Pronto!™ 486 · 482 · 863 · 682

USER GUIDE

Pronto! 486
- Prints or laminates in 600 dpi at up to 4 ips

Pronto! 482
- Prints or laminates in 200 dpi at up to 10 ips

Pronto! 863
- Prints or laminates in 300 dpi at up to 6 ips on labels up to 8.5" wide

Pronto! 682
- Prints or laminates in 200 dpi at up to 8 ips on labels up to 6.5" wide

QuickLabel.com

Find us on:

QuickLabel Pronto! 482/486/682/863 User Guide

Specifications are subject to change without notice

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Trademarks

Windows® is a trademark of Microsoft Corporation.

QuickLabel® is a registered trademark of QuickLabel Systems and Astro-Med, Inc.

Pronto! Printer Limited Lifetime Warranty

QuickLabel Systems, An Astro-Med Inc. Product Group, warrants this product against defects in materials or workmanship for the lifetime of the product. This warranty excludes printhead and print platen, which are separately warranted. This warranty also excludes any cutter blade that may be incorporated in a cutter accessory installed in, integrated with or attached to the Pronto! printer. The product lifetime is defined as the period during which the fair market value of the product exceeds the cost to repair the product, as determined by the condition of the product at the time the defect is reported to QuickLabel. If during the lifetime of the product the customer discovers a defect, this defect must be reported promptly to QuickLabel. QuickLabel will, at its option, repair the printer or repair or replace its defective part(s) at no additional charge under our QuickSwap Repair & Loaner Service.

If QuickLabel determines that repair at QuickLabel's factory is required, the customer may be asked to return the printer to QuickLabel at the customer's expense, and a loaner printer will be shipped via ground freight at QuickLabel's expense for use during the repair process. In the event that a repair can be performed by the customer through parts exchange, repair parts or replacement parts will be shipped to the customer via ground freight. Repair parts and replacement parts will be either reconditioned or new. The customer is responsible for freight to return the loaner printer or any replaced parts to our factory, and the customer should insure the shipment in case the product is lost or damaged in transit. QuickLabel is not responsible for damage during shipment. If the QuickSwap loaner printer or replaced parts are not returned to the factory, the customer will be billed at list price for the parts. All replaced parts become the property of QuickLabel. Travel, freight and other expenses related to warranty repairs are not covered.

The Pronto! warranty excludes the cost to repair damage to the product caused by labels, tags or thermal transfer ribbons that are not compatible with the product.

This warranty is void if the product has been damaged by accident, abuse, neglect or misapplication, or if the product has been improperly installed or maintained, or if the product has been used outside of its environmental specifications, or if the product has been modified without the express written permission of QuickLabel.

QuickLabel makes no warranty, either express or implied, with respect to this product's merchantability or fitness for a particular purpose. In no event shall QuickLabel be held liable for any direct, indirect, special, incidental, or consequential damages, whether based on a contract, tort, or any other legal theory and whether advised of the possibility of such damages.

Pronto! Printhead and Platen Warranty

QuickLabel Systems warrants the printhead and the platen from the date of purchase for a period of 90 days or for 1 million inches of thermal transfer ribbon, whichever comes first, contingent upon the use of QuickLabel Systems thermal transfer ribbon. QuickLabel Systems printheads are calibrated for use with QuickLabel Systems thermal transfer ribbon and perform optimally only when used with this ribbon. This specific Printhead and Platen Warranty does not apply to printheads damaged by accident, abuse, neglect, misapplication or the like.

Obtaining Service

To obtain warranted service, please contact QuickLabel Technical Support through one of the Factory Sales and Service Centers listed below.

Contact Information for Factory Sales and Service Centers

QuickLabel USA and World Headquarters

600 East Greenwich Avenue

West Warwick, RI 02893 USA

Toll Free: (877) 757-7978

Toll-Free Sales: (877) 757-7978

Toll Free Technical Support: (877) 757-7310

Tel: (401) 828-4000

Fax: (401) 822-2430

Web Site: www.QuickLabel.com

Sales E-mail: info@QuickLabel.com

Technical Support E-mail: support@QuickLabel.com

QuickLabel Canada
#111 - 3555 Isabelle, Borssard, QC J4Y 2R2 Canada
Tel: (800) 565-2216
Fax: (450) 619-9976
Web Site: www.QuickLabel.ca
Sales E-mail: info@QuickLabel.ca
Technical Support E-mail: support@QuickLabel.ca

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Fax: +49 (0) 6106-771121
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QuickLabel France
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ZA la Clef de St Pierre
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78990 ELANCOURT
Tel: 33 1 34 82 09 00
Fax: 33 1 34 82 05 71
Web Site: www.QuickLabel.fr
Sales E-mail: info@QuickLabel.fr
Technical Support E-mail:support@QuickLabel.fr

QuickLabel United Kingdom
Astro-Med House, 11 Whittle Parkway
Slough, Berkshire SL1 6DQ
Tel: 01628 668836
Fax: 01628 664994
Web Site: www.QuickLabel.co.uk
Sales e-mail: info@QuickLabel.co.uk
Technical Support e-mail:support@QuickLabel.co.uk

Ownership Information

Congratulations and thank you for your business. Your purchase of a quality QuickLabel product is an investment in the finest of state-of-the-art printing and labeling technology.

Please use the spaces below to list the model number and serial number of your product. If, for any reason, it should be necessary for you to contact us regarding your purchase, please refer to:

Serial Number:

FCC Compliance Statement

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

UL Compliance

Pronto 482, Pronto 486, Pronto 682, and Pronto 863 have been investigated by Underwriters Laboratories Inc.® (UL) or any authorized licensee of UL in accordance with the Standard(s) indicated:

UL 60950-1, Information Technology Equipment - Safety - Part 1: General Requirements

CSA C22.2 No. 60950-1-07, Information Technology Equipment - Safety - Part 1: General Requirements

RoHS Compliance

We declare that the Pronto! 482/486/682/863 complies with The European RoHS Directives 2011/65/EU and 2002/95/EU (Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment).

This declaration is based on information provided by suppliers based on reasonable inquiry. This declaration is rendered invalid if the product is altered by someone other than Astro-Med, Inc.

Declaration of Conformity
Declaration de Conformité
Übereinstimmungserklärung
Dichiarazione di Conformità

ID	DoC-22834571
Manufacturer's name and address Nom et adresse du fabricant Hersteller Nome del costruttore	Astro-Med, Inc. 600 East Greenwich Avenue West Warwick, RI 02893 USA
Model No. Modele No. Model Nr. Modello No.	Pronto 482 Pronto 486 Pronto 483 Pronto 682 Pronto 863

Standards to which conformity is declared
Standards auquel la conformité appartient
Normen für welche Übereinstimmung erklärt wird
Norme per le quali si dichiara la conformità
	EMC: EN 60950-1 :2006+A11:2009
	           +A12:2011+A1:2010
	           EN 61558-1:2005+A1:2009
	           EN 55022:2010
	           EN 55024:2010
	           EN 61000-3-2:2006+A1:2009+A2:2009
	           EN 61000-3-3:2008
	Safety: UL 60950-1
	           CSA C22.2 No. 60950-1-07

Application of Council Directives Application des Decisions du Conseil Anwendbar fur die Richtlinien Applicazione delle Direttive del Comitato	2006/95/EC 2004/108/EC

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directive and Standard.

Je, Soussigné, déclare que l'équipment spécifié ci-dessus est en conformité avec la directive et le standard ci-dessus.

Ich, der unterzeichnende erkläre hiermit, daß das oben beschriebene Gerät den vorgenannten Richtlinien und Normen entspricht.

Il sottoscritto dichiara che l'apparecchio sopra specificato è conforme alle Direttive e Norme sopra specificate.

Steven Holbrook Quality Assurance Manager Astro-Med, Inc.	*Steven G. Holbrook* Date of issue: <u>12/13/2013</u> Place of issue: <u>West Warwick, RI</u>

European Contact: Your local Astro-Med, Inc. Sales and Service Office.

FRANCE - Astro-Med SNC, Parc d'Activities de Pissaloup, 1, rue Edouard Branly, 78190 Trappes (Tel. 331-3482-0900 Fax: 331-3482-0571 Email:AstroMedFrance@astromed.com)

GERMANY - Astro-Med GmbH, Senefelderstrasse 1/T6, D-63110 Rodgau (Tel. +49(0)6106-28368-0 Fax: 49-6106-771121 Email: AstroMedDeutschland@astromed.com)

UNITED KINGDOM - Astro-Med, Inc., Astro-Med House, 11 Whittle Parkway, Slough, SL1 6DQ. (Tel. 44-1628-668836 Fax: 44-1628-664994 Email: AstroMedUK@astromed.com)

Declaration of Conformity
Declaration de Conformité
Ubereinstimmungserklärung
Dichiarazione di Conformità

ID	DoC-22834571-ER4
Manufacturer's name and address Nom et adresse du fabricant Hersteller Nome del costruttore	Astro-Med, Inc. 600 East Greenwich Avenue West Warwick, RI 02893 USA
Model No. Modele No. Model Nr. Modello No.	ER4

Standards to which conformity is declared
Standards auquel la conformité appartient
Normen für welche Übereinstimmung erklärt wird
Norme per le quali si dichiara la conformità
	EMC: EN 55022:1998 +A1:2000 +A2:2003
	          EN 61000-3-2:2000
	          EN 61000-3-3:1995 +A1:2001
	          EN 55024:1998 +A1:2001 +A2:2003
	          EN 61000-6-2:2001

Application of Council Directives Application des Decisions du Conseil Anwendbar fur die Richtlinien Applicazione delle Direttive del Comitato	98/37/EG 2006/95/EG 2004/108/EG

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directive and Standard.

Je, Soussigné, déclare que l'équipment spécifié ci-dessus est en conformité avec la directive et le standard ci-dessus.

Ich, der unterzeichnende erkläre hiermit, daß das oben beschriebene Gerät den vorgenannten Richtlinien und Normen entspricht.

Il sottoscritto dichiara che l'apparecchio sopra specificato è conforme alle Direttive e Norme sopra specificate.

Steven Holbrook Quality Assurance Manager Astro-Med, Inc.	*Steven G. Holbrook* Date of issue: 02/26/2009 Place of issue: West Warwick, RI

European Contact: Your local Astro-Med, Inc. Sales and Service Office.

FRANCE - Astro-Med SNC, Parc d'Activities de Pissaloup, 1, rue Edouard Branly, 78190 Trappes (Tel. 331-3482-0900 Fax: 331-3482-0571 Email:AstroMedFrance@astromed.com)

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Declaration of Conformity
Declaration de Conformité
Ubereinstimmungserklärung
Dichiarazione di Conformità

ID	DoC-22834571-CS4
Manufacturer's name and address Nom et adresse du fabricant Hersteller Nome del costruttore	Astro-Med, Inc. 600 East Greenwich Avenue West Warwick, RI 02893 USA
Model No. Modele No. Model Nr. Modello No.	CS4

Standards to which conformity is declared
Standards auquel la conformité appartient
Normen für welche Übereinstimmung erklärt wird
Norme per le quali si dichiara la conformità
	EMC: EN 55022:2006
	           EN 55024:1998+A1:2001+A2:2003
	           EN 61000-3-2:2006
	           EN 61000-3-3:1995+A1:2001+A2:2005

Application of Council Directives Application des Decisions du Conseil Anwendbar fur die Richtlinien Applicazione delle Direttive del Comitato	2004/108/EC

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directive and Standard.

Je, Soussigné, déclare que l'équipement spécifié ci-dessus est en conformité avec la directive et le standard ci-dessus.

Ich, der unterzeichnende erkläre hiermit, daß das oben beschriebene Gerät den vorgenannten Richtlinien und Normen entspricht.

Il sottoscritto dichiara che l'apparecchio sopra specificato è conforme alle Direttive e Norme sopra specificate.

Steven Holbrook Quality Assurance Manager Astro-Med, Inc.	*Steven G. Holbrook* Date of issue: 07/09/2010 Place of issue: West Warwick, RI

European Contact: Your local Astro-Med, Inc. Sales and Service Office.

FRANCE - Astro-Med SNC, Parc d'Activities de Pissaloup, 1, rue Edouard Branly, 78190 Trappes (Tel. 331-3482-0900 Fax: 331-3482-0571 Email:AstroMedFrance@astromed.com)

GERMANY - Astro-Med GmbH, Senefelderstrasse 1/T6, D-63110 Rodgau (Tel. +49(0)6106-28368-0 Fax: 49-6106-771121 Email: AstroMedDeutschland@astromed.com)

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Chapter 1:
Introduction & Installation

This chapter contains the following sections:

- **Safety and the environment -** Provides safety precautions and disposal information

- **Unpacking the label printer -** Describes how to unpack and inspect the printer

- **Setting up the label printer -** Describes how to set up the printer after unpacking

- **Connecting the label printer to power -** Provides information about power connections

- **Connecting the label printer to a computer -** Provides information about data connections

Safety and the environment

Read these operating instructions carefully before using the label printer for the first time. The operating instructions describe all of the functions of the label printer during operation. The available functions depend on the version used for a specific job.

Intended use

- The label printer is a state-of-the-art device which complies with the recognized safety-related rules and regulations. Despite this, a danger to life and limb of the user or third parties could arise and the label printer or other property could be damaged while operating the device.

- The label printer may only be used while in proper working order and for the intended purpose. Users must be safe, aware of potential dangers and must comply with the operating instructions! Faults, in particular those which affect safety, must be remedied immediately.

- The label printer is solely intended to print suitable media which have been approved by the manufacturer. Any other or additional use is not intended. The manufacturer/supplier is not liable for damage resulting from misuse. Any misuse is at your own risk.

- Intended use includes heeding the operating instructions, including the maintenance recommendations/regulations specified by the manufacturer.

Safety notes

- The label printer is designed for power supply systems from 100 V AC to 240 V AC. Connect the label printer only to electrical outlets with a ground contact.

- Couple the label printer to devices using extra low voltage only.

- Before making or undoing connections, switch off all devices involved (computer, printer, accessories etc.).

- Operate the label printer in a dry environment only and do not get it wet (sprayed water, mist etc.).

- If the label printer is operated with the cover open, ensure that clothing, hair, jewelry and similar personal items do not contact the exposed rotating parts.

- The print mechanism can become hot during printing. Do not touch it during operation and allow it to cool down before changing the media or before removal or adjustment.

- Carry out only the actions described in these operating instructions. Other tasks may only be performed by trained personnel or service technicians.

DANGER! Risk of death via mains voltage! Do not open the housing of the label printer.

Environmentally-friendly disposal

Used devices contain valuable recyclable materials which should be utilized.

Dispose of used devices separately from other waste, i.e. via an appropriate collection site.

The modular nature of the label printer allows it to easily be disassembled into its component parts so that the parts can be turned in for recycling.

