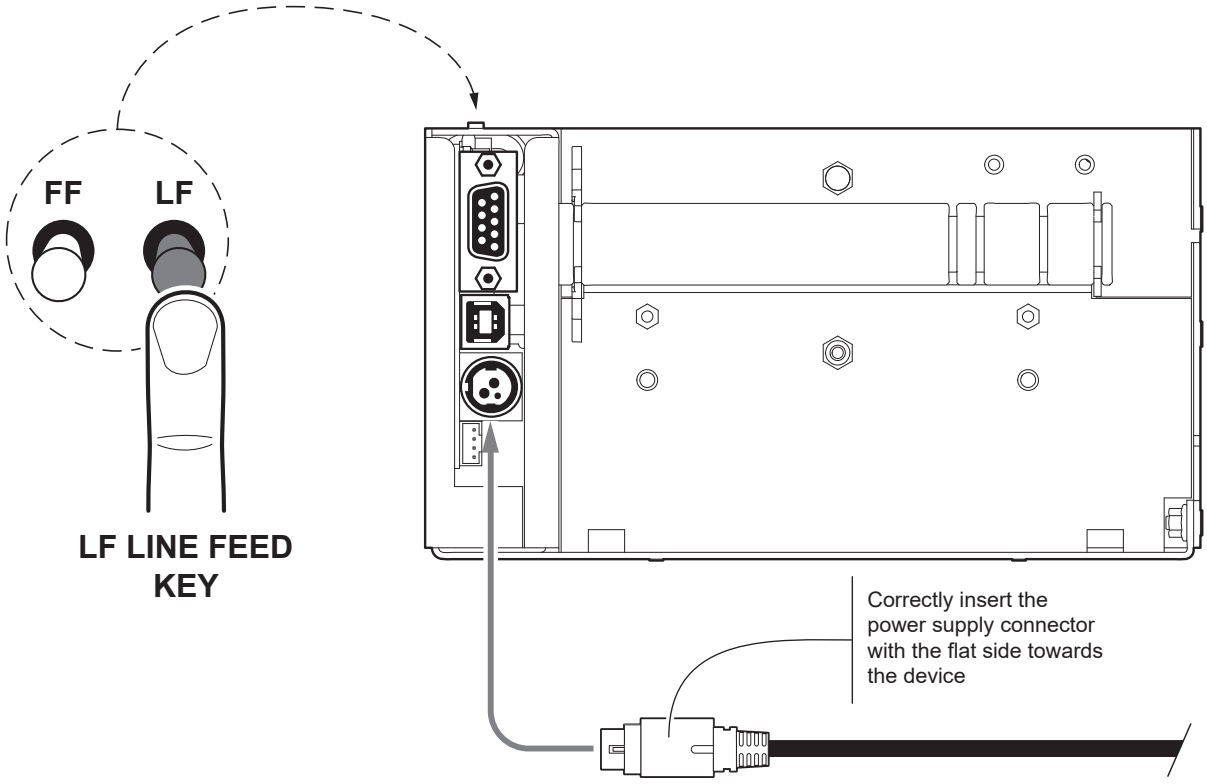
NOTE: To enable this issuing mode, you need to correctly set the operation mode of the ejector with the command 0x1D 0x65 (see commands manual) and the setup parameter "Automatic Ejecting" (see chapter 6).

6 CONFIGURATION

6.1 Configuration by keys

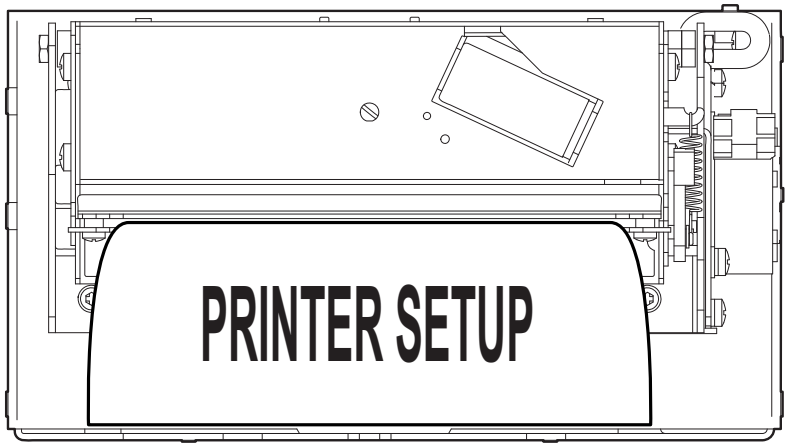
To enter the configuration mode and print a setup report with the operating parameters of the device, proceed as follows.

1



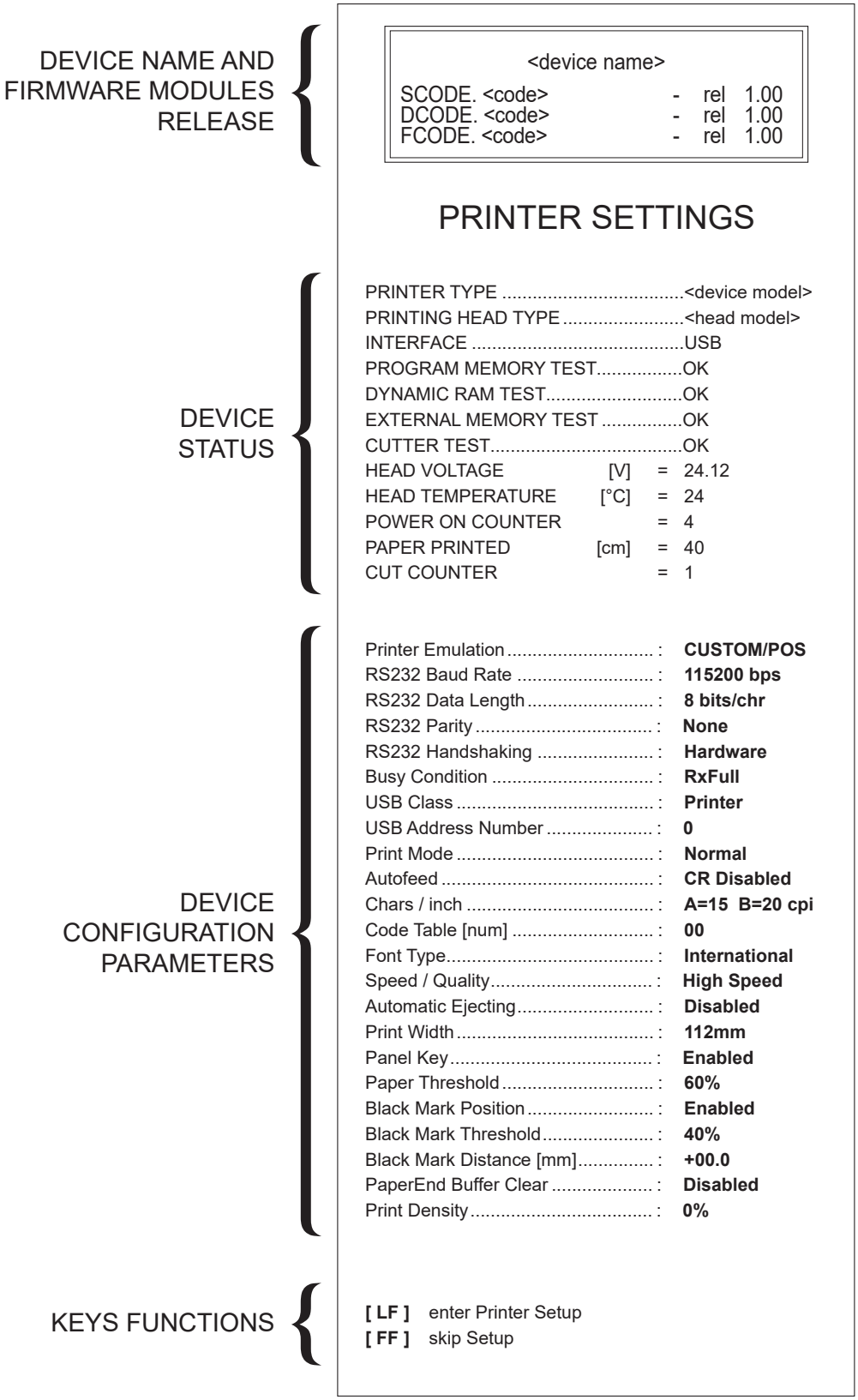
While pressing the LF LINE FEED key,
switch on the device by connecting the power supply cable.

2



The device prints the report with the settings parameters.
Follow the instruction printed on paper to proceed with configuration procedure.

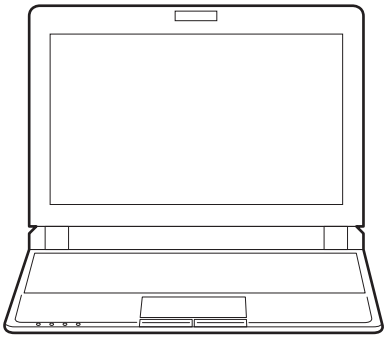
The following figure shows the setup report of the device. The shown values for parameters are sample values; for the list and the description of device parameters see the following paragraphs.



6.2 Configuration by software

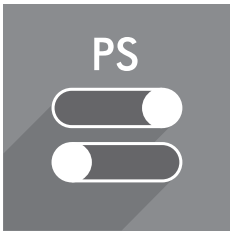
The setup parameters can be set by using the “PrinterSet” software tool available on www.custom4u.it.
For a detailed description of the device operating parameters see the following paragraphs.
To configure the device by software, proceed as follows:

1



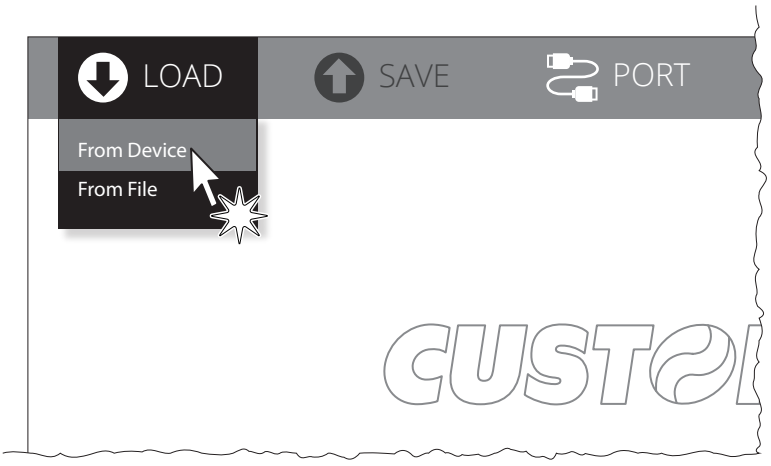
Connect the device to a PC directly (see paragraph 4.2),
without using HUB devices.

2



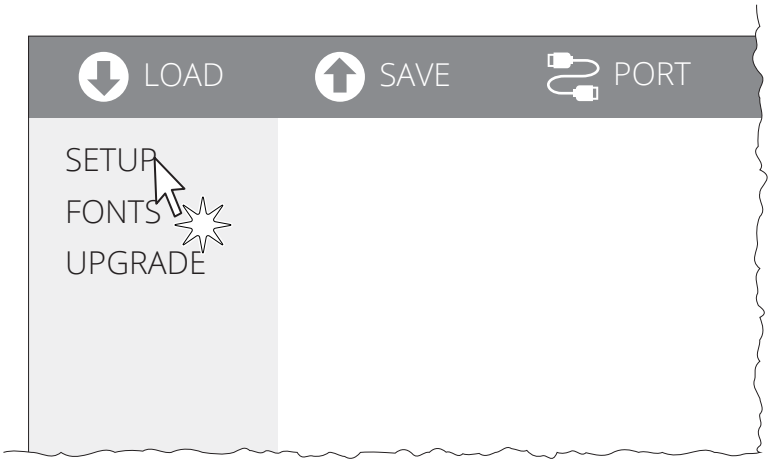
Start “PrinterSet” software tool.

3



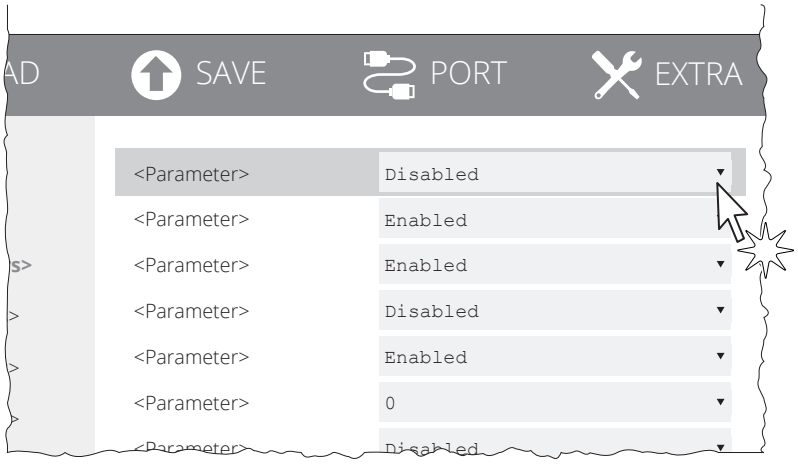
Click on LOAD > FROM DEVICE and select
the device connected to the PC.

4



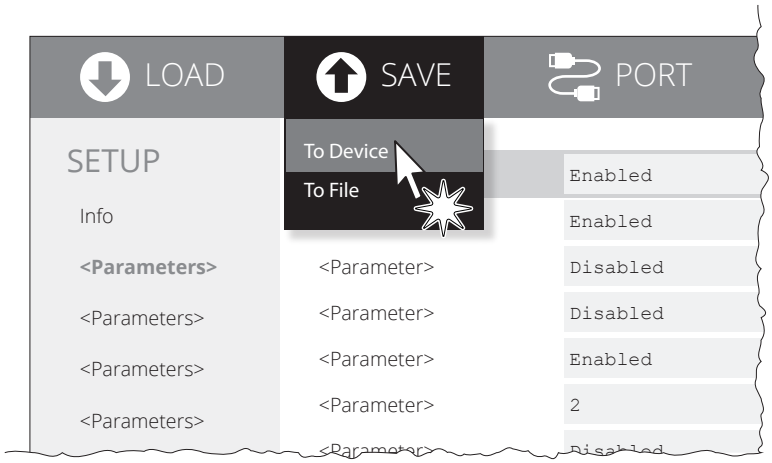
Click on SETUP to access the operating parameteres of the device to be configured.

5



Make the desired changes to the
device operating parameters.

6



Click on SAVE > TO DEVICE
to make the changes made effective.

ATTENTION:
During saving, it is strongly discouraged to disconnect the communication cable or to remove the power supply of the PC or the device.

6.3 Configuration by file

The setup parameters can be set by editing the “Setup.ini” file stored on the Flash Drive of the device.
Proceed as follows:

1

Enter setup

Enter the configuration procedure
by keys (see paragraph 6.1)
or by software (see paragraph 6.2).

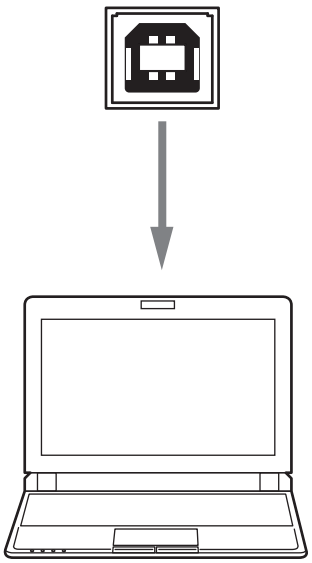
2

<parameter> ..... : **<value>**
<parameter> ..... : **<value>**
<parameter> ..... : **<value>**
<parameter> ..... : **<value>**
USB Class ..... : **Mass Storage**
<parameter> ..... : **<value>**
<parameter> ..... : **<value>**
<parameter> ..... : **<value>**
<parameter> ..... : **<value>**

Check that the "USB Class" parameter
is set to "Mass Storage".
Otherwise, this configuration mode
is not available.

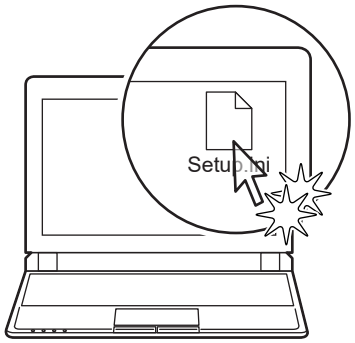
3

USB



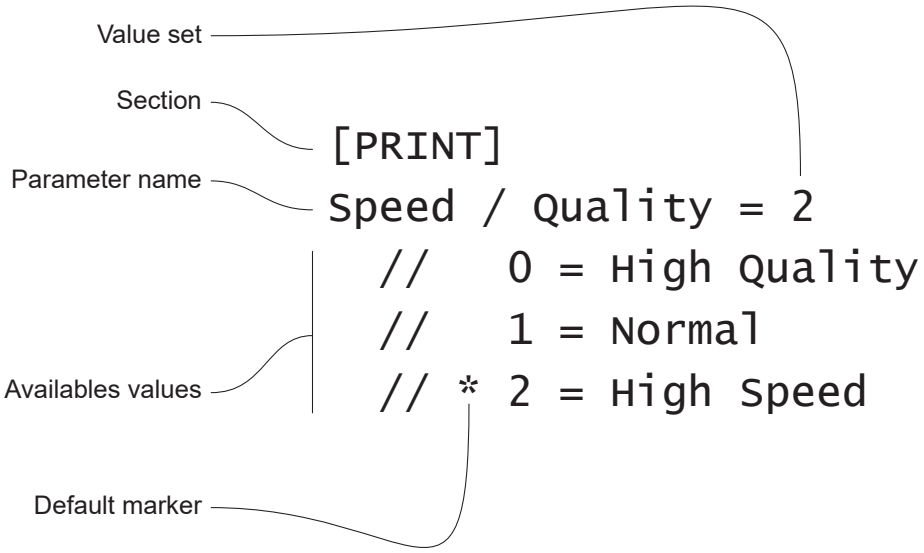
Plug the device to a Personal Computer
via USB.

4



Enter the Flash drive of the device
and edit the “Setup.ini” file.

The “Setup.ini” file is a configuration file that contains all the configurable parameters listed in text format and divided into some sections (indicated between square brackets). For each parameter, you find the parameter name followed by the value currently set and then the available values listed with a reference number. The reference number marked with the symbol ‘ * ’ is the default one (see figure).



To modify the parameter, change the numeric value after the parameter name or use the default value by typing “D”. After editing device’s parameter, simply save the “Setup.ini” file to make the modifies activated.
For a detailed description of the device operating parameters see the following paragraphs.

ATTENTION:
The change of value for the “USB Class” parameter may compromise the access to the Setup.ini file. Be careful to keep the “Mass Storage” value to allow a new access to the Flash Drive.

6.4 Device status

The device operating status is indicated in the configuration print-out in which, next to the name of the components displayed, the following information is given.

PRINTER TYPE	device model
PRINTING HEAD TYPE	printing head model
INTERFACE	interface present
PROGRAM MEMORY TEST	OK appears if functioning and NOT OK if faulty
DYNAMIC RAM TEST	OK appears if functioning and NOT OK if faulty
EXTERNAL MEMORY TEST	OK appears if functioning and NOT OK if faulty
CUTTER TEST	OK appears if functioning and NOT OK if faulty
HEAD VOLTAGE	voltage of the head
HEAD TEMPERATURE	temperature of the head
POWER ON COUNTER	number of power-ups made
PAPER PRINTED	centimetres of paper printed
CUT COUNTER*	number of cuts made

NOTE:
* : Parameter not valid for TPTCM60IIIL model.

6.5 Communication parameters

The device allows the configuration of the parameters listed in the following table.
The parameters marked with the symbol [D] are the default values.
Settings remain active even after the device has been turned off and they are stored in non-volatile memory.

RS232 BAUD RATE	Communication speed of the serial interface: 9600 57600 19200 115200 [D] 38400 Parameter valid only with serial interface.
RS232 DATA LENGTH	Number of bit used for characters encoding: 7 bits/car 8 bits/car [D] Parameter valid only with serial interface.
RS232 PARITY	Bit for the parity control of the serial interface: None [D] = parity bit omitted Even = even value for parity bit Odd = odd value for parity bit Parameter valid only with serial interface.
RS232 HANDSHAKING	Handshaking: Xon/Xoff = software handshaking Hardware [D] = hardware handshaking (CTS/RTS) Parameter valid only with serial interface.
BUSY CONDITION	Activation mode for the Busy signal: OffLine/ RxFull = Busy signal is activated when the device is both in OffLine status and the buffer is full RxFull [D] = Busy signal is activated when the buffer is full Parameter valid only with serial interface.
USB ADDRESS NUMBER	Numerical address code for the univocal identification of the USB device (in case of more than a USB device connected with the same PC): 0 [D] 2 4 6 8 1 3 5 7 9
USB CLASS	USB communication class definition. Printer [D] = setting the printer function Mass Storage = setting the sharing mode from Mass Storage Virtual COM = setting the USB port as a serial port

6.6 Operating parameters

This device allows the configuration of the parameters listed in the following table.
The parameters marked with the symbol [D] are the default values.
Settings remain active even after the device has been turned off and they are stored in non-volatile memory.

PRINTER EMULATION	Available emulations for the device: CUSTOM/POS [D] TPTCMII CUSTOM TPT
PRINT MODE	Printing mode: Normal [D] = enables printing in normal writing way Reverse = enables printing rotated 180 degrees
AUTOFEED	Setting of the Carriage Return character: CR disabled [D] = Carriage Return disabled CR enabled = Carriage Return enabled
CHARS / INCH	Font selection: A = 11 cpi, B = 15 cpi A = 15 cpi, B = 20 cpi [D] CPI = Characters Per Inch
FONT SIZE	Setting of the font size: Font 8x16 Font 16x24 [D] Font 24x32 Parameter used only with CUSTOM TPT emulation enabled.
JUSTIFICATION	Type of justification: Left [D] Center Right Parameter used only with CUSTOM TPT emulation enabled.

CODE TABLE [NUM]

Identifier number of the character code table to use.

See paragraph 9.8 to learn about the character tables corresponding to the identification numbers set with this parameter.
The character tables set with this parameter are the same set with the command 0x1B 0x74 (refer to the commands manual of the device).
The numeric value of the identifier is made up with the following two parameters for the setting of two digits for the tens and the units:

Code Table [num x 10]	Setting the digit for tens: 0 [D] 2 4 1 3 5
Code Table [num x 1]	Setting the digit for units: 0 [D] 2 4 6 8 1 3 5 7 9

FONT TYPE

Setting of the font type:

International [D]	= enables the use of the 256 characters font tables
Chinese GB18030	= enables the use of the chinese extended font GB18030
Korean CP949	= enables the use of the korean font CP949

SPEED / QUALITY

Setting of printing speed and printing quality:

High Quality
Normal
High Speed [D]

AUTOMATIC EJECTING

Setting of the automatic ejecting function of the last printed thicket in presentation mode:

Disabled [D] = ejecting function disabled
Enabled T.out 5s = the ticket is ejected after 5 seconds from the end of printing
Enabled T.out 10s = the ticket is ejected after 10 seconds from the end of printing
Enabled T.out 15s = the ticket is ejected after 15 seconds from the end of printing
Enabled T.out 20s = the ticket is ejected after 20 seconds from the end of printing
Enabled T.out 30s = the ticket is ejected after 30 seconds from the end of printing
Enabled T.out 40s = the ticket is ejected after 40 seconds from the end of printing
Enabled T.out 60s = the ticket is ejected after 60 seconds from the end of printing
Enabled T.out 2m = the ticket is ejected after 2 minutes from the end of printing

This parameter is printed only with TPTCM60III EJC, TPTCM112III EJC and TPTCM112III EJC 300 DPI.

PRINT WIDTH

Printing area width:

76 mm	86 mm	96 mm
78 mm	88 mm	98 mm
80 mm	90 mm	100 mm
82 mm	92 mm	102 mm
84 mm	94 mm	104 mm [D]

This parameter is valid only for TPTCM112III EJC and TPTCM112III EJC 300 DPI.

PANEL KEY	Panel key management: Disabled = Panel key disabled. Enabled [D] = Panel key enabled.
PAPER THRESHOLD	Threshold value (in percent) for the recognition of paper presence by the paper presence sensor: 30% 60% 90% 40% 70% 50% [D] 80%
PAPEREND BUFFER CLEAR	Cleaning mode of data in receive buffer, if the printing is stopped due to lack of paper: Disabled [D] = Data remain in the receive buffer. When the paper runs out, the device keeps the remaining data in receive buffer and prints the remaining portion of ticket after that the new paper is loaded. Enabled = When the paper runs out, all data in the receive buffer are deleted.
PRINT DENSITY	Adjusting the printing density: -25% 0 [D] +25% -12% +12% The print quality is strongly influenced by the type of chemical treatment and the type of storage to which the thermal paper has been subjected, as well as by the weight of the same. It may therefore necessary to act on this parameter to obtain the desired print quality.

6.7 Alignment parameters

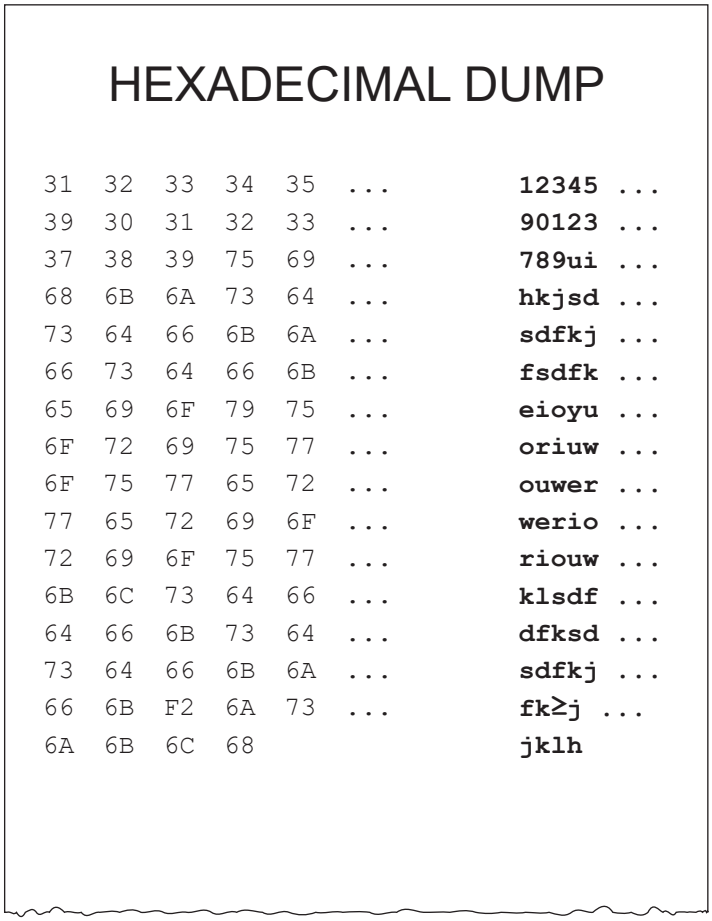
The device allows the configuration of the parameters listed in the following table.
The parameters marked with the symbol [D] are the default values.
Settings remain active even after the device has been turned off and they are stored in non-volatile memory.

BLACK MARK POSITION	Black mark or gap alignment management: Disabled [D] = alignment is not performed Enabled = alignment is performed	
BLACK MARK THRESHOLD	Threshold value (in percent) for the recognition of the presence of notch by the notch sensor: 30% 70% 40% 80% 50% 90% 60% [D] For TPTCM112III CL the default value is 40%. If “Black Mark Position” parameter is disabled, this parameter is not printed.	
BLACK MARK DISTANCE [mm]	"Black mark distance" is the minimum distance (in millimetres) between the upper edge of the ticket and the black mark (see chapter 7). from -19.9 mm to 99.9 mm (default = 0 mm) If “Black Mark Position” parameter is disabled, the parameters for the “Black Mark Distance” are not printed. The numeric value of the distance is made up with the following four parameters for the setting of three digits (two for the integer part of the number, one for the decimal part and of the sign):	
	BLACK MARK DISTANCE SIGN	Sign setting: + [D] = positive distance - = negative distance
	BLACK MARK DISTANCE [mm x 10]	Setting the digit for tens: 0 [D] 2 4 6 8 1 3 5 7 9
	BLACK MARK DISTANCE [mm x 1]	Setting the digit for units: 0 [D] 2 4 6 8 1 3 5 7 9
	BLACK MARK DISTANCE [mm x .1]	Setting the digit for decimals: 0 [D] 2 4 6 8 1 3 5 7 9

6.8 Hexadecimal dump

This function is used for the diagnosis of the characters received from the communications port. Characters are printed as hexadecimal code and the corresponding ASCII code (see below). Each line is preceded by a counter in hexadecimal that indicates the number of bytes received.

During the startup, if you hold down the FEED key, the device enters the self-test routine and print the setup report.
The device remains in standby until a key is pressed or characters are received through the communication port (Hexadecimal Dump mode). For each character sent, the ticket shows the hexadecimal value and the ASCII codes (if the characters are underlined, the receive buffer is full). Shown below is an example of a Hexadecimal Dump:



7 ALIGNMENT

Devices are provided with sensors for the alignment management in order to handle:
- rolls of tickets with pre-printed fields and a fixed length;
- rolls of labels with a fixed length.

