VKP112H

Commands manual: **77200000000800**

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 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.
- When positioning the device, make sure cables do not get damaged.
- Use the type of electrical power supply indicated on the device label. If uncertain, contact your dealer.
- Make sure the electrical system that supplies power to the device is equipped with a ground wire and is protected by a differential switch.
- 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.
- Make sure that there is an easily-accessible outlet with a capacity of no less than 15A in the vicinity of where the device is to be installed.
- Periodically perform scheduled maintenance on the device to avoid dirt build-up that could compromise the correct, safe operation of the unit.
- Before any type of work is done on the machine, disconnect the battery pack.
- 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.

GENERAL INSTRUCTIONS
CUSTOM ENGINEERING 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.

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 2006/95/CE and 2004/108/CE inasmuch as it was designed in conformity with the provisions laid down in the following Standards:

- EN 55022 Class B *(Limits and methods of measurements of radio disturbance characteristics of Information Technology Equipment)*
- EN 55024 *(Information Technology Equipment – Immunity characteristics – Limits and methods of measurement)*
- EN 60950 *(Safety of information equipment including electrical business equipment)*

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 2002/96/EC, 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.

TABLE OF CONTENTS

1 INTRODUCTION

1.1 Document structure

This document includes the following chapters:

1	INTRODUCTION	information about this document
2	DESCRIPTION	general description of device
3	INSTALLATION	information required for a correct installation of the device
4	OPERATION	information required to make the device operative
5	CONFIGURATION	description of the configuration parameters of the device
6	MAINTENANCE	information for a correct periodic maintenance
7	SPECIFICATION	technical specification for the device and its accessories
8	ACCESSORIES	description and installation of the available accessories for the device
9	CONSUMABLES	description and installation of the available consumables for the device
10	ALIGNMENT	information required for managing the paper alignment
11	TECHNICAL SERVICE	information required for contacting the technical service

1.2 Explanatory notes used in this manual

NOTE:	Information or suggestions relative to the use of the printer.

ATTENTION:	Information required to guard against damaging the printer.

DANGER:	Information required to guard against operator injury or damage.

2 DESCRIPTION

2.1 Unpacking the printer

Remove the printer from its carton being careful not to damage the packing material so that it may be re-used if the printer 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.

1. Installation instructions
2. Paper roll
3. Paper roll holder kit
4. Upper packing shell
5. Printer
6. Lower packing shell
7. Box
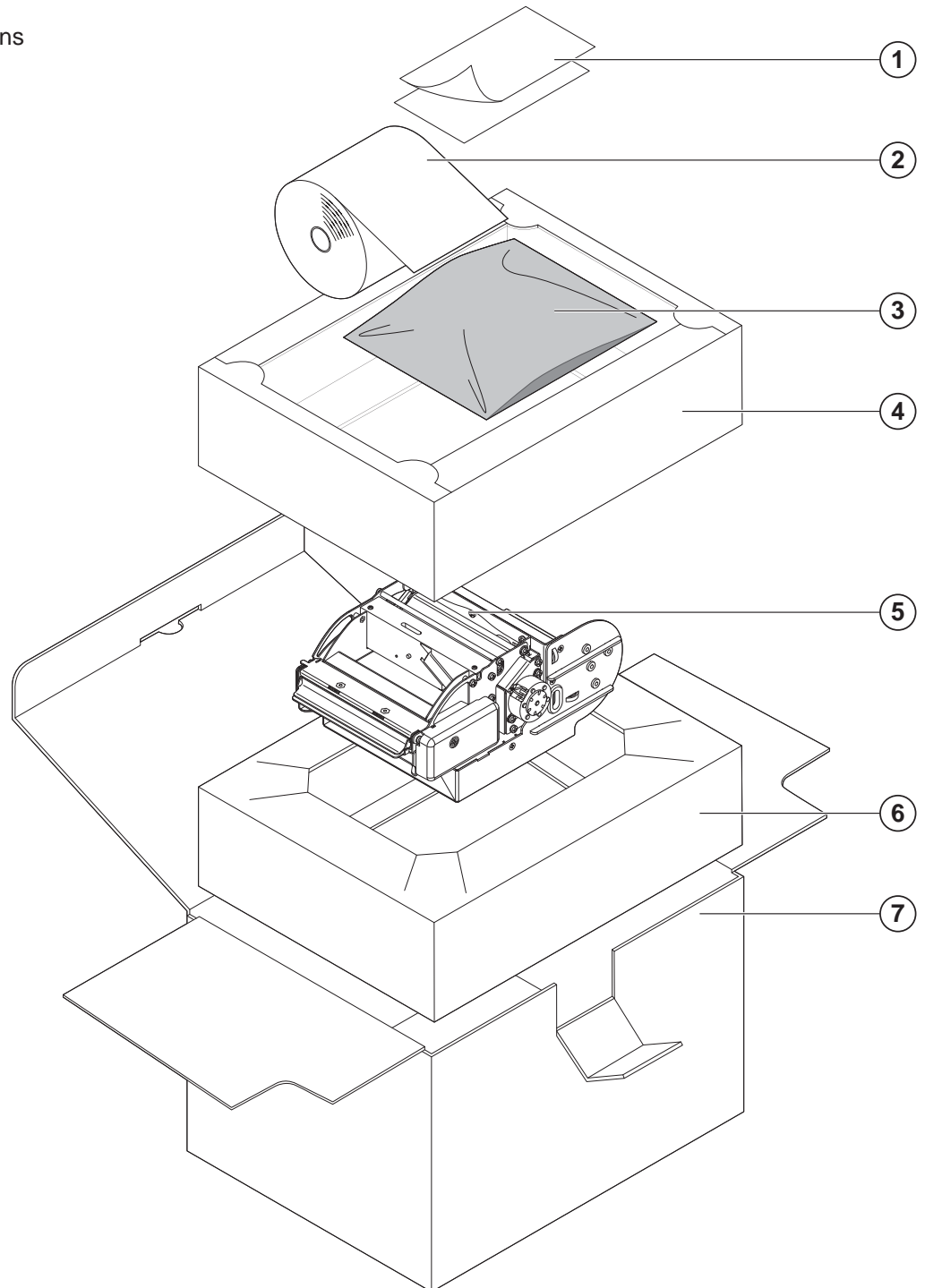
- Open the printer packaging
- Remove the upper packing frame content and remove the upper packing frame.
- Take out the printer.
- Keep the box, trays and packing materials in the event the printer must be transported/shipped in the future.

2.2 Printer component

<u>**EXTERNAL FRONT VIEW**</u>

1. Cutter
2. Printing head
3. Chassis
4. Motor
5. Mechanism for ejector group
6. Paper output
7. Ejector cover

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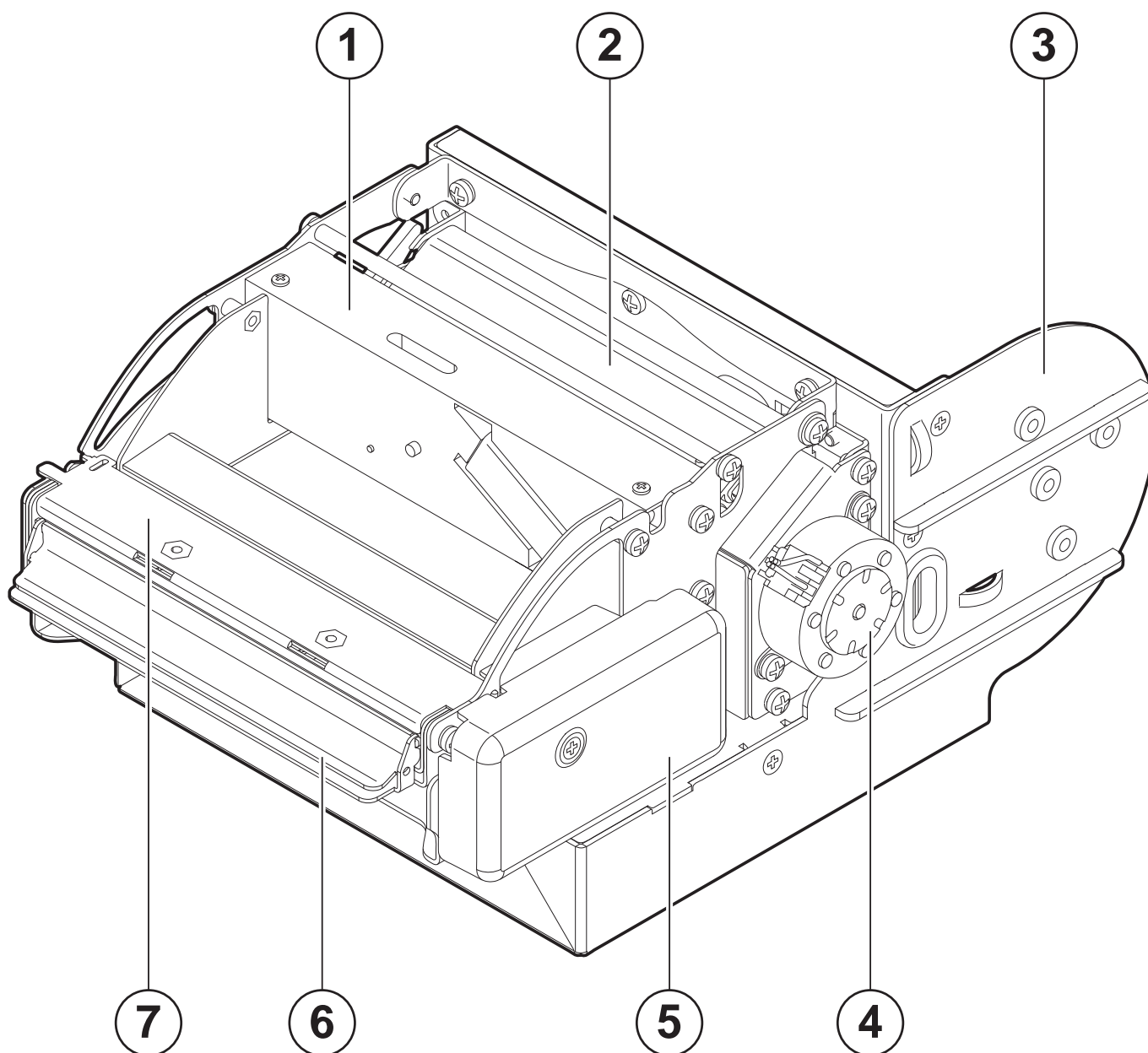
EXTERNAL REAR VIEW

1. Connector for near paper end sensor (external)
2. Paper input
3. Unblocking lever for printing head
4. Unblocking lever for ejector group
5. Status led (red)
6. Status led (green)
7. FORM FEED key
8. LINE FEED key
9. ON/OFF key
10. Power supply connector
11. USB interface connector
12. RS232 serial interface connector
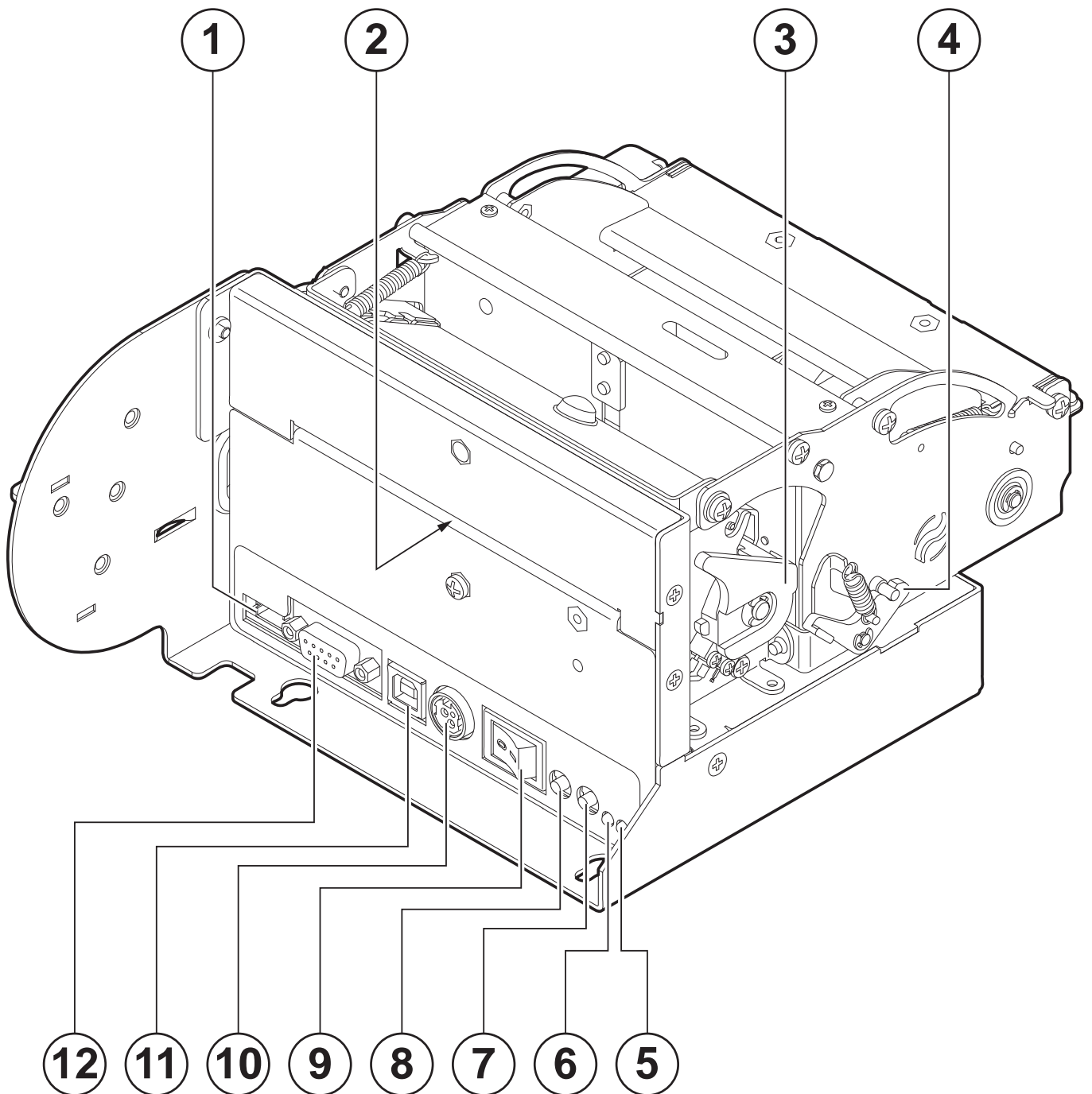
SENSORS VIEW

1. Sensor for printing head open
2. Paper in presence sensor
3. Sensor for printing head temperature
4. Paper out presence sensor
5. Sensor for ejector position

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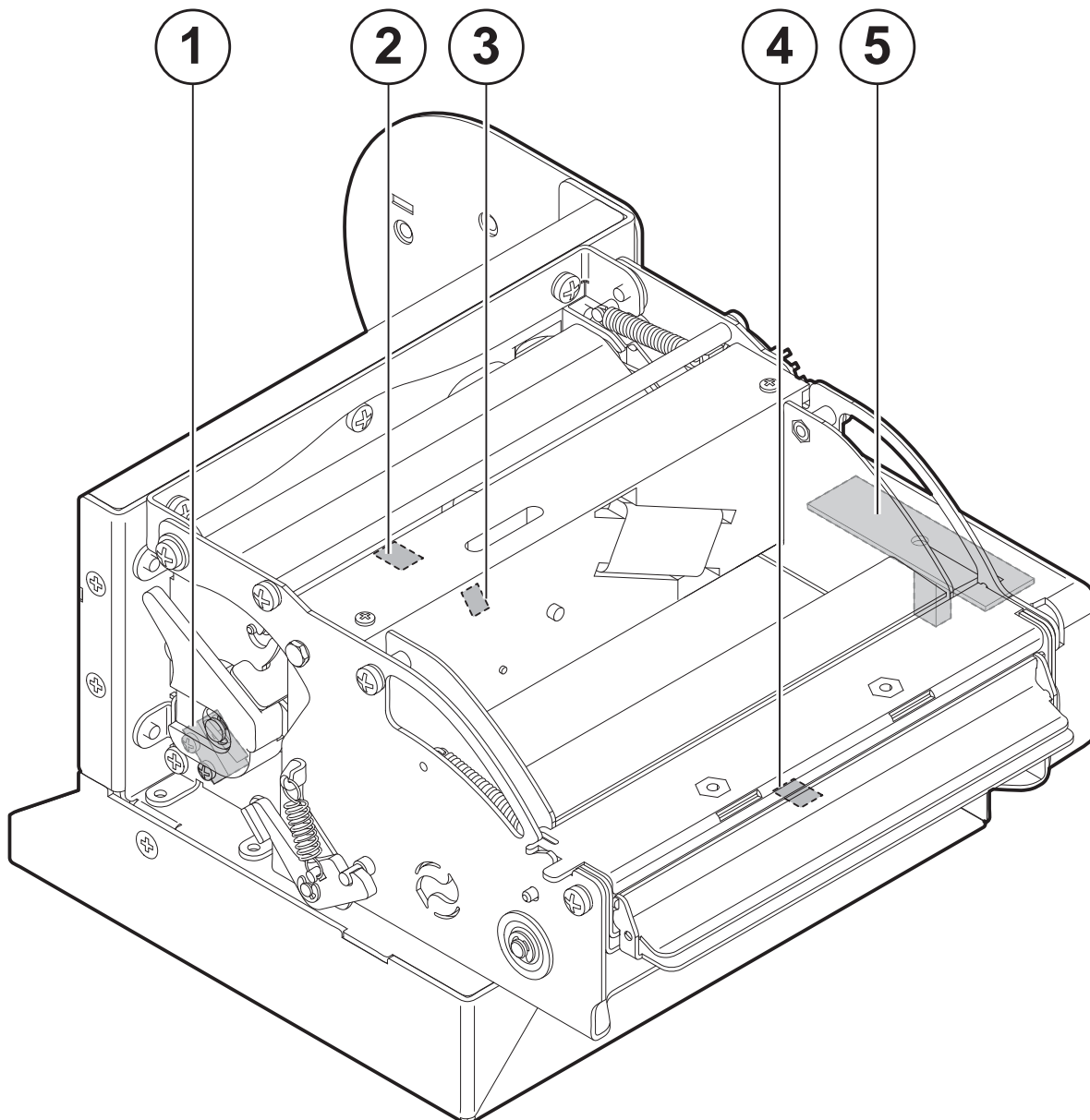
2.3 Key functions
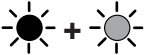
The following figures show the functions of printer's keys according to the operating condition of the device.