The PCB of the label printer has a lithium battery.

Dispose of this battery in a collection container for old batteries at the store or with the public waste disposal authority.

Unpacking the label printer

1   Lift the label printer out of the box via the straps.

2   Check label printer for damage which may have occurred during transport.

3   Check delivery for completeness.

- Label printer

- Empty cardboard core, mounted on ribbon take-up hub

- Tear-off plate (basic devices only) or Dispense plate (peel-off device version only)

- Power cable

- USB cable

- Documentation

Note: Retain the original packaging for subsequent transport.

Setting up the label printer

Caution: The device and the print media can be damaged by moisture and water. The label printer may only be set up in a dry place protected from sprayed water.
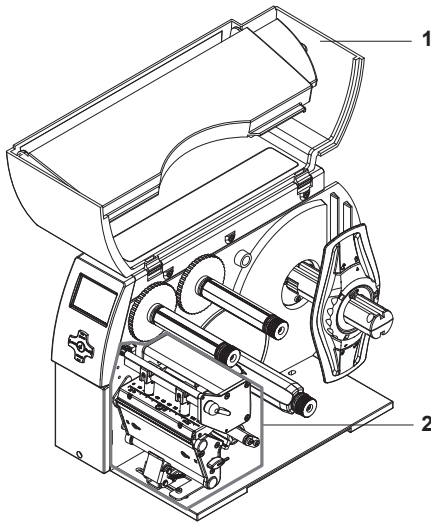
- Set up printer on a level surface.

- Open cover (1) of the label printer.

- Remove foam transportation safeguards near the printhead (2).

Connecting the label printer to power
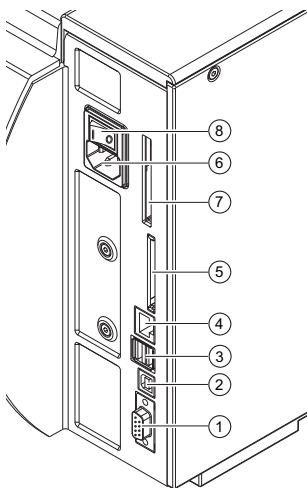
1. Serial RS-232 interface
2. USB 2.0 high speed slave interface
3. Two USB master interfaces for keyboard, scanner, optional interface adapters, or USB flash drive
4. Ethernet 10/100 Base T interface
5. Slot for CompactFlash memory card
6. Power connection jack
7. Slot for type II PC card or WLAN card
8. Power switch

Connecting to the power supply

The printer is equipped with a versatile power supply unit. The device may be operated with a mains voltage of 230 V AC/ 50 Hz or 115 V AC/60 Hz without any adjustments or modifications.

Caution: The device can be damaged by undefined switch-on currents. Set the power switch (8) to "O" before plugging in the device.

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1. Insert power cable into power connection jack (6).

2. Insert plug of the power cable into a grounded electrical outlet.

Connecting the label printer to a computer
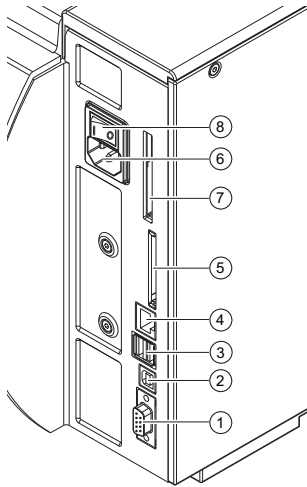
1. Serial RS-232 interface
2. USB 2.0 high speed slave interface
3. Two USB master interfaces for keyboard, scanner, optional interface adapters, or USB flash drive
4. Ethernet 10/100 Base T interface
5. Slot for CompactFlash memory card
6. Power connection jack
7. Slot for type II PC card or WLAN card
8. Power switch

Warning: Insufficient or missing grounding can cause faults during operation. Ensure that all computers and connection cables connected to the label printer are grounded.

Choose from the following options for connecting a computer to the label printer:

• Direct connection to the serial RS-232 interface

• Direct connection to the Ethernet interface

• Connection via a computer network to the Ethernet interface

• Direct connection to the high-speed USB slave interface

• Connection via an optional interface adapter (Parallel/Centronics, RS-422/485) to a USB master interface

• Connection to a wireless network via optional WLAN card installed in the slot for type II PC card.

RS-232 serial interface

The RS-232 interface is operated via an RS-232 cable.

1   Connect computer and label printer with a suitable cable.

2   Secure cable connections with the screws found at the plugs.

3   Configure the RS-232 interface of the printer to match the settings of the connected computer (see *Interfaces* on page 5-8).

If problems occur, contact the computer manufacturer for interface assignments and note the pin assignments below.
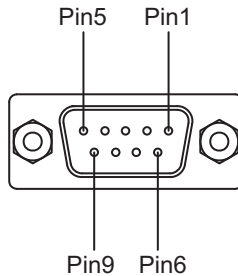
Pin	Designation	Function
1	CD	Carrier Detect
2	TxD	Transmit Data
3	RxD	Receive Data
4	DTR	Data Terminal Ready (not connected)
5	GND	Ground
6	DSR	Data Set Ready (not connected)
7	RTS	Request To Send
8	CTS	Clear To Send
9	RI	Ring Indication (not connected)

Ethernet interface

To connect the label printer to a network jack, you will require a patch cable with an RJ45 plug for 10 Base T or 100 Base T. For direct connection of the

printer to the Ethernet card of a local computer, you will need an appropriate crossover cable.

Caution: A shielded cable must be used to connect the printer to the network.

---

1   Connect computer and label printer with a suitable cable.

2   Press the menu button. Select Setup > Interfaces. Make basic settings for operation of the Ethernet interface.

3   Call up the printer website (see *Configuration via the printer website* on page 5-14).

4   Open the "Setup" tab on the printer website.

5   Set the parameters described in the path Setup > Interfaces > Ethernet. See *Setup tab* on page 5-17.

6   Click Set on the "Setup" tab.

7   Enter PIN and click Confirm (see *Security* on page 5-12).

8   Set up print service if necessary (see below).

9   Adjust Windows printer setting (see below).

Note: Do not change the settings of the "IP" and "Gateway" on the printer website, as otherwise the connection to the printer may be lost.

Print services Raw-IP and LPD in MS Windows

The print services Raw-IP and LPD are not available in all operating systems. In general, special tools are required to set up print services. Information on this can be obtained from your dealer.

Print service	Windows 2000	Windows XP	Windows Vista	Windows 7
Raw-IP	Not available	Available	Available	Available
LPD	Available, but not installed	Available	Available	Available

Windows 2000 offers the port monitor SPM (Standard Port Monitor) which is installed automatically when setting up the TCP/IP protocol. The SPM can be configured for Raw-IP or LPD.

Information on installation can be obtained from the Windows documentation.

During the installation of both print services, additional connections for print output are set up:

- Raw-IP: Enter the same port address in the printer which you have selected during installation.

- LPD: "lp" (line printer) must be entered as the name of the printer on the computer (queue name).

Adjusting Windows printer setting

If the printer driver valid for your Windows version is installed on your computer, you can use the Windows standard applications to edit the label contents and to start the print jobs. To use the Raw-IP or LPD print services, you must adjust the Windows printer settings:

1   Open the folder containing the printers via Start > Settings > Printers.

2   Right-click the icon of the label printer. A pop-up menu appears.

3   Select "Properties" in the pop-up menu.

4   Open the "Details" or "Connections" tab.

    This tab contains, among other things, the connections which were also set up when the print services were installed. The names of these connections depend on the installation tool used.

5   Select the Raw-IP or LPD connection.

6   Click OK.

USB interface

The high-speed USB interface allows the label printer to be operated via a USB interface of a computer running the operating system Windows 7 32bit/ 64bit, Windows 2000, Windows XP 32bit / 64bit, Windows 2003 32bit / 64bit and Windows Vista 32bit /64bit.

A printer driver must be installed if a USB interface will be used for connection.

1   Switch the label printer off.

2   Connect the computer and label printer with a USB A-B cable.

3   Switch computer on.

4   Place the "Printer Accessories CD" in the CD-ROM drive.

5   Exit all programs currently running.

6 Switch printer on. The Windows Installation Wizard is started automatically.

Follow the on-screen instructions. The source of the installation file is

"D:\windrv\win32\"	for Windows 2000 / XP 32bit / Server 2003 32bit / Vista 32bit / Server 2008 32bit / Windows 7 32bit
"D:\windrv\win64\"	for Windows XP 64bit / Server 2003 64bit / Vista 64bit / Server 2008 64 bit /Windows 7 64bit

Where D is the letter of the CD-ROM drive used. After successful installation, an icon for the label printer appears in the Windows "Printer" system folder.

7 Click icon in "Printer" system folder and edit printer settings if necessary.

Optional Interfaces

For the printer the following optional interfaces are available:

- Parallel/Centronics
- RS-422/485
- WLAN card 802.11b/g

The Parallel/Centronics interface and the RS422/485 interface must be connected at a USB master interface of the printer. In order to install the WLAN card the slot for the PC card must be used.

Note: For detailed information see the Operating Instructions for the respective optional interface.

- Parallel/Centronics
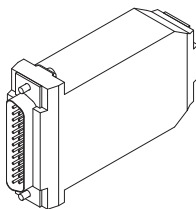
- RS422/485
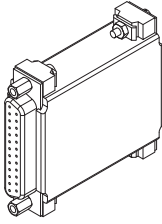
- WLAN Card
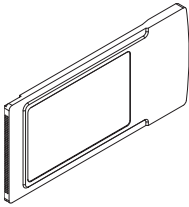
Switching the label printer on and off

Once all connections have been made:

1   Switch printer on via the power switch (1).
The printer runs through a system test and then indicates the system status **Ready** in the display.

If an error has occurred while the system was starting up, the error symbol and the error type are displayed (see *'System error' mode* on page 2-7).

Chapter 2:
Operating panel

This chapter contains the following sections:

- **About the Operating Panel -** Provides an overview of the operating panel

- **Functions of the operating panel during printing -** Describes operating panel functions while printing

About the Operating Panel

The user can control the operation of the printer with the operating panel, for example:

- pause, continue or cancel print jobs

- set printing parameters, e.g. heating energy of the printhead, print speed, configuration of the ports, language and time (see *Chapter 5: Configuration*)

- start test functions (see *Chapter 5: Configuration* and *Chapter 12: Test functions*)

- control standalone operation with memory card (see *Chapter 5: Configuration*)

The settings made at the operating panel are the basic settings of the label printer.

Note: It is to your advantage to make adjustments for different print jobs in the software whenever possible.

Layout of the operating panel
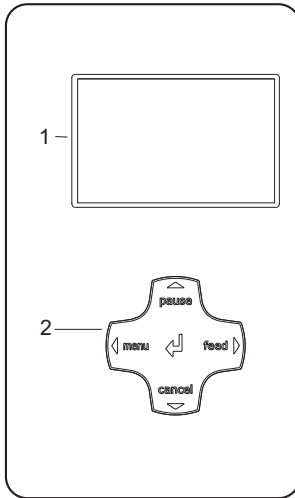
The operating panel is comprised of the graphical display (1) and the navigator pad (2) with five integrated buttons.

The graphical display informs you of the current status of the printer and the print job, reports errors and shows the printer settings in the menu.

The button functions are dependent on the current printer status:

Active functions are indicated by the illuminated letters and symbols on the buttons of the navigator pad.

While printing, active functions illuminate white (e.g. **menu** or **feed**)

Active functions are illuminated in orange in the offline menu (arrows, ↵ button)

Functions of the buttons

- **pause, cancel, menu, feed buttons:** (see *'Ready' mode* on page 2-5)

- **Arrows:** Up, down, left and right in the menu tree.

- ↵ **button:** Input of a parameter in the menu, calling up of help in case of an error

Functions of the operating panel during printing

Symbol indicators

The symbol indicators shown in the following table can appear on the status line of the screen, depending on the configuration of the printer. They inform you of the current status of the printer at a glance. For configuration of the status line, see *Status line* on page 5-10.

Symbol	Meaning
	Time
	Date
	Date/time digital
	Ribbon supply status
	WLAN field strength
	Ethernet status
	Printhead temperature
	User memory in the clock circuit
	Used memory

Symbol	Meaning
IMP	Input buffer
!	Access to memory card
⬒	Printer receiving data

Power-Save mode

If the printer is not used for some time, it switches to Power-Save mode automatically. The display shows the following graphic and button illumination is switched off.

To exit Power-Save mode:

• Press any button on the navigator pad.

'Ready' mode

The printer is ready and can receive data.

The display shows the text **Ready** and the configured symbol indicators, such as the time and date.

Button	Label	Function
menu	illuminates	go to offline menu (see *Chapter 3: Offline menu*)
feed	illuminates	advances an empty label
pause	illuminates once a print job is complete	repeat printing of last label
cancel	illuminates	clear print buffer, repeated printing of the last label is then not possible

'Printing Label' mode

The printer is carrying out a print job. Data transfer for a new print job is possible in 'Printing' mode. The new print job starts once the preceding job is completed.

The display shows the text **Printing Label** and the number of the printed label within the print job.

Button	Label	Function
pause	illuminates	pause print job, printer switches to Pause mode
cancel	illuminates	press briefly - cancel current print job press and hold - cancel current print job and delete all print jobs

'Pause' mode

The print job has been interrupted by the operator. The display shows the text **Pause** and the following symbol:

Button	Label	Function
pause	illuminates	continue print job, printer switches to **Printing Label** mode
cancel	illuminates	press briefly - cancel current print job press and hold - cancel current print job and delete all print jobs

'Fault - correctable' mode

An error which can be remedied by the operator without canceling the print job has occurred. The print job can be continued once the error is remedied.

The display shows the error type, the number of labels still to be printed, and the following symbol:

Button	Label	Function
pause	flashes	continue print job after error recovery, printer switches to **Printing Label** mode
cancel	illuminates	press briefly - cancel current print job press and hold - cancel current print job and delete all print jobs
↵ **button**	illuminates	call up help – brief information on error recovery is displayed

'Fault - irrecoverable' mode

An error which cannot be remedied without canceling the print job has occurred.

The display shows the error type, the number of labels still to be printed, and the following symbol:

Button	Label	Function
cancel	flashes	press briefly - cancel current print job press and hold - cancel current print job and delete all print jobs
↵ **button**	illuminates	call up help – brief information on error recovery is displayed

'System error' mode

If an error has occurred while the system was starting up, the display shows the error type and following symbol:

- Switch off printer via the power switch and switch it on again.

or

- Push the cancel button. If the error occurs repeatedly, notify Support.

Chapter 3: Offline menu

This chapter contains the following sections:

- **Offline menu -** Describes the structure and navigation of the offline menu

Offline menu

Structure of the offline menu

The offline menu contains setting options on several levels for configuring the label printer to meet your needs. In addition, the offline menu features test functions for supporting the configuration or checking the function of the label printer. Using status functions, the set parameters can be displayed or printed.