The alignment notch may be formed by
- black mark printed on paper (see paragraph 9.7);
- gap between two labels (see paragraph 9.7);

All the alignment sensors are “reflection” sensors: this kind of sensor emits a band of light and detects the quantity of light reflected to it. The presence of the notch is therefore detected by the amount of light that returns to the sensor, considering that the light is reflected by the white paper and absorbed by the black mark.

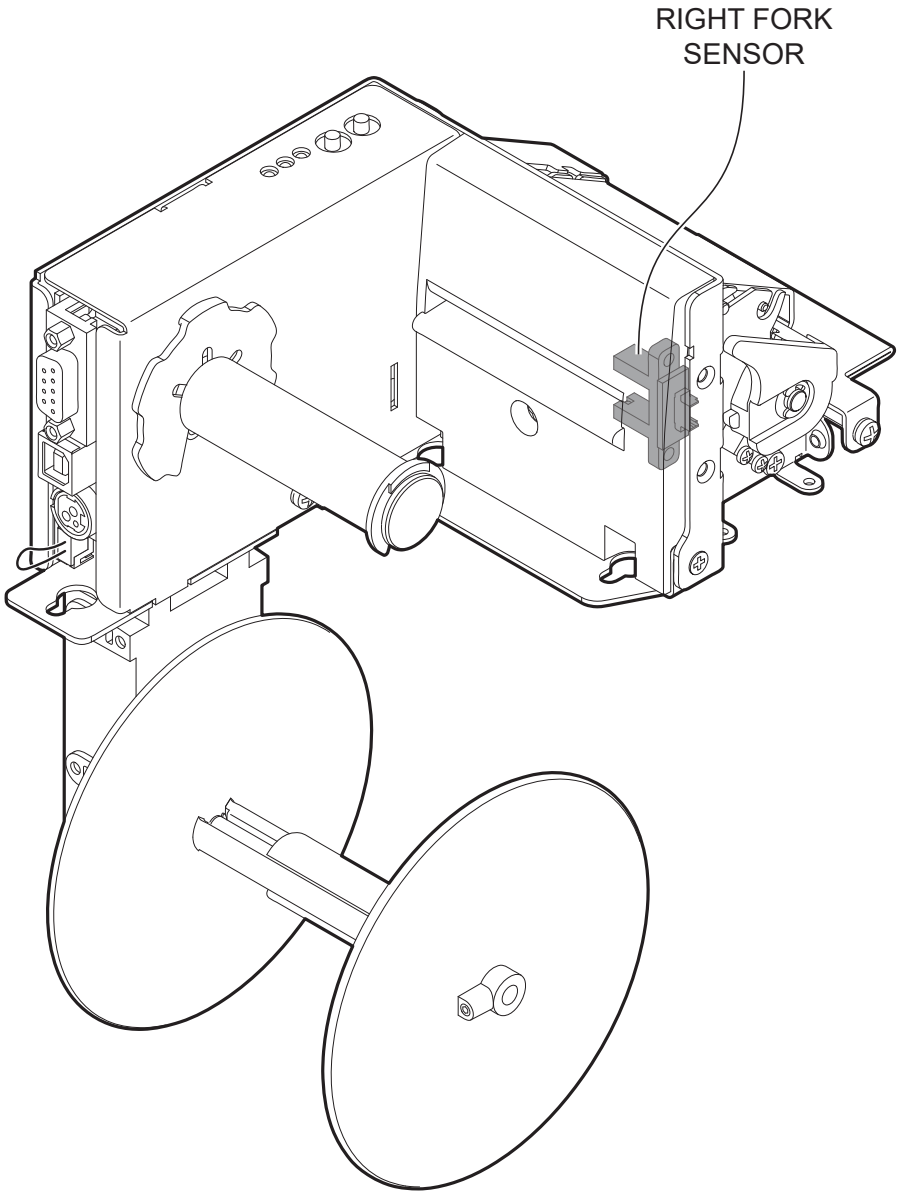
The device that handle paper with labels, are provided with a fork sensor or a couple of facing sensors working in “transparence” mode: a beam of light is emitted by the transmitter sensor and the quantity of light which reaches the opposite receiver sensor is detected.
The presence of the gap between labels is detected evaluating the amount of light that arrives to the opposite sensor, considering that the white paper doesn’t allow the beam of light to reach the receiver, whereas the translucent paper underlying (liner) lets the light to reach the receiver.

The following paragraphs show how to correctly set the configuration parameters of device in order to assure the alignment.

7.1 Enable alignment

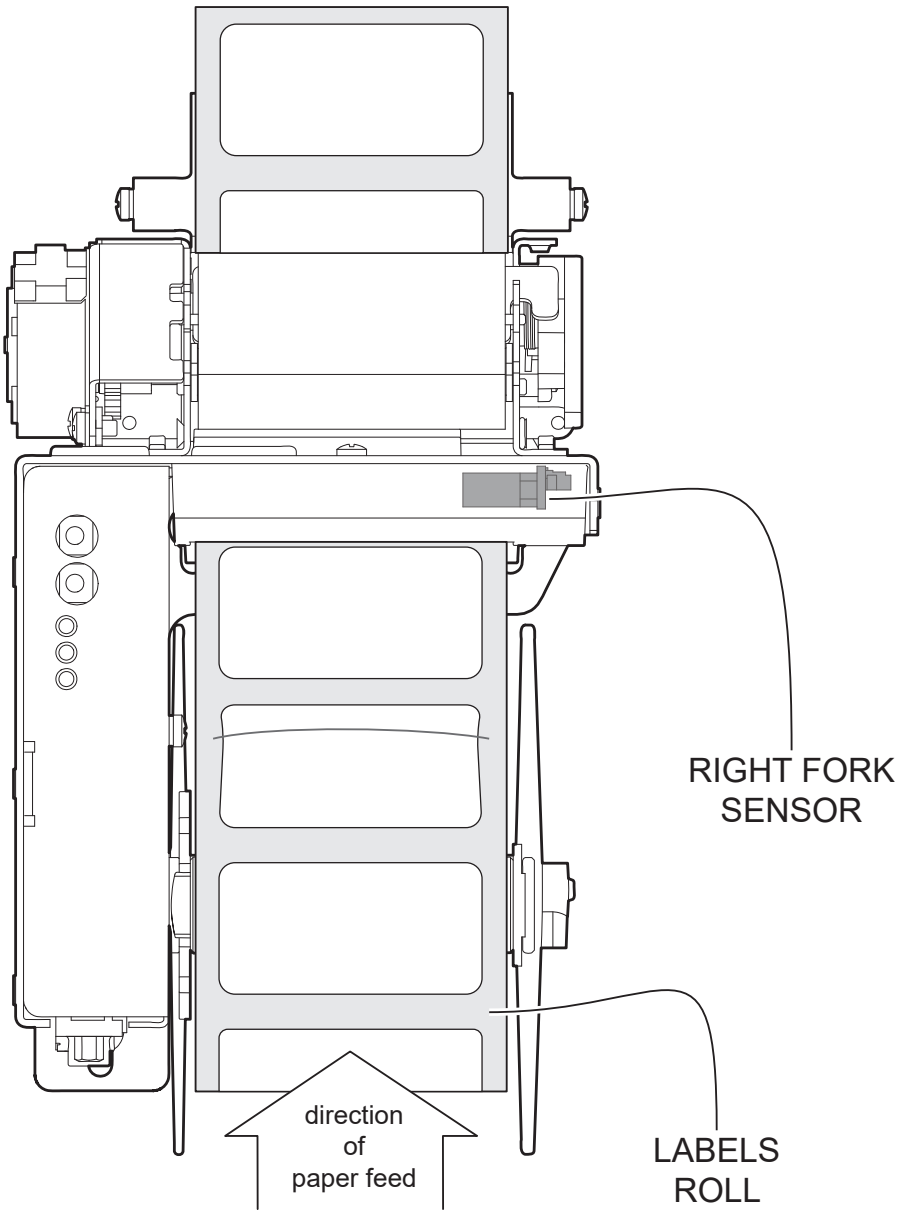
TPTCM60IIIL

Device is provided with a fork sensors for alignment, placed on the right side of the paper input mouth:



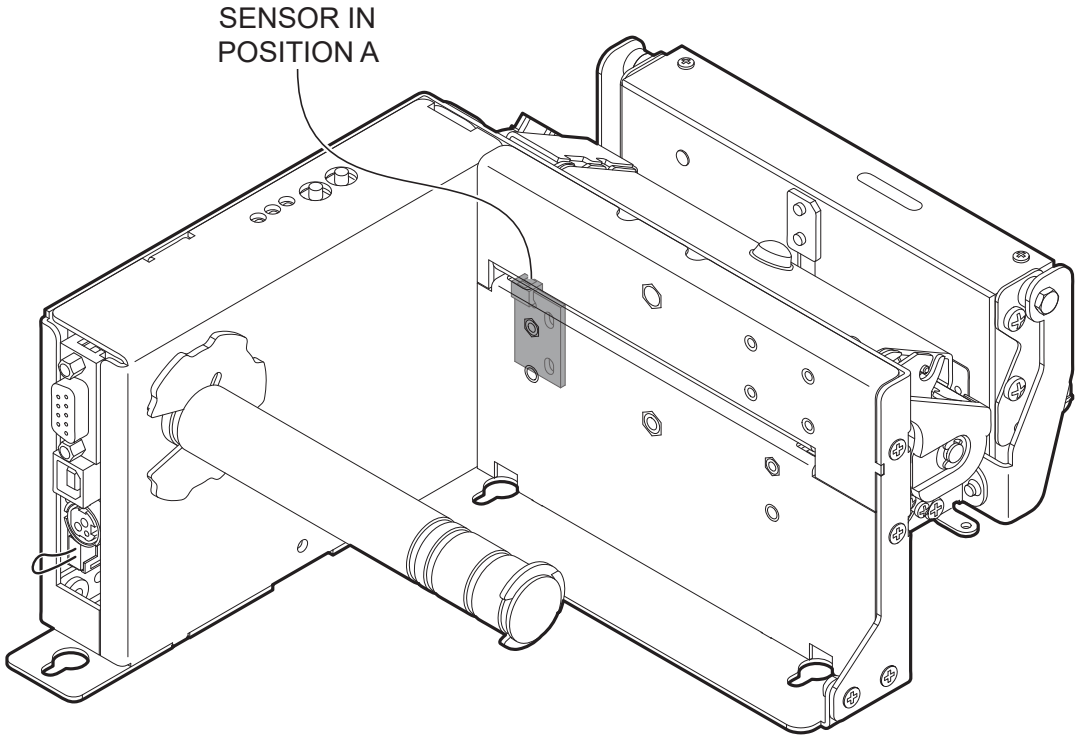
To guarantee the correct alignment, you must enable the parameter “Black Mark Position” during the setup procedure (see chapter 6).
If the alignment does not work properly, perform the labels gap detection sensor autoset procedure (see paragraph 7.3).

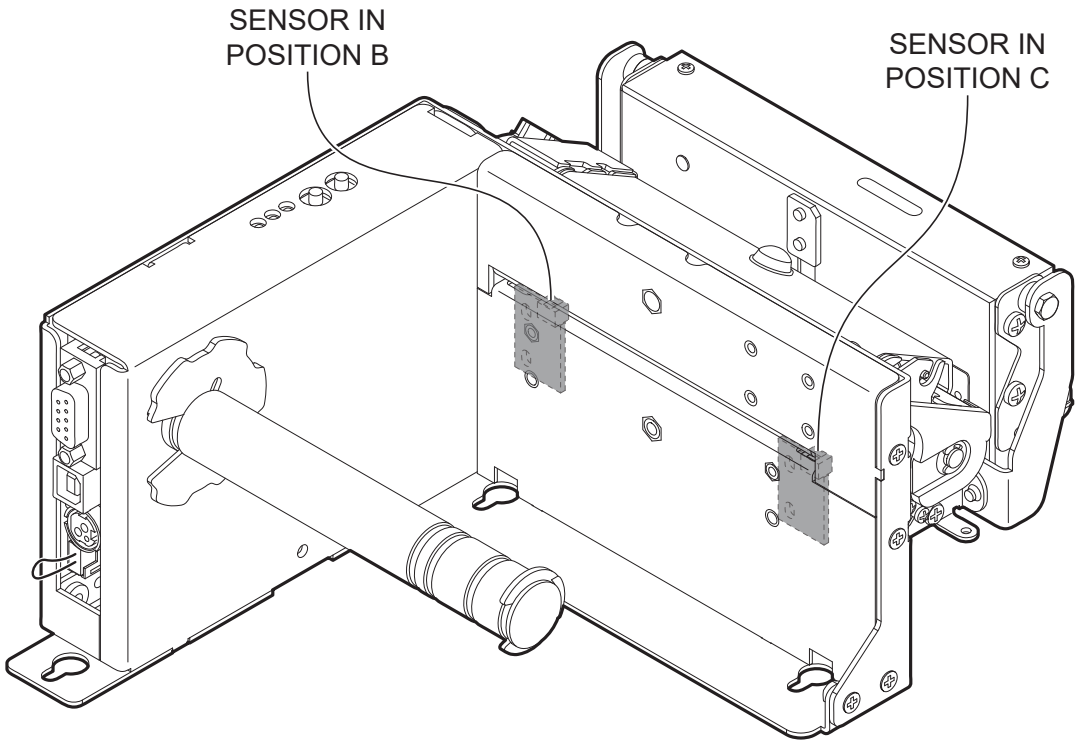
The following figure shows an example of paper with label usable with the device:



TPTCM112III, TPTCM112III STRONG CUT, TPTCM112III CL

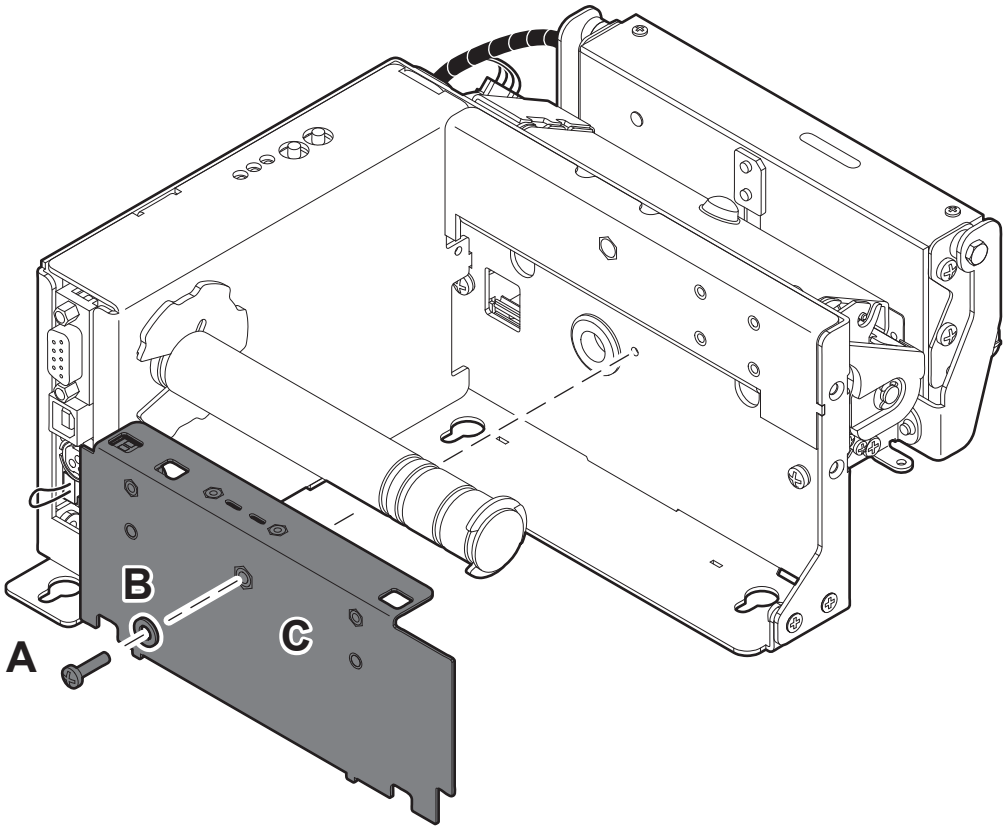
The device is equipped with an alignment sensor that can be positioned in three different positions.
In standard configuration, the sensor is positioned in position A.





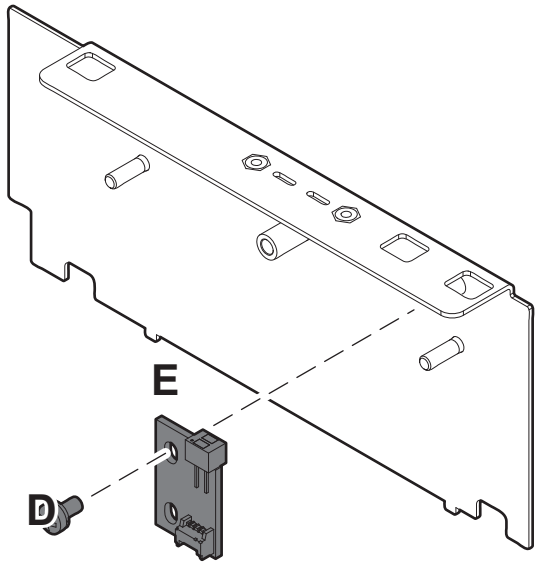
To place the sensor in positions B or C, proceed as follows.

1



Unscrew the fixing screw A and remove the washer B.
Move the lower paper guide away C being careful not to damage the cables.

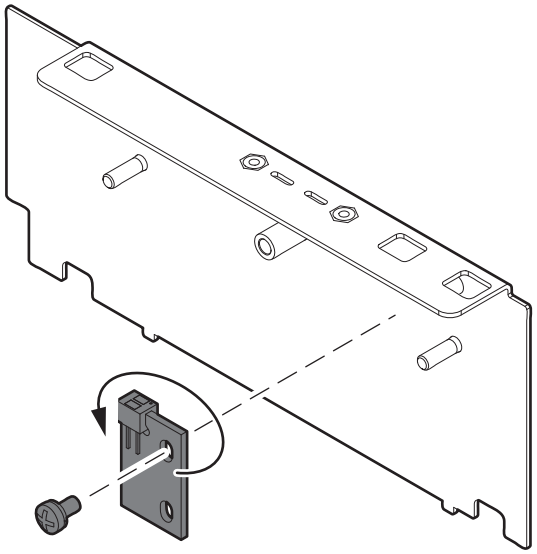
2



Unscrew the fixing screw D and remove the alignment sensor E.

3

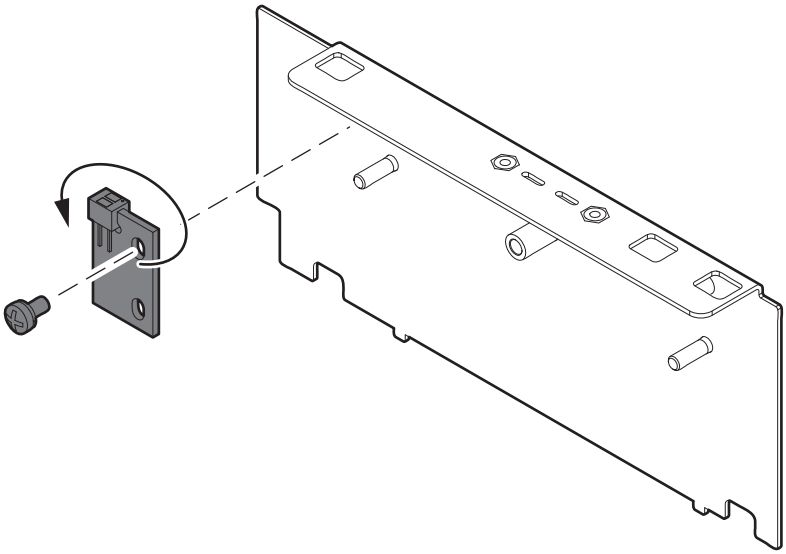
SENSOR IN POSITION B



To position the sensor in position B, rotate the sensor 180 ° and fix it
in the previous position with the previously removed fixing screw.
Make sure to match the pin of the paper guide with the hole in the alignment sensor board.

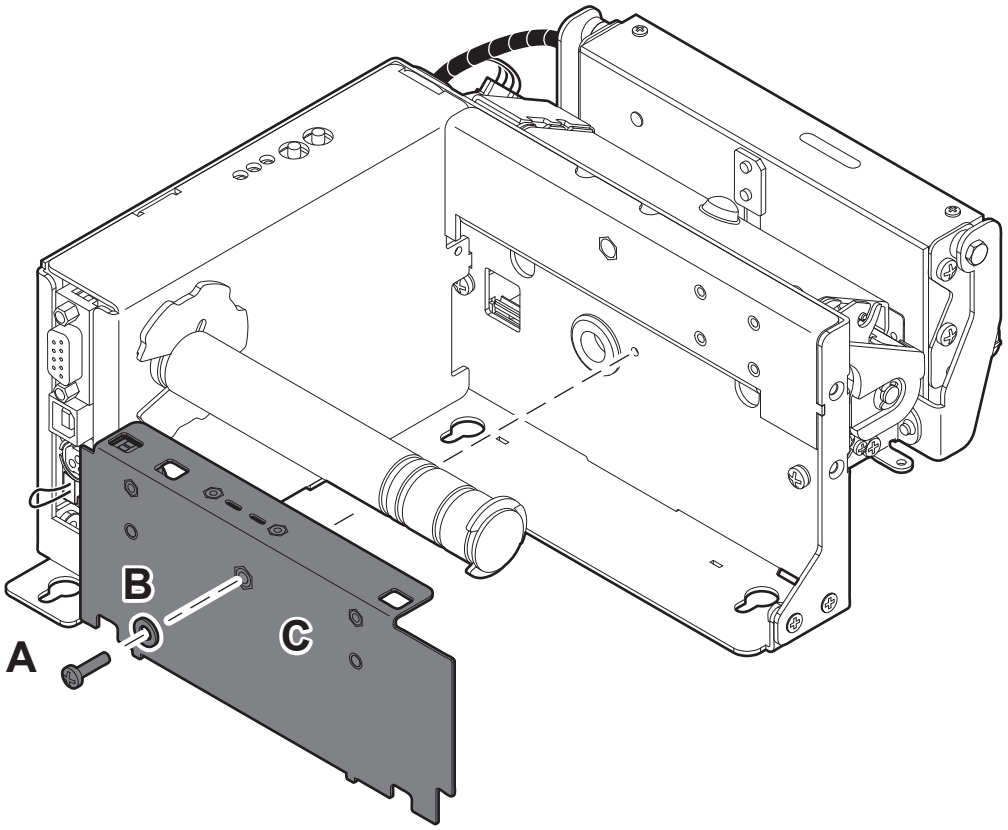
4

SENSOR IN POSITION C



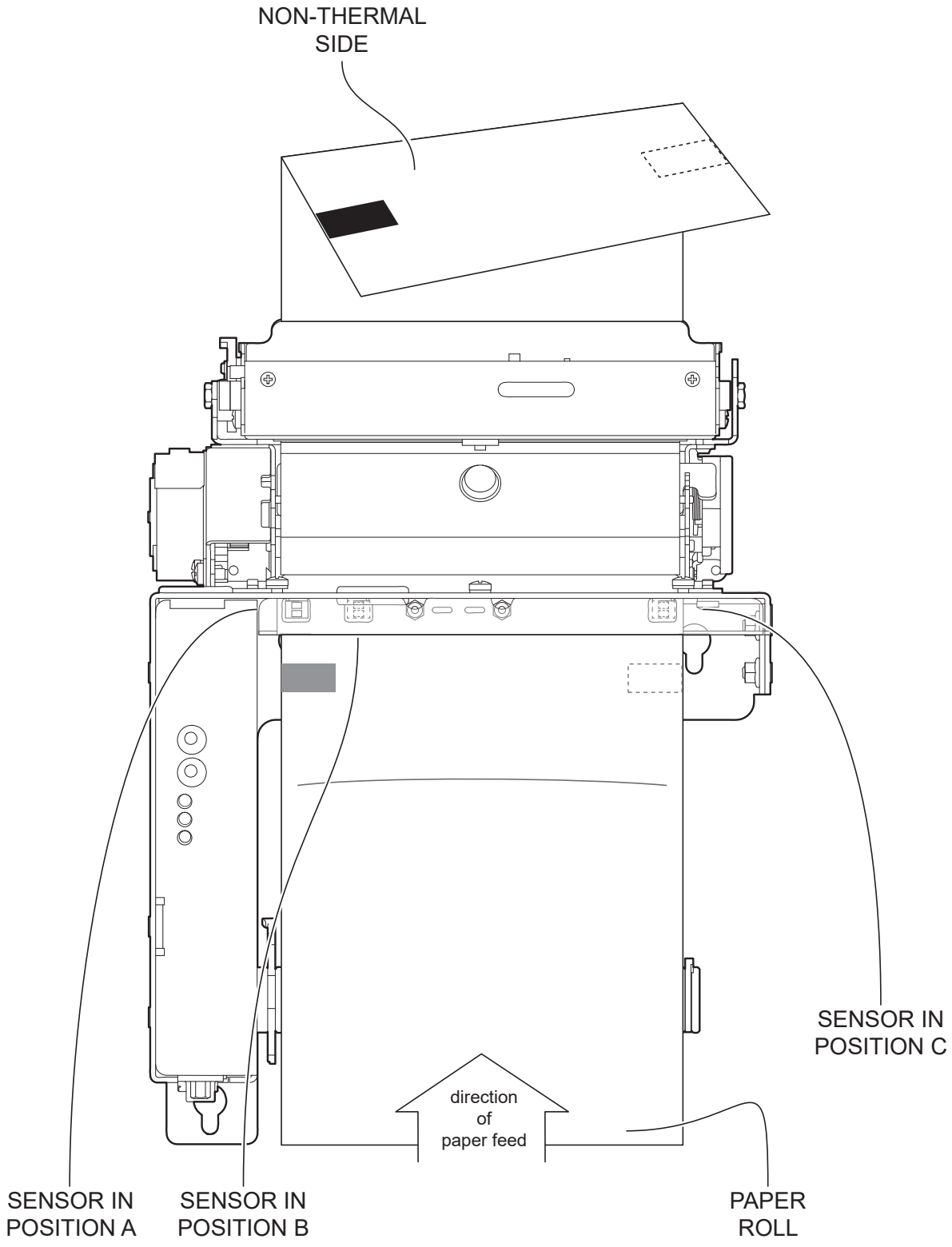
To position the sensor in position C, rotate the sensor 180 ° and fix it in the position indicated
with the previously removed fixing screw.
Make sure to match the pin of the paper guide with the hole in the alignment sensor board.

5



Reposition the lower paper guide C in its seat and fix it with the fixing screw A and the washer B.

The following figure shows an example of paper with black mark usable with the device:

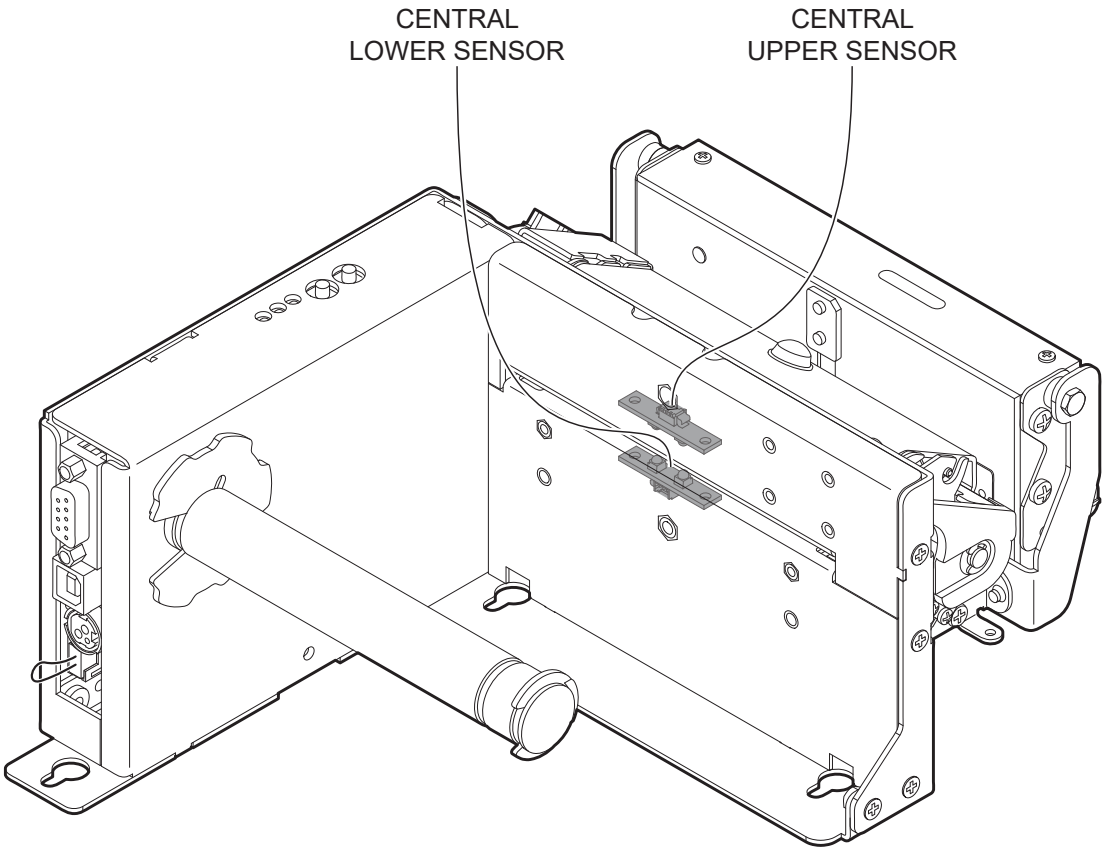


To guarantee the correct alignment, you must enable the parameter “Black Mark Position” during the setup procedure (see chapter 6).

