logiJET TM8

Operator's Manual

Edition 1.1p

microplex
printware ag

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1. Introduction

1.1. General Description

The logiJET TM8 is a multifunctional non-impact printer based on thermal print technology. The compact design, the sturdy metal housing and the option to order either a printer version for 230V or a printer version using supply voltages of 24V, 36V or 48V make this device an ideal printer for so called “mobile printing”.
A so called mounting plate (option) can be used to fix the mobile version of this printer to a forklift truck, for example. For the 230V- version of the printer the mounting plate can be ordered, too. This optional device enables both versions of the printer to use its media supply spindle for roll-fed media processing.
All logiJET TM8 printers are made for thermal direct printing. Ribbons are not necessary, this makes the handling very easy.
A logiJET TM8 printer can be used to print all kind of information as barcodes, alphanumerical characters and vector graphics e.g. . This printer not only knows one device-specific page description language as standard thermal printers usually do, but most of the languages used in the industrial field and the well-known market standards of laserprinters, too.

The logiJET TM8 printer is provided with a controller that is also used in SOLID laserprinters. So the advantages of the thermal print technology are combined with the flexibility of the „laserprinter intelligence“.

The MICROPLEX printer controller has its integrated website, this allows a printer configuration via Ethernet. See Networking Features of MICROPLEX Printers for more information.

Data can be sent without programming expenditure from almost any software platform, because printer drivers are already available for this.

The capabilities featured include the MICROPLEX page description language IDOL. Using this language, complex tasks such as the creation of forms can be carried out by simple software commands (see separate IDOL manual).

The resolution is 300 dots per inch corresponding to about 12 dots per mm.

The print speed is up to 6 inch/second (up to 150mm/second).
Roll-fed media as well as continuous-media (fanfold paper, e.g.) can be printed on. The minimum width of media is 100 mm (about 4").
The maximum processable width of media for the logiJET TM8 is up to 222 mm (8.74"). 219 mm (8,62") of that are printable.
The printer is equipped with sensors for Black Mark and Gap (reflex and transparent).
The wide-opening printhead allows easy access to the media. Therefore the loading of consumables is quick and easy.

1.2. Fundamentals of Thermal Printing

The thermal print technology enables a quiet and fast print process with a high resolution output. This printer uses the socalled thermal direct printing process. For this kind of printing no ribbon is needed.
The printhead produces the image by heating single elements (dots) inside the paper. So for printing with your logiJET TM8 you always need a special kind of paper.
While thermal direct printing the dots touch the thermal paper directly. The dyes and developers within the paper respond to the heat of particular dots, change their colour to black and so the wanted image emerges.

1.3. Conventions

To find the requested information more quickly and to understand instructions more easily, the following conventions are used:

This symbol refers to a possible source of danger. If you do not pay attention to this information, injuries may result, the function of the printer could be reduced or objects could be damaged.

This symbol refers to important hints and suggestions on using the printer. Disregarding these hints might cause problems with the printer or within the environments.

This symbol shows a key of the control panel (touch panel). Such symbols will be used in this manual whenever keys have to be pressed in order to activate certain functions.

blue colored text

Link to another chapter or a different document. By clicking the blue colored text you'll enter the concerning chapter or document.

[Menu Level 1]

This symbol represents messages shown in the display (panel).

1.4. General Safety Regulations

This device produces, employs and possibly radiates high frequency energy. Because of this, incorrect installation can disturb radio communications.

This MICROPLEX product and its consumables are designed and tested according to strict safety standards.

Heeding the following instructions ensures secure operation:

- In both cases, while using the mains connection and while "mobile printing", please make sure your electricity source is appropriately grounded.

- Set the DIPswitch located on the DC/DC converter PCB to the nominal voltage supplied by the vehicle's electric system and always use a suitabele fuse (details are described in chapter 6).

- Install the device on solid and level ground.
  For "mobile printing" the printer has to be fixed firmly to the vehicle by using the so called mounting plate (option).

- Only use consumables which are specially developed for this device.

- Using unsuitable consumables may cause a reduction of output quality or damages to the device.

- Ensure no liquids get on or into the device.

- Do not remove any cover or safety device fastened by screws.

- Do not remove or bridge over any safety device.

- Do not push anything into the ventilation apertures.

- Never carry out installations, cleanings or maintenance operations which are not described in this manual. This should only be done by MICROPLEX authorized service personnel.

- Be careful when operating equipment with opened cover hoods (setting-up work or service). Rotating parts **can cause injury** , and it is also possible for hair, clothing, jewellery, etc. to be caught in the machinery.
  Material should only be inserted and changed by specially instructed personnel.

- Optional device components may only be installed by authorized personnel, and in accordance with the appropriate assembly and usage regulations.

- The cutter (option) may only be installed by trained personnel.

- Only attach or remove the printhead when the device is switched off.
  After switching off the device, wait at least 3 minutes before removing the printhead.

- Only plug in or remove interface connectors when the device is switched off.

In order to disconnect the printer quickly from the main power in case of emergency please note the following:

- If the printer is connected to the mains supply, the power-outlet should be installed near the printer and easily within reach.

- For permanently connected printers, an easily accessible emergency power-off switch should be installed close to the printer.

- Please do not conceal any disconnect devices with the printer or other objects.

- After switching off the device, wait at least 15 seconds before the device is switched on again.

- Please follow all the information and hints directly attached to the device and/or described in this manual.

2. Installation

2.1. Printer Unpacking

1. Open the box and remove the packing materials lying on top to lay open the upper foam damper.

   Hint: The packing materials of your printer may differ in shape and appearance from the parts shown in the following figure.

2. Remove the printer accessories, if need be.

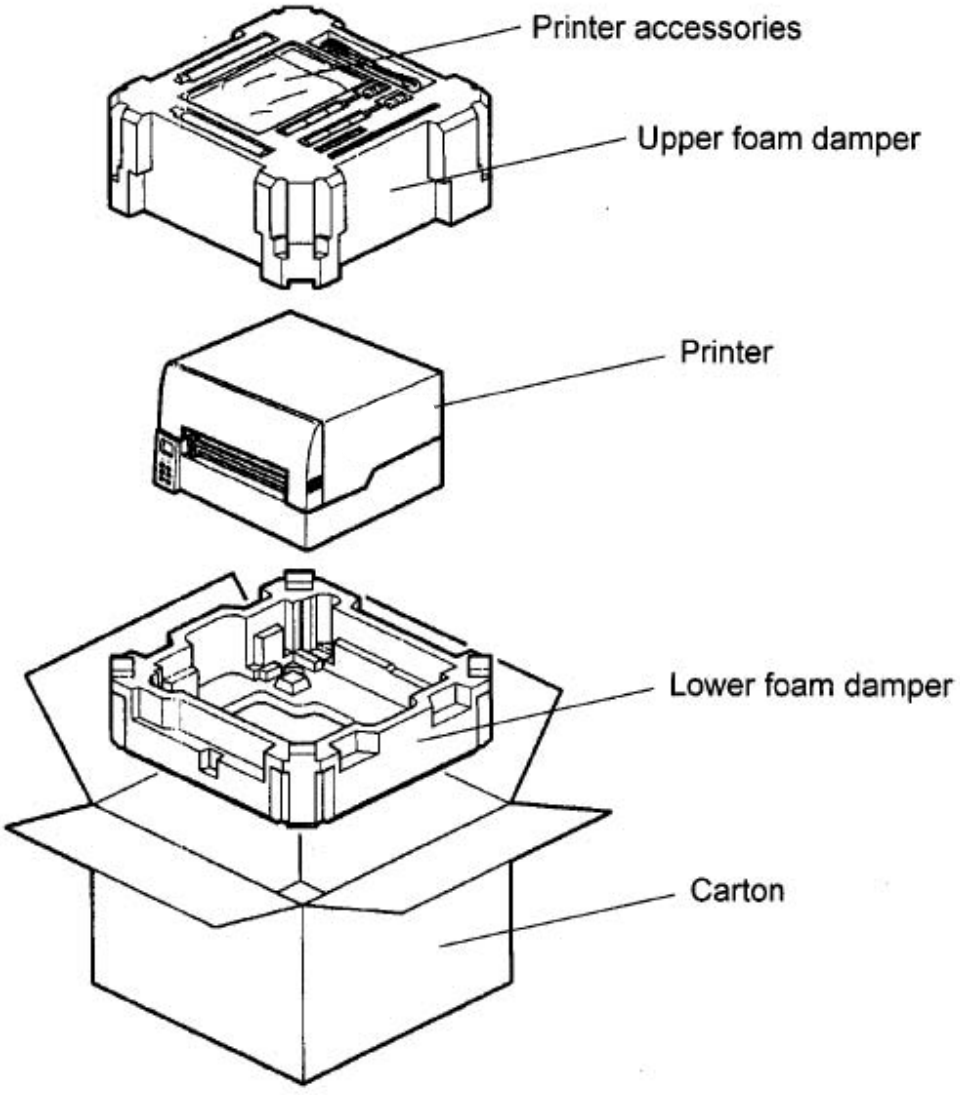


Fig. 2.1.a Example of a Microplex Printer with packing materials

3. Take out the upper foam damper.

4. Take the printer and lift it out the box carefully.

Get somebody to help you to lift the printer, if necessary.
Take hold of the printer from the bottom of the printer itself.
Get somebody to hold the lower foam damper and the box when removing the printer.

5. Remove the foil covering the printer.

6. Place the printer onto a suitable base (see section 2.3).

Please retain the original packing materials in case the printer has to be transported in the future.

2.2. Check List

First of all place the printer and the accessories onto a level surface until the definitive location is chosen.

Please make sure that all items are included and that there are no defects.
Immediately inform your supplier of any damage.

Open the cardboard box carefully and check the contents:

1. Printer logiJET TM8
2. Mains power cord (if you ordered the 230V – version of the printer)
3. If you ordered the "mobile version" of the printer:
   to connect the printer to the voltage supplied by the forklift truck:
   - one power cable (six-wire DC cable)
   - in total three fuses (one of the fuses has to be mounted to your printer. You have to use the matching fuse, compare section 6.2.)
4. If you ordered (as on option) the socalled "mounting plate":
   Mounting plate including the media supply spindle, the guide disks, etc. (all these parts belong to the media supply spindle; eventually they are already mounted)
5. CD containing:
   - Operator's Manual for logiJET TM8
   - Print drivers
   - IDOL Programming Manual

2.3. Printer Installation

- The chosen location should be well-ventilated, clean and dry.
- Damaging environmental factors such as metal vapors, oil mist, corroding lixivium or the like must not come into contact with the printer.
- Position the printer on solid and level ground.
- Do not exposure the printer to shocks or vibrations.
- The printer and socket or rather the connection cables have to be easily accessible.
- The printer should not be located near volatile or combustible materials.

- It is very important to connect your printer to an appropriate power source. Depending on the printer version you ordered you have to choose:

either: (if your printer is made for 230V AC power):

- connect it to an AC power socket (100 – 240 VAC, 50 - 60 Hz, max. 3.4 A).
  Please note: The socket and the power cord must not be damaged.

or: (if your printer is made for 24V, 36V or 48V power):

- connect it to an appropriate DC power source (on-board-electrical system of a forklift truck, for example.
  PLEASE NOTE: Before(!) you connect your printer, it has to be set to the chosen DC voltage first; see section 6.2)

- In any case please use the printer only within the allowed range of connection values (see chapter Specifications).

- In order to run the printer reliably, please maintain the following environmental conditions:

  Temperature: +5°C to +35°C (operating)
  -20°C to +60°C (storage temperature)
  Relative atmospheric humidity: 45% to 75% (without condensation)

2.4. Printer Components

Please note: Most of the figures in this chapter show the 230V version of the printer (here equipped with the socalled Mounting Plate, which is an option). Special details of the printer's "mobile version" are visible in those figures, which are marked accordingly (f.e. figure 2.4.d).

Main view:

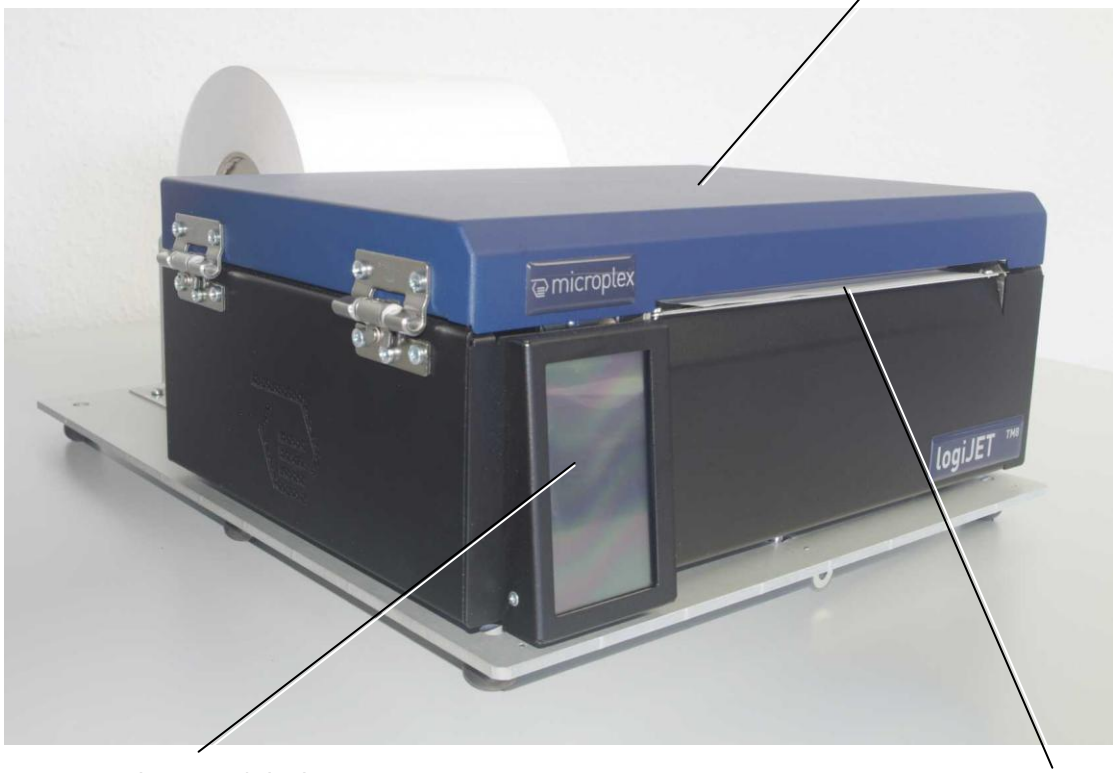


Fig. 2.4.a Main view of the printer logiJET TM8

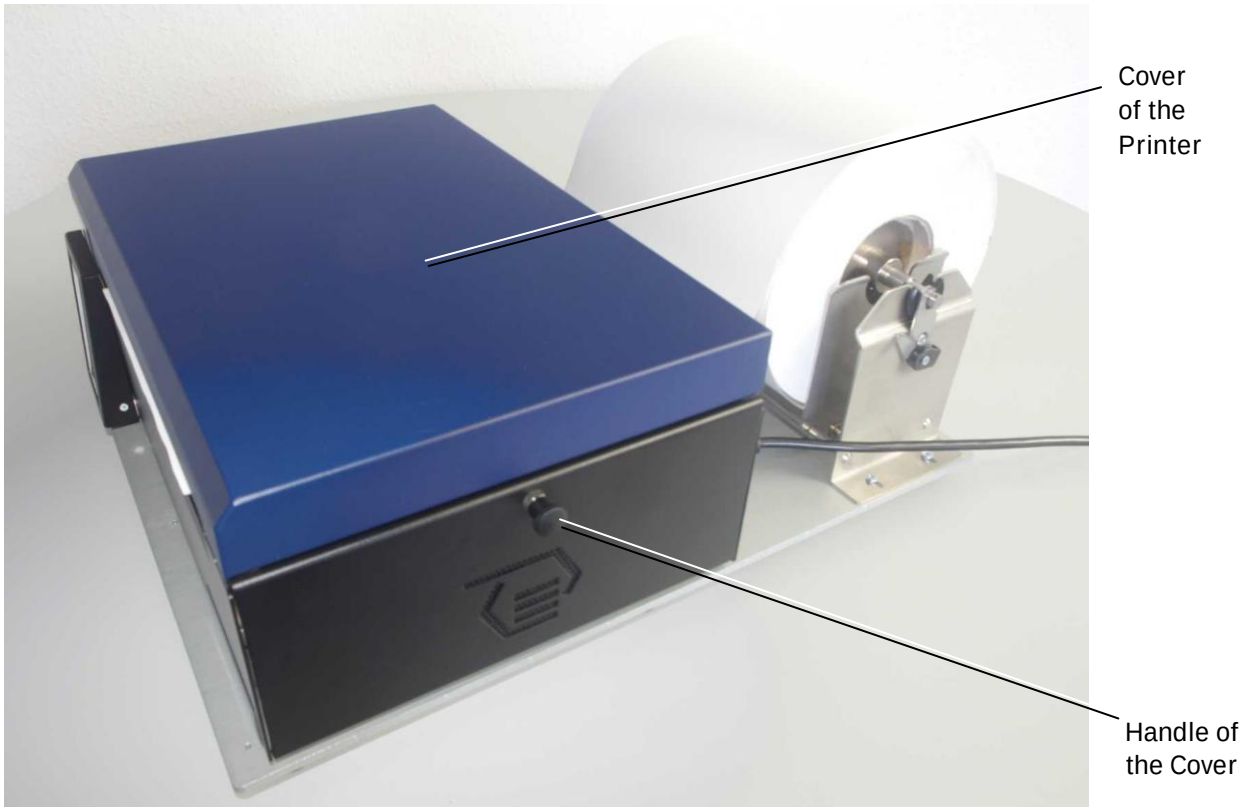


Fig. 2.4.b Side view of the printer (here equipped with Mounting Plate, media supply spindle and roll-fed media)

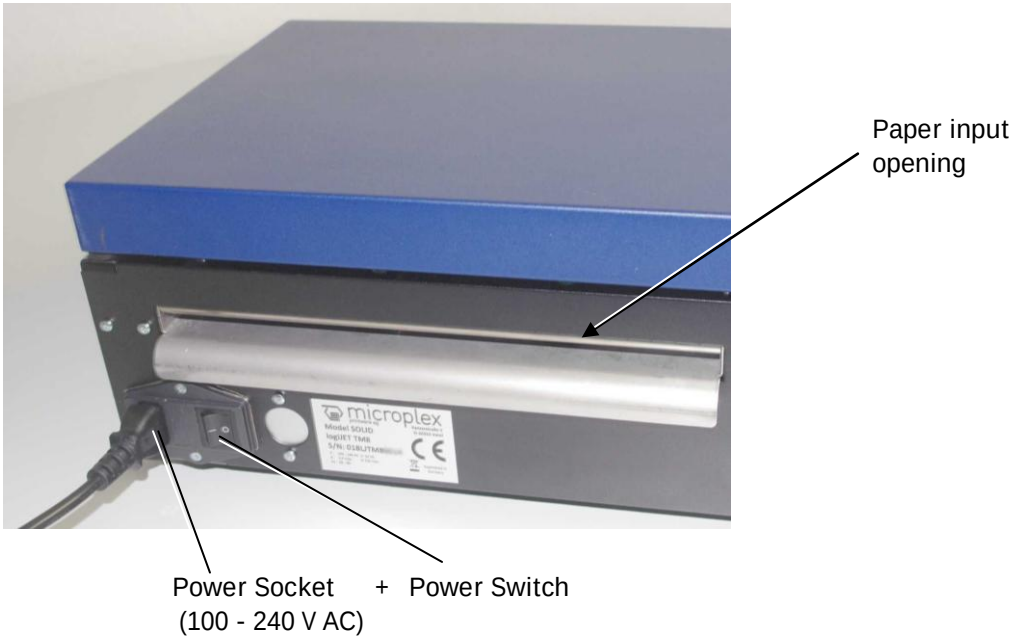


Fig. 2.4.c Rear view of the printer (230V version)

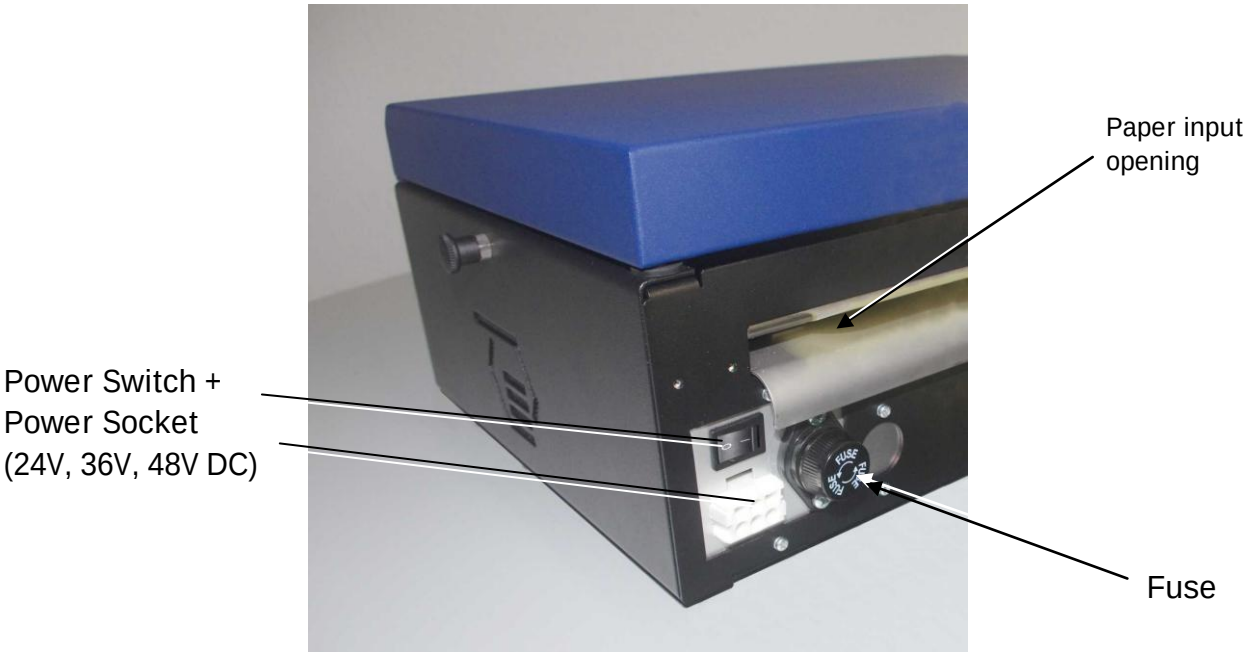


Fig. 2.4.d Rear View of the printer (here "mobile version" for 24V/36V/48V)

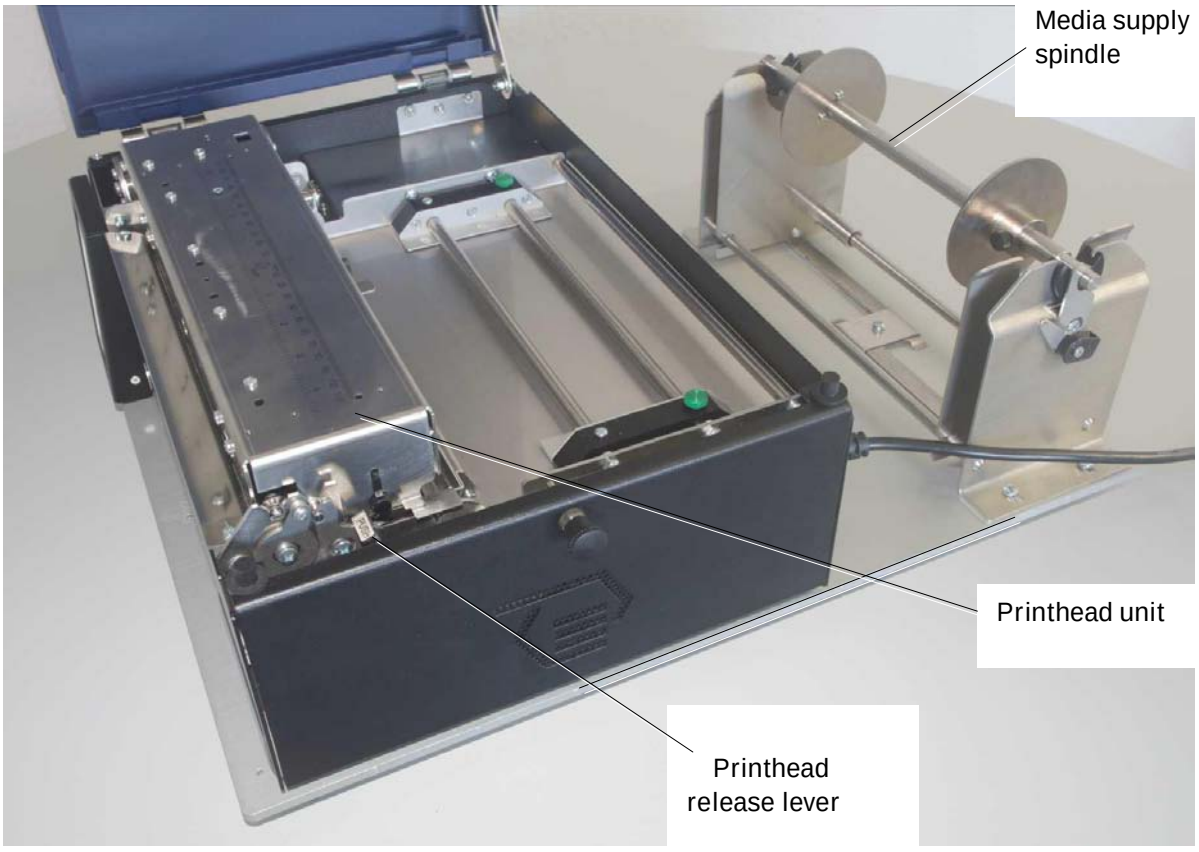


Fig. 2.4.e Inside View of the printer

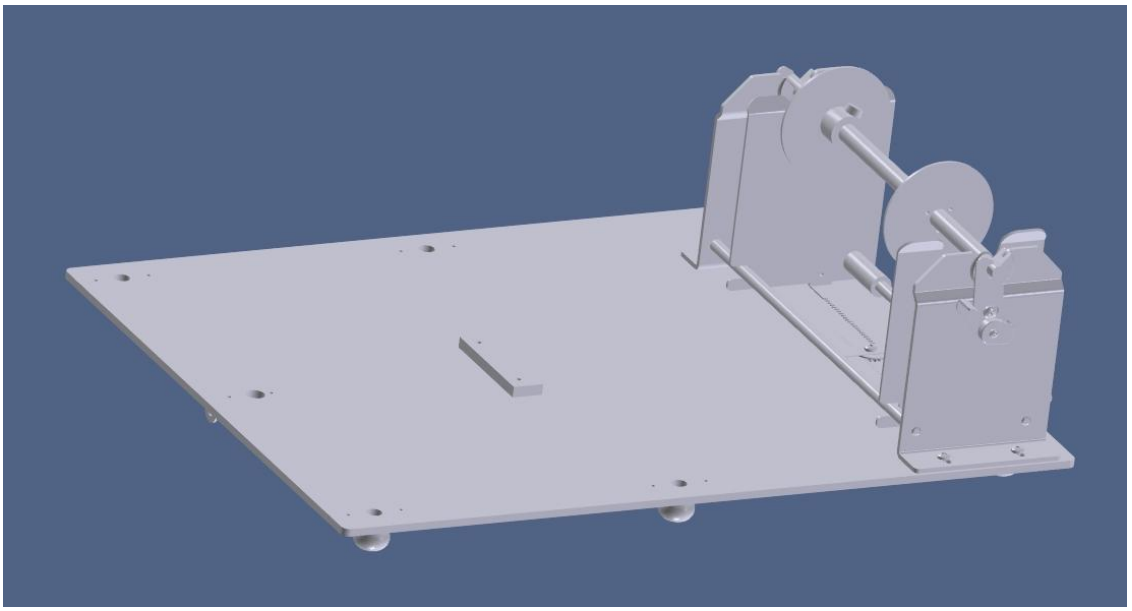


Fig. 2.4.f Mounting Plate for the printer

Please note: This Mounting Plate is an optional device of the printer

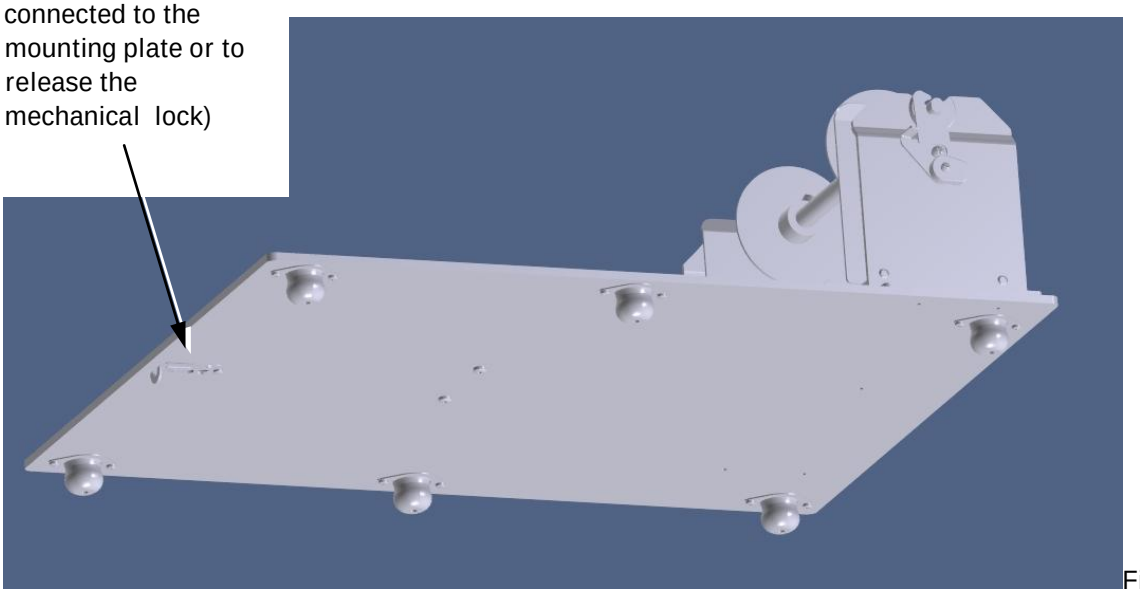


Fig. 2.4.g Mounting Plate: view from below

Rear View:

Fig. 2.4.h Rear View of the printer

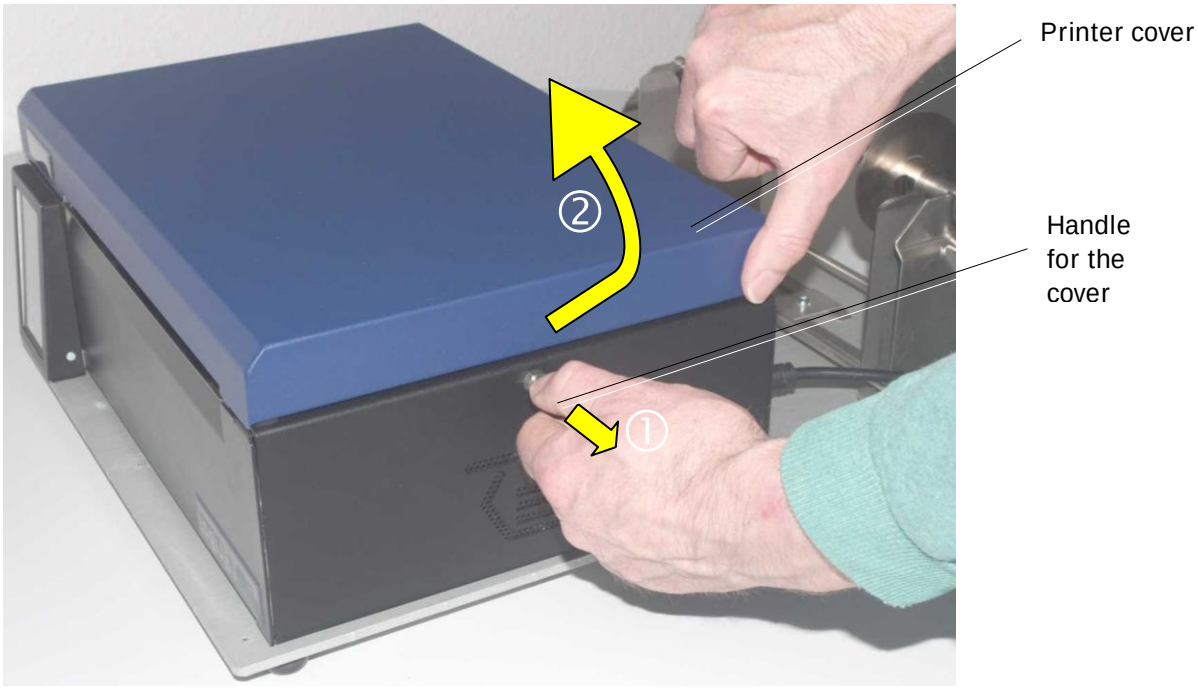


Fig. 2.4.i Opening the printer cover

Printer interior view:

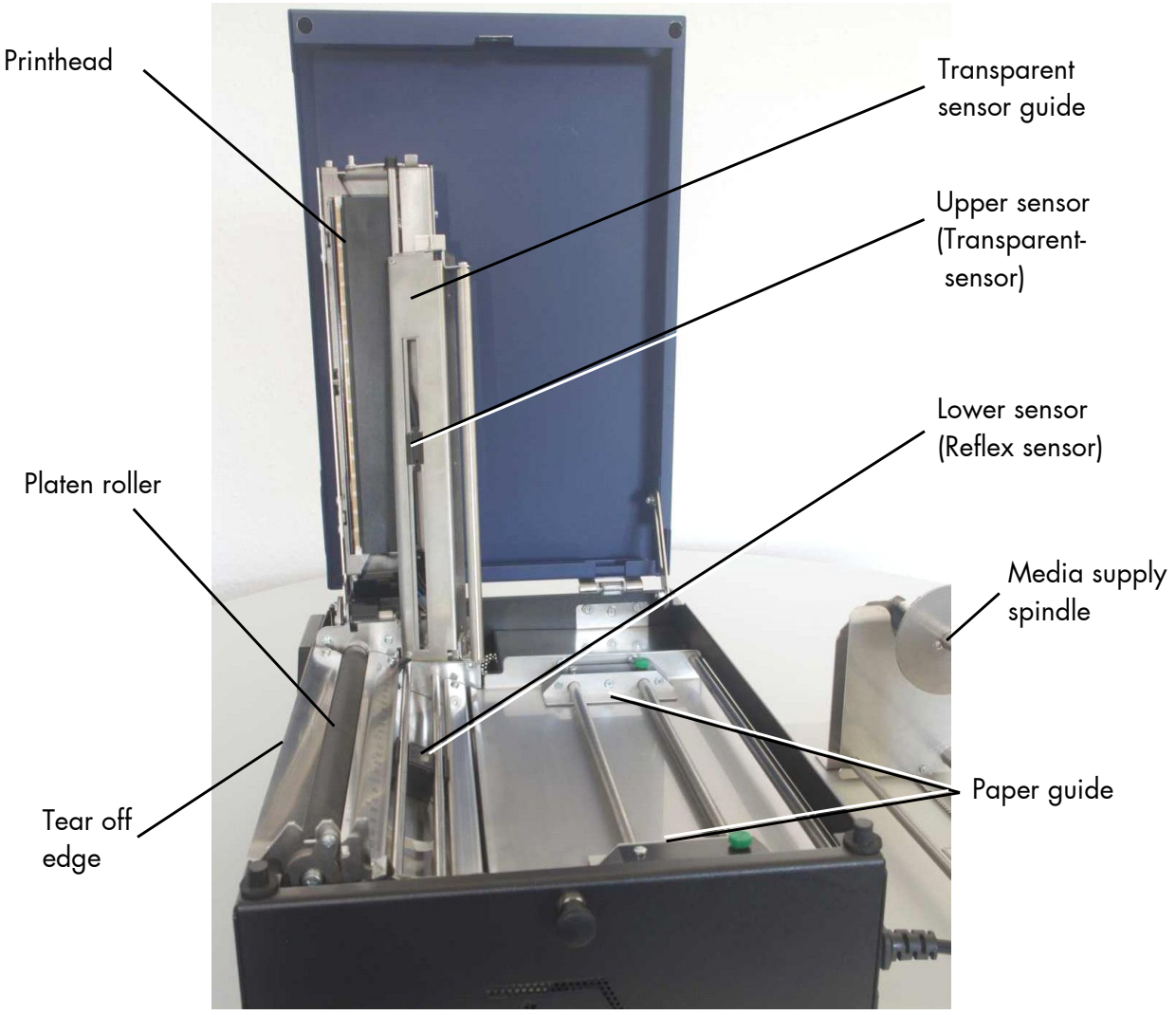


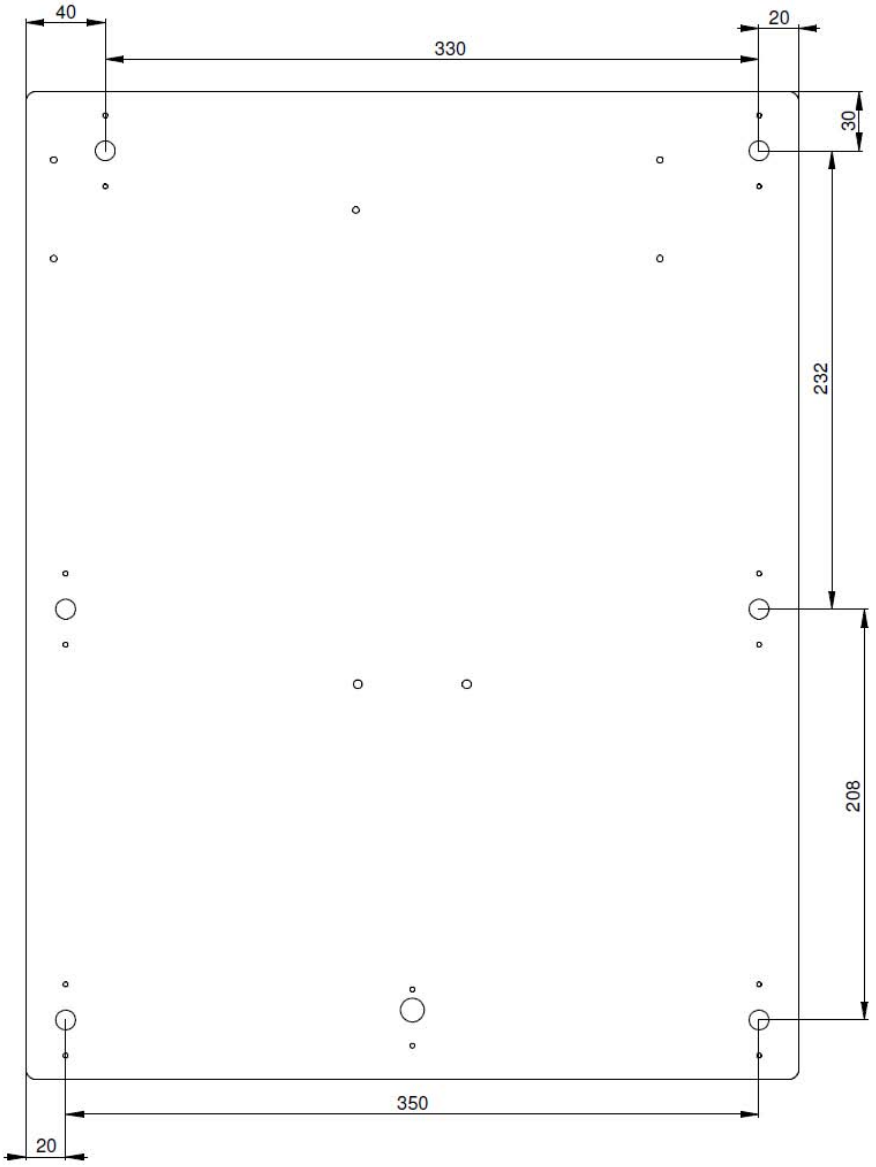
Fig. 2.4.j Pinter opened

Fig. 2.4.k Details of the printhead

Details on mounting the printer to a forklift truck:

The Mounting Plate (optional part of the printer) is equipped with 6 rubber feet.
In the bottom of each foot there is a bore hole to incorporate a M4 fastening screw.

The following drawing of the Mounting plate shows the construction offsets of the 6 rubber feet:



(Dimensions in mm)

Fig. 2.4.l Drawing of the 6 fixing holes in the Mounting Plate

Drill the 6 bore holes (threaded holes or through bores for M4 screws + nuts) into the the surface of your forklift truck (matching the target position of the printer).

Please assemble the Mounting Plate to the forklift truck using six M4 screws.
Then assemble the printer logiJET TM8 to the Mounting Plate (the locking device must engage, compare fig. 2.4.g).

2.5. Removing the Printer from the Mounting Plate

1. Remove the print media from the printer (if media is installed; details about the working steps are described in section 5.1.2).
2. Remove the mains cable (or the DC connection cable in case of the "mobile version" of the printer).

Fig. 2.5.a Printer without print media

3. Release the printer (release the locking mechanism between the printer and the Mounting Plate ; compare the following figure)

Fig. 2.5.b View from below the printer: Releasing the Mounting Plate

4. Lift the front part of the printer a little bit,

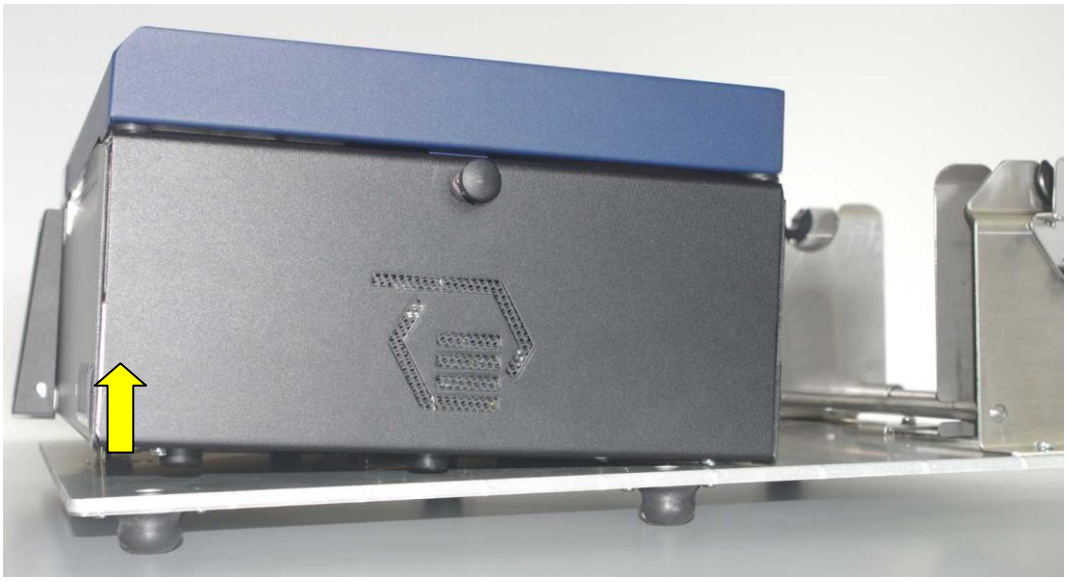


Fig. 2.5.c Side view of the released printer

5. and then carefully pull the printer about 5cm away from the media supply spindle.