1st menu level	2nd menu level	Access
Memory card	**Label from card**	Only with memory medium inserted in the default card slot
	Print directory	Only with memory medium inserted in the default card slot
	Copy memory card	Only with memory medium inserted in the default card slot PIN protection possible
	Format card	Only with memory card inserted, PIN protection possible
	ASCII dump (Card)	Only with memory medium inserted in the default card slot
Short status		

1st menu level	2nd menu level	Access
Test	**Status print**	
	Font list	
	Device list	
	WiFi status	Only with WLAN card installed
	ASCII Dump Mode	
	Test grid	
	Label profile	

1st menu level	2nd menu level	Access
Setup	**Local settings**	PIN protection possible
	Machine param.	
	Print param.	
	Interfaces	
	Status line	
	Security	

1st menu level	2nd menu level	Access
Service	**Firmware upd.**	PIN protection possible
	Firmw. fr. card	Only with memory medium inserted in the default card slot PIN protection possible
	Save settings	Only with memory medium inserted in the default card slot PIN protection possible
	Load settings	Only with memory medium inserted in the default card slot PIN protection possible

Navigating the offline menu

You can control all settings and functions in the offline menu with the navigator pad.
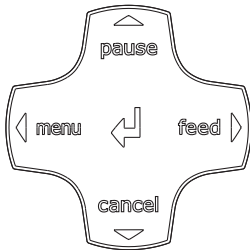
Key	Menu	Parameter setting	
		Parameter choice	**Numeric value**
↑	Return from a submenu	-	Increase of the number at the cursor position
↓	Jump into a submenu	-	Decrease of the number at the cursor position
←	Menu option to the left	Scrolls to the left	Cursor shift to the left
→	Menu option to the right	Scrolls to the right	Cursor shift to the right
↵	Start of a selected menu option	Confirmation of the selected value	
	Pressing 2 seconds: Leaving the offline menu	Pressing 2 seconds: Abort without changing the value	

Note: You can also make all settings in the offline menu via the Ethernet interface (see *Configuration via the printer website* on page 5-14) or via direct control commands (see "QuickLabel Pronto 482/486/682/863 Programmer's Guide").

Chapter 4:
Device types

This chapter contains the following sections:

- **Standard device -** Describes the standard device version

- **Peel-off device version -** Describes the peel-off device version with rewinder

Standard device

The standard device is used for printing labels or continuous media on rolls or fanfolded media.

In Tear-Off mode, labels are removed by hand.

The labels can be cut off automatically with the 'cutter' accessory. For details, see *Chapter 9: CU4 Cutter Accessory*.

The labels can be wound up with the 'external rewinder' accessory. For details, see *External Rewinder (ER1)* on page 8-6 and *External Rewinder (ER4)* on page 8-16.

Because there is no internal rewinder, automatic peeling off of the labels from the carrier medium (Peel-Off mode) and internal rewinding are not possible.

Peel-off device version

The peel-off device version is capable of Peel-Off mode and thus has an internal rewinder and a pulling system comprised of a rewind assist roller and a locking system. Printing on labels or continuous media from rolls or fanfolded media is possible.

Operation in Tear-Off mode and with the 'cutter' or 'external rewinder' accessory is possible by installing the tear-off plate (see *Removing and installing the rewind guide plate, dispense plate or tear-off plate*), as with the standard device.

In Peel-Off mode, the label is peeled off the liner after printing. The label can be removed by hand with the peel-off sensor (accessory). The liner is rolled up via the internal rewinder.

For use in Internal Rewind mode remove the locking system (see *Removing and installing the locking system* on page 6-13) and replace the dispense plate with a rewind guide plate (see *Removing and installing the rewind guide plate, dispense plate or tear-off plate* on page 6-12).

Chapter 5: Configuration

This chapter contains the following sections:

- **Configuration via the operating panel -** Describes how to change printer settings using the operating panel

- **Configuration via the printer website -** Describes how to change printer settings using the printer website

Configuration via the operating panel

A host of parameters for configuring the printer are found in the Setup menu of the offline menu. Your printer is mainly configured via the operating panel during initial commissioning and when making major changes to the operational conditions. Changes required for processing different print jobs can be implemented via software settings.

You can protect the Setup menu from unauthorized access via a code number (PIN).

Local settings

1   Press the menu button.

2   Select Setup > Local settings.

Parameter	Meaning	Default
Country	Setting the display language and the country-specific date and time formats. You can also overwrite the time formats via software. The changes are not saved permanently, however.	USA
Timezone	Adaptation of the time display of the printer to the time zone in relation to UTC (Universal Time Coordinated).	UTC + 1
Daylight saving	Selection of the daylight saving regulation applicable for the region. The time is then changed automatically.	EU
Set date	Setting of the system date in the format DD.MM.YYYY (DD: day, MM: month, YYYY: year). The print output of the date occurs in the format set via the "Country" parameter. You can also change the date via software. The change is not saved permanently, however.	—

Parameter	Meaning	Default
Set time	Setting the system time in the HH:MM:SS format. When changing the time, ensure that the Timezone, Daylight saving and Set date parameters are set correctly. The time can also be synchronized automatically via the internet using the Enternet interface. The print output of the time occurs in the format set via the "Country" parameter. You can also change the time via software. The change is not saved permanently, however.	—

Device settings

1 Press the menu button.

2 Select Setup > Machine param.

Parameter	Meaning	Default
Printhead pos. X	Shifting of the entire print image perpendicular to the direction of paper flow. The absolute shifting of the print image perpendicular to the direction of paper flow is limited to the difference between the label width and the printhead width set in the software. You can also set the Printhead pos. X via software. The offset values from the Machine param. menu and the software are added together.	0.0 mm

Parameter	Meaning	Default
Printhead pos. Y	Shifting of the entire print image in the direction of paper flow. With positive values, printing begins later in the direction of paper flow. Shifting of the print image in the direction of paper flow also influences the peel and cutting positions. • Correct the Peel position and Cut position parameters by the same value in the opposite direction. You can also set the Printhead pos. Y via software. The offset values from the Machine param. menu and the software are added together.	0.0 mm
Tear-off pos.	Shifting of the tear-off position in the direction of paper flow. With positive values, the label strip is transported farther out of the printer.	0.0 mm
Demand sensor	Configuration of the optional peel-off module. See *Label Present Sensor (PS6)* on page 8-36. If peel-off module is not connected, this option is not available.	
Cutter	Configuration of the optional cutter. See *Chapter 9: CU4 Cutter Accessory*. If cutter is not connected, this option is not available.	
Brightn. LCD	Brightness of the LCD display from 1 to 10	10
Contrast LCD	Contrast of the LCD display from 4 to 8.	6

Parameter	Meaning	Default
Time Powersave.	Time between the last operation and the activation of Powersave mode.	5 min.
Debug mode	Operating mode which supports the firmware programmer when localizing errors.	Off

Printing parameters

1 Press the menu button.

2 Select Setup > Print param.

Parameter	Meaning	Default
Heat level	Heating value for compensating for the differing thermal behavior of printheads. Changing this value is then especially necessary if the printing intensity has changed after replacing the printhead. To adapt the printing intensity when using different media, print speeds or printing contents, you should change the heat level in the software. The settings from the Print param. menu and the software are added together. The heat level setting also affects the test printouts.	0
Print speed	Basic print speed setting. You can re-specify the print speed for each print job via software. The basic setting is not changed by this. The print speed setting also affects the test printouts.	100 mm/s

Parameter	Meaning	Default
Transfer print	On for thermal transfer printing: Sensor for monitoring the transfer ribbon is activated. Off for thermal direct printing: Sensor for monitoring the transfer ribbon is not activated. You can overwrite the setting for each print job via software.	On
Warn level ribbon	Warning via the Ethernet interface by way of an SNMP message or e-mail sent when the remaining diameter of the ribbon supply roll undershoots the set value (32–74 mm).	Off
Label sensor	Method for detecting the starting end of the label. Gap Sensor: Detection using changes in the transparency between the label and label gap. Bottom-Reflect: Detection using reflex marks on the bottom of the medium. Continuos media: Synchronization of the paper flow when using endless media in cutting mode. More detailed information is found in *Chapter 9: CU4 Cutter Accessory*.	Gap Sensor
Warn level labels	Warning via the Ethernet interface by way of an SNMP message or e-mail sent when the remaining diameter of the label supply roll undershoots the set value (45–300 mm).	Off
Tear-off mode	Positioning the label medium for tearing off at the tear-off plate. On: Additional advancement of the label medium which positions the label gap after the last printed label at the dispense plate. Off: Label advance stops once the last label has fully passed the print line.	Off

Parameter	Meaning	Default
Backfeed ⬆⬇ 🔳	Method for backfeeding the label medium. Backfeeding is necessary in the cutting and peel-off modes since a label is pushed out passed the front edge of the next label above the print line when peeling off/cutting. always: Backfeeding occurs independently of label contents. smart: Backfeeding only occurs when the next label is not yet fully prepared when peeling off/cutting the current label. Otherwise, the second label is pushed on and completed after removal of the first label without backfeeding.	smart
Error-Reprint	On: With a correctable error and corresponding troubleshooting, the label being printed when the error occurs is repeated. Off: Print job is continued with the next label.	On
Pause reprint	Printing of another label with the information of the previous print job by pressing the pause button. This function can be executed until the print buffer is cleared with the cancel button.	Off
Pause on media low	The printer switches to the Pause state when rest diameters set in the parameters Warn level ribbon or Warn level labels are undershot.	Off
Barcode error	On: With faulty barcode contents or size specifications, printing is interrupted. Off: Printing is not interrupted if an error occurs. If barcode contents are faulty, the printer attempts to replace the incorrect data with valid characters (e.g. zeros). If barcode size specifications are faulty, a gray area is printed instead of the barcode.	On

Parameter	Meaning	Default
Width ASCII dump	Width of the printing area in the "Monitor mode" test function (see *ASCII Dump Mode* on page 12-12). With the Automatic setting, the printout of the control sequences arriving at the printer occurs over the maximum printing width. You can reduce the printing area width down to 50 mm.	Automatic

Interfaces

1   Press the menu button.

2   Select Setup > Interfaces.

Parameter	Meaning	Default
Default card slot	Definition of the default card slot. CompactFlash or PC-Card: card slots on the back of the printer, Ext. CompactFlash: card slot in the external operating panel, USB Memory: USB fl ash drive at USB master interface, IFFS: Internal Flash File System	Compact-Flash
Character set	Selection of the character set table for adaptation to the computer system used. Switching the character set via software is not possible. You can access characters not available in the selected character set, however, using the Unicode table.	Windows 1252
RS232	Interface parameters Baud rate and Handshake for data transfer via the serial RS-232 interface.	57600 RTS/CTS

Parameter	Meaning	Default
IEEE 1284	Configuration of the optional parallel interface. See the documentation of the parallel interface.	
	If interface is not installed, this option is not available.	
RS-422/485	Configuration of the optional serial RS-422 or RS-485 interface. See documentation of the serial interface.	
	If interface is not installed, this option is not available	
Wireless LAN 802.11	Configuration of the optional WLAN card	
	If interface is not installed, this option is not available	
Ethernet	Configuration parameters of the Ethernet interface card.	
	You can access additional configuration parameters for the Ethernet interface card via the printer website (see *Setup tab* on page 5-17).	
> DHCP	Method of issuing IP address	On
	On: Dynamic issuing of IP address by the DHCP server	
	Off: Direct issuing of the IP address by the operator	
> IP	IP address of the label printer. Only valid with DHCP = Off.	
> Mask	Subnet mask (classification and address range) of the local network. Only valid with DHCP = Off.	

Parameter	Meaning	Default
> Gateway	Connection address between the local network and other networks. The IP address of the computer (router) on the network through which the connection can be established is used for this. The address of the router can also be issued via DHCP.	Off
> Network error	Printer switches to Error mode when problems with the network connection occur.	Off
Keyboard	Setting of the keyboard layout when using an external keyboard. If keyboard is not connected, this option is not available.	
> Layout	Country setting of the keyboard layout. With the Automatic setting, the setting from the menu Local settings > Country is used. If keyboard is not connected, this option is not available.	Automatic
> NumLock	Activation or deactivation of the numerical keypad on the keyboard. If keyboard is not connected, this option is not available.	On

Status line

Select the parameters (widgets) to be displayed in Ready mode.

The display has a width of 128 pixels. It is not possible to display all widgets simultaneously. When selecting widgets, only widgets that do not overfill the display will be available. It may be necessary to remove widgets from the display before activating another one.

1   Press the menu button.

2   Select Setup > Status line menu.

3   Activate the desired widgets.

Parameter	Meaning	Default	Width (Pixels)
Clock	Displays the current time.	On	32
Date sheet	Displays the current calendar day.	On	20
Date/time digital	Digital display of current date and time.	Off	31
Ribbon supply	Displays the current ribbon supply in the form of a horizontal bar.	Off	16
Wi-Fi signal strength	Displays the current strength of the electromagnetic field with a WLAN connection.	Off	14
Ethernet link status	Displays the Ethernet status.	Off	13
Temperature	Displays the current printhead temperature.	Off	8

Parameter	Meaning	Default	Width (Pixels)
User space	Content of the user memory in the clock circuit (max. 31 byte).	Off	22
Used memory	Displays the current memory used in the form of a vertical bar.	Off	15
Input buffer	Displays the current input buffer used in the form of a vertical bar.	Off	11
Card access	Icon displayed while an installed memory card is being accessed.	On	8
Data transfer	Displays the current data transfer in the form of a falling drop.	On	16

Security
Activating a PIN

By activating a PIN, you can protect the Setup menu, certain memory card functions and the firmware update from unauthorized access.

The protected menu items are then marked with the lock symbol and are only accessible after the PIN is entered.

1   Press the menu button.

2   Select Setup > Security > Security menu.

3   Select the value On with the left and right arrow buttons

4   Accept the setting with the ↵ button.

Defining a PIN

1   Press the menu button.

2   Select Setup > Security > PIN menu.

3   Select the digit of the PIN to be changed with the left and right arrow buttons.

4   Assign the selected digit a number with the up and down arrow buttons.

5   Repeat these two steps for the remaining digits of the PIN.

6   Accept the setting with the ↵ button.

Configuration via the printer website

The parameters accessible via the operating panel can also be set via the website contained in the firmware of the printer. In addition, other parameters for the Ethernet interface are accessible there.

The printer website can be accessed with a Java-capable browser (e.g. Microsoft Internet Explorer, Mozilla Firefox) via the Ethernet interface or the optional WLAN card. Use of the Java applets requires at least version 1.4.2 of Java.

Calling up the printer website

Note: It is absolutely necessary to define a PIN in order to make settings via the printer website. You are requested to enter this PIN whenever settings are changed via the website. The initial setting of the PIN can be make via the operating panel of the printer (see *Security* on page 5-12) or via the printer website (see *Setup tab* on page 5-17).