STANDBY

Fast push

Fast push

Advance the paper

*Logos
printing*

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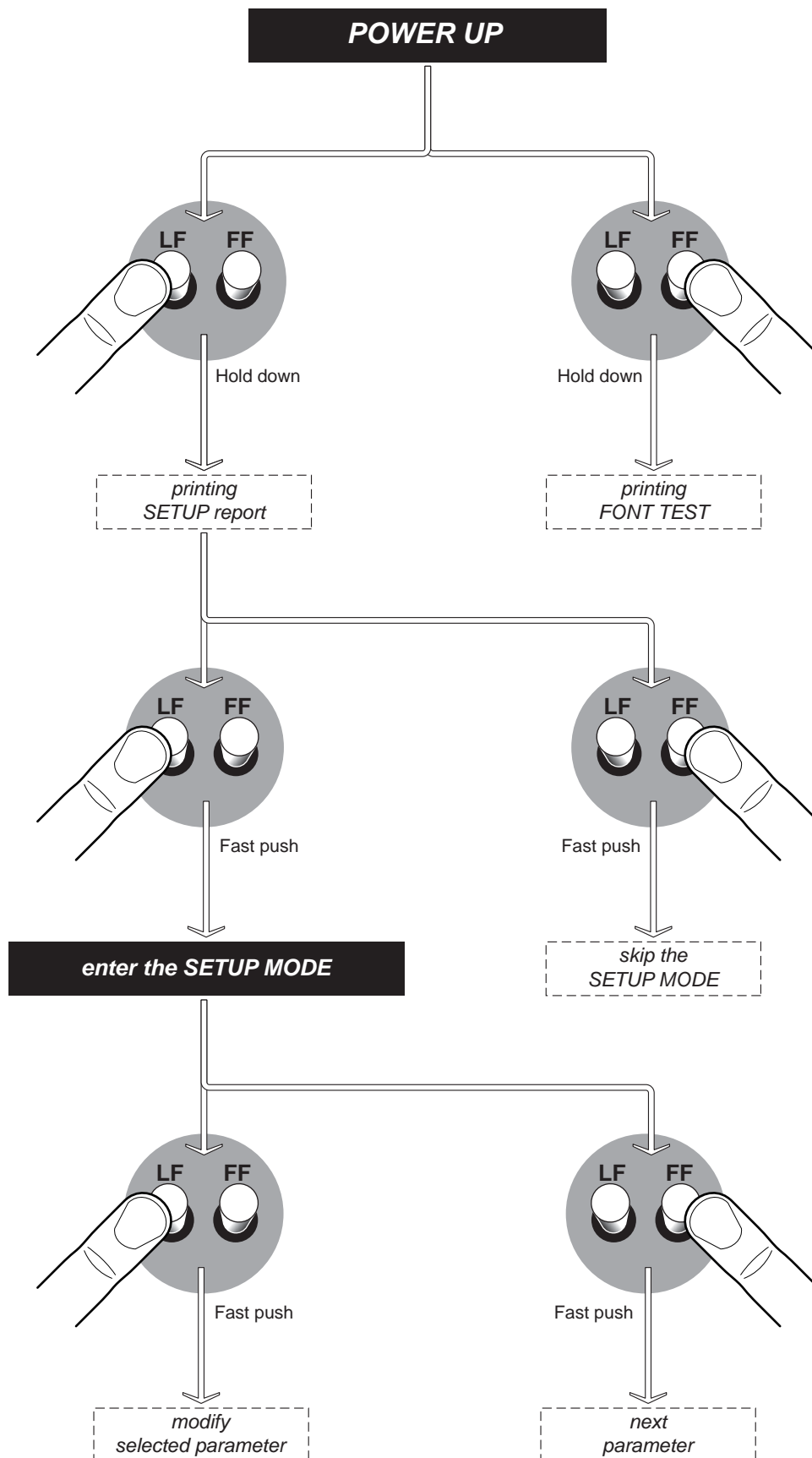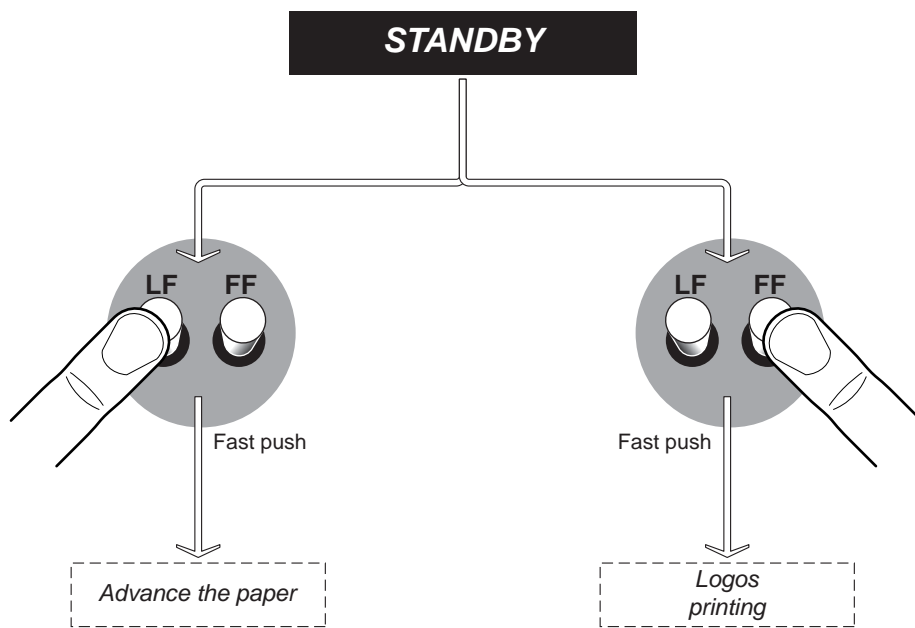
2.4 Status led flashes

The Status led indicates hardware status of device. Given in the table below are the various led signals and the corresponding printer status.

STATUS LED			DESCRIPTION
-	○	*OFF*	PRINTER OFF
GREEN	●	*ON*	PRINTER ON: NO ERROR
RED COMMUNICATION STATUS	☀	*1 x*	RECEIVE DATA
		2 x	RECEPTION ERRORS (PARITY, FRAME ERROR, OVERRUN ERROR)
		3 x	COMMAND NOT RECOGNIZED
		4 x	COMMAND RECEPTION TIME OUT
GREEN + RED RECOVERABLE ERROR	☀ + ☀	*2 x*	HEADING OVER TEMPERATURE
		3 x	PAPER END
		4 x	PAPER JAM
		5 x	POWER SUPPLY VOLTAGE INCORRECT
		6 x	PRINTING HEAD RAISED
RED UNRECOVERABLE ERROR	☀	*5 x*	RAM ERROR
		6 x	EEPROM ERROR
		7 x	CUTTER ERROR

3 INSTALLATION

3.1 Fastening

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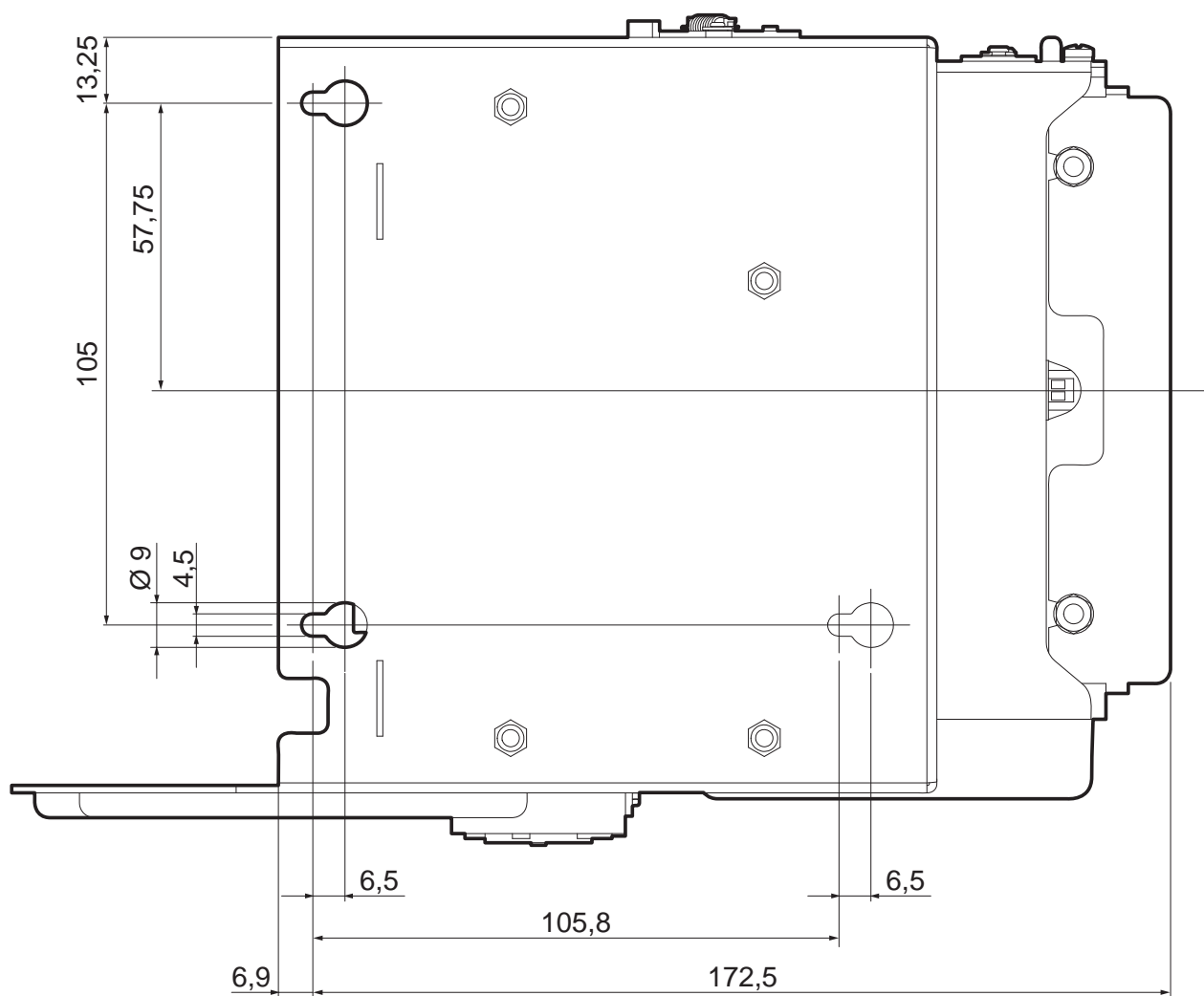
3.2 Connections

The following figure shows the possible connections for device.

Serial standard cable

USB standard cable

Power supply cable

POWER SUPPLY

RS232

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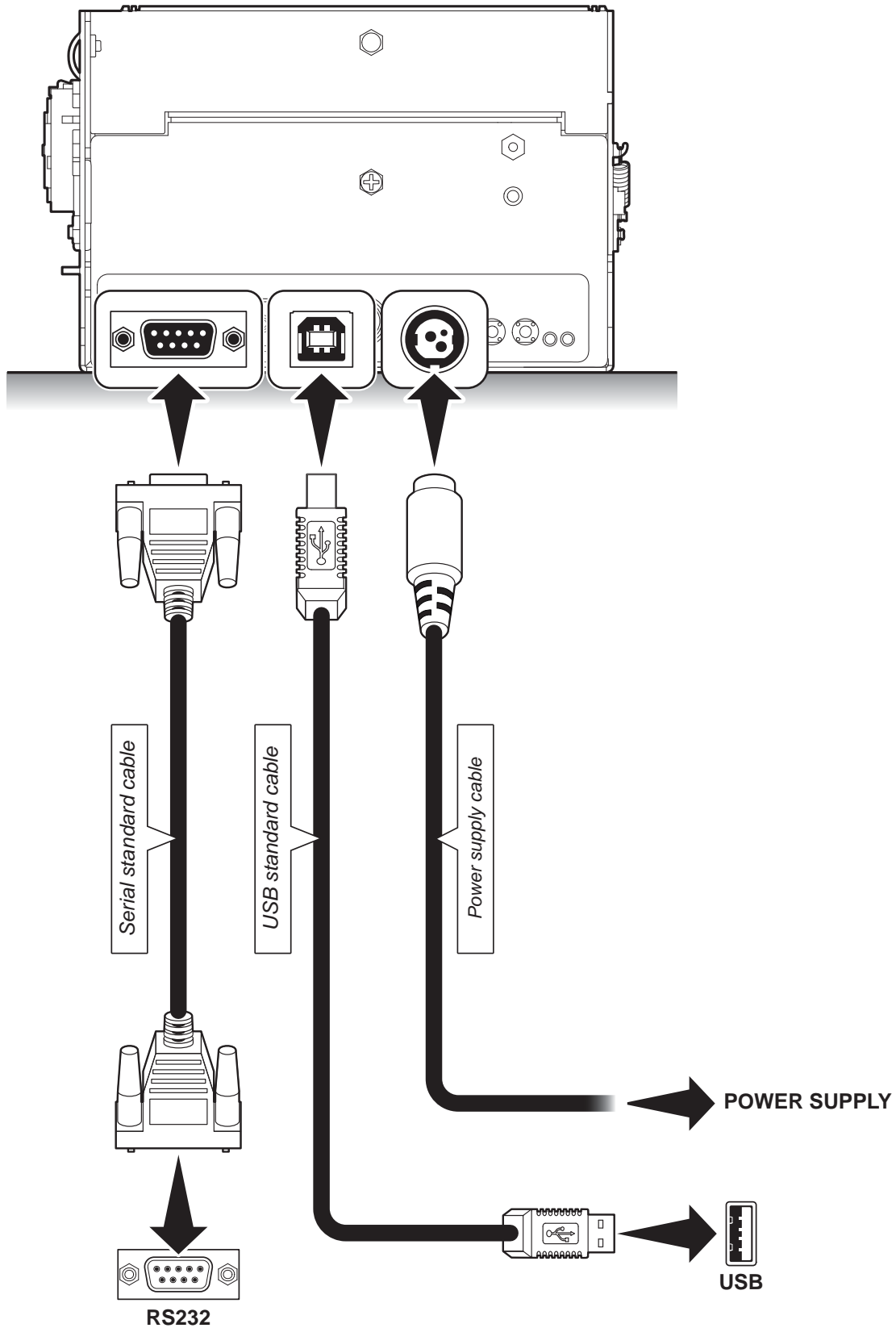
ATTENTION:
In some using conditions, we recommend the installation of a ferrite core on the power supply cable.

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3.3 Pinout

POWER SUPPLY
Tripolar female connector

J2	1	+24 Vdc
	2	GND
	3	GND
	4	Frame GND

ATTENTION:
Respect power supply polarity.

Note: *Power supply cable*
The following figure shows the connector pinout of the power supply cable for the device:

Power supply cable

Tripolar male connector

n.c.   +24 V

GND
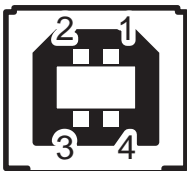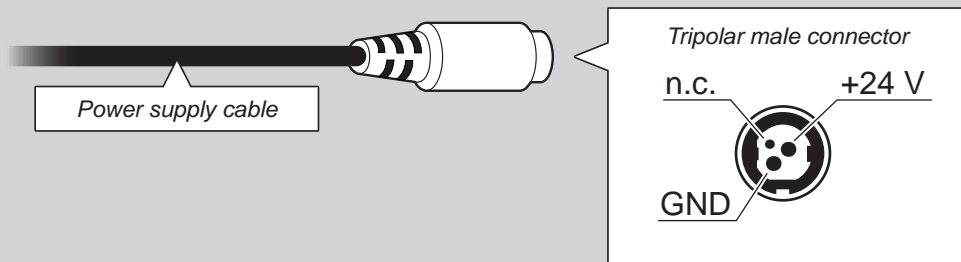
USB INTERFACE
Female USB type B connector

J4	1	USB0-VBUS	(in)
	2	D0 -	(in/out)
	3	D0 +	(in/out)
	4	GND	
	SH1	SHIELD	
	SH2	SHIELD	
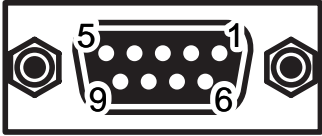
RS232 SERIAL INTERFACE
DB9 female connector

	1	DTR	
	2	TX	During transmission, takes the value "0" and "1", depending on data
	3	RX	During reception, takes the value "0" and "1", depending on data
	4	n.c.	
J3	5	GND	
	6	DTR	When "1", printer is fed
	7	CTS	
	8	RTS	When "1", printer is ready to receive data
	9	n.c.	

Note: Given the presence of the RS232 standard, logic value "0" corresponds to a voltage level of between +3 Vdc and +15 Vdc and logic value "1" corresponds to a voltage level of between -3 Vdc and -15 Vdc.

Note: *VKP112H > PC connection*
The following pictures show an example of connections between the printer and a personal computer using a 9 pin female serial connectors:

PRINTER DB9		PC DB9
1	DCD	1
2	RXD	2
3	TXD	3
4		4
5	SIGNAL GND	5
6	DSR	6
7		7
8	CTS	8
9		9
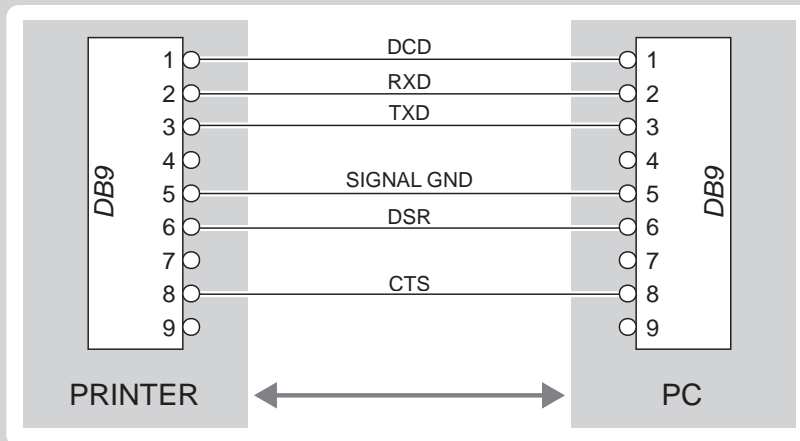
Note: When use a serial cable, we recommend the installation of a ferrite core on the power supply cable.

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3.4 Driver

The drivers are available for the following operating system:

OPERATING SYSTEM	INSTALLATION PROCEDURE
Windows XP	From the START menu, press Enter and key-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.
Windows VISTA (32/64bit)	
Windows 7 (32/64bit)	

All drivers can be found in the DOWNLOAD section of the web site www.custom.biz.

4 OPERATION

4.1 Mounting of the adjustable paper roll holder

The paper roll holder support position is adjustable on five different positions, according to the requirements of use of the device:

P1 = upper position
P2 = 45 degrees up position
P3 = rear position
P4 = 45 degrees low position
P5 = lower position

Fix the roll holder to the printer using the M4x8 countersunk screws supplied (see following figures).