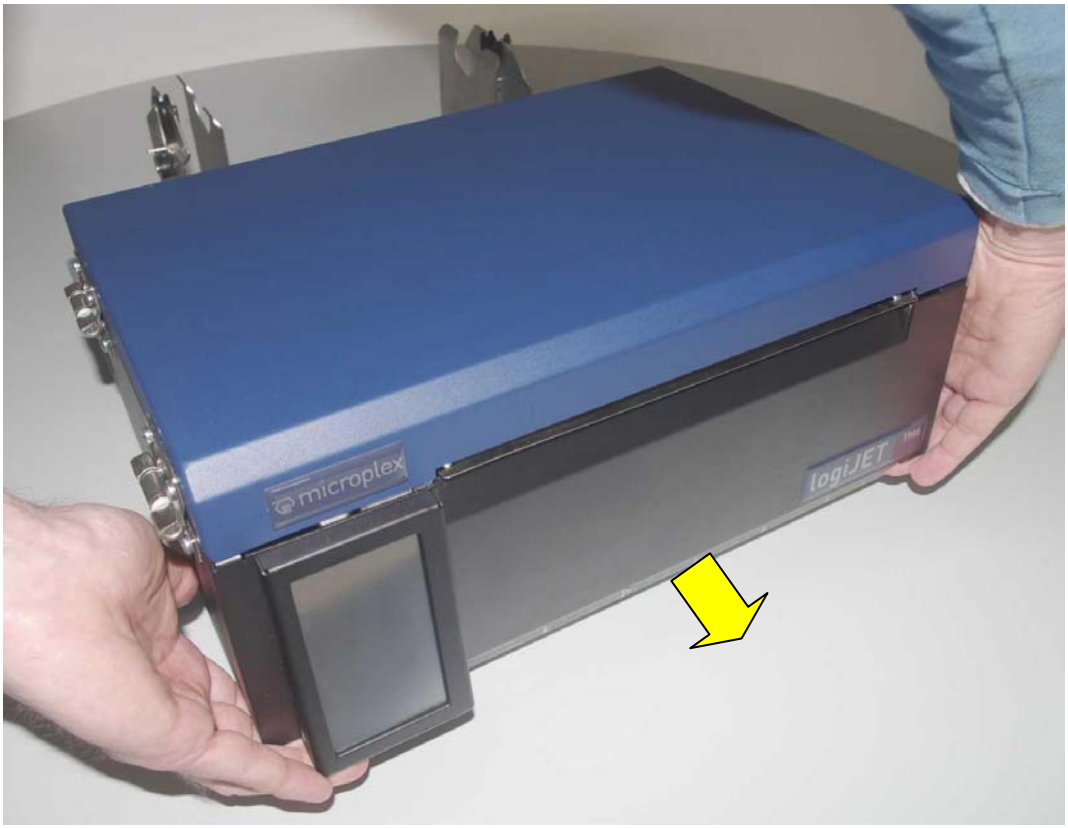


Fig.2.5.d Lifting the printer a little bit and then pulling it ca. 5cm away from the supply spindle

6. Now lift the hole printer and set it down beside the Mounting Plate:

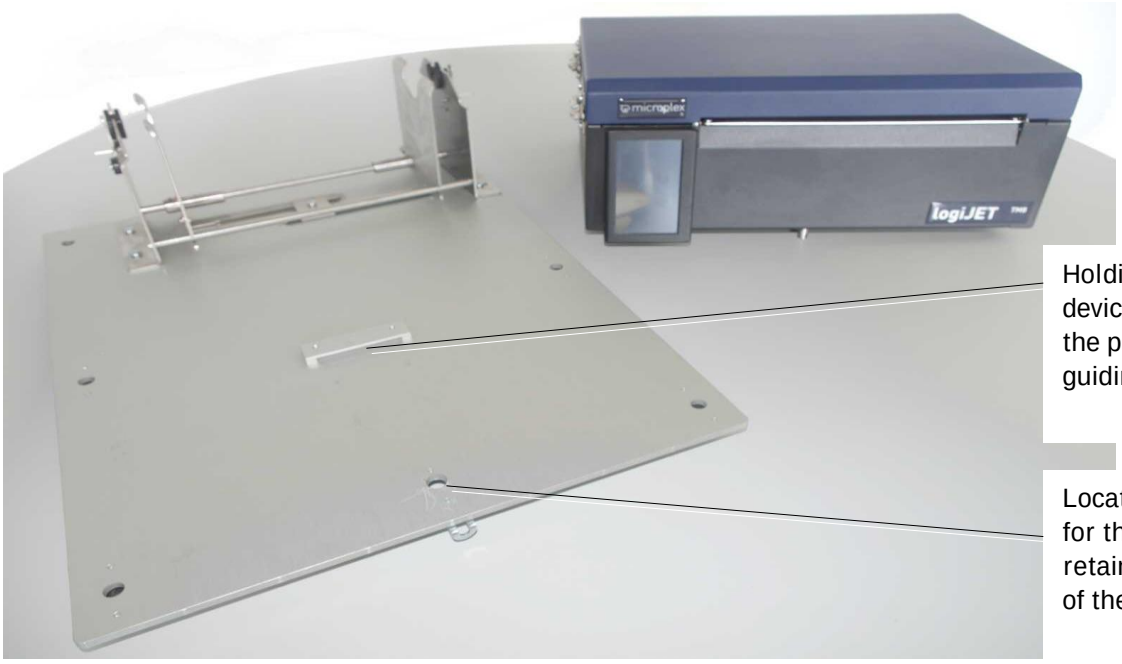


Fig. 2.5.e Details of the Mounting Plate: Guiding part and location hole

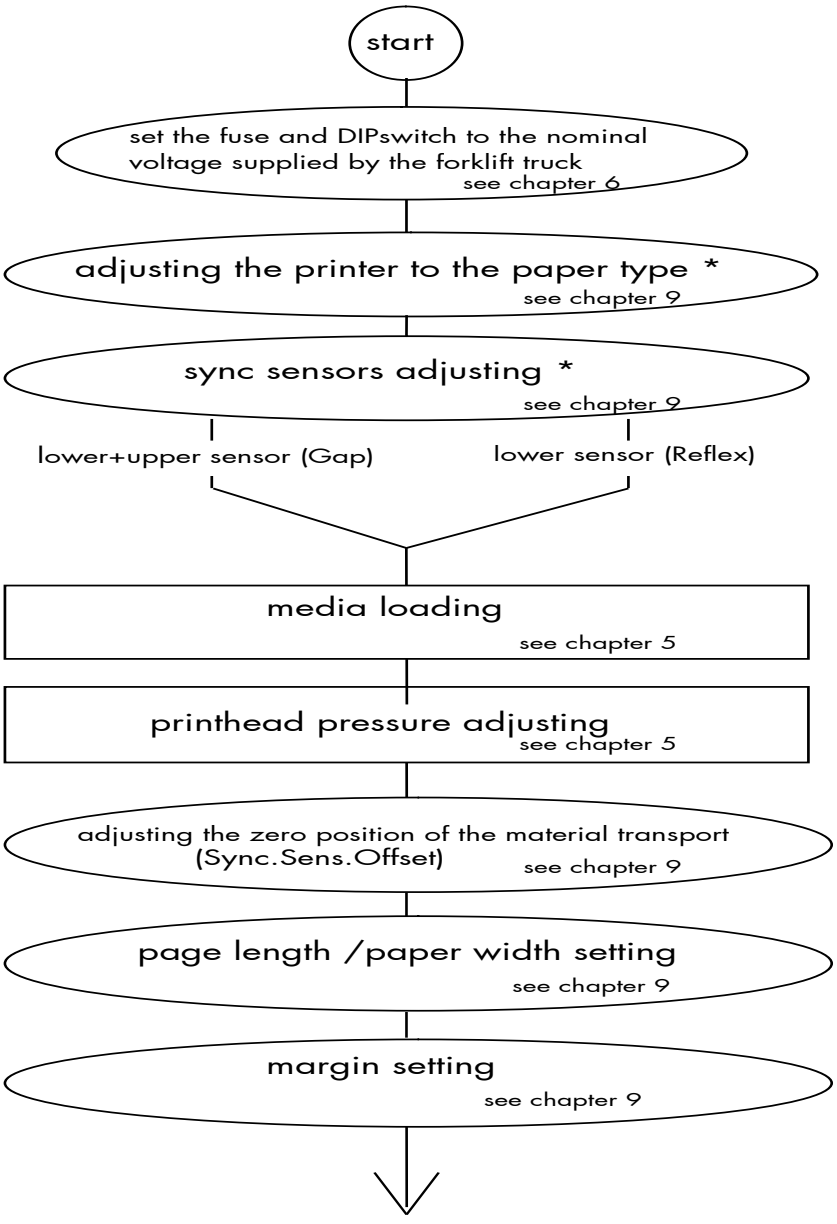
7. PLEASE NOTE:
   In case of every reassembly of the printer to the Mounting Plate it is very important to insert the guiding part of the printer (located at the underside of the printer; compare following figure) into the corresponding holding device located on the surface of the Mounting Plate. In addition the retaining bolt of the printer must engage with the location hole of the Mounting plate. All this is necessary to fix the printer on top of the mounting plate.
   So all the **working steps** described above have to be done in case of reassembly, too. But of course the steps have to be performed **in reverse order**.

Fig. 2.5.f Guiding part and Retaining bolt at the underside of the printer

Notes on the **electrical connection** of the printer can be found **in section 6.2 Printer Power Supply.**

4. Basic Operation Sequences

4.1. Overview



*) A calibration must be performed every time a media is installed in the printer for the first time and, at least, as soon as a different type of media is being used.

If the panel settings above shall be effective permanently (that means they do not have to be put in again after a printer OFF/ON) the setting values can be saved permanently by operating the ENTER key two times.

An output of the current setting values can be shown on the integrated website (WebPanel). The Status Sheet can be stored and printed, too. (See chapter 9.7 and section 7.3.5, too.)

After each material changing (print media/label material the sensors have to be suitable adjusted (via automatic adjustment or, if necessary, via sensor current and switching threshold, see section 9.2 Adjusting the Sync Sensor).

Detailed information on the operations above and to further functions of the printer logiJET TM8 can be found in the following chapters.

5. Handling of Consumables

Pay attention to the following safety instructions and the instructions listed in section 1.4, too!

Safety instructions:

- Set the DIPswitch located on the DC/DC converter PCB to the nominal voltage supplied by the vehicle's electric system and always use a suitabele fuse (details are described in chapter 6.2).

- There is a danger of fingers, hair, clothing, jewellery etc. being drawn into the machine in the vicinity of the material transport unit.
- Be careful when operating equipment with opened cover hoods (setting-up work or service). Rotating parts can cause injury, and it is possible for hair, clothing, jewellery, etc. to be caught in the machinery.
- Print material should only be inserted and changed by specially instructed personnel.

The logiJET TM8 is a thermal printer - the thermal direct printing process is used for printing.

5.1. Roll-Fed Media Handling

The printer logiJET TM8 can be used for printing on roll-fed media as well as for printing on fanfold media.
The maximum processable width of media for the logiJET TM8 is 9“ (228 mm). Up to 8,64“ (about 219 mm) of that are printable.
The **center of every print media** (paper) has to be **aligned with** the **center of the printhead**, regardless of media (paper) width.
An output of the current printer values (including the currently set paper size etc.) can be generated using the “Status Sheet“ panel function (see section 9.7).

5.1.1. Media Loading

The printer is able to process formatted media and unformatted media, too. The panel function to set the media is described in section 9.1.

Tip : To load roll-fed media for tear off respectively for further external processing go on like this:

The tear off roll-fed media is easier to insert if the end is gored before inserting as shown in the figure below (when using a new roll you should first remove the protection foil if necessary and discard one full turn of the media).

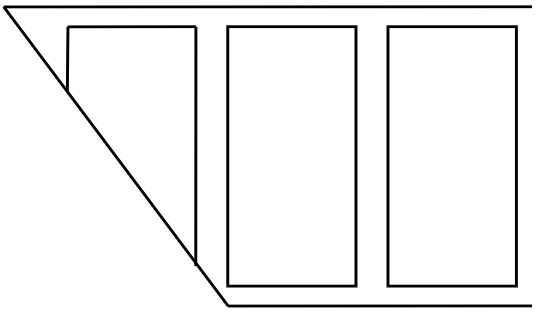


Fig. 5.1.1.a Goring the tear off roll-fed media

1. Switch the printer to OFF LINE mode.

2. Pull the handle of the printer cover to unlock the cover.

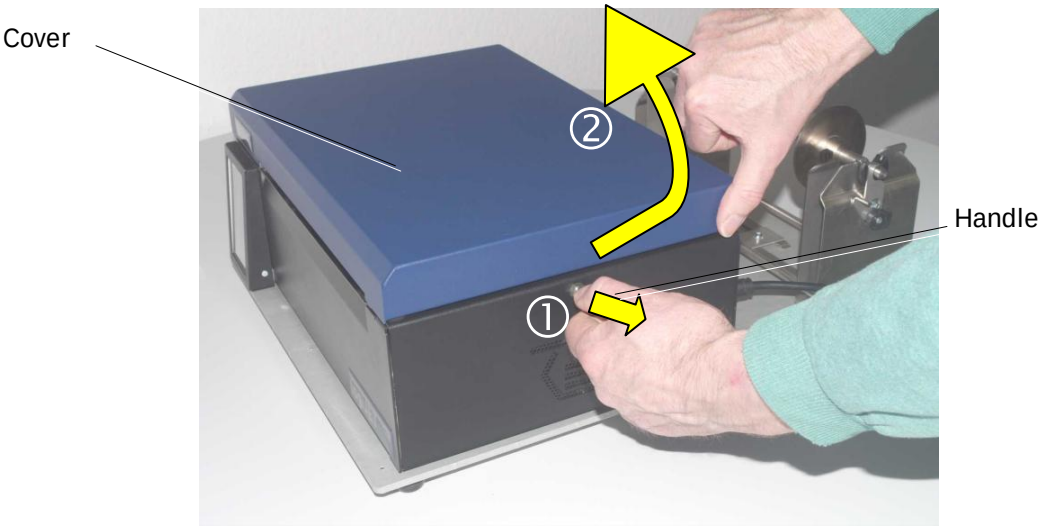


Fig. 5.1.1.b Pulling the handle and opening the printer cover

3. Open the printer cover completely.
(swivel the cover to a vertical position).

4. Unlock the printhead assembly by pushing the printhead release lever.

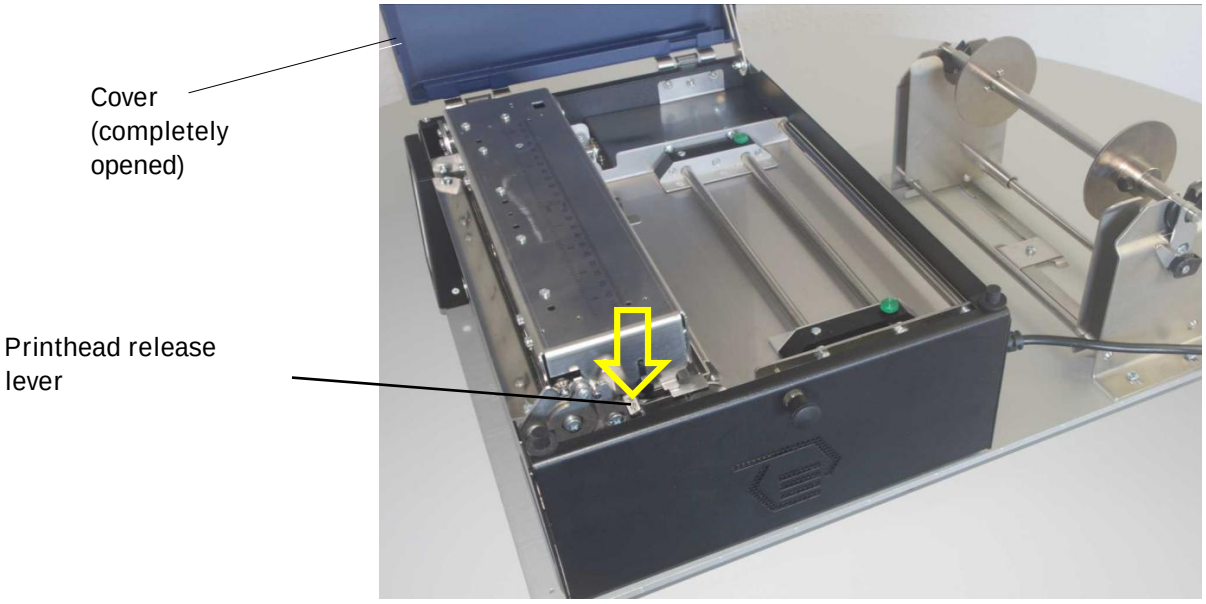


Fig. 5.1.1.c Unlocking the printhead assembly

5. Raise the printhead assembly to a vertical position (compare figure 5.1.1.e).

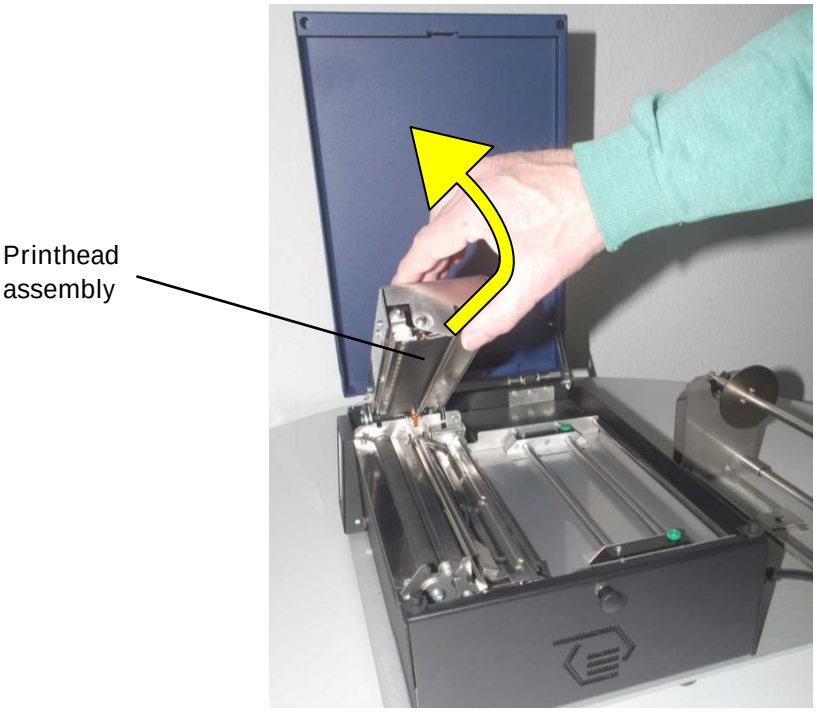


Fig. 5.1.1.d Raising the printhead assembly

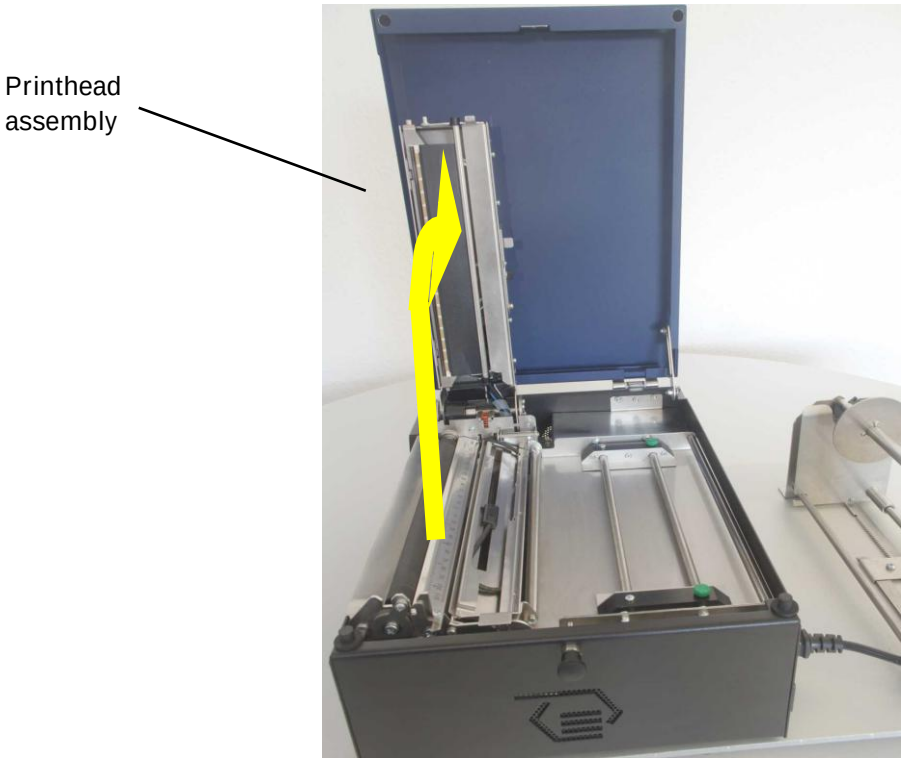


Fig. 5.1.1.e Printhead assembly raised to a vertical position

6. Unlock the guide by pushing its lever and raise the guide until it stops (as shown in the following figures).

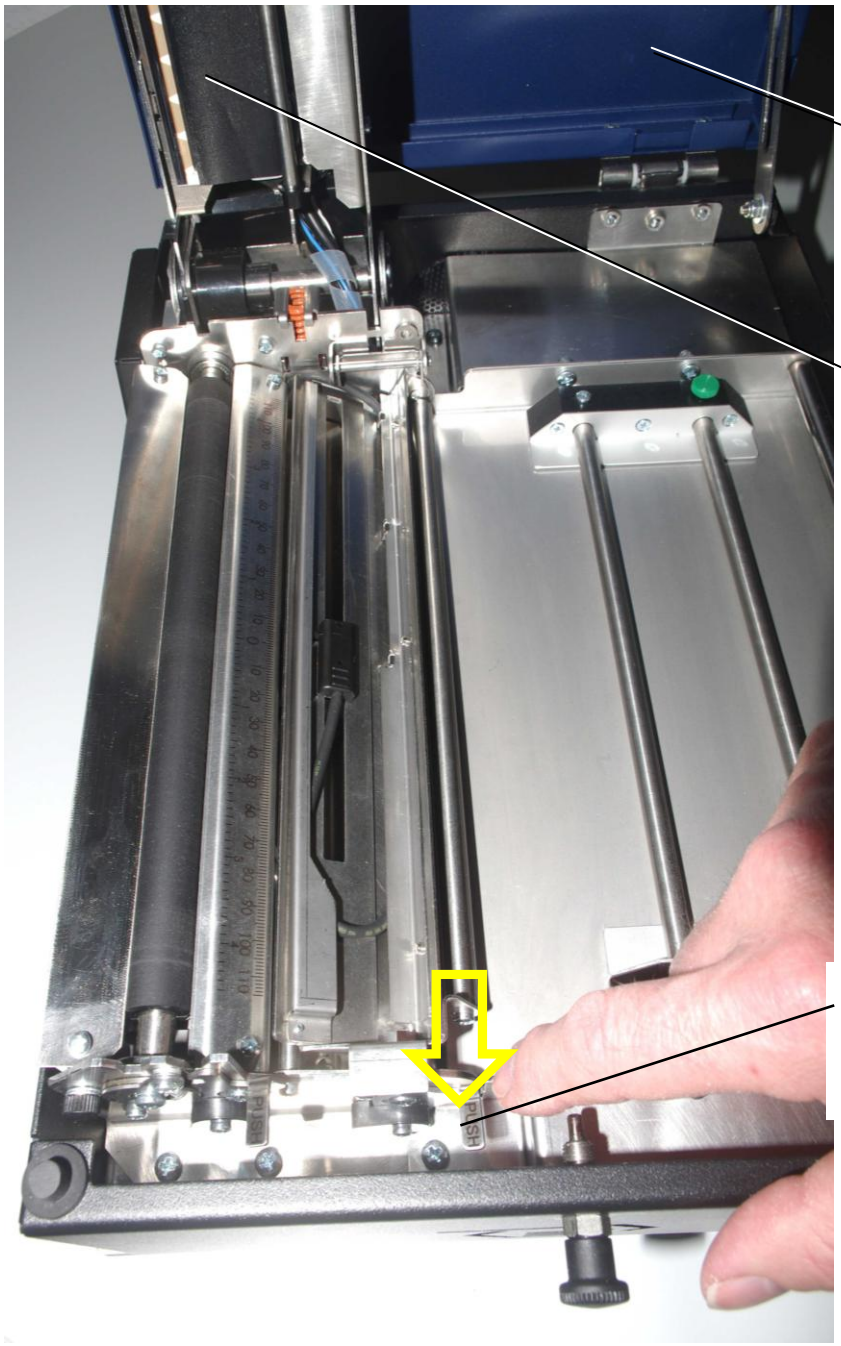


Fig. 5.1.1.f Unlocking the guide of the transparent sensor

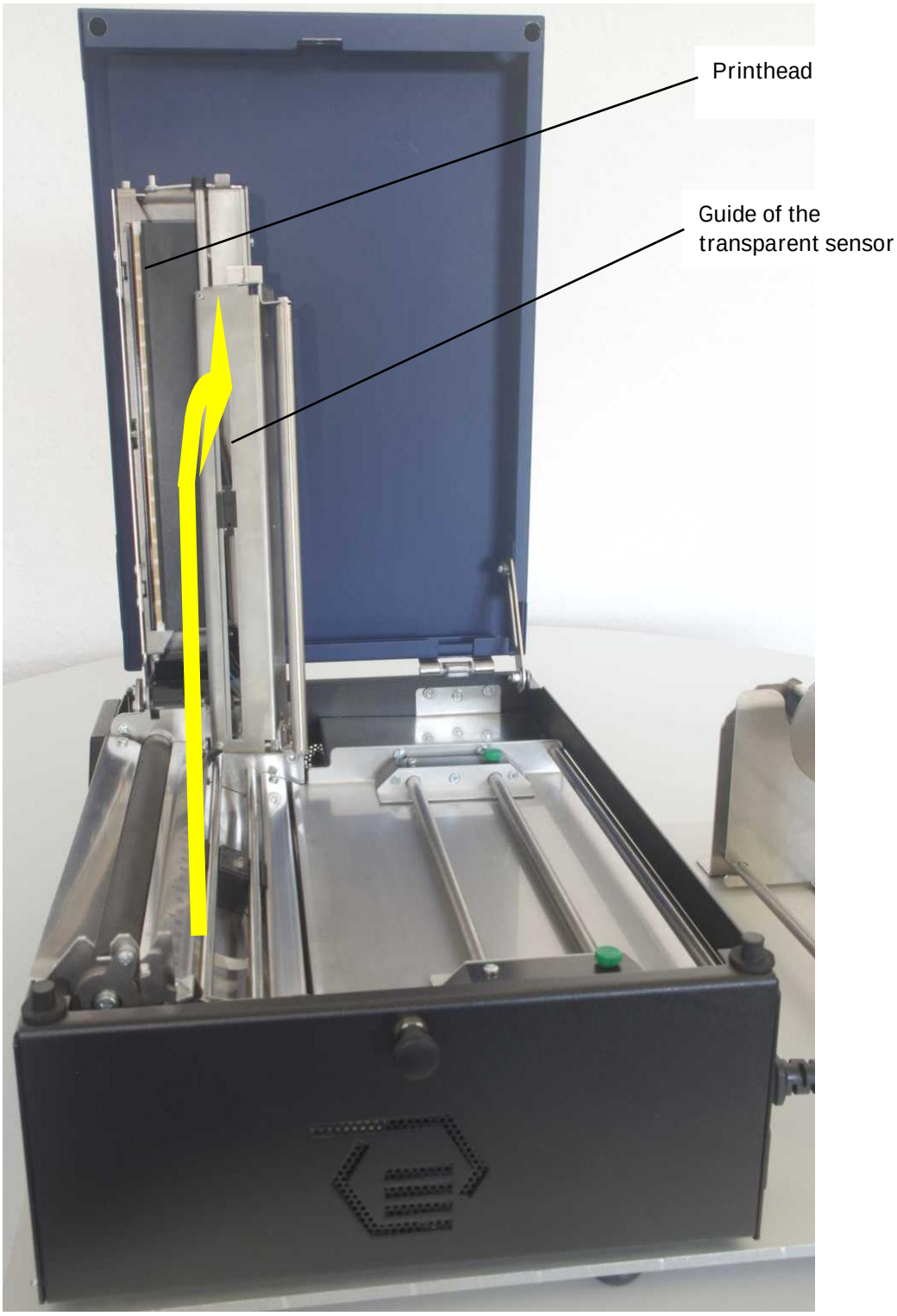


Fig. 5.1.1.g Raising the guide of the transparent sensor

7. Loosen the 2 fastening screws of the paper guide and adjust this paper guide to a width larger than the future paper width.

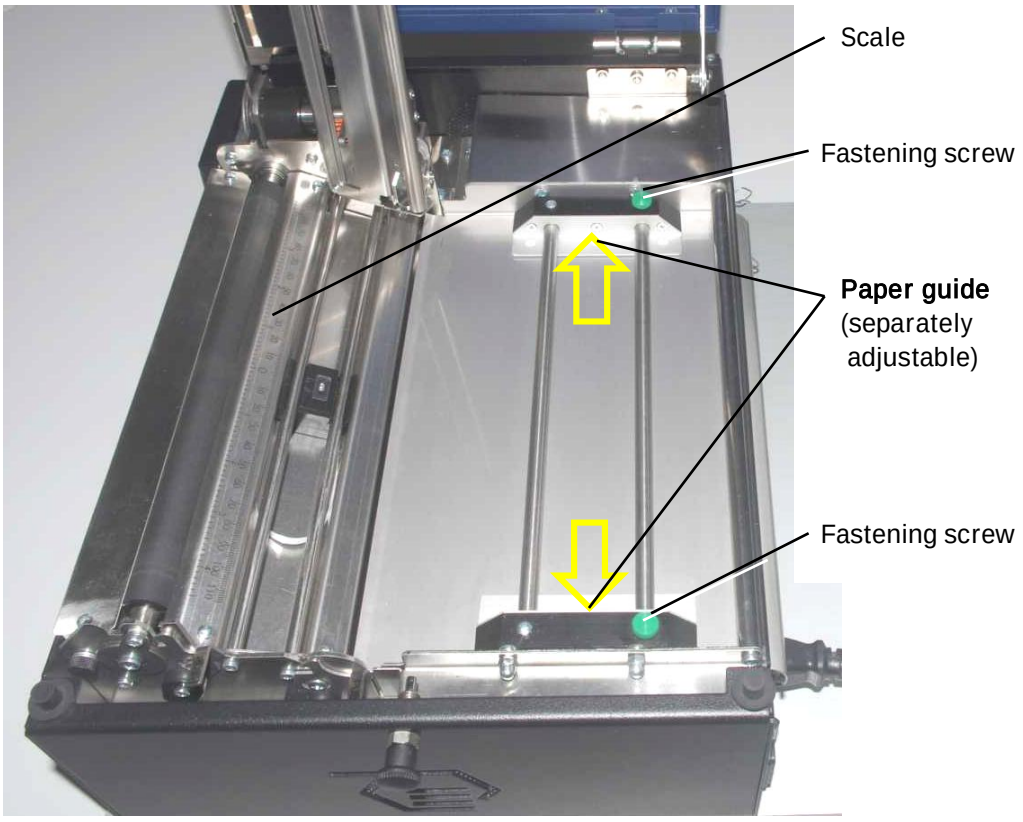


Fig. 5.1.1.h Roughly adjusting the paper guide to new paper width

8. Unlock the media supply spindle and remove.

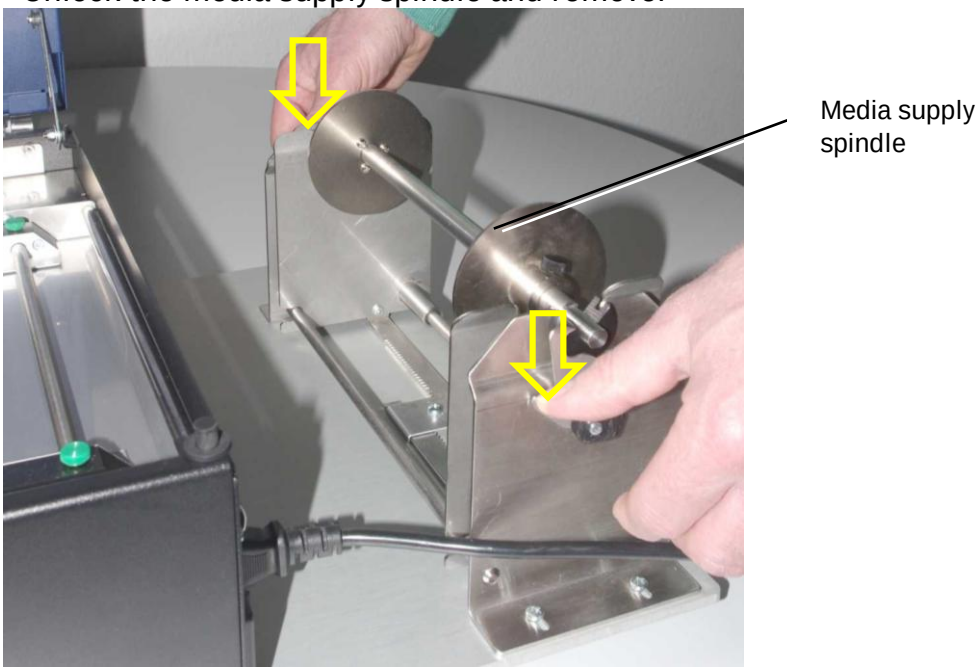


Fig. 5.1.1.i Unlocking and removing the Media supply spindle

9. Loosen the two fixing screws belonging to the two guide disks of the media supply spindle and then adjust the two Guide disks to a distance slightly smaller than the width of your media roll. (And the disks have to be positioned "centered" because the printers paper path is centered, too. Please note the scale inside the paper path.)

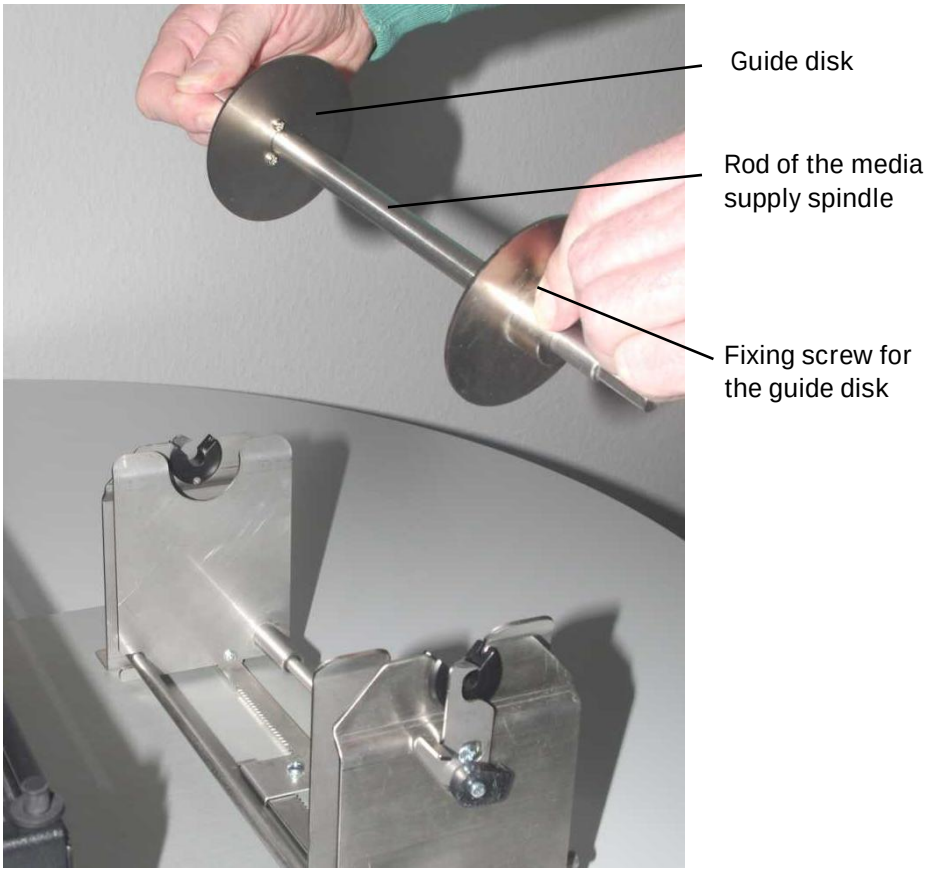


Fig. 5.1.1.j Adjusting both Guide disks of the media supply spindle

10. Take the roll-fed media for tear off (f.e. paper), find out the right direction of unwinding and then hold the media roll in the corresponding way.

11. Take the media supply spindle and move it into the core of the media roll (compare Fig. 5.1.1.k). Both guide disks should just be covered by the media roll. You may have to readjust the two guide disks to reach this aim – please don't forget to fix the guide disks after the adustment by using the fixing screws.

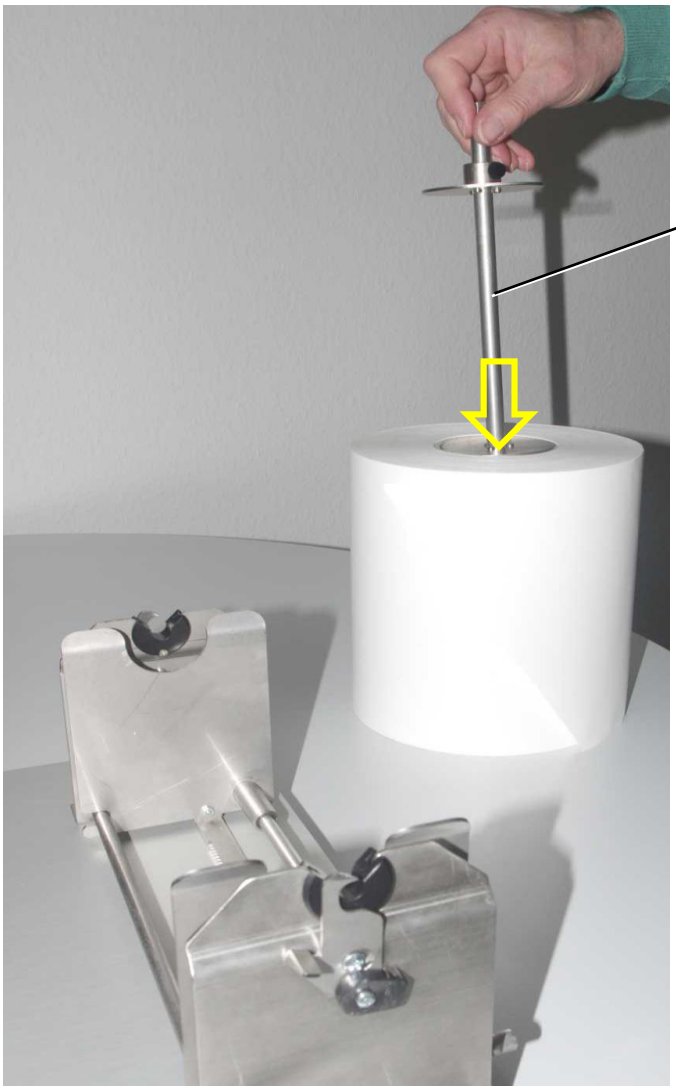


Fig. 5.1.1.k Moving the Media supply spindle into the media roll

12. Loosen the fastening screw for the 2 guides of the roll holder (these guides are mecanically centered; compare the following figure) and move the 2 guides to the outside.

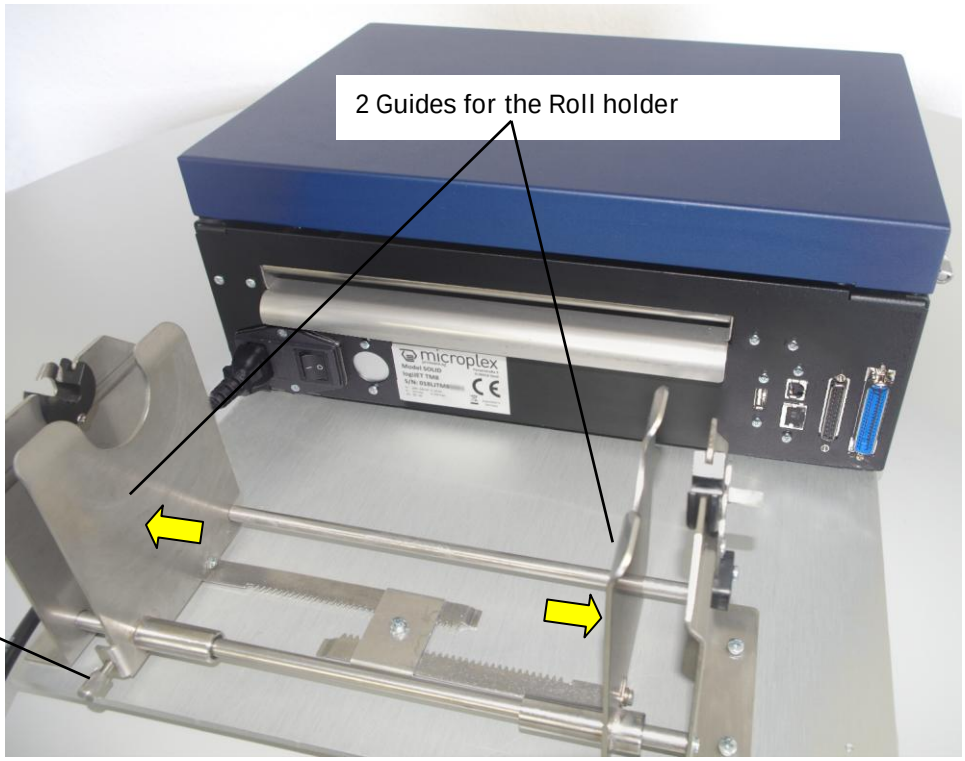


Fig. 5.1.1.l Moving the 2 Guides for the Roll holder to the outside first

13. Mount the Media supply spindle (together with the media roll) to the Roll holder (both safety levers have to engage; compare the following figure).

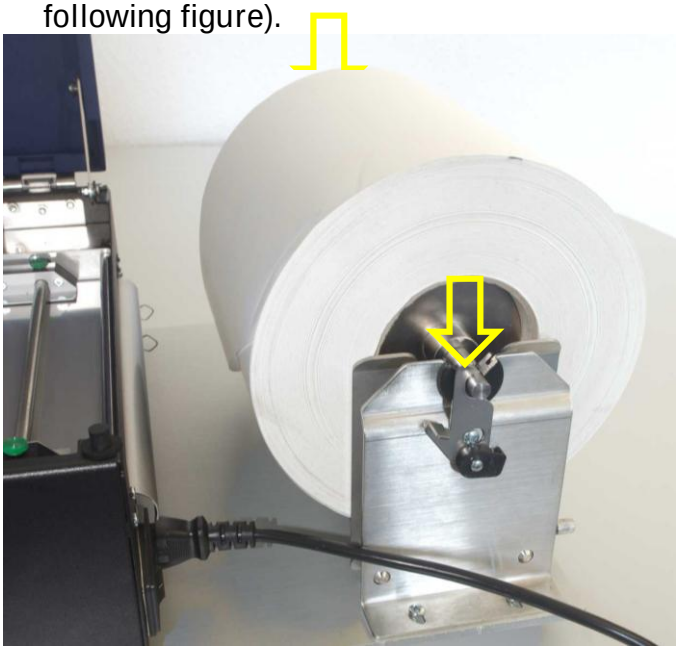


Fig. 5.1.1.m Mounting the Media supply spindle (+ media roll) to the Roll holder

14. Now move the 2 Guides of the Roll holder towards the media roll (Not with too much force to prevent damage of the media.The media roll should be easy to turn) .

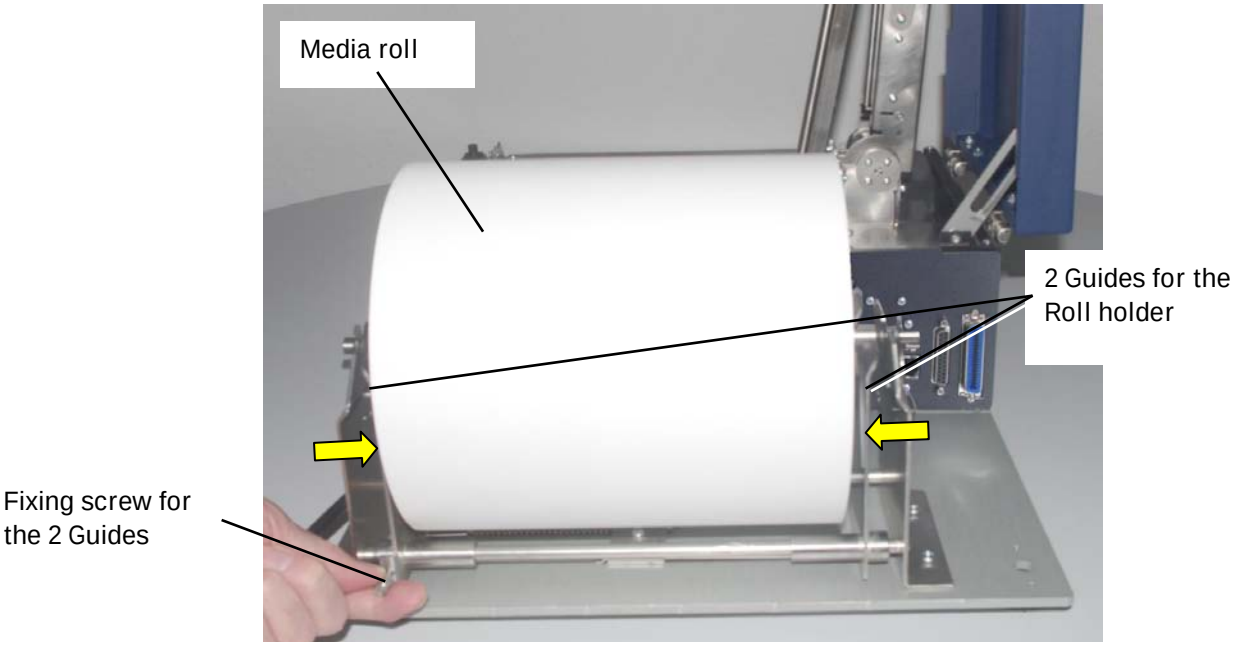


Fig. 5.1.1.n Moving the 2 Guides for the Roll holder towards the Media roll and tightening the fixing screw

The 2 Guides for the Roll holder work together in a centred way:

15. Please check the lateral position of the Media roll on the Media supply spindle and optimize it, if need be. After that tighten the Fixing screw to fix the position of the 2 Guides.

16. Take the free end of the roll-fed media and move it through the paper input opening into the printer.

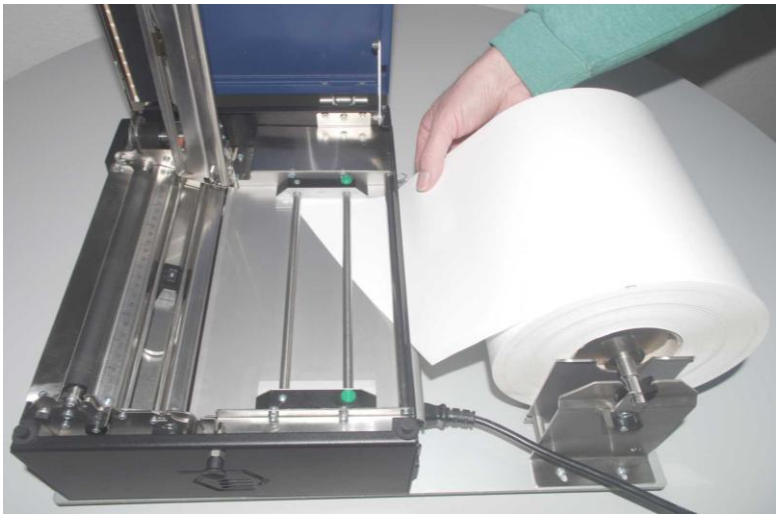


Fig. 5.1.1.o Moving the media into the printer

17. Route the media along the paper path (below the 2 "rods"; compare figure 5.1.1) and out to the front of the printer. Finally the media has to jut out over the platen roller.

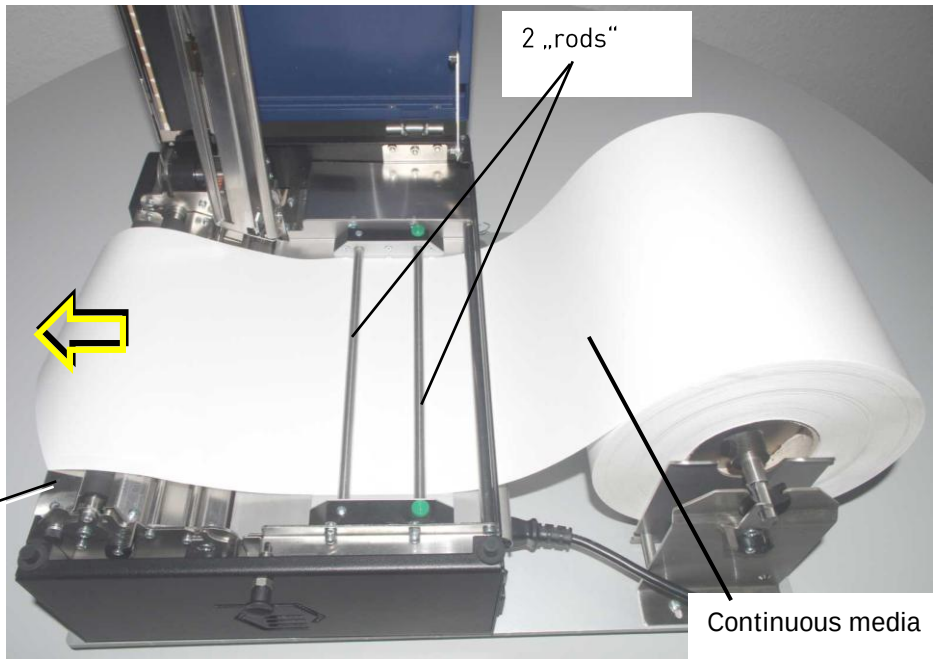


Fig. 5.1.1.p Continuous media loading

18. Move both parts (one part after the other) of the paper guide towards the continuous media until the media is slightly touched.