1   Start the browser.

2   Call up printer website by entering the IP address via HTTP (e.g. http://192.168.100.208).

    The "Status" tab is open on the home screen.

3   Check to see if the status "Ready" is displayed.

Description of the printer website

The printer website contains the following tabs:

- Status: general status description. See *Status tab* on page 5-15.

- Setup: configuration parameter settings. See *Setup tab* on page 5-17.

- System messages: automatic sending of messages via e-mail. See *System messages tab* on page 5-19.

- Printer status line: printer status line layout. See *Printer status line tab* on page 5-21.

- Fonts: overview of the available fonts. See *Fonts tab* on page 5-22.

- Devices: list of the hardware and optional components. See *Devices tab* on page 5-23.

Status tab
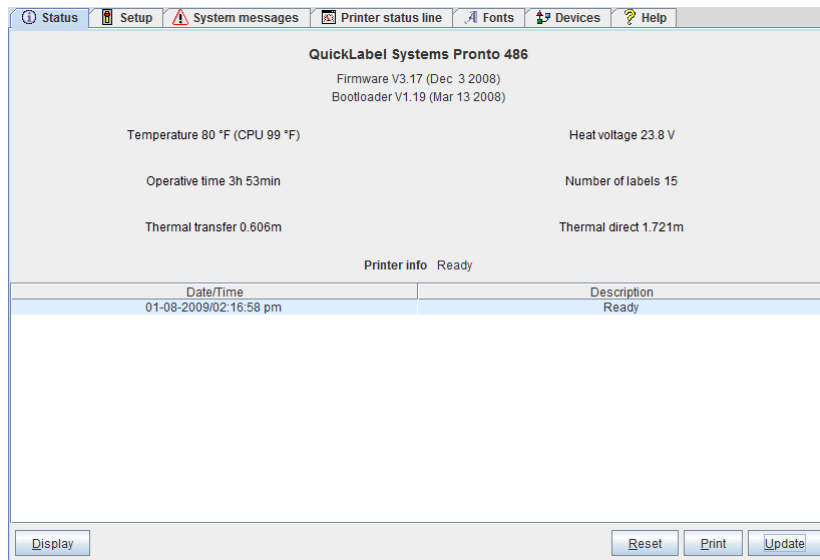
The following information is contained in the top section of the "Status" tab:

- Printer type

- Firmware version

- Bootloader version

- Printhead temperature and temperature of CPU

- Heat voltage for the printhead. The heat voltage is only active during printing. Otherwise, 0.0 V is displayed.

- Operative time of the printer

- Number of labels printed since commissioning

- Previously printed paper length with thermal transfer printing

- Previously printed paper length with thermal direct printing

- Printer status: "Ready", "Printing label", "Settings" or "Error"

Note: Information is not updated automatically while the "Status" tab is open. Updating occurs when the tab is changed or by clicking the Update button.

A list of the events which have occurred since the printer was switched on are found in the bottom section of the tab. No more than the last eight events are displayed.

The "Ready" event provides information on when the printer was switched on.

The buttons on the bottom line of the "Status" tab have the following functions:

Button	Function
Display	Opens a window which shows the current printer display. You can set the update interval on the scale below the display. The display is not updated automatically with the "0" setting.
Reset	Hard: functions like switch-off and switch-on Soft: functions like the cancel key
Print	Opens the window for the settings of a local printer or network printer to be used to print the contents of the "Status" tab.
Update	Updates the display on the "Status" tab.

Setup tab

On the "Setup" tab, you can set all the configuration parameters which are also accessible via the operating panel in the Setup menu. In addition, other parameters for the Ethernet interface can be set (see below).
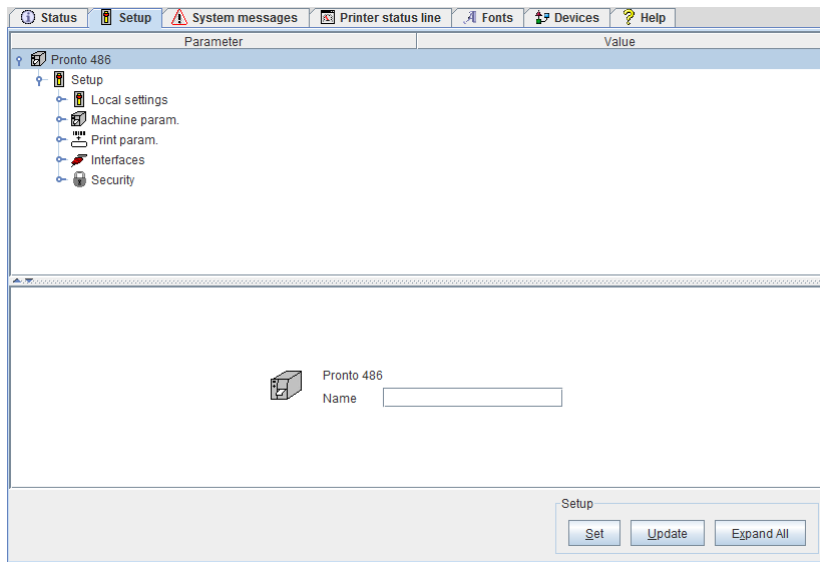
The menus and parameters are arranged in a tree structure in the top section of the tab. The tree structure can be expanded in different ways:

- Click circular symbol in front of the menu symbol once.
  The corresponding menu is expanded.

- Double-click menu symbol or menu name.
  The corresponding menu is expanded

- Click the Expand All button.
  The tree structure is fully expanded.

To change a parameter:

1 Locate parameter in the tree structure.

2 Click parameter name or the symbol next to it.

3 Enter value of the parameter in the input field in the bottom section of the tab.

4 Click Set.

5 Enter PIN and click OK.

The printer can be given a name on the top line of the tree structure. This name does not have a functional meaning. Its sole purpose is to allow the operator to more easily differentiate between the printers on a network.

Note: Information is not updated automatically while the "Setup" tab is open. Updating occurs when the tab is changed or by clicking the Update button.

The following parameters for the Ethernet interface can only be accessed via the printer website:

Parameter	Meaning	Default
SMTP server	E-mails can be sent to selected addresses when certain status and error messages are generated. To activate: • Set parameter to "On". • Enter IP address of the SMTP server. • Enter a valid e-mail address for the printer in the "From address" field. More detailed information on sending e-mails is found in *System messages tab* on page 5-19.	Off
Raw-IP port	Service for printing on the network (see *Ethernet interface* on page 1-8). • Select a predefined port address.	9100
LPD	Activation of the network printing service LPD (see *Ethernet interface* on page 1-8): • Set parameter to "On". • Enter "lp" as the queue name.	Off
LPD queue name	Activation of the LPD queue name	lp
SOAP	Activation of the protocol SOAP (Simple Object Access Protocol)	Off
SOAP password	Password setting for SOAP	Off

Parameter	Meaning	Default
SNMP	Data exchange between printer and management station via SNMP (Simple Network Management Protocol). To activate: • Set parameter to "On". • Enter IP address of the management station(s) (receiver 1 or receiver 2). • Assign the "Community" parameter the value "public".	Off
Time server	Synchronization of the date and time of the printer. To activate: • Set parameter to "On". • Enter IP address of the time server. Synchronization occurs hourly. The accepted time is not automatically saved in the printer, however. To save the accepted time: • Call up the parameter time and save the displayed setting with OK.	Off
Anonymous FTP	Enables or disables a FTP-logon with as "Anonymous".	Off

System messages tab

Status and error messages can be sent automatically to the SNMP manager or via e-mail to the selected addresses immediately after they occur via the

Ethernet interface. You can select the messages to be sent and the destination addresses on the "System messages" tab.

Column	Meaning
Description	Status and error messages that can be sent. • Expand tree structure by clicking the circular symbol once or double-clicking the description. An entry for a higher-order description (e.g. note) is automatically accepted for all subordinate descriptions (e.g. "Start", "Not ready", "Ribbon running out").
SNMP 1 **SNMP 2**	Management stations on local network which communicate with the printer via SNMP. To make use of SNMP functionality, the SNMP agent must be activated (see *Ethernet interface* on page 1-8). • Select management station by clicking the corresponding cell. The selection is indicated via a symbol. You can undo the selection by clicking it again.

Column	Meaning
E-mail	Valid e-mail address for the SMTP server to which the message is to be sent. • Click cell and enter e-mail address or select from pull-down menu.
Sound	Audible signal which indicates receipt of the message. • Click cell and select signal type in pull-down menu.

Note: The settings are not accepted until the Transfer button is clicked. If you switch to another tab beforehand, the settings are lost.

Printer status line tab

On the "Printer status line" tab, you can select the status parameters (widgets) which are to be displayed on the printer status line.
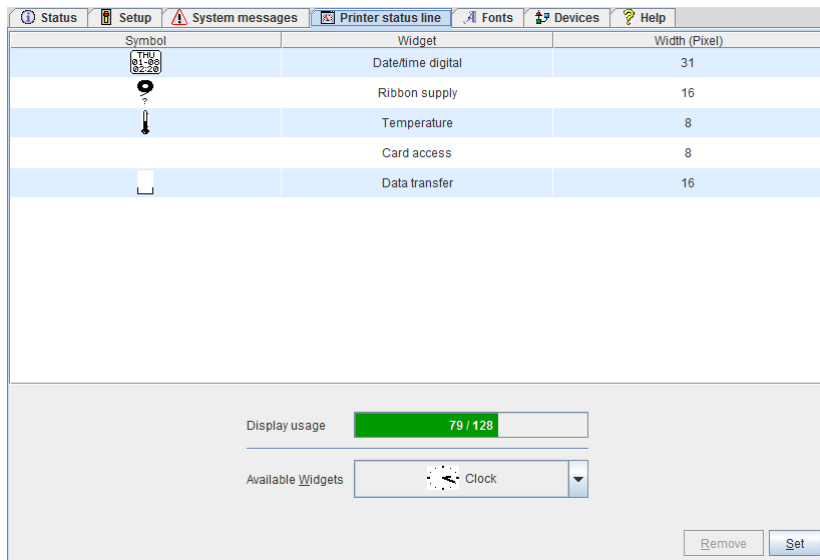
Adding a status parameter:

1   Select widget in pull-down menu. Note the text color:

- pale green: Widget may be added
- pale red: Widget may only be added, if another widget is deleted
- black: Widget is already activated

2   Click Set.
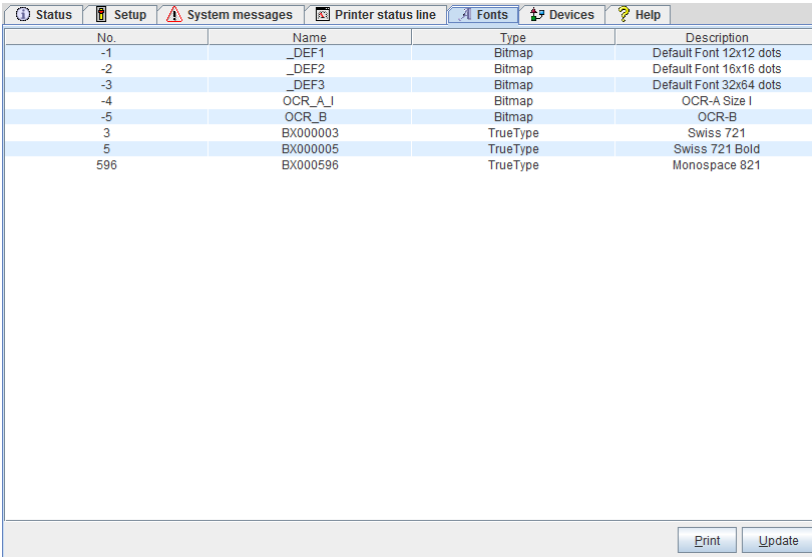
The symbol, the parameter designation and the width of the symbol in the display (in pixels) are displayed in the top section of the tab. The entire width of all symbols in the display (e.g. 92 pixels) and the maximum width of the display (e.g. 128 pixels) are displayed in the "Display usage" field.

Removing a status parameter:

1   Select parameter in the list.

2   Click Remove.

Fonts tab

The most important parameters of the fonts available in the printer are listed on the "Fonts" tab. The table contains both the original fonts in the printer and other fonts loaded into the printer.
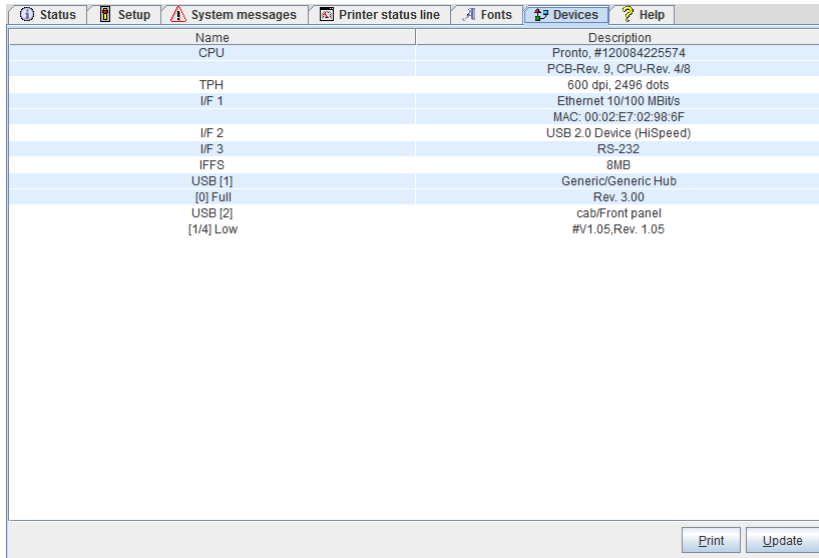
No.	Name	Type	Description
-1	_DEF1	Bitmap	Default Font 12x12 dots
-2	_DEF2	Bitmap	Default Font 16x16 dots
-3	_DEF3	Bitmap	Default Font 32x64 dots
-4	OCR_A_I	Bitmap	OCR-A Size I
-5	OCR_B	Bitmap	OCR-B
3	BX000003	TrueType	Swiss 721
5	BX000005	TrueType	Swiss 721 Bold
596	BX000596	TrueType	Monospace 821

Tabs: Status | Setup | System messages | Printer status line | Fonts | Devices | Help

Print   Update

The parameters correspond to those in the Font list menu and are described in *Font list* on page 12-7.

Devices tab

The "Devices" tab provides an overview of the most important hardware components installed in the printer and the optional devices connected.