P3

P4

P5

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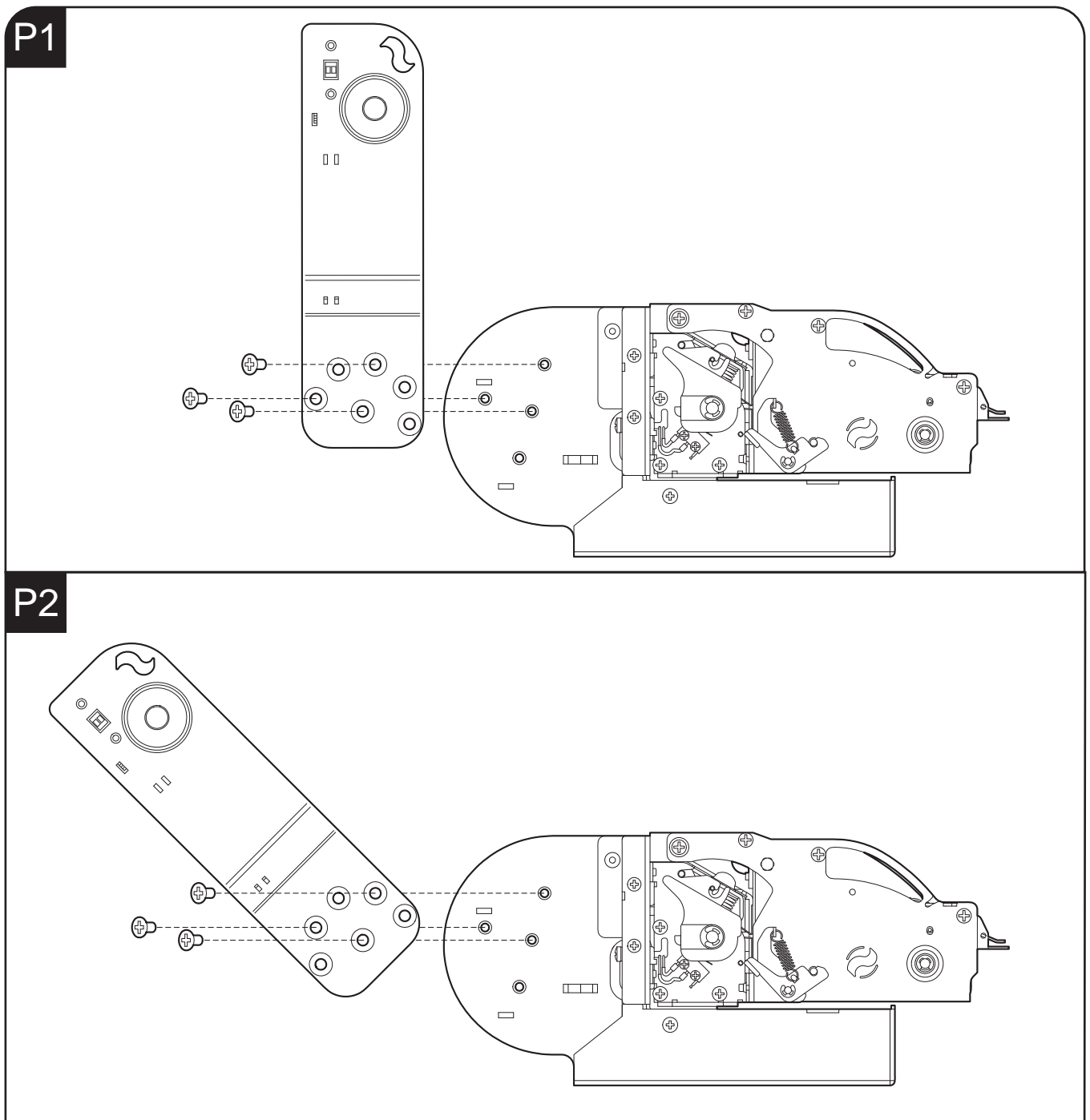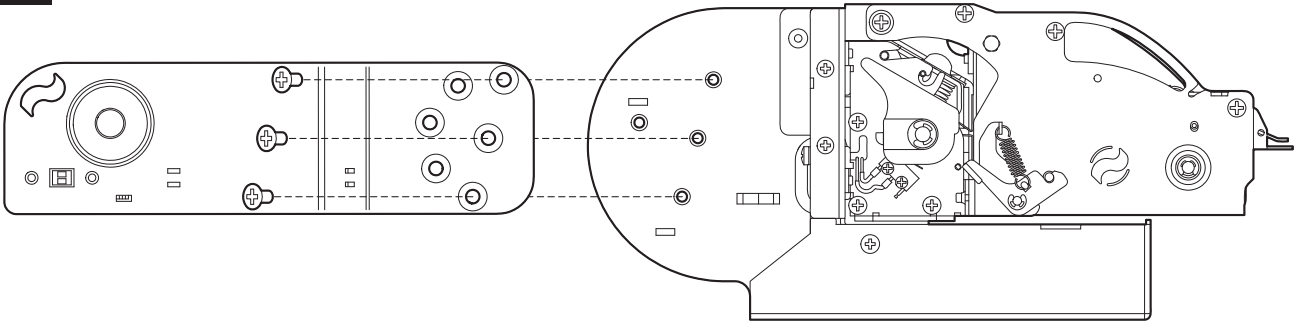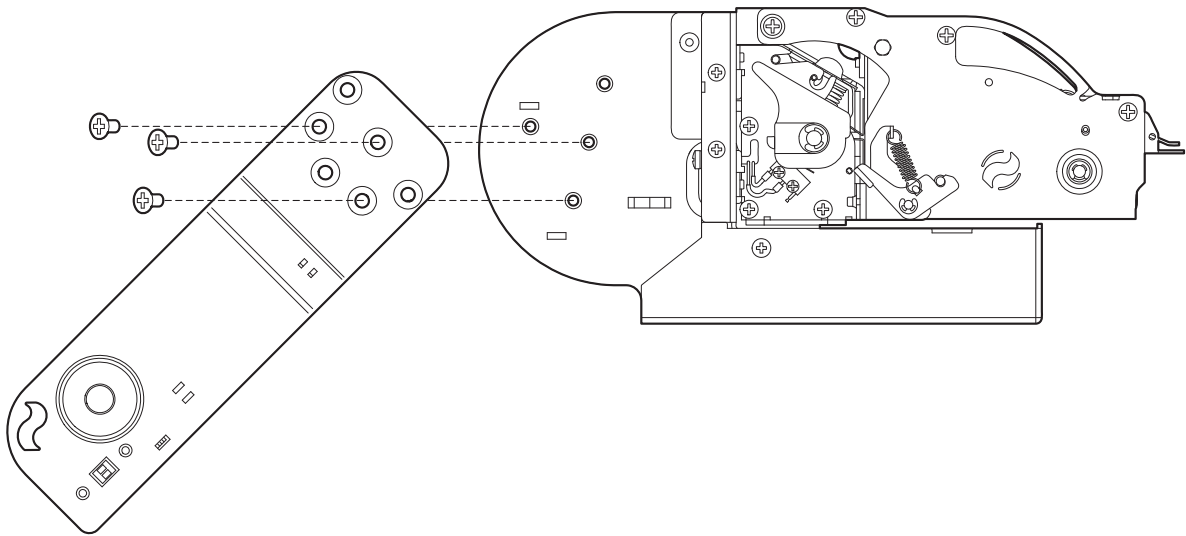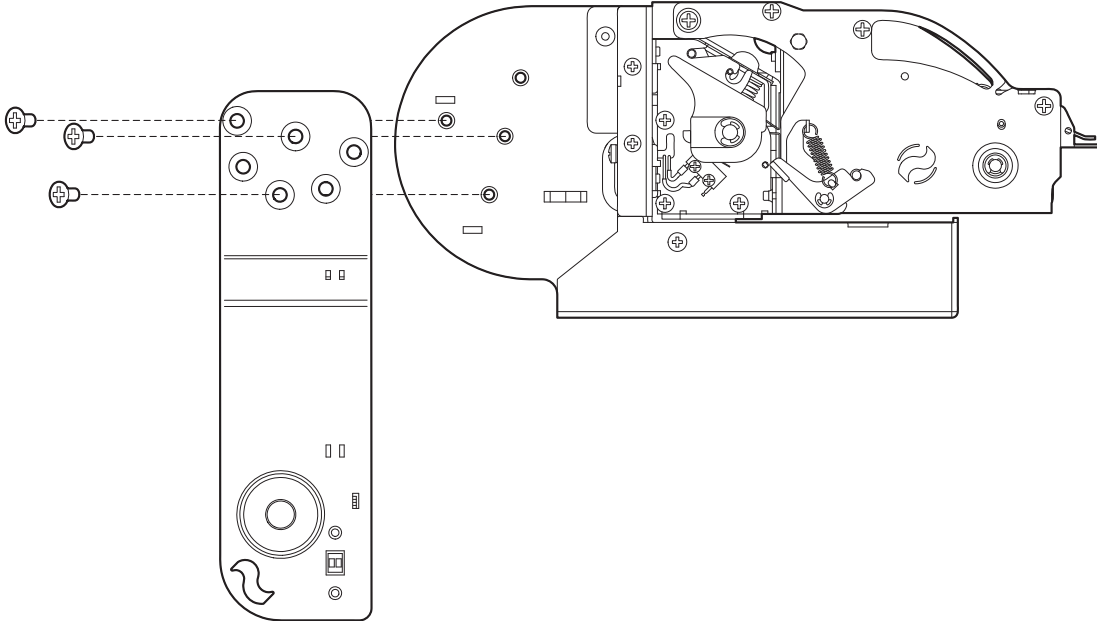
4.2 Positioning the paper roll

To place paper roll on the roll holder proceed as follows::

1
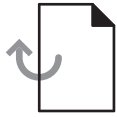
SEE PREVIOUS PARAGRAPHS

Assemble the paper roll holder to the printer.

2
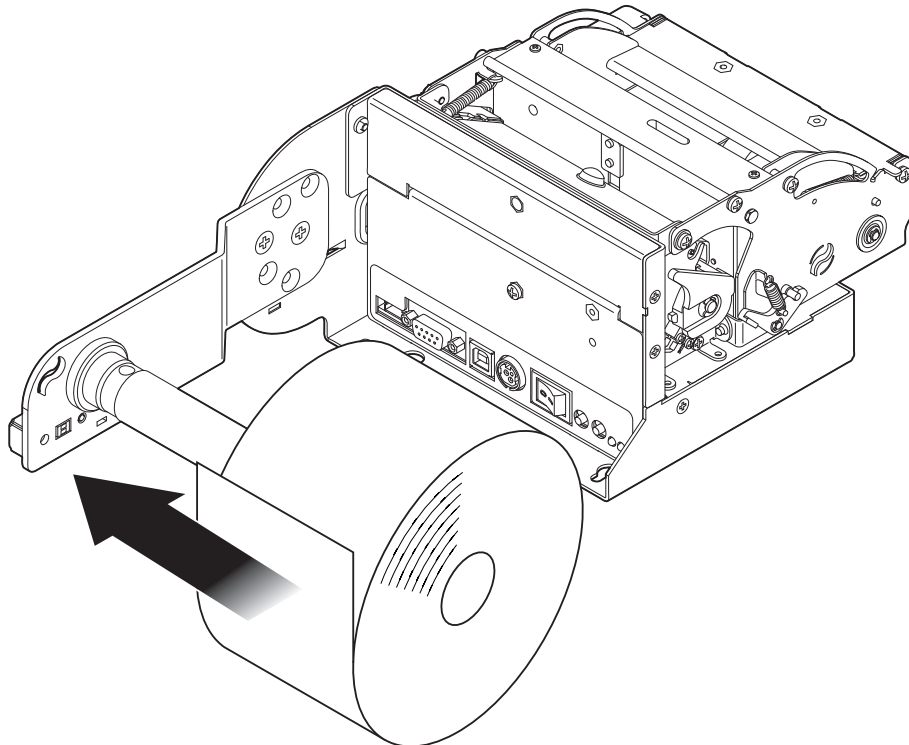
Insert the paper roll on the roll holder pin.

3
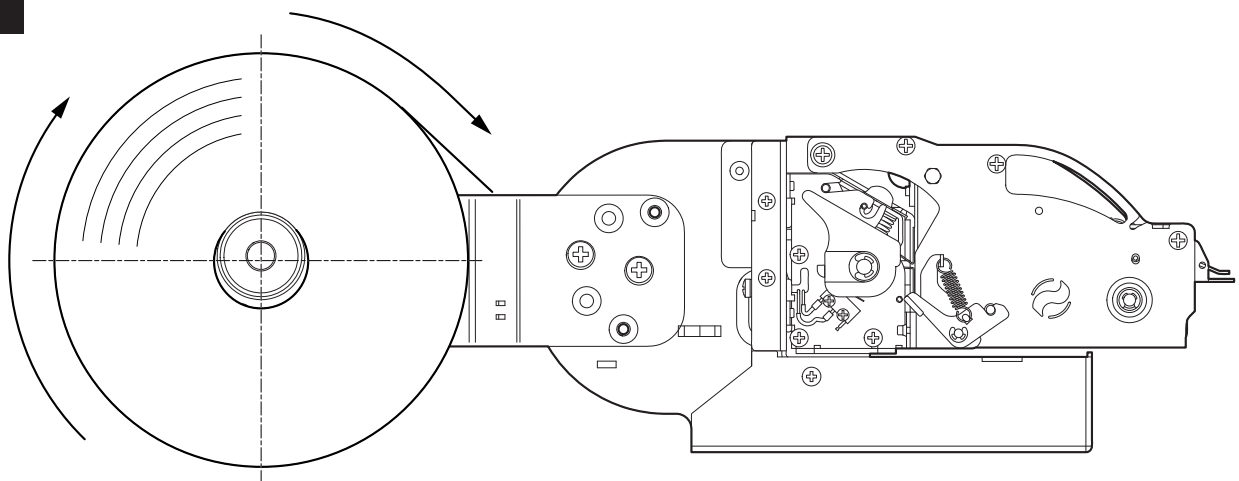
Make sure that the paper roll unrolls correctly as shown in figure.

4.3 Paper load

To load the paper into the printer proceed as follows:

1 *SEE PREVIOUS PARAGRAPHS*	
Place the paper roll on the roll holder.	

2
ATTENTION: **Make sure the cut is straight.**
Insert the paper into the feed slot.
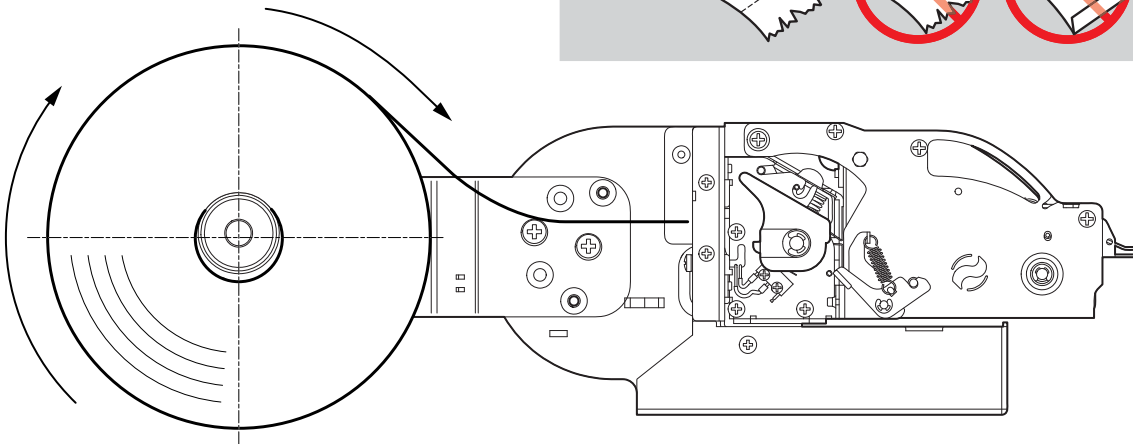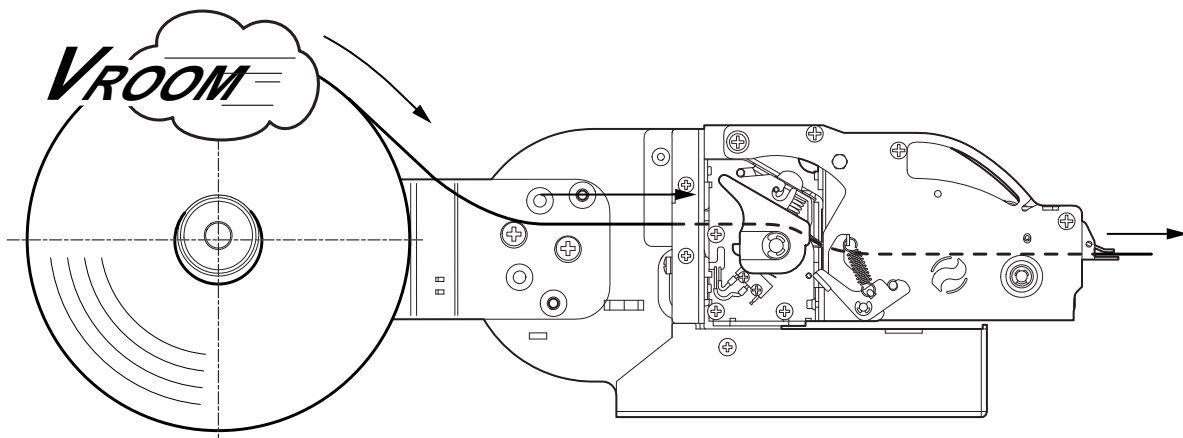
3
Wait for the paper is loaded automatically.

Note: At every change of paper roll, check inside the printer and remove any scraps of paper and accumulated dust (see par.6.2).

5 CONFIGURATION

5.1 Configuration mode

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

1

ON/OFF KEY **+** **LF LINE FEED KEY**
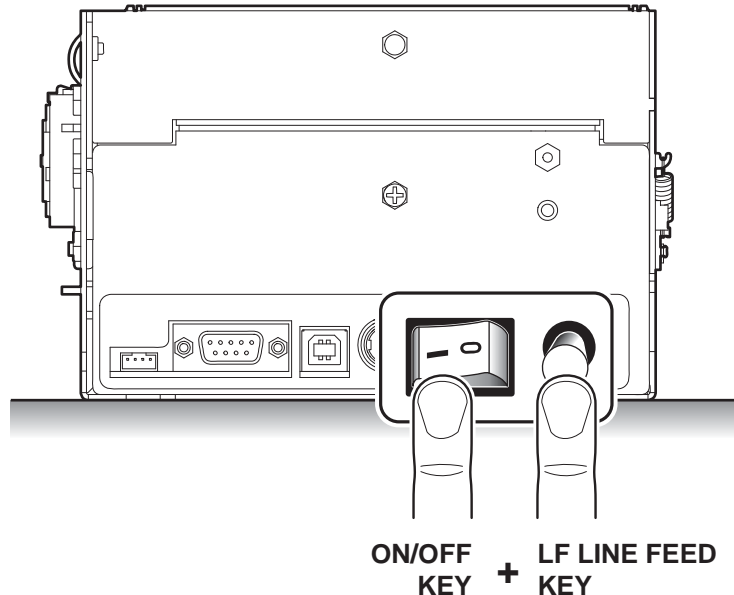
During power-up, hold down the LF LINE FEED key.

2
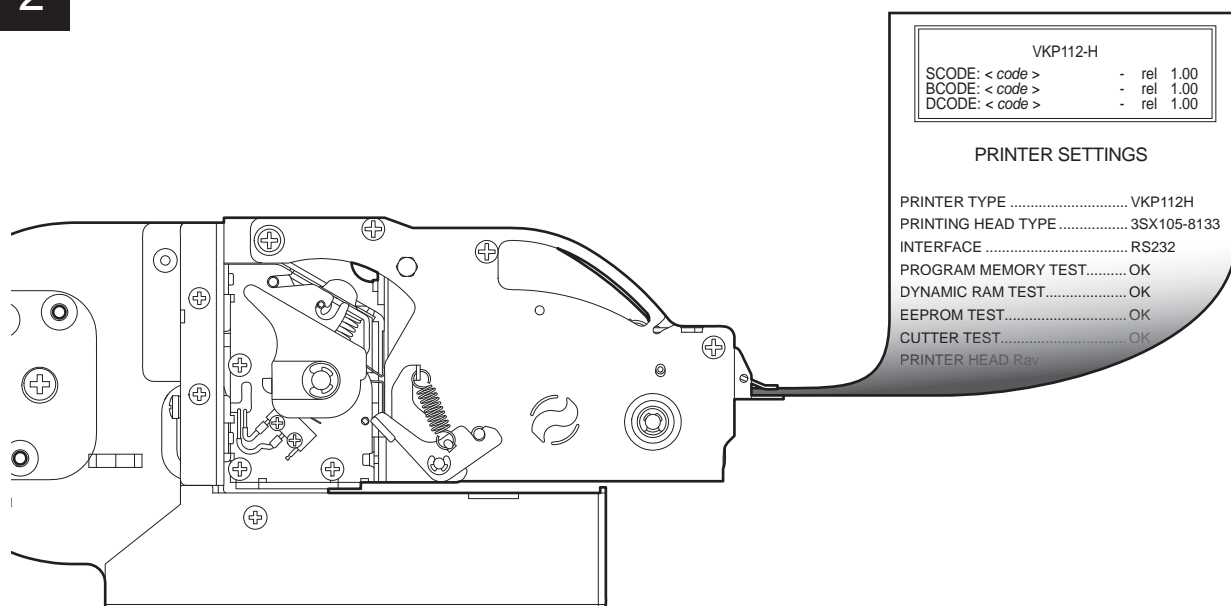
The device prints a setup reports.