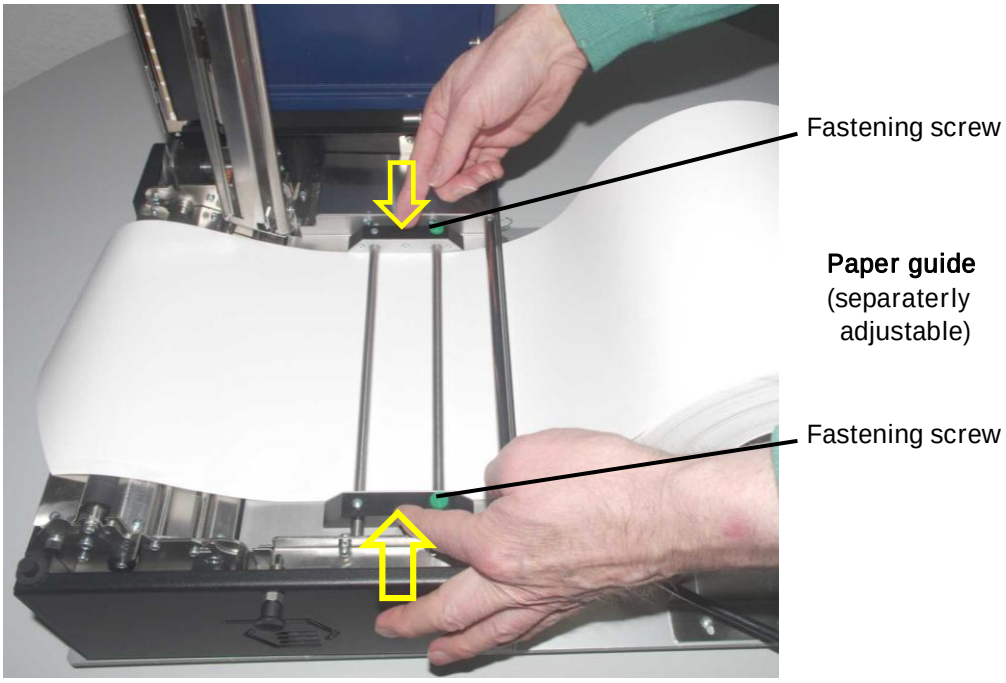


Fig. 5.1.1.q Adjusting the paper guide

19. Now use the 2 fastening screws to fix the position of the paper guide:

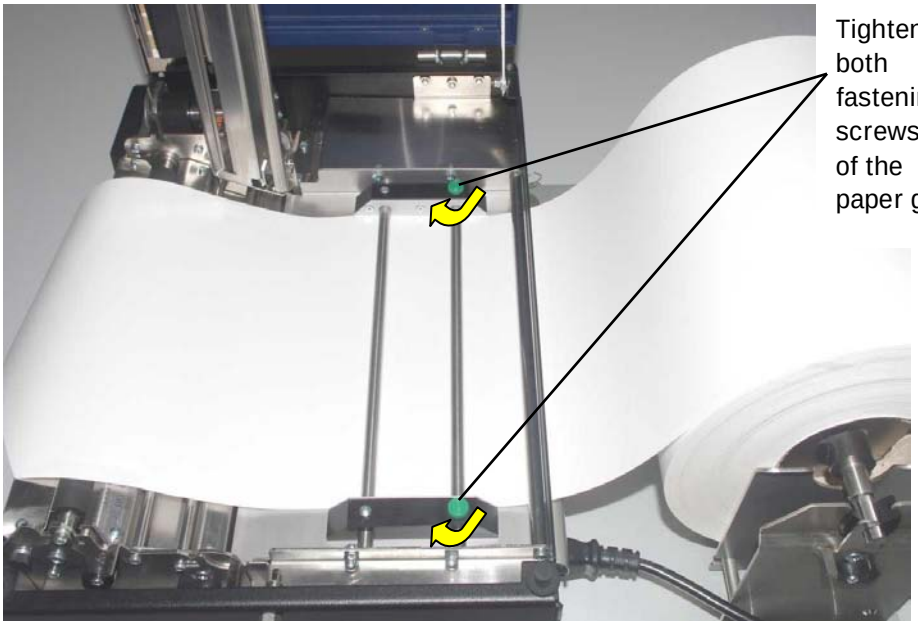


Fig. 5.1.1.r Adjusting the paper guide

20. Swivel the printhead asembly's transparent sensor guide downward and push it down gently until ist clicks into place.

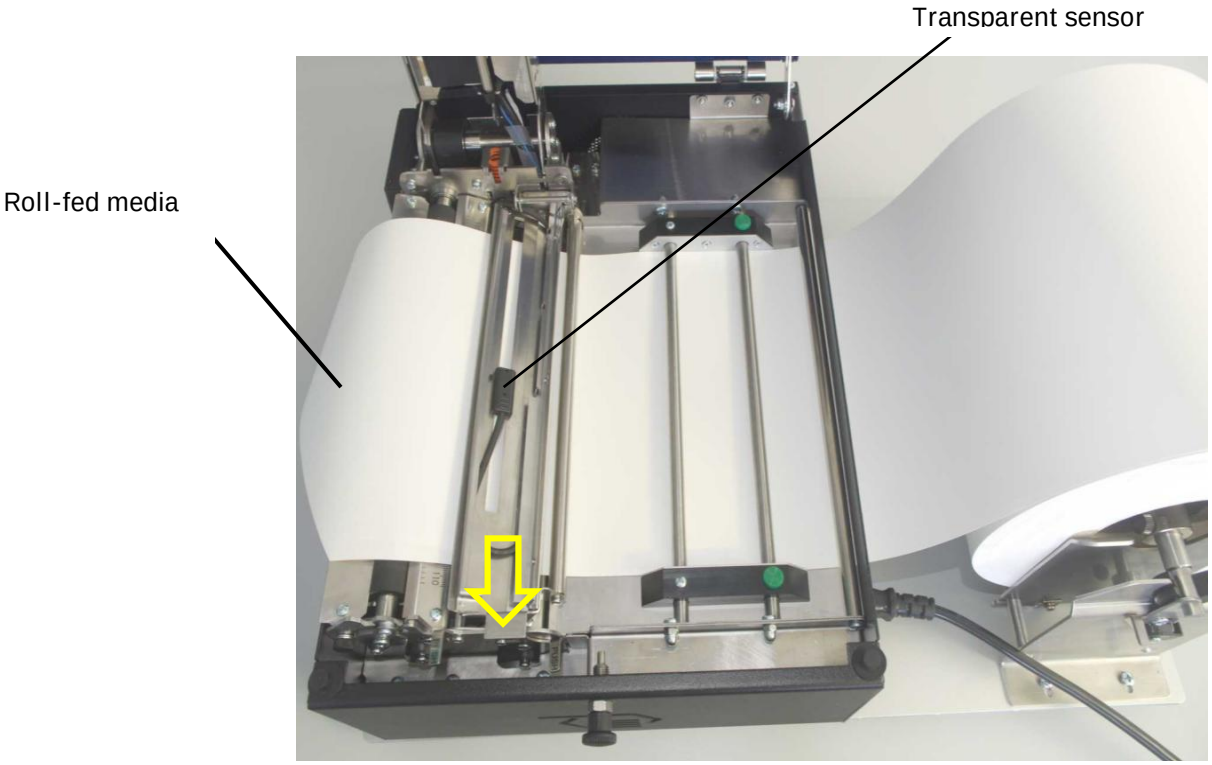


Fig. 5.1.1.s Swivelling down the transparent sensor guide

21. Now check the straight course of the media along the printer's paper path. Please optimize the adjustment of the paper guide,

if need be. You can use the scale located on the printhead housing to reach a **centered** and straight paper transport:

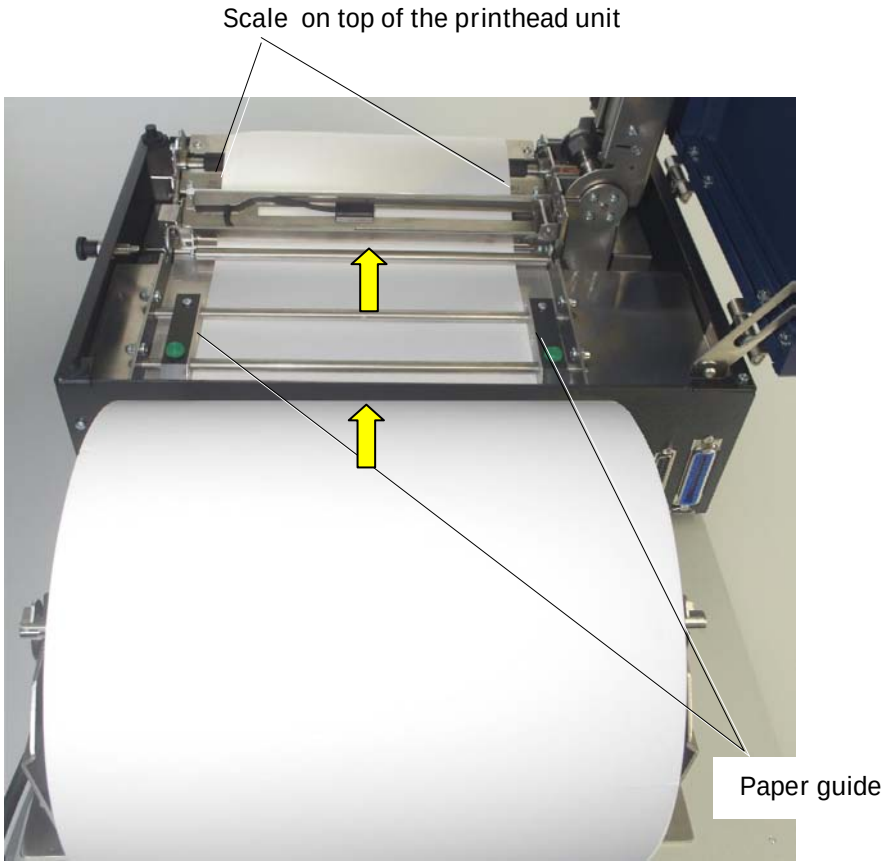


Fig. 5.1.1.t Checking the straight course of the media

Please note: For a trouble-free operation of the printer a straight media transport is necessary. Please take time to carry out a thorough inspection and please carry out any necessary correction.

Hint: The **adjustment of the** printer's **sensors** (for example for media with blackmarks or punched label material) is described in section 9.1 and section 9.2.

22. Now swivel the complete printhead assembly downward and push it down gently until it clicks into place.

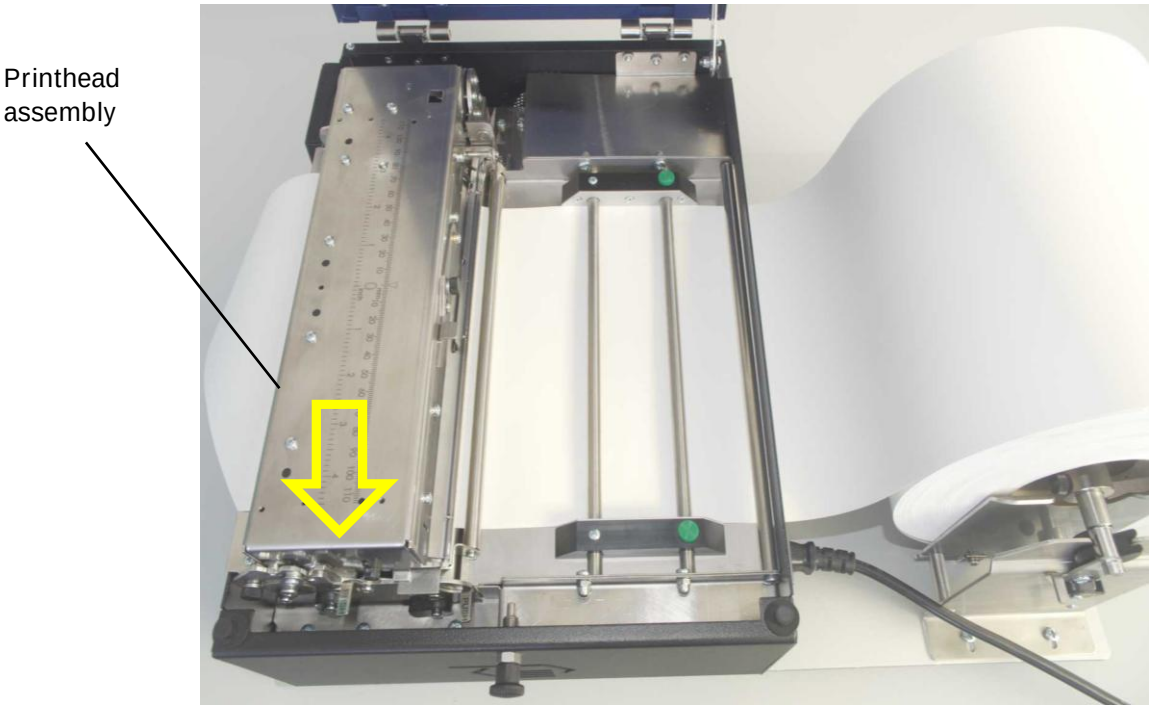


Fig. 5.1.1.u Swivelling down and locking the printhead

23. Close the printer's cover.

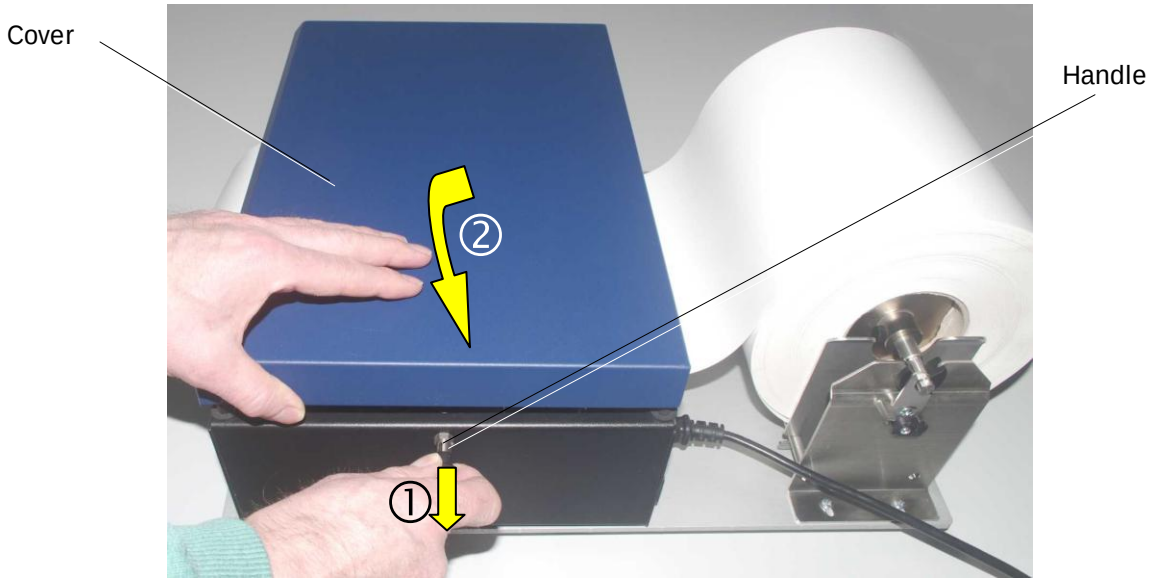


Fig. 5.1.1.v Pulling the handle and closing the printer cover

24. Before you start the printer please read chapter **6 Installation**.

5.1.2. Media Removal

1. Switch the printer to OFF LINE mode.

2. Open the printer cover completely
(swivel the cover to a vertical position).

3. Unlock the printhead assembly by pushing the printhead release lever.

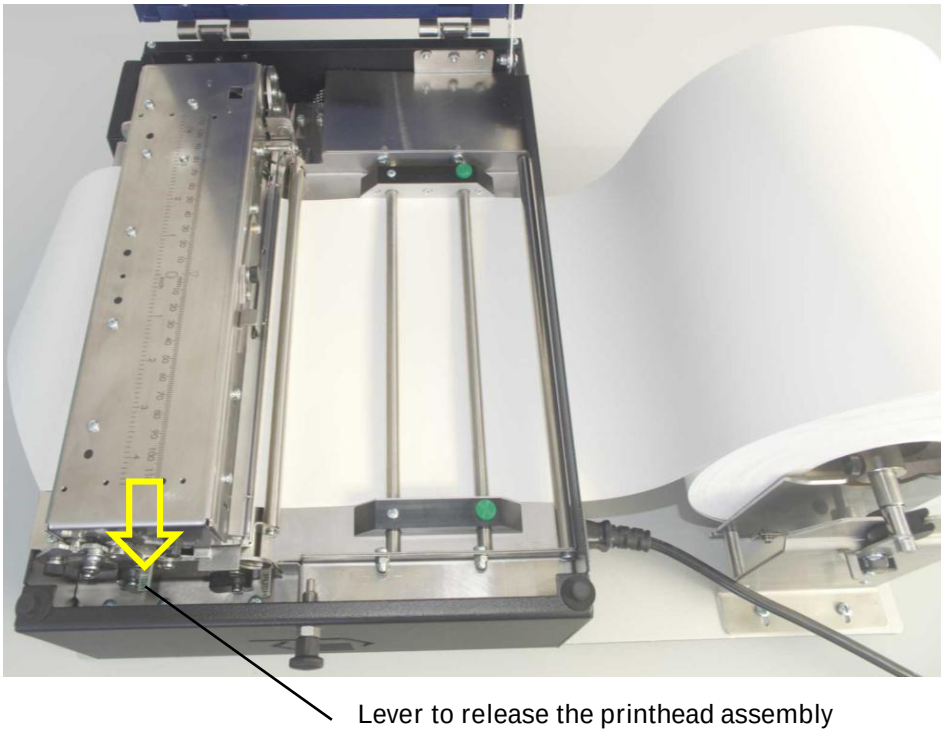


Fig. 5.1.2.a Unlocking the printhead assembly

4. Raise the printhead assembly to a vertical position.

Caution! The printhead and the platen roller may be hot.

5. Unlock the transparent sensor guide and raise it until it touches the printhead assembly.

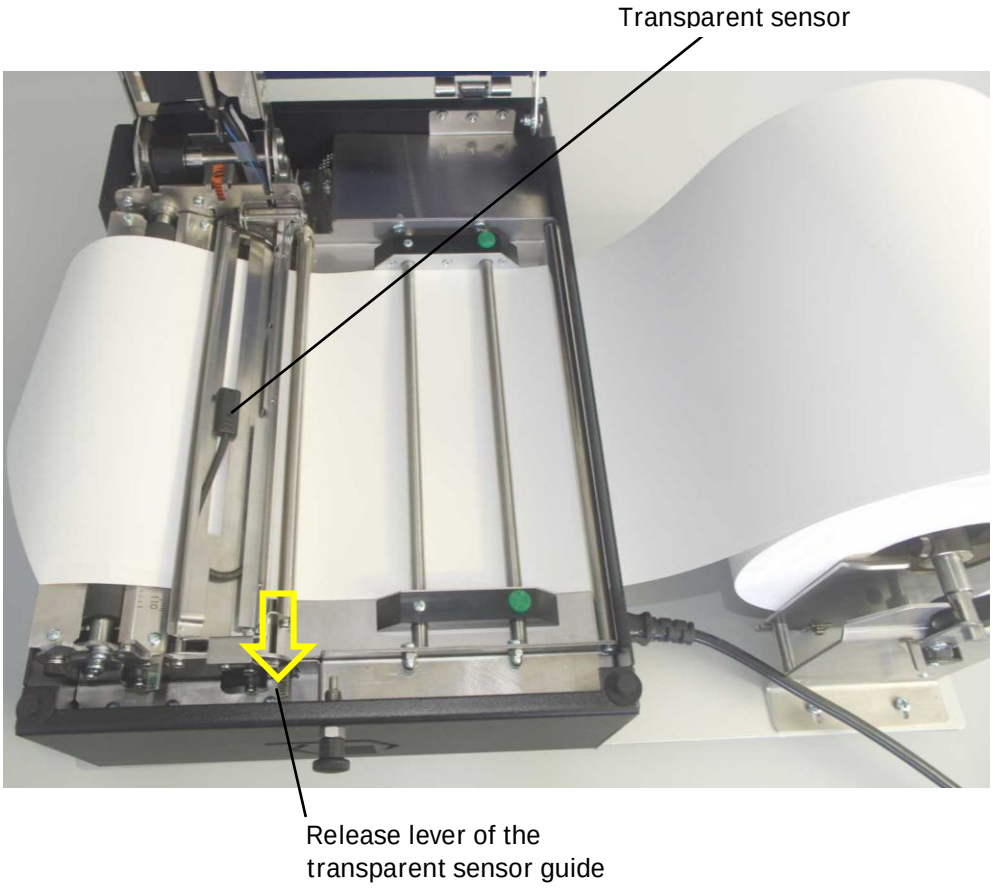


Fig. 5.1.2.b Unlocking the transpaent sensor guide (in order to raise it)

6. Take the media out of the printer by pulling it to the back side of the printer.

7. Remove the old roll-fed media (or in case of z-folded paper: remove the box containing the print media from behind the printer, if need be).

8. Now you can load the new media to the printer.
Please perform the working steps described in the prior section called "Media Loading".

Please note: In order to prevent the printer's interior from dust pollution etc. be sure to perform the following work steps:

9. Swivel downward the transparent sensor guide, and push it down gently until it clicks into place.

10. Swivel downward the printhead assembly, and push it down gently until it clicks into place.

11. Close the cover of the printer.

5.2. Printhead Pressure Adjusting

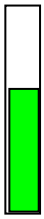
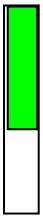
A correction of the pressure value of the printhead is necessary, if the thickness of the new printmedia is bigger or smaller than the previous one.
In addition the pressure value can be modified in order to adapt the characteristics of the consumables. An increase of the pressure value of a printhead, for example, can improve the transfer of the image onto the printmedia.
While printing narrow media the printhead may come in contact with the platen roller just in that area that isn't covered by the media. This may lead to an accelerated abrasion of the printhead and to a print quality that isn't even over the whole print width.

The operation steps to adjust the pressure value are described on the following pages.

Please consider that increasing the pressure value will increase the friction between printhead, printmedia and the platen roller, too. The abrasion of the concerning components (for example the printhead surface) will be accelerated considerably due to the increase of the pressure value.

For normal paper and labels (media with little stiffness), the printhead is adjusted at factory to the "0" position.

Guide to find the right printhead pressure value:

Tags/Cards	Labels	Scale
		- 0 - 5 - 10

For medium thickness cards (moderate stiffness), set the printhead adjustment lever to the middle of the range (scale "5").
For very thick media (stiff tags or cards), set the adjustment lever to the "10" position.

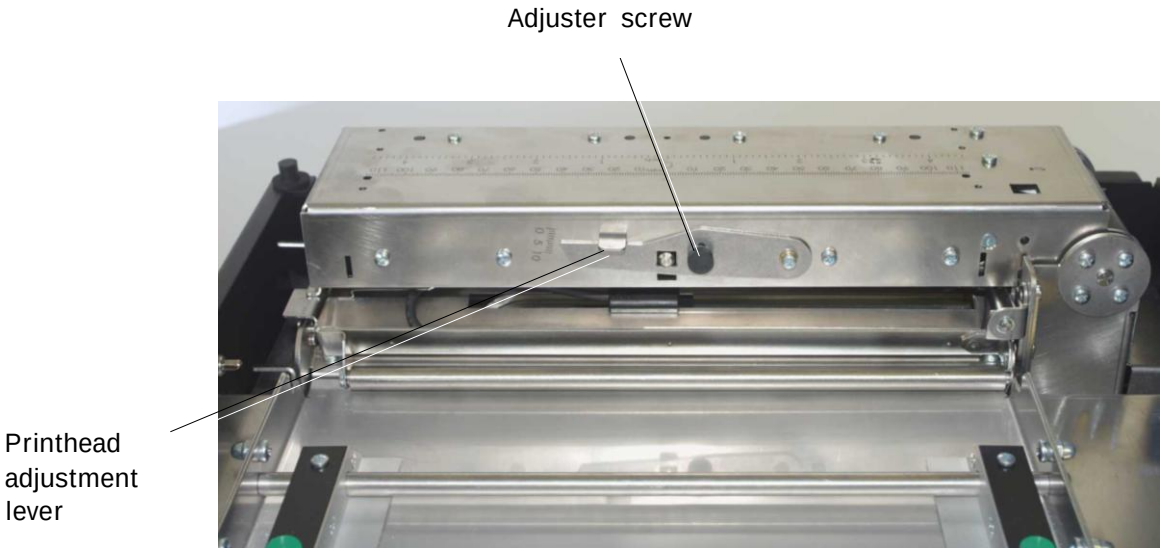


Fig. 5.2.a The black Adjuster screw has to be loosen for adjustments

Steps to adjust the printhead pressure

To change the position of the adjustment lever:

1. Loosen the small black adjuster release screw.

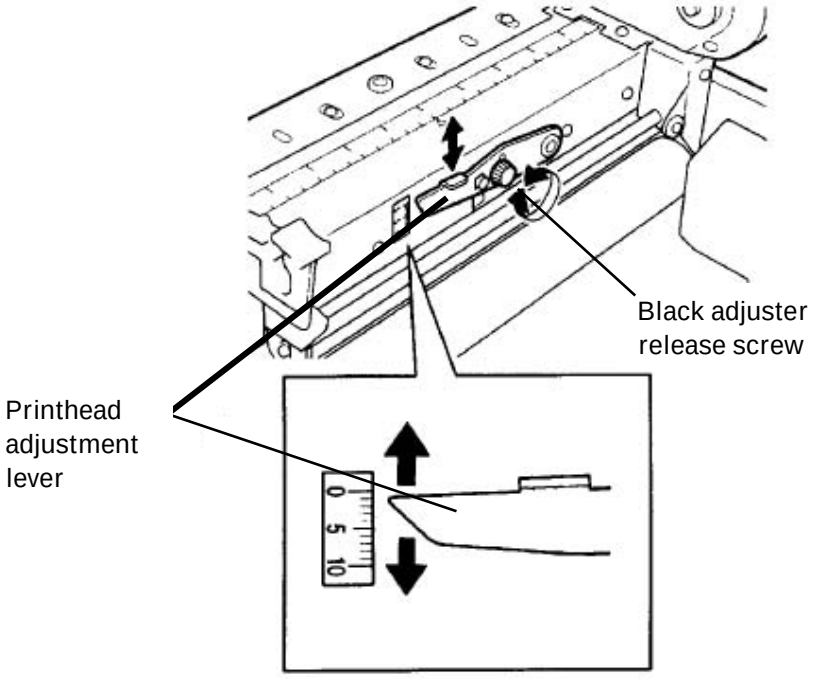


Fig. 5.2.b Adjusting the printhead pressure

2. Slide the printhead adjustment lever to the required position.

3. Re-tighten the black adjuster screw.

4. Ensure the black adjuster screw is tightened firmly to avoid it moving in operation.

6. Starting up

6.1. Attaching the Printer to a Network/PC

Fig. 6.1.a Rear view of the printer (here: 230 V – version)

1. Make sure the printer, the computer, and any other attached devices are turned off and unplugged.

2. Use a proper interface line to connect the printer to your computer or to the network.
   The printer logiJET TM8 is provided with several interfaces. See figure above and chapter 13 Specifications.

6.2. Printer Power Supply

Please notice the instructions given in chapter 5 Handling of Consumables.

1. Make sure that the printer is turned off. The power switches are located at the back of the printer (next to the paper input opening of the printer, see figure 6.2a).

2. Connecting the Printer to the Power Supply

Either Connecting the Mains Voltage

2a. Plug one end of the printer mains power cord into the socket at the back of the printer and the other end into a properly grounded outlet.

Fig. 6.2.a Rear view of the printer (here: 230 V – version)

2b. The power switch is located at the back side of the printer (at the lower right corner of the printer (see figure above).

2c. Continue with section 6.3 Turning on the Printer.
(The following pages relate only to the 24V,36V,48V printer versions)

or Connecting to the electric system of the Forklift Truck (Option)
The details are described on the following pages !

Rear view of the logiJET TM8 for forklifts (Option):

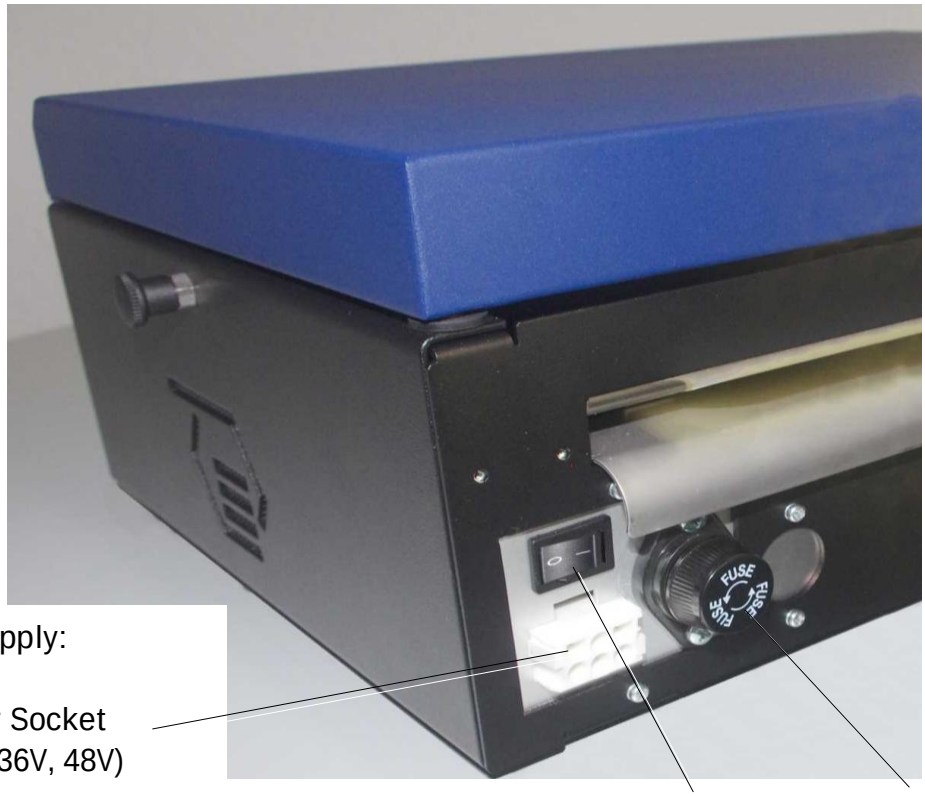


Fig. 6.2.b Rear view of the printer (24V, 36V, 48V – Version)

The printer is preset to 24V power supply at the factory.

If the printer has not yet been set to the voltage of the forklift truck, the following steps 2b up to 2k are required. Otherwise, please continue with step 2m.

2b. Lay out a cloth on your workbench (protection against scratching the printer cover). Then carefully place the printer "on its back" to gain access to the underside of the printer.

2c. Use a Phillips screwdriver to loosen the 2 lower fastening screws of the right side cover and remove the 2 screws (please keep them until you remount the printer).

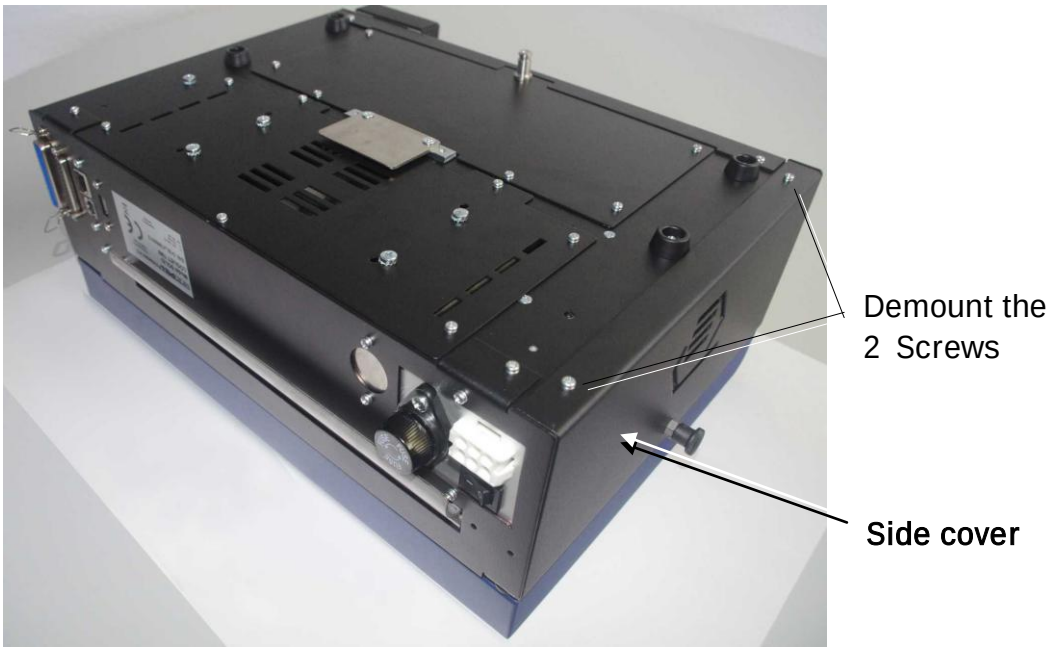


Fig. 6.2.c Underside of the printer: position of the 2 lower screws of the side cover

2d. Put the printer on his feet again.

2e. Open the printer cover.

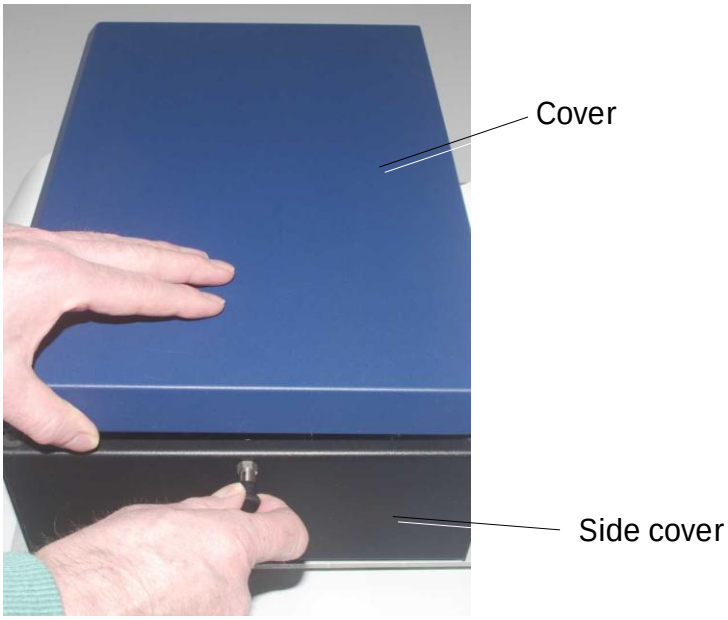


Fig. 6.2.d Unlocking the cover and swivelling the cover to a vertical position

2f. Loosen the 2 upper fastening screws of the right side cover by hand (see the following figure, these two screws are equipped with "rubberheads". After removing lay the 2 screws aside for later reassembly).

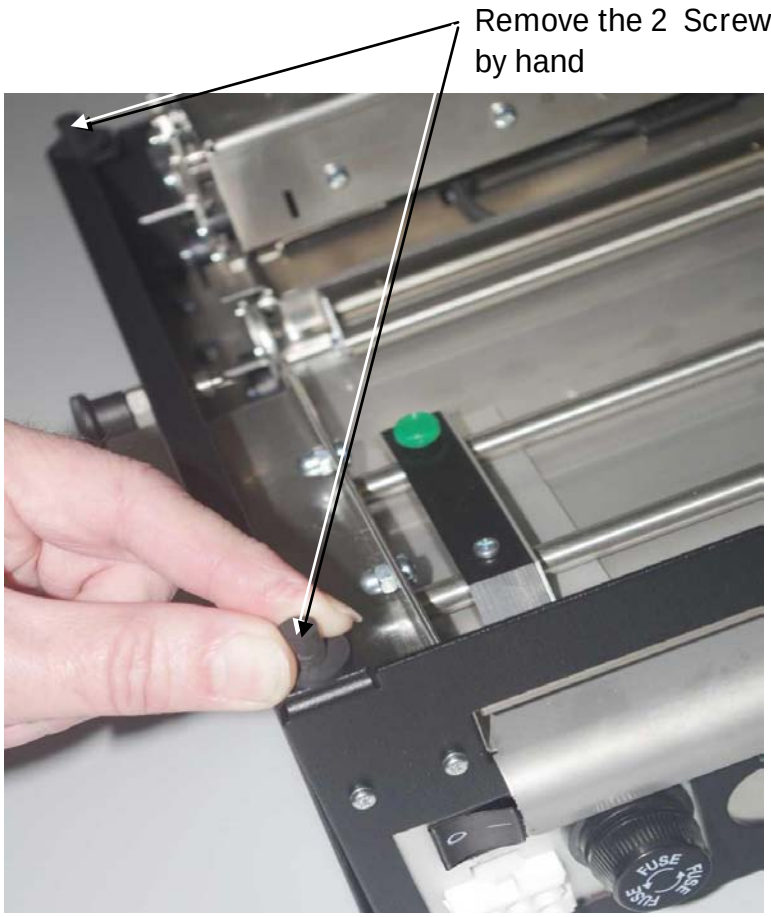


Fig. 6.2.e Remove the 2 upper fastening screws of the side cover

2g. Remove the side cover from the printer cabinet and lay the side cover aside (for later remounting).

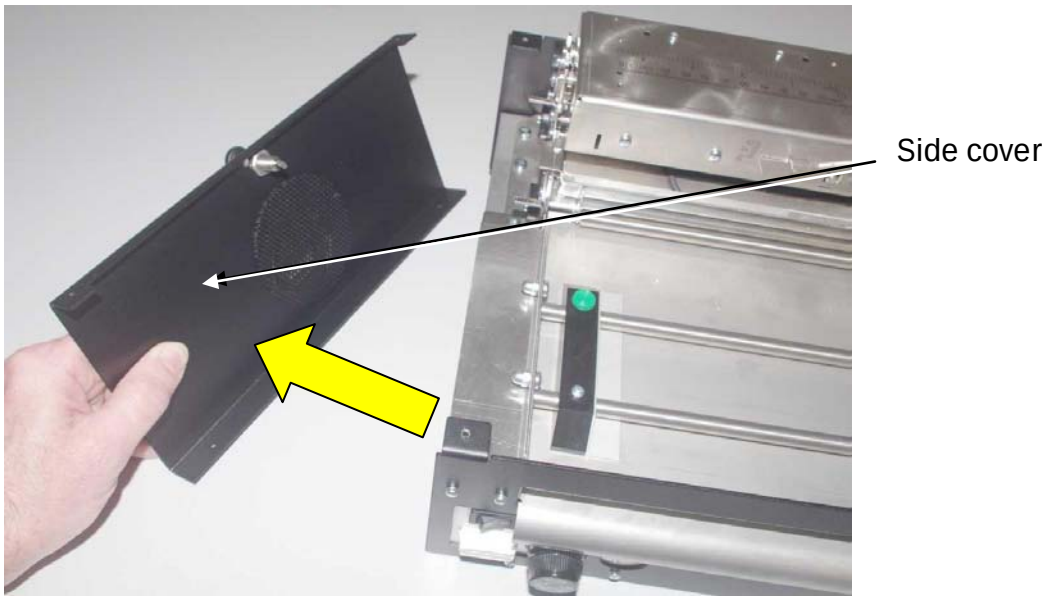


Fig. 6.2.f Remove the side cover of the printer and lay it aside

After removing the side cover the internal components of the power supply of the printer are visible:

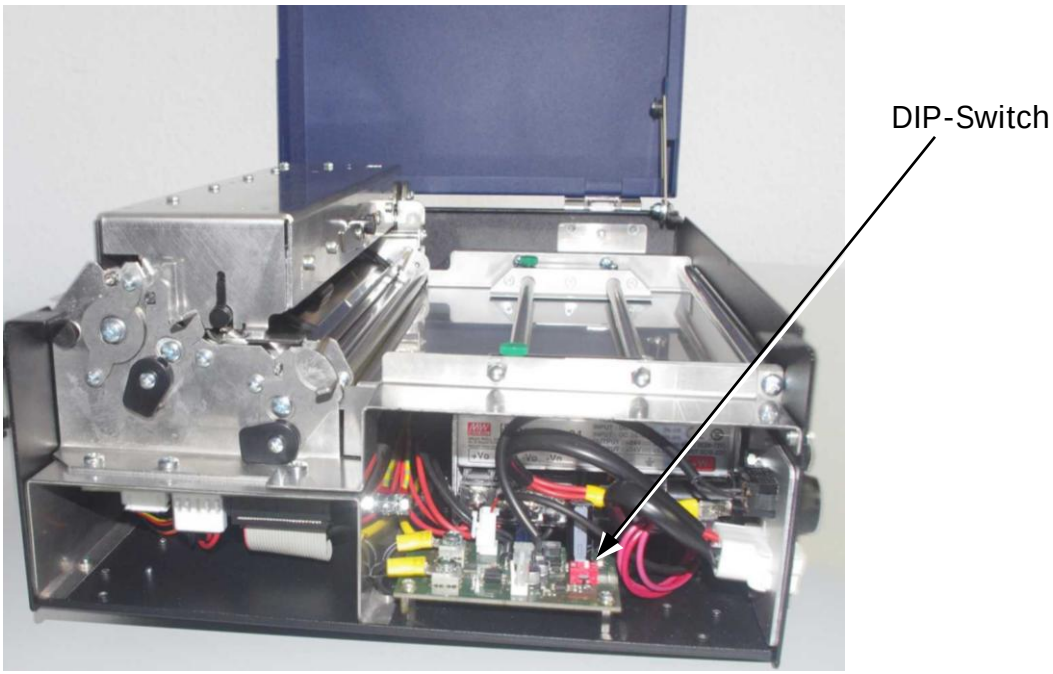


Fig. 6.2.g View inside the printer: Position of the DIPswitch

2e. The DIPswitch for the voltage supply selection is located on the printer DC/DC converter PCB:

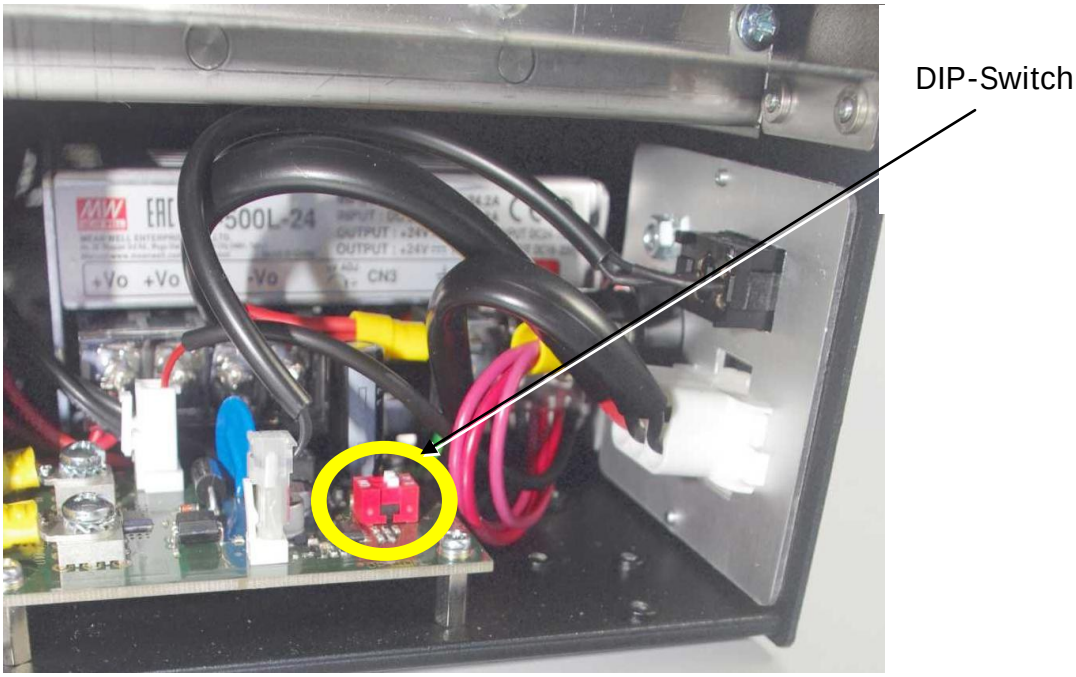


Fig. 6.2.h Close-up view of the DIPswitch

2f. Set the **DIPswitch** located on the **printer** DC/DC converter PCB **to the** nominal **voltage supplied by** the **forklift truck**. ***)**

Battery	Fuse 10,3x38mm	Power Down	DIPSWITCH 12		
24V	25A M	21,9V	OFF	OFF	(default)
36V	16A M	33,3V	ON	OFF	
48V	12A M	44,4V	OFF	ON	
		Do not set !	ON	ON	

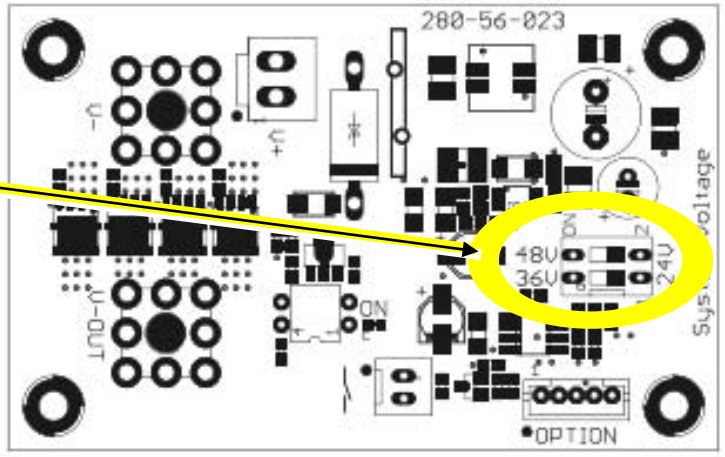


Fig. 6.2.i DIP switch on the DC/DC converter PCB

2g. Install the **correct fuse** for the printer power supply:
(Some fuses are included in the extend of supply; the printer power supply is to be protected with a fuse according to the details of the table above.) ***)**

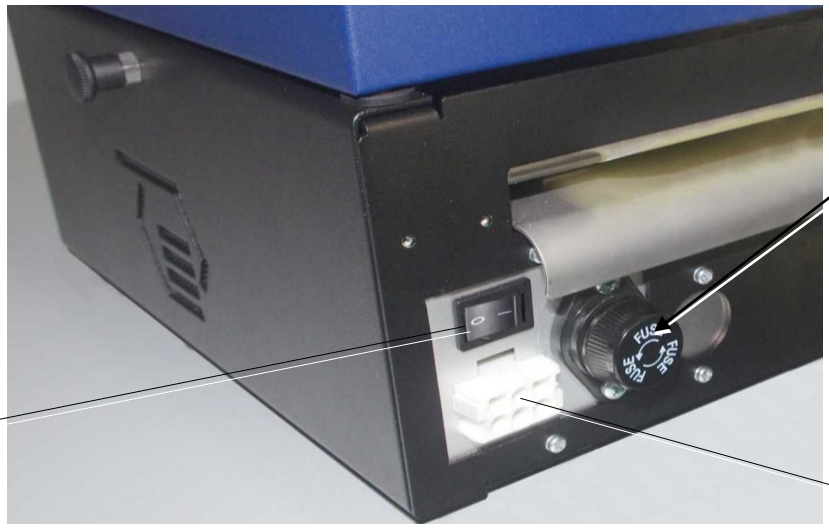


Fig. 6.2.j Rear view of the printer

***)** to protect the battery of the forklift truck

2h. Remount the side cover to the printer:

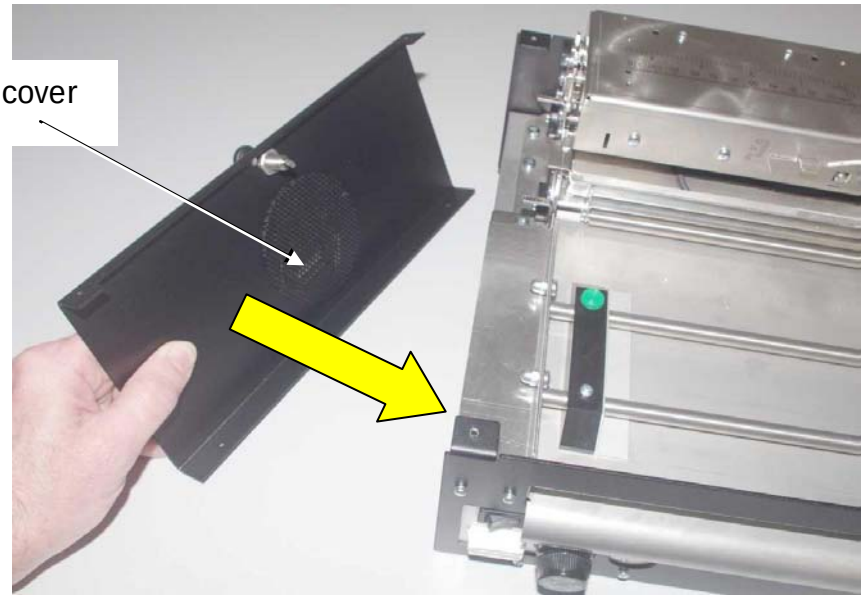


Fig. 6.2.k Take the side cover of the printer

2i. Make sure that the **clamps** of the side cover latch over the **frame of the printer cabinet**.