TPTCM112IIIL

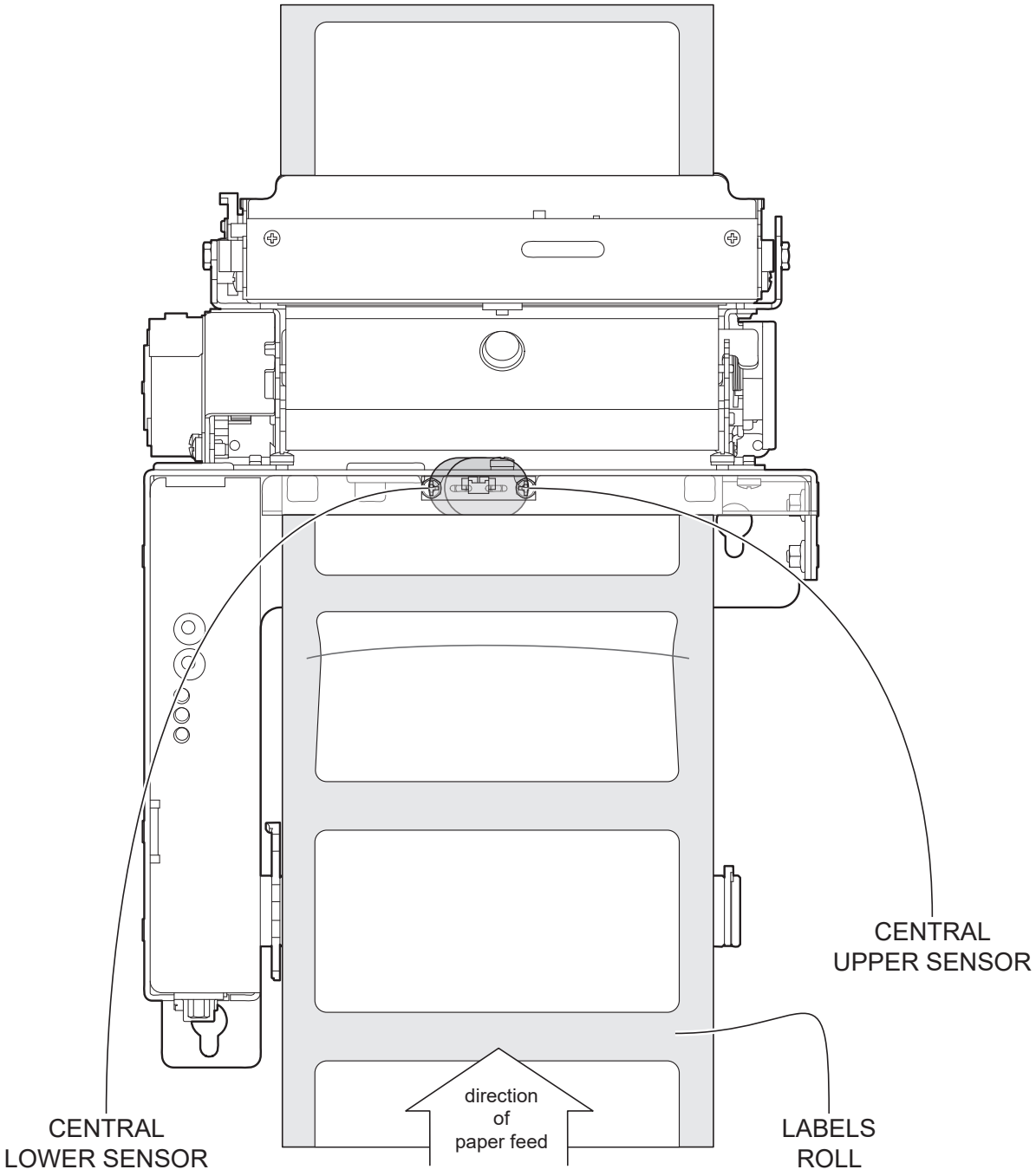
Device is provided with two sensor for alignment, placed as follows:

- a fixed sensor placed on the center, at the bottom of input paper mouth,
- a fixed sensor placed on the center, at the top of input paper mouth



To guarantee the correct alignment, you must enable the parameter “Black Mark Position” during the setup procedure (see chapter 6).
If the alignment does not work properly, perform the labels gap detection sensor autoset procedure (see paragraph 7.3).

The following figure shows an example of paper with black mark usable with the device:



7.2 Calibration

The sensor calibration occurs automatically and consists in adjusting the quantity of light emitted to match the degree of whiteness of the paper used and the degree of black of the mark printed on paper.

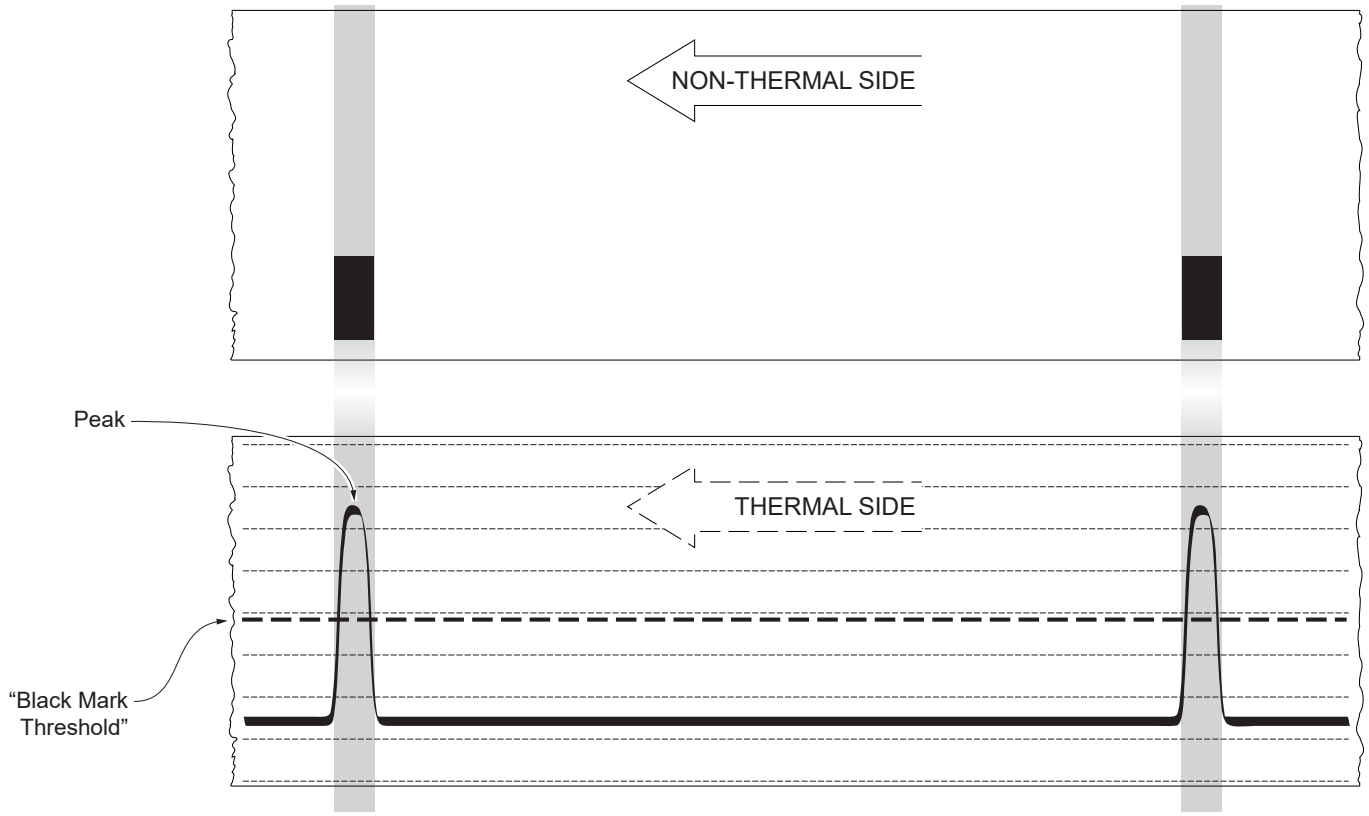
The device automatically performs the self-calibration during the setup procedure only if the “Black Mark Position” parameter is set to a value other than “Disabled” (see chapter 6).

When self-calibration starts, the device performs some paper feeds and then it prints the calibration result and the value of the PWM duty-cicle of the alignment sensor driver so that it can be perform an optimal notch detection:

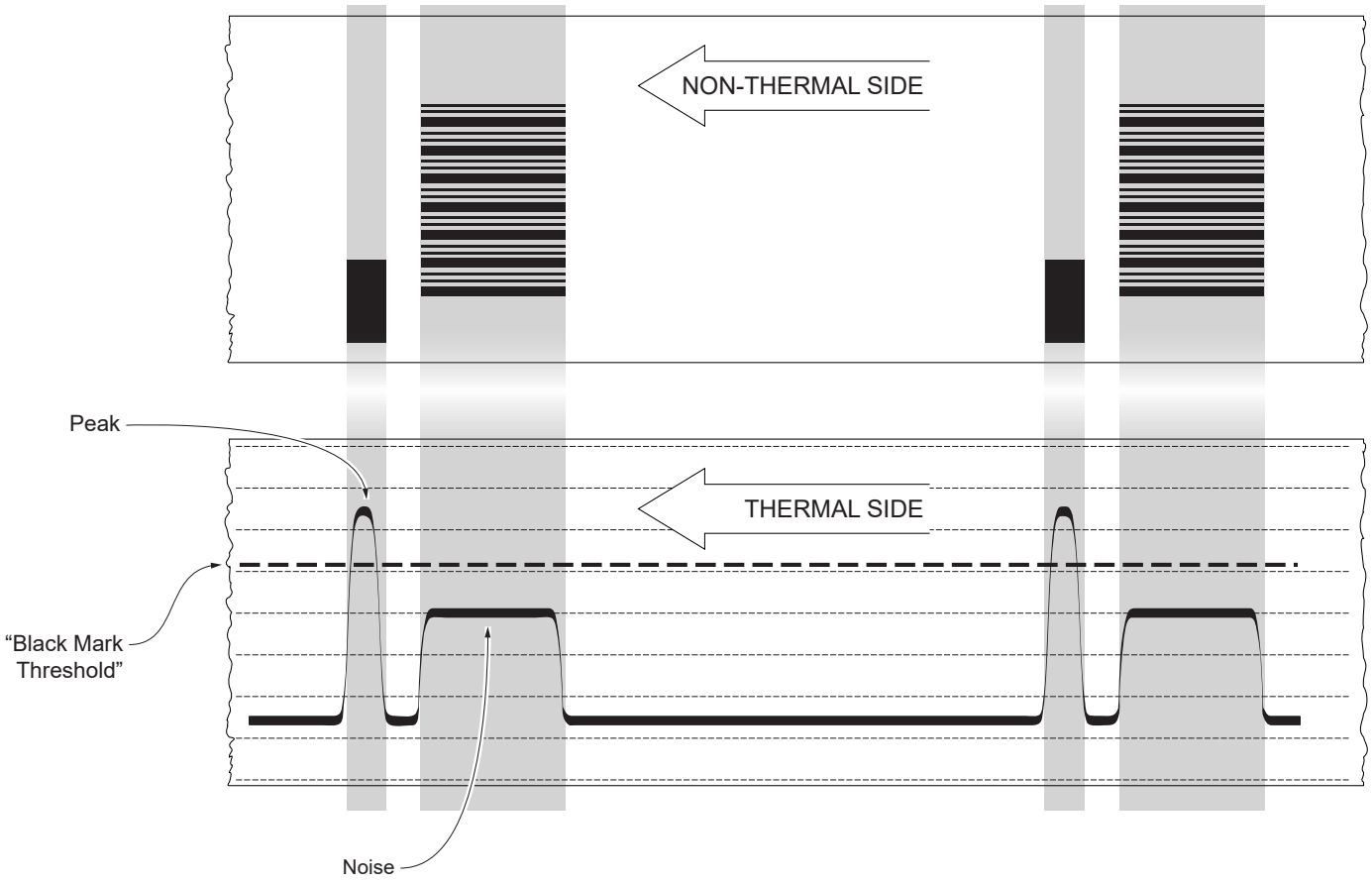
Autosetting Notch : OK
PWM Duty Cycle : 85.3%

The “Autosetting Notch” parameter indicates the result of the self-calibration procedure; OK will appear if it has been successful, NOT OK will appear if the procedure has failed.

After the printing of the procedure result, the device offers the execution of the function of paper characterization “Characterize Paper” and the change of the “Black Mark Threshold” parameter which represents the detection threshold of the notch. Choosing the “Yes” value for the “Characterize Paper” parameter, the device prints a graphic representation (see following figures) of the outgoing voltage of the alignment sensor (expressed as a percentage) and the “Black Mark Threshold” value. This graphic representation is useful to set the most suitable value to assign to the “Black Mark Threshold” parameter and then to better identify the optimal threshold value which takes into account the variations of the signal and the small oscillations around zero.
The following figure shows an example of paper with the non-thermal paper printed with black marks: the outgoing voltage is constant while passing the white paper between two notches and presents a peak at each black mark.
In this case, the optimal value for the “Black Mark Threshold” parameter is placed about half of the peak.



The following figure shows an example of paper with the non-thermal paper printed with black marks and other graphics (for example, a barcode): the outgoing voltage is constant while passing the white paper between two notches, presents a peak at each black mark and presents some “noise” at each barcode. In this case, the optimal value for the “Black Mark Threshold” parameter is located about halfway between the peak value and the maximum value of the “noise”.

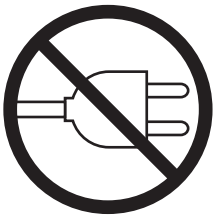


If the maximum value of “noise” read by the sensor is very close to the peak value, it might be difficult to place the value of the “Black Mark Threshold” at an intermediate point. In these cases, it is mandatory that the portion of paper between the point of printing end and the front notch is completely white (no graphics). In this way, the only next graphic detected by the sensor for alignment after the printing end will be the notch.

7.3 Labels gap detection sensor autoset procedure

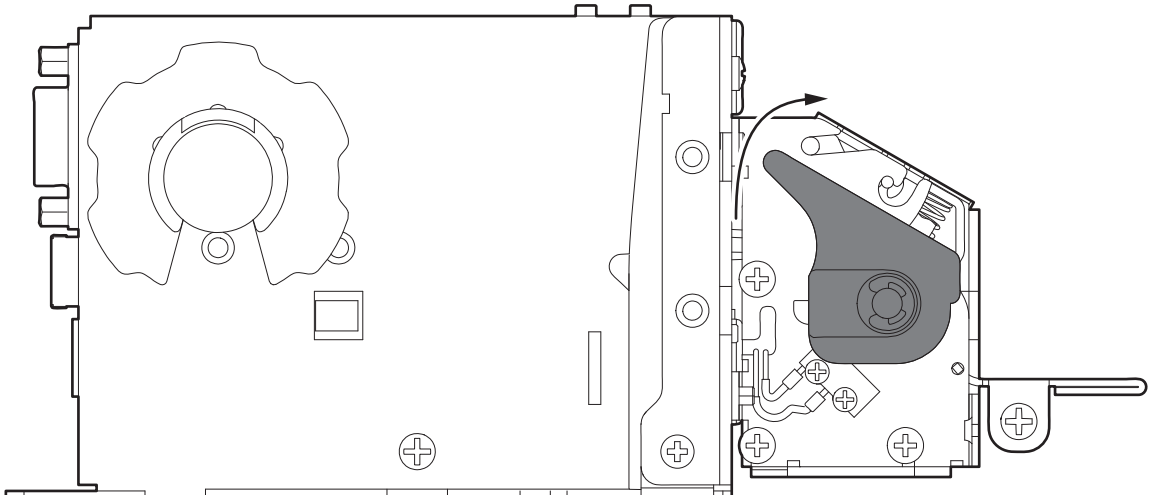
TPTCM60IIIL, TPTCM112IIIL

1



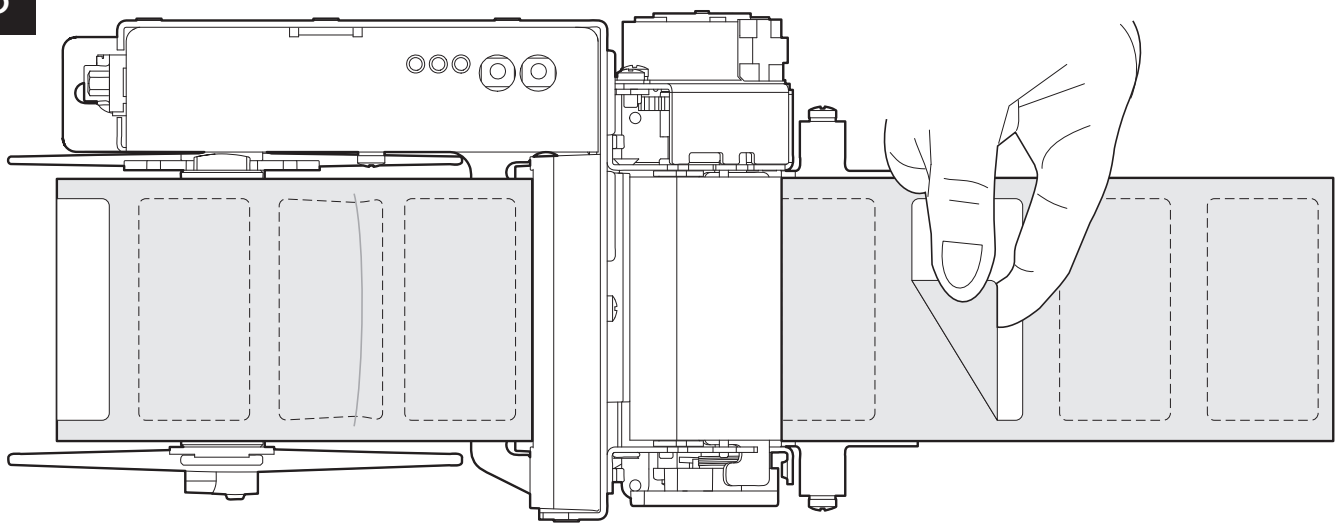
Disconnect the power supply cable.

2



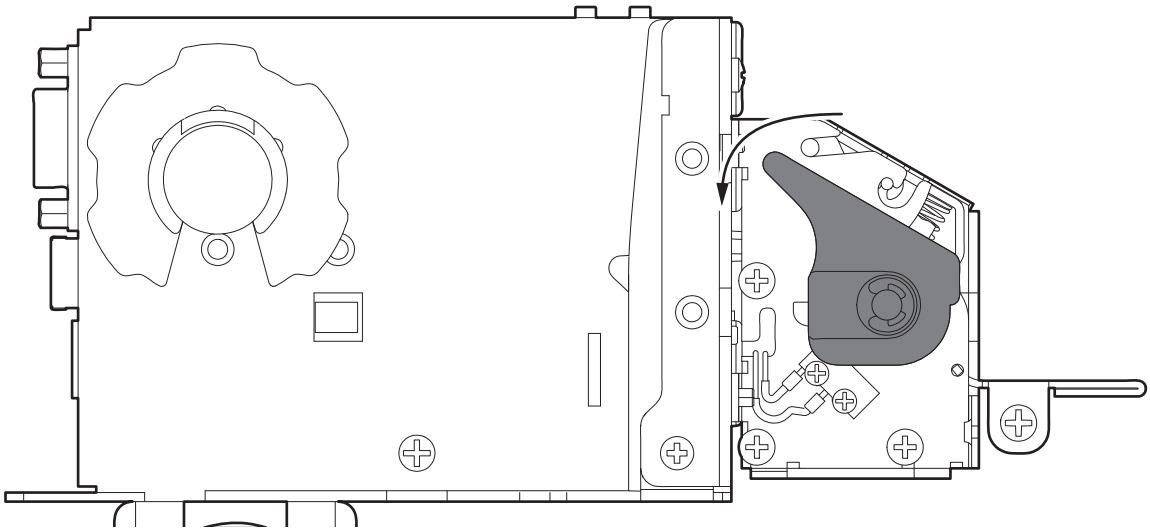
Open the printhead by rotating the printhead lifting lever.

3



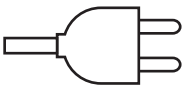
Remove all labels on the support near the paper inlet and bezel.
There should be no labels under the printing mechanism.

4



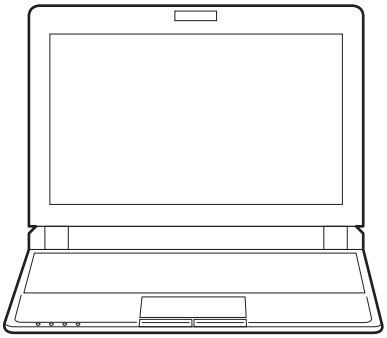
Close the printhead by rotating the printhead lifting lever.

5



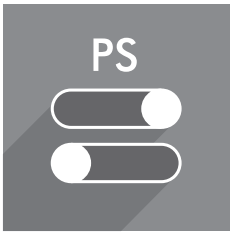
Connect the power supply cable to the device.

6



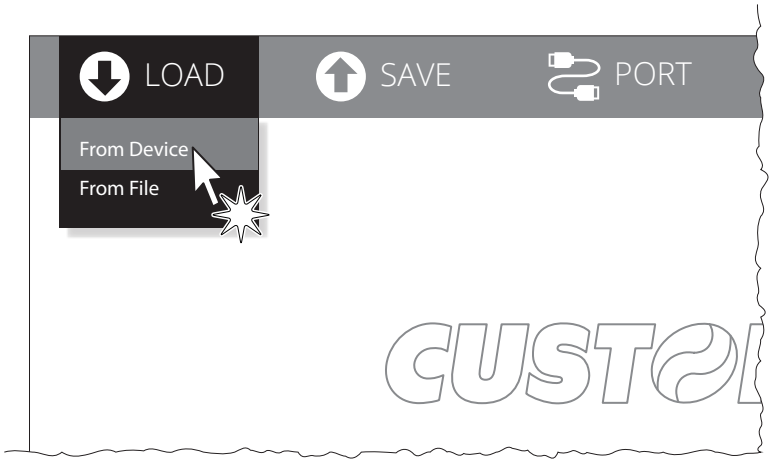
Connect the device to a PC directly (see paragraph 4.2),
without using HUB devices.

7



Start the “PrinterSet” software tool.

8

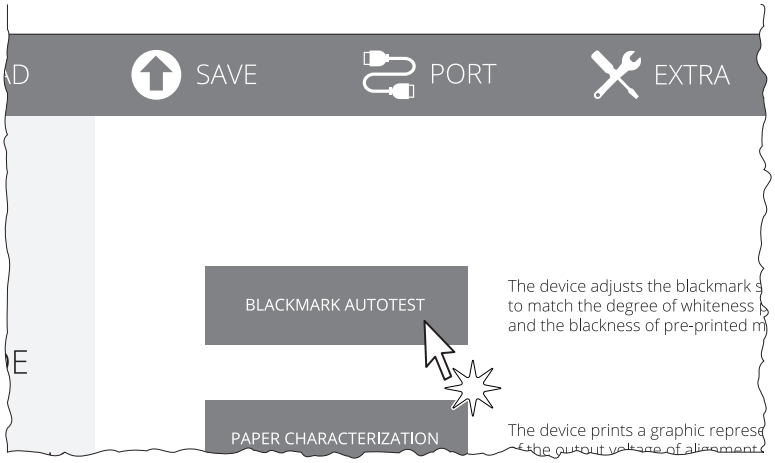


Click on LOAD > FROM DEVICE and select the device connected to the PC.

9

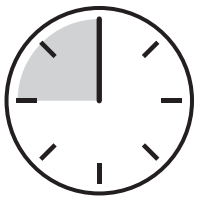
Click on TOOLS.

10



Click on BLACKMARK AUTOTEST.

11

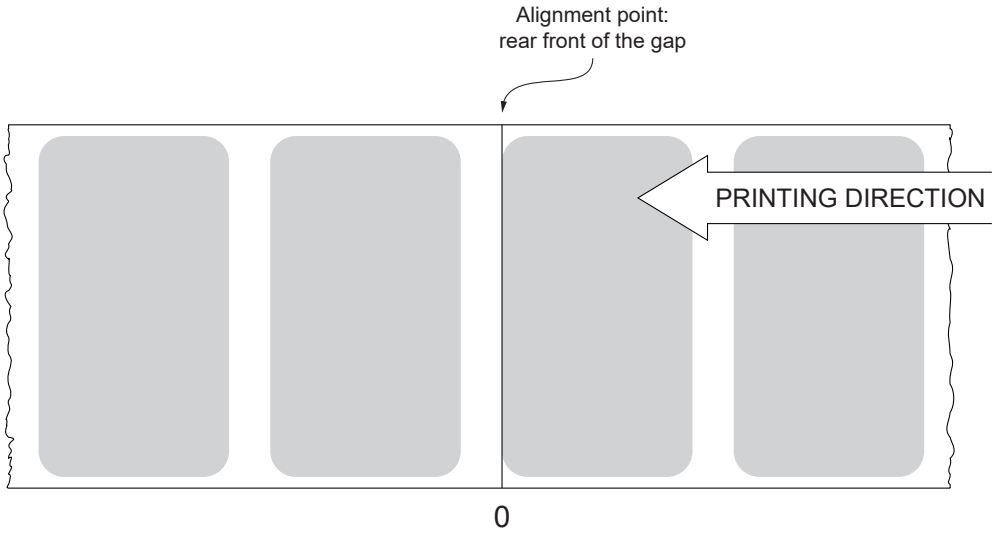


Attendere il completamento della procedura di autoset da parte del dispositivo.

7.4 Alignment parameters

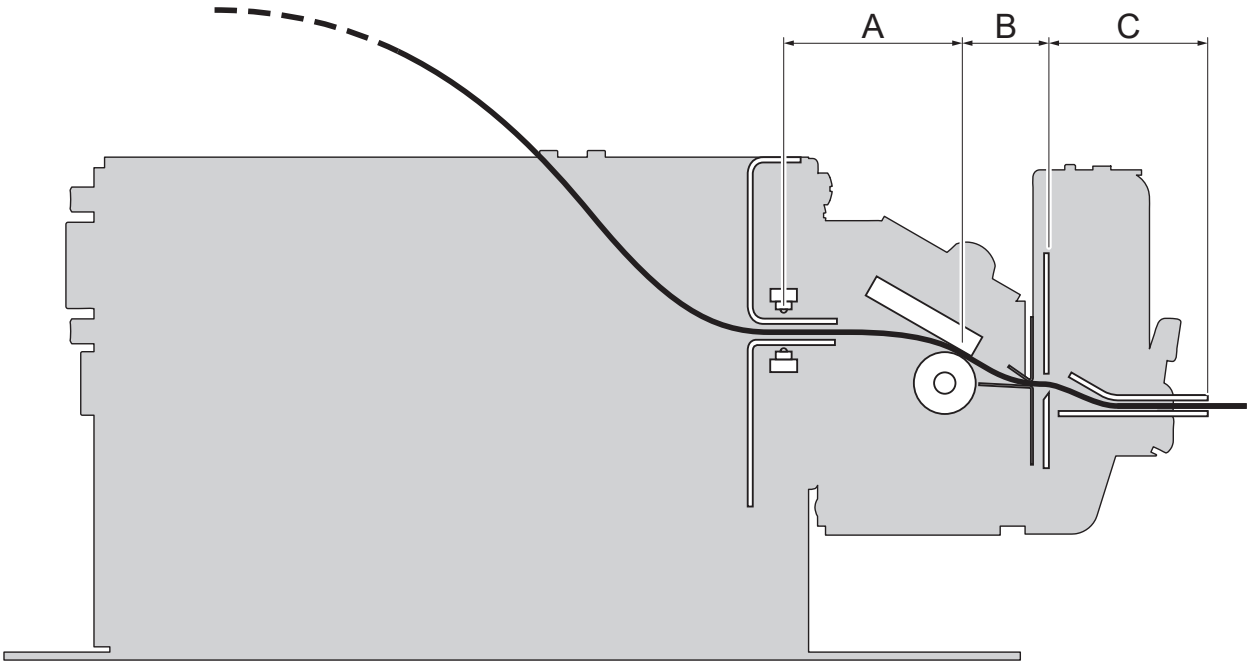
TPTCM60IIIL, TPTCM112IIIL

When you use paper with label, the “alignment point” is always meant as the label edge and match with the rear front of the gap between two labels. The gap width is automatically detected and measured by the sensors of the device.