3	
	LF LINE FEED KEY
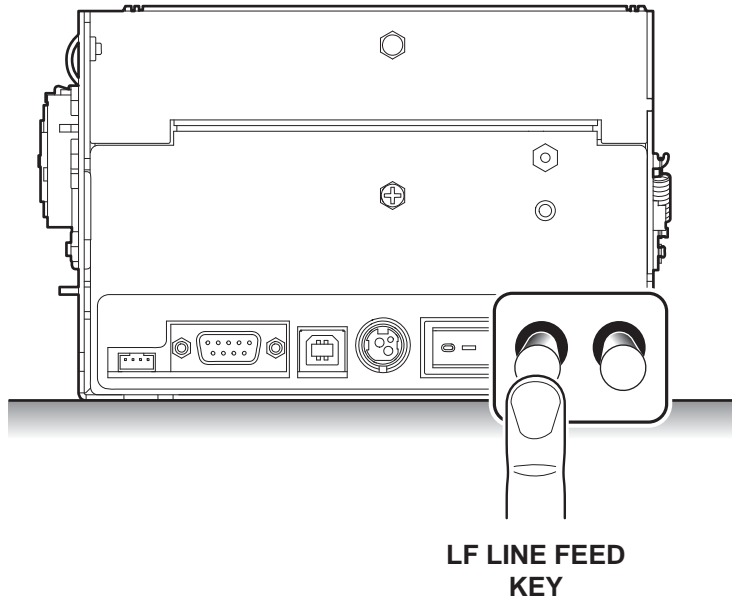
Press the LF LINE FEED key to enter the configuration mode.

4	
	[LF] *enter Printer setup* [FF] *skip Setup*
	RS232 Baud Rate .... : 115200 bps
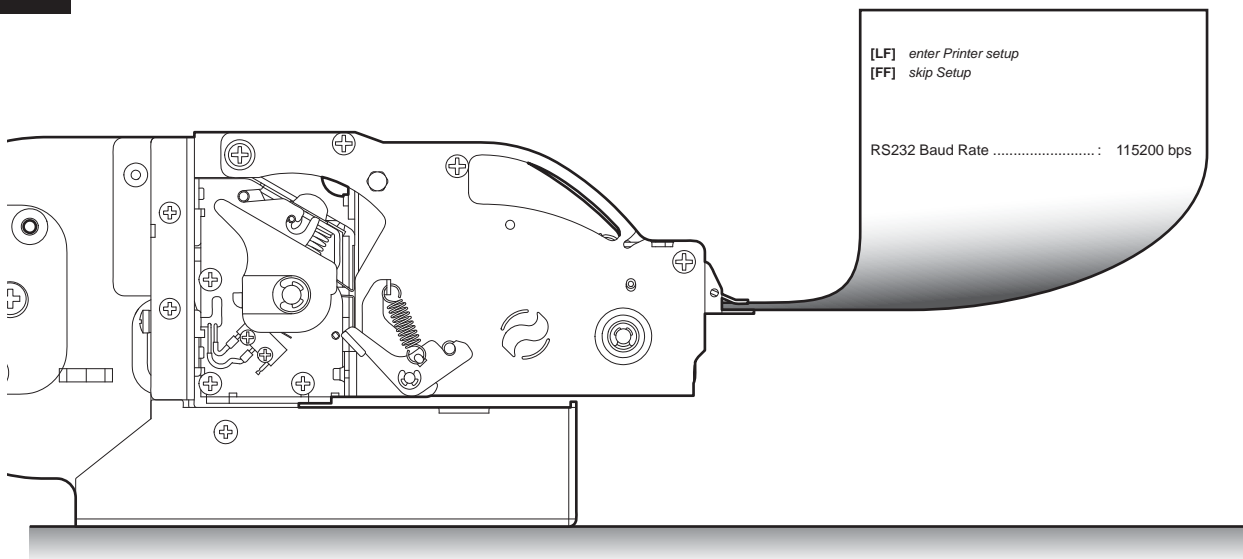
Proceed with the configuration by using the keys according to the functions printed on paper (see par.2.3).
For description and values of setup parameters, see the following paragraphs.

NOTE:
During power-up, if the LINE FEED key is held down, the printer enters the auto-test routine and prints out the setup report. The printer will remain in standby in Hexadecimal dump mode (see following paragraphs) until another key is pressed or characters are received through the printer communication port.
When the FORM FEED key is pressed, the printer enters parameter configuration.
When the LINE FEED key is pressed, the printer exits setup and terminates the Hexadecimal dump function.

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5.2 Setup report

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

PRINTER NAME and
FIRMWARE MODULES
RELEASE

```
         VKP112-H
SCODE: < code >          -   rel   1.00
BCODE: < code >          -   rel   1.00
DCODE: < code >          -   rel   1.00
```

PRINTER SETTINGS

PRINTER STATUS
(see paragraph 5.3)

PRINTER TYPE			VKP112H
PRINTING HEAD TYPE			3SX105-8133
INTERFACE			RS232
PROGRAM MEMORY TEST			OK
DYNAMIC RAM TEST			OK
EEPROM TEST			OK
CUTTER TEST			OK
PRINTING HEAD Rav			800
HEAD VOLTAGE	[V]	=	24.02
HEAD TEMPERATURE	[°C]	=	20
POWER ON COUNTER		=	4
PAPER PRINTED	[cm]	=	40
CUT COUNTER		=	1

PRINTER PARAMETERS
(see paragraph 5.4)

RS232 Baud Rate	**115200 bps**
RS232 Data Length	**8 bits/chr**
RS232 Parity	**None**
RS232 Handshaking	**Xon/Xoff**
Busy Condition	**RxFull**
USB Address Number	**0**
Print Mode	**Normal**
Autofeed	**CR Disabled**
Chars / inch	**A=23 B=30 cpi**
Speed / Quality	**Normal**
Automatic Ejecting	**Disabled**
Print Width	10**8mm**
Paper Threshold	**40%**
PaperEnd Buffer Clear	**Disabled**
Print Density	**0%**

KEYS FUNCTIONS
(see paragraph 2.3)

[LF]   *enter Printer setup*
[FF]   *skip Setup*

5.3 Printer status

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

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5.4 Printer parameters

This printer 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 printer has been turned off and they are stored in non-volatile memory.

RS232 BAUD RATE	*Communication speed of the serial interface:* *115200* [D] *19200* *2400* *57600* *9600* *1200* *38400* *4800* **NOTE:** Parameter valid only with serial interface.
RS232 DATA LENGTH	*Number of bit used for characters encoding:* *7 bits/car* *8 bits/car* [D] **NOTE:** 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* **NOTE:** Parameter valid only with serial interface.
RS232 HANDSHAKING	*Handshaking:* *XON/XOFF* [D] *= software handshaking* *Hardware = hardware handshaking (CTS/RTS)* **NOTE:** Parameter valid only with serial interface. **NOTE:** When the receive buffer is full, if handshaking is set to XON/XOFF, the printer sends the XOFF ($13) on the serial port. When the receive buffer has cleared once again, if handshaking is set to XON/XOFF, the printer sends the XON ($11) on the serial port.
BUSY CONDITION	*Activation mode for Busy signal:* *OffLine/ RXFull = Busy signal is activated when the printer is both in OffLine status and the buffer is full* *RXFull* [D] *= Busy signal is activated when the buffer is full* **NOTE:** 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] *4* *8* *1* *5* *9* *2* *6* *3* *7*
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 = 16 cpi, B = 23 cpi* *A = 23 cpi, B = 30 cpi* [D] **NOTA:** CPI = Characters Per Inch
SPEED / QUALITY	*Setting of printing speed and printing quality:* *High Quality* *Normal* [D] *High Speed*
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 minutesfrom the end of printing*
PRINT WIDTH	*Width of printing area:* *78 mm 86mm 94 mm 102 mm* *80 mm 88 mm 96 mm 104 mm* *82 mm 90 mm 98 mm 106 mm* *84 mm 92 mm 100 mm 108 mm* [D]
PAPER THRESHOLD	*Threshold value (in percent) for the recognition of the presence of paper by the paper presence sensor:* *30% 70%* *40%* [D] *80%* *50% 90%* *60%*
PAPEREND BUFFER CLEAR	*Cleaning mode of the data in receive buffer, if the printing is stopped due to lack of paper:* *Disabled* [D] *= The data remain in the receive buffer. When the paper runs out, the printer keeps the remaining data in the receive buffer and prints the remaining portion of the 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:* *-50% -12% +25%* *-37% 0* [D] *+37%* *-25% +12% +50%*

5.5 Hexadecimal dump

This function is used to diagnose the characters received through the communication port; the characters are printed out both as hexadecimal codes and ASCII codes.
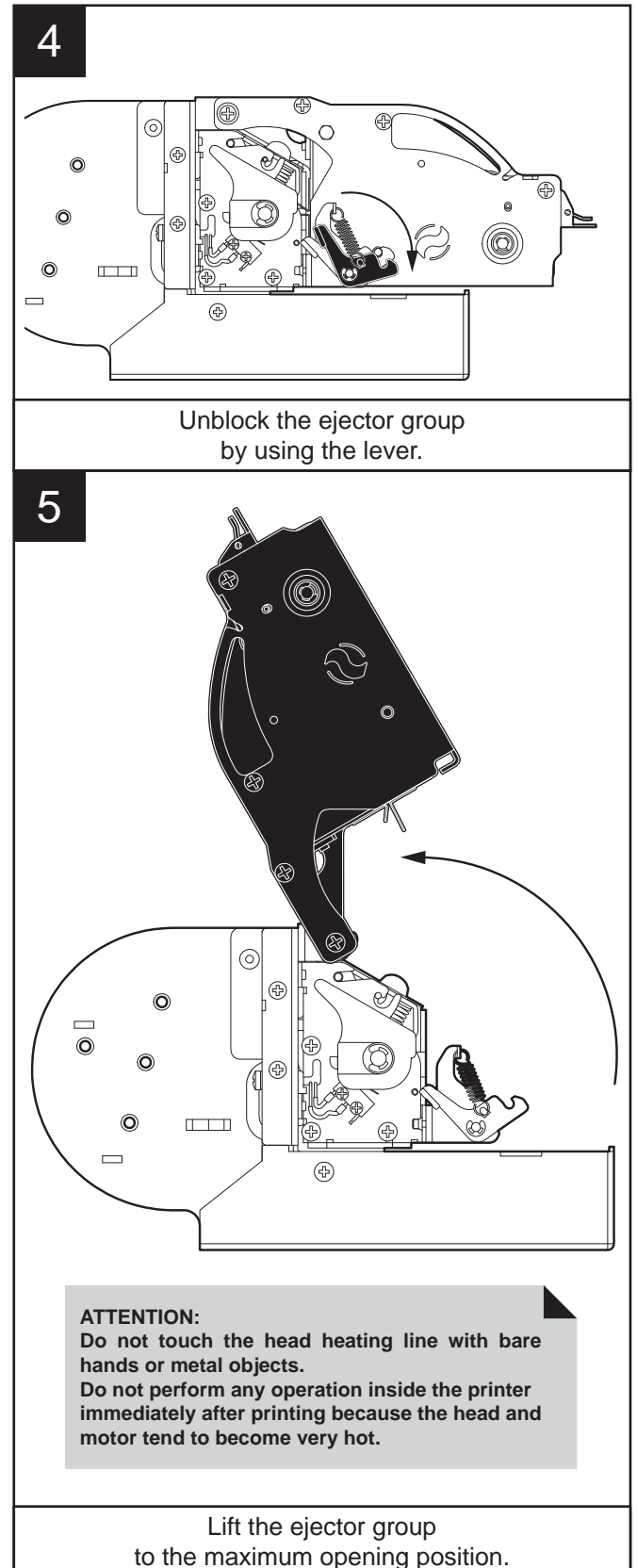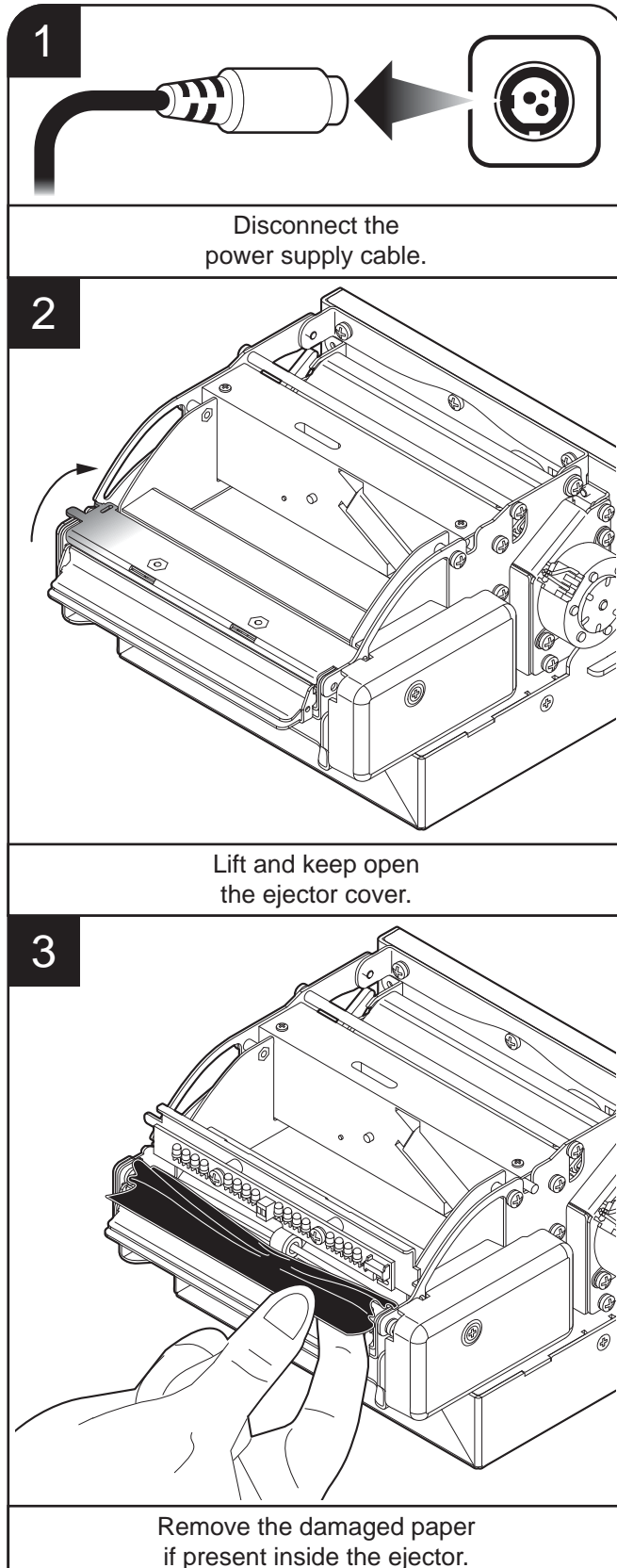Once the self-test routine has finished, the printer enters Hexadecimal Dump mode. The printer remains in standby until a key is pressed or characters are received through the communication port. For example, in the 200 dpi model, for every 8 characters received, the hexadecimal and corresponding ASCII codes are printed out (if the characters are underlined, the receive buffer is full). Shown below is an example of a Hexadecimal Dump:

```
                        HEXADECIMAL DUMP

50  72  69  6E  74  20  4C  69  6E  65  0A  50  72  69        Print Line·Pri
6E  74  20  4C  69  6E  65  0A  50  72  69  6E  74  20        nt Line·Print
4C  69  6E  65  0A  50  72  69  6E  74  20  4C  69  6E        Line·Print Lin
65  0A  50  72  69  6E  74  20  4C  69  6E  65  0A  50        e·Print Line·P
72  69  6E  74  20  4C  69  6E  65  0A  50  72  69  6E        rint Line·Prin
74  20  4C  69  6E  65  0A  50  72  69  6E  74  20  4C        t Line·Print L
69  6E  65  0A  50  72  69  6E  74  20  4C  69  6E  65        ine·Print Line
0A  50  72  69  6E  74  20  4C  69  6E  65  0A  50  72        ·Print Line·Pr
```
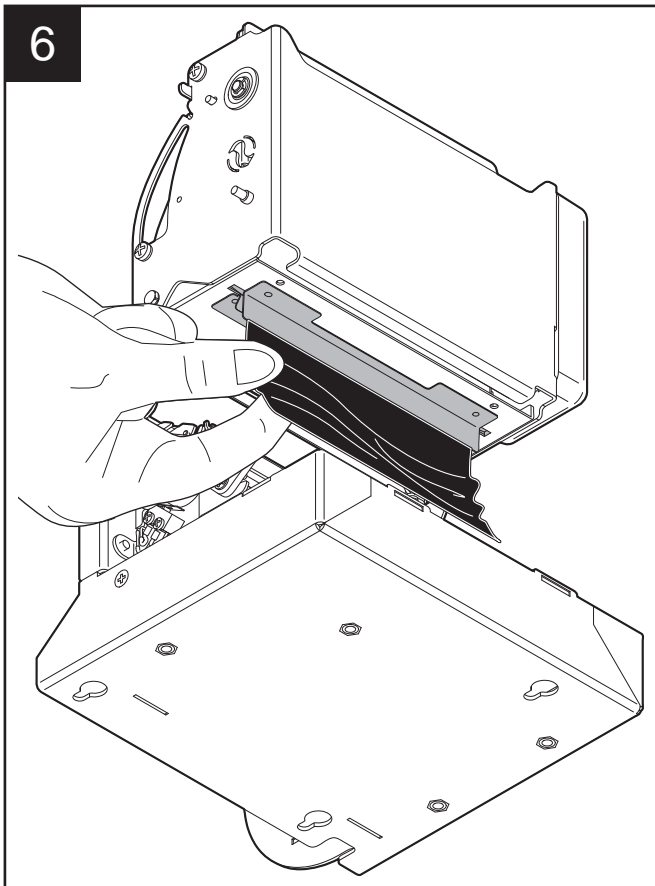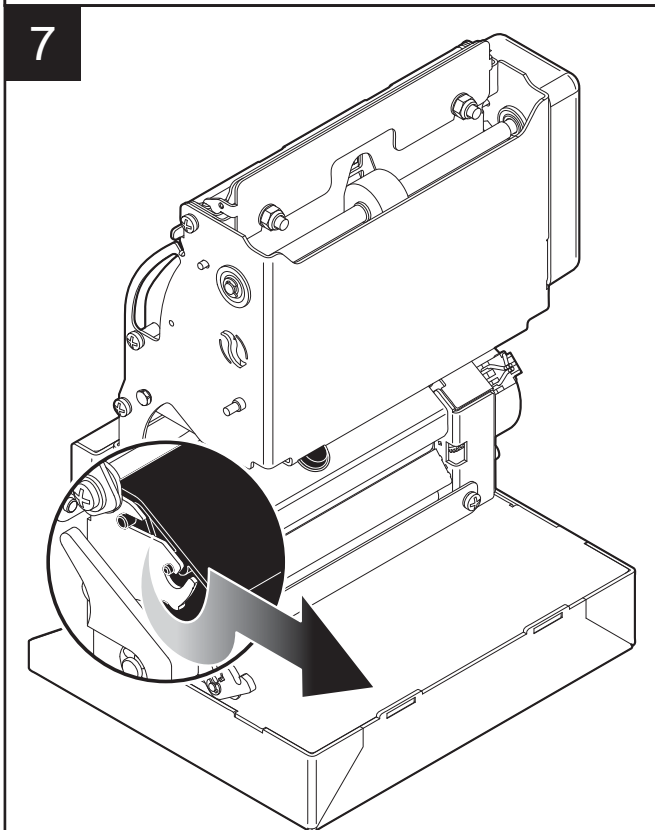
6 MAINTENANCE
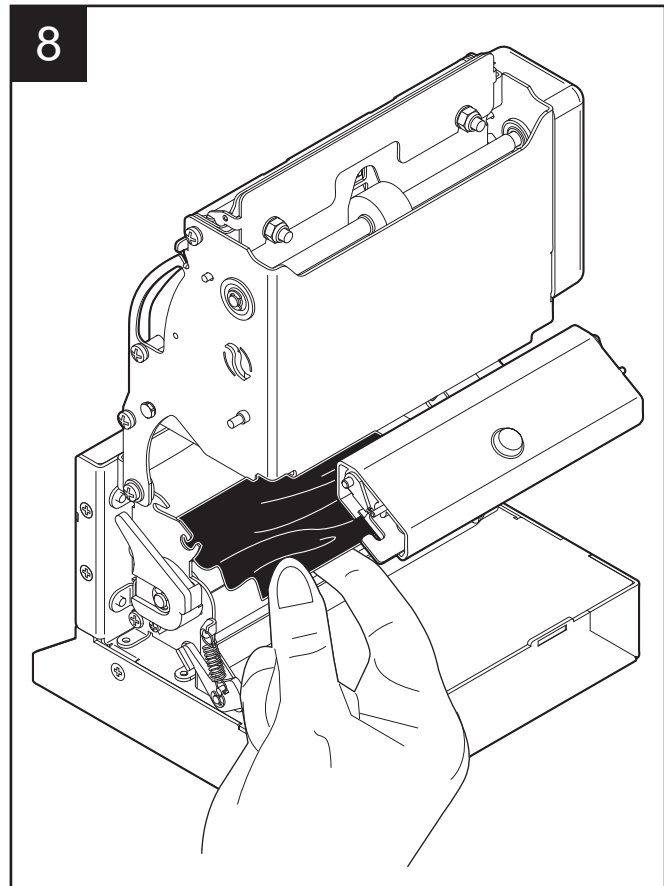
6.1 Paper jam

In case of paper jam, proceed as follows:

1

Disconnect the
power supply cable.