Fig. 6.2.l Remount the side cover to the correct position

2j. Insert the 2 upper screws (that are equipped with rubber heads) into the bore holes of the side cover and tighten the screws by hand. (Compare fig. 6.2.b).

2k. Close the printer cover.

2l. Place the printer carefully „on the back“ (comp. step 2b). This is necessary to insert the 2 Phillips-head screws at the underside of the printer. Refasten the cover by using a Phillips screwdriver for tightening the 2 Phillips screws (compare fig. 6.2.d).

2m. Use the power cable (optional extent of supply), to connect the printer to the electric system of the forklift truck.

Hints:

The 3 black wires of the power cable have to be connected to minus, the 3 red wires to plus of the forklift truck wiring system.

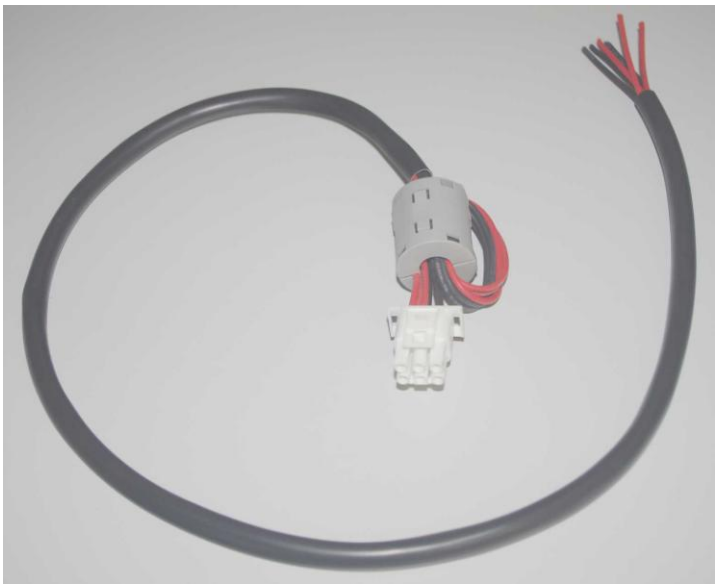


Fig. 6.2.m Power cable for connecting the printer to the electric system of the forklift truck

Please Note:

The length of the power cable must not exceed 3m.

2n. Connect the white connector of the power cable to the white socket at the back of the printer (compare the followgwing figure).

6.3. Turning on the Printer

1. **Turn on** the **printer**. The power **switch** is located at the back of the printer (next to the paper input opening of the printer).

Fig. 6.3.a Rear view of the printer (230 V –Version)

Fig. 6.3.b Optional 24V, 36V, 48V – Version of the printer

The print system requires time to initialize and to warm up after you turn it on.

As soon as the printer's warm up phase is finished the printer goes into the ON LINE mode.

6.4. Control Panel View

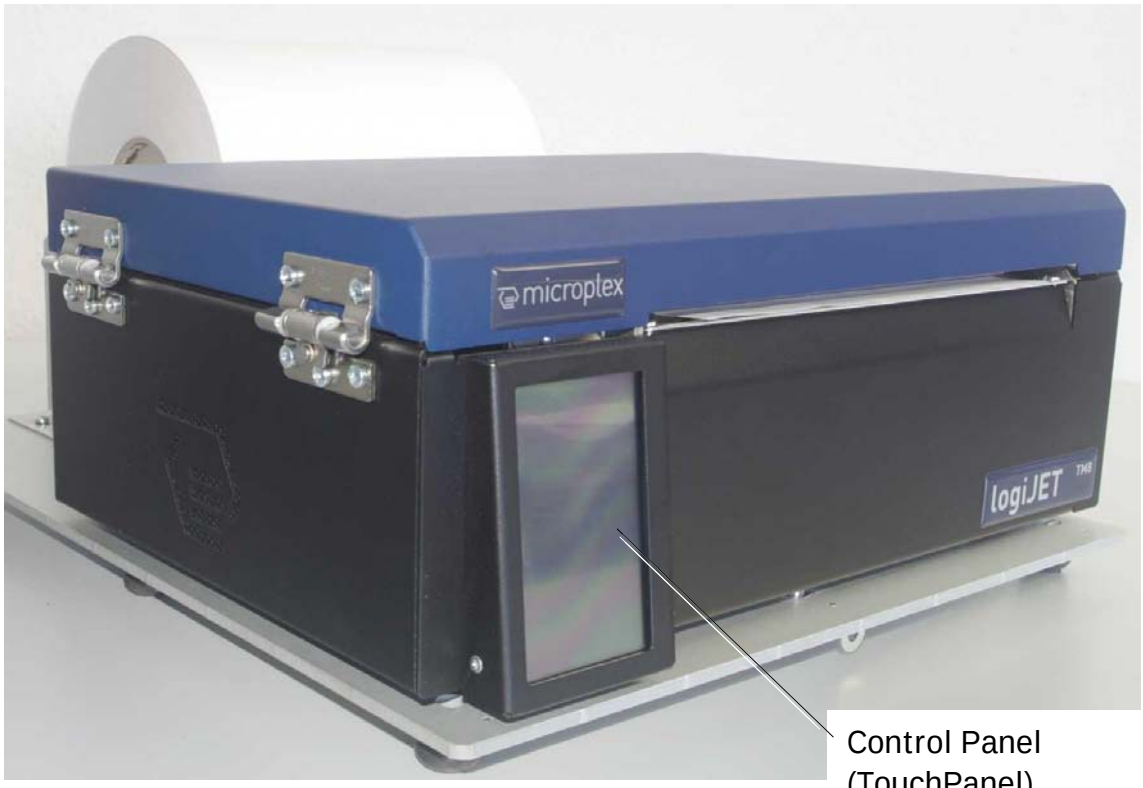


Fig. 6.4.a Main view of the printer logiJET TM8

6.4.1. Functions of the Control Panel (TouchPanel)

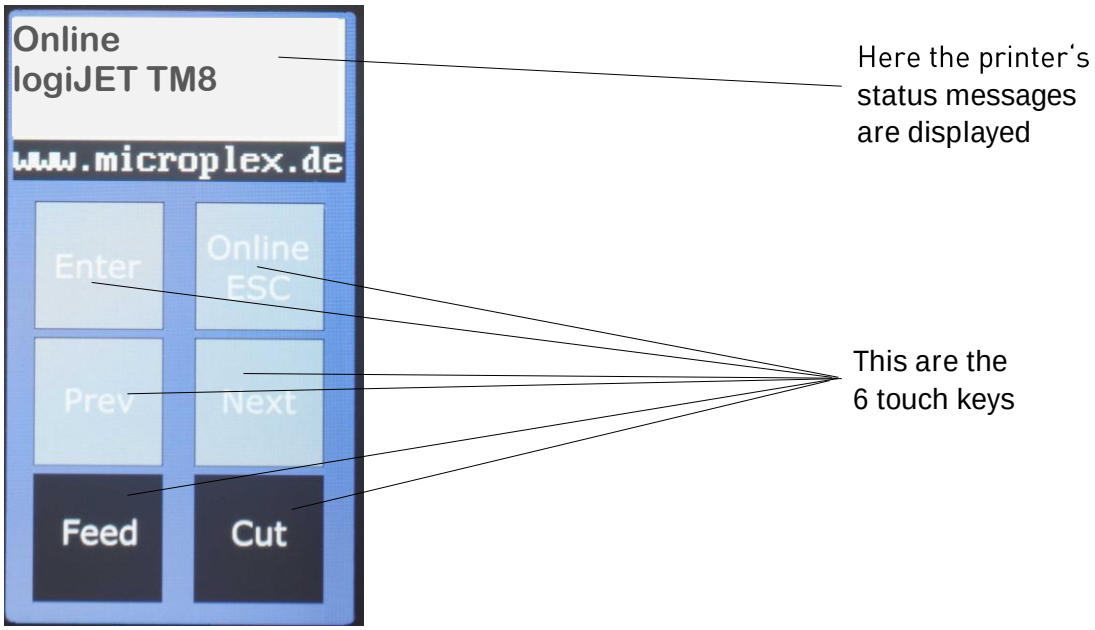


Fig. 6.4.1.a Control Panel of the printer

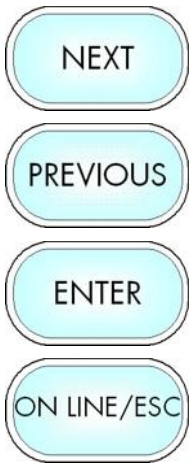
Control Panel Keys

Now the individual control panel keys are described:

The ONLINE/ESC key is used to turn the printer OFF LINE or ON LINE.
In addition to that this key can be used to clear an error message in the display after the fault was fixed.

In the OFF LINE mode this key is used to **start the cutter** (option).

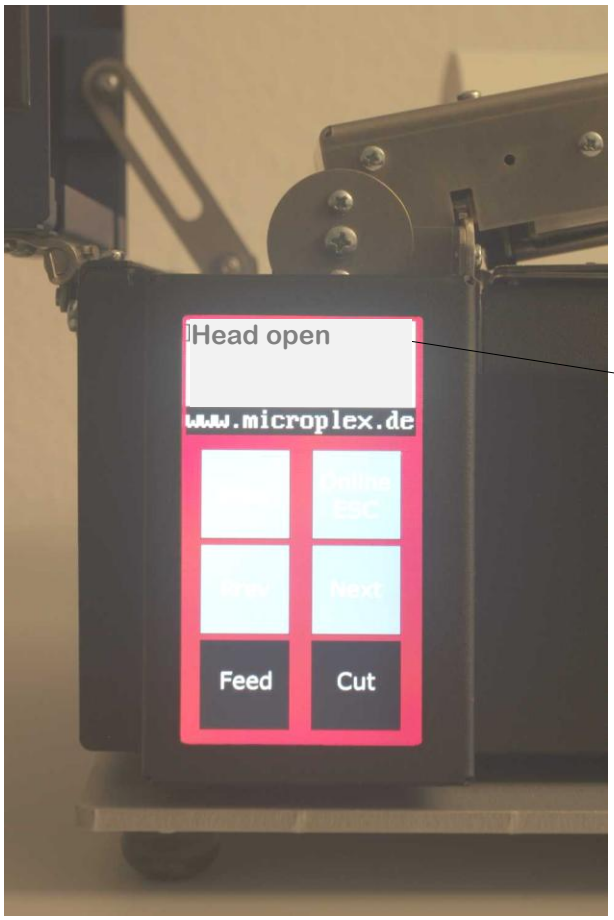
In the OFF LINE mode the paper is conveyed one format length further after having activated the FEED key.



These keys are used for working within the different levels of the menu structure described in the following.

How the printer shows Warnings and Errors

When an error occurs, a corresponding error message is displayed in the control panel.
In addition, the background color of the touchscreen changes to red.



This is a exampfle for a Warning/Error Message

(The background color of the touchscreen is red)

Fig. 6.4.1.b Displaying Warnings/Errors

7. Remote Control of the Printer via the integrated Website (WebPanel)

7.1. Access to the integrated Web Page of the logiJET TM8

The internal web page of the MICROPLEX Controller enables you for example to control or configure the printer logiJET TM8 using a computer that is connected via Ethernet (MICROPLEX WebPanel and IP-Panel).

Section 8 and following describes how to use the **IP-Admin Panel .** It is a „virtual panel“ for the printer.
If you are already familiar with the panel functions of MICROPLEX printers the IP Panel enables you to do the well-known operating steps.

* More details are described in the document Networking Features of MICROPLEX Printers. You'll find this document on the MICROPLEX Documentation CD. The CD belongs to the extent of supply of your printer.

** The network settings can be changed.
(See section 9.32 Configuration of Network Parameters).
The **status sheet** of the logiJET TM8 shows the **current settings**.

The following descriptions of panel functions are written assuming the **printer** is **turned OFFLINE**.

7.2. Connecting the Printer to the Network

1. Connect the logiJET TM8 to your network* (via the Ethernet port, compare section 6.1 Attaching the Devices to a Network/PC).

   The following network parameters** are for instance factory default settings of the logiJET TM8:

IP Address	192.168.128.128
Subnet mask	255.255.255.0
Gateway	0.0.0.0

2. Start your Web Browser and type the IP address of the printer in the address bar of the Web browser:
   http://192.168.128.128/

   The Web Browser shows the Information page of the MICROPLEX **WebPanel**:

7.3. Remote Control of the Printer via the integrated Website (WebPanel)

7.3.1. Overview Page

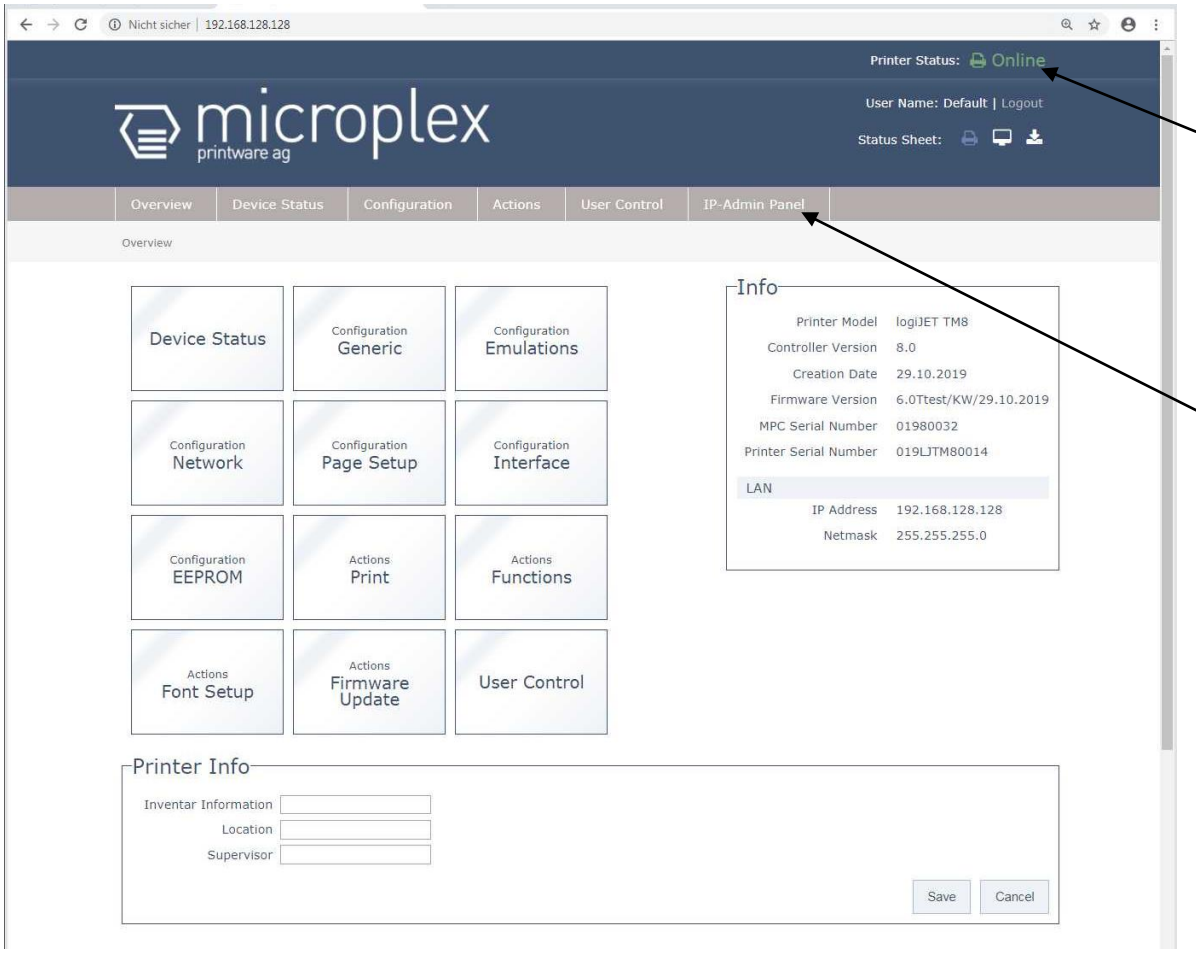


Fig. 7.3.1.a Overview page of the MICROPLEX WebPanel

On the Overview page the printer status is displayed, as well as information on the controller and firmware version of your device.

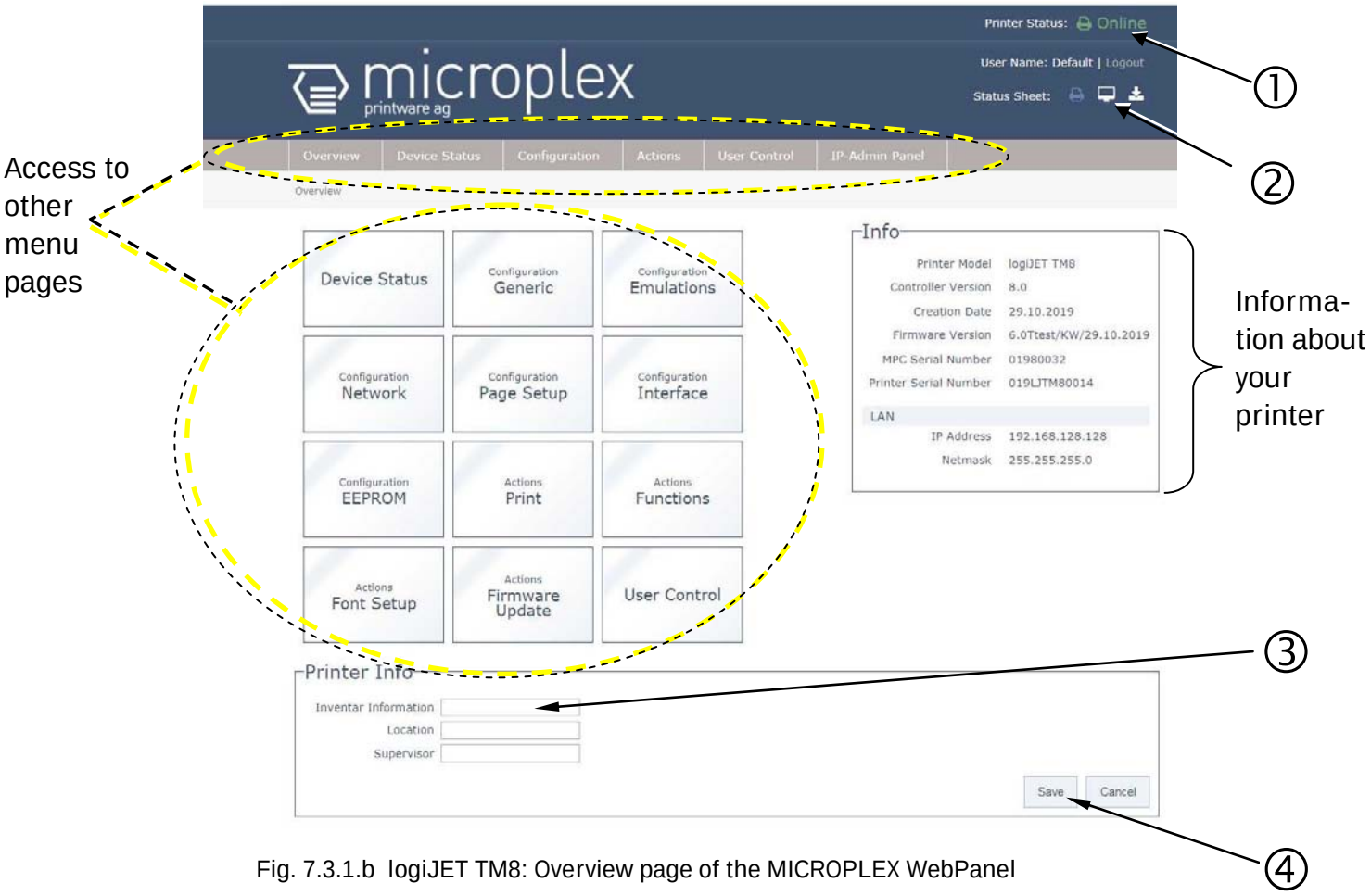


Fig. 7.3.1.b logiJET TM8: Overview page of the MICROPLEX WebPanel

① The printer status messages are displayed here (Offline/Online. Error messages are displayed in this area, too).

② Here you can release the printing of the printer status sheet, view it and save it to a file.

③ To change a parameter, „click“ on this specific parameter:
Select for example the input field „Inventar Information“ and then enter a new inventory number for this printer.

④ Complete the input of the function value with the Save key.

The print system confirms the acceptance of the new setting value. (An improper setting value leads to an error message.)

The following descriptions of panel functions are written assuming the printer is turned **OFFLINE**.

7.3.2. Configuration Page

On the Configuration page a number of print system configuration parameters can be changed.

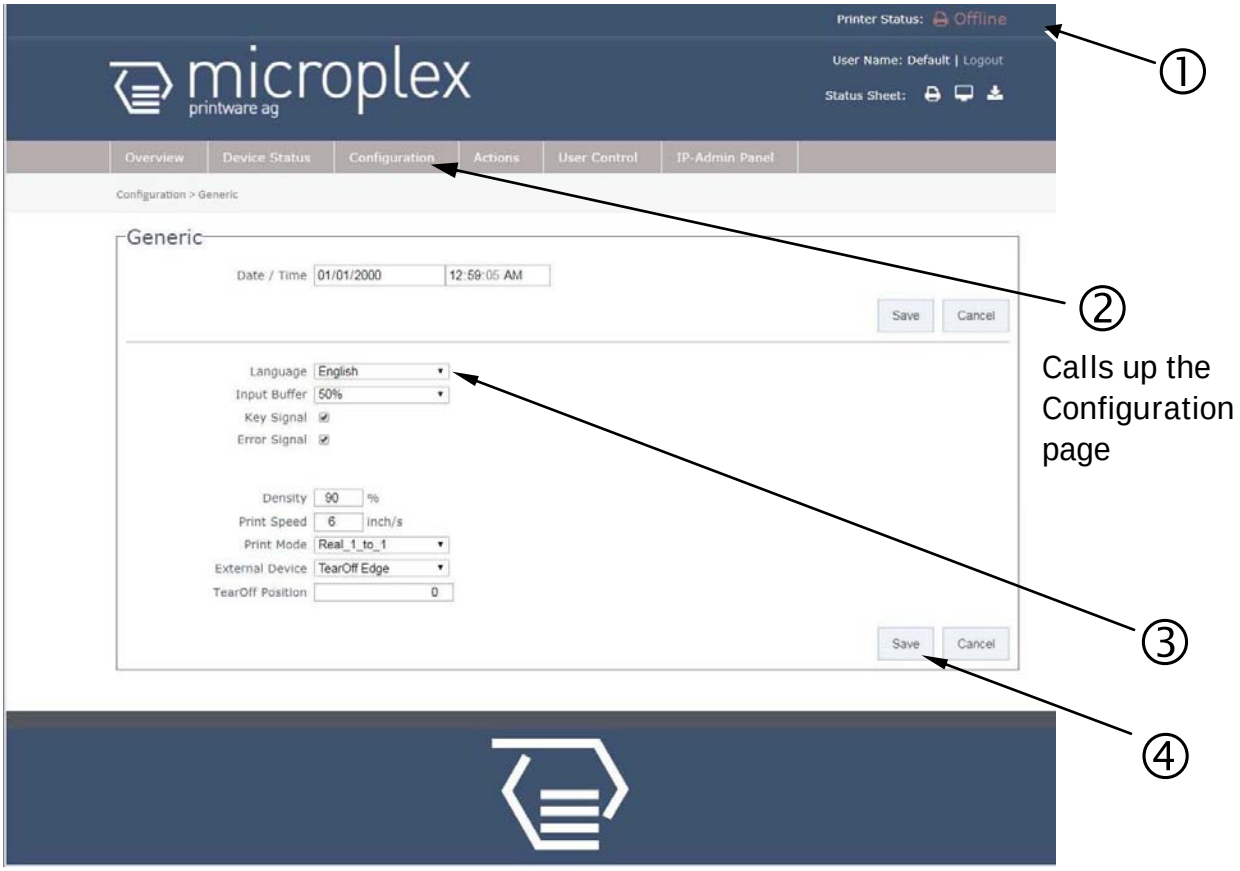


Fig. 7.3.2.a logiJET TM8: Configuration Generic page of the MICROPLEX WebPanel

Abstract:

Please „click“ on the parameter you wish to change:

① Click on the „online“ status message to turn the printer offline.
(Clicking on the „offline“ message turns the printer online again).

② Click on „Configuration“ and select the menu item „Generic“, to get to the Configuration page, that is shown above.
(or click on the button „Configuration Generic“ on the Overview page of the MICROPLEX WebPanel, compare Fig. 7.3.1.a)

③ Click the input field for the Language to change the language of the display messages, the status sheet...

④ Complete the input of the function value with the Save key.

7.3.3. Page Setup Page

On the Page Setup page you can for example set the paper size and the margins for the printouts.

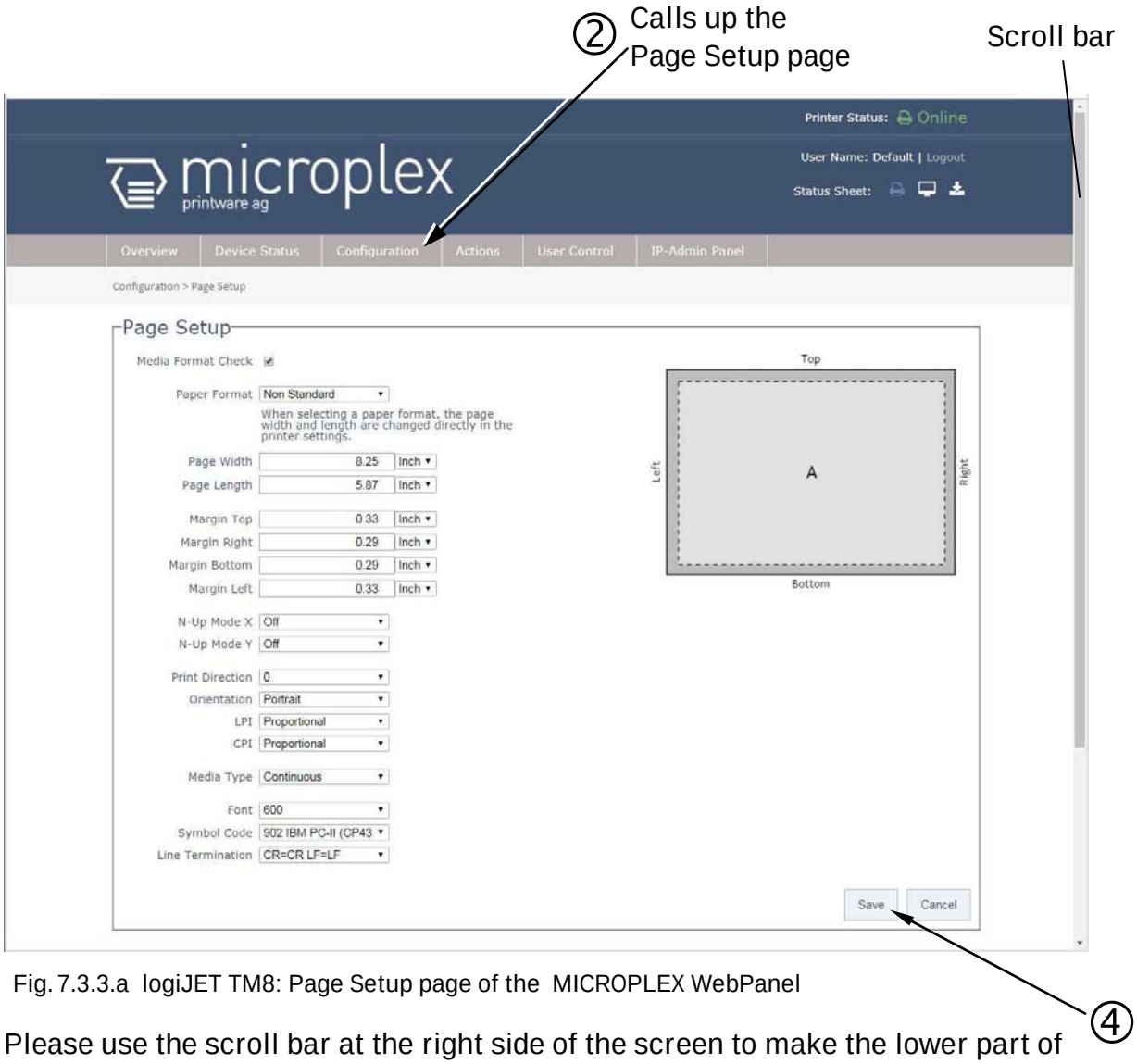


Fig. 7.3.3.a logiJET TM8: Page Setup page of the MICROPLEX WebPanel

Please use the scroll bar at the right side of the screen to make the lower part of the menu page visible.

② Click on „Configuration“ and select the menu item „Page Setup“, to get to the Page Setup page, that is shown above.
(or click on the button „Configuration Page Setup“ on the Overview page of the MICROPLEX WebPanel, compare Fig. 7.3.1.a)

③ Click on the adjustable values, use the input fields.

④ Click the Save button to finalize your settings.

7.3.4. Network Page

On the Network page you can configure the parameters for a network connection of the printer.

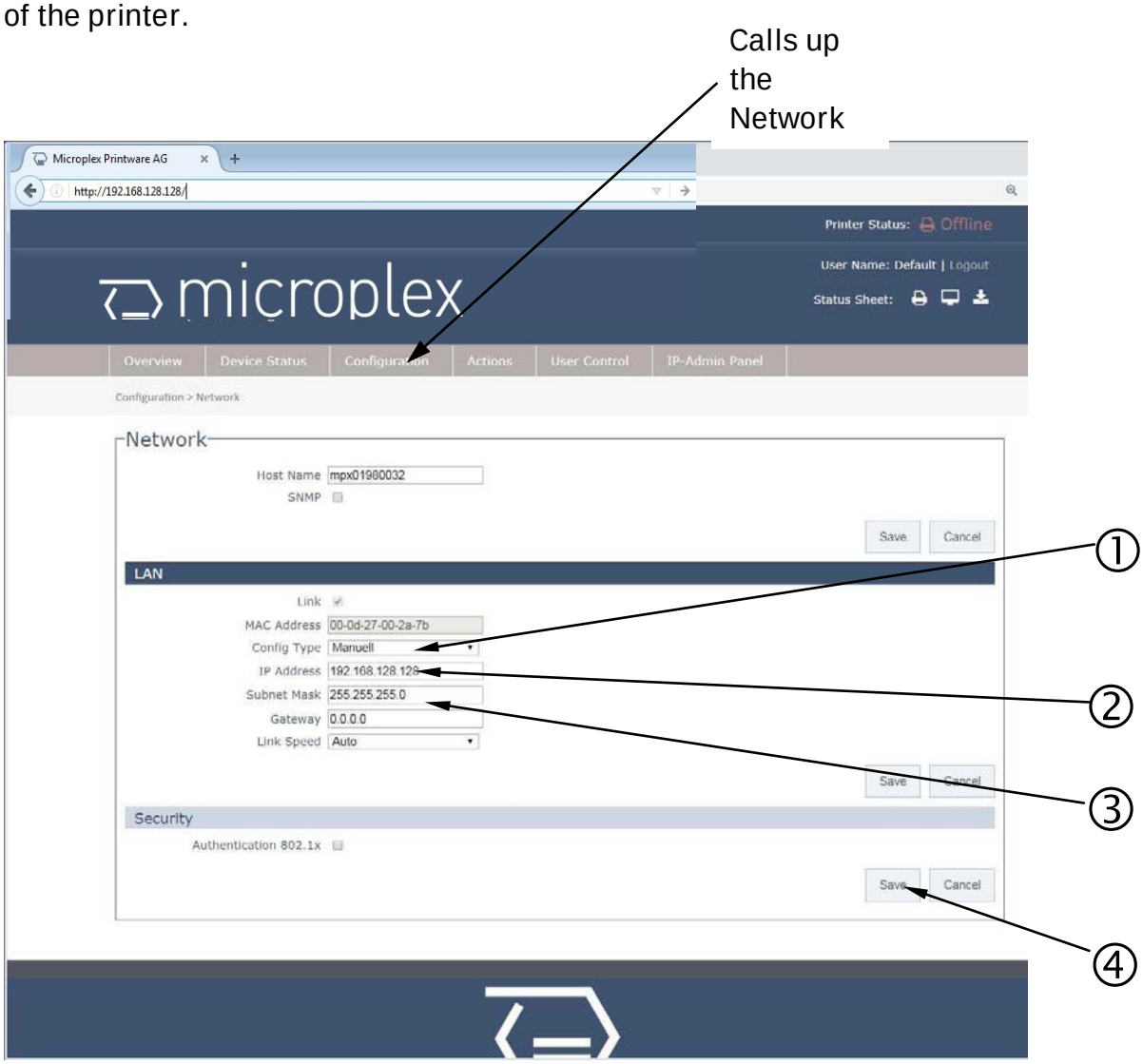


Fig. 7.3.4.a logiJET TM8: Network page of the MICROPLEX WebPanel

Abstract:

Please „click“ on the parameter you wish to change:

① Click for example on ConfigType and select Manual.

② Click on the input field for the IPAddress and then enter a new IPAddress.

Hint: The best way is to write the new IPAddress for example on a label and put it onto the device.

③ Click on the input field for the Subnet Mask and enter the subnet mask.

④ Click the Save button to finalize your settings.

More details on the network parameters can be found in chapter 6 up to 9.

7.3.5. Device Status Page

The Device Status page is not only accessible via the menu, but also appears if you click on the error message (in the event of a fault).

(or you are on the Overview page of the MICROPLEX WebPanel, then you can click on the button „Device Status“, compare Fig. 7.3.1.a)

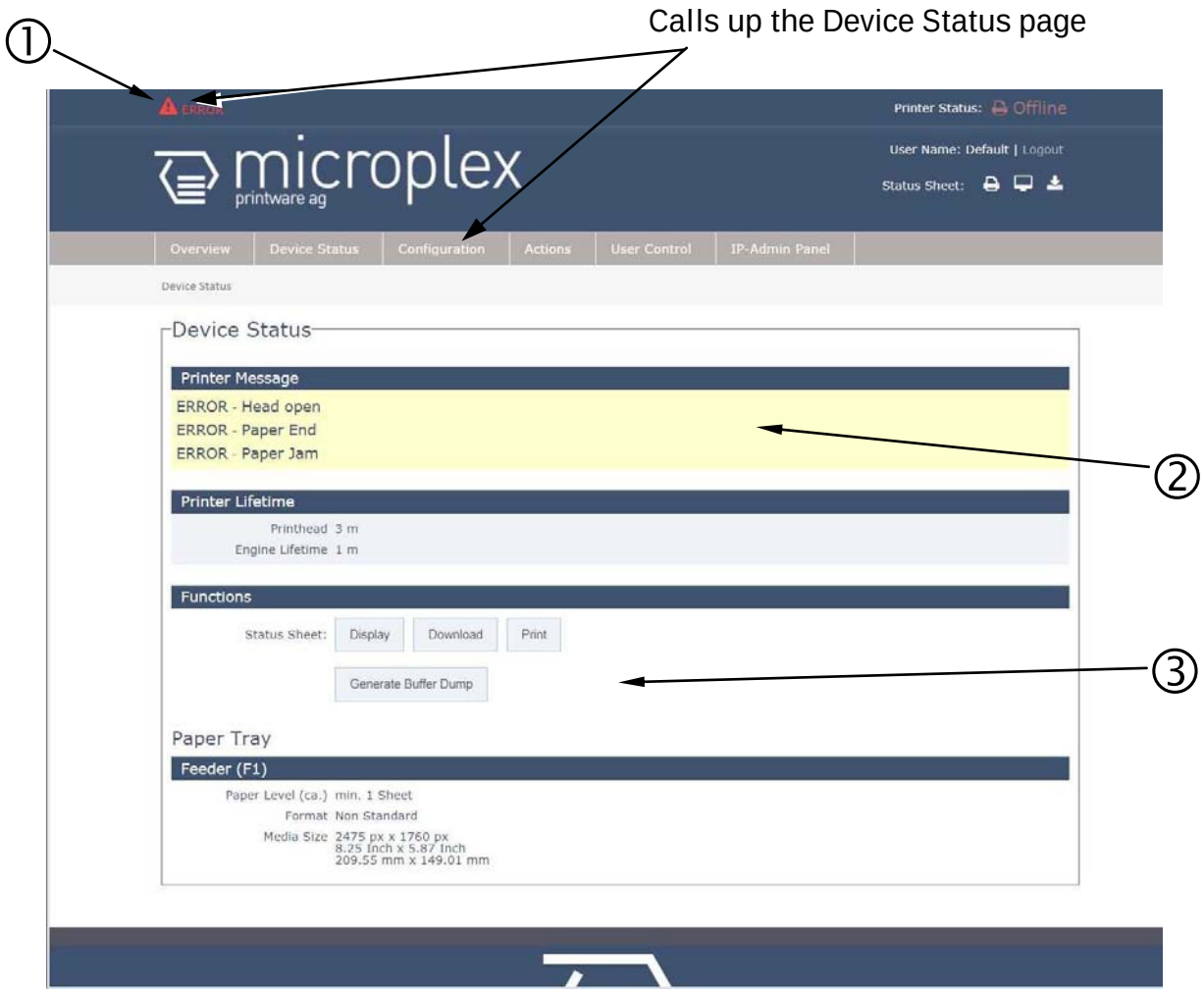


Fig. 7.3.5.a logiJET TM8: Device Status page of the MICROPLEX WebPanel

Abstract:

① The printer status messages are displayed here (Offline/Online). Error messages (short form) are displayed in this area, too.

② The (Error)Messages of the printer are listed here.

③ Here you can show the printer status sheet, save it to a file, and release its printing.

7.3.6. EEPROM Page

Attention:
You have to be **very careful** when changing parameters via the EEPROM page. If you use wrong parameters, the printer could hang up!

Before you change EEPROM parameters of the print system it is recommended to generate a **Status Sheet**! This facilitates a reset of the printer (resetting the parameters to the former settings).

The parameters must be written in hexadecimal numbers (0000 to FFFF). These EEPROM values are printed out in the first to third line of the Status Sheet.

Fig. 7.3.6.a logiJET TM8: EEPROM page of the MICROPLEX WebPanel

The fourth line (Word 49 to Word 64) cannot be changed by the user.

Hint:
For more details refer to our offer of MICROPLEX Training Courses and the corresponding documentation: “The EEPROM-Sequence”.

7.3.7. User Control Page

On the User Control page you can register all users with user name and password.

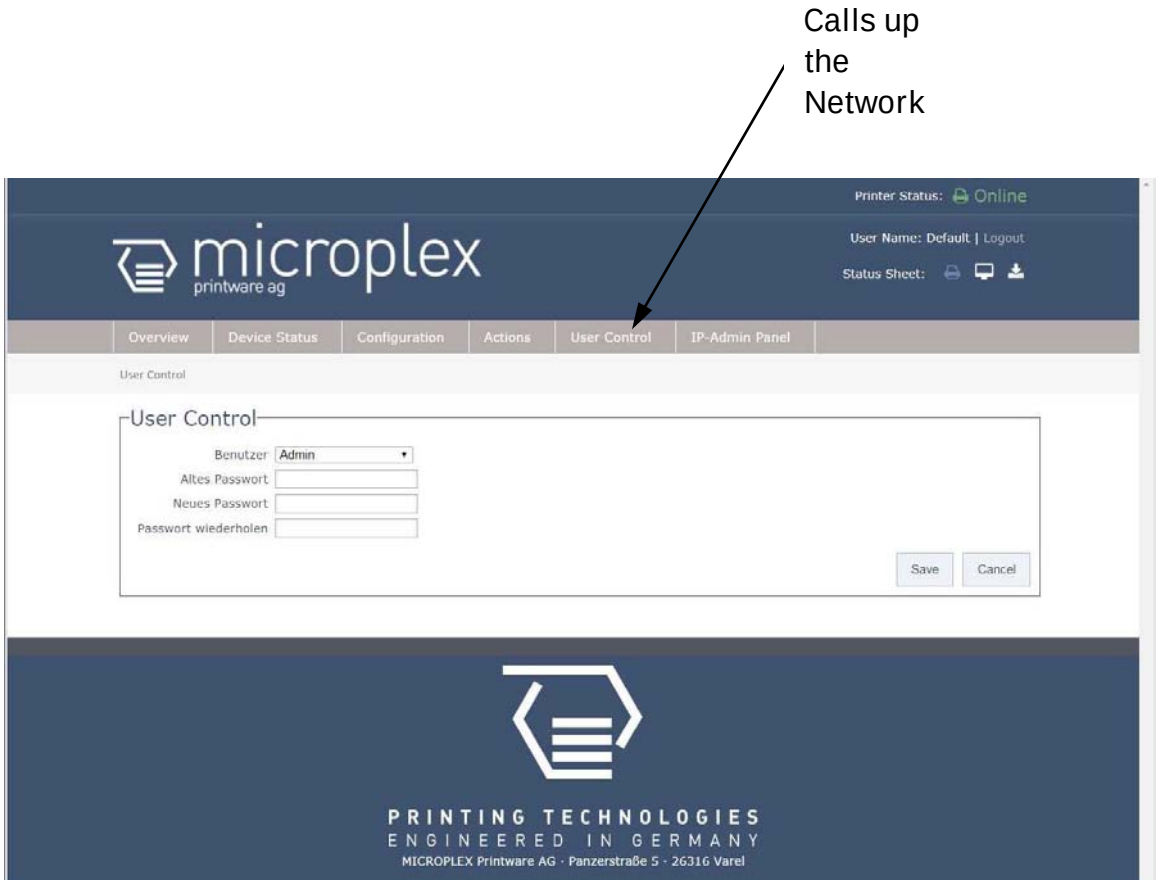


Fig. 7.3.7.a logiJET TM8: User Control page of the MICROPLEX WebPanel

Choose the User/Group and enter the passwords.

Click the Save button to finalize your settings.

7.4. Remote Control via the IP-Admin Panel

If you are already familiar with the panel functions of MICROPLEX printers the IP Panel enables you to do the well-known operating steps.

1. Type the IP address of the printer in the address bar of your Web browser: (compare the previous section, example: http://192.168.128.128/).

   The browser shows the Overview page of the MICROPLEX WebPanel:

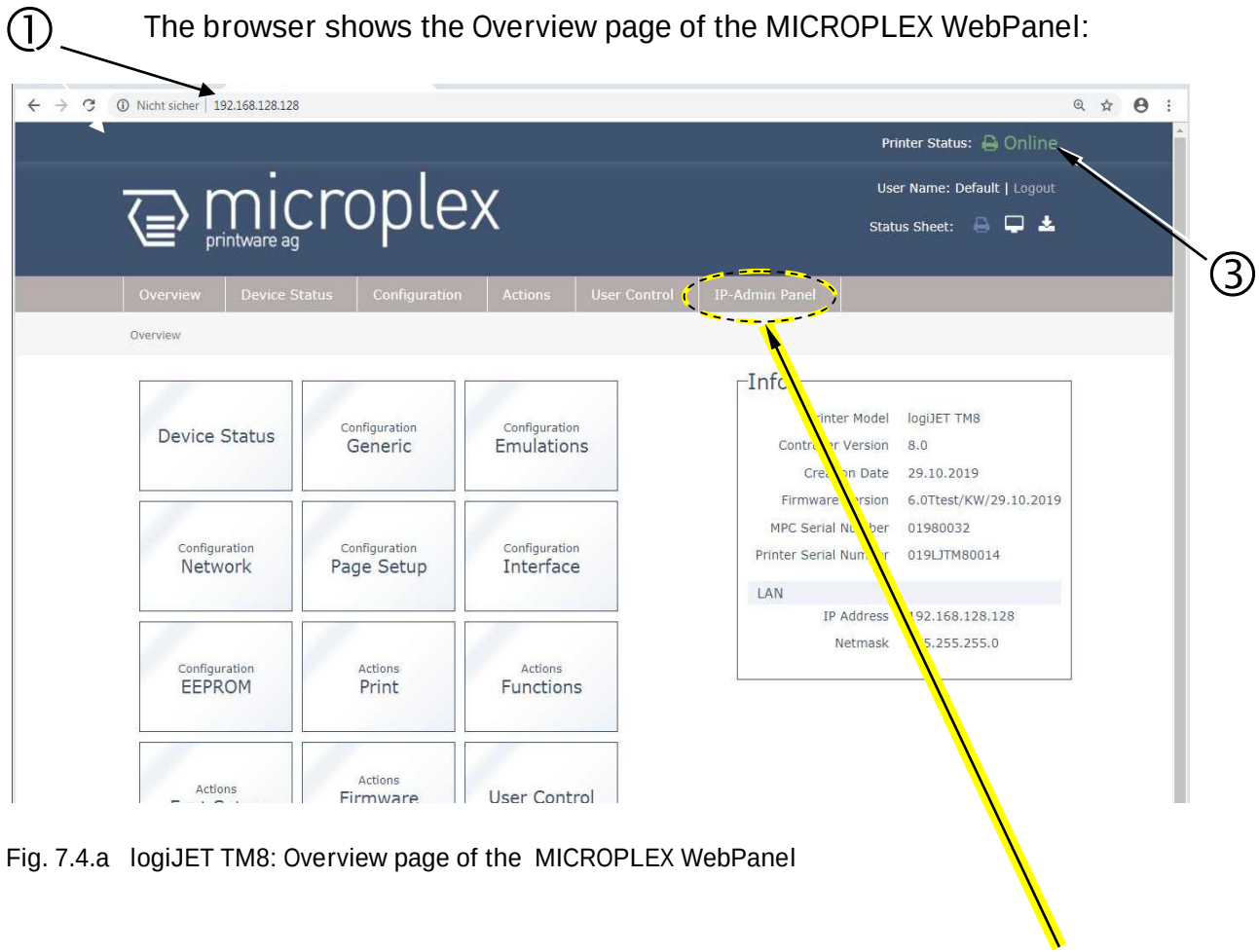


Fig. 7.4.a logiJET TM8: Overview page of the MICROPLEX WebPanel

2. By „touching“ the IP-AdminPanel button you can switch to the **IP-Admin Panel** user interface directly („panel“ as you know it from other MICROPLEX printers, see the following sections).

3. „Click“ on the „Online“ status message to switch the printer to Offline. („single click“ on the status message, compare ③ in the figure above).