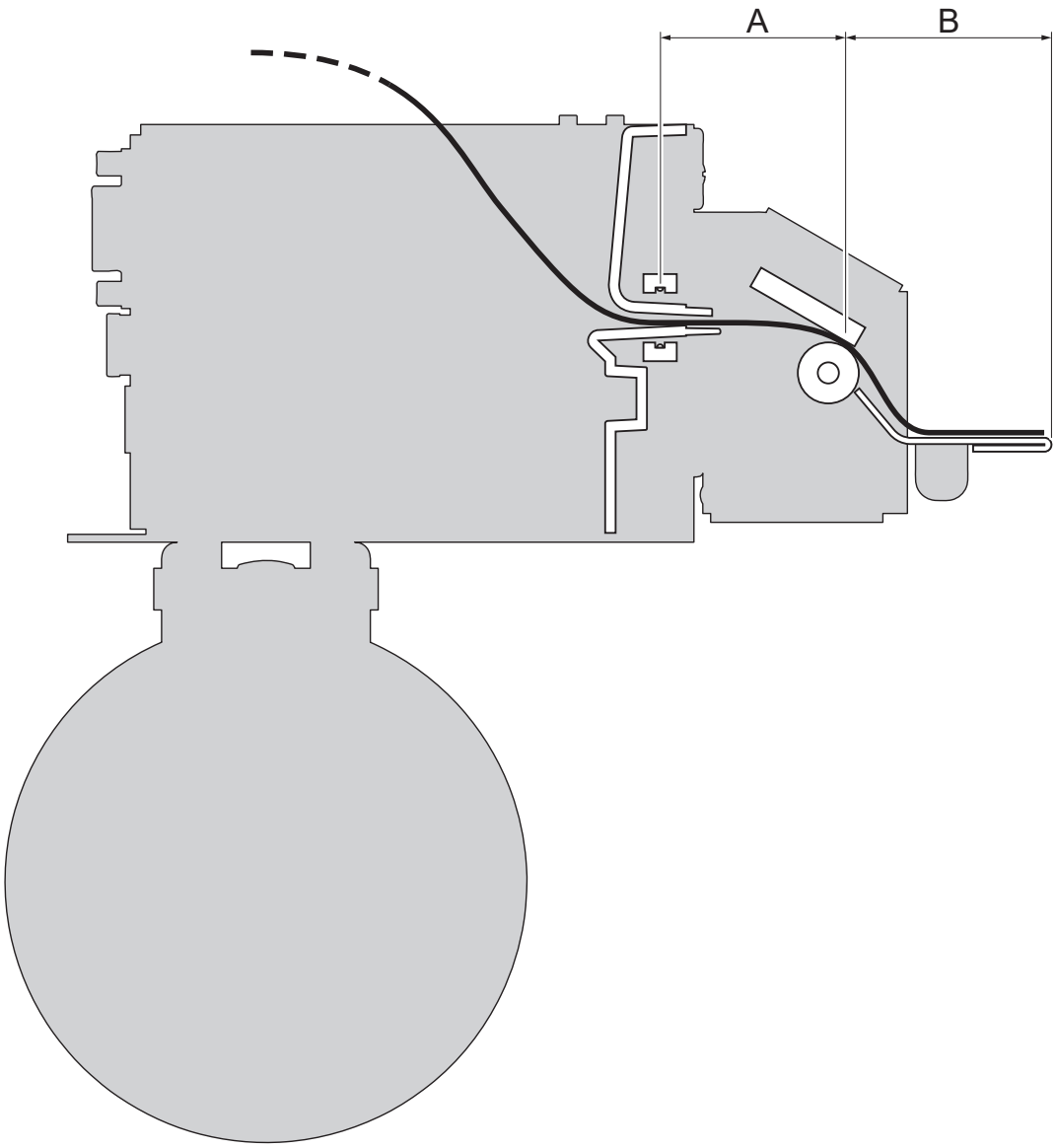
The following figures show the simplified sections of the device models with the paper path and the distances (expressed in millimeters of theoretical paper path) between the alignment sensor, the printhead, autocutter (for models with presenter) and paper output.

TPTCM112IIIL



A = distance between printhead and alignment sensor = 34 mm
B = distance between printhead and autocutter = 17.4 mm
C = distance between autocutter and paper output = 31.4 mm

TPTCM60IIIL



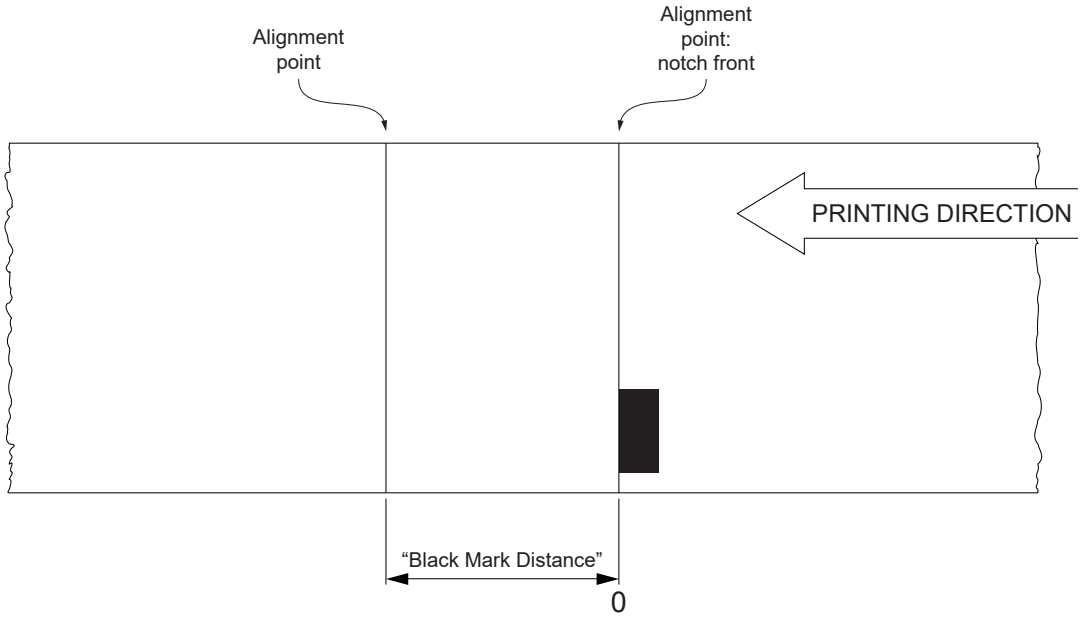
A = distance between printhead and alignment sensor = 36.5 mm
B = distance between printhead and peeler output = 47 mm

To enable the alignment management you need to enable the “Black Mark Position” as described in chapter 6.

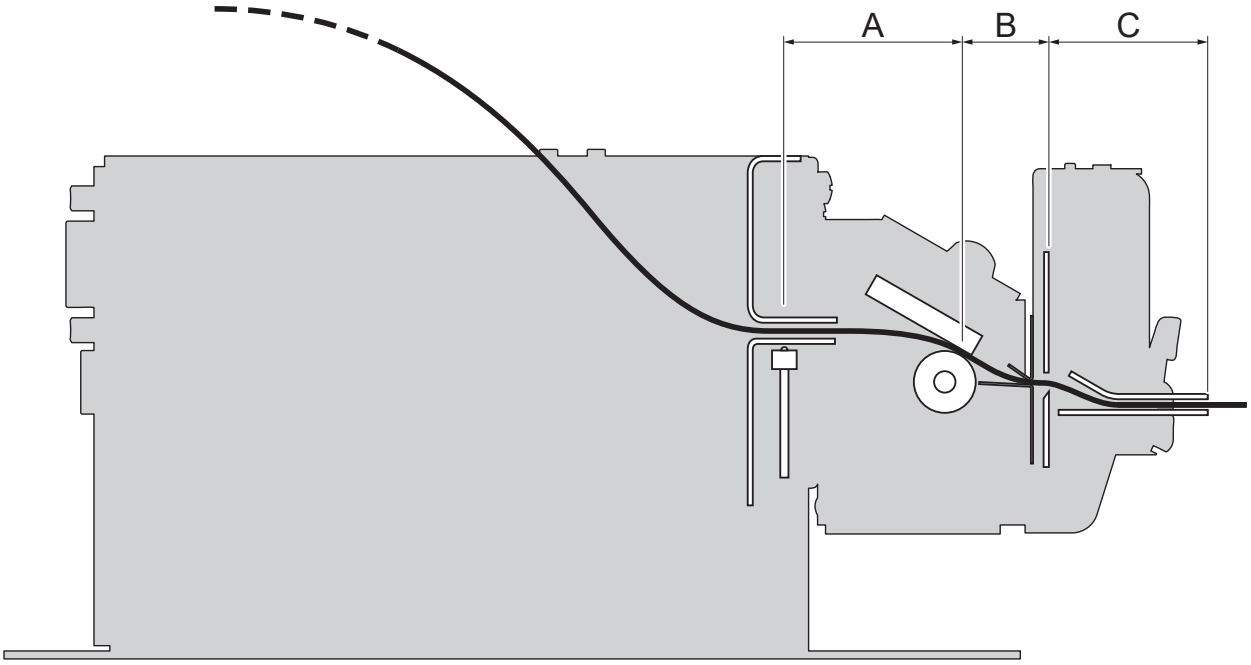
TPTCM112III, TPTCM112III STRONG CUT, TPTCM112III CL

The “alignment point” is defined as the position inside the ticket to use for the notch alignment.
The distance between the notch edge and the alignment point is defined as “Black Mark Distance”.

Referring to the front of the notch, the value of “Black Mark Distance” value varies from 0 mm minimum and 99.9 mm maximum.
If the “Black Mark Distance” value is set to 0, the alignment point is set at the beginning of the notch.



The following figures show the simplified sections of the device models with the paper path and the distances (expressed in millimeters of theoretical paper path) between the alignment sensor, the printhead, autocutter and paper output.



A = distance between printhead and alignment sensor = 34 mm
B = distance between printhead and autocutter = 17.4 mm
C = distance between autocutter and paper output = 31.4 mm

To define the alignment point you need to set the printer parameters that compose the numerical value of the “Black Mark Distance” parameter. (see paragraph 6.7).
For example, to set a black mark distance of 15 mm between the black mark and the alignment point, the parameters must be set on the following values:

Black Mark Distance Sign : +
Black Mark Distance [mm x 10] : 1
Black Mark Distance [mm x 1] : 5
Black Mark Distance [mm x .1] : 0

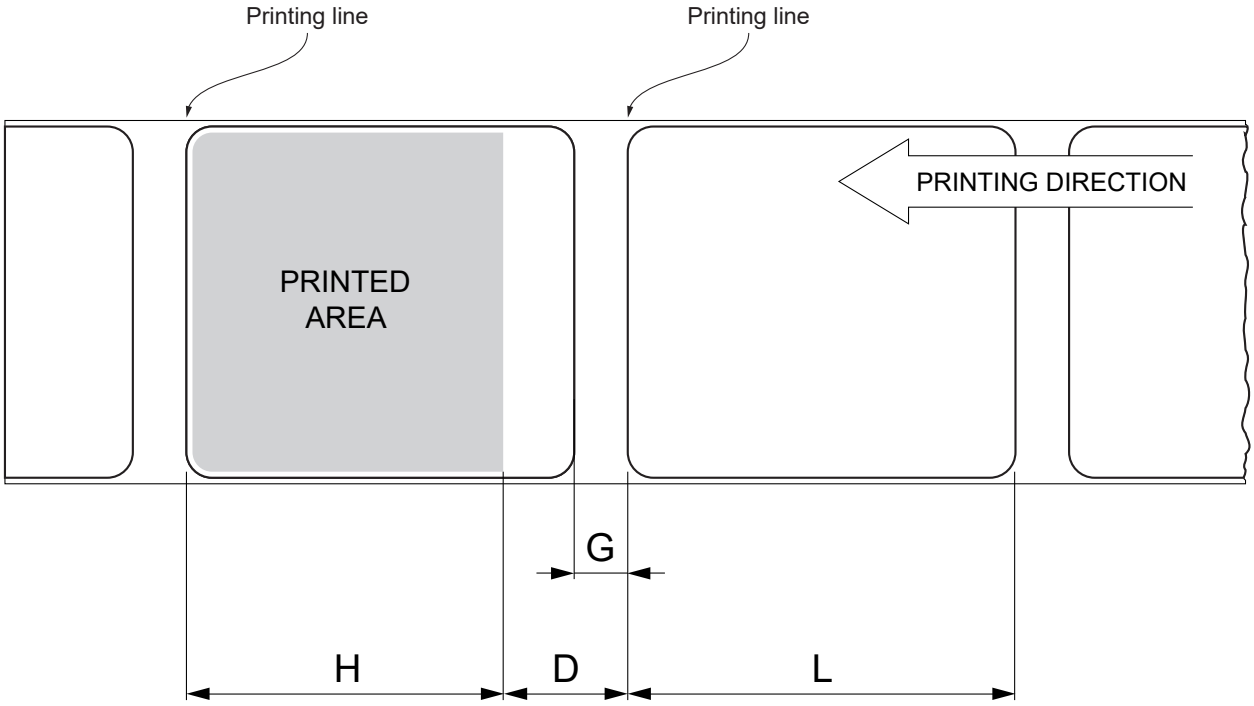
The “Black Mark Distance” parameter, may be modified as described in chapter 6.

7.5 Printing area

TPTCM60IIIL, TPTCM112IIIL

In order to issue labels correctly printed and to not overlay printing to the next label (that will make it useless for the next alignment), it is important to well calibrate the length of the printing area according to the label length.

The following figure shows an example of printed labels:



H Distance between the first and the last print line, called “Height of the printing area”.

L "Label length".

G Distance between two consecutive labels, called “Gap length”.

D Automatic feed for alignment at the next label edge.

To use all the labels on paper, you must comply with the following equation:

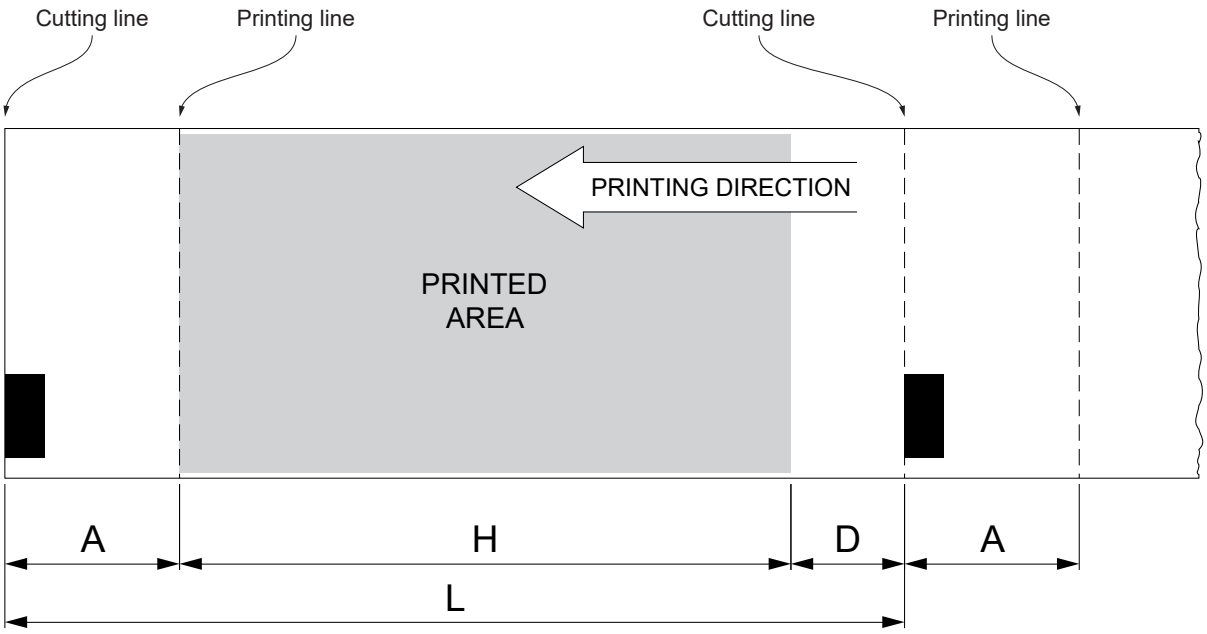
$H \leq L$

The height of the printing area (H) can be increased to make the progress on alignment (D) equal to the gap length but no further.

TPTCM112III, TPTCM112III STRONG CUT, TPTCM112III CL

In order to print ticket containing only one notch and to not overlay printing to a notch (that will make it useless for the next alignment), it is important to well calibrate the length of the printing area of ticket according to the inter-notch distance.

The following figure shows an example of tickets with “Black Mark Distance” set to 0:



A “Non-printable area” = “Distance between autocutter/printhead”

where:
”Distance between autocutter/printhead” = 17.4 mm

H Distance between the first and the last print line, called “Hieght of the printing area”.

L Distance between an edge of the black mark and the next one, called “Inter-black mark distance”.

D Automatic feed for alignment at the next black mark.

To use all the notches on paper, you must comply with the following equation:

$H + A \leq L$

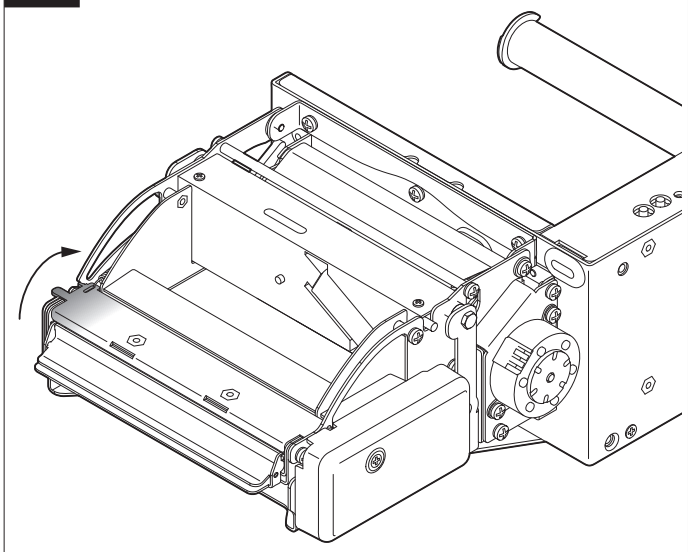
The height of the printing area (H) can be increased to make no progress on alignment (D) but no further.

8 MAINTENANCE

8.1 Paper jam

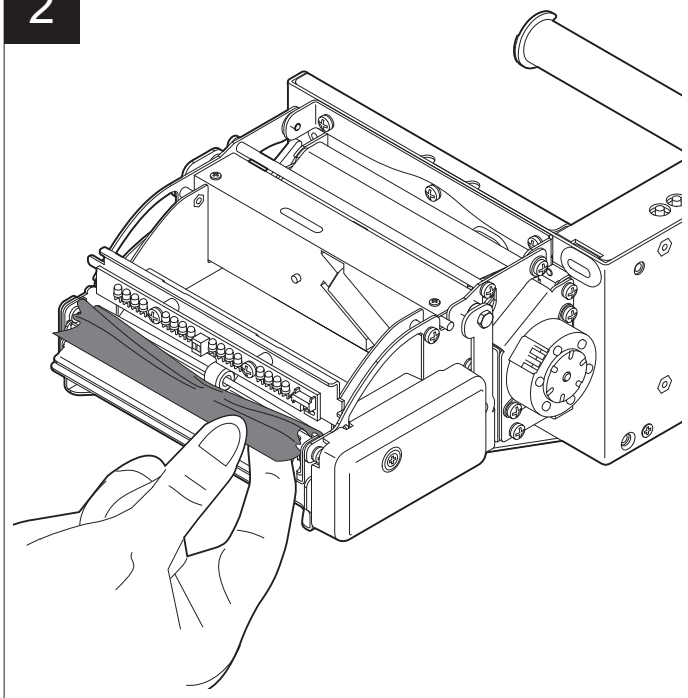
TPTCM60III EJC, TPTCM112III EJC, TPTCM112III EJC 300 DPI

1



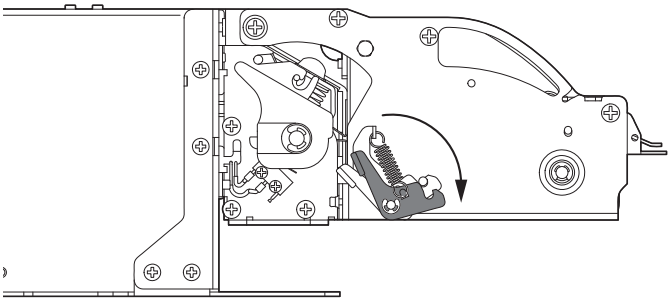
Lift and keep open
the ejector cover.

2



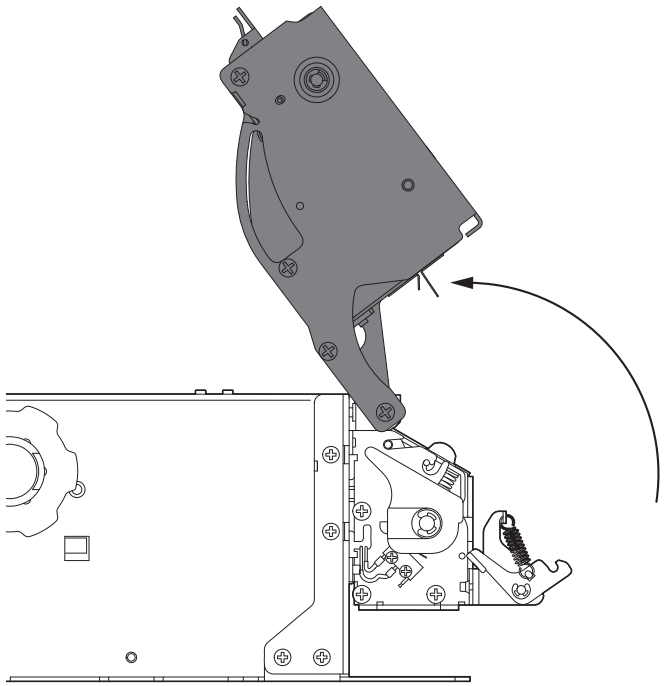
Remove the damaged paper and check the presence
for paper scraps inside the ejector.

3



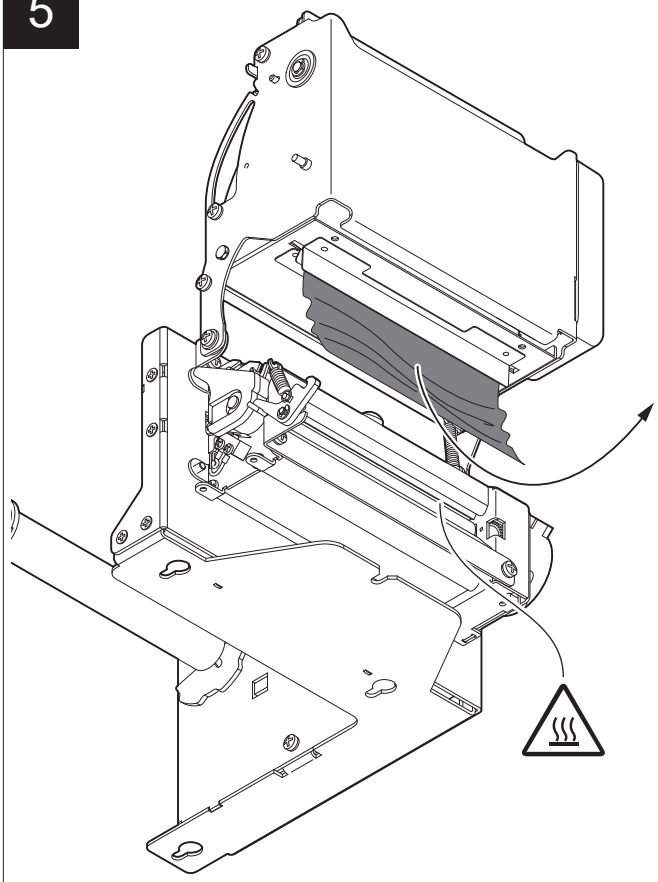
Unlock the ejector group
by using the lever.

4



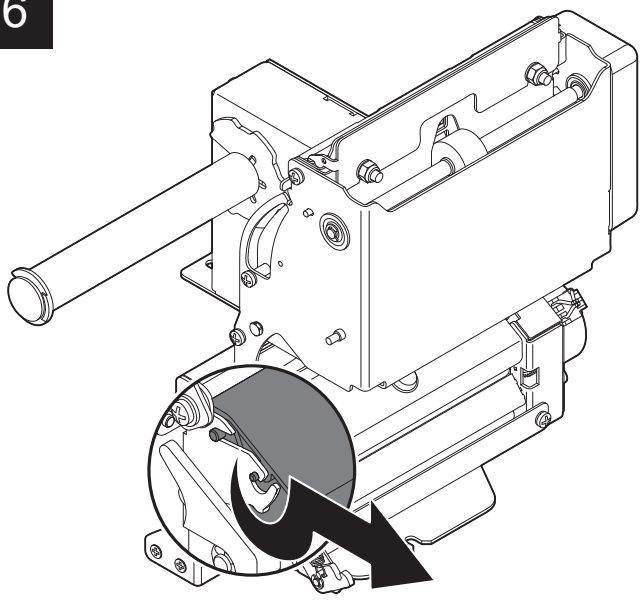
Lift the ejector group
to the maximum opening position.

5



Remove the damaged paper
if present on the cutter input.

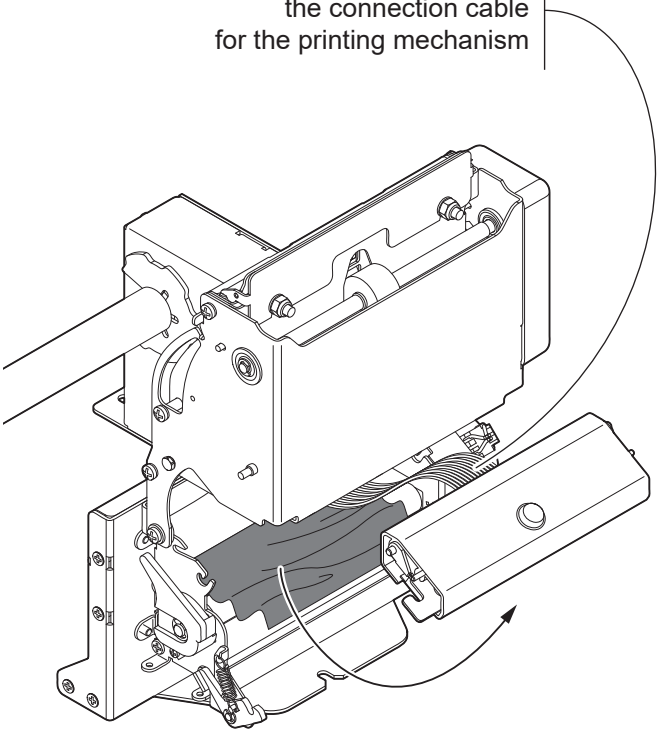
6



Unlock the printing mechanism
as shown in figure.

7

Be careful not to damage
the connection cable
for the printing mechanism

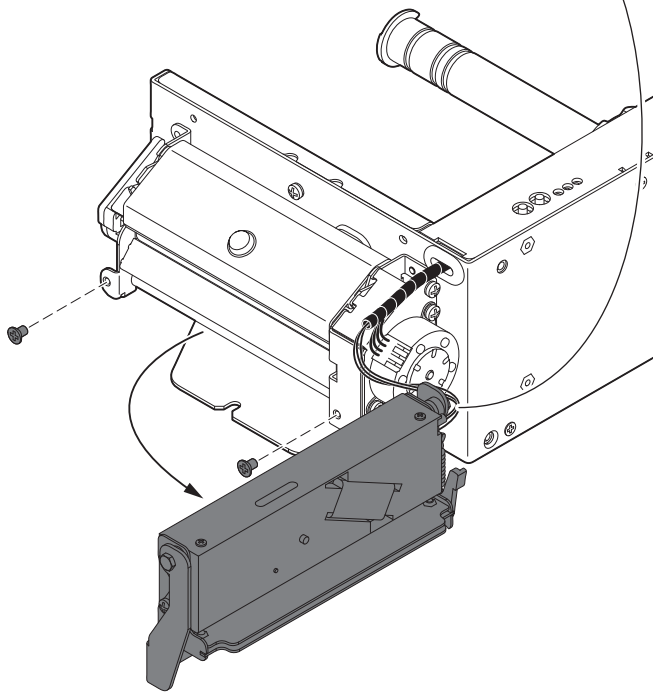


Remove the damaged paper
if present under the printing mechanism.