2

Lift and keep open
the ejector cover.

3

Remove the damaged paper
if present inside the ejector.

4

Unblock the ejector group
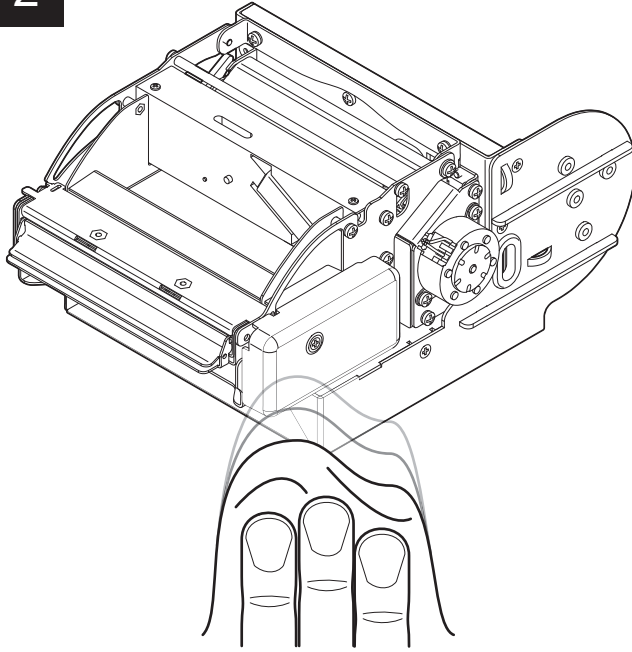by using the lever.

5

ATTENTION:
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.

Lift the ejector group
to the maximum opening position.

6

Remove the damaged paper
if present on the cutter input.

8

Remove the damaged paper
if present under the printing mechanism.

7

Unlock the printing mechanism
as shown in figure.

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6.2 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.

EVERY PAPER CHANGE	
Printing head	Use isopropyl alcohol
Rollers	Use isopropyl alcohol
EVERY 5 PAPER CHANGES *	
Ejector	Use compressed air
Cutter	Use compressed air
Paper path	Use compressed air or tweezers
Sensors	Use compressed air
EVERY 6 MONTHS OR AS NEEDED *	
Printer case	Use compressed air or a soft cloth

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

For specific procedures, see the following pages.
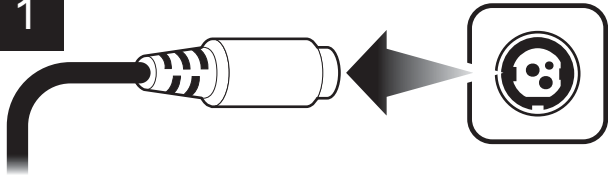
6.3 Cleaning

For periodic cleaning of the printer, see the instructions below

CASE

1

Disconnect the
power supply cable.

2

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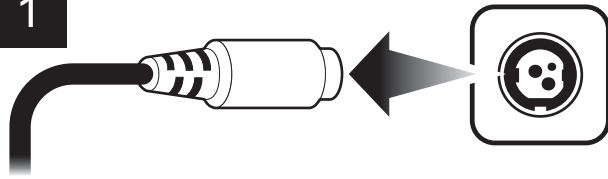**water or other liquids get inside the machine.**

Alcohol, solvent

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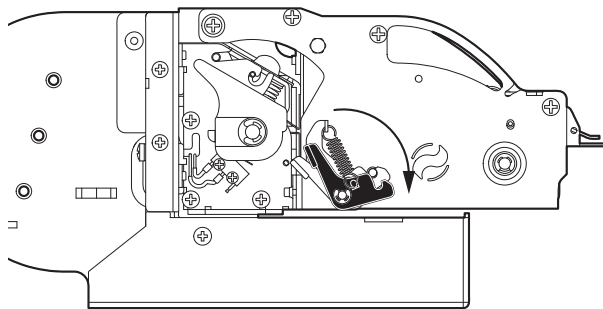
To clean the machine,
use compressed air or a soft cloth.

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SENSORS AND PAPER PATH

1

Disconnect the
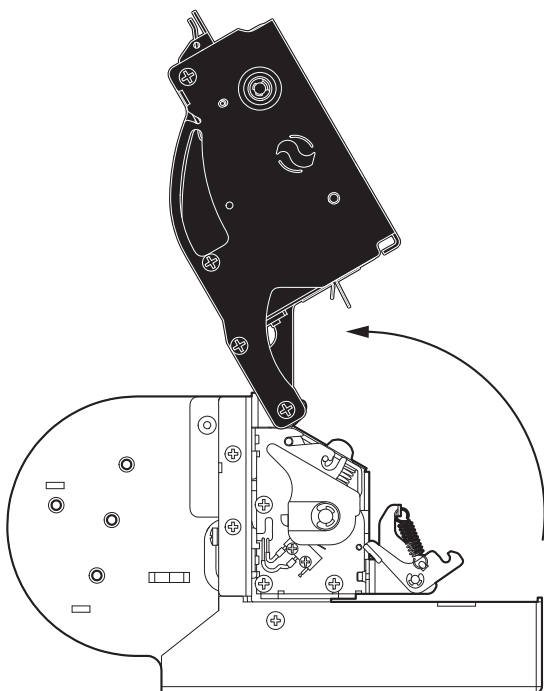power supply cable.

2

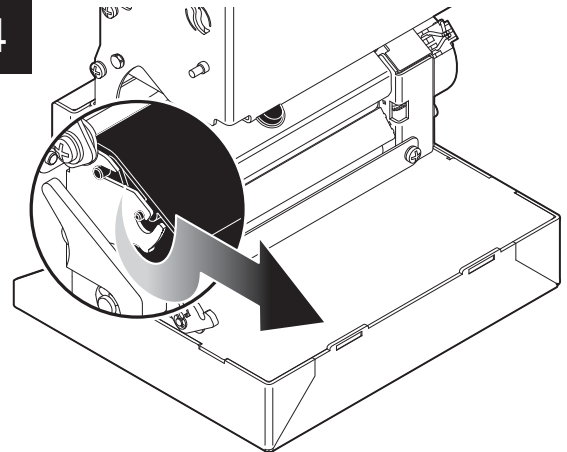Unblock the ejector group
by using the lever.

3

ATTENTION:
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.
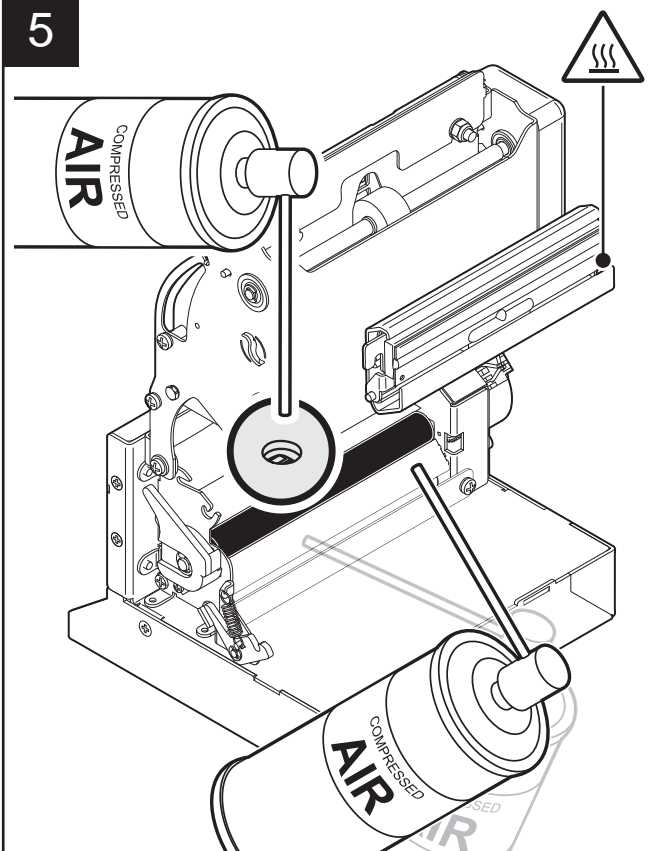

Lift the ejector group
to the maximum opening position.
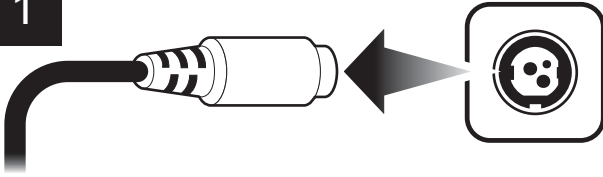
4

Unblock the printing mechanism
as shown in figure.

5

ATTENTION:
Do not use alcohol, solvents, or hard brushes. Do not let water or other liquids get inside the machine.
To remove paper scraps, use tweezers or compressed air.

Carefully clean the printer sensors by using
compressed air. Remove any scraps of paper and
the accumulated paper dust on the printing
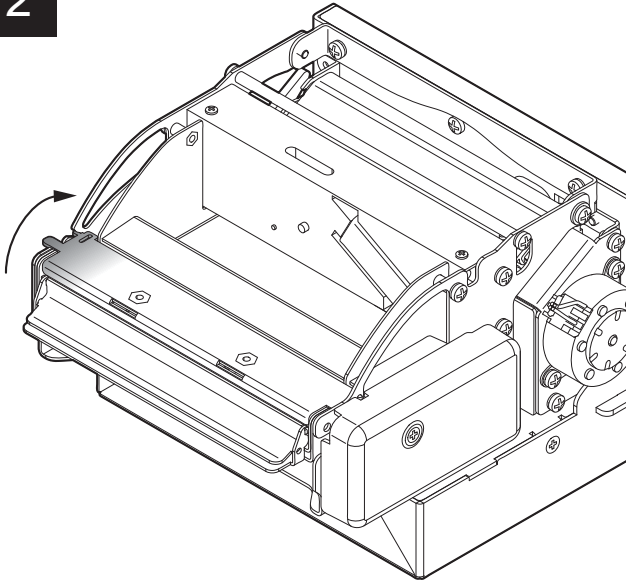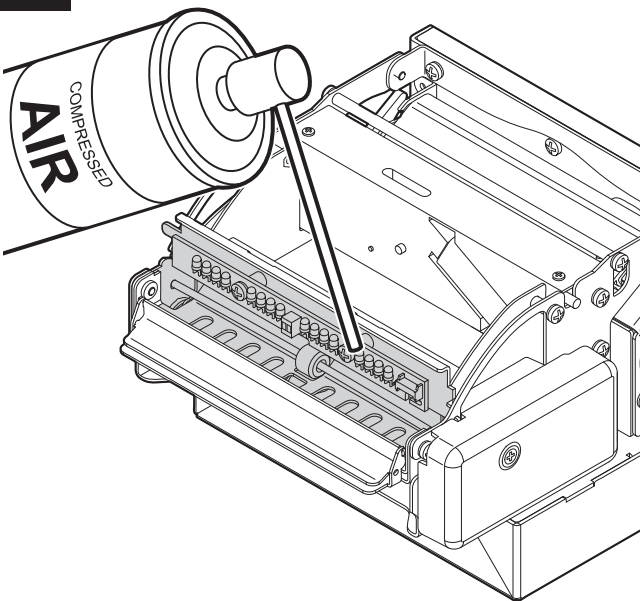roller and on the area around the sensors.
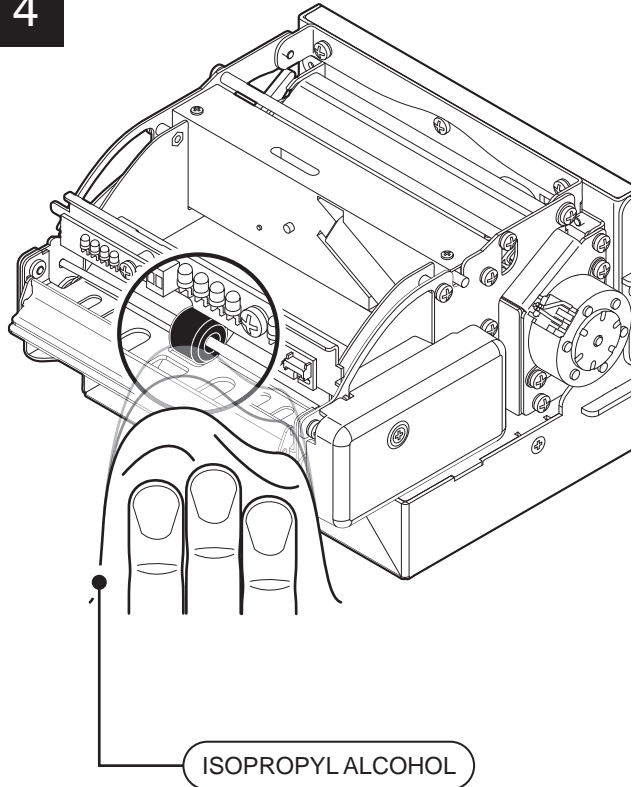
EJECTOR

1

Disconnect the
power supply cable.

2

Lift and keep open
the ejector cover.

3

COMPRESSED AIR

Remove any scraps of paper and the
accumulated paper dust inside the ejector.

4

ISOPROPYL ALCOHOL

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

Alcohol, solvent

ON

Clean the ejector roller by using
a soft cloth moistened with isopropyl.

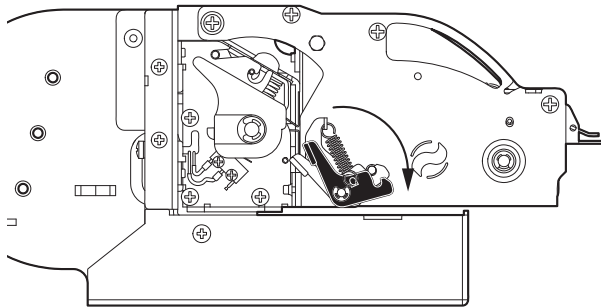**CUSTOM**

PRINTING HEAD

1

Disconnect the
power supply cable.

2

Unblock the ejector group
by using the lever.

3

ATTENTION:
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.

Lift the ejector group
to the maximum opening position.

4

Unblock the printing mechanism
as shown in figure.

5

ISOPROPYL ALCOHOL

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

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

PRINTING ROLLER

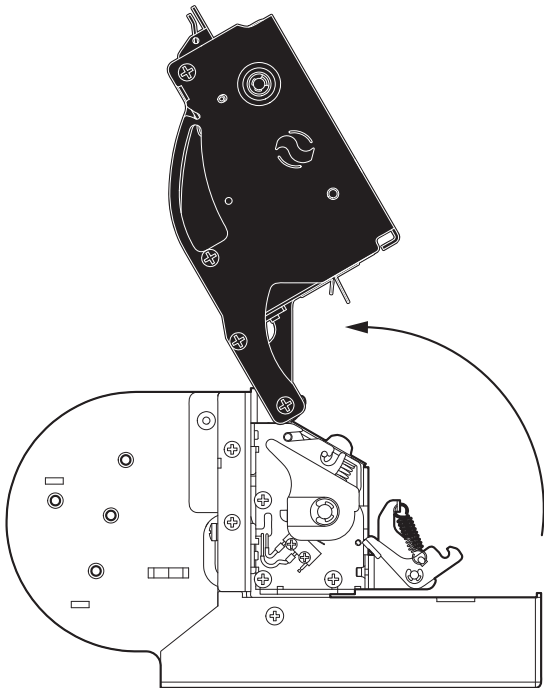**1**

Disconnect the
power supply cable.

2

Unblock the ejector group
by using the lever.