7.4.1. IP-Admin Panel

The **virtual control panel** (internal web page of the printer) of the logiJET TM8 pops up:

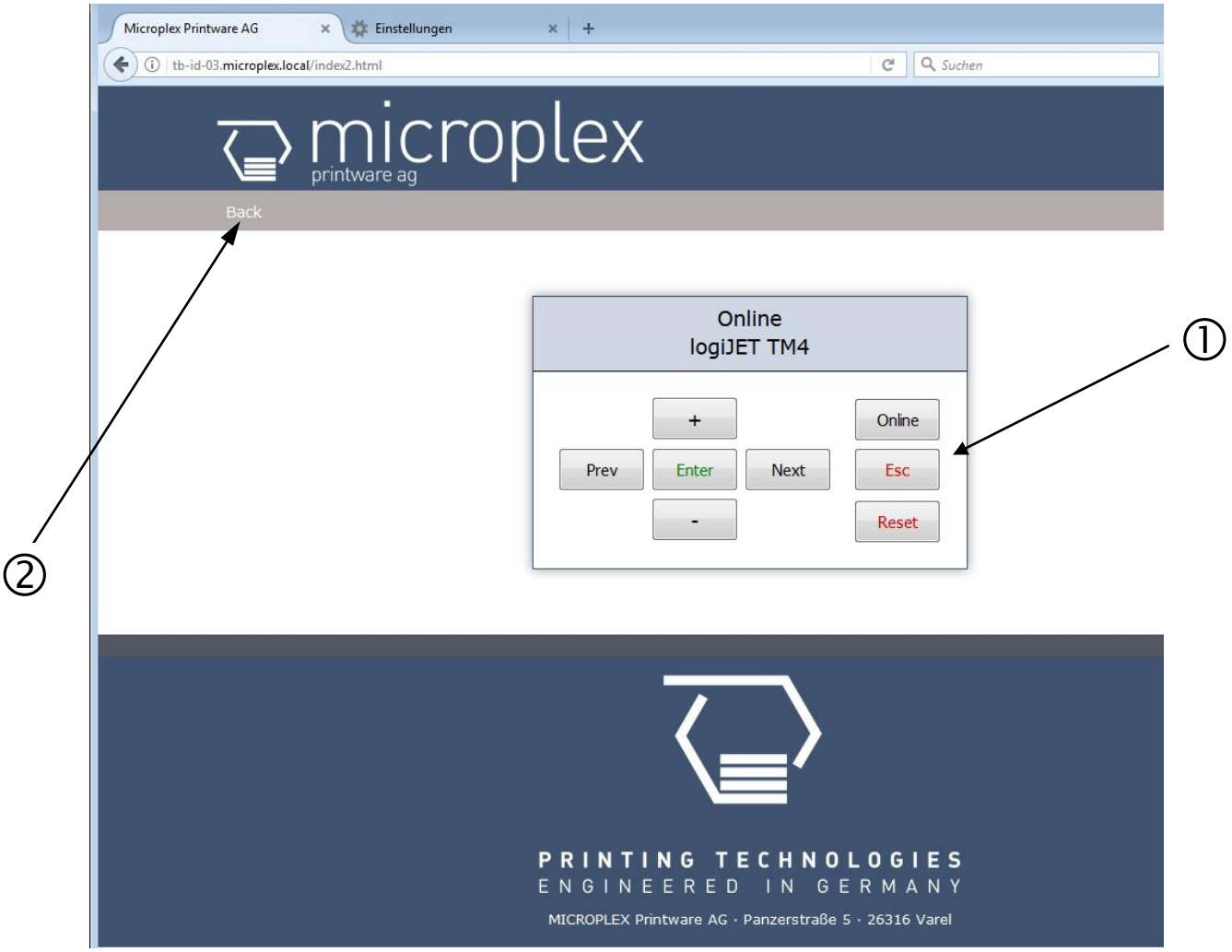


Fig. 7.4.1.a The MICROPLEX IP-Admin Panel is the virtual control panel of the logiJET TM8

① This virtual control panel enables you to get access to the printer's menu structure.

Details about the panel functions can be found in the following sections.

② A „click" on the Back button brings you back to the Overview page of the MICROPLEX WebPanel.

8. Printer Configuration and Menu Structure

8.1. Changing the Configuration of the Printer

By using the panel functions directly at the **touchpanel** of the logiJET TM8 **or** via remote controlling over network (via **IP-Panel** or **WebPanel**) you can change the printer configuration and customize your printer to meet your specific needs.

In chapter 9 (Panel Functions) you'll find descriptions how to reach the particular printer functions.

T e m p o r a r y changes in printer configuration are effective only as long as the printer stays turned on. To select such changes temporarily, the user must terminate the change of function by pressing the **ENTER key** one single time.

P e r m a n e n t changes in printer configuration are active each time the printer is turned on again. To select such changes permanently, the user must terminate the change of function by pressing the **ENTER key two times**.

An output of the current printer values can be generated using the panel function ″Printing the Status Sheet ″ (see section 9.7).

Please note:

- User default settings remain in effect until you save new settings or restore the factory defaults.
- Settings you choose from your software application or printer driver can also change or override the user default settings you select from the touch panel.

Switching the Printer OFF LINE

After the printer was turned on (and as soon as the warm up phase is finished) the printer goes into the ON LINE – Mode

[logiJET TM8] Printer messages are displayed on the control panel display.

This symbol shows the ON/OFF LINE key. This key is used to turn the printer OFF LINE. If the printer is turned OFF LINE with this key you get automatically into the first menu level.

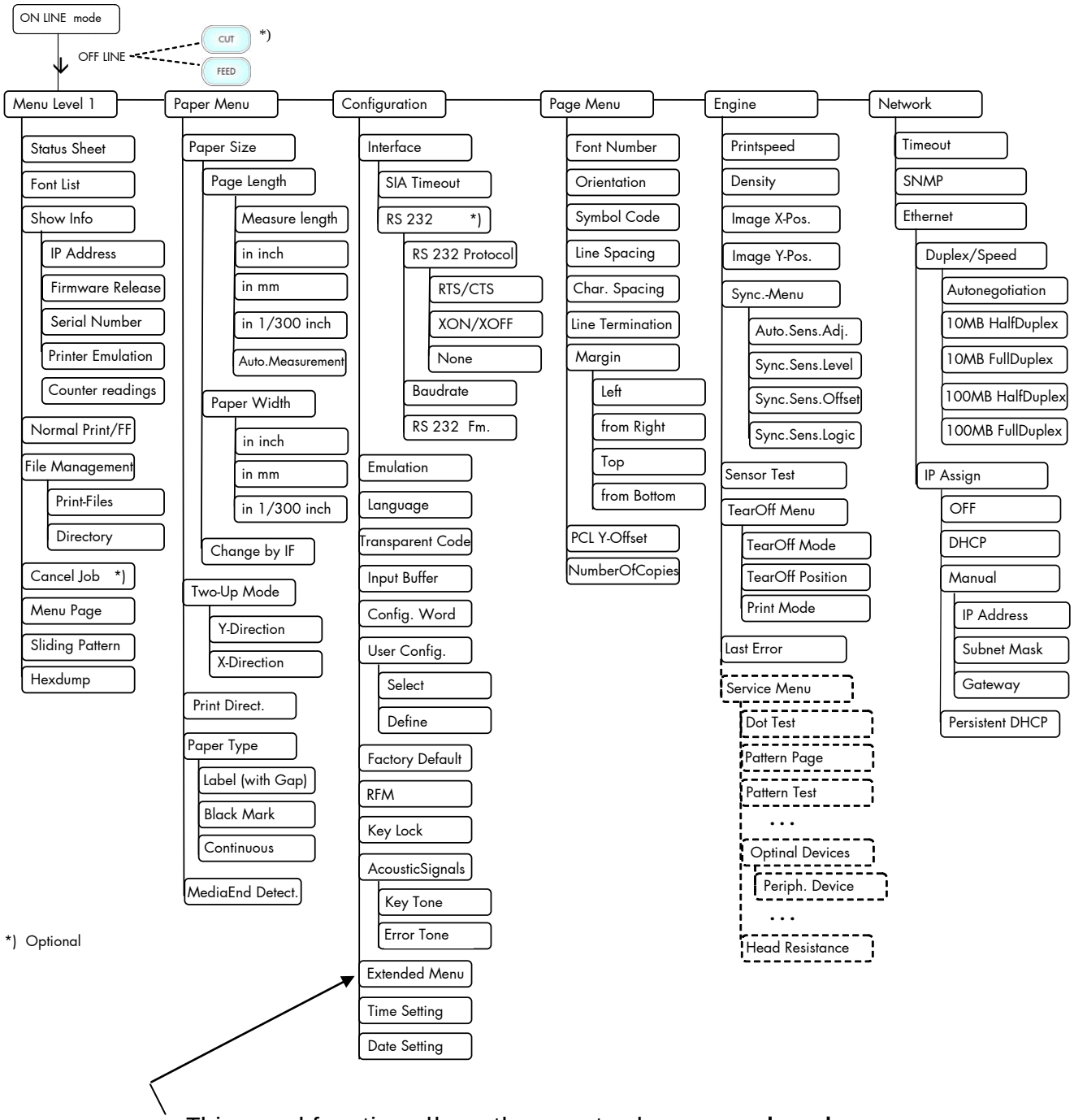
[Menu Level 1] Now this message is displayed on the display.

In the interest of simplicity, in the following chapters only the most important display messages are shown in the Panel display column.

8.2. Menu Structure

Access to the menu structure is possible as soon as the printer is turned OFF LINE.

The menu structure of the logiJET TM8 is arranged in different levels:



This panel function allows the user to choose a **reduced menu** instead of the extended menu shown above.

Selecting positions in the menu structure:

This symbol shows the ON LINE/ESC key. You get automatically into menu level 1, if the printer is turned OFF LINE with this key.

By pressing the NEXT key or the PREVIOUS key you can move within the menu levels.

Press and hold the NEXT key to scroll forward quickly or press and hold the key PREVIOUS to scroll backward.

["Menu Level"]

Each menu item/subitem within a menu level is shown in the display.

The ENTER key has two main functions. It gives the user access to a particular menu and, once in the menu, it allows the user to select a particular function.

["Function"]

Functions / Changing of function values:

Within one function the value can be changed by pressing the key NEXT or PREVIOUS.

In case of a multi-digit function value the value of the currently chosen digit will be changed.

In case of a multi-digit function value pressing the ENTER key switches to the next position of the function value.
Pressing the ESC key switches to the previous digit of the function value.

Please note: If you press the ESC key although the absolute left digit of the function value is still arrived, the changing procedure will be cancelled and this moves you to the next menu level above.
If you press the ENTER key although the absolute right digit (digit 1) of the function value is still arrived, the currently displayed function value is stored.

By pressing the ENTER key the function values currently displayed are confirmed respectively the selected function is activated (the changes are saved until the next printer power off; this kind of saving is called temporary).

[Save as Setup?] After this you have to decide, if you want to save the changes permanent (Save as setup).

To select such changes permanently, the user must press the ENTER key one more time. These permanent changes in printer configuration are active each time the printer is turned on again.

If the ESC key is pressed instead, the changes are only stored temporary (not saved as setup).
(This key takes the user to the respective previous menu level).

Return to the menu level above:

Pressing the ON LINE/ESC key takes the user back to the respective menu level above.

Return to the ON LINE mode:

A) In one step:

Pressing the ONLINE/ESC key longer than 2 seconds switches the user directly to the ON LINE mode from nearly any menu position.

B) Return to the ON LINE mode step by step:

Pressing the ONLINE/ESC key shortly takes the user to the respective previous menu level.

[Menu Level 1] Aim is to jump back to Menu Level 1.

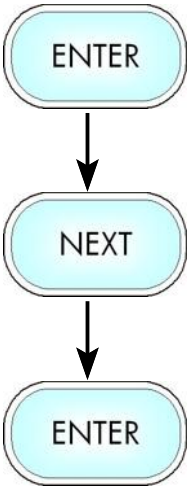
Pressing the ONLINE/ESC key one more time switches the printer to the ON LINE mode.

8.3. Syntax of Diagrams

The control panel functions will be described using diagrams. These diagrams show the course necessary in order to activate a certain function.

First the elements of the diagrams are explained:

The sequence on the left describes which keys have to be pressed briefly in succession.



In this example the ENTER key has to be pressed first. Then the ENTER key has to be released and the NEXT key has to be pressed. Then the NEXT key has to be released and the ENTER key has to be pressed.

["Message"]

The ″Panel display″ column shows the display messages corresponding to the sequences listed on the left.

In the column ″Notes″ explanations to particular operational steps are given.

9. Panel Functions

For the panel functions described in the following, the printer is presumed to be switched on and in the ON LINE mode.

The following panel functions can provide a first overview of the most relevant functions of the logiJET TM8:

- **Show Info** see section 9.8

  This function serves to show some basic information about your printer: the IP Address, Firmware Release, Serial Number and the current Printer Emulation.

- **Printing the Menu Page** *) see section 9.13

  This function prints a survey of the available panel functions.

- **Printing the Status Sheet** *) see section 9.7

  This function generates a status sheet.
  The status sheet contains information about the current printer configuration and the available fonts.

*) Please follow the instructions step by step (as described in the following sections: 9.1 Print Process Selecting, 9.1 Adjusting the Printer to the Print Material , 9.2 Adjusting the Sync Sensors ...).

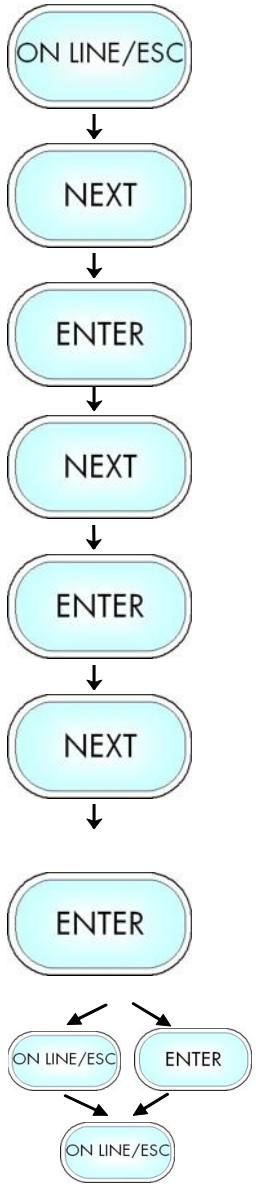
9.1. Adjusting the Printer to the Print Material (Paper Type)

This function is necessary to adjust the printer to the current media in use. This adjustment selects the active Light Sensor Type (SyncSensor).

The printer is able to handle

- continuous media
- material with Gaps (label material)
- material with Black Marks

The **Gap Sensor** (Transparent Photoelectric Switch) is suitable for labels with transparent or register gaps.
The **Reflex Sensor** (Reflex Photoelectric Switch) is suitable for materials with markings / Black Marks.



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	Press the NEXT or PREVIOUS key until [Paper Menu] is displayed.
• • •	
[Paper Menu]	Press the ENTER key. This selects the Paper menu.
[Paper Size]	Press the NEXT or PREVIOUS key until [Paper Type] is displayed.
• • •	
[Paper Type]	Press the ENTER key. This selects sub-menu Paper Type.
[Label (with Gap)]	The currently set value is displayed.
• • •	Press the NEXT or PREVIOUS key until the statement shown by the display corresponds to the inserted media (Black Mark e.g.).
[Black Mark]	The printer is adjusted to material with Black marks.
[Save as Setup?]	In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ONLINE key longer than 2 seconds.

9.2. Adjusting the Sync Sensors

Please note: **Always adjust** the printer **sensors** to your consumables (**sensor position as well as the levels and currents**).

9.2.1. Checking and Adjusting the Sensors

The device is provided with sensors to enable controlling of consumable movements (Synchronization).
The Black mark sensor (Reflex sensor) is located "below" the printhead mounting, the Gap sensor (Transparent sensor) is additionally located in the printhead holder, too (fixed position, centric).

Adjust the sensors to your consumables:

Please note: The sensors are located under the print unit.
Always adjust all sensors to your current consumables (levels and currents as well as sensor position).

1. Open the printer cover completely.

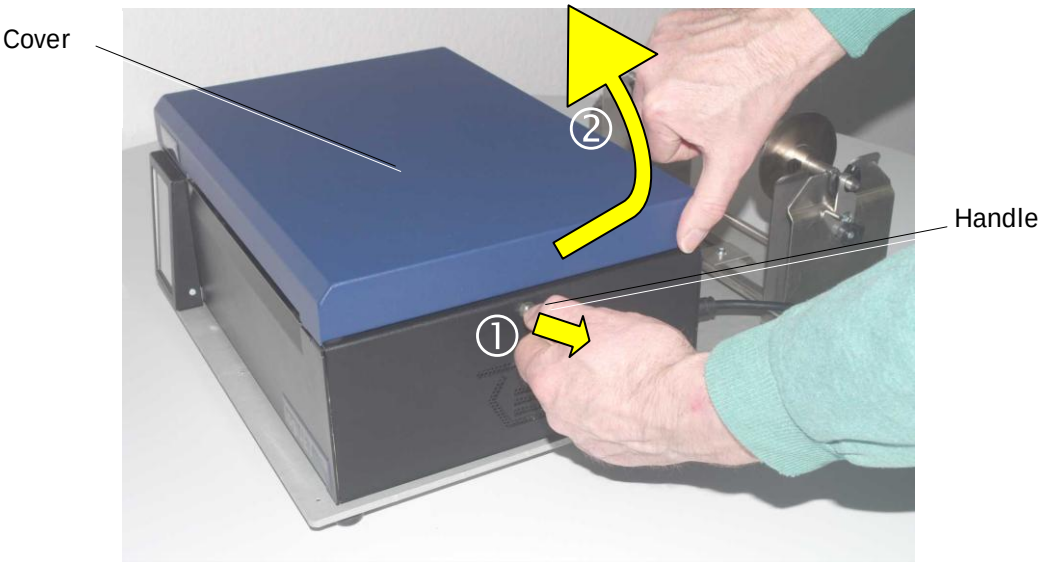


Fig. 9.2.1.a Pulling the handle and opening the printer cover

2. Open the printer cover completely (swivel the cover to a vertical position).

3. Unlock the printhead assembly by pushing the printhead release lever.

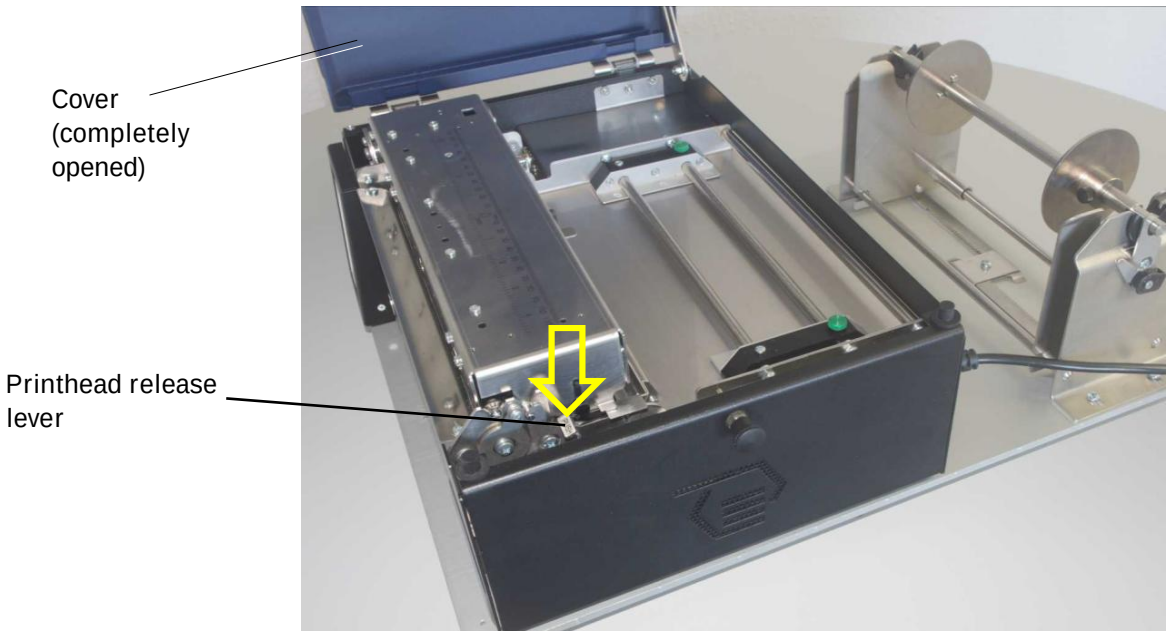


Fig. 9.2.1.b Unlocking the printhead assembly

4. Raise the printhead assembly to a vertical position

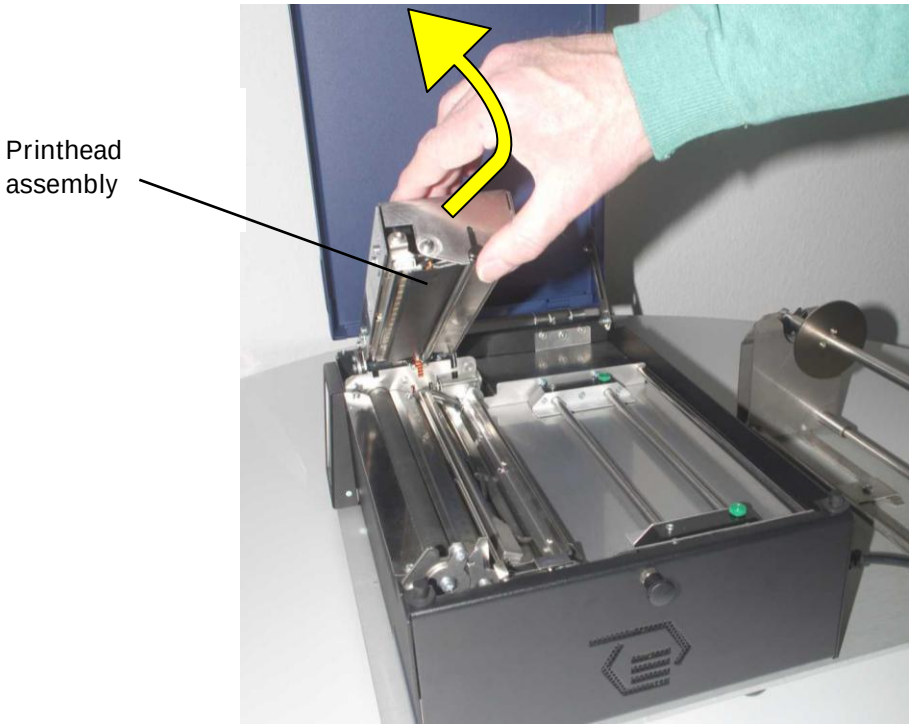


Fig. 9.2.1.c Raising the printhead assembly

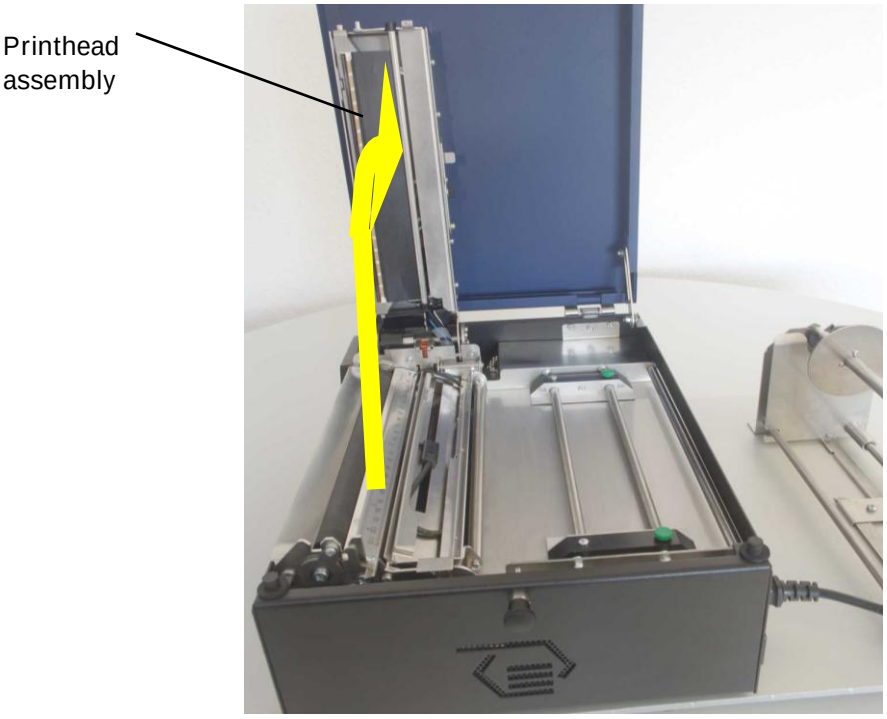


Fig. 9.2.1.d Printhead assembly raised to a vertical position

5. Unlock the transparent sensor guide by pushing its lever and raise the transparent sensor guide until it stops:

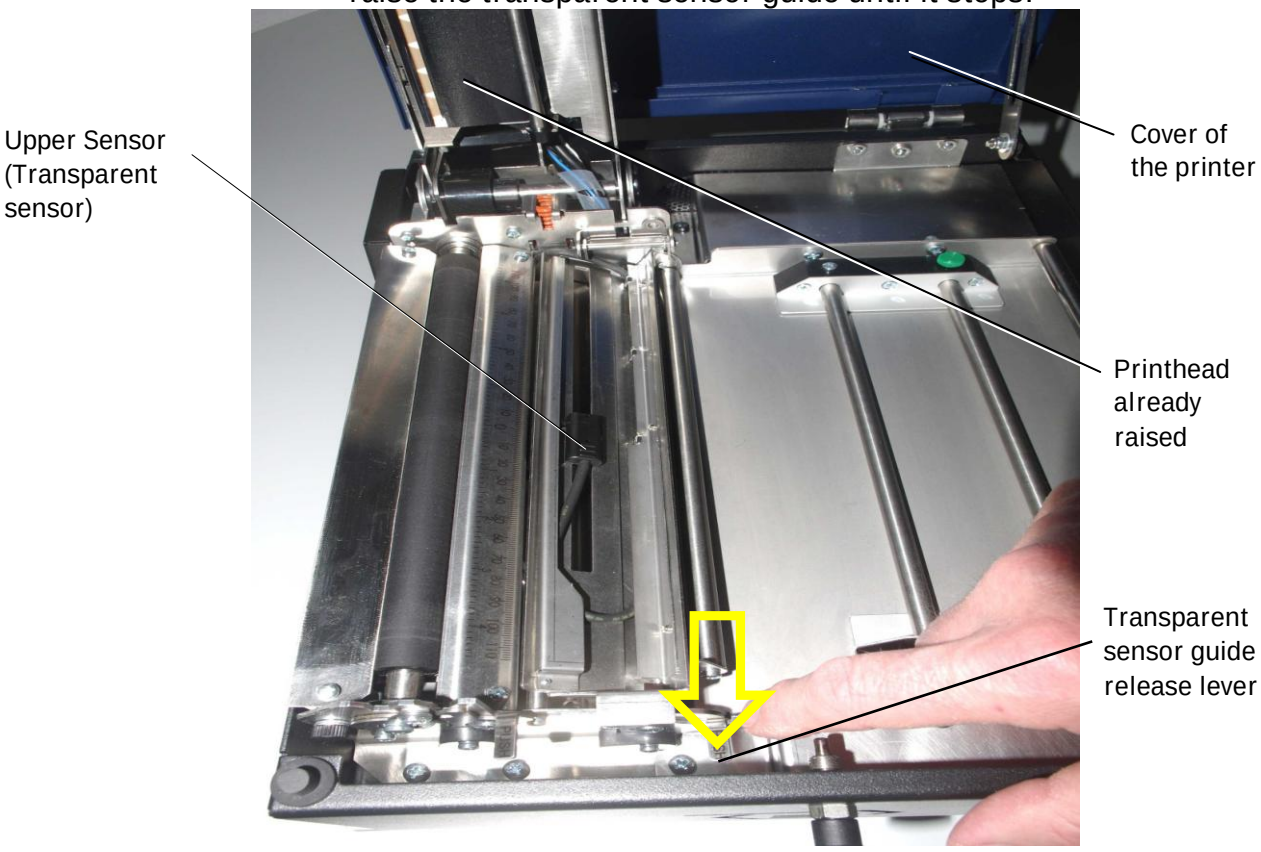


Fig. 9.2.1.e Unlocking the transparent sensor guide

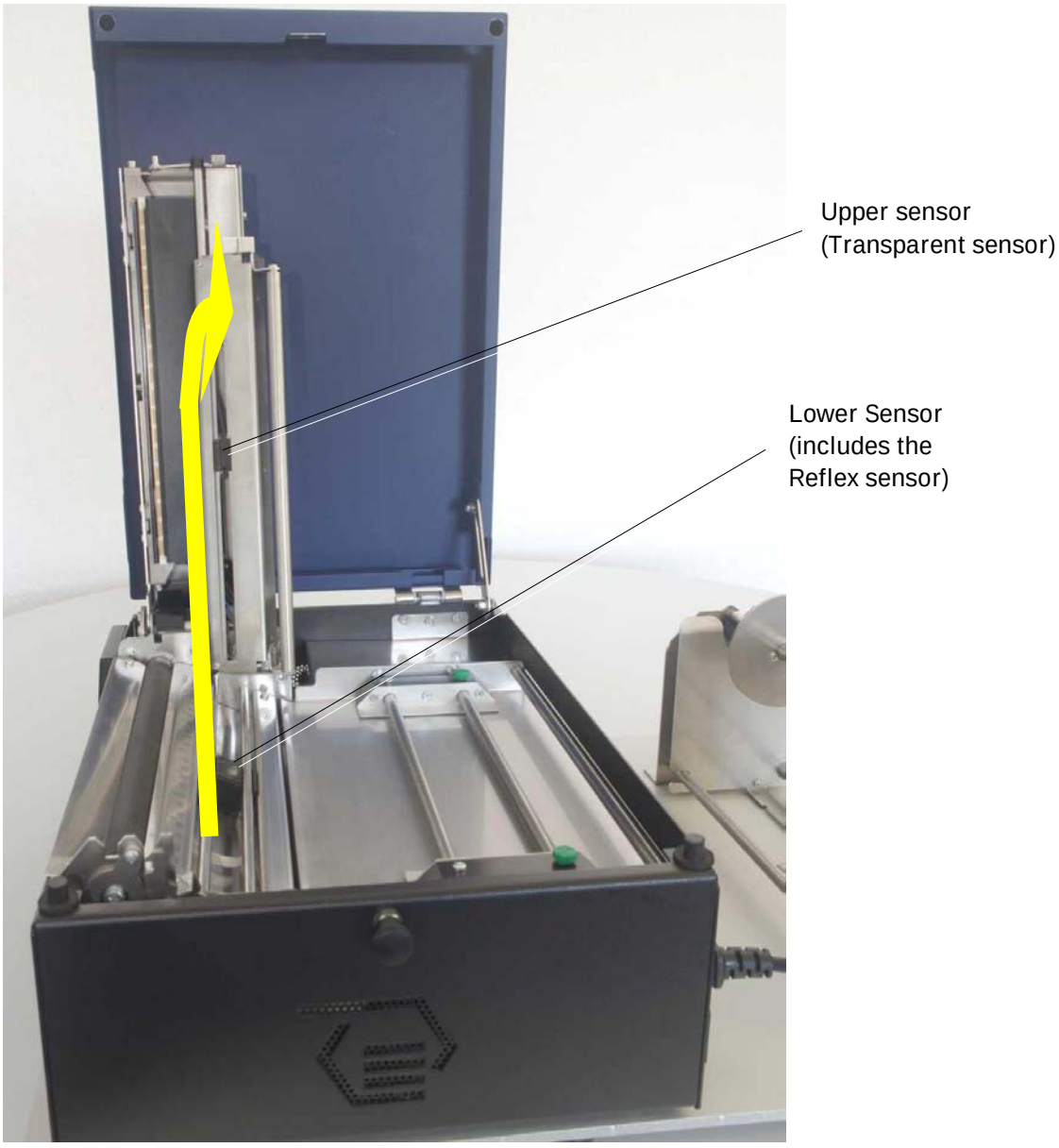


Fig. 9.2.1.f Printhead and transparent sensor guide raised

6. Insert the consumables and set the paper guides to the paper width (refer to section 5.1 for details).

7. Find out the position of the gaps/marks of your consumable.

8. The following table gives you an **overview of print media and sensor target positions** (upper sensor = transparent sensor, lower sensor = includes the reflex sensor):

Media	Sensors required	Sensor position mark
Media with Black marks	Lower sensor (Black mark) (+ upper sensor for paper end detection)	Directly over the black mark
Die-cut label	Lower and upper sensor (Gap)	The middle of media
Center-punched hole tag	Lower and upper sensors(Gap)	Directly over the hole
Notched tag	Lower and upper sensors(Gap)	Directly over the notch

9. Set the lower sensors to the lateral position of the gaps or marks of your material. (Compare the yellow arrows in the following figure.)

10. Use the correct mark for this (transparent or reflex, compare the following figure).

Example:
When the media is a center-punched hole or notched tag, first align the lower sensor position mark 'T' with the hole or notch of the media.

11. Read the value of the scale on the media guide plate pointing the 'T' mark. (The transparent sensor has to be set to the same value, compare step 10.)

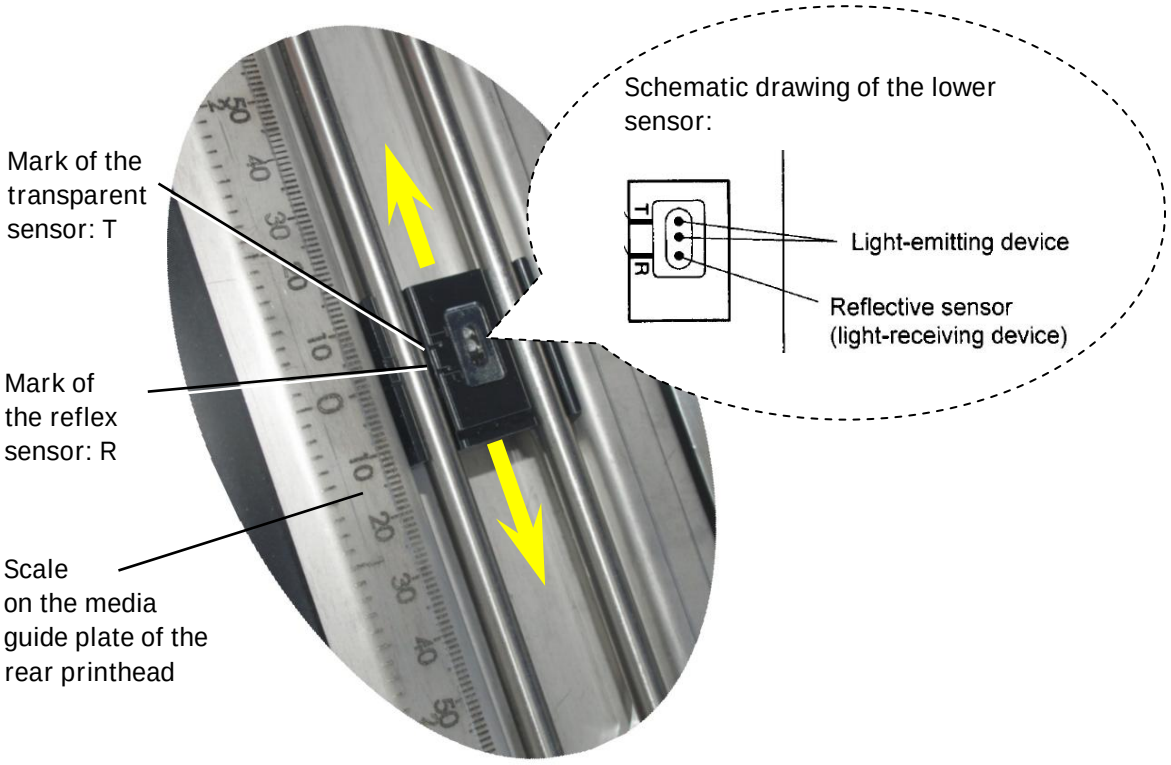


Fig. 9.2.1.g Setting **the lower** sensor to the right position

12. Swivel the transparent sensor guide downward.

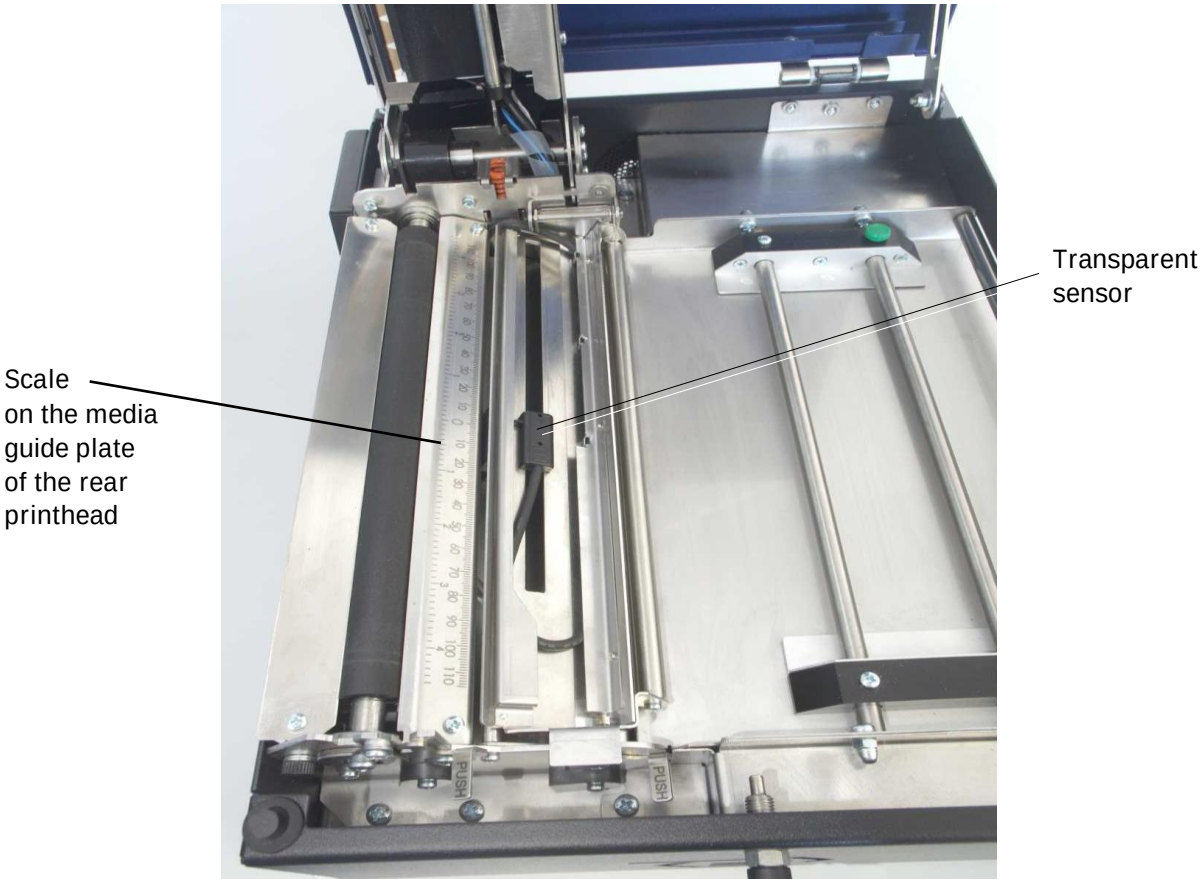


Fig. 9.2.1.h Transparent sensor guide swivelled down

13. Slide the transparent sensor to the accurate position, compare the scale value of step 8:

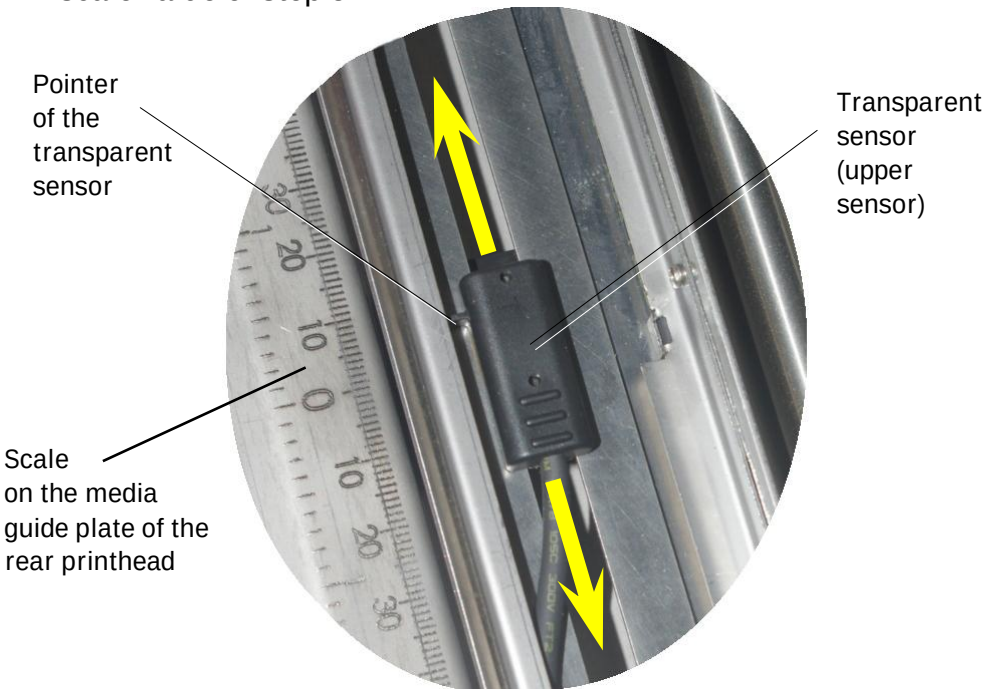


Fig. 9.2.1.i Sliding the **upper sensor** (transparent sensor) to the accurate position

For **through-beam functionality** it is important, that the **Transparent sensor and Reflex sensor** are facing each other.

This can be tested as follows:

14. Take out the consumables.
15. Push the transparent sensor guide down gently until it clicks into place.
16. Swivel the printhead assembly downward and push it down gently until it clicks into place.
17. Use the **Sensor Test** panel function (in the engine menu), to check the signal of the sensor:

After successful adjustment of the sensor positions the **measured value** should be **slightly above 0%.** (Level without material in the light barrier).

If the measured value is not as expected: please carry out the sensor position adjustment steps as described above once again and carefully, before proceeding with the the following sections.

The next step is to adjust the currents and the switching thresholds of the sensors. (Please read the following sections.)

Always adjust **both sensors** to your current consumables (upper sensor and lower sensor)!

For applying the **through-beam light barrier** functionality it is anyway necessary to use both, the upper Transparent sensor as well as the lower Reflex sensor.

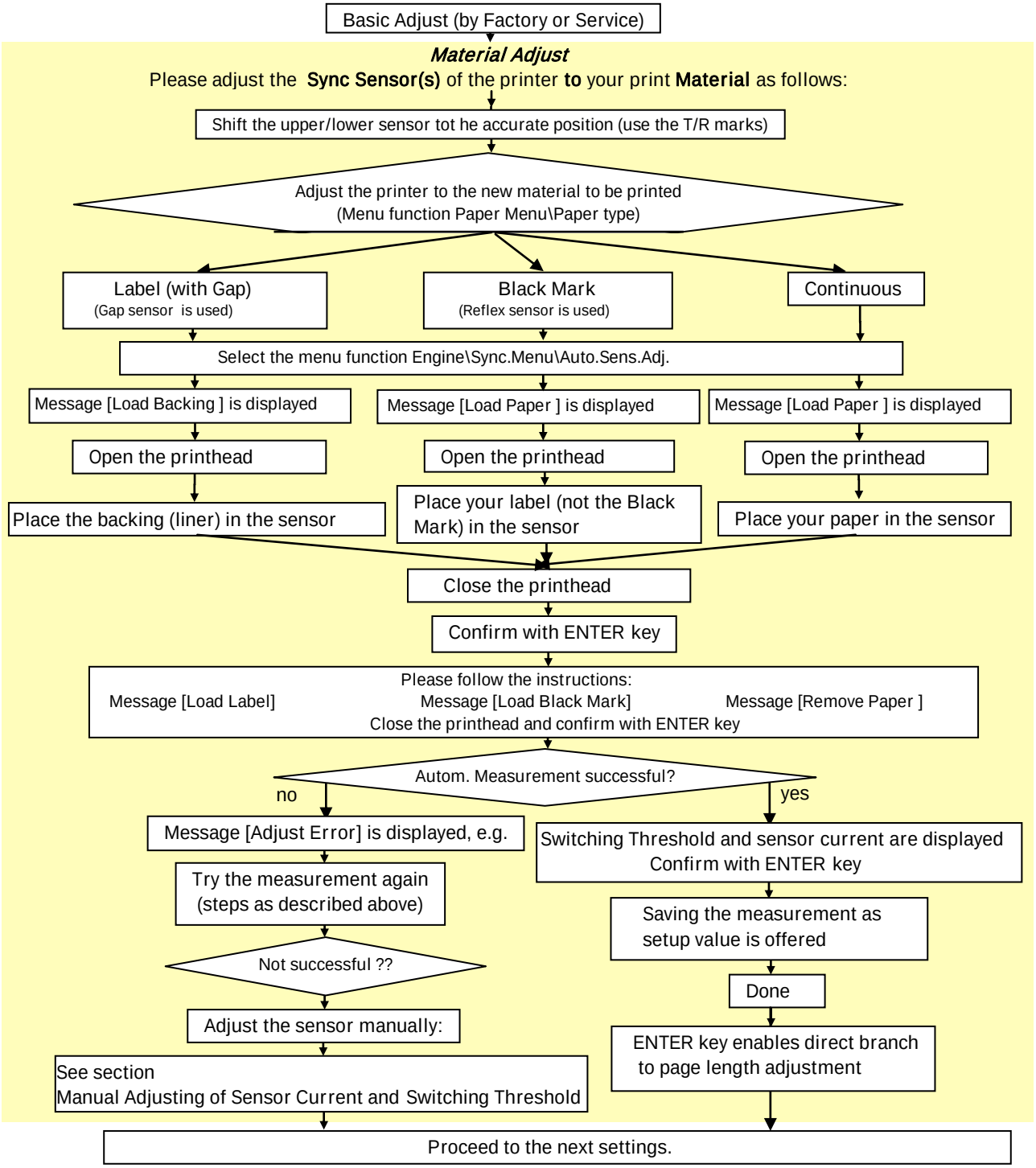
For using the **reflex light barrier** functionality only the (lower) Reflex sensor is needed to detect the markings / Black Marks, but the through-beam light barrier is needed for paper end detection.

9.2.2. Automatic Adjust of Sensor Current and Switching Threshold

This function serves to adjust the printer's Sync Sensors to the material in use.

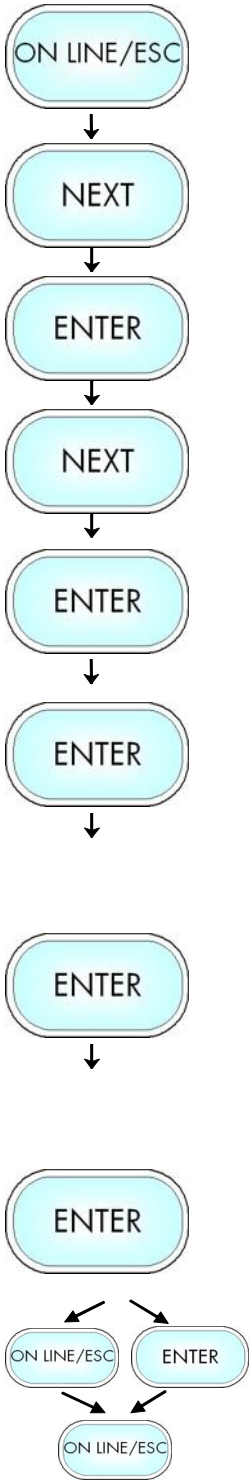
If this automatic function does not work with your specific print material, please perform the steps described in section 9.2.3 Manual Adjusting of Sensor Current and Switching Threshold.

9.2.2.1. Overview



9.2.2.2. Example

Adjusting the printer to the actual used media (Paper Type) is described in section 9.1. The following example describes the steps of the **automatic sensor adjust** of the Gap Sensor (transparent sensor).