TPTCM112III, TPTCM112III 300 DPI, TPTCM112III STRONG CUT, TPTCM112IIIL, TPTCM112III CL

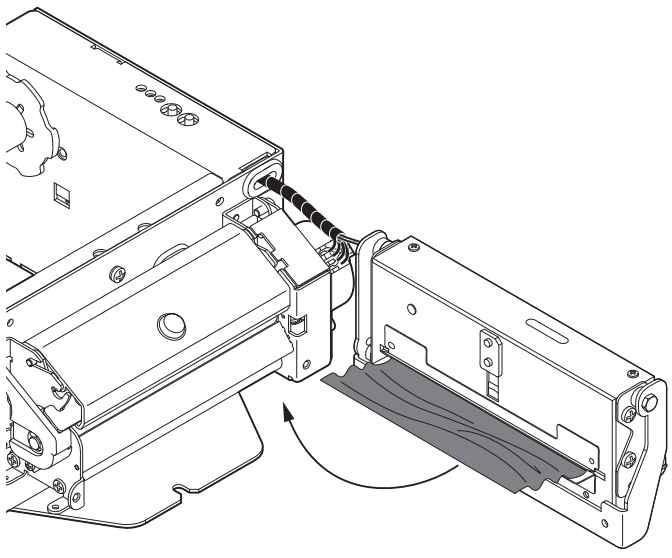
1

Be careful not to damage
the connection cable
for the cutter group



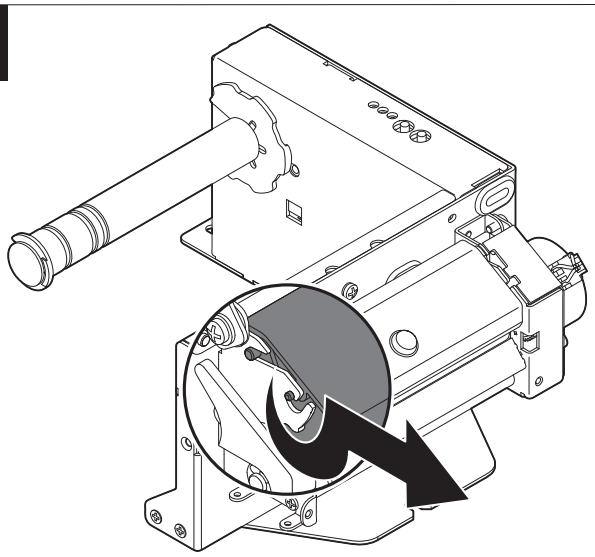
Unscrew the two fixing screws
and remove the cutter group.

3



Remove the damaged paper
if present on the cutter input.

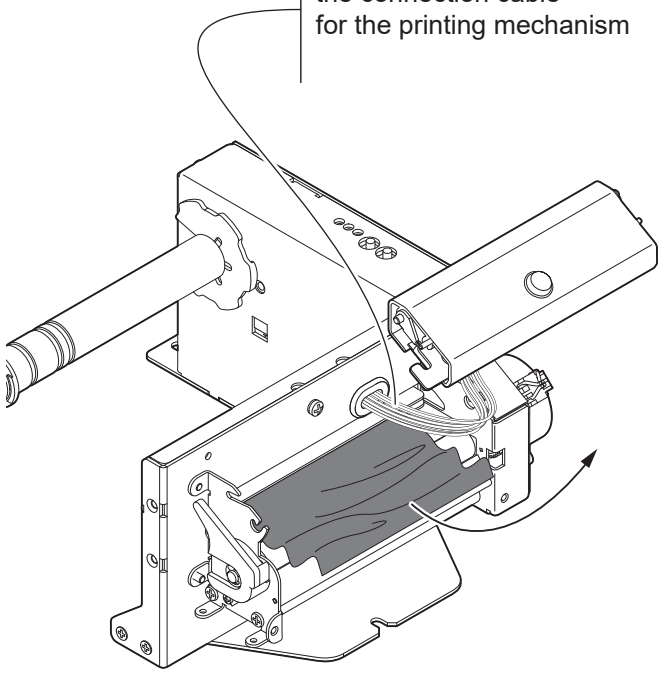
3



Unlock the printing mechanism
as shown in figure.

4

Be careful not to damage
the connection cable
for the printing mechanism



Remove the damaged paper
if present under the printing mechanism.

8.2 Planning of cleaning operations

The regular cleaning of the device keeps the print quality and extends its life. The following table shows the recommended planning for the cleaning operations.

If you use the device in dusty environments, you must reduce the intervals between the cleaning operations.

For specific procedures, see the following pages.

EVERY PAPER CHANGE	
Printhead	Use isopropyl alcohol
Platen roller	Use isopropyl alcohol
EVERY 5 PAPER CHANGES	
Autocutter (1)	Use compressed air
Sensors	Use compressed air
Ejector (2)	Use compressed air
AS NEEDED	
Chassis	Use compressed air or a soft cloth
Autocutter (3)	Use siliconic oil Do not use alcohol or any aggressive solvent

NOTES:
For some models is represented only the internal printer group.

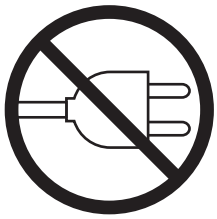
(1) Only for TPTCM60III EJC, TPTCM112III, TPTCM112III 300 DPI, TPTCM112III STRONG CUT, TPTCM112III EJC, TPTCM112III EJC 300 DPI and TPTCM112IIIL.
(2) Only for TPTCM60III EJC, TPTCM112III EJC and TPTCM112III EJC 300 DPI.
(3) Only for TPTCM112III CL.

8.3 Cleaning

For periodic cleaning of the device, see the instructions below.

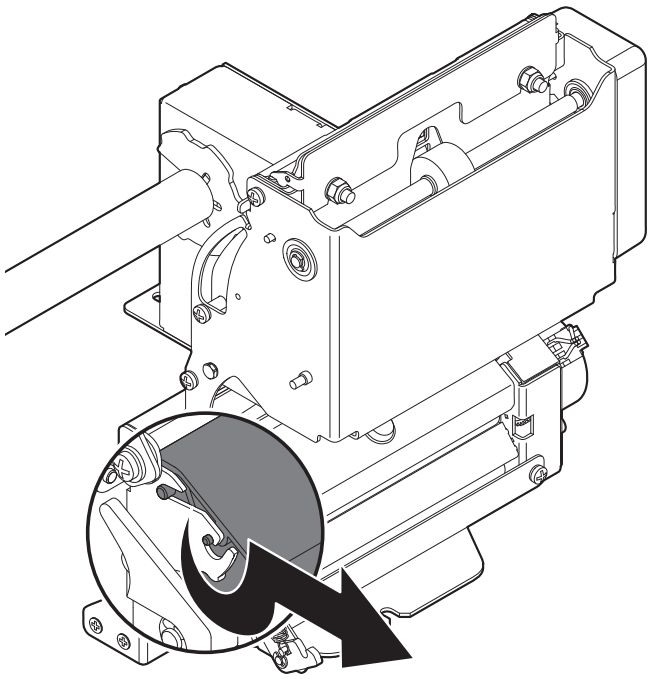
Printhead - TPTCM60III EJC, TPTCM112III EJC, TPTCM112III EJC 300 DPI

1



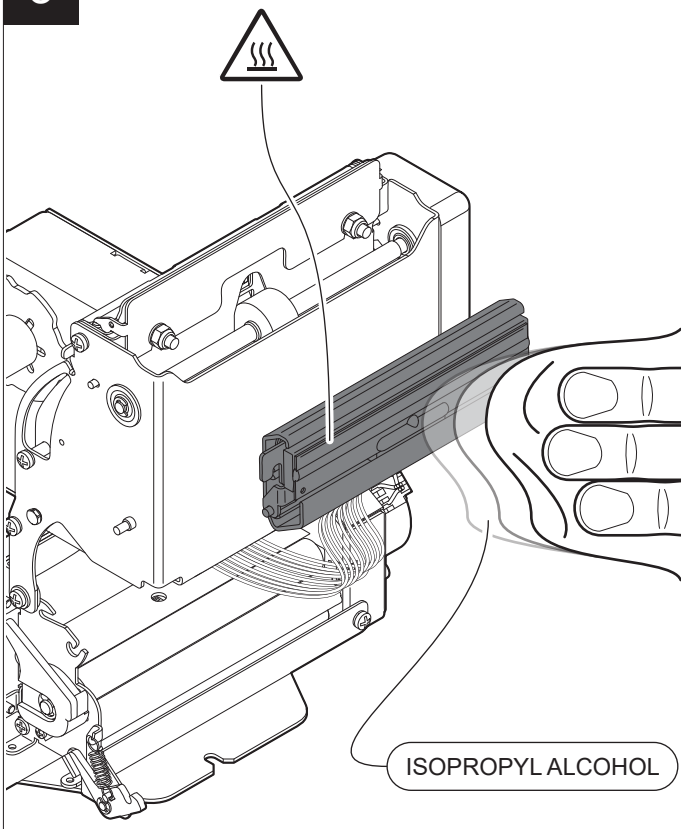
Disconnect the power supply cable and lift the ejector group (see paragraph 8.1).

2



Unlock the printing mechanism as shown in figure.

3

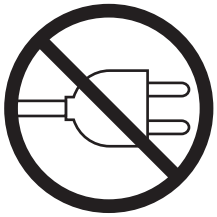


ATTENTION:
Do not use solvents, or hard brushes.
Do not let water or other liquids get inside the machine.

Clean the printhead by using a non-abrasive cloth moistened with isopropyl.

Printhead - TPTCM112III, TPTCM112III 300 DPI, TPTCM112III STRONG CUT, TPTCM112IIIL

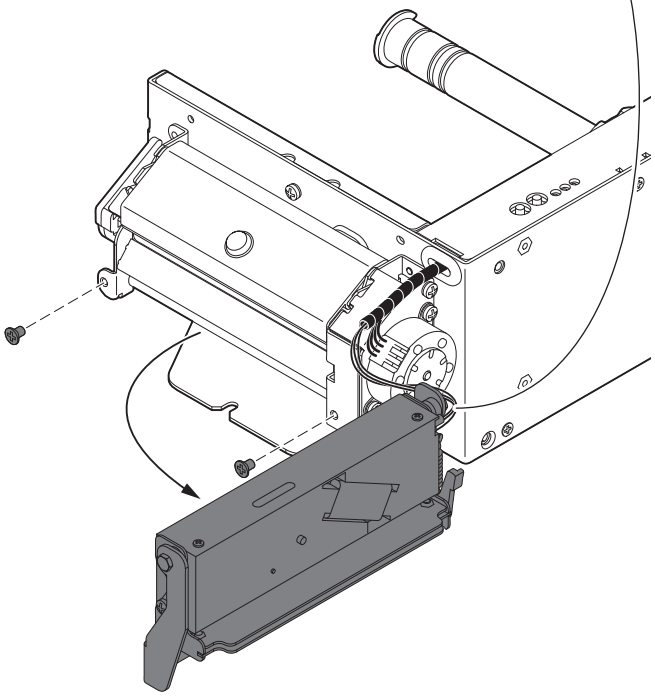
1



Disconnect the power supply cable.

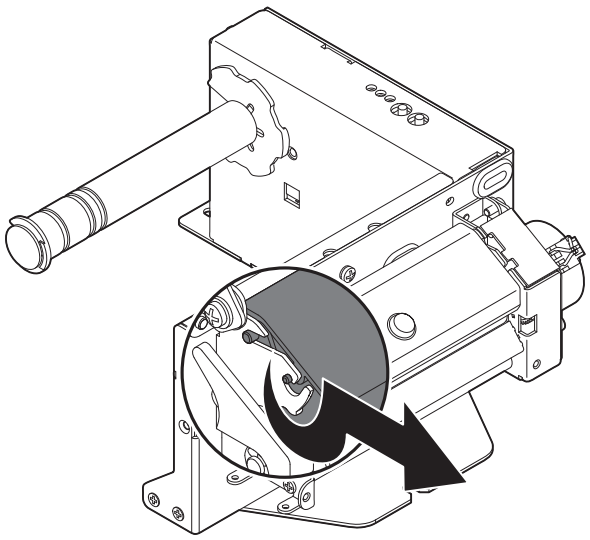
2

Be careful not to damage
the connection cable for
the autocutter group



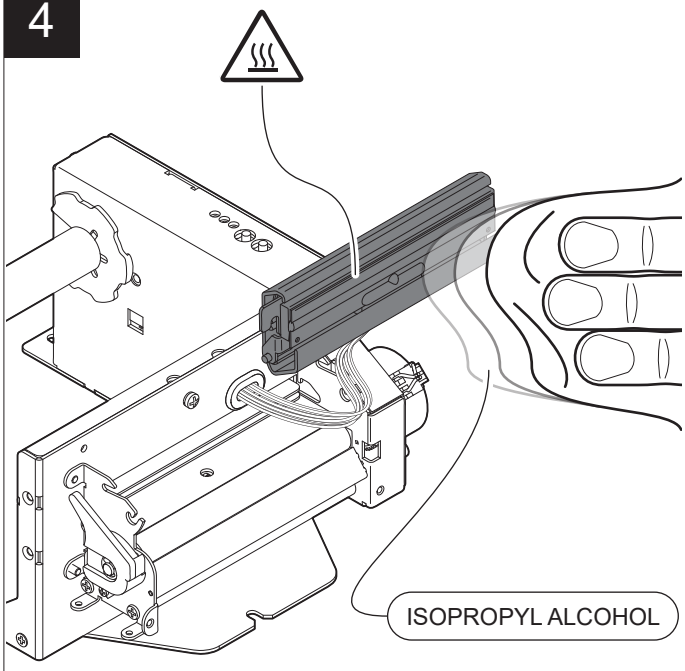
Unscrew the two fixing screws
and remove the autoccutter group.

3



Unlock the printing mechanism
as shown in figure.

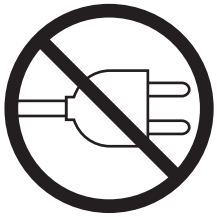
4



ATTENTION:
Do not use solvents, or hard brushes.
Do not let water or other liquids get inside the machine.

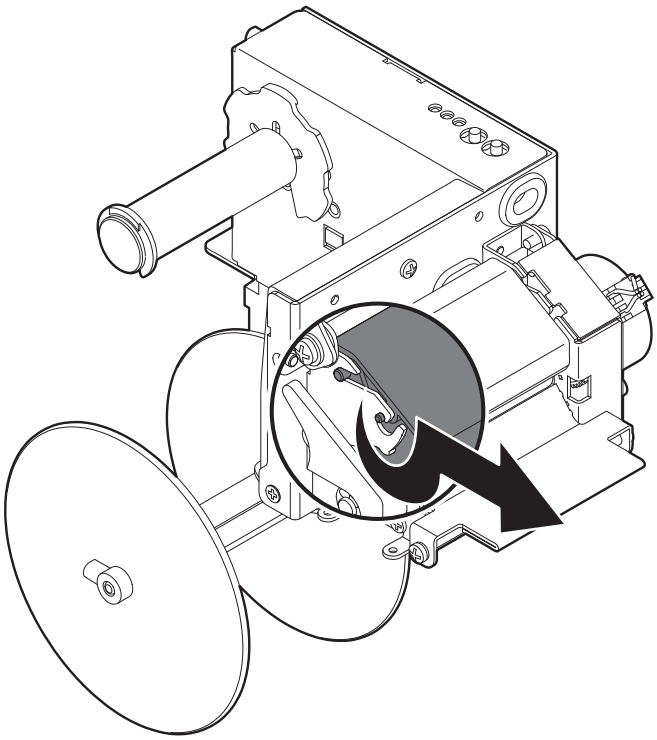
Clean the printhead by using
a non-abrasive cloth moistened with isopropyl.

1



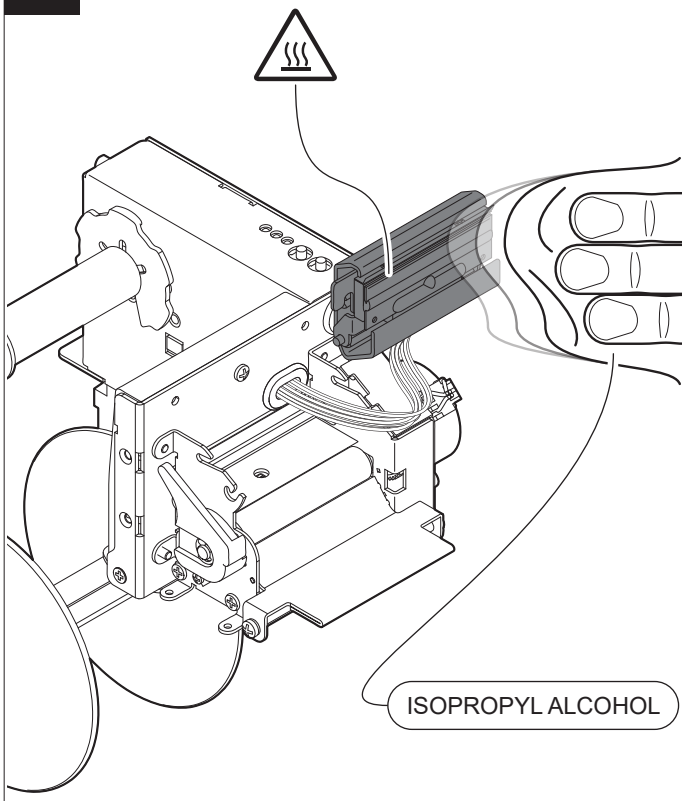
Disconnect the power supply cable.

2



Unlock the printing mechanism
as shown in figure.

3

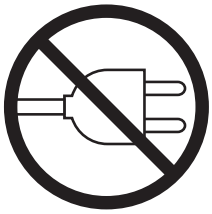


ATTENTION:
Do not use solvents, or hard brushes.
Do not let water or other liquids get inside the machine.

Clean the printhead by using
a non-abrasive cloth moistened with isopropyl.

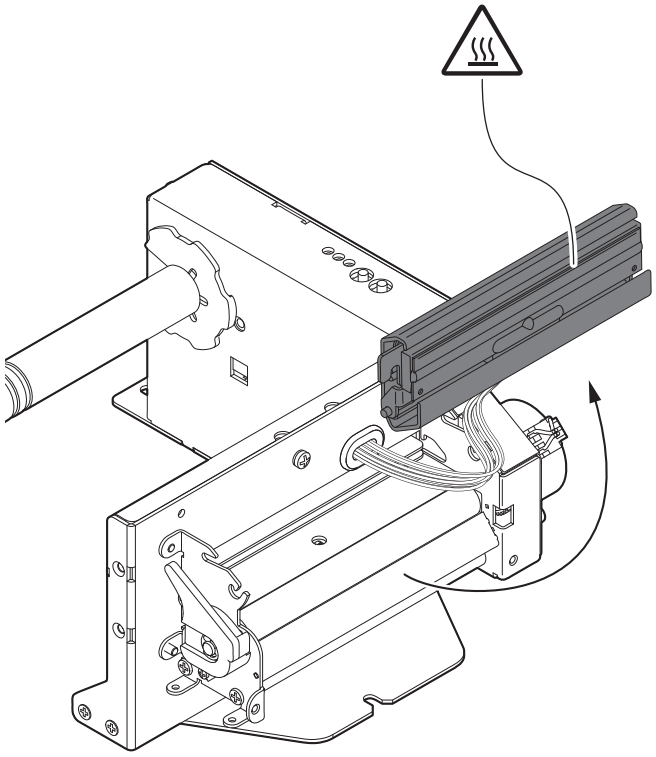
Platen roller

1



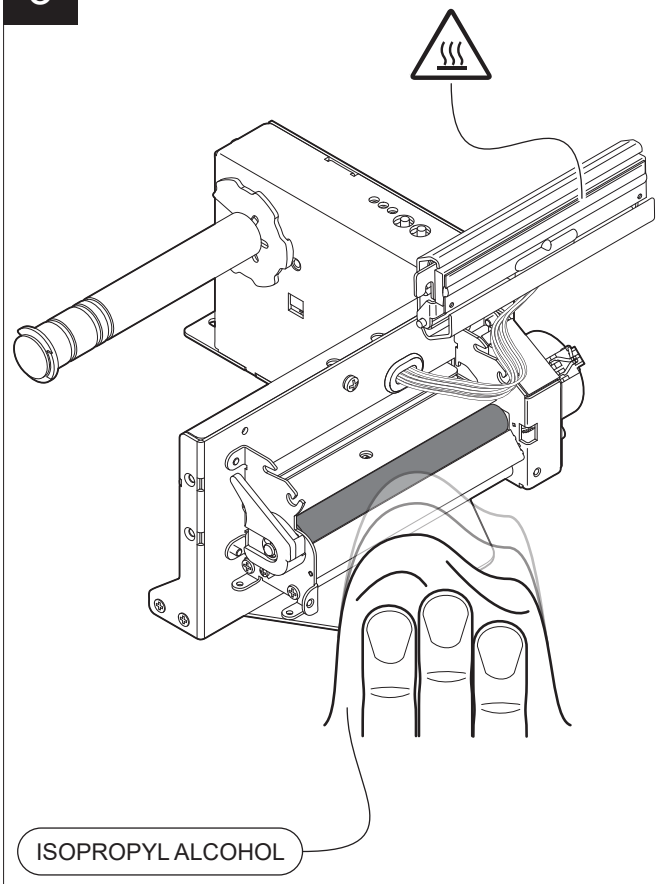
Disconnect the power supply cable.

2



Unlock the printing mechanism
by following the specific procedure for each model
as described in the previous paragraphs.

3

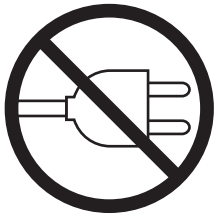


ATTENTION:
Do not use solvents, or hard brushes.
Do not let water or other liquids get inside the machine.

Clean the platen roller by using
a non-abrasive cloth moistened with isopropyl alcohol.

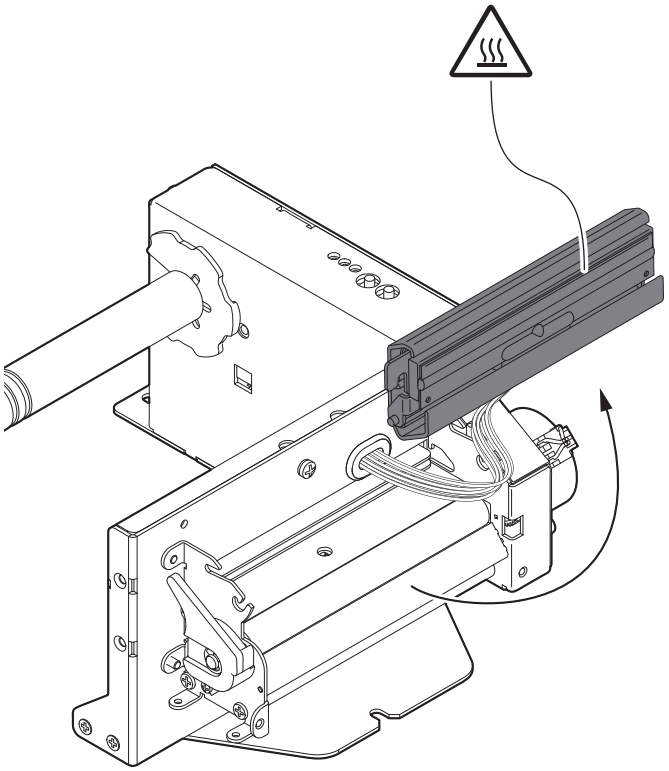
Sensor for paper presence in input

1



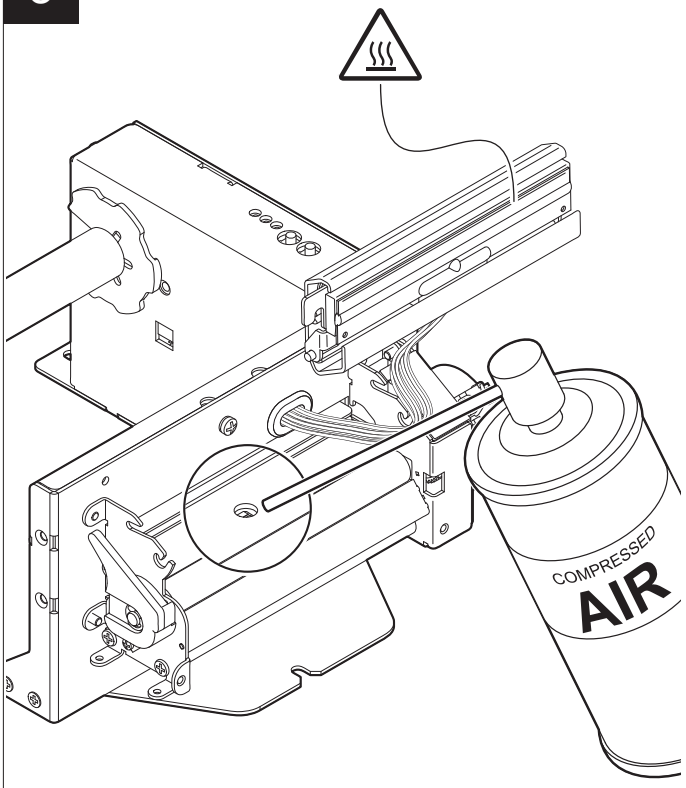
Disconnect the power supply cable.

2



Unlock the printing mechanism
by following the specific procedure for each model
as described in the previous paragraphs.

3

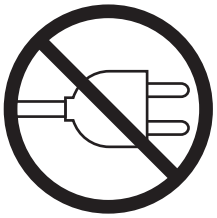


ATTENTION:
Do not use alcohol, solvents, or hard brushes.
Do not let water or other liquids get inside the device.

Clean the paper presence sensor in input
by using compressed air.

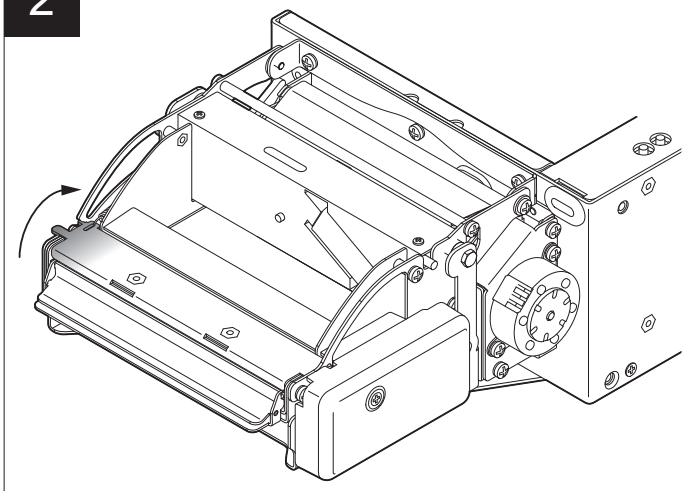
Ejector (TPTCM60III EJC, TPTCM112III EJC, TPTCM112III EJC 300 DPI)

1



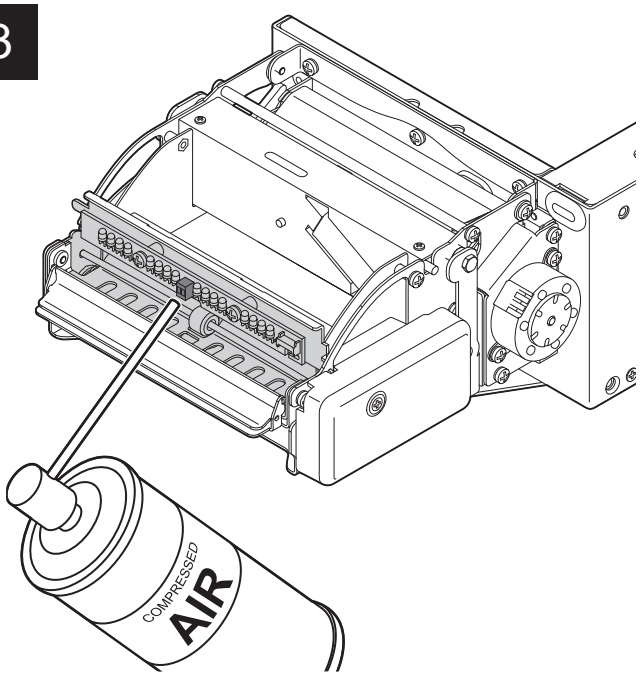
Disconnect the power supply cable.

2



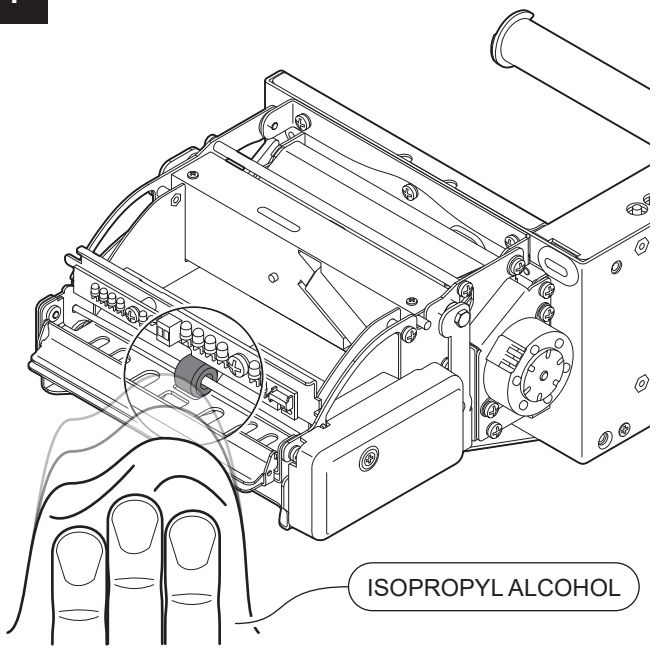
Lift and keep open
the ejector cover.

3



Clean the sensor for paper presence on output
by using compressed air. Remove any scraps of paper
and the accumulated paper dust inside the ejector.