3

ATTENTION:
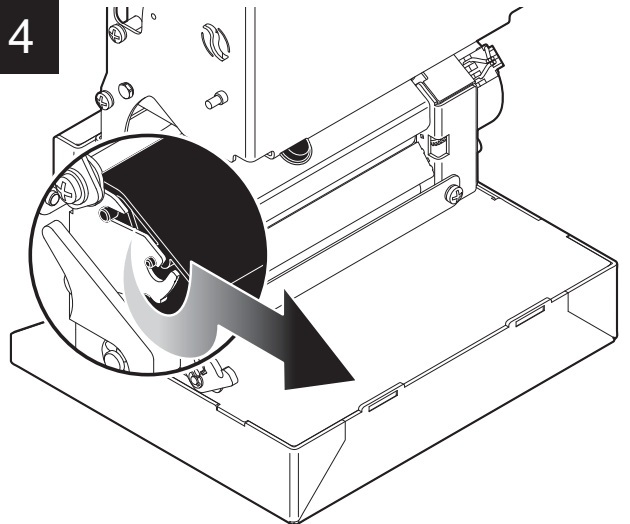**Do not touch the head heating line with bare hands**
or metal objects.
Do not perform any operation inside the printer
immediately after printing because the head and
motor tend to become very hot.
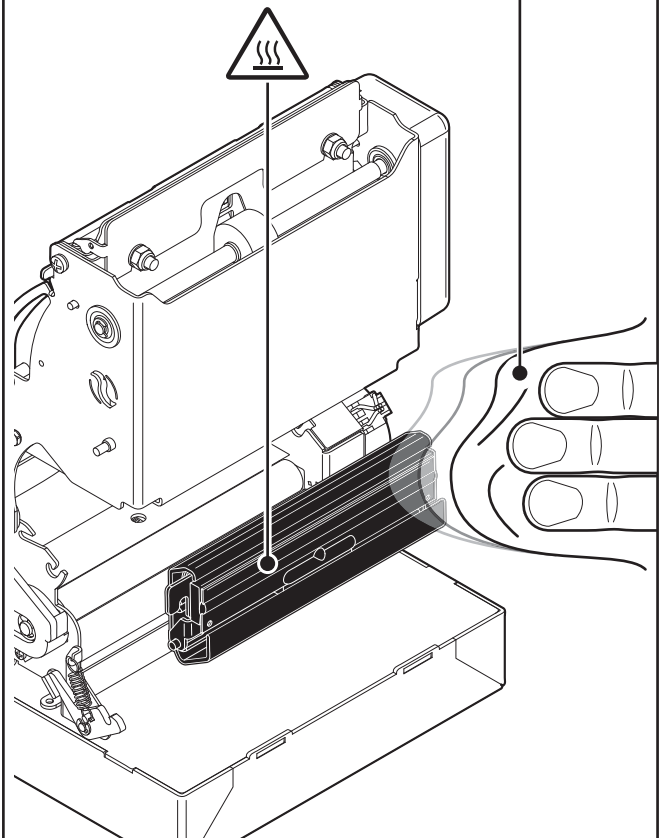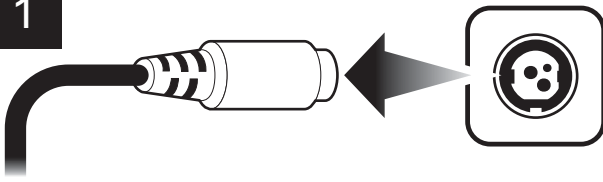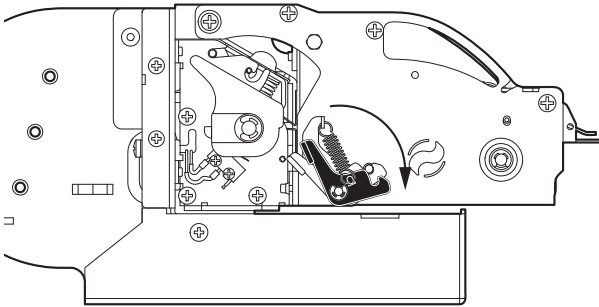
Lift the ejector group
to the maximum opening position.

4

Unblock the printing mechanism
as shown in figure.

5

ISOPROPYL ALCOHOL

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

Clean the dragging roller
by using a soft cloth moistened with isopropyl.
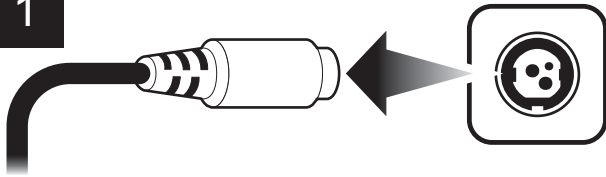
CUSTOM®

CUTTER

1

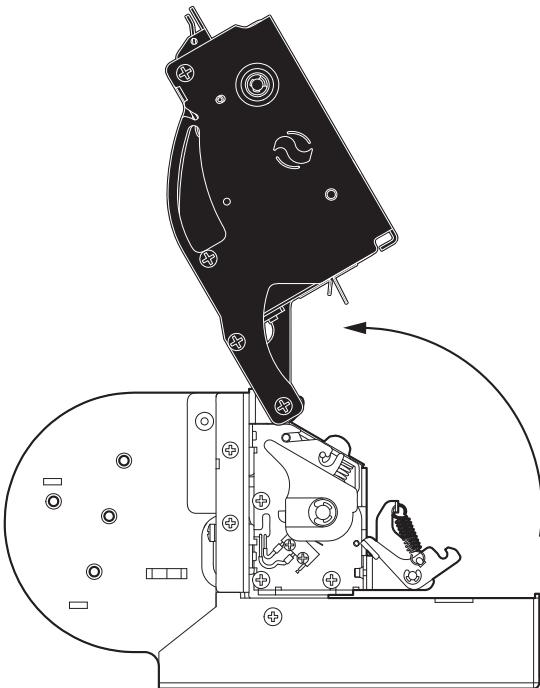Disconnect the
power supply cable.
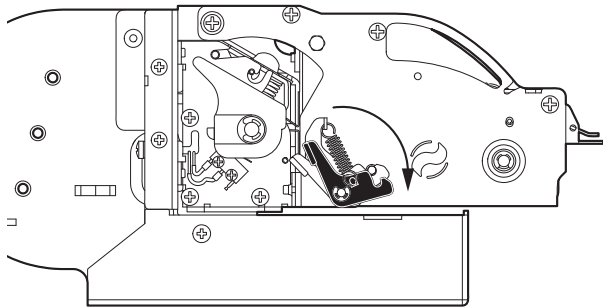
2

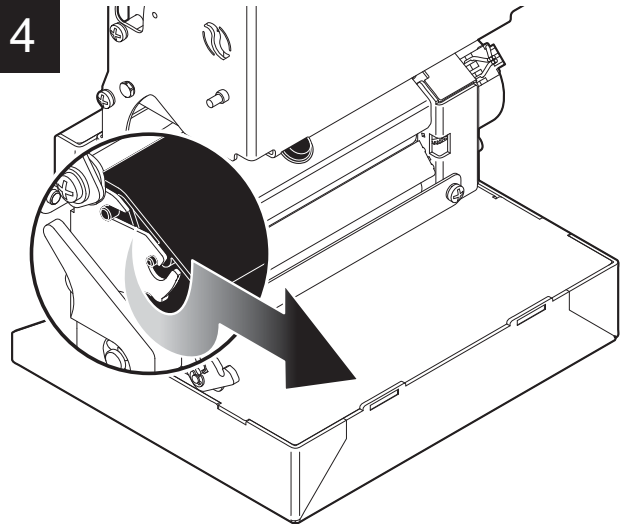Unblock the ejector group
by using the lever.

3

ATTENTION:
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.

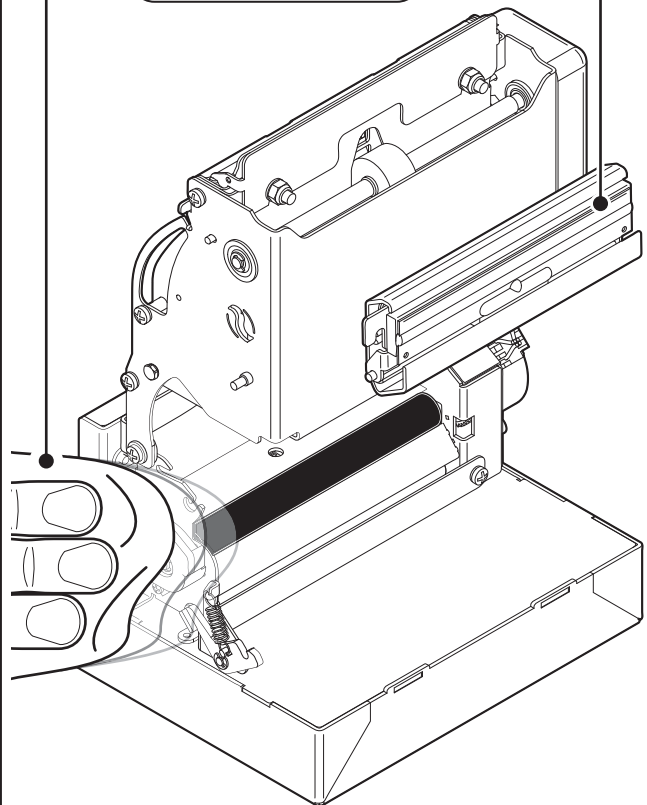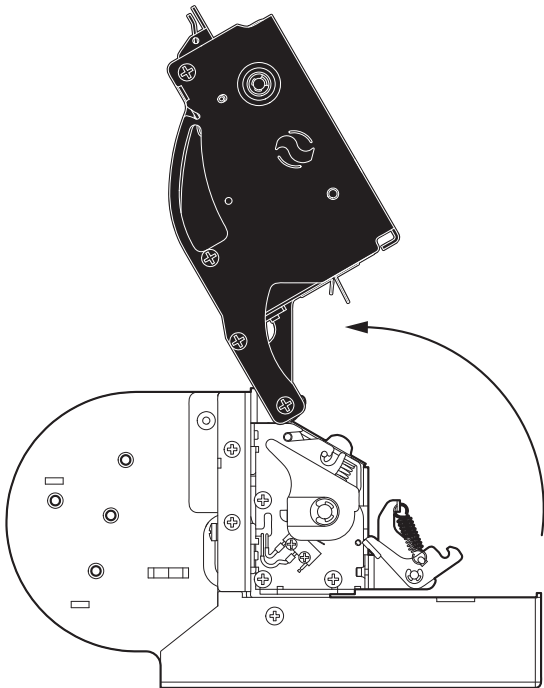Lift the ejector group
to the maximum opening position.

4

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

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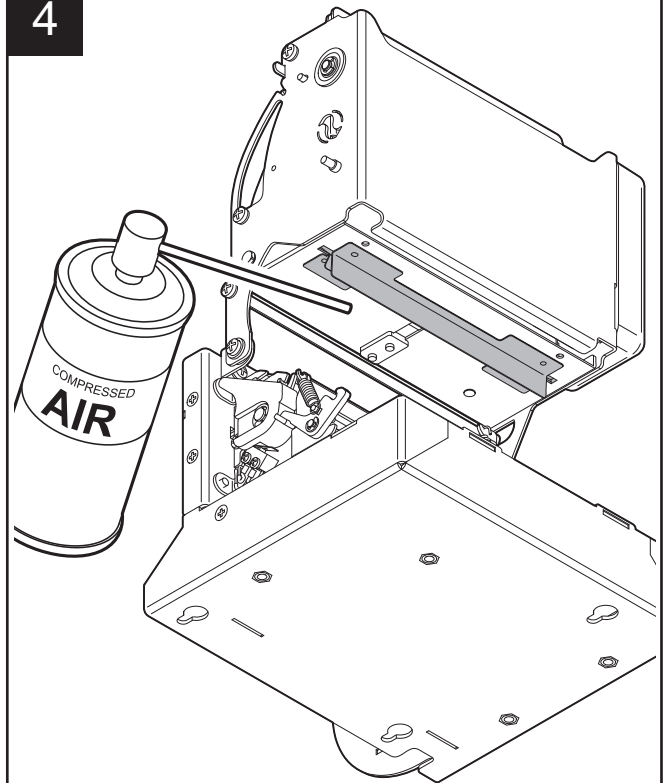
Remove any scraps of paper and
the accumulated paper dust on the cutter input
by using compressed air.

6.4 Upgrade firmware

WARNING: During communication between PC/ printer for the firmware update it is strictly forbidden to disconnect the communication cable or to remove the power supply of the devices not to endanger the proper functioning of the printer.

Note: The latest firmware of the printer is available in the download area of the web site www.custom.biz.

Note: Install on the PC used for printer upgrading the UPGCEPRN software available in the download area of the web site www.custom.biz.

UPDATE VIA SERIAL INTERFACE

Proceed as follows:

1. Print the SETUP report (see chapter 5).
2. Switch OFF the printer.
3. Connect the printer to the PC using a serial cable (see paragraph 3.2).
4. Switch ON the printer.
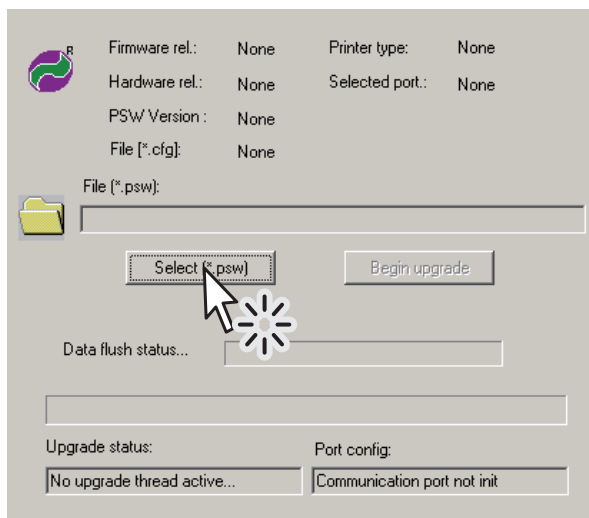5. Start the software UPGCEPRN.
6. Select the update file .PSW location :

7. Select the serial communication port (ex. COM1):
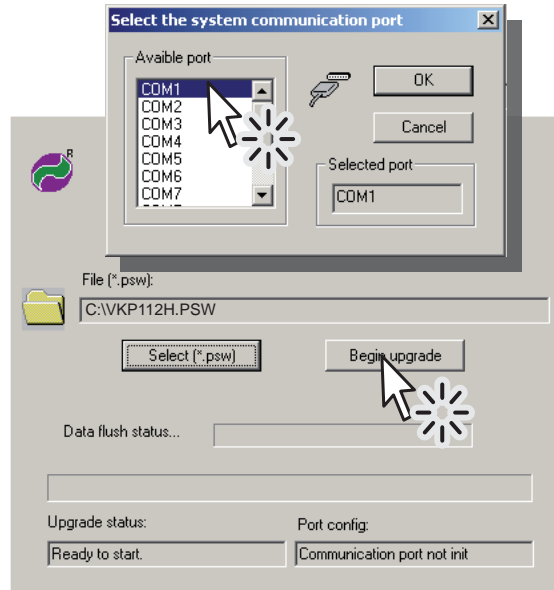
8. Detecting and setting of the parameters necessary for serial communication are performed automatically and then updating begins.
9. After a few minutes a message on the screen warns that the update is completed.

10. Print a new SETUP report to verify the new firmware release (see chapter 5).

UPDATE VIA USB INTERFACE

ATTENTION: Only during the firmware update, the connection between PC and printer must be direct, without the use of wireless HUB.

ATTENTION: Only during the firmware update, do not connect or disconnect other USB devices.

NOTE: For communication via USB you must install on PC the printer driver available in the download area of the web site www.custom.biz.

Proceed as follows:
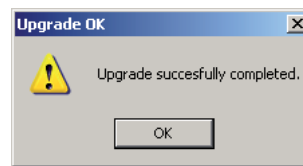
1. Print the SETUP report (see chapter 5).
2. Switch OFF the printer.

3. Connect the printer to the PC using a USB cable (see paragraph 3.2).
4. Switch ON the printer.
5. Start the software UPGCEPRN.
6. Select the update file .PSW location :
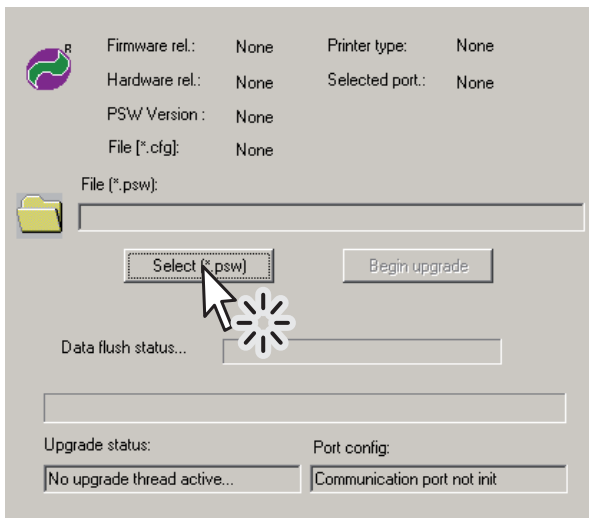
7. Select item USB and then select the USB device among those proposed (ex. VKP80III):
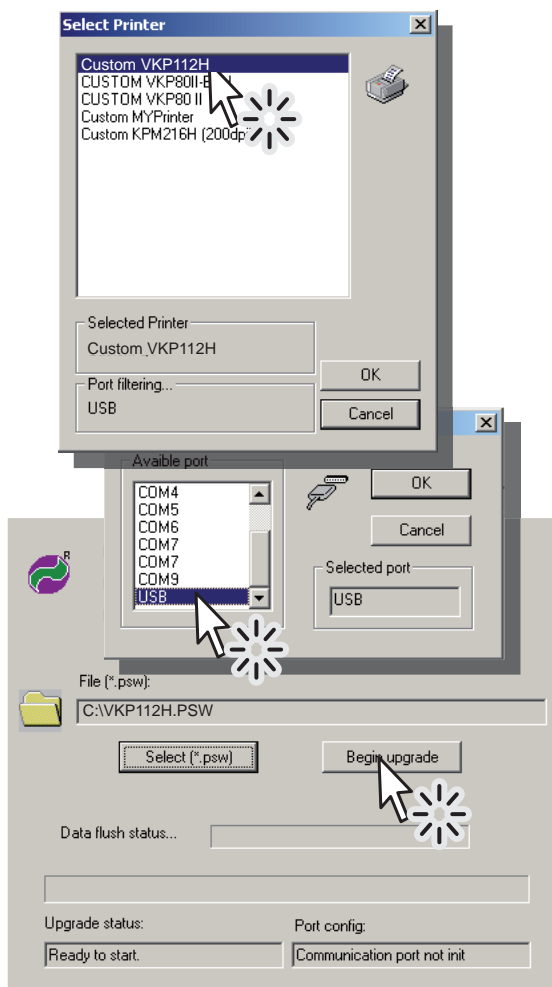
8. After a few minutes a message on the screen warns that the update is completed.

9. Print a new SETUP report to verify the new firmware release (see chapter 5).

7 SPECIFICATIONS

7.1 Hardware specifications

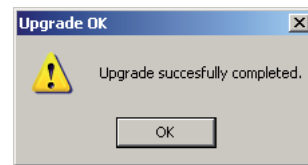| GENERAL	
Sensors	Paper presence on input, printing head temperature, ejector position paper presence on output, printing head lifted, near paper end on paper roll holder
MTBF[1]	109000 hours
Emulations	ESC/POS™
Printing driver	Windows XP, VISTA (32/64bit), Windows 7 (32/64bit)
INTERFACES	
RS232 serial connector	from 1200 to 115200 bps
USB connector	12 Mbit/sec (USB 2.0 full speed)
MEMORIES	
Flash memory	16 Mbytes
RAM memory	32 Mbytes
Receive buffer	64 Kbytes
PRINTER	
Resolution	304 DPI (12 dot/mm)
Printing method	thermal, fixed head
Head life [2]	150 km
Printing width	from 78 mm to 108 mm (2 mm step)
Printing mode	normal, 90°, 180°, 270°
Printing format	height/width from 1 to 8, bold, reverse, underlined, italic
Character fonts	PC437, PC850, PC860, PC863, PC865, PC858 (euro)
Printable barcode	UPC-A. UPC-E, EAN13, EAN8, CODE39, ITF, CODABAR, CODE93, CODE128, CODE32, PDF417, QRcode, DATAMATRIX, AZTEC
Printing speed [2] [3]	High Speed = 160 mm/sec Normal = 140 mm/sec High Quality = 120 mm/sec
PAPER	
Type of paper	thermal rolls, heat-sensitive side on outside of roll
Paper width	115,5 mm ± 0,5mm
Paper weight	da 58 g/m² a 80 g/m²

7. SPECIFICATIONS

Recommended types of paper	KANZAN KF50 e KP460 MITSUBISHI PG5075 e TL4000
Paper end	not attached to roll core
External roll diameter	max 130 mm [4] max 160 mm [5]
Internal roll core diameter	25 mm (+ 1mm)
Core type	Cardboard or plastic
CUTTER	
Paper cut	total
Estimated life [2]	300 000 cutter number
ELECTRICAL SPECIFICATIONS VKP80III	
Power supply	24 Vdc ±10% (optional external power supply)
Medium consumption [3]	1,5 A
Stand-by consumption	75 mA
ELECTRICAL SPECIFICATIONS POWER SUPPLY cod.963GE020000004 (OPTIONAL)	
Power supply voltage	from 90 Vac to 264 Vac
Frequence	from 47 Hz to 63 Hz
Current (output)	4,17 A
Power	100W
ENVIRONMENTAL CONDITIONS	
Operating temperature	from 0°C to +50°C
Relative humidity	from 10% Rh to 85% Rh
Storage temperature	from -20 °C to +70 °C
Storage relative humidity	from 10% Rh to 90% Rh

NOTES:

[1] : Control board
[2] : Respecting the regular schedule of cleaning for the device components.
[3] : Referred to a standard CUSTOM receipt (L = 10cm, Density = 12,5% dots on).
[4] : Referred to models without paper roll holder.
[5] : Referred to models with paper roll holder.