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	
• • •	Press the NEXT or PREVIOUS key until [Engine] is displayed.
[Engine]	Press the ENTER key. This selects the Engine menu.
[Printspeed]	
• • •	Press the NEXT or PREVIOUS key until [Sync. Menu] is displayed.
[Sync. Menu]	Press the ENTER key. This selects the Sync. menu.
[Auto.Sens.Adj.]	Press this key to start the autom. sensor adjustment.
[Load Backing]	Open the rear printhead and place the backing (liner) in the sensor. Close the printhead.
[Load Label]	Press ENTER: the printer automatically measures the contrast value. Open the rear printhead and place the label (with liner) in the sensor. Close the printhead.
[Save as Setup?]	Press ENTER: the printer automatically measures the contrast value. In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ONLINE key longer than 2 seconds.

9.2.3. Manual Adjusting of Sensor Current and Switching Threshold

Manual adjusting of the Sync sensor current and switching threshold allows the processing of materials with high contrast proof points within the label, which would otherwise be falsely measured by the system. *)

The panel functions Sensor Test and Sync Sens Level serve to adjust the Sync sensors (Reflex sensor and Gap sensor) to special media (material to print on).

The following sections describe the steps to adjust the Black mark sensor (reflex sensor) and the Gap sensors (transparent sensor) in form of flow charts as well as in form of step by step listings.

*) Special solution: If the adjusting of the Gap Sync sensor fails because the contrast value of the label material itself is very low, you can use the panel function **Sync.Sens.Logic** to invert the logic. (Black marks can be used as "inverse gaps" in this way.)

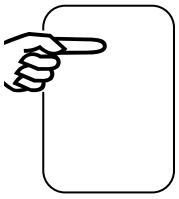
To get access to the Service Functions you have to **start** the printer in the **Service Mode**:

The Service Functions can be carried out by a MICROPLEX authorized operator or a service engineer.
A not trained person is **not allowed** to carry out this operations.

Please be especially careful when carrying out the following operations to avoid maladjustments and damaging the printer.

Turn off the printer.

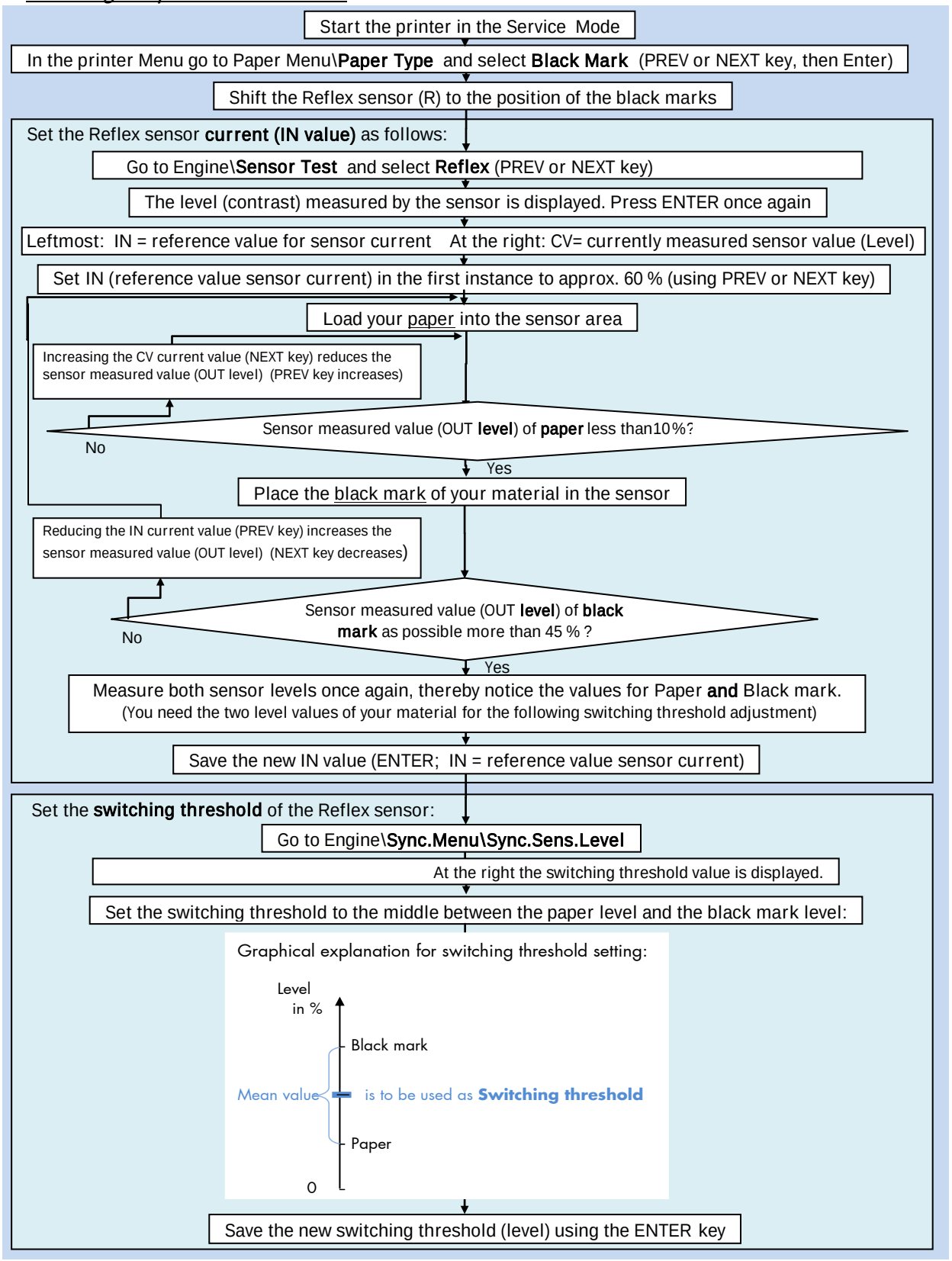
Start the printer in the **Service Mode:**

	Panel display	Notes
Turn the printer off		
Put a fingertip on the touch screen		Before starting the printer touch the printer screen (centrally in the upper area of the touchscreen) with your fingertip.
Turn the printer on		Turn the printer on and keep the finger on the touchscreen for about 1 second, then remove it.
	[Service Mode]	
		Now the functions of the service menu are available (compare dashed areas in the Menu Structure of section 8.2).

• • •

9.2.3.1. Reflex Sensor (Black Mark Sensor)

Working Steps as Flow Chart:



*Description of the Working Steps for the **Reflex Sensor** (Black Mark Sensor):*

A) Start the printer in the Service Mode, compare section 9.2.3 (necessary for steps in section D).

B) Select the **Paper Type** Reflex Mark

Please go to [**Paper Type**] in the printer menu structure:

Paper Menu\Paper Type\ select **Black Mark**

(Use PREV or NEXT key, then ENTER)

C) Shift the **Reflex sensor (R)** to the **position** of your **black marks**

See section 9.2.1 Checking and Adjusting the Sensors

D) **Sensor Current** (**IN** value) adjusting Reflex

Please go to **Sensor Test** and select the subpoint **Reflex**:

Engine\Sensor Test\ select Reflex

The currently measured sensor level (contrast) is displayed.

Press the ENTER key again, after this 2 values are displayed:

Left IN = reference value for sensor current Right OUT = curr. measured sensor value (level)

IN is modifiable (and has an effect on the OUT value).

Use the NEXT and PREV keys to set the IN value. Approx. IN value: 60 %

Load paper into the **sensor**.

The sensor measured value (OUT **level**) of the **paper** (not black mark) should count less than 10%.

If the OUT level is too high, increase IN (sensor current).

Put a **black mark into** the **sensor** area.

The sensor measured value (OUT **level**) of the black mark should count as possible more than 45 %.

If the sensor measured value (OUT level) of black mark is too low, the IN value should be decreased.

Higher black mark OUT values than 45 % are more advantageous so long as there is no rising above 10 % of the paper OUT level.

Measure both sensor levels once again for Paper **and** Black mark.

(You need the two level values of your material for the following switching threshold adjustment)

Save the new current value (IN) using the ENTER key.

E) **Sensor Switching Threshold** adjusting

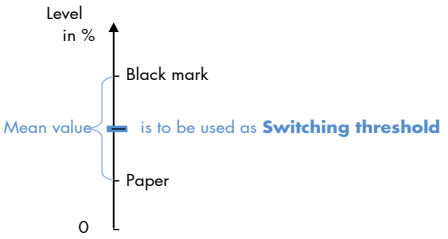
Please go to [**Sync.Sens.Level**] in the printers menu structure:

Engine\Sync.Menu\Sync.Sens.Level

At the right the switching threshold value is displayed.

Use the NEXT and PREV keys to set the switching threshold of the sensor to the middle between the paper level and the black mark level:

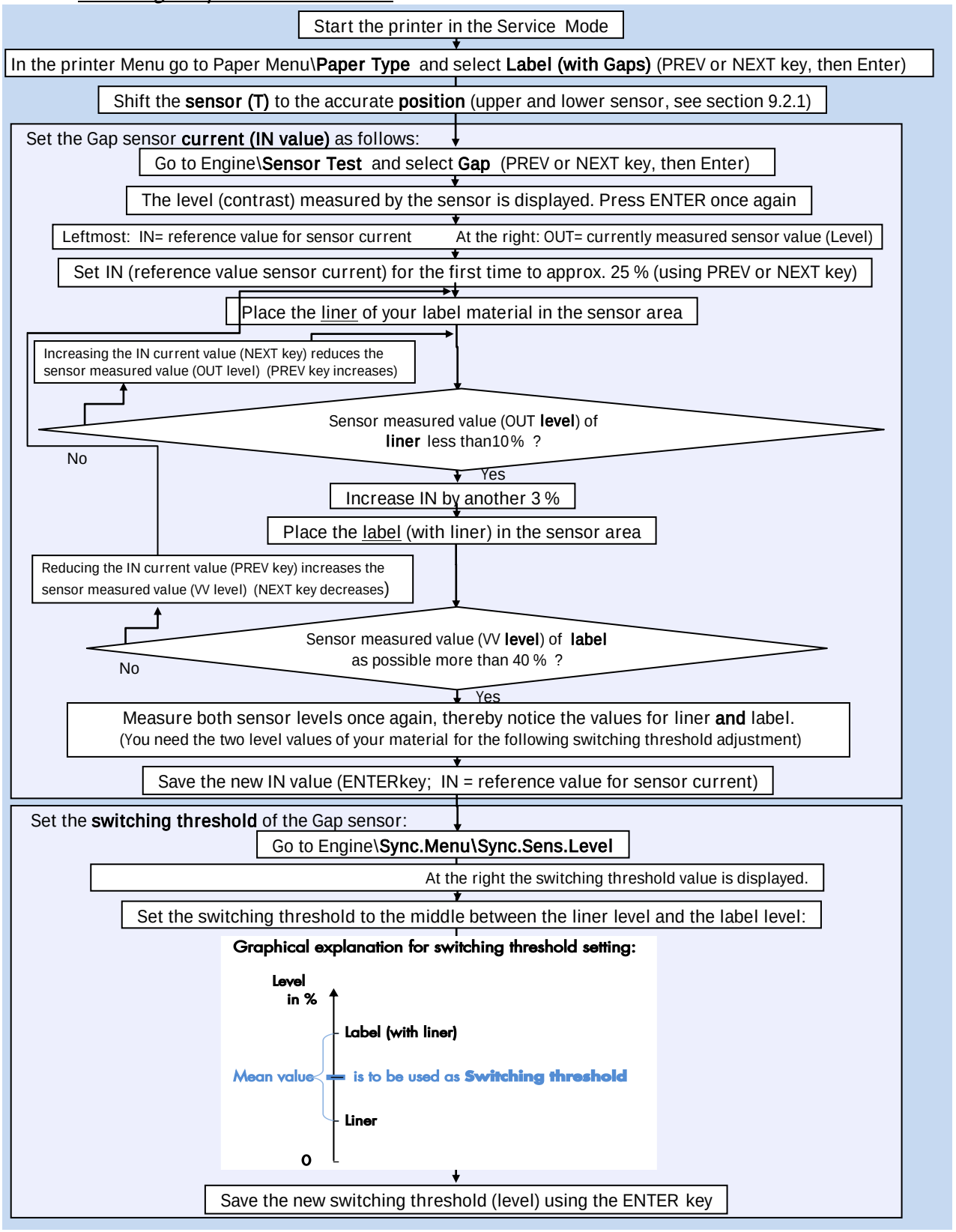
Graphical explanation for switching threshold setting:



Save the new switching threshold (ENTER key).

9.2.3.2. Gap Sensor (Transparent Sensor)

Working Steps as Flow Chart:



*Description of the Working Steps for the **Gap Sensor** (Transparent Sensor):*

A) Start the printer in the Service Mode, compare section 9.2.3 (necessary for steps in section D).

B) Select the **Paper Type** — Label, Punched

Please go to [**Paper Type**] in the printers menu structure:
Paper Menu\Paper Type and select **Label (with Gaps)**
(Use PREV or NEXT, then ENTER)

C) Shift the **sensor (T)** to the accurate **position** (facing the upper sensor)
See section 9.2.1 Checking and Adjusting the Sensors

D) **Sensor Current (IN** value**)** adjusting — Gap

Please go to **Sensor Test** and select the subpoint **Gap**:
Engine\Sensor Test\ select Gap
The currently measured sensor level (contrast) is displayed.
Press the ENTER key again, after this 2 values are displayed:
Left IN = reference value for sensor current Right OUT = curr. measured sensor value (level)
IN is modifiable (and has an effect on the OUT value).

Use the NEXT and PREV keys to set the IN value. Approx. IN value: — 25 %

Put the **liner** (not the label) of your material into the **sensor**.
Increase IN (current) until the sensor measured value (OUT **level)** of the **liner** is **under 10 %** .

After that increase IN (sensor current) by another 3 %. — + 3 %

Load label (with liner) **into the sensor**.
The measured sensor level (OUT **level)** of **label** should count **as possible more than 40 %** .

If the sensor measured value (OUT level) of label is too low, the IN value should be decreased.
Higher label OUT values than 40 % are more advantageous so long as there is no rising above 10 % of the liner OUT level.

Measure both sensor levels once again for Liner **and** Label.
(You need the two level values of your material for the following switching threshold adjustment)

Save the new current value (IN) using the ENTER key.

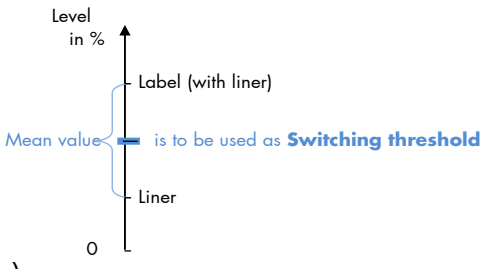
E) **Sensor Switching Threshold** adjusting

Please go to [**Sync.Sens.Level**] in the printers menu structure:
Engine\Sync.Menu\Sync.Sens.Level

At the right the switching threshold value is displayed.

Use the NEXT and PREV keys to set the switching threshold of the sensor to the middle between the liner level and the label level:

Graphical explanation for switching threshold setting:



Save the new switching threshold (ENTER key).

9.2.3.3. Example: Determining the Switching Threshold for a Label Material

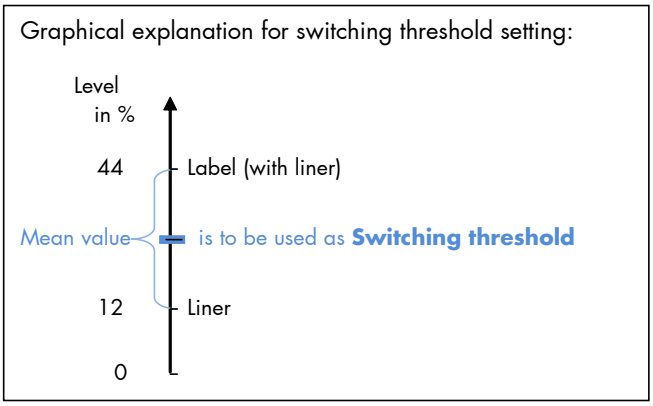
After selecting the **panel function Sync.Sens.Level** the contrast of the inserted material (placed in the photoelectric sensor area) is shown on the printer display.
The **left level value** is the **currently measured sensor value** (You'll find more details in the previous sections.)

For **all** different **contrast zones** of the current **material** sensor values (level values in %) have to be measured now. **Place** the material **in the** photoelectric **sensor** area and read the level values.

Example: Self-adhesive material with black bars across the label

Zone of the inserted material:	Sensor measured value (level):
Label + liner + black bar	75 %
Label + liner	44 %
Liner (other names: carrier or backing)	12 %

Calculation of the Switching Threshold



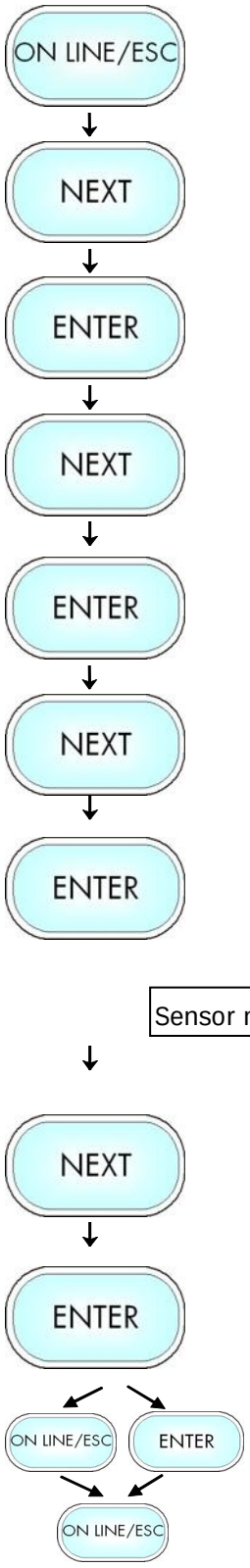
The **middle between the label level** (incl. liner) **and liner level** has to be calculated:

(44% - 12%)/2 + 12% = 28%

In this example the switching threshold is to be set to the value 28 %.

The steps to set the Sync sensor level at the printer panel can be found on the following page:

Steps to **set the Switching Threshold (Sync.Sens.Level)** at the printer panel:



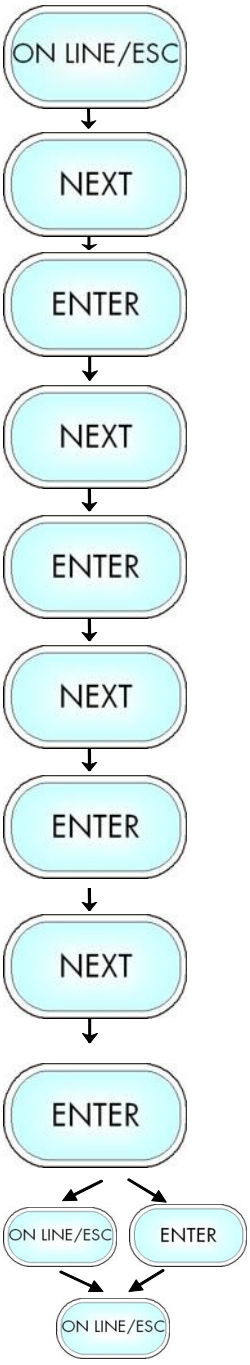
Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	
• • •	Press the NEXT or PREVIOUS key until [Engine] is displayed.
[Engine]	Press the ENTER key. This selects the Engine menu.
[Printspeed]	
• • •	Press the NEXT or PREVIOUS key until [Sync. Menu] is displayed.
[Sync. Menu]	Press the ENTER key. This selects the Sync menu.
[Auto.Sens.Adj.]	
• • •	Press the NEXT or PREVIOUS key until [Sync.Sens.Level] is displayed.
[Sync.Sens.Level]	Press the ENTER key to adjust the switching threshold of the sensor.
[Level: 44% 40.0%] (Sensor measured value / **Switching Threshold**)	At the right the currently set switching threshold is displayed. (At the left the sensor measured contrast value is displayed.)
• • •	Press the NEXT or PREVIOUS key until the desired switching threshold is displayed.
[Level: 44% 28.0%]	In this example the switching threshold is adjusted to 28%.
[Save as Setup?]	In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ONLINE key longer than 2 seconds.

After you finished the sensor adjustments you have to **turn off the printer**. This is necessary to terminate the Service Mode (to lock the access to the service functions).

9.3. Adjusting the Zero Position of the Material Transport (Sync.Sens.Offset)

Using this function an **offset** from the detected paper feed zero-position can be set. (See figure next page) By this the position of **printout and tear off/cut** is adjusted **relatively to the material**. (TOF, offset from the printer-detected punch position, that means relatively to the gap/perforation and start of the label). The setting range for the offset is approximately ± 15 mm.

Note: Please execute this offset adjusting after you have successfully adjusted the Sync sensors and the slip correction. (See previous sections).



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	Press the NEXT or PREVIOUS key until [Engine] is displayed.
• • •	
[Engine]	
[Printspeed]	Press the NEXT or PREVIOUS key until [Sync. Menu] is displayed.
• • •	
[Sync. Menu]	
[Auto.Sens.Adj.]	Press the NEXT or PREVIOUS key until [Sync.Sens.Offset] is displayed.
• • •	
[Sync.Sens.Offset]	
[Offset: + 0.0 mm]	The currently set value is displayed.
• • •	Press the NEXT or PREVIOUS key until the desired offset is displayed.
[Offset: + 1.0 mm]	The gap position is shifted 1 mm against the feed direction.
[Save as Setup?]	In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ON LINE key longer than 2 seconds.

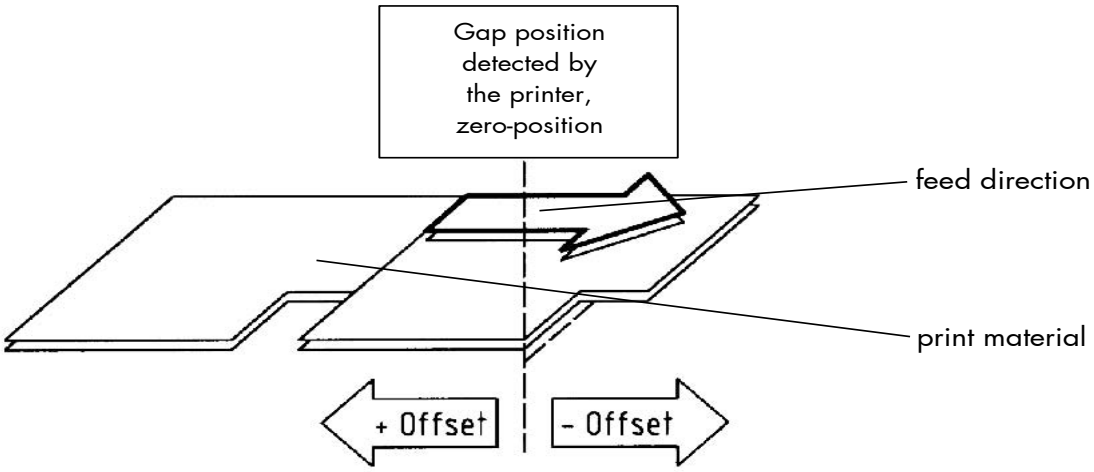
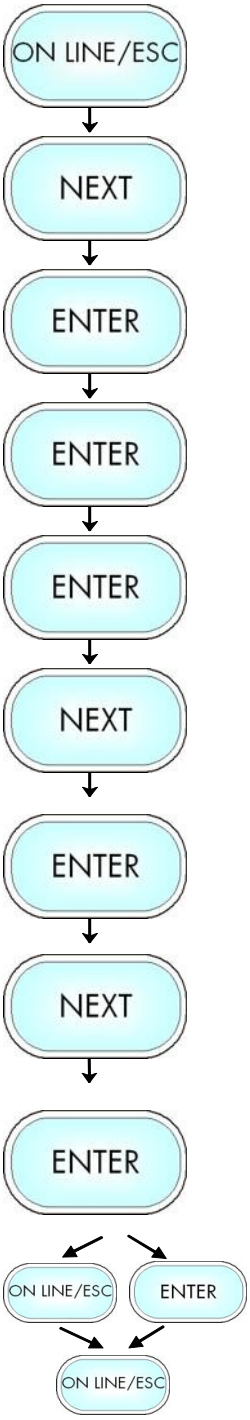


Fig. 9.3.a Setting the zero position of the material feed

9.4. Page Length Adjustment

After inserting new material (e.g. paper) this function is used to adjust the printer to the new paper length.

Hints: Alternatively, the printer itself is able to measure the label length. See next sections.
Please execute **this** length adjusting **after** you have successfully **adjusted** the Sync **sensors** and the **Sync.Sens.Offset** (See previous sections).



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	Press the NEXT or PREVIOUS key until [Paper Menu] is displayed.
• • •	
[Paper Menu]	Press the ENTER key to select the paper menu.
[Paper Size]	Press the ENTER key to select the paper size menu.
[Page Length]	Press the ENTER key to adjust the page length.
[Measure Length]	Press the NEXT or PREVIOUS key if you want to **adjust the paper length manually**:
• • •	
[in mm]	mm = currently selected measuring unit. (Alternative the units inch or 1/300 inch can be chosen with NEXT or PREVIOUS).
• • •	
[Digit4 1̲49.9]	Pressing the NEXT or PREVIOUS key changes the value of the current digit (Digit4 = left position, in this example: 1). Pressing the ENTER key moves you to the next digit (the ESC key moves you back, if need be).
• • •	
[Digit1 149.5̲]	The paper length is changed to 149.5 mm.
[Save as Setup?]	In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ONLINE key longer than 2 seconds.

9.4.1. Starting the Printer's Measurement of Label Length

Use the panel function
logiJET TM8 \ Paper Menu \ Paper Size \ Page Length \ **Measure Length**

The printer performs a material feed and reports the measured label length on the display.
Use the ENTER key to confirm this value (configuration of the measured label length).

In addition this new value can be saved permanent as setup value (using the ENTER key, again).

9.4.2. Configuration of Semiautomatic Label Length Measurement

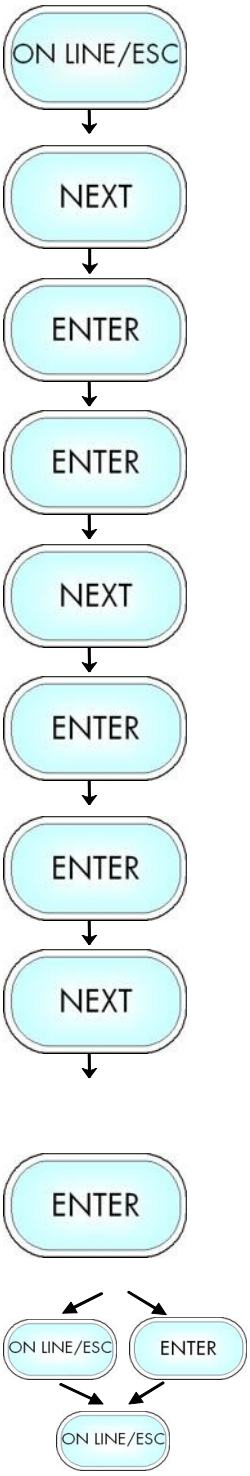
The panel function
logiJET TM8\Paper Menu\Paper Size\Page Length**Auto.Measurement**
serves to switch the semiautomatic label length measurement function to on or off (and to save this setting as setup value).

If the semiautomatic label length measurement function is chosen, the printer **automatically offers** you the **measurement of the label length** after every printer power on and **after every closing of the printhead** (for example after the inserting of a new label roll):
Panel display [Measure length]

Use the ENTER key to start the measurement of label length, use the FEED key to suppress this function.
The printer saves the measured label length temporal (as long as the printer stays turned on).

9.5. Material Width Adjustment (Paper Width)

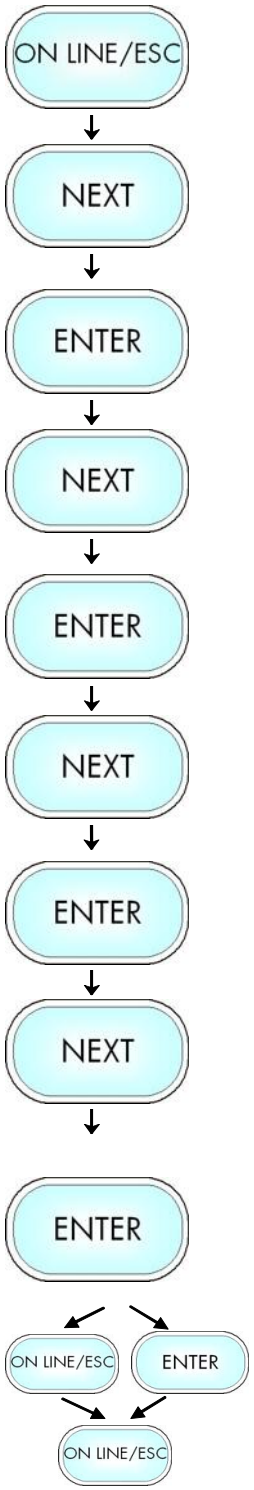
The paper width (print width) has to be adjusted with this function according to the currently used format.). The setting range for the paper width is from 100 mm up to 228 mm (219 mm printable).



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	Press the NEXT or PREVIOUS key until [Paper Menu] is displayed.
• • •	
[Paper Menu]	Press the ENTER key to select the paper menu.
[Paper Size]	Press the ENTER key to select the paper size menu.
[Paper Length]	Press the NEXT or PREVIOUS key until [Paper Width] is displayed.
• • •	
[Paper Width]	Press the ENTER key to adjust the format width to the paper width.
[in mm]	mm = currently selected measuring unit. (Alternative the units inch or 1/300 inch can be chosen with NEXT or PREVIOUS).
• • •	
[Digit4 1̲08.4]	Pressing the NEXT or PREVIOUS key changes the value of the current digit (Digit4 = left position, in this example: 1). Pressing the ENTER key moves you to the next digit (the ESC key moves you back, if need be).
• • •	
[Digit1 108.0̲]	The format width (paper width) is changed to 108.0 mm.
[Save as Setup?]	In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ONLINE key longer than 2 seconds.

9.6. Configuration of Text Margins

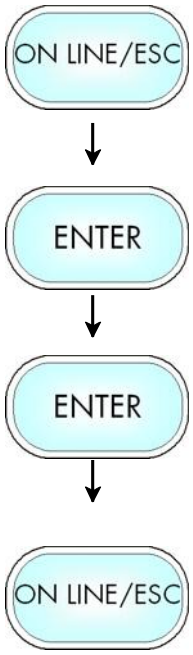
This function sets text margins. Margins are expressed in dots at the concerning edge of the paper.



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1] • • • [Page Menu]	Press the NEXT or PREVIOUS key until [Page Menu] is displayed.
[Font Number] • • • [Margin]	Press the NEXT or PREVIOUS key until [Margin] is displayed.
[Left] • • • [from Right]	Press the NEXT or PREVIOUS key until the desired margin is displayed.
[Digit4 0081] • • • [Digit1 0087]	Pressing the NEXT or PREVIOUS key changes the value of the current digit (Digit4 = left position, in this example: 0). Pressing the ENTER key moves you to the next digit (the ESC key moves you back, if need be). The right margin is changed into 87 dot.
[Save as Setup?]	In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ON LINE key longer than 2 seconds.

9.7. Printing the Status Sheet

This function generates a status sheet.
The status sheet contains information about the current printer configuration and the available fonts.



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	Press the ENTER key. Menu level 1 is selected.
[Status Sheet]	Press the ENTER key again. A status sheet is printed.
[Status Sheet]	Turn the printer ON LINE again: Press the ONLINE key longer than 2 seconds.

Status sheet contents:

The first lines, entitled SERVICE INFORMATION, contain hexadecimal coded configuration parameters.

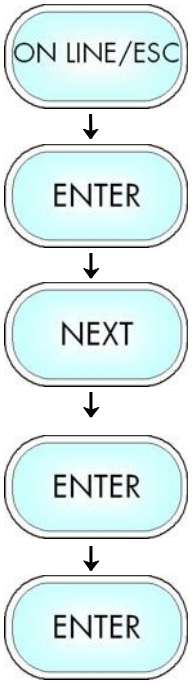
Printed in plain text:

- Device Info
- Controller version / memory / serial number
- Firmware release
- Interface
  parameters of Parallel, Serial, USB, Network (Ethernet)
- Network
  parameters and addresses
- Printer emulation
- User-RAM / free User-RAM
- Input data buffer
- Transparent code
- Paper size
- Default margins top / left
  bottom / right
- Default character code
- Options
- Fonts installed (Font banks)

Note: Use the panel function Printing the Font List to show the fonts installed (see section 9.9).

9.8. Show Info (IP Address, Firmware Release ...)

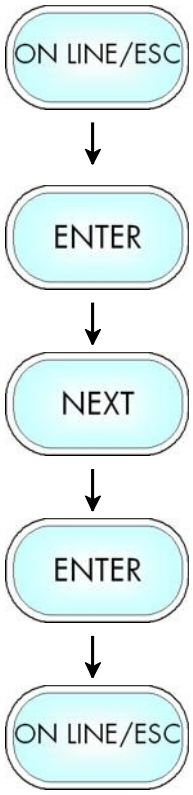
This function serves to show some basic information about your printer: the IP Address, Firmware Release, Serial Number and the current Printer Emulation.



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	Press this key. Menu Level 1 is selected.
[Status Sheet]	Press the NEXT or PREVIOUS key until [Show Info] is displayed.
• • •	
[Show Info]	Press this key. The Show Info menu is selected.
[IP Address]	Press this key again to show the IP Address of your printer.
	Alternative: Use the NEXT or PREVIOUS key to select for example the Firmware Release or the Serial Number of your printer.
[192.168.002.002]	The currently set IP Address is displayed.
	If you need to change the setting, refer to section 9.32 Configuration of Network Parameters.
	Turn the printer ON LINE again: Press the ON LINE key longer than 2 seconds.

9.9. Printing the Font List

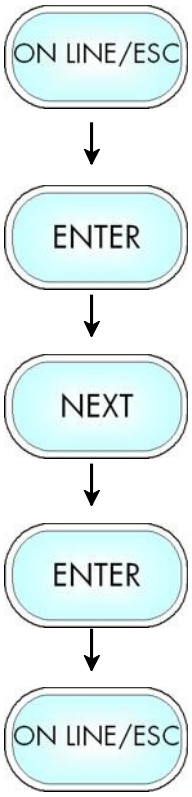
This function generates a list of all fonts installed to the printer.
The font list shows demo prints of all fonts and, in addition, the concerning PCL selection commands. These commands contain information on font width and font height (see section 9.21 Font Selection, too).



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	Menu Level 1 is selected.
[Status Sheet]	Press the NEXT or PREVIOUS key until [Font List] is displayed.
• • •	
[Font List]	The font list is printed.
[Font List]	Turn the printer ON LINE again: Press the ONLINE key longer than 2 seconds.

9.10. Hexdump Mode Activation

Within the Hexdump Mode the printer prints all characters received via interface without any interpretation (hexadecimal coded).
This mode helps with error diagnosis. The Hexdump Mode can be activated only temporarily.

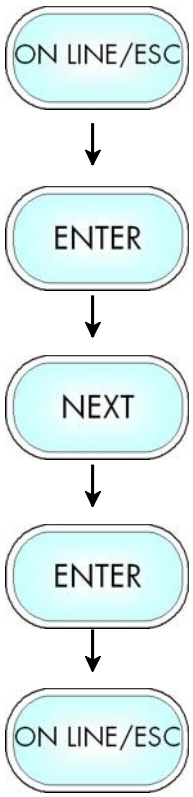


Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	Menu level 1 is selected.
[Status Sheet]	Press the NEXT or PREVIOUS key until [Hexdump] is displayed.
• • •	
[Hexdump]	
[Hexdump]	The Hexdump Mode is activated.
	Turn the printer ON LINE again: Press the ONLINE key longer than 2 seconds.

Note: By activating the normal print mode (see next section) or by turning the printer off and on again the printer can be taken out of Hexdump Mode.
Time between turning the printer off and on again should be at least 15 seconds.

9.11. Normal Print Mode Activation (incl. FORM FEED)

The normal print mode suspends the Hexdump Mode.
This function is activated, when a print job must be continued without turning the printer off and on again.
In addition to that the function "Normal Print Mode Activation" is used to produce a FORM FEED.

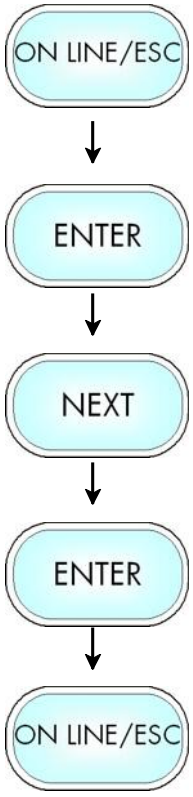


Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	
	Menu level 1 is selected.
[Status Sheet]	
• • •	Press the NEXT or PREVIOUS key until [Normal Print/FF] is displayed.
[Normal Print/FF]	
	The normal print mode is activated.
[Normal Print/FF]	
	Turn the printer ON LINE again: Press the ONLINE key longer than 2 seconds.

Note: After activating the normal print mode a FORM FEED is released automatically and one sheet is put out.
This is necessary because after a test in the Hexdump Mode it is possible that data can remain in the input buffer unintentionally (cause: in the Hexdump Mode no control characters are evaluated and no FORM FEED is effected).

9.12. Clearing the Input Buffer (Cancel Job)

This function permits the resumption of a print job at a particular page after a print interruption (e.g. paper jam). The data contained in the input buffer before the interruption are cleared.

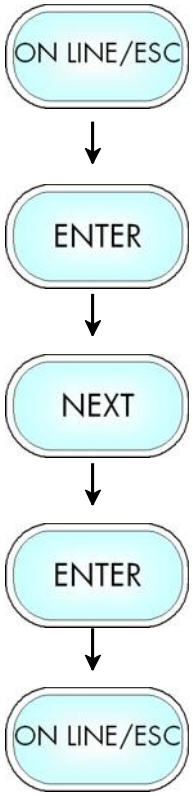


Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	Menu level 1 is selected.
[Status Sheet]	Press the NEXT or PREVIOUS key until [Cancel Job] is displayed.
• • •	
[Cancel Job]	All data contained in the input buffer will be cleared.
[Cancel Job]	Turn the printer ON LINE again: Press the ONLINE key longer than 2 seconds.

9.13. Printing the Menu Page

This function prints a survey of the available panel functions.

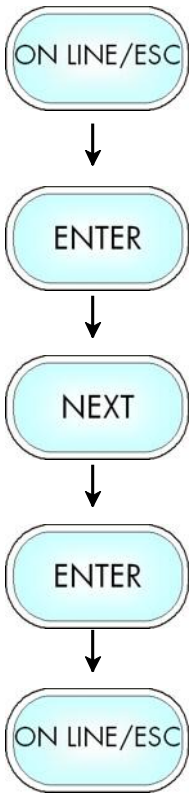
Note: When printing the menu page please use a large paper.



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	Menu level 1 is seleced.
[Status Sheet]	Press the NEXT or PREVIOUS key until [Menu Page] is displayed.
• • •	
[Menu Page]	A menu structure presentation of the logiJET TM8 is printed out (compare section 8.2).
[Menu Page]	Turn the printer ON LINE again: Press the ONLINE key longer than 2 seconds.

9.14. Generating Test Prints (Sliding Pattern)

This function generates a series of test prints without sending data to the printer.
These test prints facilitate error analysis.

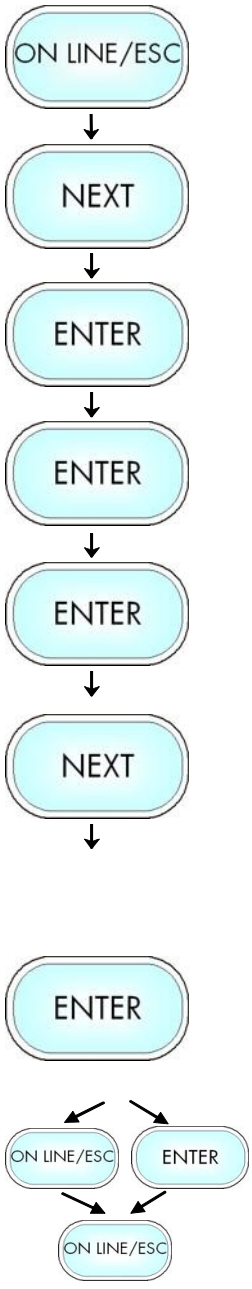


Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	Menu level 1 is selected.
[Status Sheet]	Press the NEXT or PREVIOUS key until [Sliding Pattern] is displayed.
• • •	
[Sliding Pattern]	A series of test prints is generated.
[Sliding Pattern]	Turn the printer ON LINE again: Press the ONLINE key longer than 2 seconds.

The printing out of test prints can be stopped by pushing the ESC key.

9.15. Data Interface Configuration

This function is used to set the interface parameters.

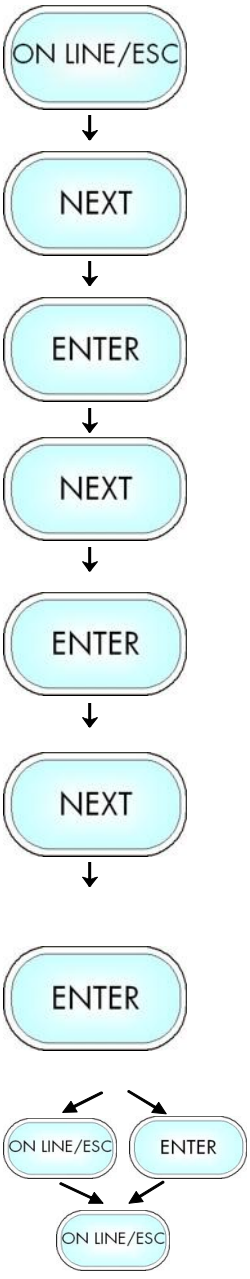


Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	Press the NEXT or PREVIOUS key until [Configuration] is displayed.
• • •	
[Configuration]	
[Interface]	
[SIA Timeout]	Press the ENTER key to change the timeout.
[30 s]	The currently set value for he timeout is displayed (here: 30 seconds).
• • •	Pressing the NEXT or PREVIOUS key changes the timeout.
[40 s]	The timeout (the waiting period for SIA to switch to the next interface) is increased to 40 seconds.
[Save as Setup?]	In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ON LINE key longer than 2 seconds.

Note: The printer uses SIA (Simultaneous Interface Administration) to check, which interface is currently used for the transfer of print data.

9.16. Emulation Selection

With this function you can change the active emulation.



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	
• • •	Press the NEXT or PREVIOUS key until [Configuration] is displayed.
[Configuration]	
[Interface]	
• • •	Press the NEXT or PREVIOUS key until [Emulation] is displayed.
[Emulation]	
[SOLID Standard]	
• • •	Press the NEXT or PREVIOUS key until the desired emulation (e.g. HP PCL 5) is displayed.
[HP PCL 5]	
[Save as Setup?]	The emulation HP PCL 5 is selected. In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ON LINE key longer than 2 seconds.

Available emulations:

Subset of the MICROPLEX standard emulations:

SOLID Standard (MICROPLEX IDOL),
IBM Proprinter,
AGFA Reno,
Bull MP6090,
CUPS Raster,
Datamax (FGL),
Epson FX (ESC/P),
Tally MT 6xx,
TEC B6xx,
TEC Bx72,
TIFF (CCITT group 4),
ZPL II (Zebra Programming Language)

Optional:

HP LaserJet (PCL 5e) (Factory option only)
ANSI Genicom,
Cab,
Eltron EPL2,
Etimark,
Godex EZPL,
IPDS (via PPD/PPR Protocol),
IDS/IDS2,
IER Command,
Kyocera Prescribe,
LabelPoint,
LDC (Label Description Language),
Printronix IGP/PGL,
QMS (Magnum) Code V,
UBI Fingerprint,
XEROX XES,
XML (SAP RFID),
µPostscript

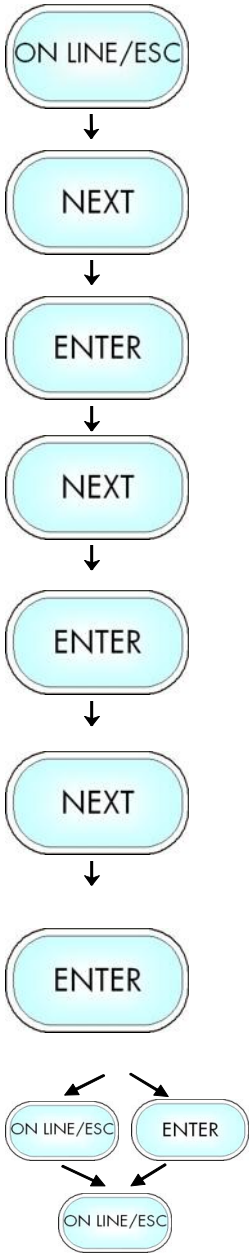
More emulations on request.

Notice:

The brand names mentioned are registered trademarks of the enterprises named above.

9.17. Display Language Selection

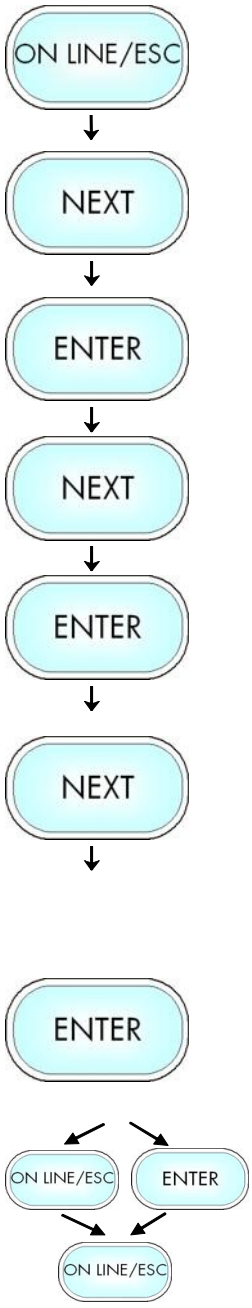
This function enables the user to determine the language for the display messages, the status sheet and the font list.



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	
• • •	Press the NEXT or PREVIOUS key until [Configuration] is displayed.
[Configuration]	
[Interface]	
• • •	Press the NEXT or PREVIOUS key until [Language] is displayed.
[Language]	
[German]	
• • •	Press the NEXT or PREVIOUS key until the desired language (e.g. English) is displayed.
[English]	
[Save as Setup?]	The display language English is selected. In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ON LINE key longer than 2 seconds.

9.18. Transparent Code Adjustment

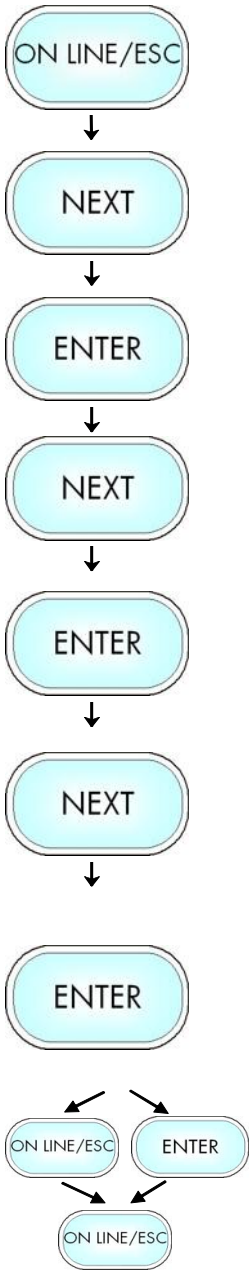
This function configures the transparent code. Using the transparent code enables you to initiate the commands of the page description language IDOL by **printable** characters. The transparent code pre-setting is 2625. These are the ASCII character codes (hexadecimal) for the characters &% (ref. IDOL Programming Manual).