4

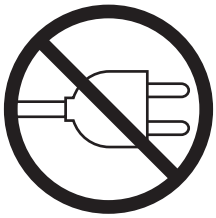


ATTENTION:
Do not use solvents, or hard brushes.
Do not let water or other liquids get inside the machine.

Clean the ejector roller by using
a non-abrasive cloth moistened with isopropyl.

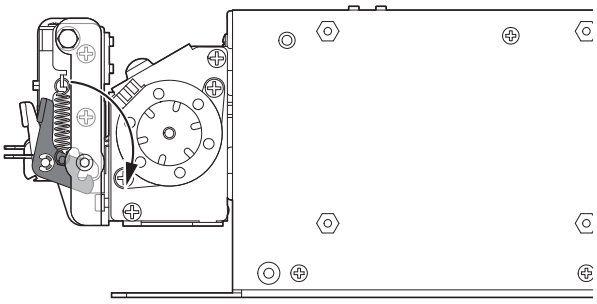
Autocutter (TPTCM112III, TPTCM112III 300 DPI, TPTCM112III STRONG CUT, TPTCM112IIIL)

1



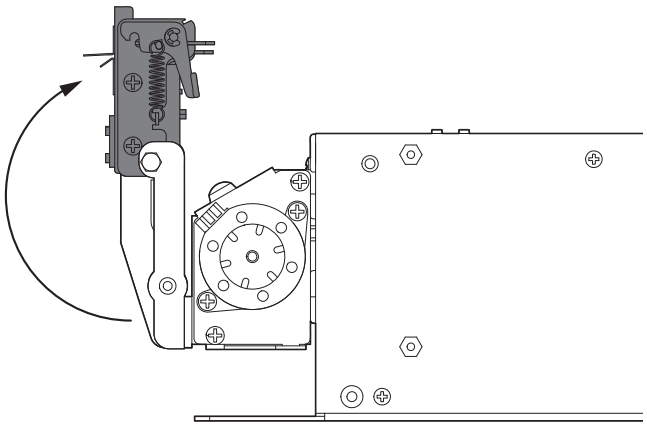
Disconnect the power supply cable.

2



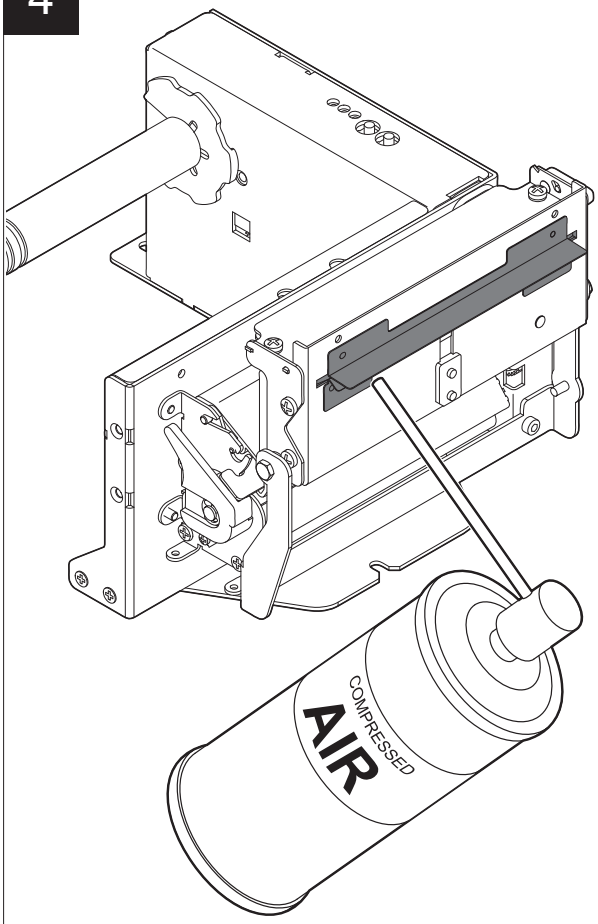
Unlock the autocutter group
by using the lever.

3



Lift the autocutter group.

4

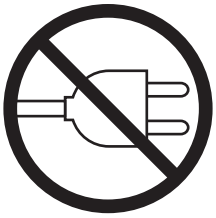


ATTENTION:
Do not use alcohol, solvents, or hard brushes.
Do not let water or other liquids get inside the device.

Remove any scraps of paper and
the accumulated paper dust on the autocutter input
by using compressed air.

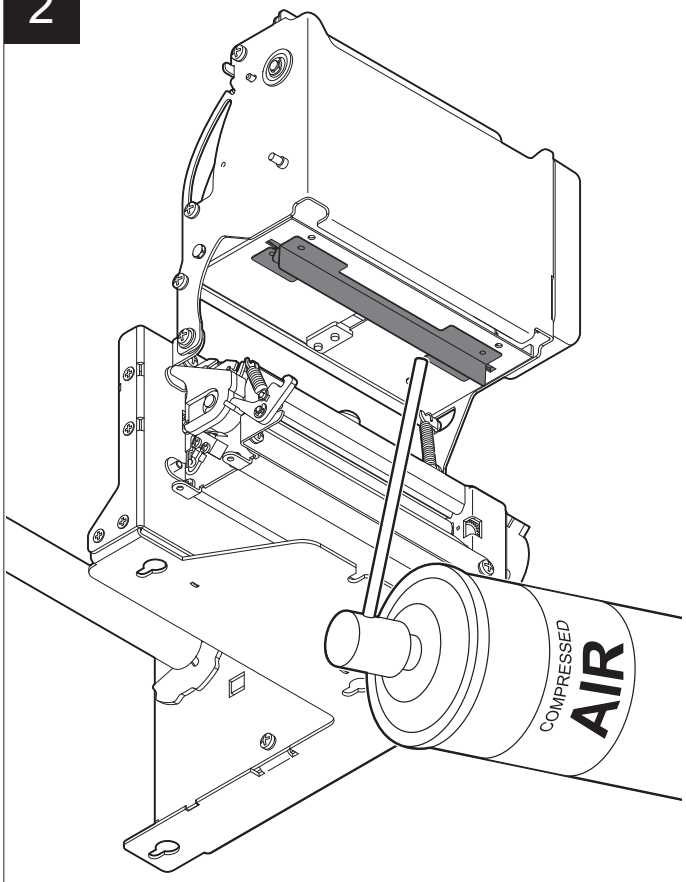
Autocutter (TPTCM60III EJC, TPTCM112III EJC)

1



Disconnect the power supply cable and lift the ejector group (see paragraph 8.1).

2

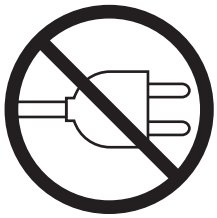


ATTENTION:
Do not use alcohol, solvents, or hard brushes.
Do not let water or other liquids get inside the device.

Remove any scraps of paper and the accumulated paper dust on the autocutter input by using compressed air.

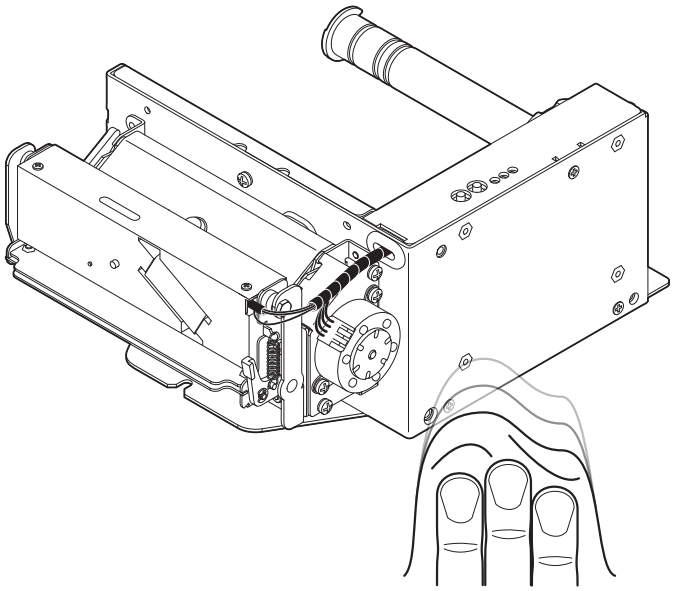
Case

1

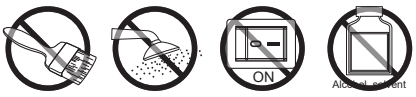


Disconnect the power supply cable.

2



ATTENTION:
Do not use alcohol, solvents, or hard brushes.
Do not let water or other liquids get inside the device.



To clean the device, use compressed air or a soft cloth.

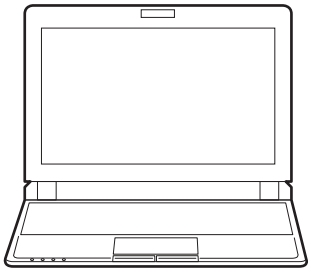
8.4 Firmware upgrade

Firmware upgrade can be performed by using the “PrinterSet” software tool available on www.custom4u.it.
To upgrade firmware, proceed as follows:

1

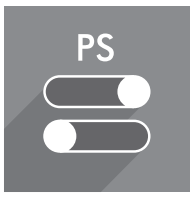
Login to the website www.custom4u.it, type in the product code of the device and download the latest firmware release available.

2



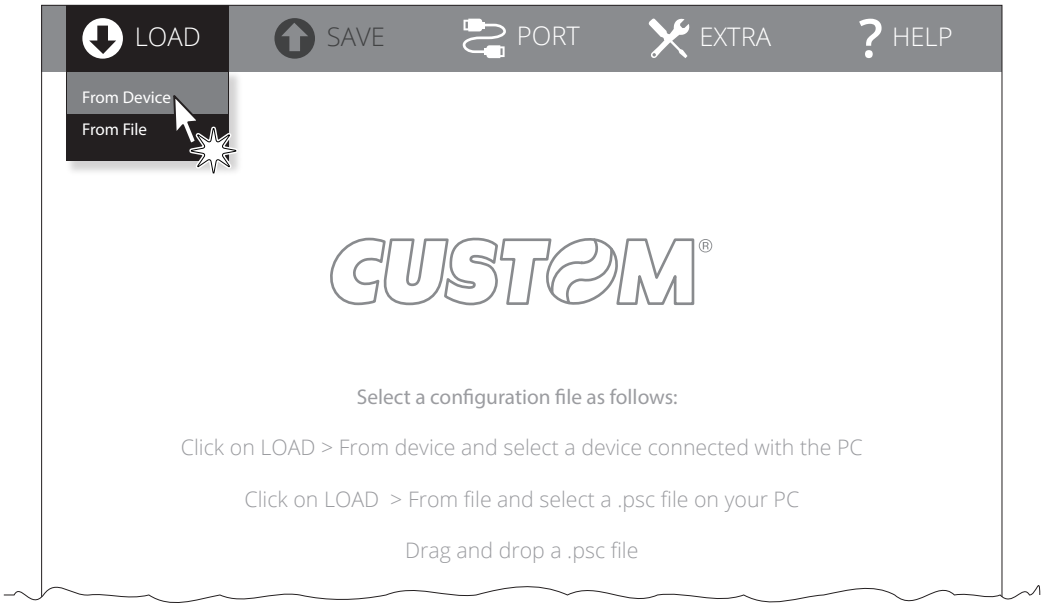
Connect the device to a PC directly (see paragraph 4.2), without using HUB devices.

3



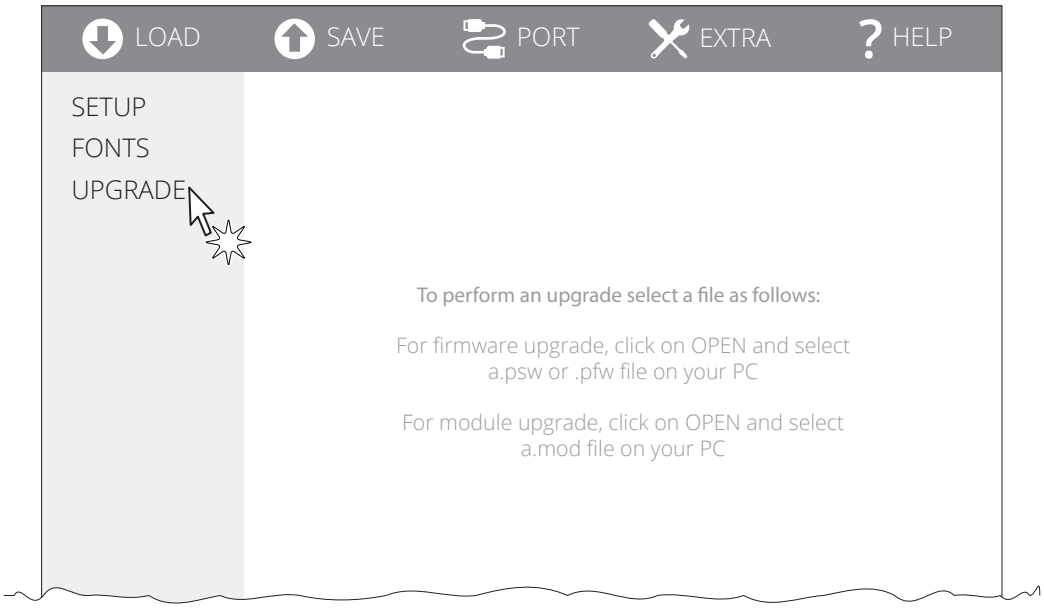
Start the “PrinterSet” software tool.

4



Click on LOAD > FROM DEVICE and select the device connected to the PC.

5



Click on UPGRADE and follow the instructions shown on the screen.

ATTENTION:
During saving, it is strongly discouraged to disconnect the communication cable or to remove the power supply of the PC or the device.

9 SPECIFICATION

9.1 Hardware specifications

GENERAL	
Sensors	
TPTCM60III EJC TPTCM112III EJC TPTCM112III EJC 300 DPI	Head temperature, paper presence in input, print head lifted, low paper, paper presence on output, ejector position
TPTCM60IIIL	Head temperature, paper presence in input, print head lifted, low paper, fork sensor for gap between labels
TPTCM112III TPTCM112III 300 DPI TPTCM112III STRONG CUT TPTCM112III CL	Head temperature, paper presence in input, print head lifted, low paper, left sensor for black mark, right sensor for black mark (optional)
TPTCM112IIIL	Head temperature, paper presence in input, print head lifted, low paper, central detector (upper and lower) for gap between labels
Emulations	CUSTOM/POS, TPTCMII, CUSTOM TPT
Printing driver	Windows XP VISTA (32/64 bit) Windows 7 (32/64 bit) Windows 8 (32/64 bit) Windows 8.1 (32/64 bit) Windows 10 (32/64 bit) Self-installing driver for Virtual COM (32/64 bit) Linux Android
INTERFACES	
USB port	12 Mbit/s
RS232 serial port	from 1200 bps to 115200 bps
MEMORIES	
Receive buffer	16 kB
Flash memory	1 MB internal + 4 MB external (of which 1 MB available for user)
RAM memory	128 kB internal, 8 MB external

PRINTER	
Resolution	
TPTCM60III EJC TPTCM60IIIL TPTCM112III TPTCM112III STRONG CUT TPTCM112III EJC TPTCM112IIIL TPTCM112III CL	203 dpi (8 dot/mm)
TPTCM112III 300 DPI TPTCM112III EJC 300 DPI	304 dpi (12 dot/mm)
Printing method	Thermal, fixed head
Head life [1]	
Abrasion resistance [2]	100 km (with recommended paper, 12.5% duty cycle)
Pulse durability	100 M (referred to each dot)
Printing width	80 mm
TPTCM60III EJC TPTCM60IIIL	60 mm
TPTCM112III TPTCM112III 300 DPI TPTCM112III STRONG CUT TPTCM112IIIL TPTCM112III CL	104 mm
TPTCM112III EJC TPTCM112III EJC 300 DPI	from 76 mm to 104 mm (2 mm step)
Printing method	Normal, 90°, 180°, 270°
Printing format	Height/Width from 1 to 8, bold, reverse, underlined, italic
Character font	54 character code tables (see paragraph 9.8), extended chinese GB18030-2000, korean PC949
Printable barcodes	Codabar, Code 32, Code 39, Code 93, Code 128, EAN-8, EAN-13, ITF, UPC-A, UPC-E, Data Matrix, PDF417, QRCode
Printing speed [1] [3]	High quality = 80 mm/s Normal = 115 mm/s High Speed = 140 mm/s

PAPER	
Type of paper	Thermal rolls, heat-sensitive side on outside of roll
Paper width	
TPTCM60III EJC TPTCM60IIIL	60 mm ± 0.5 mm
TPTCM112III TPTCM112III STRONG CUT TPTCM112III 300 DPI TPTCM112III EJC TPTCM112III EJC 300 DPI TPTCM112IIIL TPTCM112III CL	80 mm ± 0.5 mm 86 mm ± 0.5 mm 100 mm ± 0.5 mm 112 mm ± 0.5 mm
Paper weight	
TPTCM60III EJC TPTCM60IIIL TPTCM112III TPTCM112III 300 DPI TPTCM112III EJC TPTCM112III EJC 300 DPI TPTCM112IIIL TPTCM112III CL	from 60 g/m^2 to 90 g/m^2
TPTCM112III STRONG CUT	from 60 g/m^2 to 130 g/m^2
Paper thickness	from 63 µm to 100 µm
Recommended types of paper	KANZAN KF50 and KP460 MITSUBISHI PF5067 and TL4000
External roll diameter (4)	
TPTCM60III EJC	(without optional paper roll holder) max. 90 mm (with optional paper roll holder) max. 160 mm
TPTCM60IIIL	max. 90 mm
TPTCM112III TPTCM112III 300 DPI TPTCM112III EJC TPTCM112III EJC 300 DPI TPTCM112IIIL TPTCM112III CL	(without optional paper roll holder) max. 120 mm (with optional paper roll holder) max. 160 mm
Internal roll core diameter	25 mm (+ 1 mm)

Paper end	Not attached to roll core
Core type	Cardboard or plastic
LABELS (TPTCM60IIIL, TPTCM112IIIL, TPTCM112III CL)	
Label type	Labels on roll Thermal paper white (heat-sensitive side on outside of roll)
Paper weight	78 g/m^2
Paper thickness	0.085 mm
Paper adhesive	Clear synthetic rubber adhesive for general purpose
Liner width	
TPTCM60IIIL	60 mm ± 0.5 mm
TPTCM112IIIL	112 mm ± 0.5 mm
Liner weight	60 g/m^2
Liner thickness	0.055 mm
Liner trasparency	Trasparency 47%
Liner total thickness	0.15 mm ± 10%
AUTOCUTTER (TPTCM60III EJC, TPTCM112III, TPTCM112III 300 DPI, TPTCM112III STRONG CUT, TPTCM112III EJC, TPTCM112III EJC 300 DPI, TPTCM112IIIL, TPTCM112III CL)	
Paper cut	Total cut
Estimated life (1)	
TPTCM60III EJC	1000000 cuts (with paper thickness 100 µm, ambient temperature)
TPTCM112III TPTCM112III 300 DPI TPTCM112III EJC TPTCM112III EJC 300 DPI TPTCM112IIIL	300000 cuts (with paper thickness 100 µm, ambient temperature)
TPTCM112III STRONG CUT	1000000 cuts (with paper thickness 100 µm, ambient temperature)
TPTCM112III CL	500000 cuts (with paper thickness 120 µm, ambient temperature)

DEVICES ELECTRICAL SPECIFICATIONS	
Power supply	24 Vdc ± 10%
Assorbimento medio [5]	
TPTCM60III EJC TPTCM60IIIL	2.7 A
TPTCM112III TPTCM112III 300 DPI TPTCM112III STRONG CUT TPTCM112III EJC TPTCM112III EJC 300 DPI TPTCM112IIIL TPTCM112III CL	4.1 A
Assorbimento tipico [3]	
TPTCM60III EJC TPTCM60IIIL	1.2 A
TPTCM112III TPTCM112III 300 DPI TPTCM112III STRONG CUT TPTCM112III EJC TPTCM112III EJC 300 DPI TPTCM112IIIL TPTCM112III CL	1.7 A
Standby consumption	50 mA
POWER SUPPLY ELECTRICAL SPECIFICATIONS code 963GE020000071 (optional for TPTCM60III EJC and TPTCM60IIIL)	
Power supply voltage	from 90 Vac to 264 Vac
Frequency	from 47 Hz to 63 Hz
Output	24 V, 2.5 A
Power	60 W

POWER SUPPLY ELECTRICAL SPECIFICATIONS code 963GE020000106 (optional for TPTCM112III, TPTCM112III 300 DPI, TPTCM112III STRONG CUT, TPTCM112III EJC, TPTCM112III EJC 300 DPI, TPTCM112IIIL, TPTCM112III CL)	
Power supply voltage	Auto Range, 90-264 Vac
Frequency	from 47 Hz to 63 Hz
Output	24 V, 4.17 A
Power	100 W
ENVIRONMENTAL CONDITIONS	
Operating temperature	from 0°C to +50°C (6)
Relative humidity (RH)	from 10% to 85% (w/o condensation)
Storage temperature	from -20 °C to +70 °C
Storage relative humidity (RH)	from 10% to 90% (w/o condensation)

NOTES:
(1) : Respecting the regular schedule of cleaning for the device components.
(2) : Damages caused by scratches, ESD and electromigration are excluded.
(3) : Referred to a standard CUSTOM receipt (L=10 cm, Density = 12.5% dots on).
(4) : For external rolls diameter higher to Ø100 mm it's recommended to use a paper pretensioning device.
(5) : Referred to the UL measurements (Speed/Quality = Normal, Ticket = 100 mm, Print Density = 50%, 50% dots on, 1 ticket every 30 s).
(6) : If you use TPTCM60III EJC or TPTCM60IIIL with the power supply code 963GE020000071, supplied as an accessory, the operating temperature range is from 0 °C to +40 °C.

9.2 Character specifications

TPTCM60III EJC, TPTCM60IIIL

Character set		3	
Character density	11 cpi	15 cpi	20 cpi
Number of columns	26	36	48
Chars / second	1213	1680	2240
Lines / second	46	46	46
Characters (L x H mm)-Normal	2.25 x 3	1.625 x 3	1.25 x 3

TPTCM112III, TPTCM112III STRONG CUT, TPTCM112III EJC, TPTCM112IIIL, TPTCM112III CL

Character set		3	
Character density	11 cpi	15 cpi	20 cpi
Number of columns	46	64	83
Chars / second	2146	2986	3873
Lines / second	46	46	46
Characters (L x H mm)-Normal	2.25 x 3	1.625 x 3	1.25 x 3

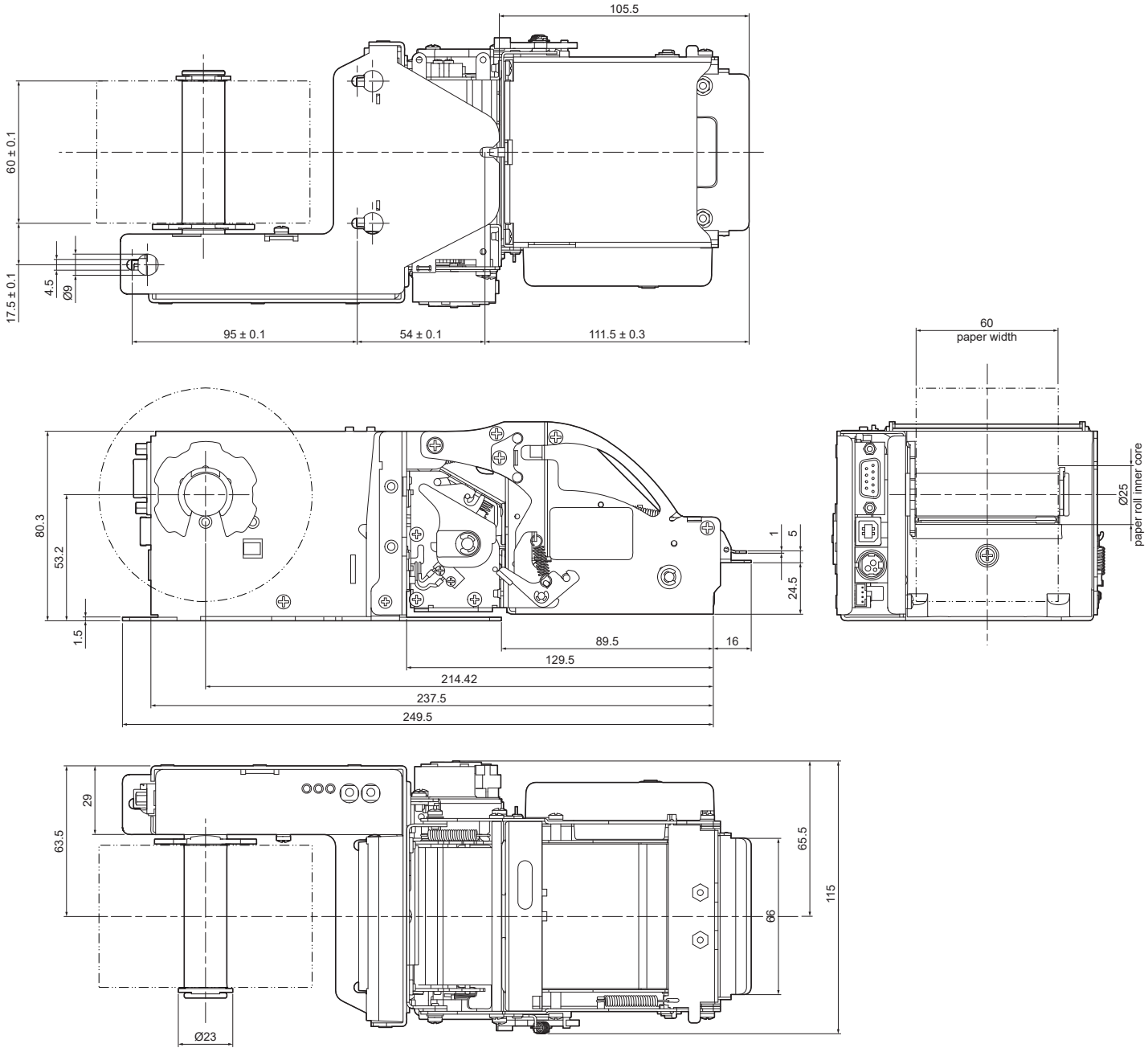
NOTE: Theoretical values.

9.3 Device dimensions

TPTCM60III EJC

Length	265.5 mm
Height	80.3 mm
Width	115 mm
Weight	1500 g

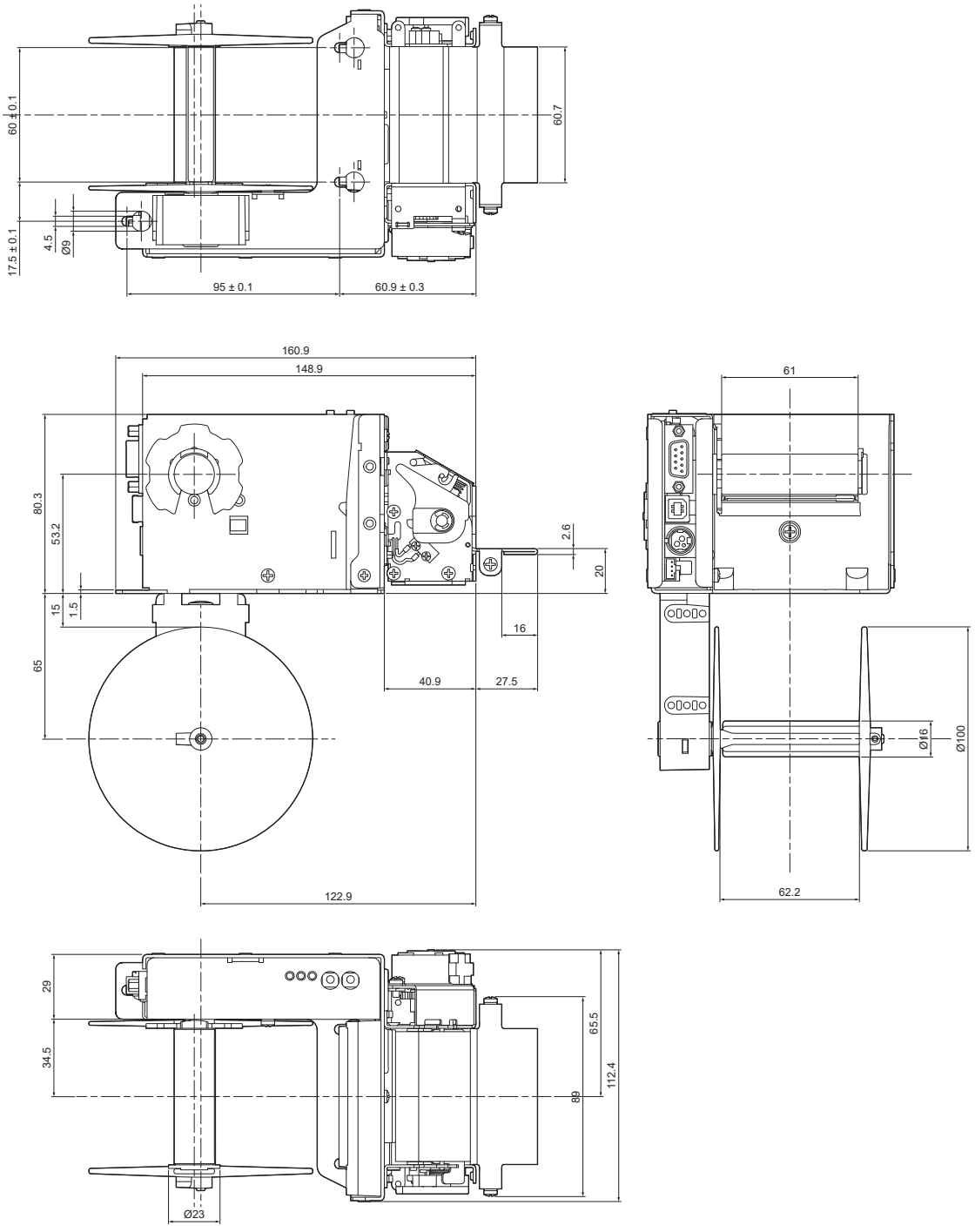
All the dimensions shown in following figure are in millimetres.