Name	Description
CPU	Pronto, #120084225574
	PCB-Rev. 9, CPU-Rev. 4/8
TPH	600 dpi, 2496 dots
I/F 1	Ethernet 10/100 MBit/s
	MAC: 00:02:E7:02:98:6F
I/F 2	USB 2.0 Device (HiSpeed)
I/F 3	RS-232
IFFS	8MB
USB [1]	Generic/Generic Hub
[0] Full	Rev. 3.00
USB [2]	cab/Front panel
[1/4] Low	#V1.05,Rev. 1.05

(Status | Setup | System messages | Printer status line | Fonts | Devices | Help)

(Print | Update)

The contents of the display correspond with those of the Device list and are described in *Device list* on page 12-9.

Chapter 6:
Loading media

This chapter contains the following sections:

- **Opening and closing the support bracket Pronto! 863 -** Describes how to open/close the support bracket on the Pronto! 863 printer

- **Loading labels from a roll -** Describes how to load label rolls

- **Removing the wound roll -** Describes how to remove wound rolls from the printer

- **Loading fanfold labels -** Describes how to load fanfold labels

- **Loading transfer ribbon -** Describes how to load transfer ribbon

- **Setting the feed path of the transfer ribbon -** Describes how to reduce ribbon wrinkling by adjusting the feed path

- **Removing and installing the rewind guide plate, dispense plate or tear-off plate -** Describes how to install and remove components for use in another operating mode

- **Removing and installing the locking system -** Describes how to remove and install the locking system

For adjustments and simple installation work, use the accompanying hexagonal wrench located in the bottom section of the print unit. No other tools are required for the work described here.

Opening and closing the support bracket Pronto! 863

For additional bearing of the roller and printhead assemblies and the ribbon hubs the Pronto! 863 is equipped with a support bracket (1).

Note: For loading and removing material on Pronto! 863 it is necessary to open and close the support bracket in addition to the steps described in the following chapters.
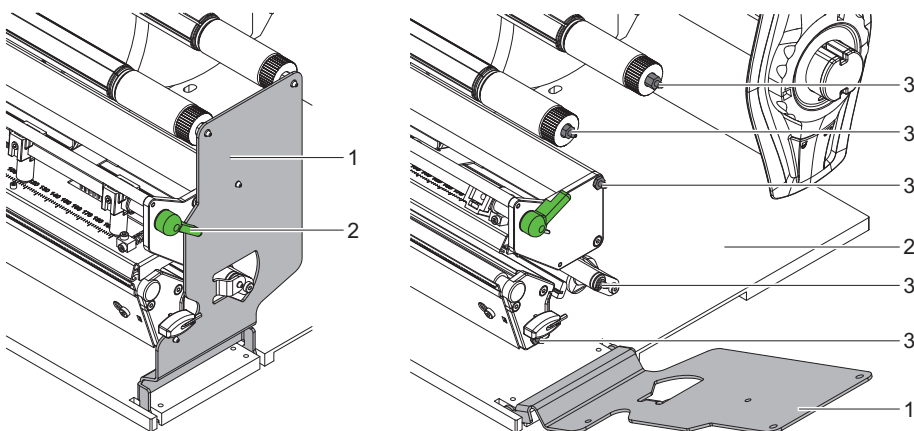
Opening the Support Bracket
1   Open cover.

2   Turn lever (2) counterclockwise to lift the printhead.

3   Open the support bracket (1). Labels and transfer ribbon can be loaded or removed.

Closing the Support Bracket
1   Turn lever (2) counterclockwise until it stops.

2   Close the support bracket (1). Ensure that the all pins (3) are captured by the drillings of the support bracket.

3   Turn lever (2) clockwise to lock the printhead.

Note: Operate or adjust the printer with closed support bracket only. Operation with support bracket open is not prevented but the print quality may become poor.

Loading labels from a roll

Positioning the label roll on the roll retainer
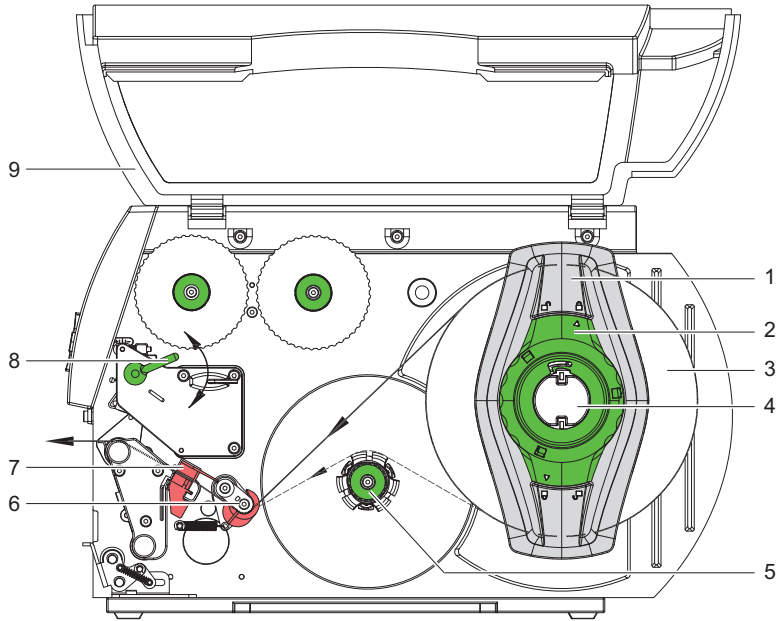
1   Open cover (9).

2   Turn ring (2) at the margin stop (1) counterclockwise, so that the arrow points to the symbol, and thus release the margin stop.

3   Remove the margin stop (1) from the roll retainer (4).

4   Load label roll (3) on the roll retainer in such a way that the labels can be inserted into the printhead in the right position. The printing side of the labels must be visible from above.

5   Re-mount the margin stop (1) onto the roll retainer (4). Push the margin stop (1) to the roll until it stops.

6   Turn ring (2) clockwise, so that the arrow (10) points to the locked symbol, and thus fix the margin stop (1) on the roll retainer (4).

7   Supplying longer label strips:

- For Peel-Off or Rewind mode: approx. 60 cm
- For Tear-Off mode: approx. 40 cm

Inserting a label strip into the printhead

1 Turn lever (8) counterclockwise to lift the printhead.

2 Push guide ring on axis (6) all the way out.

3 Guide label strip to the print unit above the internal rewinder (5).

4 Guide label strips below the axis (6) and through the label sensor (7) in such a way that it exits the print unit between the printhead and the print roller.

5 Push guide ring on axis (6) against the outer edge of the label strip.

Setting the label sensor
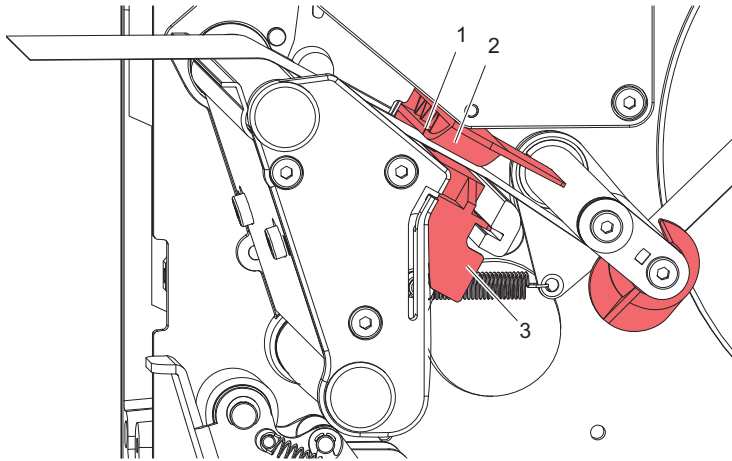
The label sensor (2) can be shifted perpendicular to the direction of paper flow for adaptation to the label medium. The sensor unit (1) of the label sensor is visible from the front through the print unit and is marked with a indentation in the label sensor retainer.

• Position label sensor with tab (3) in such a way that the sensor (1) can detect the label gap or a reflex or perforation mark.

• If the labels deviate from a rectangular shape, align label sensor using the tab (3) with the front edge of the label in the direction of paper flow.

- **For use in Tear-Off mode only:** Turn lever clockwise to lock the printhead.
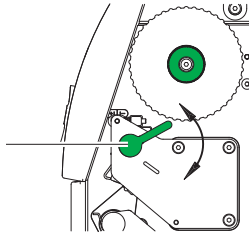
The label roll is loaded for use in Tear-Off mode.

Winding up the label strip in Rewind mode
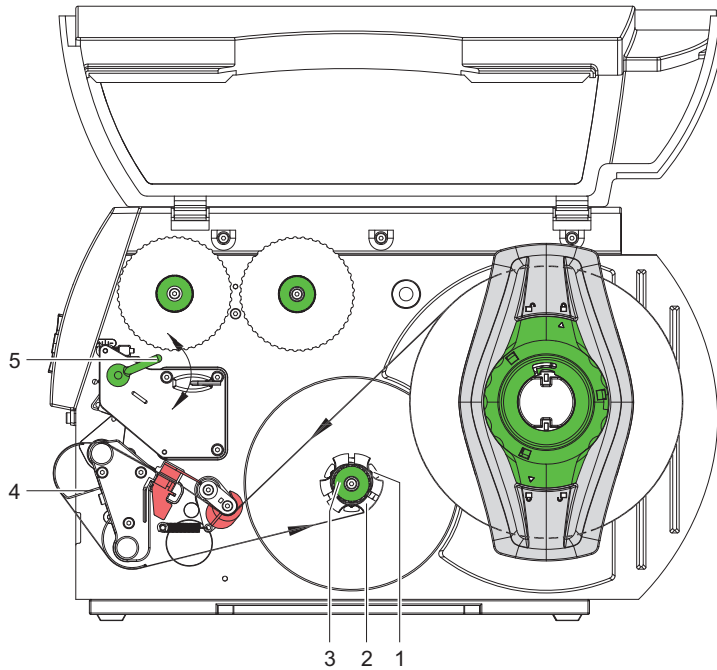
In Rewind mode, the labels are wound up internally after printing for later use.

1 Remove the locking system for Rewind mode if necessary (see *Removing and installing the locking system* on page 6-13) and install rewind guide plate (see *Removing and installing the rewind guide plate, dispense plate or tear-off plate* on page 6-12).

2 Guide label strip around the rewind guide plate (4) to the internal rewinder (2).

---

3 Hold rewinder (2) firmly and turn knob (3) clockwise until it stops.

4 Push label strip under a bracket (1) of the rewinder and turn knob (3) counterclockwise until it stops.

The rewinder is fully spread, thus gripping the label strip firmly.

5 Turn rewinder (2) counterclockwise to tighten the label strip.

6 Turn lever (5) clockwise to lock the printhead.

The label roll is loaded for use in Rewind mode.

Winding up the liner in Peel-Off mode
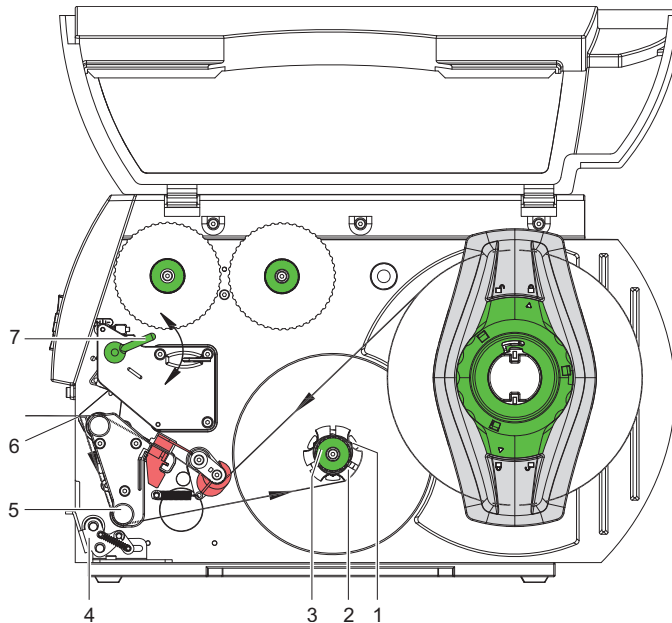
In Peel-Off mode, the labels are removed after printing, and only the liner is wound up internally.

1 Lift the pinch roller (4) off the rewind assist roller (5).

2 Remove labels from the first 100 mm of the liner.

3 Guide liner to the rewinder (2) around the dispense plate (6) and the rewind assist roller (5).

4 Hold rewinder (2) firmly and turn knob (3) clockwise until it stops.

5 Push liner under a bracket (1) of the rewinder (2) and turn knob (3) counterclockwise until it stops.

The rewinder is fully spread, thus gripping the liner firmly.

6   Turn rewinder (2) counterclockwise to tighten the liner.

7   Slightly loosen top fixing screw at the locking system with hexagonal wrench and position the pinch roller (4) centrally to the liner (see *Removing and installing the locking system* on page 6-13).

8   Close the locking system and tighten top fixing screw at the locking system.

9   Turn lever (7) clockwise to lock the printhead. The label roll is loaded for use in Peel-Off mode.

Setting the head locking system

The printhead is pushed on via two plungers (on Pronto! 863 three plungers). The location of the outer plunger must be set to the width of the label medium used so as to

• achieve even print quality across the entire label width

• prevent wrinkles in the feed path of the transfer ribbon

• prevent premature wearing of the print roller and printhead
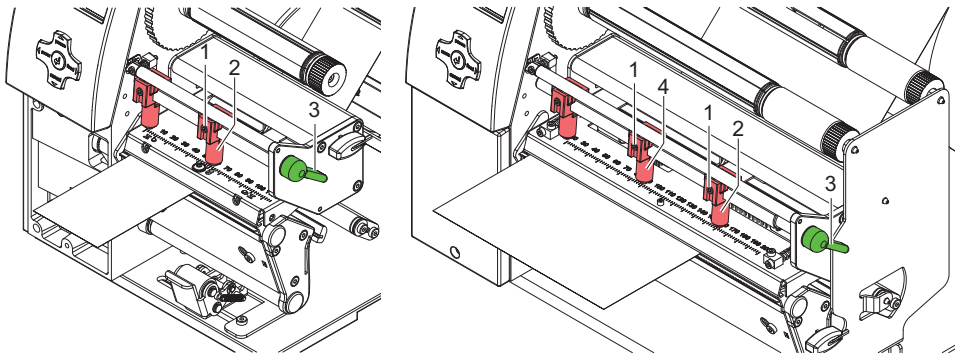
1   Turn lever (3) clockwise to lock the printhead.