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7.2 Character specifications

ESC/POS™ EMULATION			
Number of columns	69	89	124
Printing speed			
Lines / sec	60	60	60
Chars / sec	4140	5340	7440
Characters (L x H mm)			
Normal	1,5 x 2	1,1 x 2	0,8 x 2
Double height	3 x 2	2,2 x 2	1,6 x 2
Double width	1,5 x 4	1,1 x 4	0,8 x 4
Double height and width	3 x 4	2,2 x 4	1,6 x 4
Quadruple height	6 x 2	4,4 x 2	3,2 x 2
Quadruple width	1,5 x 8	1,5 x 8	0,8 x 8
Quadruple height and width	6 x 8	4,4 x 8	3,2 x 8

7.3 Printer dimensions

Length	233,05 mm
Height	*(con espulsore chiuso)* 104,3 mm *(con espulsore aperto)* 232 mm
Width	167,1 mm
Weight	2200 g

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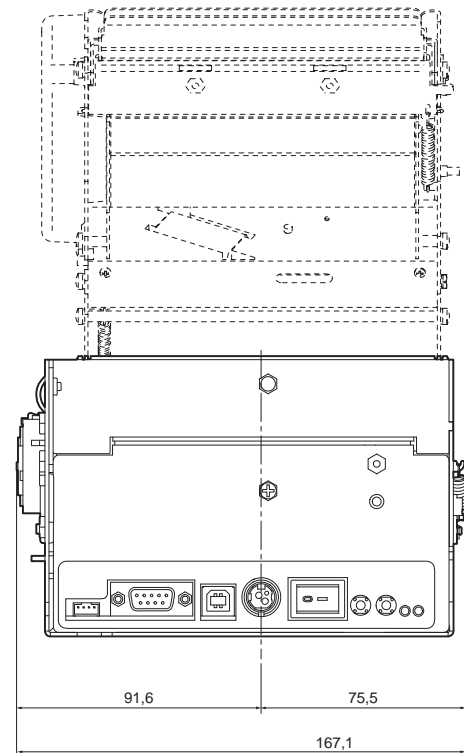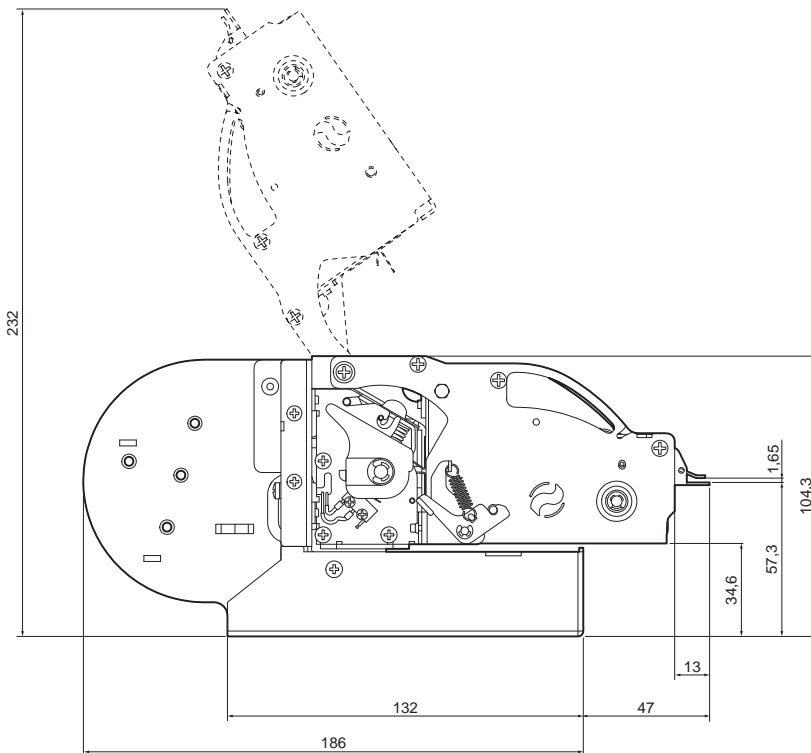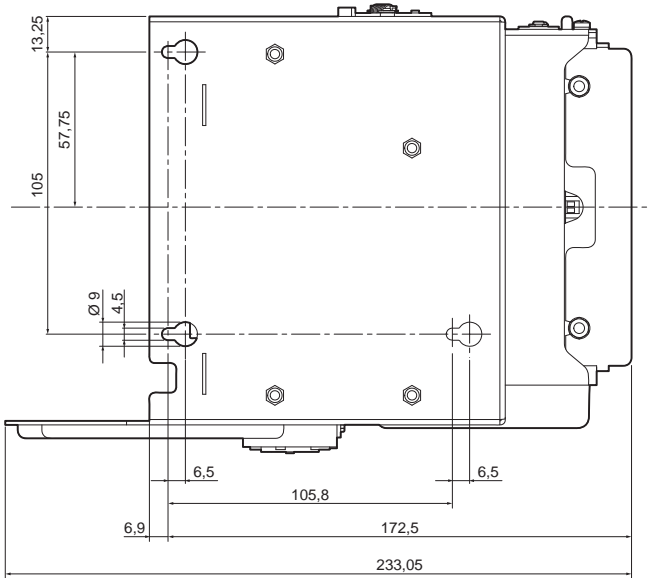
7.4 Printer dimensions with paper roll holder

Length	356,7 mm
Height	104,3 mm
Width	167,1 mm
Weight	2550 g
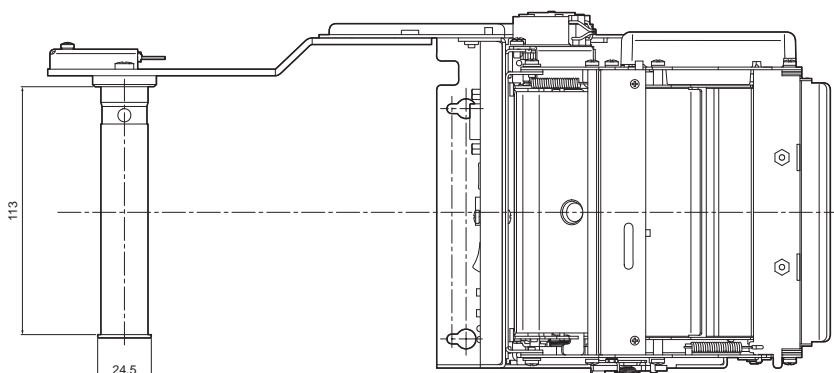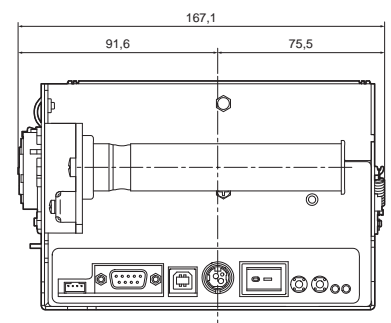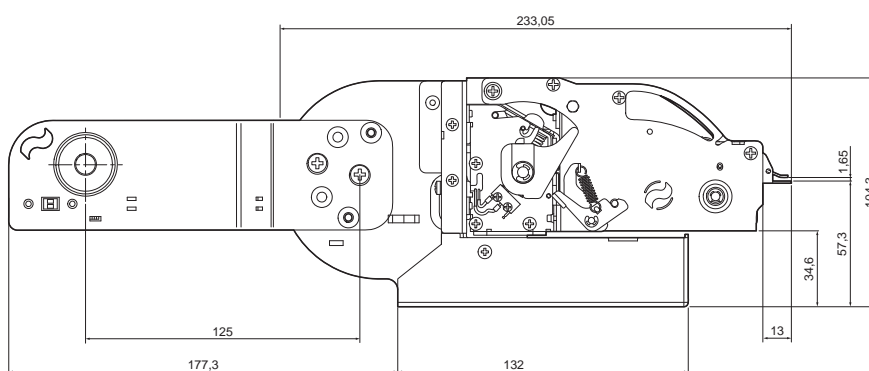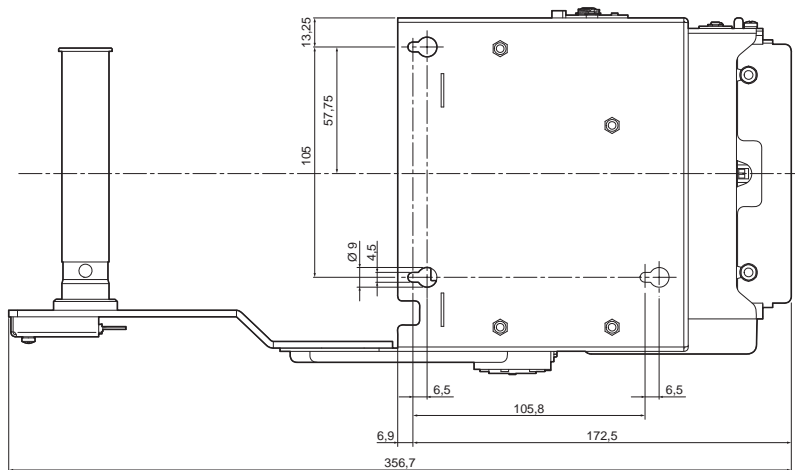
7. SPECIFICATIONS

7.5 Power supply dimensions cod.963GE020000004 (optional)

Length	146,2 ± 0,5 mm
Height	39 ± 0,5 mm
Width	75,2 ± 0,5 mm

AC INLET

N.C

GND

+24V

DC OUTPUT WIRE
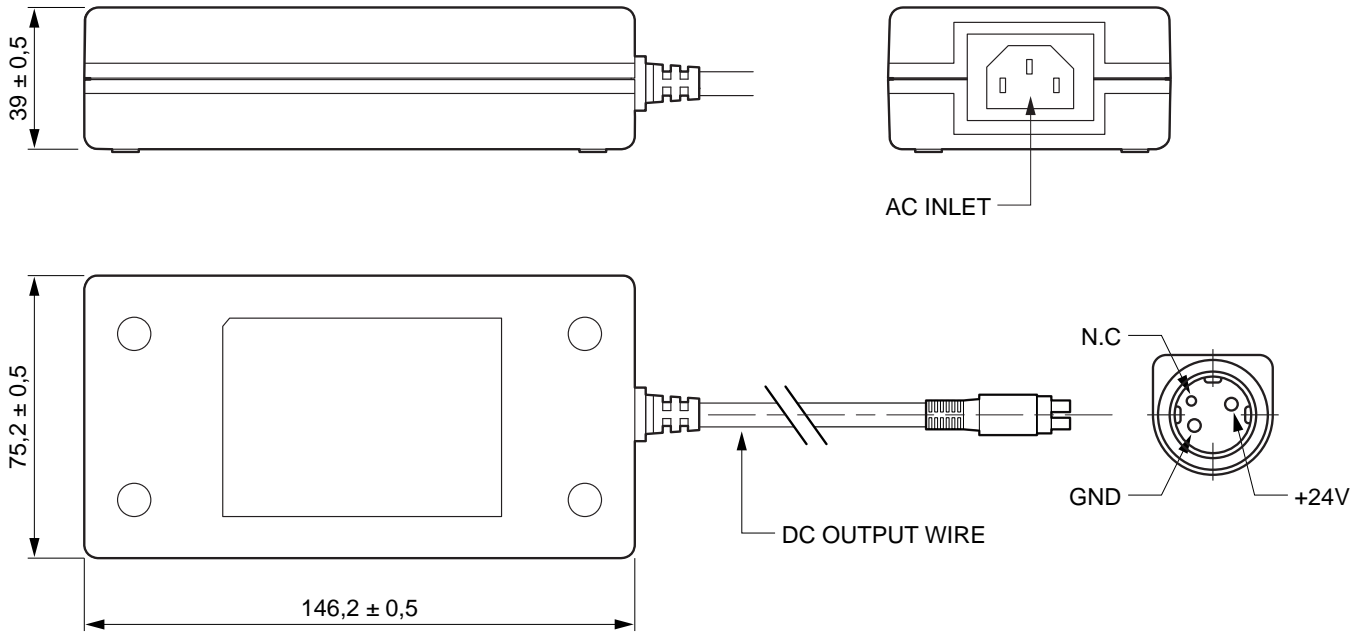
7.6 Character sets

The printer has 3 fonts of varying width which may be accessed through programming or control characters. Each of these fonts offers the following code tables: PC437, PC850, PC860, PC863, PC865, PC858.

PC437 CODE TABLE (Usa, Standard Europe)

| Char	SP	!	"	#	$	%	&	'	(	)	*	+	,	-	.	/
Hex	0020	0021	0022	0023	0024	0025	0026	0027	0028	0029	002A	002B	002C	002D	002E	002F
Dec	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
Char	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
Hex	0030	0031	0032	0033	0034	0035	0036	0037	0038	0039	003A	003B	003C	003D	003E	003F
Dec	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Char	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Hex	0040	0041	0042	0043	0044	0045	0046	0047	0048	0049	004A	004B	004C	004D	004E	004F
Dec	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
Char	P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
Hex	0050	0051	0052	0053	0054	0055	0056	0057	0058	0059	005A	005B	005C	005D	005E	005F
Dec	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
Char	`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
Hex	0060	0061	0062	0063	0064	0065	0066	0067	0068	0069	006A	006B	006C	006D	006E	006F
Dec	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
Char	p	q	r	s	t	u	v	w	x	y	z	{	|	}	~	△
Hex	0070	0071	0072	0073	0074	0075	0076	0077	0078	0079	007A	007B	007C	007D	007E	007F
Dec	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127
Char	Ç	ü	é	â	ä	à	å	ç	ê	ë	è	ï	î	ì	Ä	Å
Hex	0080	0081	0082	0083	0084	0085	0086	0087	0088	0089	008A	008B	008C	008D	008E	008F
Dec	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143
Char	É	æ	Æ	ô	ö	ò	û	ù	ÿ	Ö	Ü	¢	£	¥	Pts	ƒ
Hex	0090	0091	0092	0093	0094	0095	0096	0097	0098	0099	009A	009B	009C	009D	009E	009F
Dec	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
Char	á	í	ó	ú	ñ	Ñ	ª	º	¿	⌐	¬	½	¼	¡	«	»
Hex	00A0	00A1	00A2	00A3	00A4	00A5	00A6	00A7	00A8	00A9	00AA	00AB	00AC	00AD	00AE	00AF
Dec	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175
Char	░	▒	▓	│	┤	╡	╢	╖	╕	╣	║	╗	╝	╜	╛	┐
Hex	00B0	00B1	00B2	00B3	00B4	00B5	00B6	00B7	00B8	00B9	00BA	00BB	00BC	00BD	00BE	00BF
Dec	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191
Char	└	┴	┬	├	─	┼	╞	╟	╚	╔	╩	╦	╠	═	╬	╧
Hex	00C0	00C1	00C2	00C3	00C4	00C5	00C6	00C7	00C8	00C9	00CA	00CB	00CC	00CD	00CE	00CF
Dec	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207
Char	╨	╤	╥	╙	╘	╒	╓	╫	╪	┘	┌	█	▄	▌	▐	▀
Hex	00D0	00D1	00D2	00D3	00D4	00D5	00D6	00D7	00D8	00D9	00DA	00DB	00DC	00DD	00DE	00DF
Dec	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223
Char	α	ß	Γ	π	Σ	σ	µ	τ	Φ	Θ	Ω	δ	∞	φ	ε	∩
Hex	00E0	00E1	00E2	00E3	00E4	00E5	00E6	00E7	00E8	00E9	00EA	00EB	00EC	00ED	00EE	00EF
Dec	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239
Char	≡	±	≥	≤	⌠	⌡	÷	≈	°	∙	·	√	ⁿ	²	■	NBSP
Hex	00F0	00F1	00F2	00F3	00F4	00F5	00F6	00F7	00F8	00F9	00FA	00FB	00FC	00FD	00FE	00FF
Dec	240	241	242	243	244	245	246	247	248	249	250	251	252	253	251	255

PC850 CODE TABLE (Multilingual)

Char	SP	!	"	#	$	%	&	'	(	)	*	+	,	-	.	/
Hex	0020	0021	0022	0023	0024	0025	0026	0027	0028	0029	002A	002B	002C	002D	002E	002F
Dec	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
Char	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
Hex	0030	0031	0032	0033	0034	0035	0036	0037	0038	0039	003A	003B	003C	003D	003E	003F
Dec	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Char	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Hex	0040	0041	0042	0043	0044	0045	0046	0047	0048	0049	004A	004B	004C	004D	004E	004F
Dec	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
Char	P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
Hex	0050	0051	0052	0053	0054	0055	0056	0057	0058	0059	005A	005B	005C	005D	005E	005F
Dec	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
Char	`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
Hex	0060	0061	0062	0063	0064	0065	0066	0067	0068	0069	006A	006B	006C	006D	006E	006F
Dec	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
Char	p	q	r	s	t	u	v	w	x	y	z	{	|	}	~	⌂
Hex	0070	0071	0072	0073	0074	0075	0076	0077	0078	0079	007A	007B	007C	007D	007E	007F
Dec	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127
Char	Ç	ü	é	â	ä	à	å	ç	ê	ë	è	ï	î	ì	Ä	Å
Hex	0080	0081	0082	0083	0084	0085	0086	0087	0088	0089	008A	008B	008C	008D	008E	008F
Dec	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143
Char	É	æ	Æ	ô	ö	ò	û	ù	ÿ	Ö	Ü	ø	£	Ø	×	ƒ
Hex	0090	0091	0092	0093	0094	0095	0096	0097	0098	0099	009A	009B	009C	009D	009E	009F
Dec	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
Char	á	í	ó	ú	ñ	Ñ	ª	º	¿	®	¬	½	¼	¡	«	»
Hex	00A0	00A1	00A2	00A3	00A4	00A5	00A6	00A7	00A8	00A9	00AA	00AB	00AC	00AD	00AE	00AF
Dec	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175
Char	░	▒	▓	│	┤	Á	Â	À	©	╣	║	╗	╝	¢	¥	┐
Hex	00B0	00B1	00B2	00B3	00B4	00B5	00B6	00B7	00B8	00B9	00BA	00BB	00BC	00BD	00BE	00BF
Dec	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191
Char	└	┴	┬	├	─	┼	ã	Ã	╚	╔	╩	╦	╠	═	╬	¤
Hex	00C0	00C1	00C2	00C3	00C4	00C5	00C6	00C7	00C8	00C9	00CA	00CB	00CC	00CD	00CE	00CF
Dec	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207
Char	ð	Đ	Ê	Ë	È	ı	Í	Î	Ï	┘	┌	█	▄	¦	Ì	▀
Hex	00D0	00D1	00D2	00D3	00D4	00D5	00D6	00D7	00D8	00D9	00DA	00DB	00DC	00DD	00DE	00DF
Dec	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223
Char	Ó	ß	Ô	Ò	õ	Õ	µ	þ	Þ	Ú	Û	Ù	ý	Ý	¯	´
Hex	00E0	00E1	00E2	00E3	00E4	00E5	00E6	00E7	00E8	00E9	00EA	00EB	00EC	00ED	00EE	00EF
Dec	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239
Char	SHY	±	=	¾	¶	§	÷	¸	°	¨	·	¹	³	²	■	NBSP
Hex	00F0	00F1	00F2	00F3	00F4	00F5	00F6	00F7	00F8	00F9	00FA	00FB	00FC	00FD	00FE	00FF
Dec	240	241	242	243	244	245	246	247	248	249	250	251	252	253	251	255