TPTCM60IIIL

Length	188.4 mm
Height	195.3 mm
Width	112.4 mm
Weight	1150 g

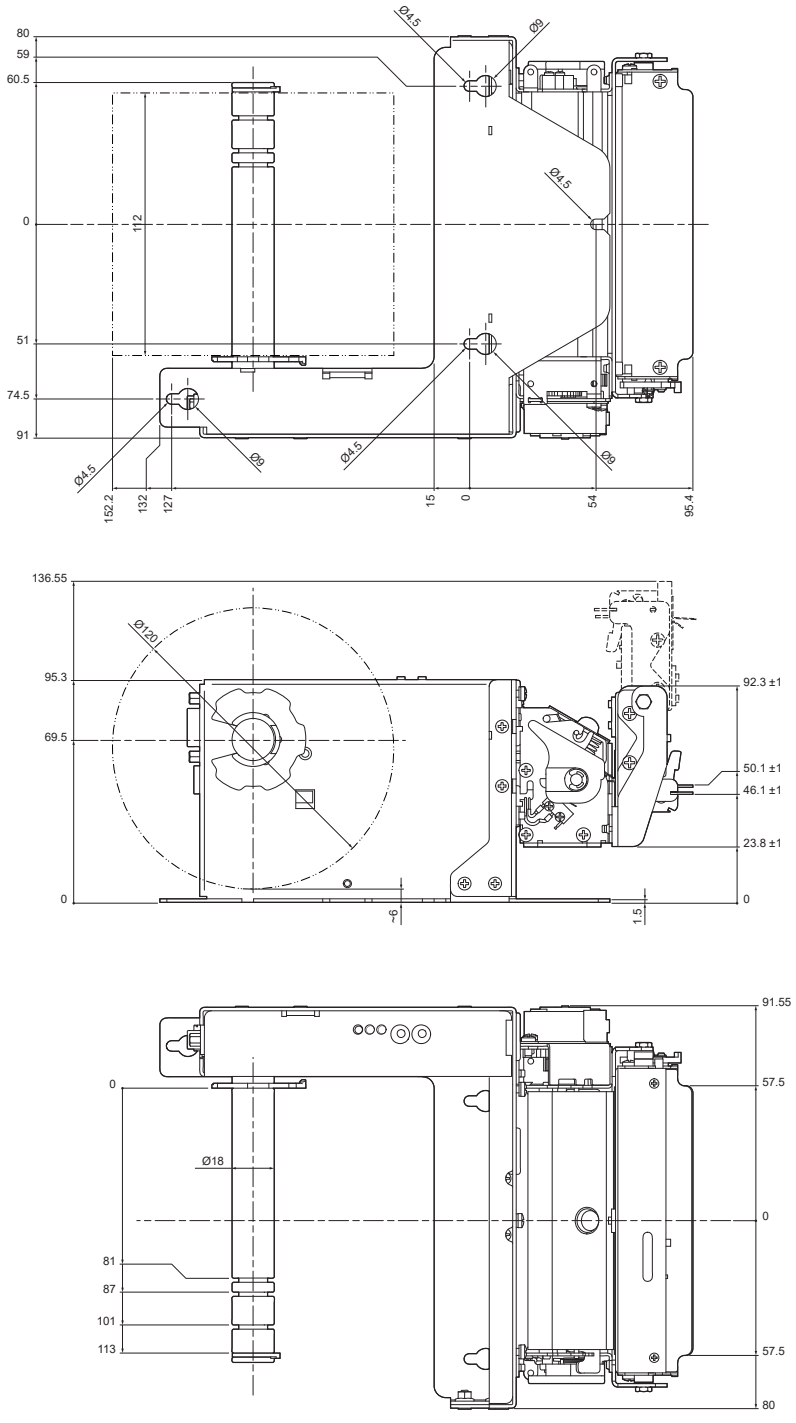
All the dimensions shown in following figure are in millimetres.



TPTCM112III, TPTCM112III 300 DPI, TPTCM112III CL

Length	227.4 mm
Height	(with autocutter down) 95.3 mm (with autocutter up) 136.6 mm
Width	171.55 mm
Weight	1700 g

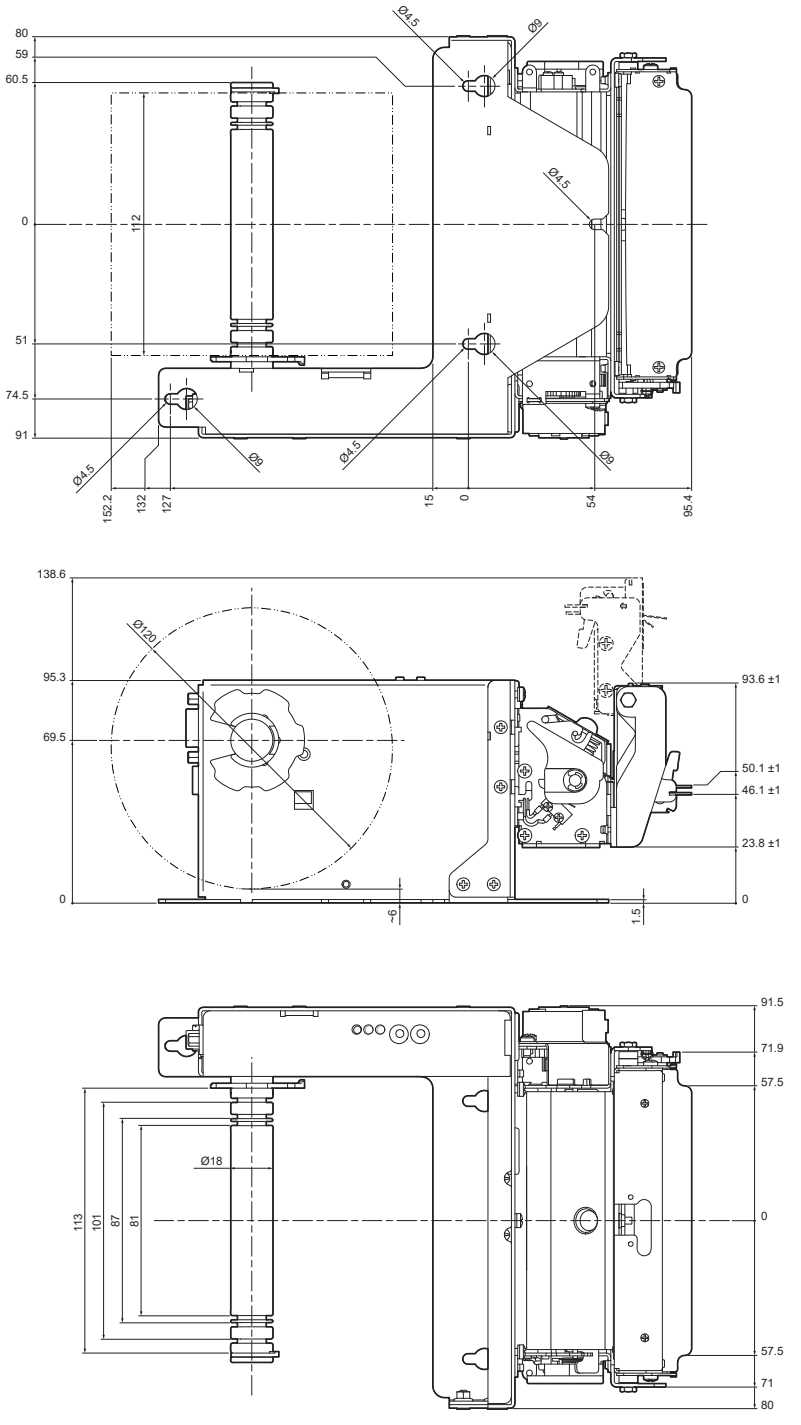
All the dimensions shown in following figure are in millimetres.



TPTCM112III STRONG CUT

Length	227.4 mm
Height	(with autocutter down) 95.3 mm (with autocutter up) 138.6 mm
Width	171.55 mm
Weight	1700 g

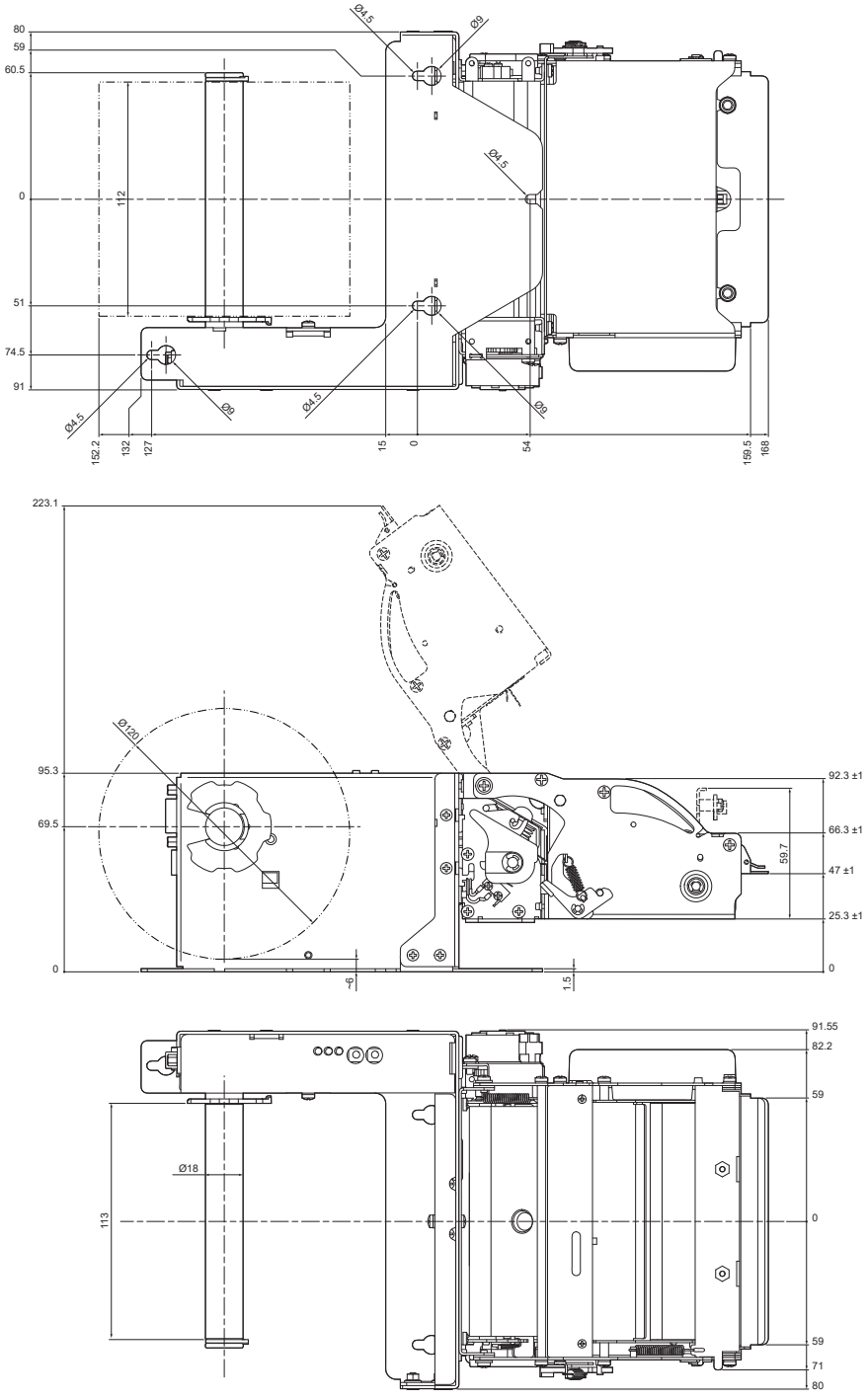
All the dimensions shown in following figure are in millimetres.



TPTCM112III EJC, TPTCM112III EJC 300 DPI

Length	300 mm
Height	(with ejector down) 95.3 mm (with ejector up) 223.1 mm
Width	171.55 mm
Weight	2100 g

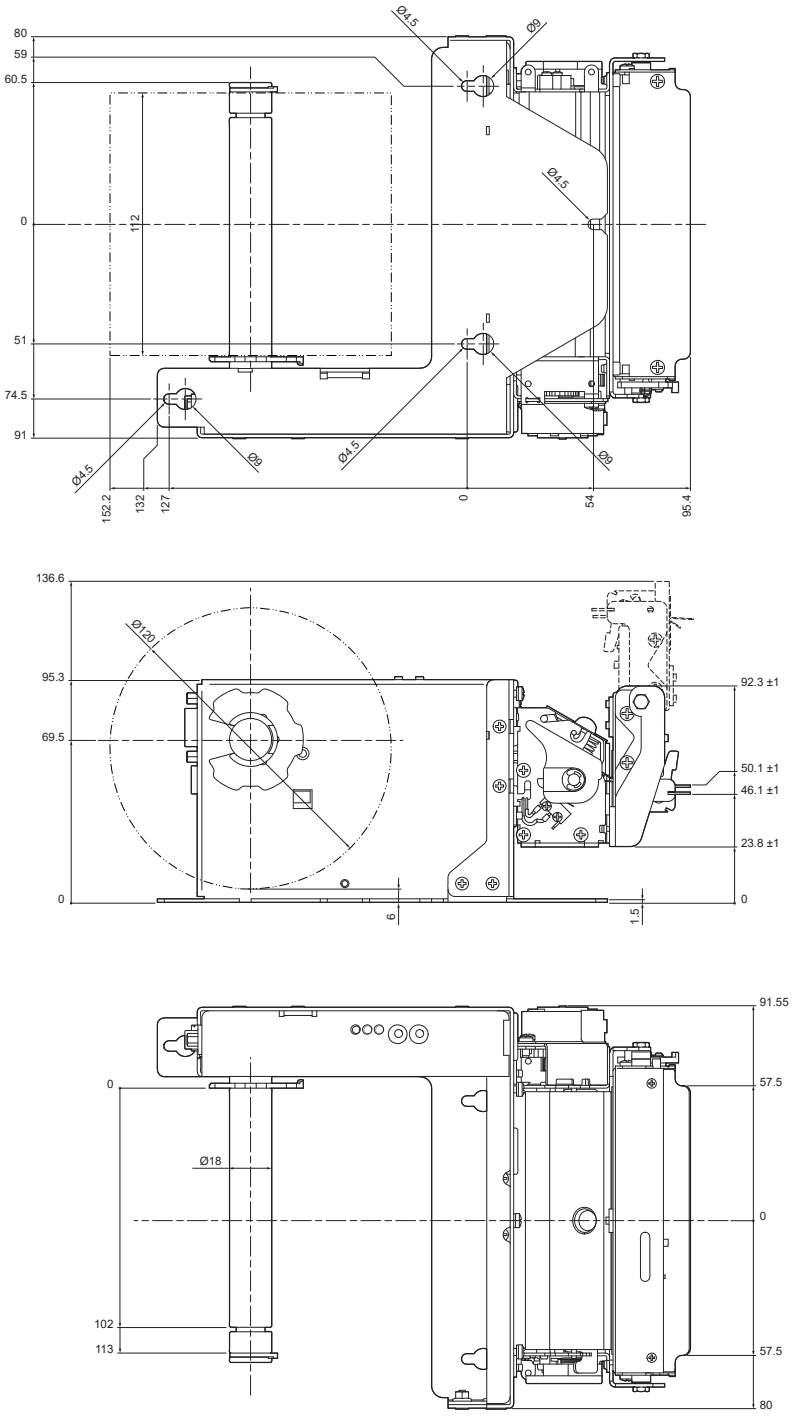
All the dimensions shown in following figure are in millimetres.



TPTCM112IIIL

Length	227.4 mm
Height	(with autocutter down) 95.3 mm (with autocutter up) 136.6 mm
Width	171.55 mm
Weight	1700 g

All the dimensions shown in following figure are in millimetres.

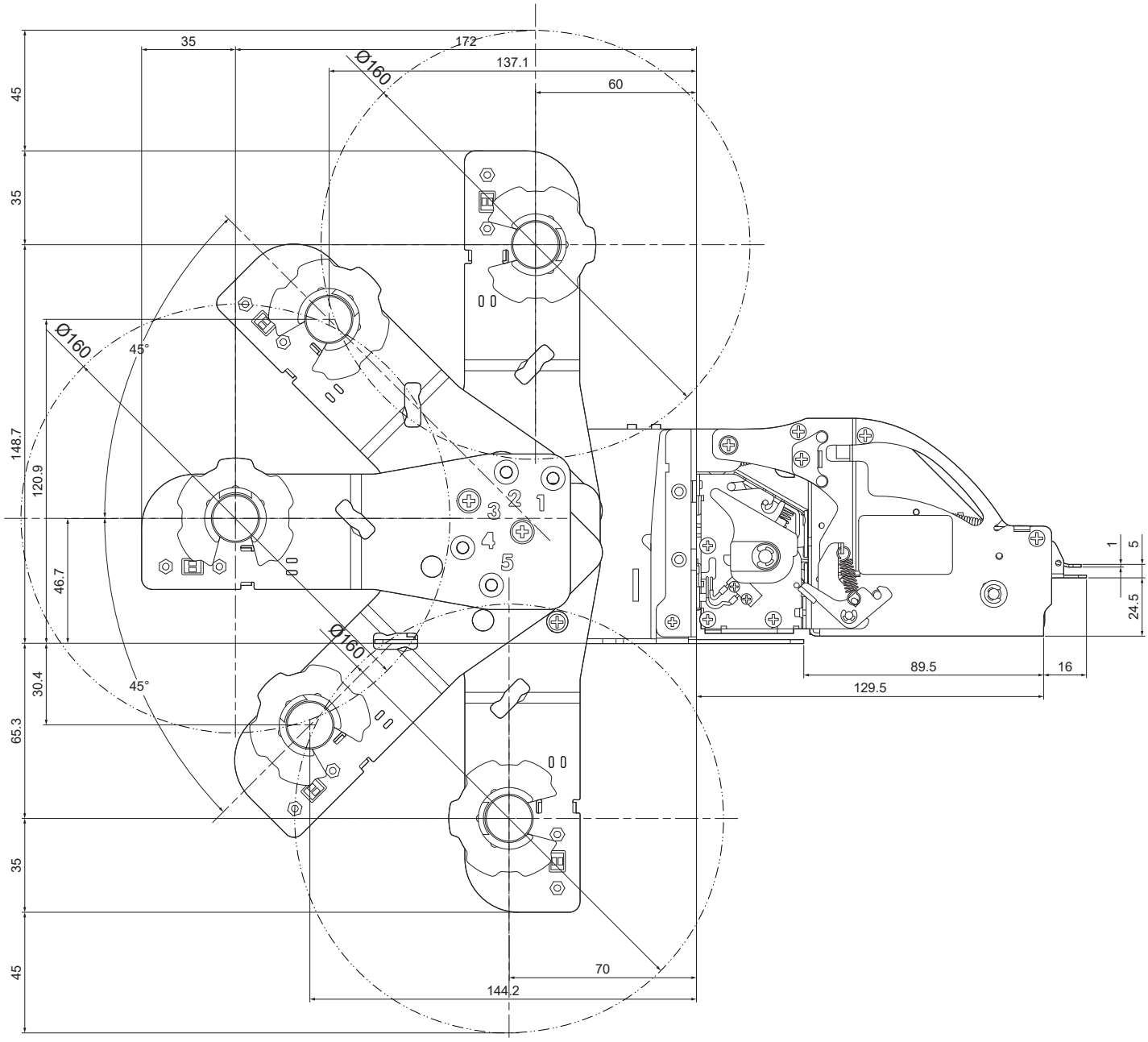


9.4 Device dimensions with paper roll holder code 974EX010000316 (optional)

TPTCM60III EJC

Length	max. 352.5 mm max. 397.5 mm (with paper roll Ø max.160 mm)
Height	max. 183.7 mm max. 228.7 mm (with paper roll Ø max.160 mm)
Width	115 mm

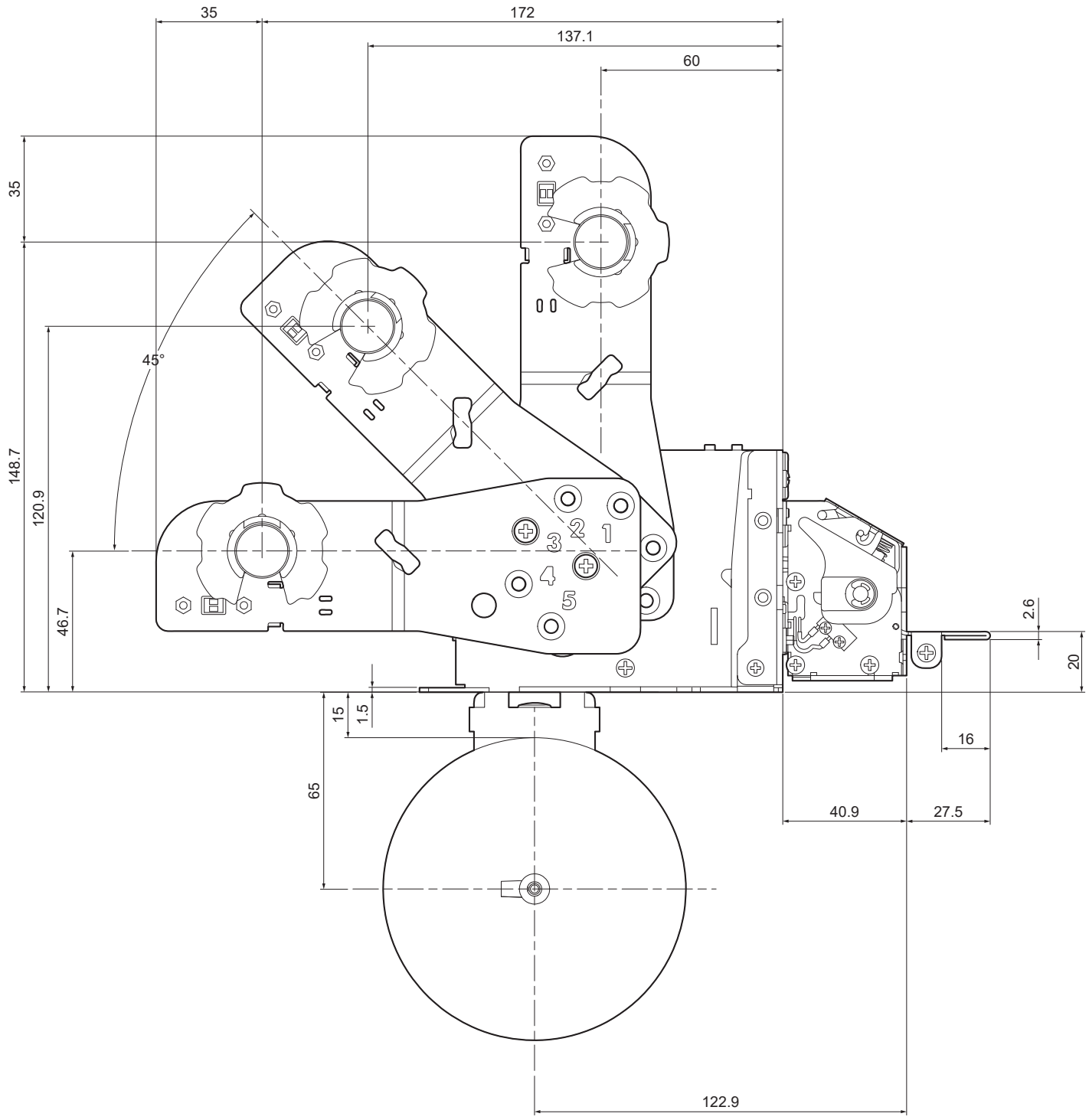
All the dimensions shown in following figure are in millimetres.



TPTCM60IIIL

Length	max. 275.4 mm
Height	max. 298.7 mm
Width	112.4 mm

All the dimensions shown in following figure are in millimetres.

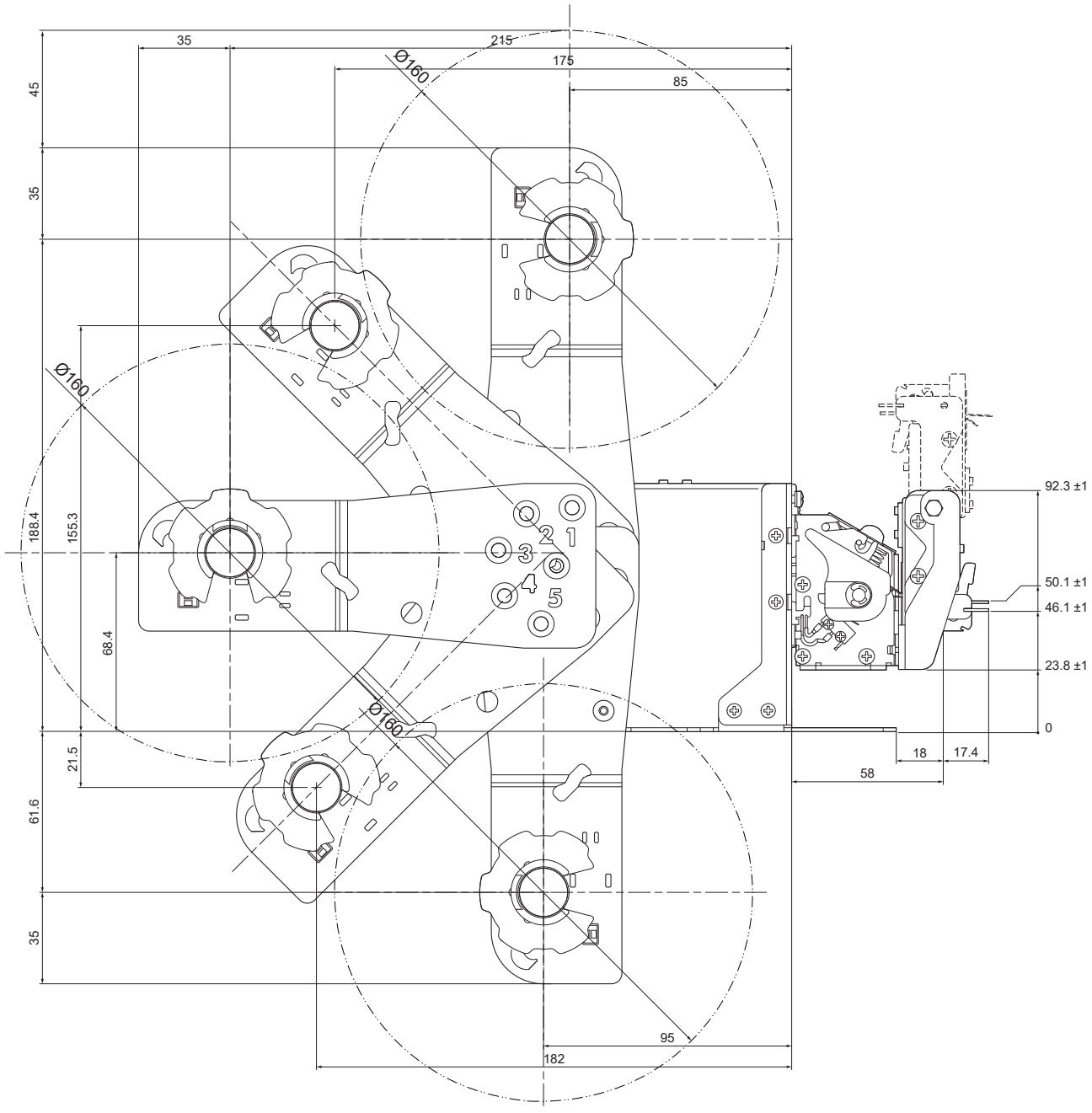


9.5 Device dimensions with paper roll holder code 974EU010000315 (optional)

TPTCM112III, TPTCM112III 300 DPI, TPTCM112III STRONG CUT, TPTCM112IIIL, TPTCM112III CL

Length	max. 325.4 mm max. 370.4 mm (with paper roll Ø max.160 mm)
Height	max. 223.4 mm max. 268.4 mm (with paper roll Ø max.160 mm)
Width	115 mm

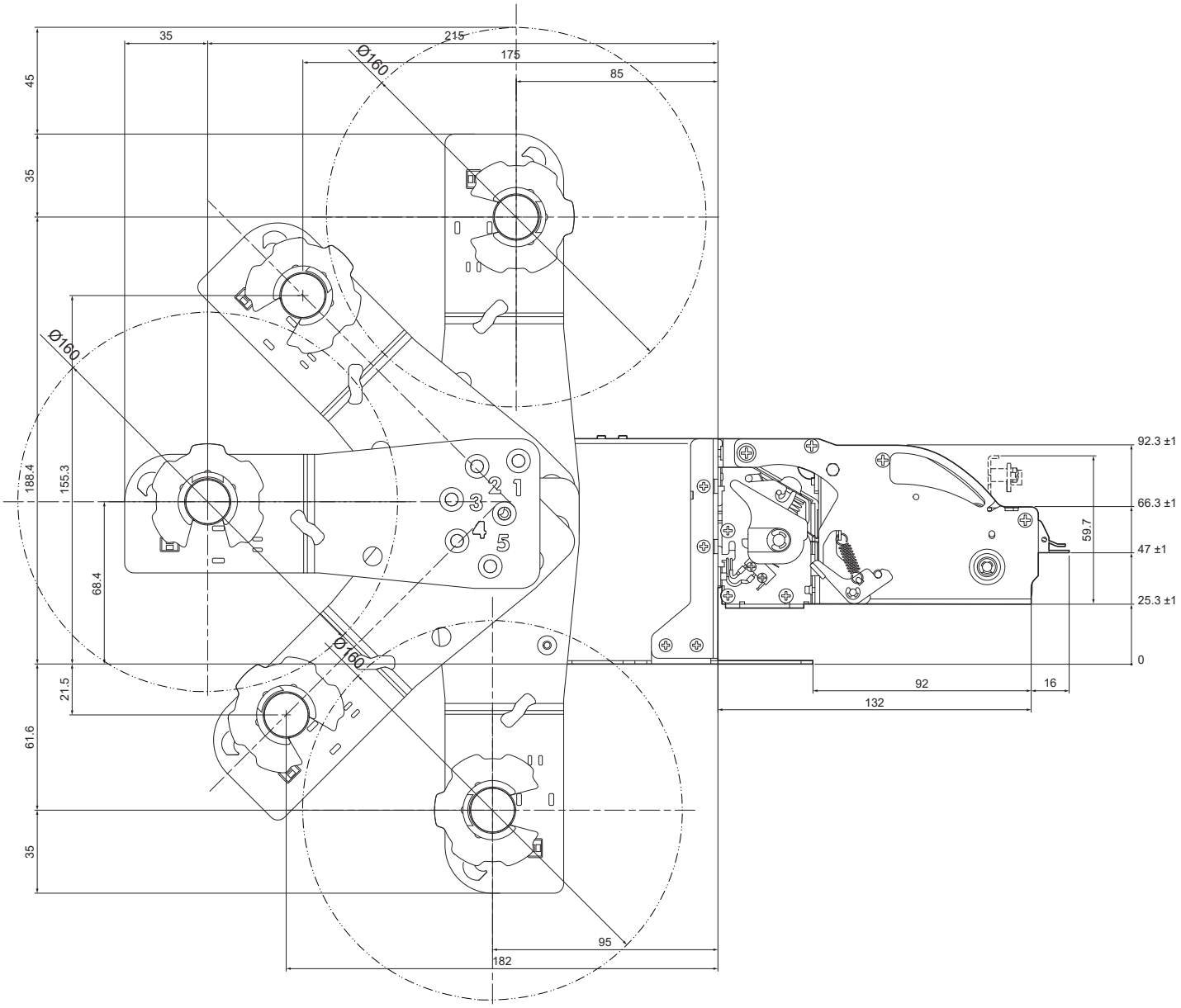
All the dimensions shown in following figure are in millimetres.