2   Loosen threaded pin (1) at outer plunger (2) with hexagonal wrench.

3   Position outer plunger (2) above the outer label edge and tighten threaded pin (1).

4   On Pronto! 863 align the middle plunger to the middle of the labels.

Removing the wound roll
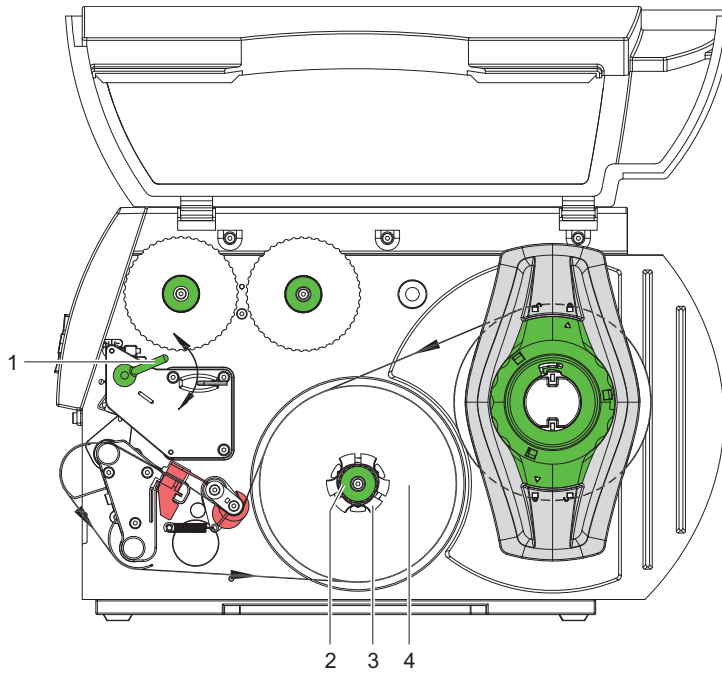
1 Turn lever (1) counterclockwise to lift the printhead.

2 Cut label strip and wind it fully around the rewinder (3).

3 Hold rewinder (3) firmly and turn knob (2) clockwise. The rewinder spindle relaxes and the wound roll (4) is released.

4 Remove wound (4) roll from rewinder (3).

Loading fanfold labels
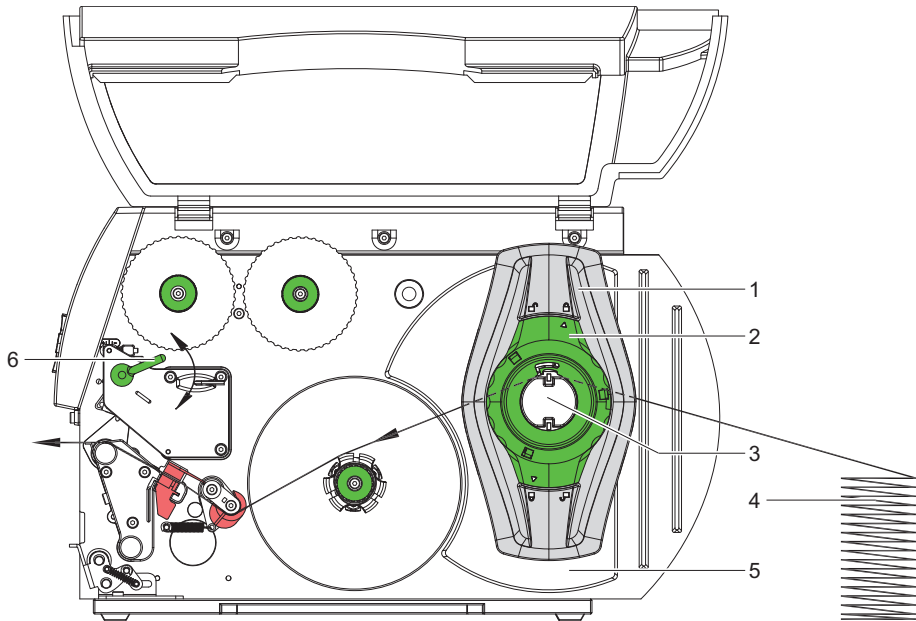
1. Turn ring (2) counterclockwise, so that the arrow points to the unlocked symbol, and thus release the margin stop (1).

2. Move the margin stop (1) outwards as far as possible.

3. Position label stack (4) behind the printer. Ensure that the labels on the strip are visible from above.

4. Guide label strip to print unit via the roll retainer (3).

5. Move the margin stop (1) against the media strip until chassis (5) and margin stop (1) touch the media strip without clamping or bending it.

6. Turn ring (2) clockwise, so that the arrow points to the locked symbol, and thus fix the margin stop (1) on the roll retainer (3).

7. Insert label strip into printhead (see *Inserting a label strip into the printhead* on page 6-4).

8. Set label sensor (see *Setting the label sensor* on page 6-4).

9. Set head locking system (see *Setting the head locking system* on page 6-7)

10. Turn lever (6) clockwise to lock the printhead.

Loading transfer ribbon

Note: With direct thermal printing, do not load a transfer ribbon; if one has already been loaded, remove it.
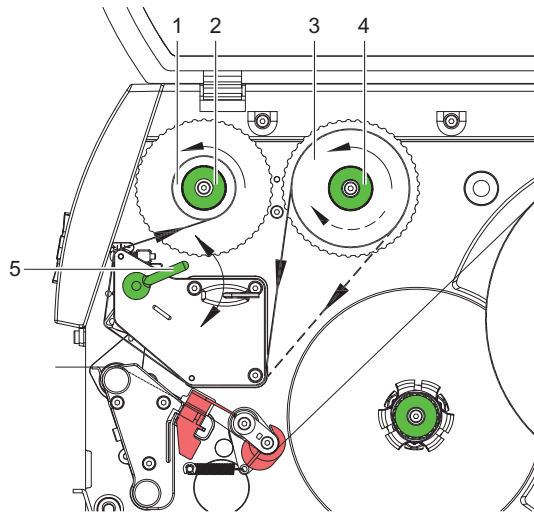
1   Clean printhead before loading the transfer ribbon (see *Cleaning the printhead* on page 11-5).

2   Turn lever (5) counterclockwise to lift the printhead.

3   Slide transfer ribbon roll (3) onto the ribbon supply hub (4) until it stops and so that the color coating of the ribbon faces downward when being unwound. No rotation direction is specified for the ribbon supply hub (4).

4   Hold transfer ribbon roll (3) firmly and turn knob on ribbon supply hub (4) counterclockwise until the transfer ribbon roll is secured.

5   Slide suitable transfer ribbon core (1) onto the transfer ribbon take-up hub (2) and secure it in the same way.

6   Guide transfer ribbon through the print unit as shown.

7   Secure starting end of transfer ribbon to the transfer ribbon core (1) with adhesive tape. Ensure counterclockwise rotation direction of the transfer ribbon take-up hub here.

8   Turn transfer ribbon take-up hub (2) counterclockwise to smooth out the feed path of the transfer ribbon.

9   Turn lever (5) clockwise to lock the printhead.

Setting the feed path of the transfer ribbon

Transfer ribbon wrinkling can lead to print image errors. Transfer ribbon deflection can be adjusted so as to prevent wrinkles. See also *Setting the head locking system* on page 6-7. The adjustment is best carried out during printing.
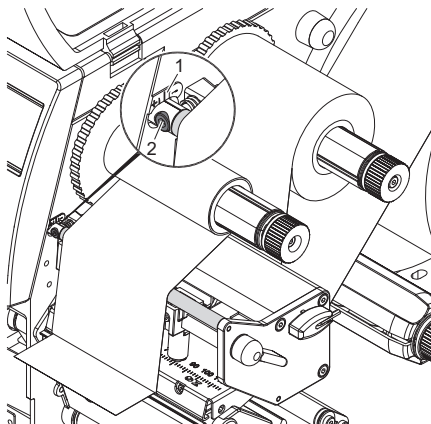
1. Read current setting on the scale (1) and record if necessary.
2. Turn screw (2) with hexagonal wrench and observe the behavior of the ribbon.
   In the + direction, the inner edge of the transfer ribbon is tightened, and the outer edge is tightened in the - direction.

Removing and installing the rewind guide plate, dispense plate or tear-off plate

To convert the printer for use in another operating mode, a rewind guide plate, a dispense plate or a tear-off plate may need to be installed.

Note: For printer versions with a locking system on the rewind assist roller, the locking system on the rewind assist roller must be removed (see *Removing and installing the locking system* on page 6-13) for operation in Rewind mode before installation of the rewind guide plate.
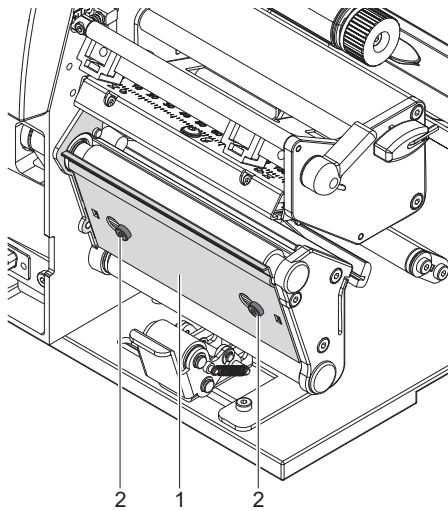
Removing a plate

1 Loosen screws (2) several turns.

2 Slide plate (1) to the right and remove it.

Installing a plate

1 Place plate (1) onto the screws (2) and slide to the left completely.

2 Tighten screws (2).

Removing and installing the locking system
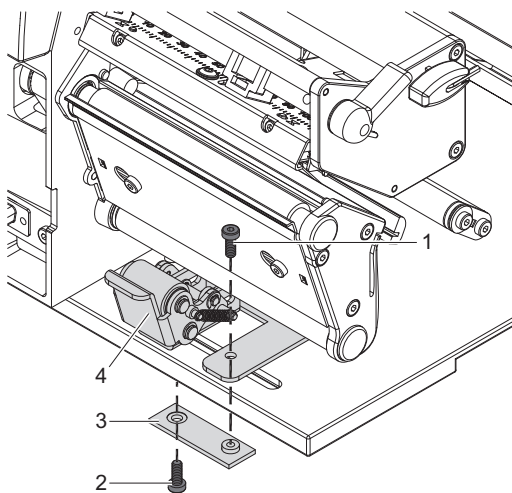
Removing the locking system

1   Position printer at edge of table so that the oblong hole is accessible from below.

2   Screw out screws (1) (2) and remove them.

3   Remove the pinch roller (4) and bottom plate (3).

Installing the locking system

1   Position printer at edge of table so that the oblong hole is accessible from below.

2   Place the pinch roller (4) into oblong hole and lightly tighten screw (1) of bottom plate (3) from above.

3   Lightly tighten screw (2) of bottom plate (3) from below.

4   Align the pinch roller (4) with center of label and tighten screws.

Chapter 7: Printing

- **Synchronization -** Describes how to synchronize the printer and automatically set label advancement

- **Tear-Off mode -** Describes tear-off mode

- **Peel-Off mode -** Describes peel-off mode

- **Internal rewinding -** Describes rewinding labels

Caution: The printhead can be damaged if handled improperly!

- Do not touch the bottom of the printhead with your fingers or sharp objects.

- Ensure that the labels are clean.

- Ensure smooth label surfaces. Raw labels are like emery and reduce the service life of the printhead.

- Print at the lowest possible printhead temperature.

Synchronization

After the label stock has been inserted, for peel-off or cutting mode a synchronization of the paper feed is required. That way the first label, which is detected by the label sensor, will be transported to the print position and all labels in front will be fed out of the printer. So the synchronization avoids, that blank labels are peeled-off together with the first printed label or that the first cut label would be too long. Both effects can cause useless first labels.

1   Press the **feed** button to start synchronization.

2   Remove empty labels after synchronization. The printer is synchronized with the loaded label medium.

Note: Synchronization is not necessary if the printhead was not opened between different print jobs, even if the printer was switched off.

Tear-Off mode

In Tear-Off mode, labels or continuous media are printed. After printing, the label strip is separated by hand. The label printer is equipped with a tear-off plate for this. Optionally, the label can be cut off or label strips can be wound up externally.

Peel-Off mode

In Peel-off mode, the labels are automatically peeled off the liner after printing and presented for removal. The liner is wound up by the internal rewinder. This mode is available only on the peel-off printer versions. The printer must be equipped with a dispense plate and present sensor (PS6).

Internal rewinding

The labels are wound up internally after printing with the carrier medium for later use. This mode is available only on the peel-off printer versions. The label printer must be equipped with a rewind guide plate.

Chapter 8: Accessories

This chapter contains the following sections:

- **Cutter -** References information about the cutter accessory

- **External keyboard -** Describes how to use the external keyboard

- **External Rewinder (ER1) -** Describes how to use the ER1 external rewinder

- **External Rewinder (ER4) -** Describes how to use the ER4 external rewinder

- **External Unwinder (EU4) -** Describes how to use the EU4 external unwinder

- **Label Present Sensor (PS6) -** Describes how to use the PS6 label present sensor

- **Pause Adapter PS7 -** Describes how to use the PS7 pause adapter

- **WLAN-Card -** Describes how to install and use the WLAN card

- **External Operating Panel -** Describes how to set up the external operating panel

- **Antistatic Brush -** Describes how to install the static brush.

Cutter

The cutter accessory is described in *CU4 Cutter Accessory* on page 9-1.

External keyboard

You can connect an external keyboard or compatible input device (e.g. barcode scanner) directly to the printer. Using an external keyboard facilitates the entry of variable data while processing print jobs and printing from the memory media.

Input prompts and the data received from the keyboard are shown in the display.

Connecting external keyboard

You can connect any MF-2-compatible USB keyboard which supports code set 3 to the printer.

• Insert connection cable of the keyboard into the USB master interface on the back of the printer.

Special key functions

General:

Key	Function
[F1]	Executes the Label from card memory card function.
[F2]	Prints an additional label from the last print job. Corresponds to the command A 1 CR.
[F3]	Repeats the last print job with renewed polling of the variable data and polling of the label quantity.
[F8]	Functions in the same manner as feed.
[Enter]	Switches to the offline menu. Functions in the same manner as menu.
[Esc]	Functions in the same manner as cancel.
[Space]	Functions in the same manner as pause Not for continuing after an error.

In the offline menu and for entry of variable data:

Key	Function
←	Moves cursor left. On the top level of the offline menu, switches back to Ready mode.
→	Moves cursor right.
↑	Increases the value at the cursor position.
↓	Decreases the value at the cursor position.
[Enter]	Confirms the input.
[Esc]	Cancels input and returns.

Key assignment and special characters

The printer features a specific keyboard assignment table for each setting of the Country configuration parameter. These tables generally match the DOS keyboard assignments (see *Interfaces* on page 5-8).

The [Alt Gr] key has no function. All special characters obtained using this key (e.g. [ ] { } \) and various other special characters (e.g. " × ÷) can be obtained using the [Alt] key. Additional special characters can be output using a sequence of two characters, whereby you must press the [Alt] key when entering the second character.

Some special characters cannot be shown in the display of the printer. In this case, they are replaced by a character similar to the special character.

Note: When using a scanner ensure that the same character set is set for both the scanner and the printer.

Country-specific special characters:

The following country-specific special characters are entered with the [Alt] key pressed.