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	
• • •	Press the NEXT or PREVIOUS key until [Configuration] is displayed.
[Configuration]	
[Interface]	
• • •	Press the NEXT or PREVIOUS key until [Transparent Code] is displayed.
[Transparent Code]	
[Digit4 2625]	The hexadecimal number for &% is preset. Pressing the NEXT or PREVIOUS key changes the value of the current position (Digit 4 = left position, in this example: 2). Pressing the ENTER key moves you to the next digit (the ESC key moves you back, if need be).
• • •	
[Digit1 2626]	2626 is selected as transparent code. From now on use the characters && before programming the IDOL commands.
[Save as Setup?]	In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ON LINE key longer than 2 seconds.

9.19. Selection of Memory Distribution (Input Buffer)

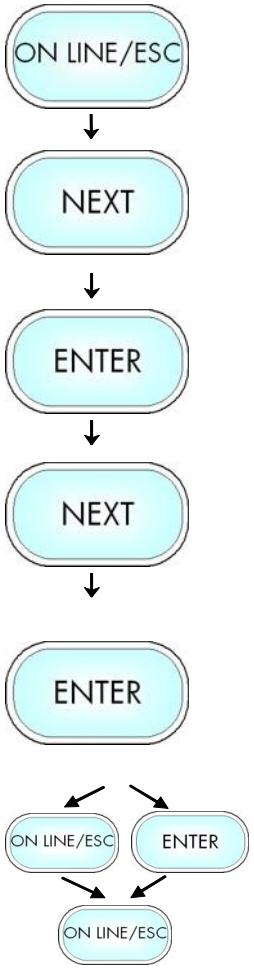
This function enables the user to choose the distribution of the available RAM memory between input buffer and macro/download memory.



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	
• • •	Press the NEXT or PREVIOUS key until [Configuration] is displayed.
[Configuration]	
[Interface]	
• • •	Press the NEXT or PREVIOUS key until [Input Buffer] is displayed.
[Input Buffer]	
[32 kB]	
• • •	Press the NEXT or PREVIOUS key until the desired memory distribution is displayed. The input buffer size is specified in kilobyte (kB) or in percent of the installed memory.
[100 kB]	
[Save as Setup?]	100 kB is selected as input buffer. In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ON LINE key longer than 2 seconds.

9.20. Setting to Factory Default

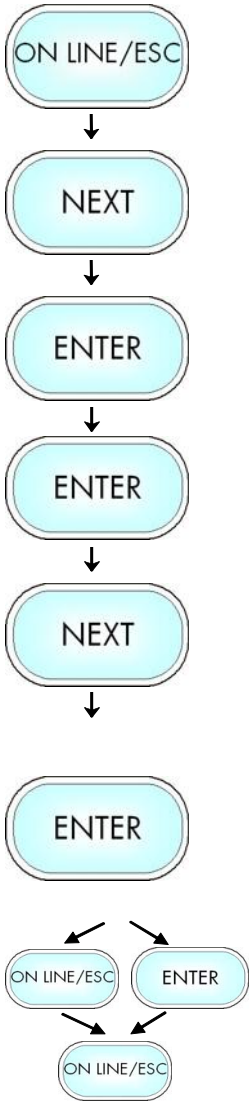
This function back-outs all configurations to factory defaults.



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	
• • •	Press the NEXT or PREVIOUS key until [Configuration] is displayed.
[Configuration]	
[Interface]	
• • •	Press the NEXT or PREVIOUS key until [Factory Default] is displayed.
[Factory Default]	
[Save as Setup?]	Only if you press the ENTER key a second time the configuration will be back-outed to factory defaults.
	Turn the printer ON LINE again: Press the ONLINE key longer than 2 seconds.

9.21. Font Selection

This function selects the active font. Select font number out of the list of available fonts.



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	
• • •	Press the NEXT or PREVIOUS key until [Page Menu] is displayed.
[Page Menu]	
[Font Number]	
[Font 600]	
• • •	Press the NEXT or PREVIOUS key until the desired font number (e.g. 5507 Langeoog) is displayed.
[Font 5507]	
[Save as Setup?]	The font number 5507 Langeoog is selected. In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ON LINE key longer than 2 seconds.

The **logiJET TM8 standard equipment** contains the following **fonts**:

Font no.	Font width	Font height	Font name
0600	10	12	Kurilen
0602	10	12	Kurilen Italic
0610	12	10.1	Kurilen
1710	12	10.1	Kurilen Italic
4508	P	8.1	Helgoland
4510	P	10	Helgoland
4714	P	14.4	Helgoland Bold
5507	20	7	Langeoog
5508	16.6	7.9	Langeoog
5509	15	9.1	Langeoog
6610	10	10.1	Juist Monosp.
9210	P	10.1	Tasmanien
9310	P	10.1	Tasmanien Italic
2000	P	SC	Tasmanien
9900	P	SC	Neuwerk

Resumption of this standard font list see next page.

Explanations:

Font width:
Character distance in CPI (Characters Per Inch).
P = proportional, (meaning that each character has an individual width).

Font height:
Font height from the lowest descender to the upper edge of the highest character, measured in graphical points (1/72 inch).
SC = scalable.

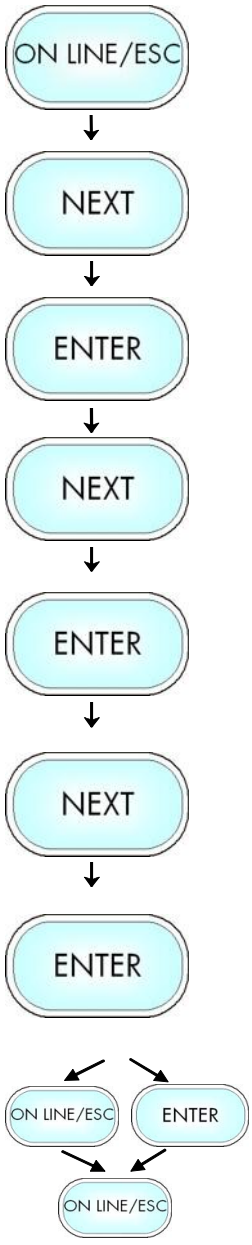
	Font no.	Font width	Font height	Font name
	0050	SC		Plakatschrift
	0590	SC		OCR /B
	0591	SC		OCR /A
	6600	SC		Juist Monospaced
PCL 5 compatible	0699	SC		Kurilen
	1700	SC		Kurilen Italic
	1800	SC		Kurilen Bold
	1900	SC		Kurilen Bold Italic
	5500	SC		Langeoog
	5600	SC		Langeoog Bold
	5700	SC		Langeoog Italic
	5800	SC		Langeoog Bold Italic
	2100	P	SC	Texel Bold
	2200	P	SC	Texel Italic
	2300	P	SC	Texel Bold Italic
	9800	P	SC	Neuwerk Italic
	9500	P	SC	Neuwerk Bold Italic
	9600	P	SC	Neuwerk Bold
	0060	SC		Plakatschrift
	9501	P	SC	Neuwerk-II Condensed Italic
	9601	P	SC	Neuwerk-II Condensed Bold Ital.
	9801	P	SC	Neuwerk-II Condensed Bold
	9901	P	SC	Neuwerk-II Condensed
	0530	P	SC	PiktoWin
	5100	P	SC	Amrum
	5200	P	SC	Amrum Bold
	5300	P	SC	Amrum Italic
	7500	P	SC	Antigua
	7700	P	SC	Antigua Bold
	7800	P	SC	Antigua Italic
	7900	P	SC	Antigua Bold Italic
	9199	P	SC	Tasmanien-II Bold Italic
	9299	P	SC	Tasmanien-II
	9399	P	SC	Tasmanien-II Italic
	9499	P	SC	Tasmanien-II Bold

Notes: Additional fonts can be selected from the font catalogue depending upon the memory capacity.

You can use the panel function Printing the Font List (see section 9.9) to generate a list of all fonts installed to the printer.

9.22. Text Orientation Selection

This function selects the active text orientation.



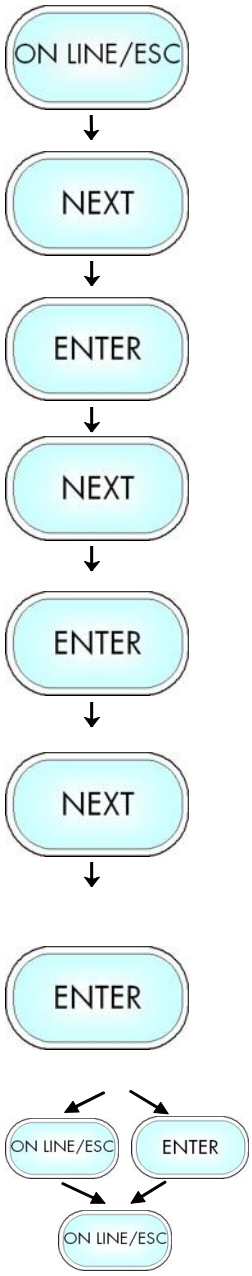
Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	
• • •	Press the NEXT or PREVIOUS key until [Page Menu] is displayed.
[Page Menu]	
[Font Number]	
• • •	Press the NEXT or PREVIOUS key until [Orientation] is displayed.
[Orientation]	
[Orientation 0]	
• • •	Press the NEXT or PREVIOUS key until the desired orientation is displayed.
[Orientation 1]	The orientation 1 = landscape is selected.
[Save as Setup?]	In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ON LINE key longer than 2 seconds.

Text orientation assignment:

Orientation 0 = Portrait (upright format)
Orientation 1 = Landscape (horizontal format)
Orientation 2 = Portrait upside down
Orientation 3 = Landscape upside down

9.23. Symbol Code Selection

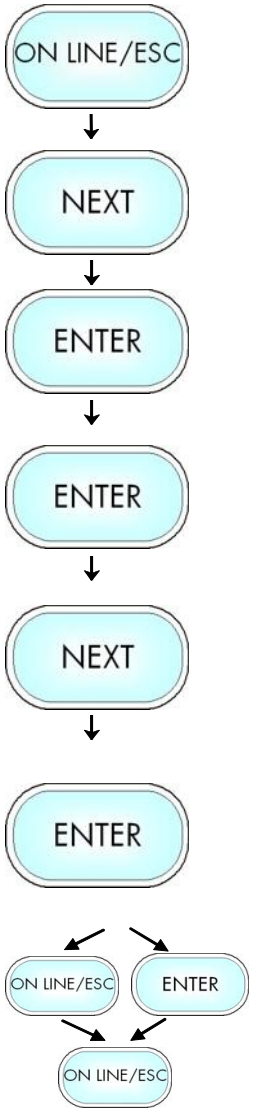
This function selects the active symbol code.



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	
• • •	Press the NEXT or PREVIOUS key until [Page Menu] is displayed.
[Page Menu]	
[Font Number]	
• • •	Press the NEXT or PREVIOUS key until [Symbol Code] is displayed.
[Symbol Code]	
[902, IBM PC-II]	
• • •	Press the NEXT or PREVIOUS key until the desired symbol code is displayed.
[901, IBM PC-I]	
[Save as Setup?]	The symbol code 901, IBM PC-I is selected. In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ON LINE key longer than 2 seconds.

9.24. Print Speed Adjustment

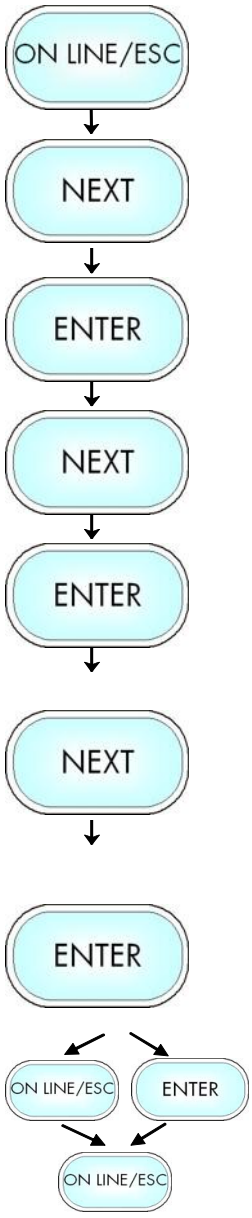
This function is used to change the print speed (adaptation to the actual used materials, e.g. to optimize the density of the printout). The setting range for the print speed is 2 inch/s to 6 inch/s.



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu level 1]	
• • •	Press the NEXT or PREVIOUS key until [Engine] is displayed.
[Engine]	
[Printspeed]	
[6 inch/s]	The currently set value is displayed.
• • •	Press the NEXT or PREVIOUS key until the desired value is displayed.
[4 inch/s]	Here the print speed is reduced to 4 inch/s.
[Save as Setup?]	In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ON LINE key longer than 2 seconds.

9.25. Density (Contrast) Setting

Using this function the print density (contrast) of the printed characters can be changed. The contrast is adjustable for both print units (colors) separately.

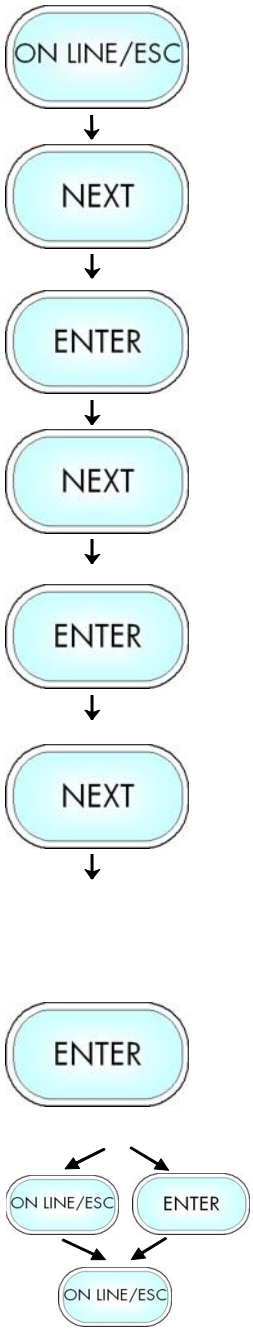


Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1] • • • [Engine]	Press the NEXT or PREVIOUS key until [Engine] is displayed.
[Printspeed] • • • [Density]	Press the NEXT or PREVIOUS key until [Density] is displayed.
[Density: 85 %]	The currently set value is displayed.
• • •	Press the NEXT or PREVIOUS key to change the density. Values from 10% to 120% are settable *.
[Density: 60 %]	The density is reduced to 60 % (the contrast is decreased).
[Save as Setup?]	In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ON LINE key longer than 2 seconds.

*** Note:** Please consider that using high density values (more than 100%) can result in a reduced lifetime of the printhead.

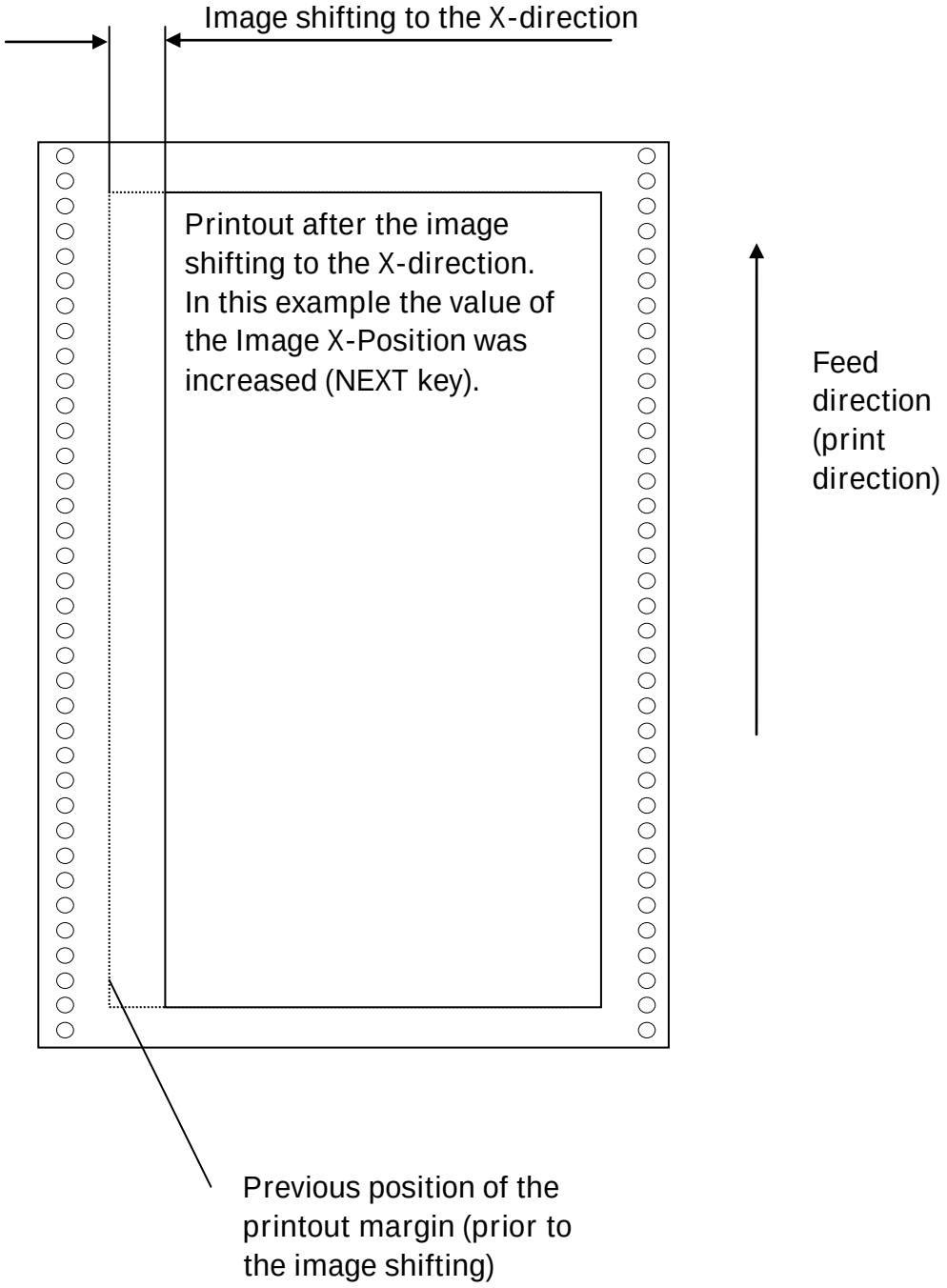
9.26. Image Shifting to the X-Direction

This function shifts the print image (both colors together) in relation to the paper to the X-direction (crosswise the print direction).



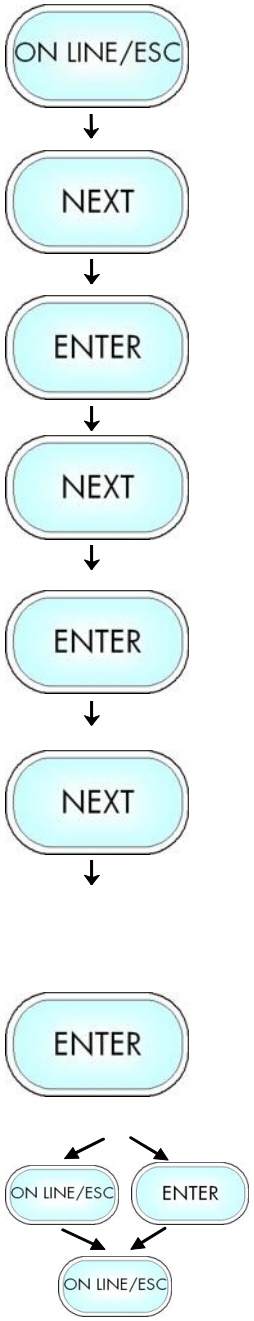
Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	
• • •	Press the NEXT or PREVIOUS key until [Engine] is displayed.
[Engine]	
[Printspeed]	
• • •	Press the NEXT or PREVIOUS key until [Image X-Pos.] is displayed.
[Image X-Pos.]	The panel function Image Shifting to the X-Direction is selected.
[X-Pos.: 0 Dot]	Currently set value (0 =Default). Operating the NEXT or PREVIOUS key the value for the image shift can be altered. Values from -288 up to +288 Dot are settable, so a max. image shifting of appr. ±1 Inch (approx. ±25 mm) can be reached.
• • •	
[X-Pos.: +160 Dot]	Now the new image X-Position is saved.
[Save as Setup?]	In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ON LINE key longer than 2 seconds.

Example for shifting the image to the X-direction:



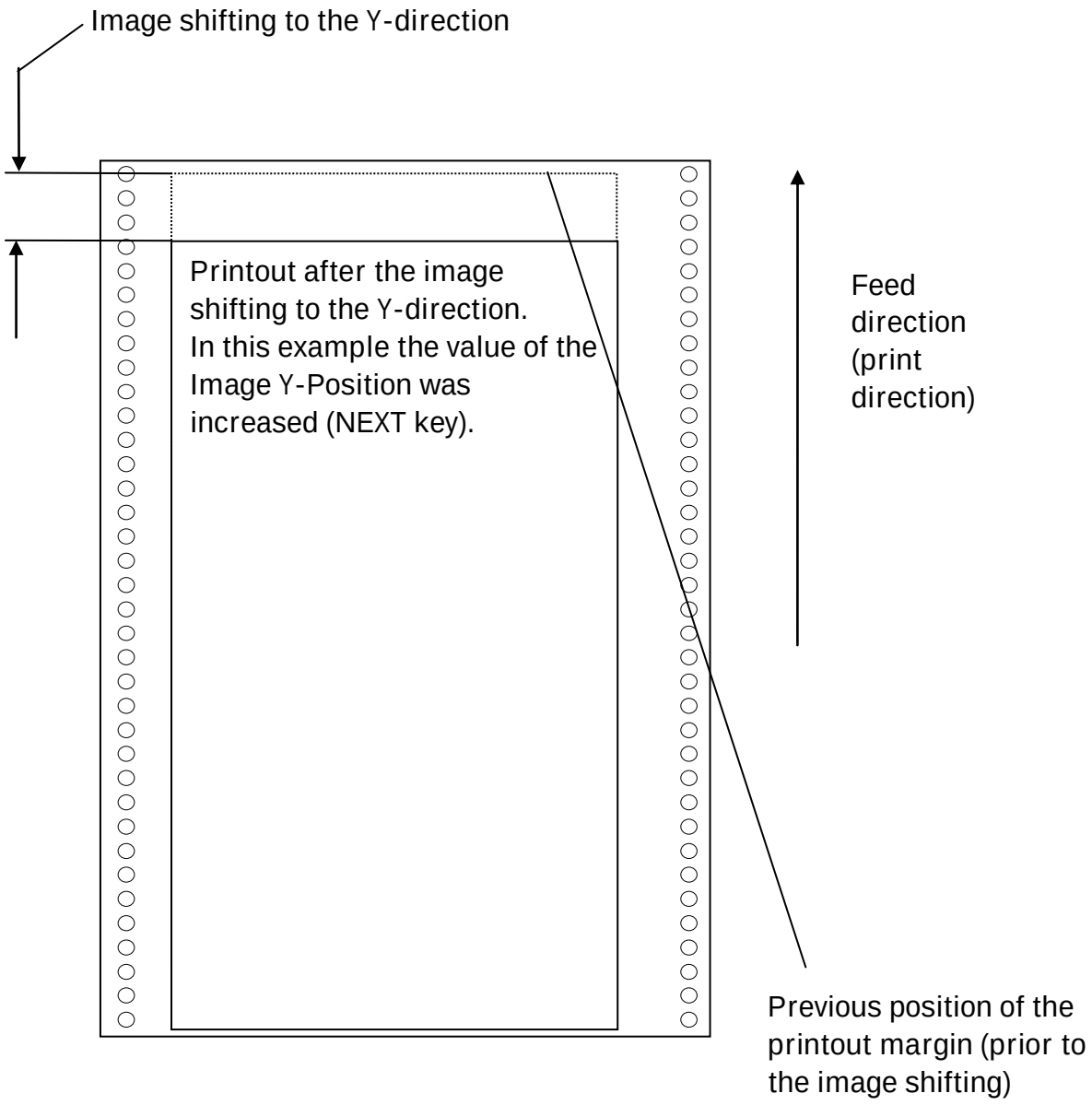
9.27. Image Shifting to the Y-Direction

This function shifts the print image (both colors together) in relation to the paper to the Y-direction (print direction).



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	
• • •	Press the NEXT or PREVIOUS key until [Engine] is displayed.
[Engine]	
[Printspeed]	
• • •	Press the NEXT or PREVIOUS key until [Image Y-Pos.] is displayed.
[Image Y-Pos.]	
	The panel function Image Shifting to the Y-Direction is selected.
[Y-Pos.: 0 Dot]	Currently set value (0 =Default). Operating the NEXT or PREVIOUS key the image can be shifted relative to the paper. Values from -496 up to +496 Dot are settable, so a max. image shifting of approx. ± 1.6 Inch (approx. ± 42 mm) can be reached.
• • •	
[Y-Pos.: +120 Dot]	
	Now the new image Y-Position is saved.
[Save as Setup?]	In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ON LINE key longer than 2 seconds.

Example for shifting the image to the Y-direction:



9.28. Peripheral Device Activation (Tear Off Edge, Cutter)

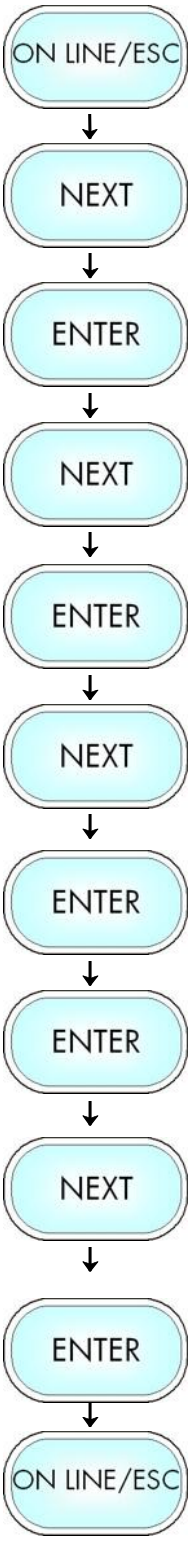
After installation or deinstallation of a peripheral device this function has to be used to adjust the printer configuration.

Start the printer in the **Service Mode:**

The steps to enter the Service Mode are described in section

9.2.3. Manual Adjusting of Sensor Current and Switching Threshold

Peripheral device selection:

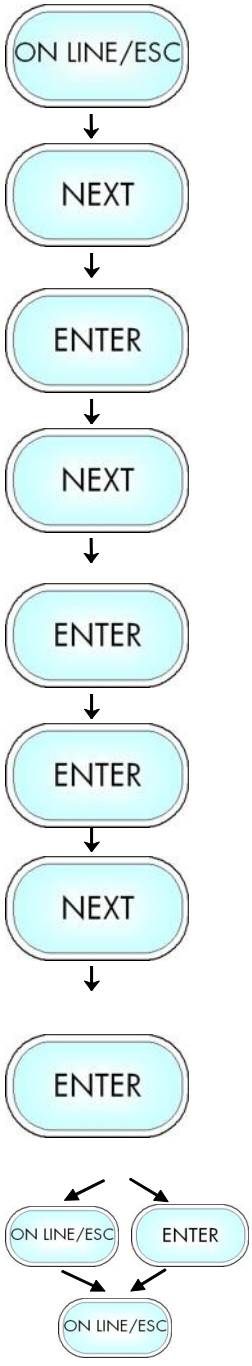


Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	
• • •	Press the NEXT or PREVIOUS key until [Engine] is displayed.
[Engine]	
[Printspeed]	
• • •	Press the NEXT or PREVIOUS key until [Service Menu] is displayed.
[Service Menu]	
[Dot Test]	
• • •	Press the NEXT or PREVIOUS key until [Optional Devices] is displayed.
[Optional Devices]	
[Periph. Device]	
	Select the submenu [Periph. Device] .
[TearOff Edge]	
• • •	Press the NEXT or PREVIOUS key until the desired peripheral device is displayed.
[Cutter]	
	The cutter is selected.
[Saved !]	
	Turn the printer ON LINE again: Press the ON LINE key longer than 2 seconds.

Hint: After having finished the settings described above, the **printer has to be turned off and on**. After printer power off and on the new settings will be valid.

9.29. Selecting the Tear Off Mode (Option: Cutting Mode)

With this function the printer's material transport can be adjusted to the following media processing.



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	
• • •	Press the NEXT or PREVIOUS key until [Engine] is displayed.
[Engine]	
[Printspeed]	
• • •	Press the NEXT or PREVIOUS key until [TearOff Menu] is displayed.
[TearOff Menu]	
[TearOff Mode]	
[OFF]	
• • •	Press the NEXT or PREVIOUS key until the desired value is displayed.
[ON]	
	The tear off mode is selected.
[Save as Setup?]	In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ON LINE key longer than 2 seconds.

Information on the Tear Off mode:

OFF = After printing no additional media transport takes place, the printhead position is TOP OF FORM.

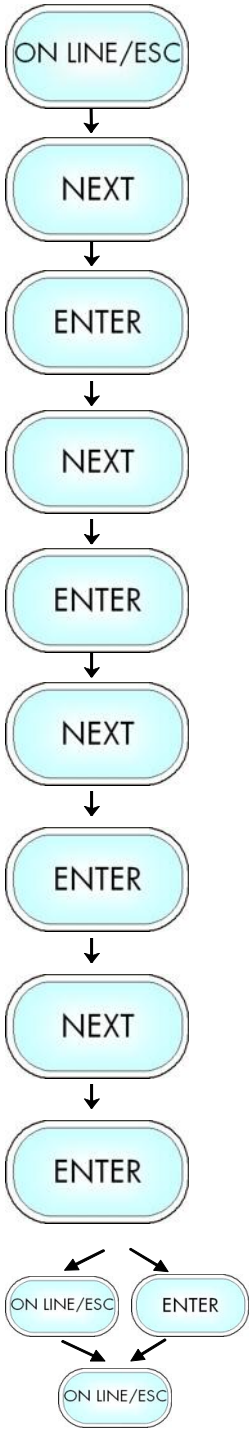
ON = The printer will feed the material (label) out to the tear edge, waiting for the user to tear it off before printing the next label. This additional media transport after printing enables to disjoin the material along/at the perforation. *)
The tear off mode is not carried out, if the next page is already ready to print. (In this case the next page is printed instead).

*) A draw back of the material can be selected. Prior to the next print job the material is moved back until the printhead position is TOP OF FORM (Real 1:1 Mode).
Use the panel function Selecting the Print Mode for this (see the following pages).

If the **optional cutter** is installed and activated, the menu structure of the printer contains the **Cutting Menu** instead of the Tear Off Menu. The adjustment of the cutting parameters has to be done in the same way as it is described for the tear off functions.

9.30. Adjusting the Tear Off Position (Option: Cutting Position)

The tear off position② is identical to the detected gap position, i.e. with the perforation or the start of the label. With this function a fine setting of the tear off position is carried out. The setting range for the offset is approximately +- 10.7 mm.



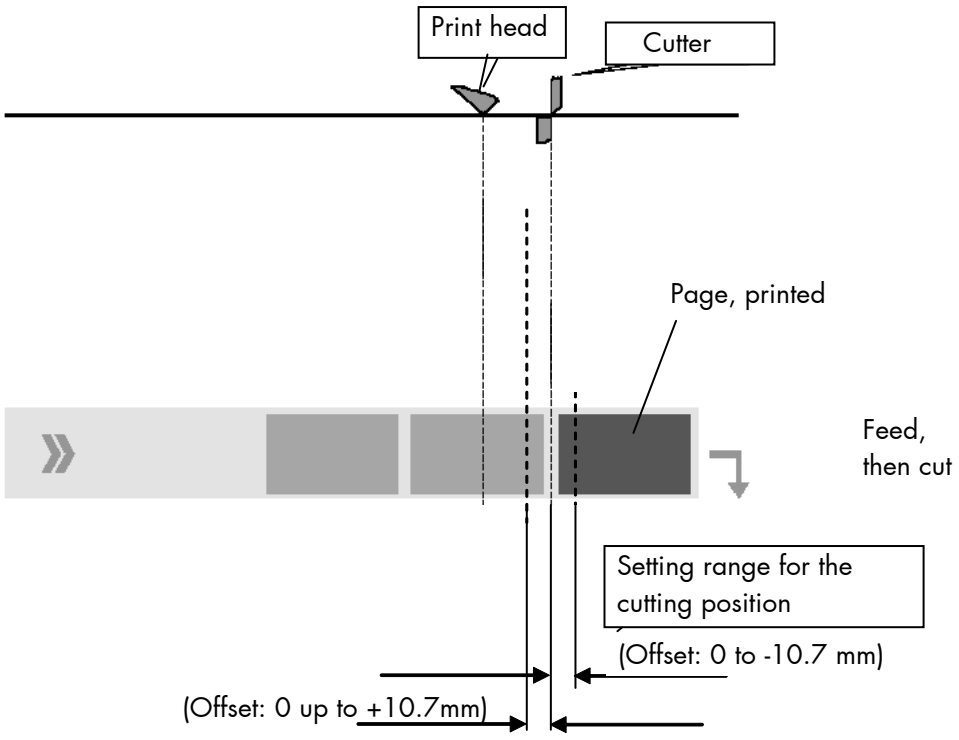
Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	
• • •	Press the NEXT or PREVIOUS key until [Engine] is displayed.
[Engine]	
[Printspeed]	
• • •	Press the NEXT or PREVIOUS key until [TearOff Menu] is displayed.
[TearOff Menu]	
[TearOff Mode]	
• • •	Press the NEXT or PREVIOUS key until [TearOff Pos.] is displayed.
[TearOff Pos.]	
[Position: - 2.0 mm]	The currently set value is displayed.
• • •	Press the NEXT or PREVIOUS key until the desired offset is displayed.
[Position: - 2.5 mm]	The tear off position is shifted 0.5 mm (additionally) in feed direction.
[Save as Setup?]	In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ON LINE key longer than 2 seconds.

② If a cutter is installed and activated, the concerning panel function Cutting Position has to be used.

Hints on adjusting the position:

This function is used to change the cutting position of the optional cutter:

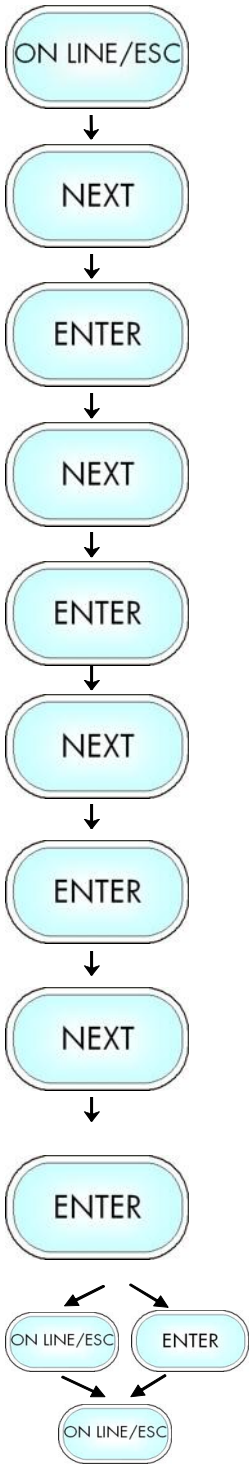
Adjusting causes a shift of the cutting position relative to the printer detected gap position (i.e. relative to the perforation or the start of the label, compare the following figure).



Please note: Changing the SyncOffset has an effect on the cutting position, too. For **further information** see section 9.3 Adjusting the Zero Position of the Material Transport.

9.31. Selecting the Print Mode

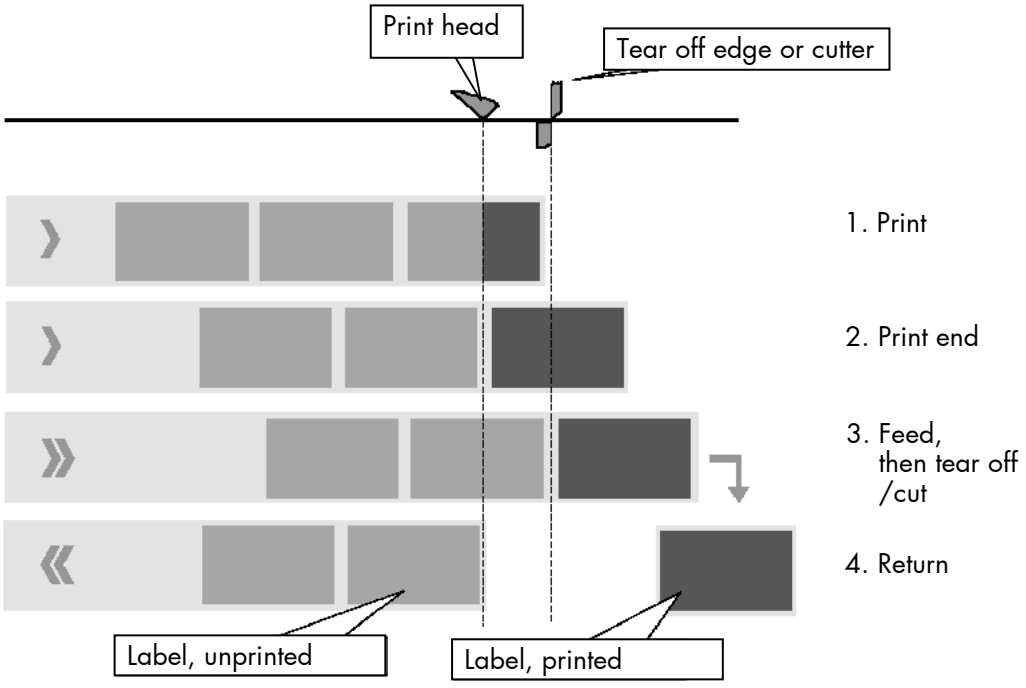
With this function the procedure for the label output and print is defined.
The different print modes are described on the following pages.



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	
• • •	Press the NEXT or PREVIOUS key until [Engine] is displayed.
[Engine]	
[Printspeed]	
• • •	Press the NEXT or PREVIOUS key until [TearOff Menu] is displayed.
[TearOff Menu]	
[TearOff Mode]	
• • •	Press the NEXT or PREVIOUS key until [Print Mode] is displayed.
[Print Mode]	
[Real 1:1 Mode]	The currently set print mode is displayed.
• • •	Press the NEXT or PREVIOUS key until the desired print mode is displayed.
[Normal 1:1 Mode]	
[Save as Setup?]	The Normal 1:1 mode is selected. In addition this new value can be saved as setup value (using the ENTER key). After this decision turn the printer ON LINE again: Press the ONLINE key longer than 2 seconds.

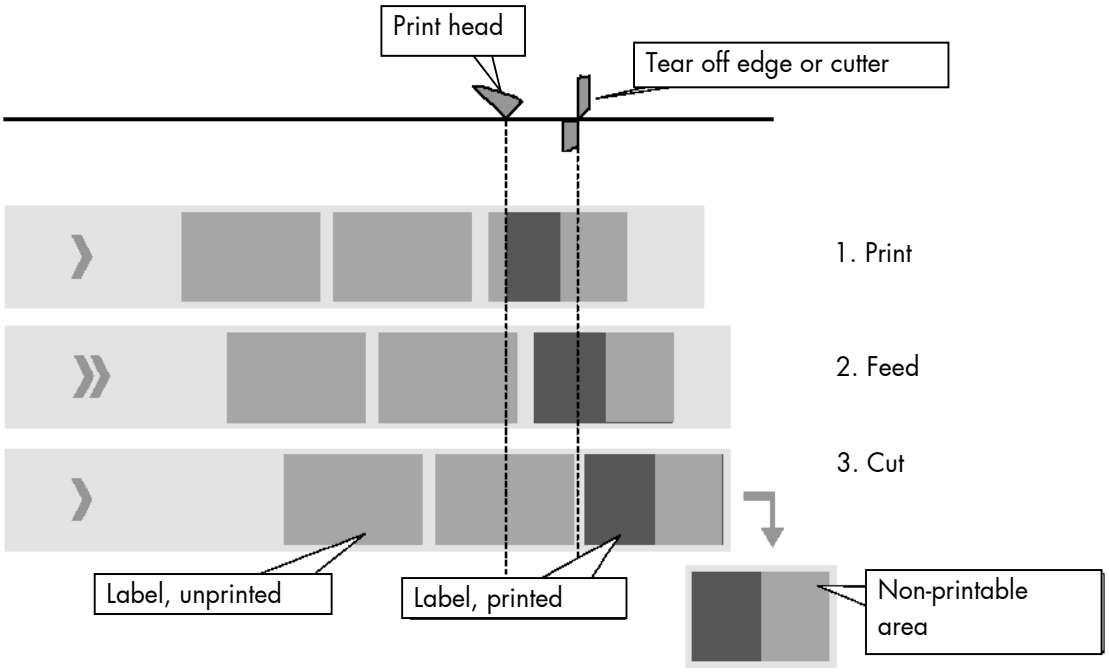
Real 1:1 Mode

The whole surface of the label is printable.
The label is pushed forward to the tear off edge for tear off (see the previous section: Selecting the Tear Off Mode) or to the cutter. **After the tear off/cut**, the **beginning of the next label is drawn back under** the **printhead**. This reduces the output volume (in relation to a certain time).



Normal 1:1 Mode

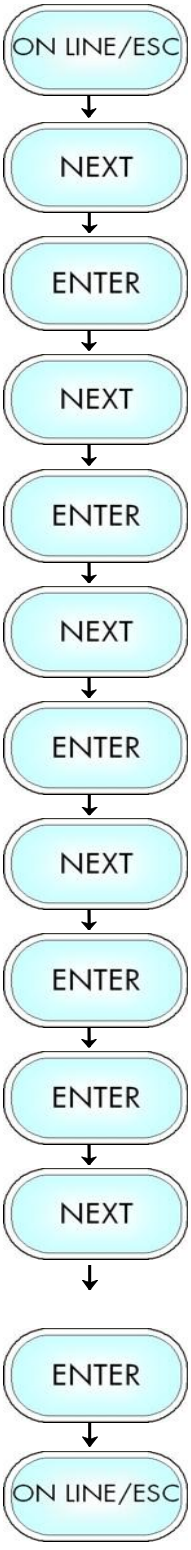
In this mode after tear off or cut no draw back of the unprinted material takes place. The output volume is at its maximum level. As a result the first 18 mm of the label are not printable. These measurements correspond to the distance between printhead and tear off edge or cutter.



9.32. Configuration of Network Parameters (IP Address, e.g.)

The functions of the submenu Network are used to set the parameters for connecting the printer to a network (Ethernet).

Setting the IP address manually:



Panel display	Notes
[ON LINE]	Turn the printer OFF LINE with this key.
[Menu Level 1]	Press the NEXT or PREVIOUS key until [Network] is displayed.
• • •	
[Network]	Press the ENTER key to select the Network menu.
[Timeout]	Press the NEXT or PREVIOUS key until [Ethernet] is displayed.
• • •	
[Ethernet]	Press the ENTER key to select the Ethernet menu.
[Duplex/Speed]	Press the NEXT or PREVIOUS key until [IP Assign] is displayed.
• • •	
[IP Assign]	Press the ENTER key to select the IP Assign menu.
[Off]	The current setting value is displayed.
• • •	Press the NEXT or PREVIOUS key until [Manual] is displayed.
[Manual]	
[IP Address]	Press the ENTER key to set the IP address manually.
[192.168.002.002]	Pushing the NEXT or PREVIOUS key changes the value of the current position (left digit first, in this example: 1). Pressing the ENTER key moves you to the next digit (the ESC key moves you back, if need be).
• • •	
[192.168.010.123]	The new IP address is saved as setup value.
[Saved !]	Turn the printer ON LINE again: Press the ON LINE key longer than 2 seconds.

Hint: The current network settings are shown on the Status Sheet of your printer, too.

Notes: If your network is using DHCP[①] , an address can be automatically assigned (select the item **DHCP** from the network submenu IP Assign).

The parameters **Subnet Mask** and **Gateway** are configured in the same way as described above. Please select the concerning panel functions for this (compare section 8.2 Menu Structure).

Select the subitem **Off** from the network menu to switch off the network access.

[①] Dynamic Host Configuration Protocol: offers among other things a centralized address management.

Duplex/Speed Setting

This panel function is located in the network menu (submenu Duplex/Speed Setting).

The factory default value is Autonegotiation.

Autonegotiation means that devices on the network agree a transmission mode, which each unit is able to handle, before data transmission starts. By this the printer automatically adjusts itself to maximize link performance.

Hint: Autonegotiation is the recommended setting!

If you set the Duplex/Speed parameters manually, you may experience problems. Wrong settings can slow down the speed of the link (worst case: communication does not occur).

Explanations:

Auto-Negotiation
A Ethernet procedure that allows devices at either end of a link segment to advertise and negotiate modes of operation such as the speed of the link (100 Mbit/s or 10 Mbit/s) and half- or full-duplex operation.

Half duplex
A device can either receive or send data at a given time.

Full duplex
Capability of a device for sending and receiving data at the same time. In the case of full duplex, collision detection is deactivated. A full duplex capable device is able to buffer data packets.

10. Operator Maintenance

In order to run the printer on its highest quality level, it is necessary to perform regularly simple cleaning operations, and to occasionally replace certain components.
These operations can be performed by a MICROPLEX trained operator. A not trained person is not allowed to perform these operations.

10.1. Printer Cleaning

By a regular and conscientious performance of the following operations, the printer is guaranteed to always work at an optimum reliability.

For safety pull out the mains plug first. Make sure the elements that are to be cleaned have cooled down.

Please be especially careful to avoid damaging mechanical or electronic modules.
Do not use detergents, or any other devices or tools not mentioned in this manual to avoid damages and unnecessary costs of repairs.

For the following cleaning operations the concerning parts or modules have to be freely accessible. Because of this please perform the following operational steps first if necessary:

- media removal (see section 5.1.2)

After the cleaning operations please load the wanted consumables (again), see chapter 5: Handling of Consumables.

10.1.1. Printer Cabinet Cleaning

Soilings like dust, grease or similar things can be removed with a soft, lint-free cloth. If necessary the cloth can be moistured with water or a neutral detergent. Inside the printer dust or paper dust can be removed best with a soft (non-metallic) brush.

10.1.2. Printhead Cleaning

This maintenance operation should be done not later than the print quality is reduced (unwanted "lines" or "gaps" in the printout).

Please pay attention to the following:

- For the printhead cleaning there is no need to disassemble or remove the printhead.
- The printhead can be damaged by electrostatic charges. Therefore first of all touch a properly grounded part of the printer (the base plate of the printer, e.g.).