TPTCM112III EJC, TPTCM112III EJC 300 DPI

Length	max. 398 mm max. 443 mm (with paper roll Ø max.160 mm)
Height	max. 223.4 mm max. 268.4 mm (with paper roll Ø max.160 mm)
Width	115 mm

All the dimensions shown in following figure are in millimetres.



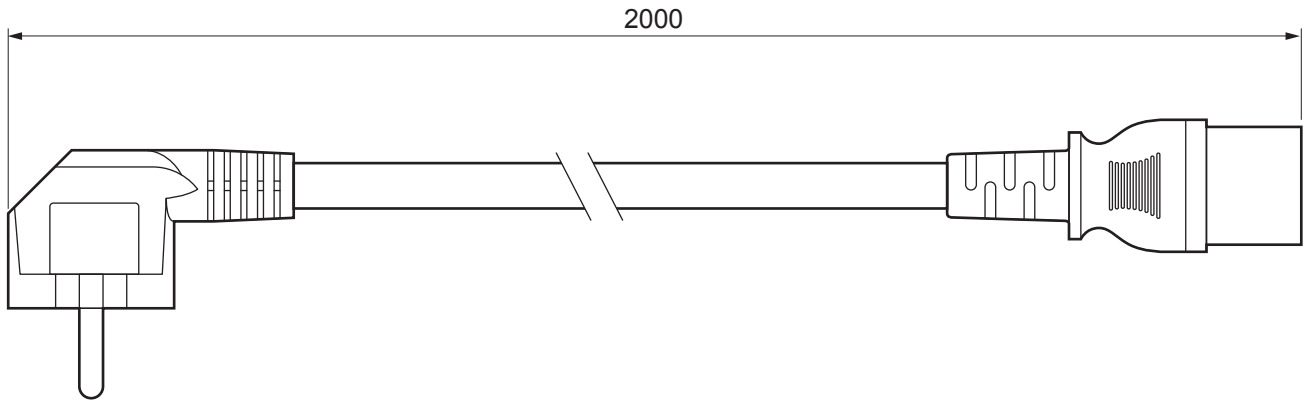
9.6 Power supply and power cord dimensions

The following table shows the dimensions of the power supply, the power cord and the adapter for power supply optionals for the device.

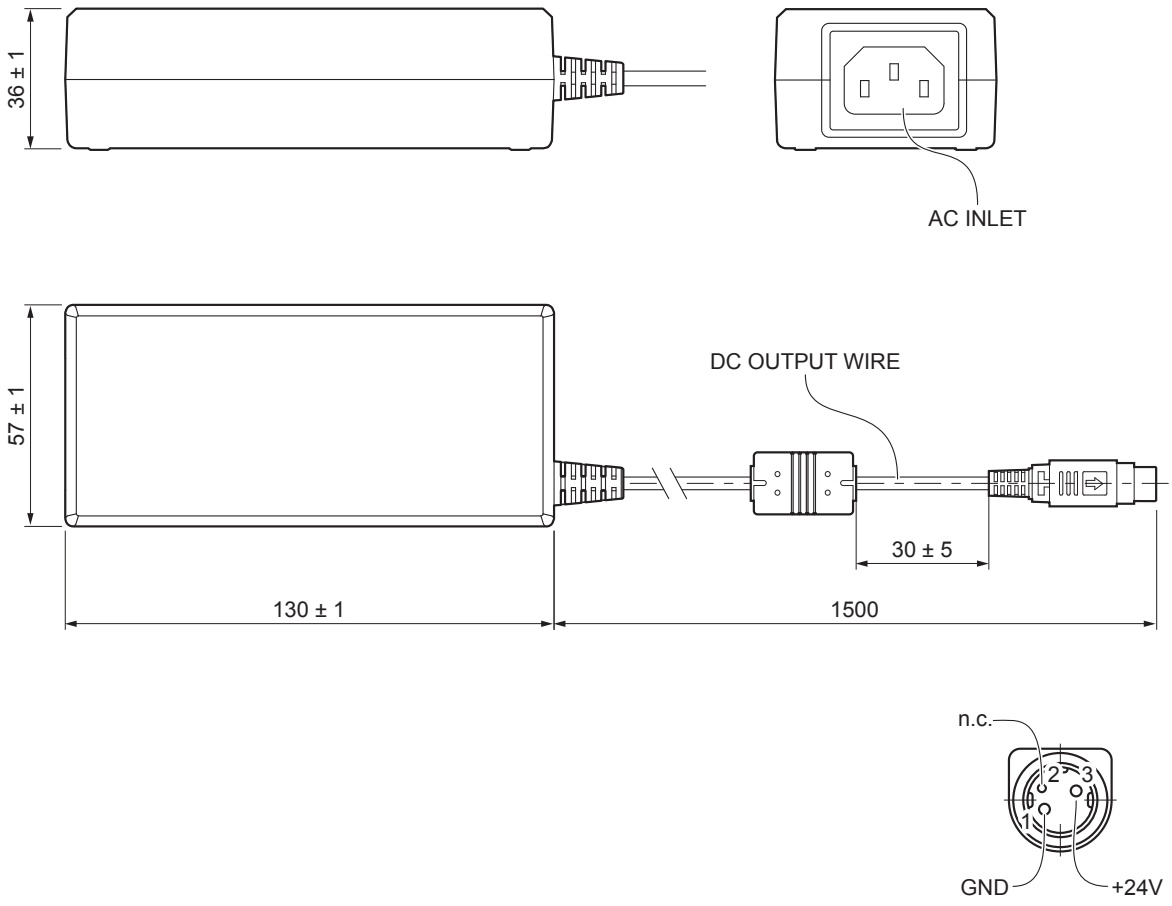
POWER CORD code 26100000000311 (optional for TPTCM60III EJC and TPTCM60IIIL)	
Length	2000 mm
POWER SUPPLY code 963GE020000071 (optional for TPTCM60III EJC and TPTCM60IIIL)	
Length	130 mm
Height	36 mm
Width	57 mm
POWER SUPPLY code 963GE020000106 (optional for TPTCM112III, TPTCM112III 300 DPI, TPTCM112III STRONG CUT, TPTCM112III EJC, TPTCM112III EJC 300 DPI, TPTCM112IIIL, TPTCM112III CL)	
Length	146.2 mm
Height	39 mm
Width	75.2 mm

All the dimensions shown in following figures are in millimetres.

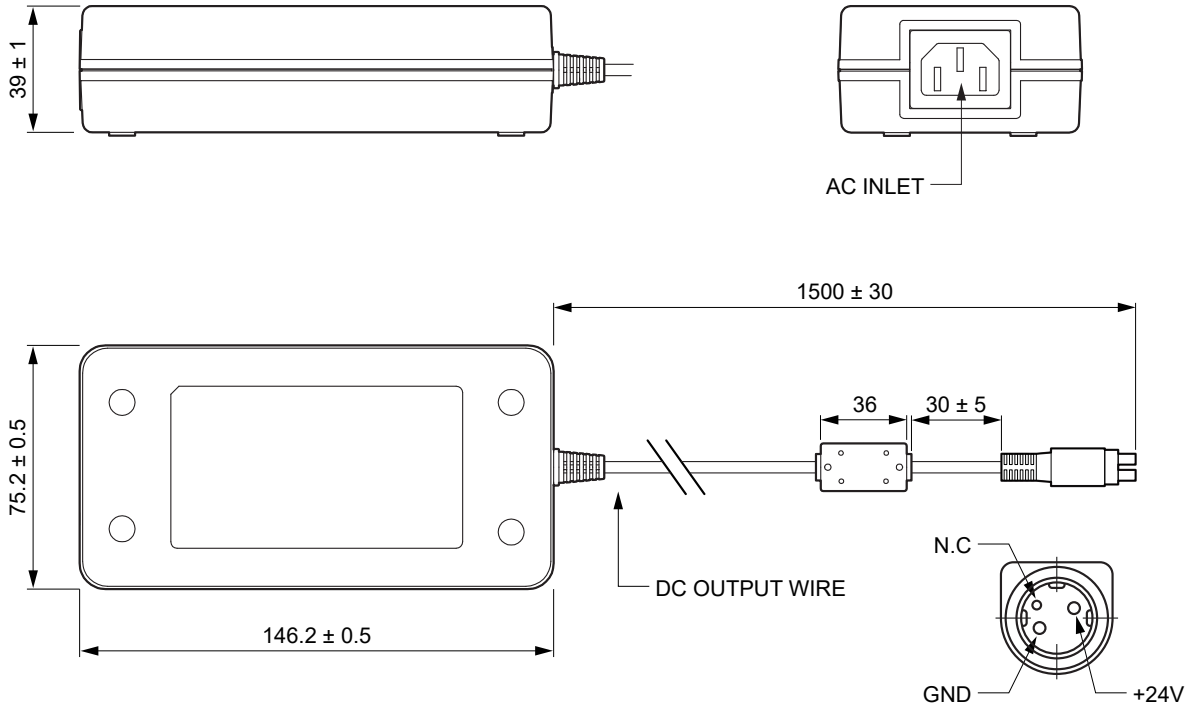
POWER CORD code 26100000000311



POWER SUPPLY code 963GE020000071



POWER SUPPLY code 963GE020000106

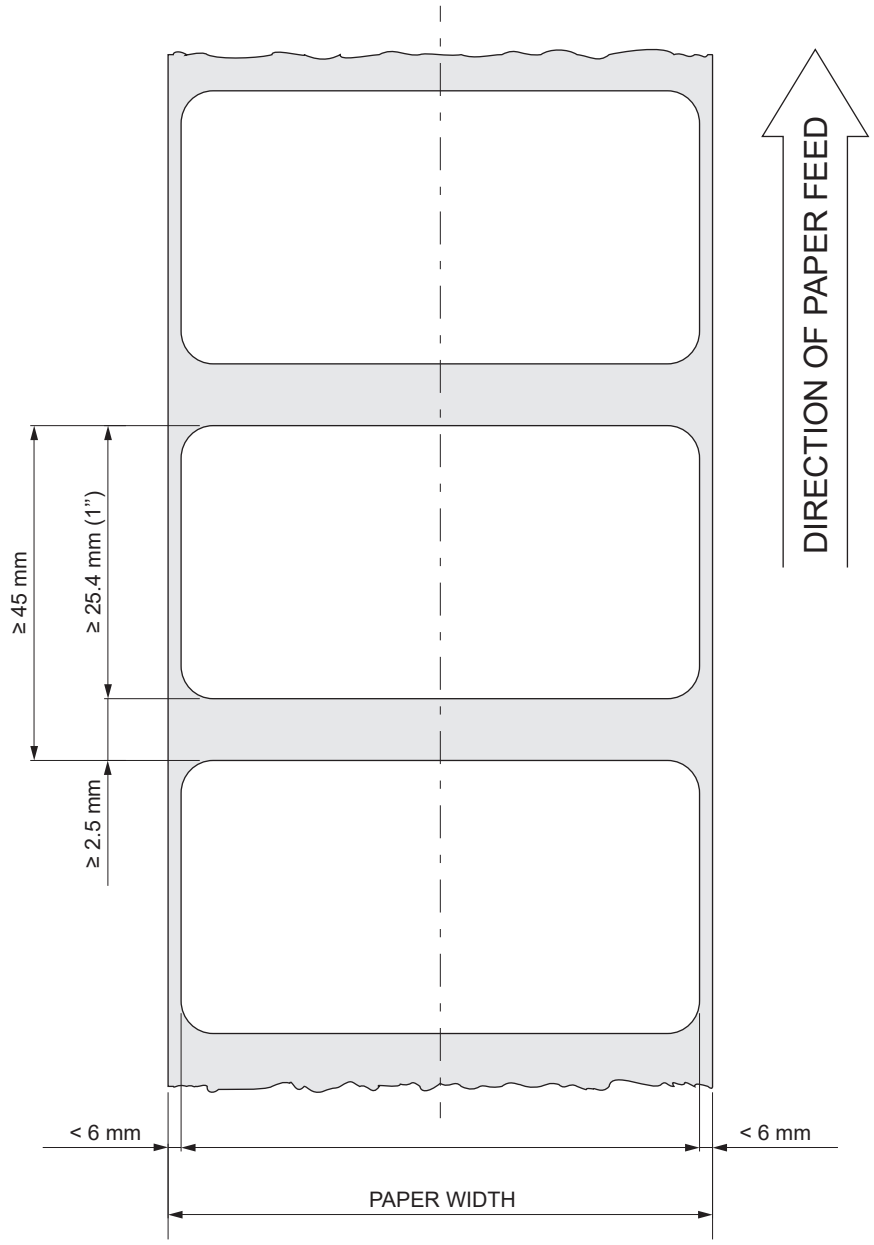


9.7 Paper specification

TPTCM60IIIL, TPTCM112IIIL

To properly use the alignment commands, you need to use paper with labels that comply with the dimensions shown in the following figure that apply to all paper widths handled by the devices.

All the dimensions shown in following figures are in millimetres.

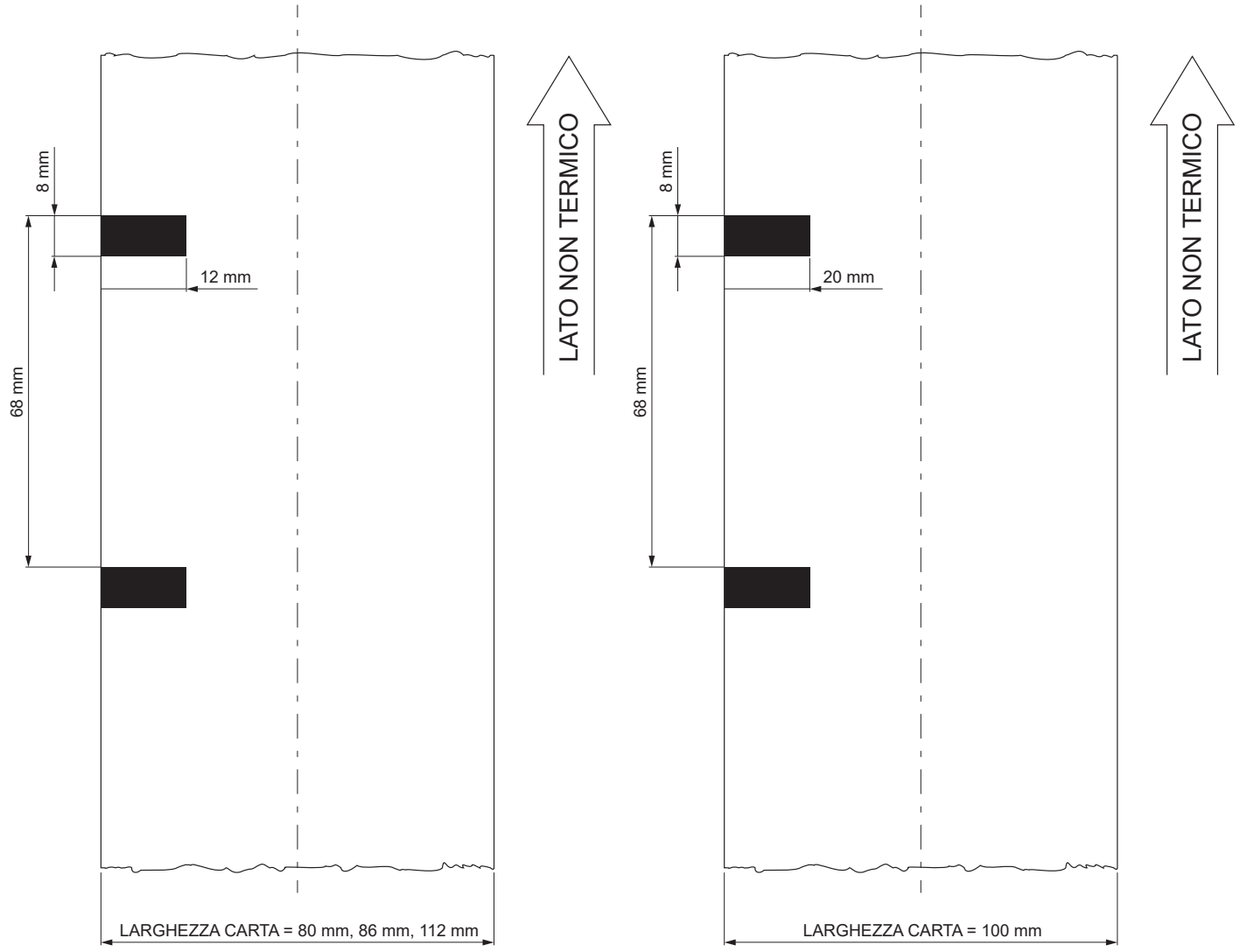


TPTCM112III, TPTCM112III 300 DPI, TPTCM112III STRONG CUT, TPTCM112III CL

The following image shows the placement of the black mark on paper. The notch must be printed on the non-thermal side of paper according to the dimensions shown in the following figure that apply to all paper widths handled by the device.

For devices with the alignment sensor in position C (see chapter 7), the paper specifications are symmetric to the axis of the paper.

All the dimensions shown in following figures are in millimetres.



9.8 Character sets

The device has 3 fonts of varying width (11, 15 and 20 cpi) which may be related one of the coding tables provided on the device.

To know the coding tables actually present on the device, you need to print the font test (see paragraph 3.4).

You can set font and coding table by using the commands (see the commands manual of the device) or using the “Code Table”, "Chars / Inch" and "Font Type" parameters during the setup procedure (see paragraph 6.6).

The following is the full list of coding tables that can be installed on the device.

<CodeTable>	Coding table	
0	PC437 - U.S.A., Standard Europe	
1	Katakana	
2	PC850 - Multilingual	
3	PC860 - Portuguese	
4	PC863 - Canadian/French	
5	PC865 - Nordic	
6	VISCII - Vietnamese Standard Code	on request
11	PC851 - Greek	on request
12	PC853 - Turkish	on request
13	PC857 - Turkish	on request
14	PC737 - Greek	on request
15	ISO8859-7 - Greek	on request
16	WPC1252 - Scandinavian	
17	PC866 - Cyrillic 2	
18	PC852 - Latin 2	on request
19	PC858 per simbolo Euro in posizione 0xD5	
20	KU42 - Thai	on request
21	TIS11 - Thai	on request
26	TIS18 - Thai	on request
30	TCVN_3 - Vietnamese	on request
31	TCVN_3 - Vietnamese	on request

<CodeTable>	Coding table	
32	PC720 - Arabic	on request
33	WPC775 - Baltic Rim	on request
34	PC855 - Cyrillic	on request
35	PC861 - Icelandic	on request
36	PC862 - Hebrew	
37	PC864 - Arabic	
38	PC869 - Greek	on request
39	ISO8859-2 - Latin 2	on request
40	ISO8859-15 - Latin 9	on request
41	PC1098 - Farsi	on request
42	PC1118 - Lithuanian	on request
43	PC1119 - Lithuanian	on request
44	PC1125 - Ukrainian	on request
45	WPC1250 - Latin 2	
46	WPC1251 - Cyrillic	
47	WPC1253 - Greek	
48	WPC1254 - Turkish	
49	WPC1255 - Hebrew	
50	WPC1256 - Arabic	
51	WPC1257 - Baltic Rim	
52	WPC1258 - Vietnamese	
53	KZ1048 - Kazakh	on request
255	Space page	

10 CONSUMABLES

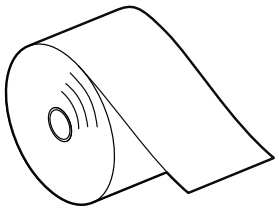
The following table shows the list of available consumables for devices:

TPTCM60III EJC, TPTCM60IIIL

67300000000370

THERMAL PAPER ROLL

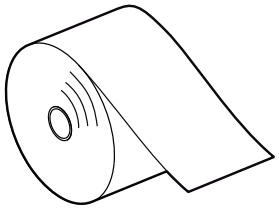
weight = 74 g/m^2
width = 60 mm
Ø external = 95 mm
Ø core = 25 mm



67300000000352

THERMAL PAPER ROLL

weight = 70 g/m^2
width = 60 mm
Ø external = 130 mm
Ø core = 25 mm

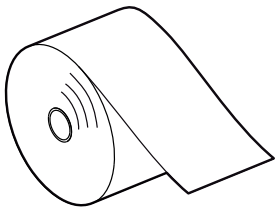


TPTCM112III, TPTCM112III 300 DPI, TPTCM112III STRONG CUT, TPTCM112III EJC, TPTCM112III EJC 300 DPI, TPTCM112IIIL, TPTCM112III CL

67300000000318

THERMAL PAPER ROLL

weight = 70 g/m^2
width = 112 mm
Ø external = 95 mm
Ø core = 12 mm



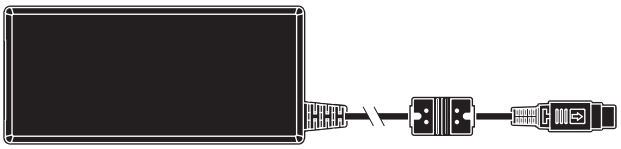
11 ACCESSORIES

The following tables shows the list of available accessories for device.

TPTCM60III EJC, TPTCM60IIIL

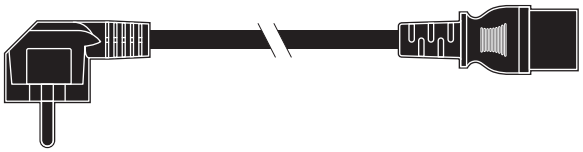
963GE020000071

POWER SUPPLY
(for technical specifications, see paragraph 9.1)



26100000000311

POWER CORD SCHUKO PLUG
length = 2 m
(see paragraph 9.6)

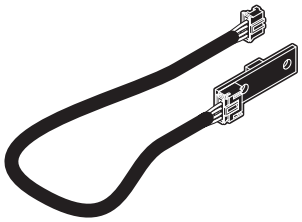


26600000000012

ADAPTER CABLE
3 pin male power-DIN connector
length = 50 cm

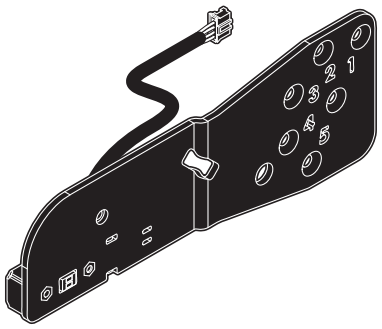
26300000000603

LOW PAPER SENSOR BOARD
with cable length = 200 mm



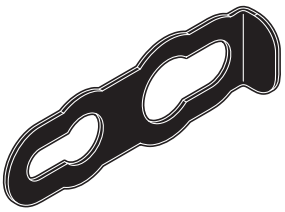
974EX010000316

ADJUSTABLE PAPER ROLL HOLDER
with low paper sensor board and cable
for rolls with 160 mm external diameter



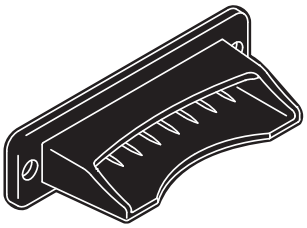
21100000001349

TIE FOR ROLL LOCKING



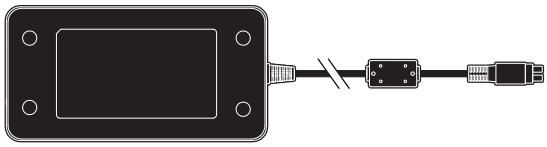
21400000000948

PLASTIC BEZEL



963GE020000106

POWER SUPPLY
(for technical specifications, see paragraph 9.1)

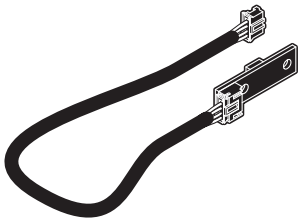


26600000000012

ADAPTER CABLE
3 pin male power-DIN connector
length = 50 cm

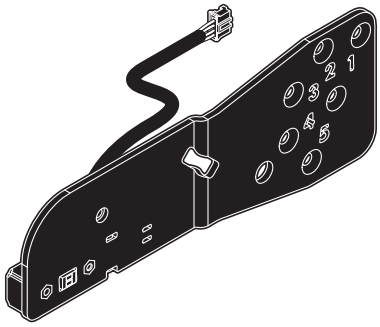
26300000000603

LOW PAPER SENSOR BOARD
with cable length = 200 mm



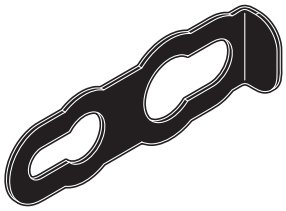
974EU010000315

ADJUSTABLE PAPER ROLL HOLDER
with low paper sensor board and cable
for rolls with 160 mm external diameter



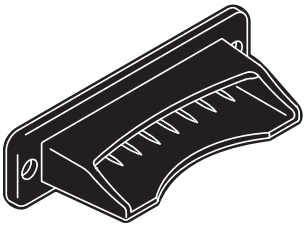
21100000001349

TIE FOR ROLL LOCKING



21400000000947

PLASTIC BEZEL



12 TECHNICAL SERVICE

In case of failure, contact the technical service accessing the website www.custom4u.it and using the support tools on the homepage. It is advisable to keep the identification data of the product at hand.

The product code, the serial number and the hardware release number can be found on the product label (see paragraph 3.3). The firmware release number (SCODE) can be found:

- on the setup report (see paragraph 6.1)
- connecting the device to a PC and starting the “PrinterSet” tool (see paragraph 6.2)
- by consulting the “setup.ini” file (see paragraph 6.3)

Part Number : 76200000005400 Rev.1.70

CUSTOM S.p.A.
World Headquarters
Via Berettine, 2/B - 43010 Fontevivo, Parma ITALY
Tel. +39 0521 680111 - Fax +39 0521 610701
info@custom.biz - www.custom.biz

www.custom.biz