Character	GR	FR	UK	US	SG	SF	BE	SU	IT	SP	DK	CZ
€	E	E	E	E	E	E	E	E	E	E	E	E
{	7	'			ä	à	ç	7	8	´	7	B
}	0	=			$	$	à	0	9	ç	0	N
[	8	(			ü	è	^	8	è	`	8	F
]	9	)			¨	¨	$	9	+	+	9	G
\	ß	_			<	<	<	+		°	<	Q
|	<	-	`		1	1	&	<		1	´	W
'									\	0		
´			'	`	'	'	ù					í
`		è					µ		´			ý
^		ç					§					š
ˇ	^	^	6	6	§	§	²	§	Ì	<	½	;
¨	.		.	.					.			=
~	+	é			^	^	=	¨	ù	4	¨	+
°			0	0				´	0	0		ř
²	2								2			
³	3								3			
#		"			3	3	"		à	3		X
$								4			4	ů
¢					8	8						
£								3			3	
¤		$										¨
@	q	à			2	2	é	2	ò	2	2	V
µ	m								m	m	m	
¬					6	6				6		
÷	|/|	|/|	|/|	|/|	|/|	|/|	|/|	|/|	|/|	|/|	|/|	|/|
×	|*|	|*|	|*|	|*|	|*|	|*|	|*|	|*|	|*|	|*|	|*|	|*|

Character	[Alt] + Key
˘	č
¸	ž
˙	á
˝	é
¸	´
÷	ú
×	)
đ	S
Đ	D
ł	K
Ł	L
ß	§
&	C
<	,
>	.
*	-
	CZ

GR: Deutschland	SG: Schweiz	IT: Italia
FR: France	SF: Suisse	SP: España
US: USA	BE: Belgie	DK: Danmark
	SU: Suomi	CZ: Ceska republika

Characters between vertical lines (| / |, | * |) are entered with the corresponding keys on the numerical keypad of the keyboard.

A special character in the ZZ column can be entered by first entering the corresponding character in the Z1 column and then entering the character in the Z2 column while pressing the [Alt] button.

Other special characters:

ZZ	Z1	Z2
À	`	A
Á	´	A
Â	^	A
Ã	~	A
Ä	¨	A
Å	°	A
Æ	A	E
Ç	,	C
Č	ˇ	C
D'	'	D
È	`	E
É	´	E
Ê	^	E
Ë	¨	E
Ì	`	I
Í	´	I
Î	^	I
Ï	¨	I
IJ	I	J
£	-	L
Ñ	~	N

ZZ	Z1	Z2
Ò	`	O
Ó	´	O
Ô	^	O
Õ	~	O
Ö	¨	O
Ø	/	O
Œ	O	E
Ř	ˇ	R
Š	ˇ	S
Ù	`	U
Ú	´	U
Û	^	U
Ü	¨	U
Ý	´	Y
¥	-	Y
Ž	ˇ	Z
à	`	a
á	´	a
â	^	a
ã	~	a
ä	¨	a

ZZ	Z1	Z2
å	°	a
æ	a	e
ª	_	a
ç	,	c
¢	|	c
č	ˇ	c
ď	'	d
è	`	e
é	´	e
ê	^	e
ë	¨	e
ě	ˇ	e
ì	`	i
í	´	i
î	^	i
ï	¨	i
ij	i	j
ľ	'	l
ĺ	´	l
ñ	~	n
ň	ˇ	n

ZZ	Z1	Z2
ò	`	o
ó	´	o
ô	^	o
õ	~	o
ö	¨	o
ø	/	o
œ	o	e
°	_	o
ŕ	´	r
ř	ˇ	r
š	ˇ	s
ß	s	s
ť	'	t
ù	`	u
ú	´	u
û	^	u
ü	¨	u
ů	°	u
ý	´	y
ÿ	¨	y
ž	ˇ	z

Example:

Entering the character: ñ	1st entry: [~]	2. entry: [Alt] + [n]

External Rewinder (ER1)

Note: This accessory is compatible only with the Pronto! 482 and 486 models.

To handle large print jobs, the external rewinder is available which allows you to rewind complete rolls of label material.

The rewinder is powered and controlled directly by the peripheral port of the printer. The rewinder operates only when the printer is feeding media. After completion of the paper feed the rewinder runs for a maximum of one more second.

Safety Instructions

Caution:

• The printer must be switched off before attaching the rewinder!

• During operation, the rotating rewind axle with the mounted flange is accessible. Ensure that loose hanging jewelry, hair etc. are kept clear of the moving parts.

Risk of injury from moving parts!

• Do not change the rewinding direction when the rewind axle is turning!

Delivery Contents

Note: Retain packing material for later use!

1   Rewinder
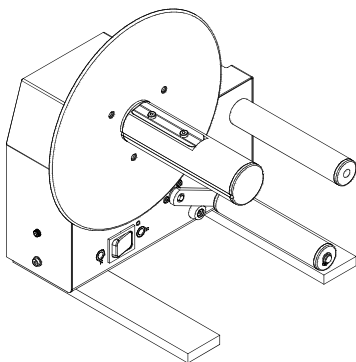
2 Flange
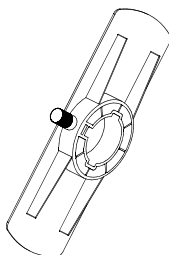
3 Clamp
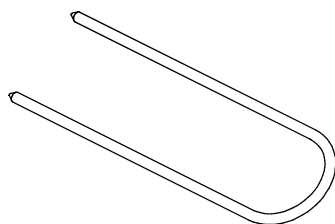
4 Rewind Axle Adapters (2)
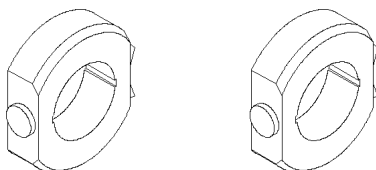
Mounting the External Rewinder

The printer is normally shipped with the front cover (6) mounted. In order to install the rewinder the front cover has to be removed.
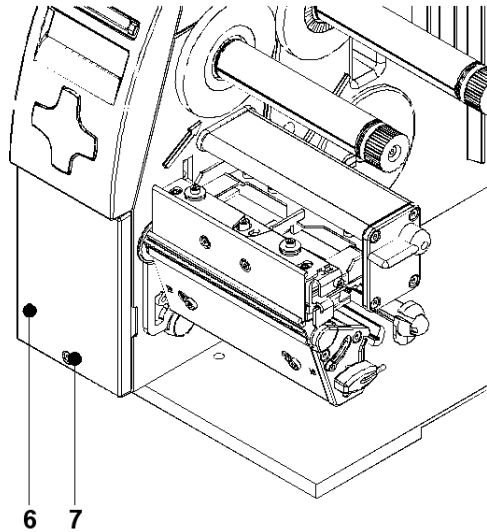
Caution: The printer must be switched off when mounting the rewinder. Otherwise it can cause damage on printer and rewinder.

1 Loosen the screw (7).

2 Remove the front cover (6).

   The External Rewinder is mounted on the printer so it is not necessary to adjust the device.

8	**11**	**10**		**12**	**13**
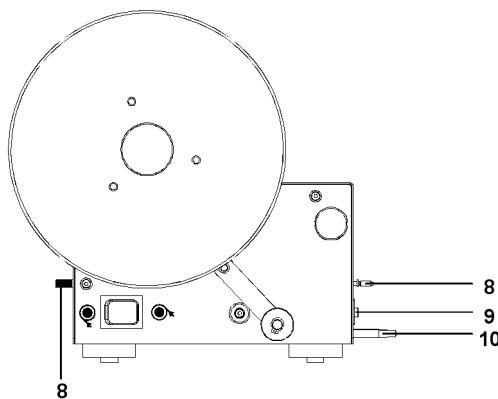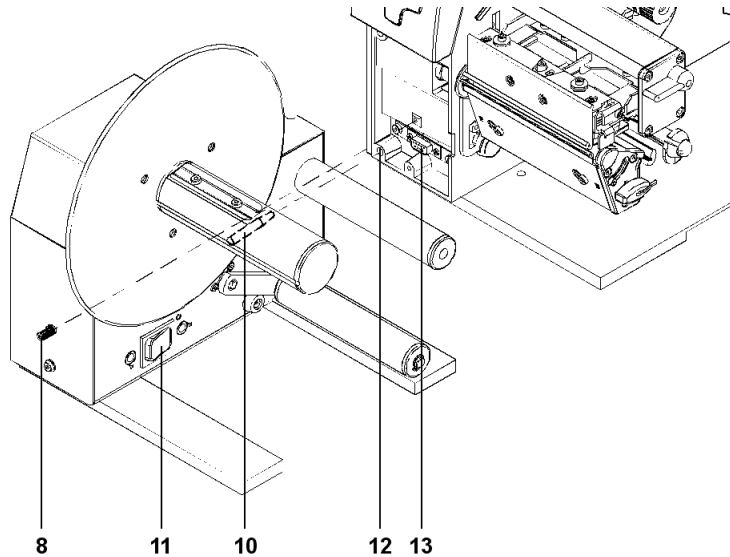
3 Insert the pin (10) of the rewinder into the hole (12) of the printer. Press the rewinder against the printer. That way the plug (9) of the rewinder will be connected to the peripheral port (13) of the printer.

4 Secure the rewinder by tightening the spindle (8).

Selection of the Rewind Method

It is possible to rewind inside and outside wound labels with the rewinder. But before rewinding the method has to be set.

Caution: To avoid damage, do not change the rewinding direction, when the rewind axle is turning!

Set the switch (11) to the required manner of rewinding:

	Rewinding with labels inside
	Rewinding with labels outside

Rewinding directly onto the Rewind Axle

14 **20** **21** **15** **16** **17** **2**

18 **3**

17 **14** **15** **2** **16**

18
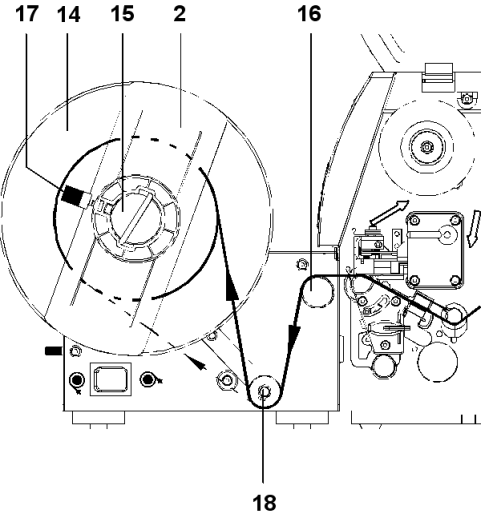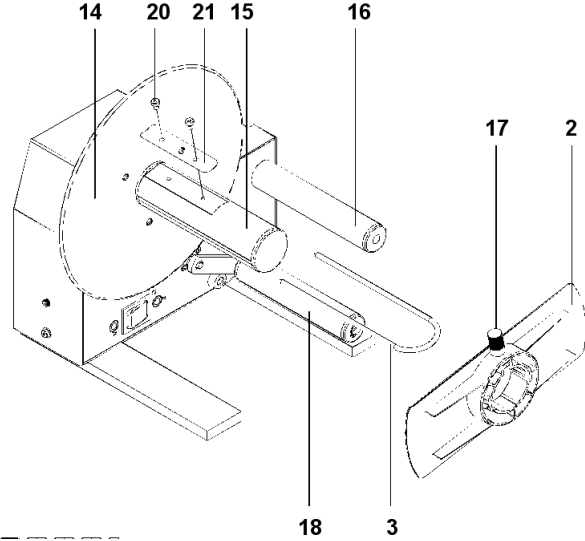
1   To rewind directly onto the rewind axle the spring (21) must be removed.

     Loosen the screws (20) and remove the spring (21).

2   Feed the label strip over the guide bar (16) and under the roller (18) to the rewind axle (15). Ensure that the label strip is even with the disc (14).

3   Attach the label strip appropriately to the rewind axle by sliding the clamp (3) over the label strip with the clamp set in the groove of the rewind axle (15).

     Consider the required method of rewinding:

     •   The broken line is valid for inside wound labels.

     •   The full line is valid for outside wound labels.

4   Slide the clamp (3) as far as possible towards the disc (14).

5   Slide the flange (2) onto the rewind axle so that it slightly touches the label strip. The label strip must be able to move slightly between the disc and the flange.

6   Tighten the knurled screw (17) on the flange.

7   The rewinder is ready for operation. If the printer carries out a paper feed the rewinder also starts to operate.

Rewinding onto 3 in (76 mm) Cardboard Core
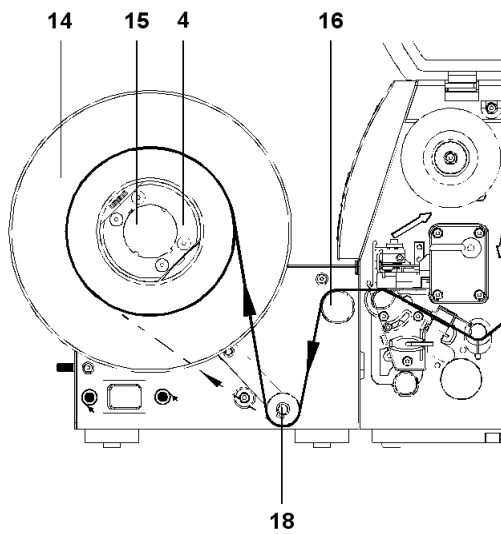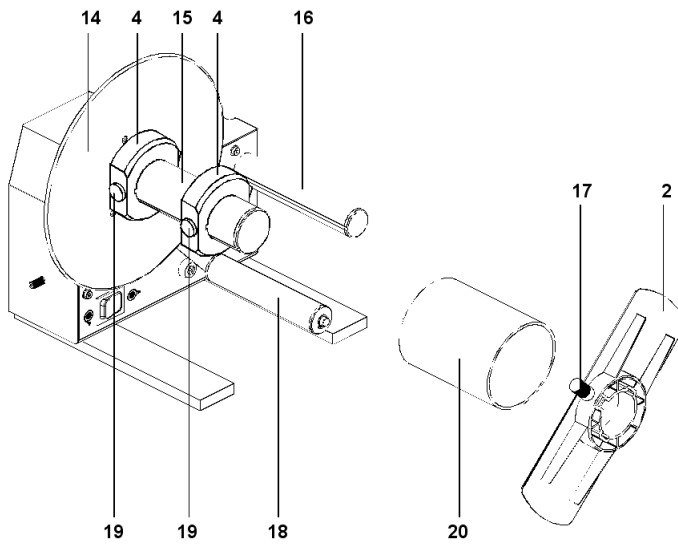
1   For this operation mode, the spring must be removed from the rewind axle as described in the previous chapter.

    Loosen the screws and remove the spring.