CUSTOM®

PC860 CODE TABLE (Portuguese)

Char	SP	!	"	#	$	%	&	'	(	)	*	+	,	-	.	/
Hex	0020	0021	0022	0023	0024	0025	0026	0027	0028	0029	002A	002B	002C	002D	002E	002F
Dec	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
Char	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
Hex	0030	0031	0032	0033	0034	0035	0036	0037	0038	0039	003A	003B	003C	003D	003E	003F
Dec	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Char	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Hex	0040	0041	0042	0043	0044	0045	0046	0047	0048	0049	004A	004B	004C	004D	004E	004F
Dec	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
Char	P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
Hex	0050	0051	0052	0053	0054	0055	0056	0057	0058	0059	005A	005B	005C	005D	005E	005F
Dec	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
Char	`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
Hex	0060	0061	0062	0063	0064	0065	0066	0067	0068	0069	006A	006B	006C	006D	006E	006F
Dec	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
Char	p	q	r	s	t	u	v	w	x	y	z	{	|	}	~	△
Hex	0070	0071	0072	0073	0074	0075	0076	0077	0078	0079	007A	007B	007C	007D	007E	007F
Dec	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127
Char	Ç	ü	é	â	ã	à	Á	ç	ê	Ê	è	Í	Ô	ì	Ã	Â
Hex	0080	0081	0082	0083	0084	0085	0086	0087	0088	0089	008A	008B	008C	008D	008E	008F
Dec	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143
Char	É	À	È	ô	ö	ò	Ú	ù	Ì	Õ	Ü	¢	£	Ù	Pts	Ó
Hex	0090	0091	0092	0093	0094	0095	0096	0097	0098	0099	009A	009B	009C	009D	009E	009F
Dec	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
Char	á	í	ó	ú	ñ	Ñ	ª	º	¿	Ò	¬	½	¼	¡	«	»
Hex	00A0	00A1	00A2	00A3	00A4	00A5	00A6	00A7	00A8	00A9	00AA	00AB	00AC	00AD	00AE	00AF
Dec	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175
Char	░	▒	▓	│	┤	╡	╢	╖	╕	╣	║	╗	╝	╜	╛	┐
Hex	00B0	00B1	00B2	00B3	00B4	00B5	00B6	00B7	00B8	00B9	00BA	00BB	00BC	00BD	00BE	00BF
Dec	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191
Char	└	┴	┬	├	─	┼	╞	╟	╚	╔	╩	╦	╠	═	╬	╧
Hex	00C0	00C1	00C2	00C3	00C4	00C5	00C6	00C7	00C8	00C9	00CA	00CB	00CC	00CD	00CE	00CF
Dec	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207
Char	╨	╤	╥	╙	╘	╒	╓	╫	╪	┘	┌	█	▄	▌	▐	▀
Hex	00D0	00D1	00D2	00D3	00D4	00D5	00D6	00D7	00D8	00D9	00DA	00DB	00DC	00DD	00DE	00DF
Dec	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223
Char	α	ß	Γ	π	Σ	σ	µ	τ	Φ	Θ	Ω	δ	∞	φ	ε	∩
Hex	00E0	00E1	00E2	00E3	00E4	00E5	00E6	00E7	00E8	00E9	00EA	00EB	00EC	00ED	00EE	00EF
Dec	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239
Char	≡	±	≥	≤	⌠	⌡	÷	≈	°	∙	·	√	ⁿ	²	■	NBSP
Hex	00F0	00F1	00F2	00F3	00F4	00F5	00F6	00F7	00F8	00F9	00FA	00FB	00FC	00FD	00FE	00FF
Dec	240	241	242	243	244	245	246	247	248	249	250	251	252	253	251	255

PC863 CODE TABLE (Canadian, French)

Char	SP	!	"	#	$	%	&	'	(	)	*	+	,	-	.	/
Hex	0020	0021	0022	0023	0024	0025	0026	0027	0028	0029	002A	002B	002C	002D	002E	002F
Dec	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
Char	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
Hex	0030	0031	0032	0033	0034	0035	0036	0037	0038	0039	003A	003B	003C	003D	003E	003F
Dec	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Char	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Hex	0040	0041	0042	0043	0044	0045	0046	0047	0048	0049	004A	004B	004C	004D	004E	004F
Dec	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
Char	P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
Hex	0050	0051	0052	0053	0054	0055	0056	0057	0058	0059	005A	005B	005C	005D	005E	005F
Dec	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
Char	`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
Hex	0060	0061	0062	0063	0064	0065	0066	0067	0068	0069	006A	006B	006C	006D	006E	006F
Dec	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
Char	p	q	r	s	t	u	v	w	x	y	z	{	|	}	~	⌂
Hex	0070	0071	0072	0073	0074	0075	0076	0077	0078	0079	007A	007B	007C	007D	007E	007F
Dec	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127
Char	Ç	ü	é	â	Â	à	¶	ç	ê	ë	è	ï	î	=	À	§
Hex	0080	0081	0082	0083	0084	0085	0086	0087	0088	0089	008A	008B	008C	008D	008E	008F
Dec	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143
Char	É	È	Ê	ô	Ë	Ï	û	ù	¤	Ô	Ü	¢	£	Ù	Û	ƒ
Hex	0090	0091	0092	0093	0094	0095	0096	0097	0098	0099	009A	009B	009C	009D	009E	009F
Dec	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
Char	¦	´	ó	ú	¨	¸	³	─	Î	⌐	¬	½	¼	¾	«	»
Hex	00A0	00A1	00A2	00A3	00A4	00A5	00A6	00A7	00A8	00A9	00AA	00AB	00AC	00AD	00AE	00AF
Dec	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175
Char	░	▒	▓	│	┤	╡	╢	╖	╕	╣	║	╗	╝	╜	╛	┐
Hex	00B0	00B1	00B2	00B3	00B4	00B5	00B6	00B7	00B8	00B9	00BA	00BB	00BC	00BD	00BE	00BF
Dec	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191
Char	└	┴	┬	├	─	┼	╞	╟	╚	╔	╩	╦	╠	═	╬	╧
Hex	00C0	00C1	00C2	00C3	00C4	00C5	00C6	00C7	00C8	00C9	00CA	00CB	00CC	00CD	00CE	00CF
Dec	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207
Char	╨	╤	╥	╙	╘	╒	╓	╫	╪	┘	┌	█	▄	▌	▐	▀
Hex	00D0	00D1	00D2	00D3	00D4	00D5	00D6	00D7	00D8	00D9	00DA	00DB	00DC	00DD	00DE	00DF
Dec	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223
Char	α	ß	Γ	π	Σ	σ	µ	τ	Φ	Θ	Ω	δ	∞	φ	ε	∩
Hex	00E0	00E1	00E2	00E3	00E4	00E5	00E6	00E7	00E8	00E9	00EA	00EB	00EC	00ED	00EE	00EF
Dec	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239
Char	≡	±	≥	≤	⌠	⌡	÷	≈	°	∙	·	√	ⁿ	²	■	NBSP
Hex	00F0	00F1	00F2	00F3	00F4	00F5	00F6	00F7	00F8	00F9	00FA	00FB	00FC	00FD	00FE	00FF
Dec	240	241	242	243	244	245	246	247	248	249	250	251	252	253	251	255

CUSTOM®

PC865 CODE TABLE (Nordic)

SP	!	"	#	$	%	&	'	(	)	*	+	,	-	.	/
0020	0021	0022	0023	0024	0025	0026	0027	0028	0029	002A	002B	002C	002D	002E	002F
32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
0030	0031	0032	0033	0034	0035	0036	0037	0038	0039	003A	003B	003C	003D	003E	003F
48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0040	0041	0042	0043	0044	0045	0046	0047	0048	0049	004A	004B	004C	004D	004E	004F
64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
0050	0051	0052	0053	0054	0055	0056	0057	0058	0059	005A	005B	005C	005D	005E	005F
80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
0060	0061	0062	0063	0064	0065	0066	0067	0068	0069	006A	006B	006C	006D	006E	006F
96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
p	q	r	s	t	u	v	w	x	y	z	{	|	}	~	⌂
0070	0071	0072	0073	0074	0075	0076	0077	0078	0079	007A	007B	007C	007D	007E	007F
112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127
Ç	ü	é	â	ä	à	å	ç	ê	ë	è	ï	î	ì	Ä	Å
0080	0081	0082	0083	0084	0085	0086	0087	0088	0089	008A	008B	008C	008D	008E	008F
128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143
É	æ	Æ	ô	ö	ò	û	ù	ÿ	Ö	Ü	ø	£	Ø	Pts	ƒ
0090	0091	0092	0093	0094	0095	0096	0097	0098	0099	009A	009B	009C	009D	009E	009F
144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
á	í	ó	ú	ñ	Ñ	ª	º	¿	⌐	¬	½	¼	¡	«	¤
00A0	00A1	00A2	00A3	00A4	00A5	00A6	00A7	00A8	00A9	00AA	00AB	00AC	00AD	00AE	00AF
160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175
░	▒	▓	│	┤	╡	╢	╖	╕	╣	║	╗	╝	╜	╛	┐
00B0	00B1	00B2	00B3	00B4	00B5	00B6	00B7	00B8	00B9	00BA	00BB	00BC	00BD	00BE	00BF
176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191
└	┴	┬	├	─	┼	╞	╟	╚	╔	╩	╦	╠	═	╬	╧
00C0	00C1	00C2	00C3	00C4	00C5	00C6	00C7	00C8	00C9	00CA	00CB	00CC	00CD	00CE	00CF
192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207
╨	╤	╥	╙	╘	╒	╓	╫	╪	┘	┌	█	▄	▌	▐	▀
00D0	00D1	00D2	00D3	00D4	00D5	00D6	00D7	00D8	00D9	00DA	00DB	00DC	00DD	00DE	00DF
208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223
α	ß	Γ	π	Σ	σ	µ	τ	Φ	Θ	Ω	δ	∞	φ	ε	∩
00E0	00E1	00E2	00E3	00E4	00E5	00E6	00E7	00E8	00E9	00EA	00EB	00EC	00ED	00EE	00EF
224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239
≡	±	≥	≤	⌠	⌡	÷	≈	°	∙	·	√	ⁿ	²	■	NBSP
00F0	00F1	00F2	00F3	00F4	00F5	00F6	00F7	00F8	00F9	00FA	00FB	00FC	00FD	00FE	00FF
240	241	242	243	244	245	246	247	248	249	250	251	252	253	251	255

PC858 CODE TABLE (Euro symbol)

Char	SP	!	"	#	$	%	&	'	(	)	*	+	,	-	.	/
Hex	0020	0021	0022	0023	0024	0025	0026	0027	0028	0029	002A	002B	002C	002D	002E	002F
Dec	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
Char	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
Hex	0030	0031	0032	0033	0034	0035	0036	0037	0038	0039	003A	003B	003C	003D	003E	003F
Dec	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Char	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Hex	0040	0041	0042	0043	0044	0045	0046	0047	0048	0049	004A	004B	004C	004D	004E	004F
Dec	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
Char	P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
Hex	0050	0051	0052	0053	0054	0055	0056	0057	0058	0059	005A	005B	005C	005D	005E	005F
Dec	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
Char	`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
Hex	0060	0061	0062	0063	0064	0065	0066	0067	0068	0069	006A	006B	006C	006D	006E	006F
Dec	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
Char	p	q	r	s	t	u	v	w	x	y	z	{	|	}	~	⌂
Hex	0070	0071	0072	0073	0074	0075	0076	0077	0078	0079	007A	007B	007C	007D	007E	007F
Dec	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127
Char	Ç	ü	é	â	ä	à	å	ç	ê	ë	è	ï	î	ì	Ä	Å
Hex	0080	0081	0082	0083	0084	0085	0086	0087	0088	0089	008A	008B	008C	008D	008E	008F
Dec	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143
Char	É	æ	Æ	ô	ö	ò	û	ù	ÿ	Ö	Ü	ø	£	Ø	×	ƒ
Hex	0090	0091	0092	0093	0094	0095	0096	0097	0098	0099	009A	009B	009C	009D	009E	009F
Dec	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
Char	á	í	ó	ú	ñ	Ñ	ª	º	¿	®	¬	½	¼	¡	«	»
Hex	00A0	00A1	00A2	00A3	00A4	00A5	00A6	00A7	00A8	00A9	00AA	00AB	00AC	00AD	00AE	00AF
Dec	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175
Char	░	▒	▓	│	┤	Á	Â	À	©	╣	║	╗	╝	¢	¥	┐
Hex	00B0	00B1	00B2	00B3	00B4	00B5	00B6	00B7	00B8	00B9	00BA	00BB	00BC	00BD	00BE	00BF
Dec	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191
Char	└	┴	┬	├	─	┼	ã	Ã	╚	╔	╩	╦	╠	═	╬	¤
Hex	00C0	00C1	00C2	00C3	00C4	00C5	00C6	00C7	00C8	00C9	00CA	00CB	00CC	00CD	00CE	00CF
Dec	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207
Char	ð	Đ	Ê	Ë	È	€	Í	Î	Ï	┘	┌	█	▄	¦	Ì	▀
Hex	00D0	00D1	00D2	00D3	00D4	00D5	00D6	00D7	00D8	00D9	00DA	00DB	00DC	00DD	00DE	00DF
Dec	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223
Char	Ó	ß	Ô	Ò	õ	Õ	µ	þ	Þ	Ú	Û	Ù	ý	Ý	¯	´
Hex	00E0	00E1	00E2	00E3	00E4	00E5	00E6	00E7	00E8	00E9	00EA	00EB	00EC	00ED	00EE	00EF
Dec	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239
Char	SHY	±	=	¾	¶	§	÷	¸	°	¨	·	¹	³	²	■	NBSP
Hex	00F0	00F1	00F2	00F3	00F4	00F5	00F6	00F7	00F8	00F9	00FA	00FB	00FC	00FD	00FE	00FF
Dec	240	241	242	243	244	245	246	247	248	249	250	251	252	253	251	255

NOTE: To print the Euro (€) symbol, the command sequence is: $1B, $74, $13, $D5 (see Commands Manual).

CUSTOM®
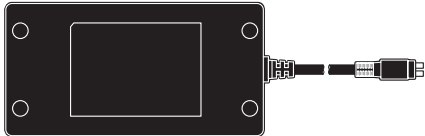
8 CONSUMABLES

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

DESCRIPTION	CODE
THERMAL PAPER ROLL WITH BACK SIDE PRE-PRINTED weight = 60 g/m^2 width = 112 mm Ø external = 95 mm Ø core = 25 mm	**67300000000317**

9 ACCESSORIES

The available accessories for the device are listed in the following table:

DESCRIPTION	CODE
POWER SUPPLY (for technical specifications, see the paragraph 7.1)	**963GE020000004**

10 TECHNICAL SERVICE

In case of failure, contact the Technical Service by sending an e-mail to support@custom.it detailing:
1. Product code
2. Serial number
3. Hardware release
4. Firmware release

To get the necessary data, proceed as follows:

1

PRODUCT LABEL

Find the product label located on the bottom of the printer.

2
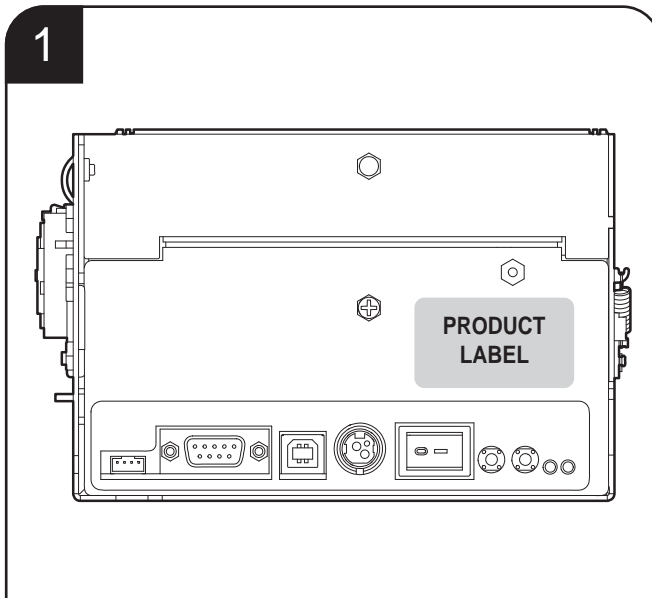
hardware release
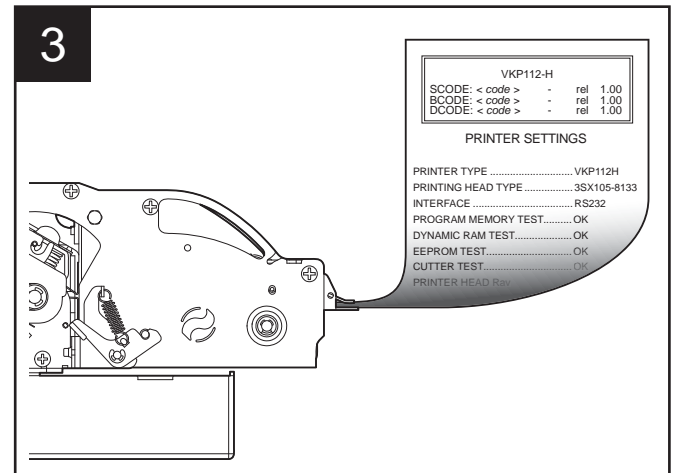
XXXXXXXXXXXXXX

XXXXXX XXX XXXX XXXX
XXXXXX XXX XXXX XXXX

Rx

0000000000000000000

serial number

product code
(14 digits)

The label shows the product code, serial number and hardware release.

3

VKP112-H

SCODE: < *code* >   -   rel   1.00
BCODE: < *code* >   -   rel   1.00
DCODE: < *code* >   -   rel   1.00

PRINTER SETTINGS

PRINTER TYPE VKP112H
PRINTING HEAD TYPE 3SX105-8133
INTERFACE RS232
PROGRAM MEMORY TEST..........OK
DYNAMIC RAM TEST....................OK
EEPROM TEST..............................OK
CUTTER TEST...............................OK
PRINTER HEAD Rev

Print a Setup report
(see paragraphs 5.2).

4

firmware release

VKP112-H

SCODE: < *code* >   -   rel 1.00
BCODE: < *code* >   -   rel 1.00
DCODE: < *code* >   -   rel 1.00

PRINTER SETTINGS

PRINTER TYPE VKP112H
PRINTING HEAD TYPE 3SX105-8133

The Setup report shows the firmware release.

5

@

support@custom.it
Customer Service Department

Send an e-mail to the Technical Service, with the data collected.

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CERTIFIED QUALITY
SYSTEM

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