1. Open the printer cover (swivel the cover to a vertical position).

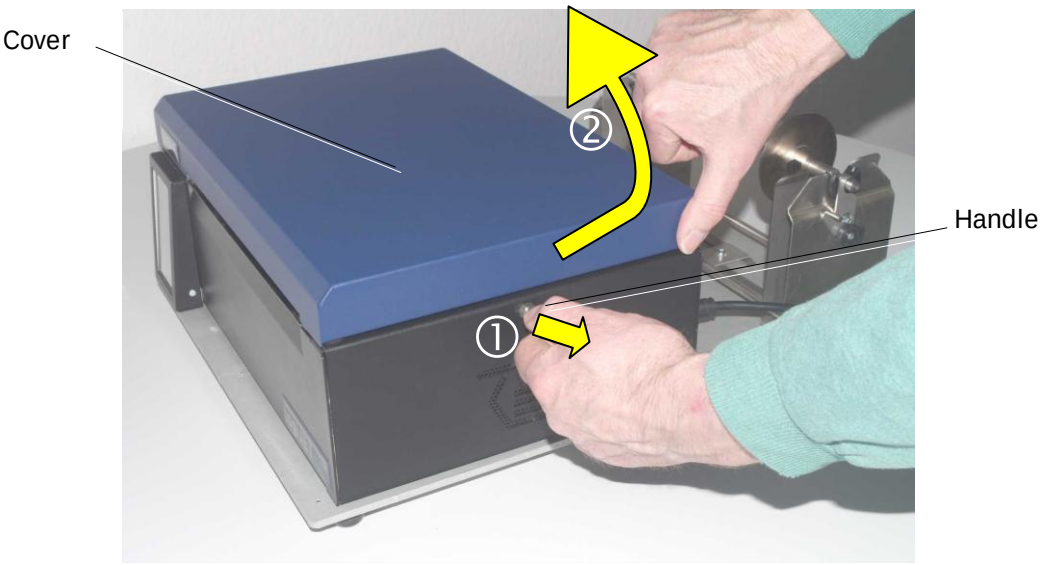


Fig. 10.1.2.a Pulling the handle and opening the printer cover

2. Unlock the printhead assembly by pushing the printhead release lever.

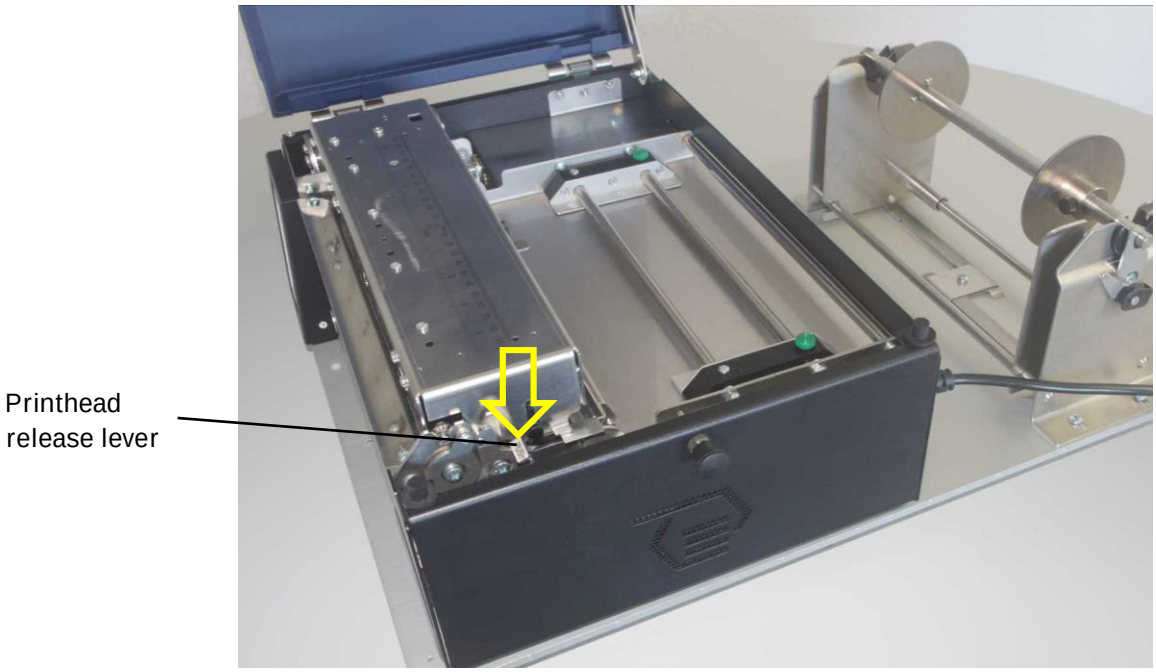


Fig. 10.1.2.b Unlocking the printhead assembly

3. Raise the printhead assembly to a vertical position.

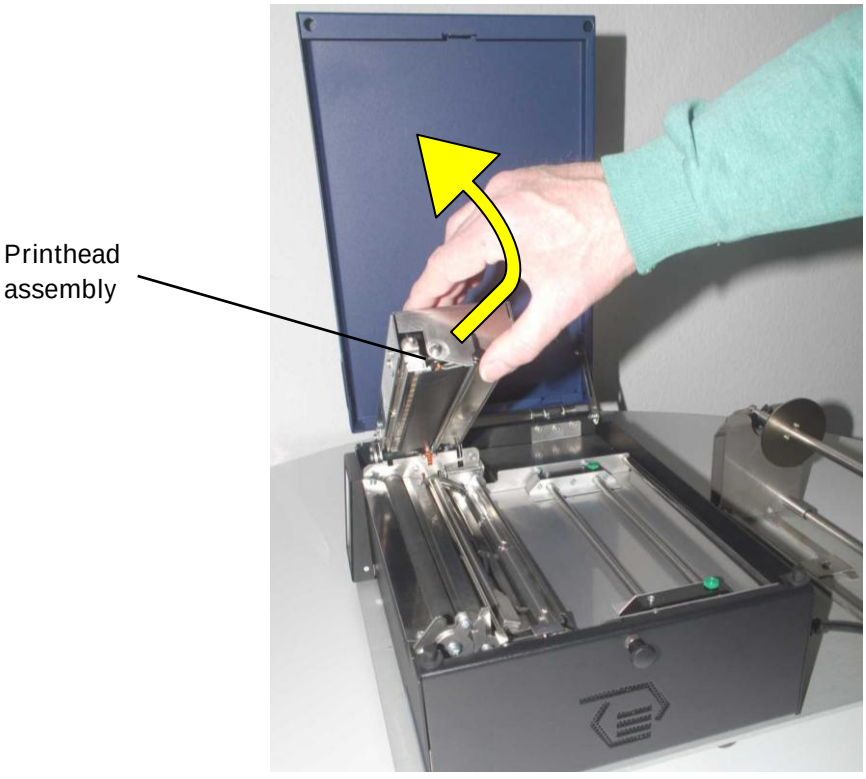


Fig. 10.1.2.c Raising the printhead assembly

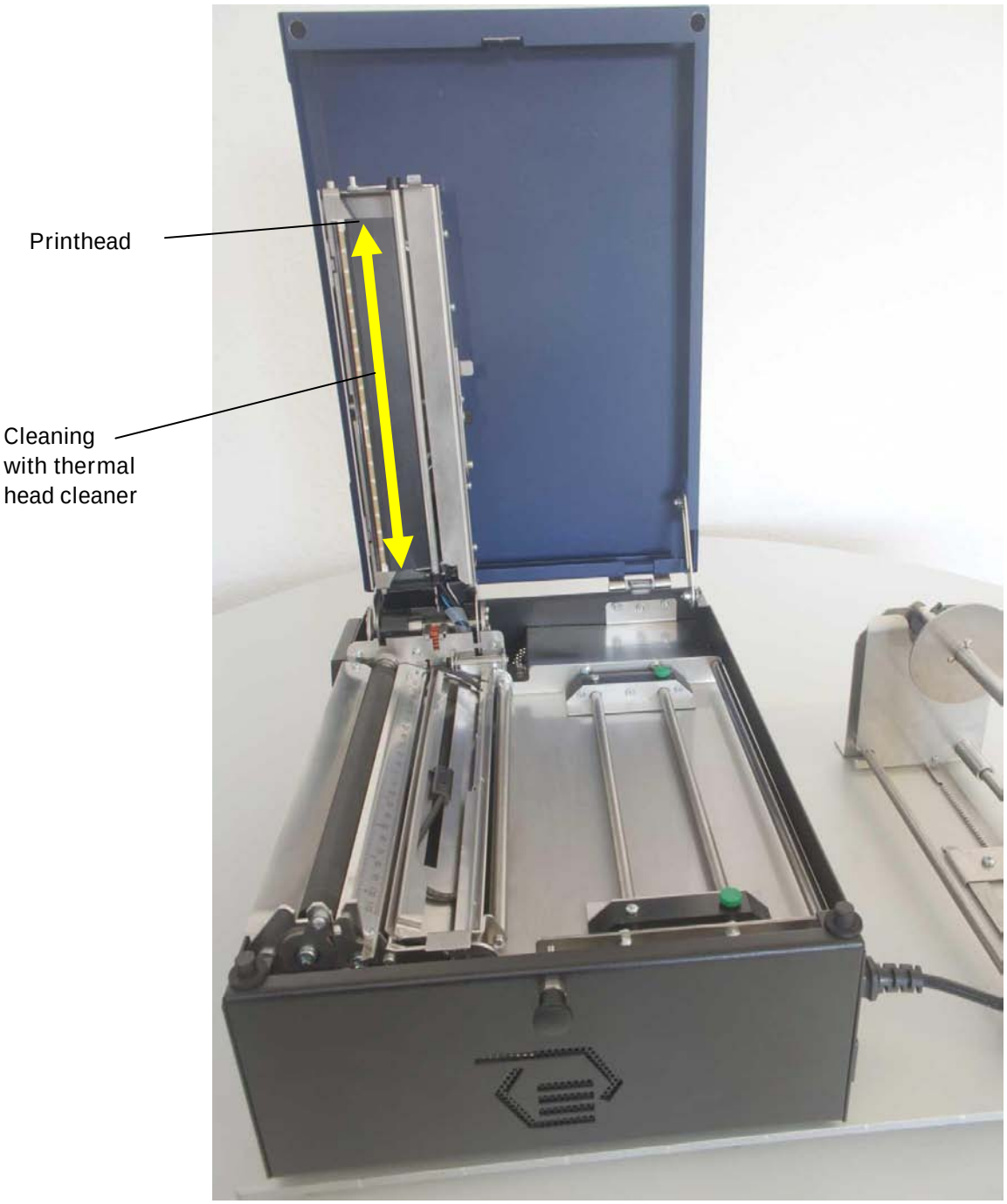


Fig. 10.1.2.d Cleaning the printhead

4. Clean the printhead using a soft, lint-free cloth or a special cleaning pen:
   - Move the cloth or pen along the print area of the printhead (see figure 10.1.2.d). This working step requires light pressure and has to be repeated several times.

- If the printhead is very dirty: Use a soft lint-free cloth, moisten it with **spirit** (Ethanol) and then use it to wipe several times along the print area of the printhead (compare figure 10.1.2.d).

Spirit is an easily combustible liquid!
Take notice of the safety instructions for combustible liquids!
Don't smoke!

- Allow the printhead to dry for 2-3 minutes.

5. Swivel down the printhead unit until it clicks into place.

6. Close the printer cover. The printer is ready for printing again.

To help keep the printhead clean and to avoid premature wear out of the printhead, the cover of the printer should always be closed. Moreover it is not allowed to use dusty or dirty print media.

10.1.3. Platen Roller Cleaning

The printer's platen roller (transport roller below the printhead) can be soiled by the print media (e.g. with adhesive residues).

For the following cleaning operations the hints of section 10.1 are valid, too !

1. Open the printer cover (swivel the cover to a vertical position).

2. Unlock the printhead assembly by pushing the printhead release lever.

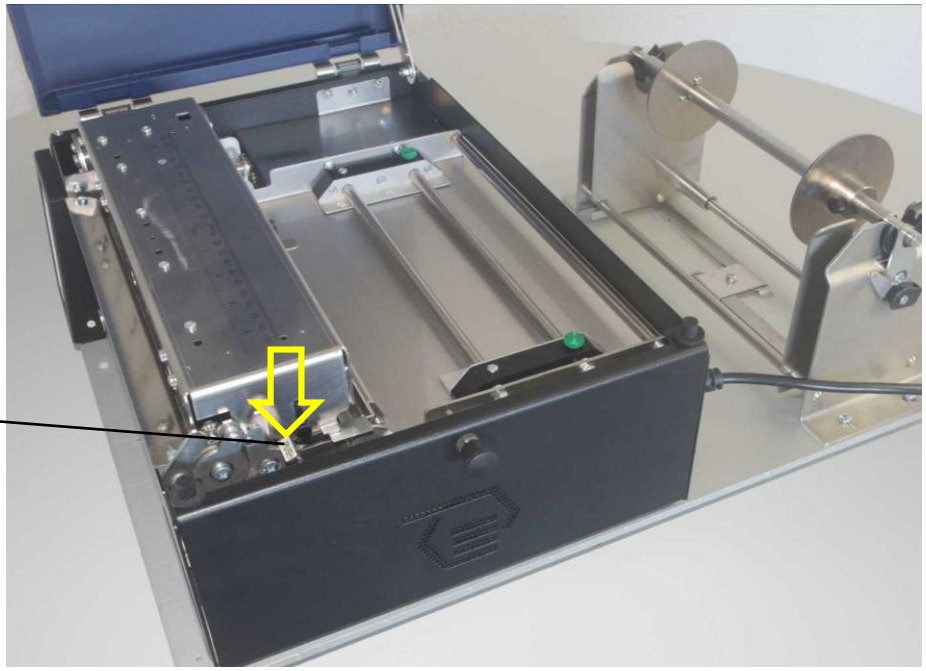


Fig. 10.1.3.a Unlocking the printhead assembly

3. Raise the printhead assembly to a vertical position.

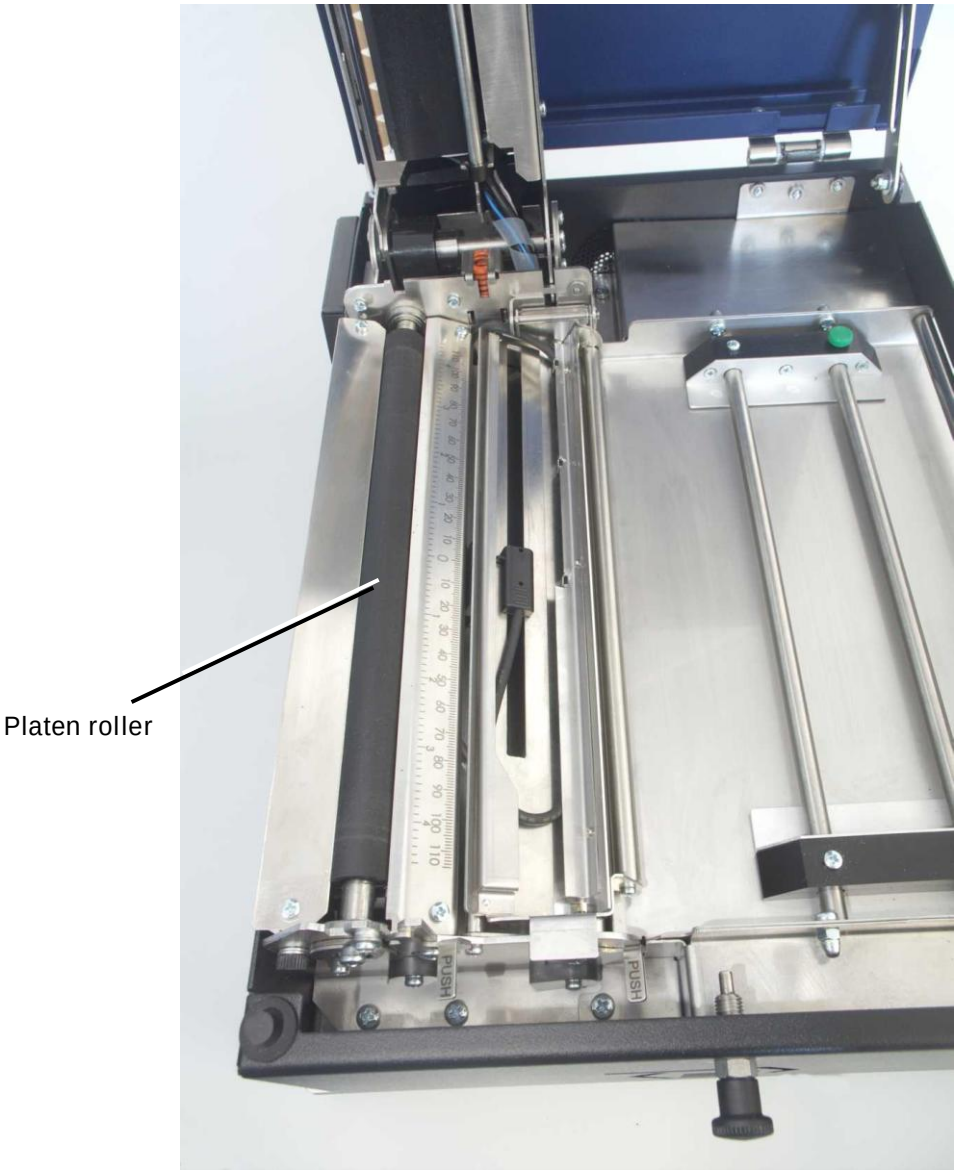


Fig. 10.1.3.b Position of the platen roller

4. Stickings can be removed best with a soft lint-free cloth saturated with isopropyl alcohol (99.9 %).

Make sure the platen roller has been cleaned on its whole extent so that there is no reason for irregular media transport after that.

Allow the platen roller to dry for at least 3 minutes.

5. Swivel down the printhead unit until it clicks into place.

6. Close the printer cover.

The printer is ready for printing again.

10.1.4. Cleaning the Sensors

The device is provided with sensors to enable controlling of consumable movements.
The upper media sensor (Transparent sensor) and the lower media sensor (Reflex sensor) are both located "below" the printhead mounting:

During the print process this two sensors first of all may be soiled by paper dust. A large amount of dirt is able to cause problems.

Go on like this to remove dust and dirt from the sensors:

1. Switch the printer OFF.
2. Open the printer's cover and swivel it to a vertical position.
3. Unlock the **printhead assembly** by pushing the printhead release lever and raise the printhead assembly to a vertical position.
4. Unlock the transparent sensor guide by pushing its lever and raise the transparent sensor guide until it stops (as shown in figure 10.1.4.a+b).

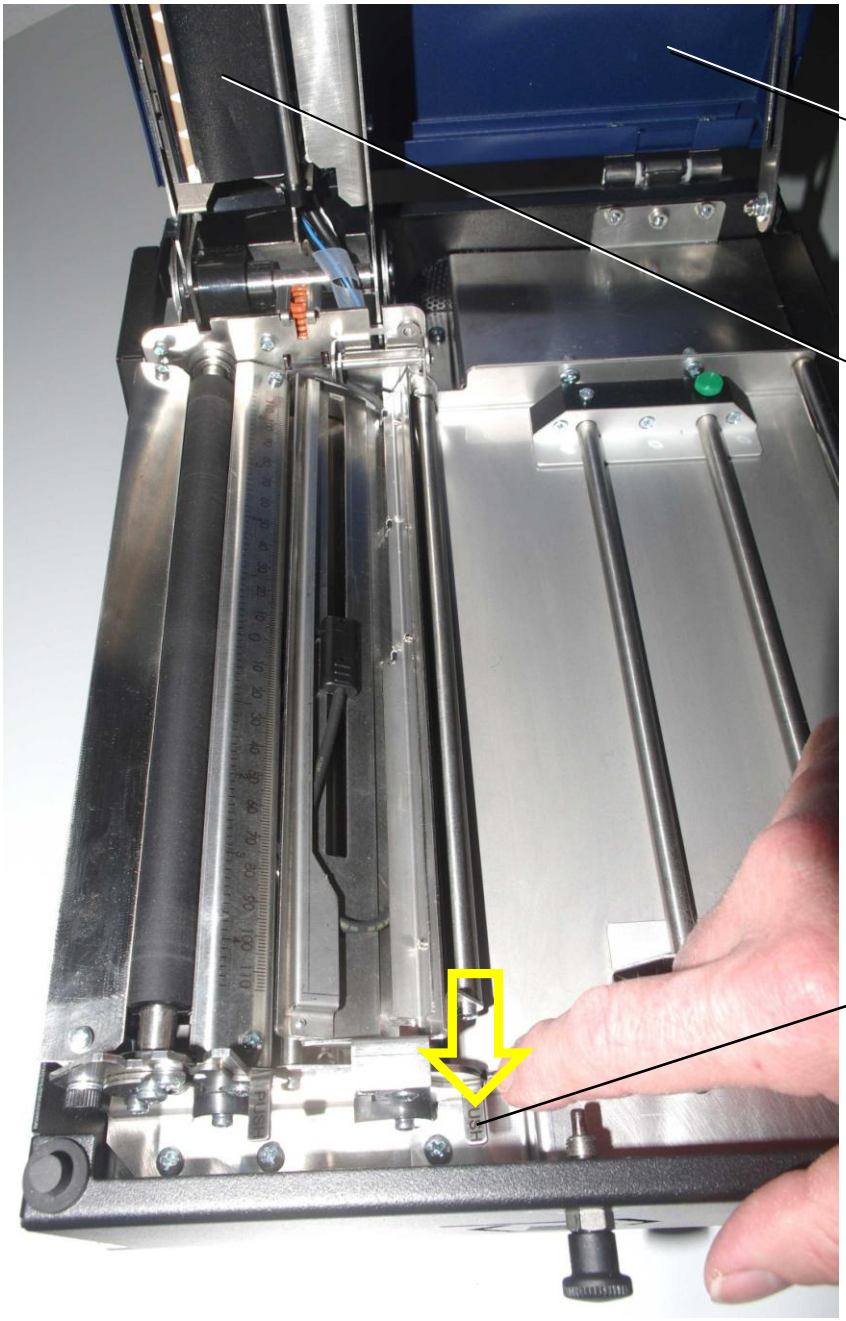


Fig. 10.1.4.a Unlocking the transparent sensor guide

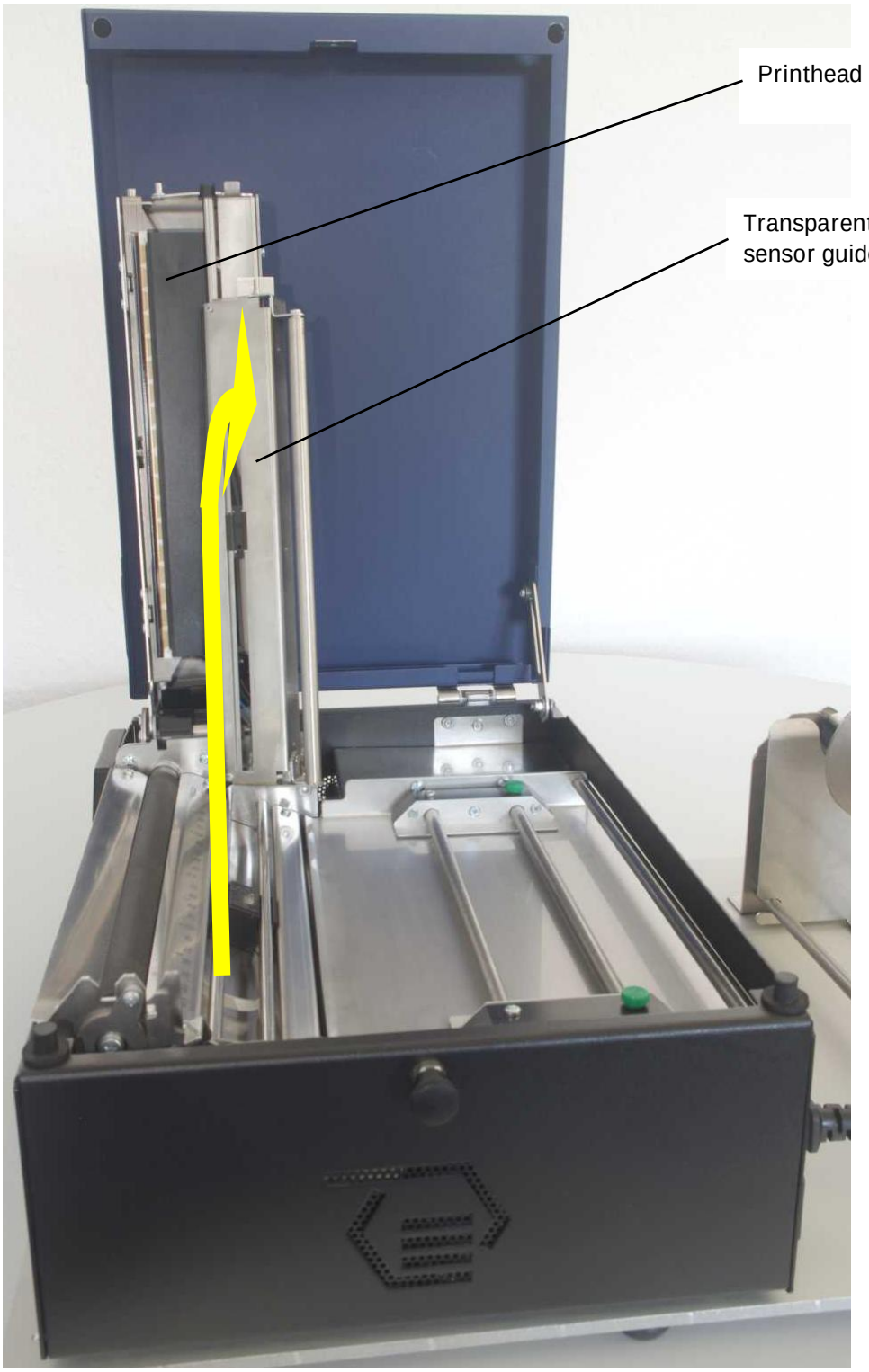


Fig. 10.1.4.b Swivelling the transparent sensor guide upward

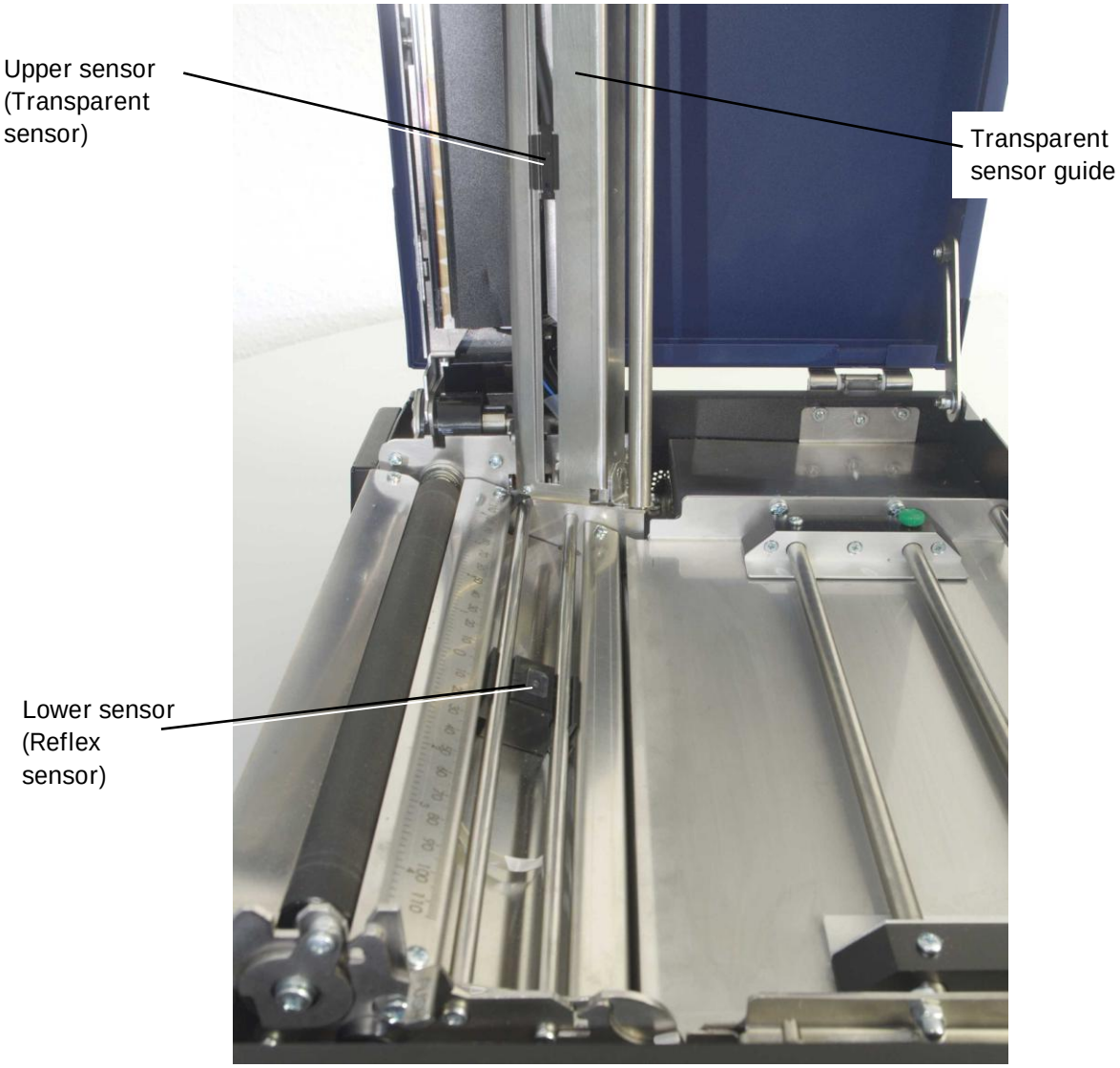


Fig. 10.1.4.c Position of Transparent sensor and Reflex sensor within the printer

5. Carefully clean the sensors with compressed air.

Do not use any sharp tools or detergents to clean the sensors!

Please pay attention to the hints given in chapter 10.1 !

6. Swivel the transparent sensor guide downward and push it down gently until it clicks into place.
7. Swivel the printhead assembly downward and push it down gently until it clicks into place.
8. Close the the printer's cover. The printer is ready for printing again.

10.2. Check the Printhead Pressure

A correction of the pressure value of the printhead is necessary, if the thickness of the new printmedia is bigger or smaller than the previous one.
In addition the pressure value can be modified in order to adapt the characteristics of the consumables. An increase of the pressure value of a printhead, for example, can improve the transfer of the image onto the printmedia.
While printing narrow media the printhead may come in contact with the platen roller just in that area that isn't covered by the media. This may lead to an accelerated abrasion of the printhead and to a print quality that isn't even over the whole print width.

The operation steps to adjust the pressure value are described in section 5.2.

Please consider that increasing the pressure value will increase the friction between printhead, printmedia and the platen roller, too. The abrasion of the concerning components (for example the printhead surface) will be accelerated considerably due to the increase of the pressure value.

11. Troubleshooting

For "mobile printing" (Option) you must set the DIPswitch:
Set the DIPswitch located on the DC/DC converter PCB to the nominal voltage supplied by the vehicle's electric system and always use a suitabele fuse (details are described in chapter 6).

When an error occurs, a corresponding error message is displayed in the control panel (see section 11.1).

Please address the problems described in this chapter yourself (especially the consumable replacement).
Please regard the following subjects if an opening of the printer becomes necessary:

- While operating the printer components inside the device will heat up. Take care that you do not burn your fingers when removing a paper jam.

- Make sure all covers of the device are completely closed afterwards.

Any others but the troubles described on the following pages are only to be repaired by a MICROPLEX authorized operator or a service engineer.
When reporting a problem to your service engineer, please give him the exact error message. That helps to localize the error more quickly.

11.1. Printer Error Messages

Panel display	Remedies
[Load Paper] or [Paper End]	- insert a printmedia (paper, roll-fed media e.g.) - make sure the media has been loaded correctly (compare section 5.1) - clean the sensors (compare section 10.1.4)
[Head open!]	The printhead assembly is not firmly in place. Re-open the printhead assembly and make sure it closes tightly: - swivel the printhead mechanism downward and use both hands to push down gently to lock.

Panel display	Remedies
[HeadNot Found!]	- the printhead is not connected or faulty.
[Head defectiv!]	- the printhead is defective. A new printhead has to be installed.
[High Head Temp.]	The printhead temperature is too high. - make sure the consumables have been loaded correctly (compare section 5.1 up to 5.3)
[Head Life End!]	- a new printhead has to be installed
[CutterNotFound!]	The optional cutter is selected, but not connected or defective. - make sure the cutter is installed correctly. See section 9.28 Peripheral Device Activation (Tear Off Edge, Cutter - Deactivate the Cutter, if he was deinstalled. See section 9.28
[Cutter Error!]	An error occurred during cutter operation. - check for a paper jam. Remove the jammed paper. - reload the consumables (paper)

Panel display	Remedies
[Punch Error!] or [Sync.Mark Error!]	- check the position of the sensors (reflective and Gap sensor). - set the sensor positions in accordance to your consumables. See section 9.2.1 Checking and Adjusting the Sensor Positions. - clean the sensors See section 10.1.4 Cleaning the Sensors - After a repeated paper jam please check first that all material pieces are removed. See section 11.3 Incorrect Media Transport

If the remedies above are not successful, please call a MICROPLEX authorized service engineer.

11.2. Reduced Print Quality

Defect	Remedies
Printout too light	- check the printhead pressure (see section 5.2 Printhead Pressure Adjusting) - increase the contrast (Density Setting; see section 9.25) - choose different consumables - check the environment conditions and correct them if necessary (admissible values for humidity, temperature etc., see chapter 2.3 and 13)
Printout too strong	- reduce the contrast (Density (Contrast) Setting; see section 9.25)

Defect	Remedies
Printout blurred or incomplete	- clean the printhead (see section 10.1.2) - also, see section 11.3: Incorrect Media Transport - the printhead has to be exchanged if, for example after a big printout performance, the printout isn't correct any more.

If the remedies above are not successful, please call a MICROPLEX authorized service engineer.

11.3. Incorrect Media Transport

Defect	Remedies
Incorrect media transport (no gap detection between labels e.g.)	- perform the basic operations (see chapter 4) - check if the Sync Sensor has been adjusted correctly (see section 9.2) - adjust the position of the sensors (reflective and Gap sensor) suitable to your consumables. - check if the media has been loaded correctly (compare section 5.1) - clean the the sensors (see section 10.1.4) - check if the jammed consumables have been removed completely.
No straight transport of the consumables (torsion or folding of the media, e.g.)	- check if the media has been loaded correctly (compare section 5.1) - check if the printhead pressure was adjusted correctly (see section 5.2 Printhead Pressure Adjusting) - clean the platen roller (see section 10.1.3)

Defect	Remedies
Paper Jam	- Paper jam clearing: in addition to the remedies above: - follow the steps from the next section: **Clearing Paper Jam** - check if the jammed consumables have been removed completely.

If the remedies above are not successful, please call a MICROPLEX authorized service engineer.

11.4. Clearing Paper Jam

Operation steps for clearing a paper jam are described in this paragraph.

a) Turn the printer OFF LINE.

b) Open the printer's cover and swivel it to a vertical position.

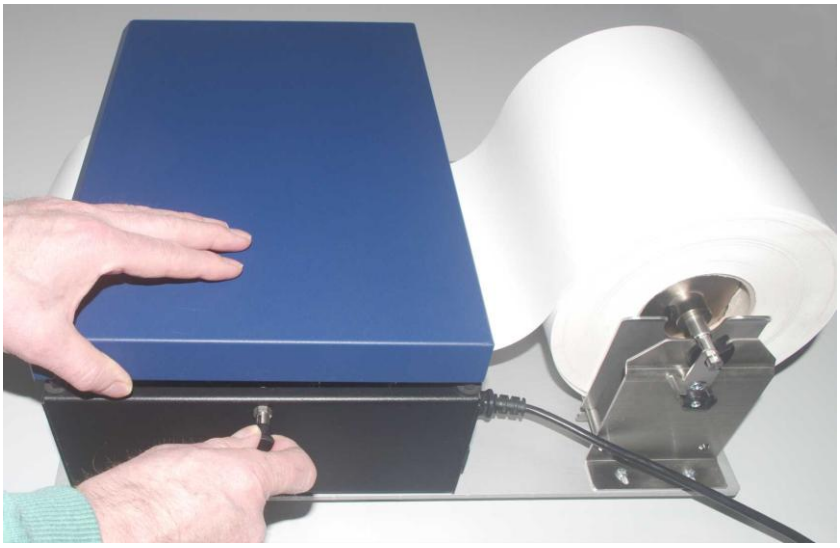


Fig. 11.4.a Opening the cover of the printer

c) Unlock the printhead assembly by pushing the release lever.

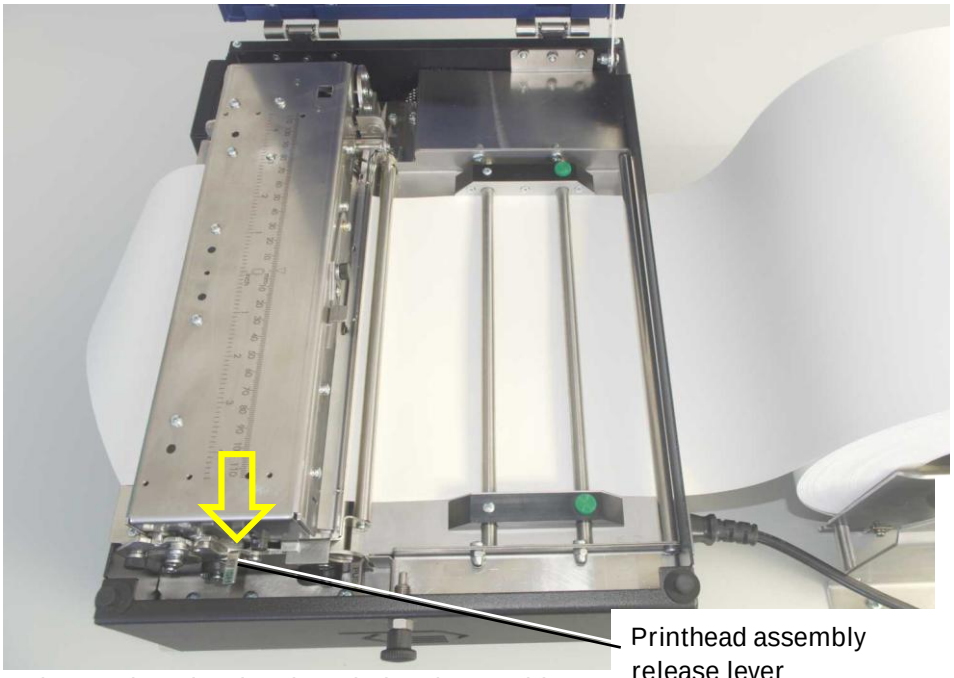


Fig. 11.4.b Releasing the printhead assembly

d) Swivel the printhead assembly upward until it stops and stands upright.

Caution! The printhead and the platen roller may be hot.

e) Unlock the metal guide (transparent sensor guide) and swivel it upward until it touches the printhead assembly.

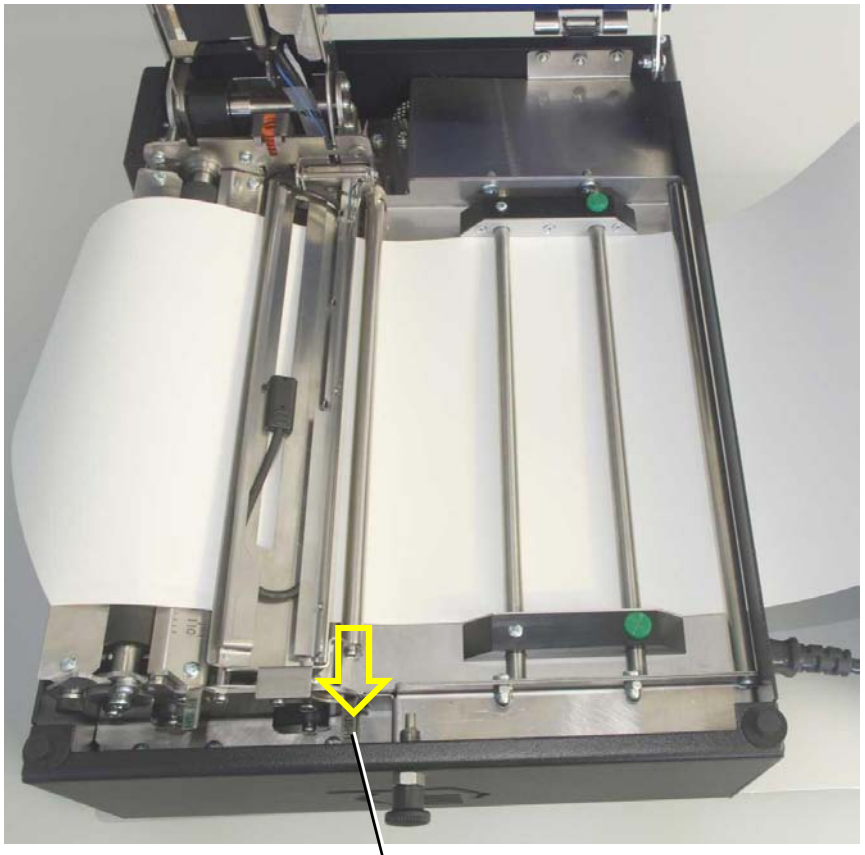


Fig. 11.4.c Releasing the metal guide (in order to swivel it upward)

f) Remove the creased paper from the printer. (For example pull the z-folded paper completely out of the printer.)

After every paper jam the paper has to be removed completely from the paper path.

g) Detach the creased paper at the next perforation.

h) Load new paper to the printer (see chapter 5).
Check if the paper is impeccable (crushed or damped paper must not be inserted).

i) Swivel the transparent sensor metal guide downward and push it down gently until it clicks into place.

j) Swivel the printhead assembl< downward and push it down gently until it clicks into place.

k) Close the printer's cover.

l) Press the ON LINE key to continue printing.

Data is kept in the printer's memory. After the paper jam has been cleared, all the pages on the paper path will be printed again. (See next section for more information.)

11.5. Print Repetition after an Error

The printer is provided with an automatic jam safety function to prevent a loss of data.
When an error occurs, all the pages on the paper path will be printed again. This ensures that no data will get lost.

The exact number of pages to repeat depends on the format length and the position where the error occurred on the page.

This automatic jam safety function can be switched off (by changing the EEPROM - configuration) if the user wants to resume the print job at a position he chooses himself.
In addition to this see panel function Clearing the Input Buffer (section 9.12).

12. Measures for Transport and Shipping (Repacking)

The Printer is shipped with special packing material and fixing measures.
It is recommended to store the boxes and those packing materials.

In case of further shipping or returning of the products they must be repacked in the original way in order to avoid damaging during transportation.

The following list gives you an overview of the working steps necessary for repacking. Pay attention to the notices located on the products and the hints given in the Service Manual as well.

If you are not familiar with any of the working steps please ask your service engineer or your supplier.

- Remove the printer's optional peripheral devices (if present).
- Remove the paper.
- Close the printhead.
- Lock all moveable parts of the printer (use all original transport safety devices, adhesive fasteners and so on).

Repack all items in their original packing material and ship them in the original boxes.

13. Specifications

Print technology:	non-impact, thermal direct printing
Print speed:	up to 6 inch / second (up to 150 mm / second)
Resolution:	300 dpi (dots per inch, horizontal and vertical)
Media width:	4 inch up to 8.74 inch (equivalent to 100 mm up to 222 mm)
max. Print width:	8.62 inch (219 mm)
Media thickness:	0.14 up to 0.25 mm
Interfaces:	parallel: IEEE 1284 (Centronics) (MP-Bus, SPS-Control GPIO, optional) serial: USB 2.0 (RS232, RS422 optional) LAN: Ethernet 10/100 Mbit (TCP-IP)

Dimensions:

Width (W):	420 mm
Depth (D):	305 mm
Height (H):	167 mm

Environment:	temperature: +5°C to +35°C (operating) -20°C to +60°C (storage temperature) relative atmospheric humidity: 45 to 75 % (without condensation)
Mains connection:	100 - 240 V AC (-10%, + 6%), max. 3.4 A, 50/60 Hz or (in case of the "mobile version"): connection to 24V, 36V or 48V (Adaption via DIPswitch and a suitable fuse; refer to chapter 6 for details)

Costs per Page for MICROPLEX Print Systems

The term "costs per page" is the most frequently used one in connection with the purchase of a printer.
Nevertheless this term is the one with the biggest lack of definition.
The distributors normally attach great importance to having small values for the costs per page. The user normally wants to have a value that is as realistic as possible.

There isn't any generally valid rule to calculate the costs per page. Therefore values given by different manufacturers are very often not comparable.

The values given by MICROPLEX are based on the utilization time of the so-called consumables of the printer. There isn't any generally valid rule for this calculation, either. Therefore MICROPLEX has fixed the definition of consumables as follows:

1. Consumables

Consumables are parts or substances which the user can exchange or refill without tools.

MICROPLEX understands by this definition that the user can decide by visible criteria when he should exchange or refill consumables. The working steps can be done by the user in accordance with the manual without the usage of tools.

Consumables can be different depending on the printer type.
The most important consumable for example is **toner**.

Usually the utilization time of these materials is given as a number of pages (DIN A4). These values often refer to the print density (3%, 4%, or 5%) which is given as an application specific parameter. Usually a value of 5% print density is defined, very seldom is 4% used.
In the case of a low print density (e.g. 3%) the utilization time increases, in the case of a high print density (e.g. 10%) the utilization time is decreased.
Therefore the utilization time is strongly dependant upon the application.
Experience proves that in professional applications a print density of higher than 5% is usually reached. For a delivery note containing a form and some bar codes a print density of 8 - 10% is quite normal.

There are further parts that must be exchanged in addition to the consumables during the life time of a print system. MICROPLEX divides these additional parts into two categories:

2. Application specific wearing materials

Application specific wearing materials are parts which have to be exchanged by a service engineer or a trained operator. The criterias for the exchange aren't always easily recognizable for a user. Some of the criterias require measuring techniques or the experience of a service engineer or operator.
In a normal application, parts of this category are:
- fuser unit
- process unit (drum, OPC)
- ozone filter

3. Spare parts

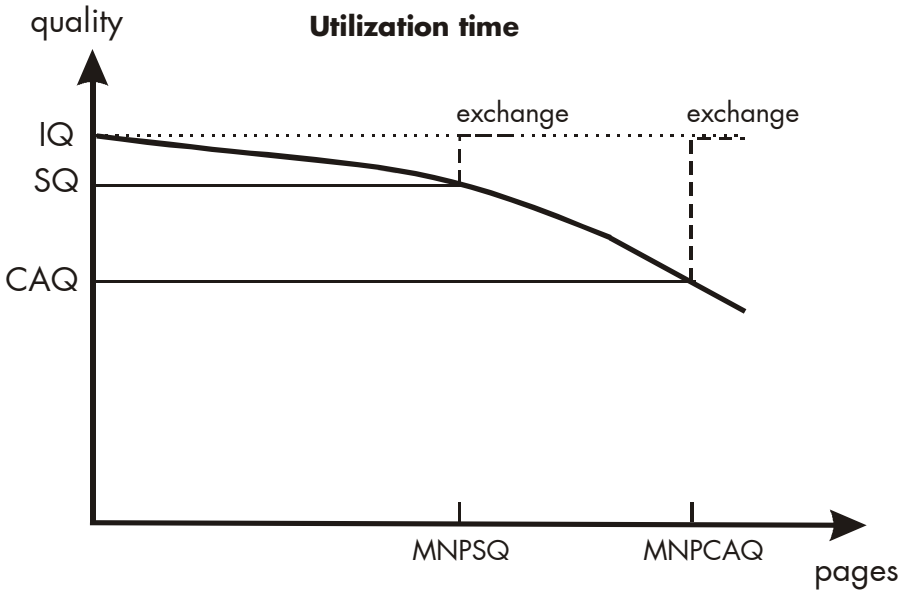
Spare parts are exchanged by the service engineer, when they fail.
Examples for spare parts are:
- couplings
- electronic assemblies
- rollers

Depending on the application some parts may change categories under certain circumstances. If for example very rough paper is used, the rollers can become an (application specific) wearing part.

It's a fact, that the right time to exchange a component depends not only on the failure of a component but also on a possible loss of print quality in the printouts.

MNPSQ = Mean Number of Prints with Specified Quality (**SQ**).
This value is often associated with "Lifetime". This term is not correct. MNPSQ describes the period of time in which a defined print quality is maintained.
The print quality is determined by the values for
- print density
- background darkness
- homogeneity

The value **IQ** (Initial Quality) is used to designate the print quality that is reached with a new printer. **CAQ** (Customer Acceptable Quality) is a purely subjective lower limit which a respective customer is willing to accept the print quality. An exchange of parts is only then necessary even if the MNPSQ is already exceeded.



14. Index

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