2   Use a cardboard core (20) which is about .04 in (1 mm) wider than the label strip.

3   Put the first axle adapter (4) onto the rewind axle (15) and slide it up to the disc (14).

    Tighten the knurled screw (19).

4   Put the second axle adapter (4) onto the rewind axle and slide it towards the first adapter until the clearance between the outer edge of it and the disc (14) is a little less than the width of the cardboard core.

    Tighten the knurled screw (19).

5   Slide the cardboard core (20) over the two adapters (4) until it is touching the disc (14).

6   Feed the label strip over the guide bar (16) and under the roller (18) up to the cardboard core (20).

    Ensure that the label strip is even with the disc (14).

7   Using adhesive tape or label, affix the end of the label strip to the cardboard core.

    Consider the required method of rewinding:

    •   The broken line is valid for inside wound labels.

    •   The full line is valid for outside wound labels.

8   Slide the flange (2) onto the rewind axle (15) until it stops

9   Tighten the knurled screw (17) on the flange.

10 The rewinder is ready for operation. If the printer carries out a paper feed the rewinder also starts to operate.

Rewinding onto 1.56 in (40 mm) Cardboard Core
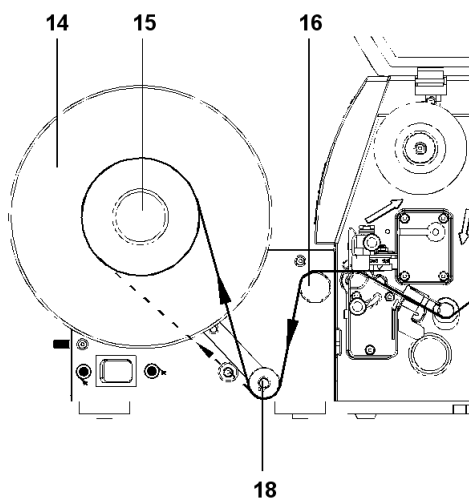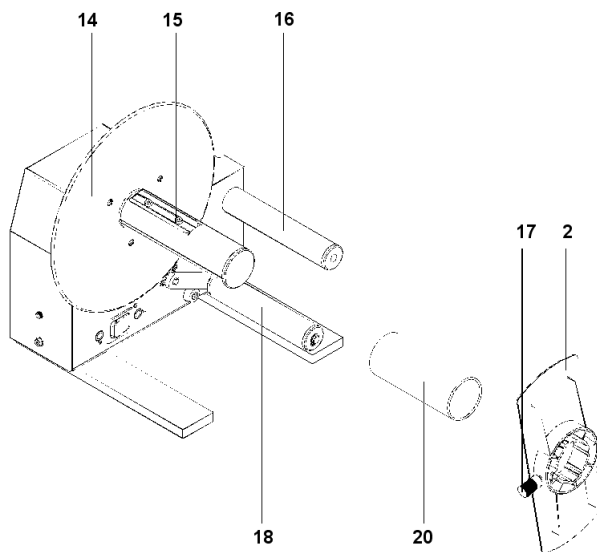
Note: For rewind mode the spring on the rewind axle must be mounted.

1   Use a cardboard core (20) which is about .04 in (1 mm) wider than the label strip

2   Put the cardboard core (20) onto the rewind axle (15).

3   Feed the label strip over the guide bar (16) and under the roller (18) up to the cardboard core (20).

    Ensure that the label strip is even with the disc (14).

4   Using adhesive tape or label, affix the end of the label strip to the cardboard core.

    Consider the required method of rewinding:

    •   The broken line is valid for inside wound labels.

    •   The full line is valid for outside wound labels.

5   Slide the flange (2) onto the rewind axle (15) until it stops.

    When using small labels it is possible that the cardboard core not covers the spring over the whole length. In this case the groove on the flange must be aligned so that it fits on the spring of the rewind axle.

6   Tighten the knurled screw (17) on the flange.

7   The rewinder is ready for operation. If the printer carries out a paper feed the rewinder also starts to operate.

External Rewinder (ER4)

Note: This accessory is compatible only with the Pronto! 482 and 486 models.

Intended Use

- The device is manufactured in accordance with the current technological status and the recognized safety rules. However, danger to the life and limb of the user or third parties and/or damage to the device and other tangible assets can arise during use.

- The device may only be used for its intended purpose and if it is in perfect working order, and it must be used with regard to safety and dangers as stated in the operating manual.

- The device is intended exclusively for rewinding suitable materials that have been approved by the manufacturer. Any other use or use going beyond this shall be regarded as improper use. The manufacturer/ supplier shall not be liable for damage resulting from unauthorized use; the user shall bear the risk alone.

- Usage for the intended purpose also includes complying with the operating manual, including the manufacturer's maintenance recommendations and specifications.

Safety Instructions

The device may only be used in a dry environment, do not expose it to moisture (sprays of water, mists, etc.).

Warning: During operation, the rotating rewinder axle with the flange or plate mounted upon it is freely accessible. When working on the device wear tightly fitting clothes and tie up long hair. Loosely hanging pieces or long hair can get caught in parts of the device.

Attention: Switch off the device in case of changing the turn direction.

Warning: Do not try to manipulate or repair parts that are not described in the manual of the external rewinder or the printer.

Environment

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

- Send to suitable collection points, separately from residual waste.
- Send the parts for recycling.

Function

The External Rewinders are peripheral devices for transfer printers of different manufacturers.

During processing of large print jobs it is possible to take up and rewind large label roles independently of the printer. An adjustable guide axle ensures that the label strip is led horizontally from each printer into the rewinder.

Device Overview
ER4
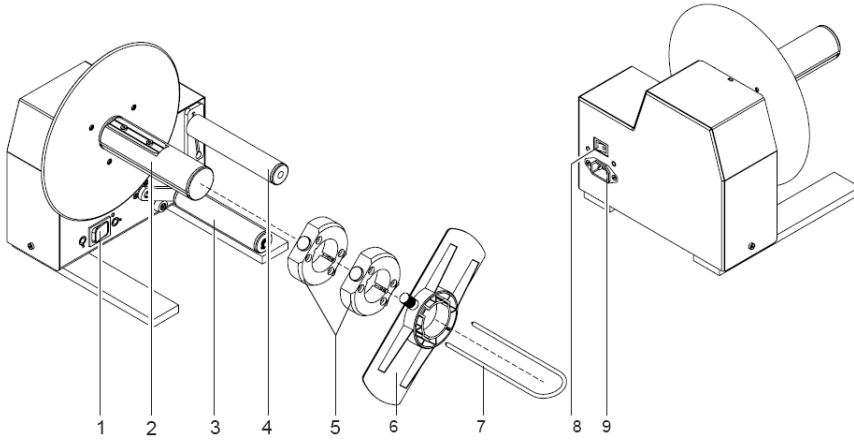
1	Switch Rotating Direction	**6**	Flange
2	Rewind Axle	**7**	Clamp
3	Roll	**8**	Power Switch
4	Guide Axle	**9**	Power Input Module
5	Rewind Adapter		

Contents of Delivery

Check the external rewinder for damage in transit and totality.

Contents of delivery:

- External Rewinder
- Rewind Adapter 2x
- Flange for ER4
- Power Cable

Note: Retain packing material for later use.

Connecting to Power Supply

The rewinder is equipped with a wide range power unit (100-240V~), so it is possible to use the printer both with a voltage of 230V~/50 Hz and with a voltage of 115V~/60 Hz without making changes to the printer.

Warning! Risk of injury by rotating engine parts.

Make sure the power switch (1) is in position "O" (OFF) before connecting the printer to a power supply! When switching on the Rewinder starts immediately without or with loose material!

ER4
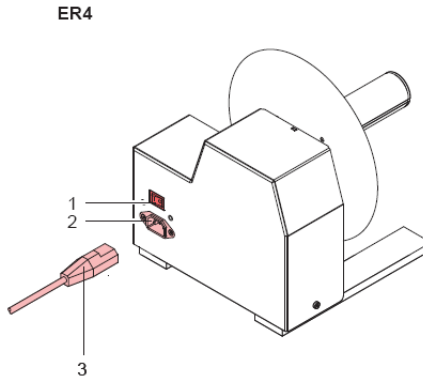
The rewinder is ready for use, if the power cable (3) supplied in the accessories is inserted into a power supply connector (2) and the cable is contacted to a grounded outlet.

Selection of the Rewind Direction

The selection of the rewind direction is depend of using an inside or outside wound label.

ER4
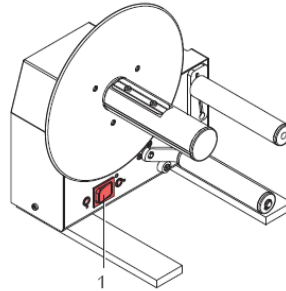
Turn off the rewinder and set the switch (1) to the required direction of rewinding:

Rewinding with labels inside	
Rewinding with labels outside	

Aligning the Guide Axle

Depend of the used printer the guide axle should be aligned so, that the label strip is led horizontally from the printer to the rewinder.
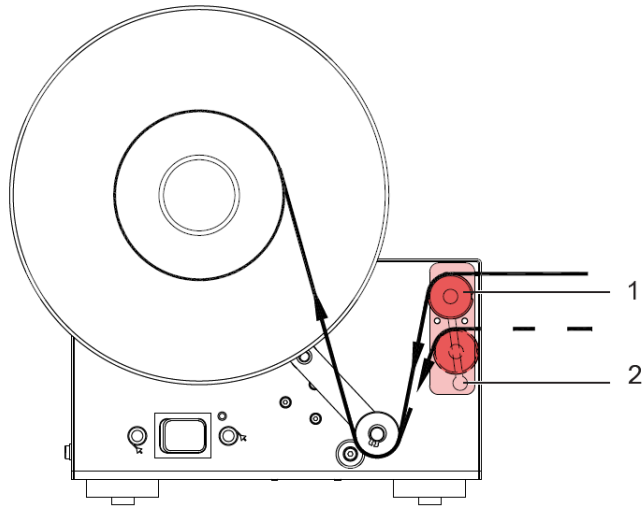
1   Loosen the guide axle (1) by turning it counterclockwise.

2   Move it in the guide plate (2) up to the desired position.

3   Fasten the guide axle (1) by turning it clockwise.

Rewinding Directly onto the Rewind Axle

Note: First remove the spring (2) from the rewind axle!

Warning! Risk of injury by rotating engine parts. When switching on the Rewinder starts immediately and winds to the material is tightened.
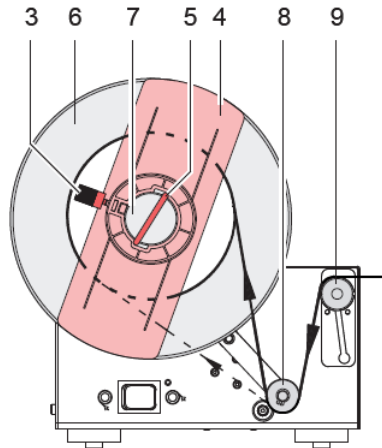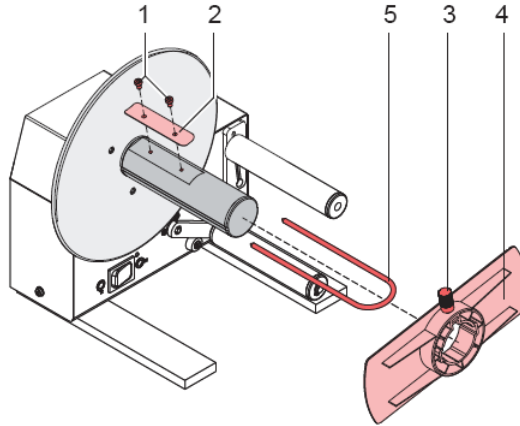
ER4

1   Loosen the screws (1) and remove the spring (2).

Note: Consider the required direction of rewinding:

- The broken line is valid for inside wound labels.
- The full line is valid for outside wound labels.

2   Feed the label strip over the guide axle (9) and under the roller (8) to the rewind axle (7).

3   Attach the label strip appropriately to the rewind axle by sliding the clamp (5) over the label strip with the clamp set in the groove of the rewind axle (7).

4   Slide the clamp (5) as far as possible towards the disc (6).

5   Slide the flange on ER4 (4) onto the rewind axle so that it slightly touches the label strip. The label strip must be able to move between the disc and the flange.

6   Tighten the knurled screw (3) on the flange.

7   Switch on the rewinder on the power switch.

Rewinding onto 40 mm (1.6 in) Cardboard Core

Note: Make sure that the spring (1) is mounted on the rewind axle (2)!

Consider that the cardboard core (3) should be about 1 mm (0.04 in) broader than the label strip.

Warning! Risk of injury by rotating engine parts.

When switching on the Rewinder starts immediately and winds to the material is tightened.
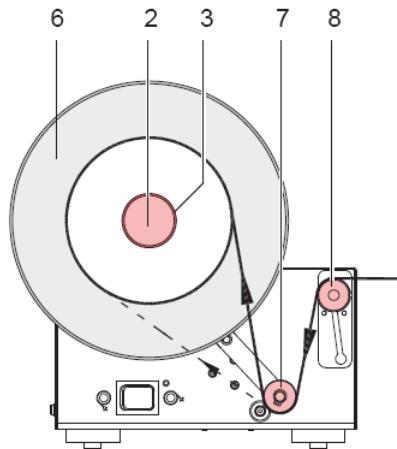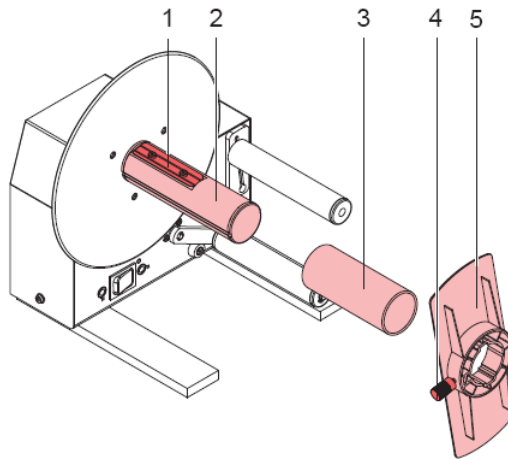
ER4

1   Put the cardboard core (3) on the rewind axle (2).

Note: Consider the required direction of rewinding:

- The broken line is valid for inside wound labels.
- The full line is valid for outside wound labels.

---

2   Feed the label strip over the guide axle (8) and under the roller (7) up to the cardboard core (3).

3   Affix the end of the label strip with consideration of the selected rewinding direction to the cardboard core using adhesive tape or label.

4   Slide the flange (5) with the knurled screw outward onto the rewind axle until it stops.

Note: When using small labels it is possible that the cardboard core not covers the spring over the whole length. In this case the groove on the flange must be aligned so that it fits on the spring of the rewind axle.

---

5   Tighten the knurled screw (4) on the flange.

6   Switch on the rewinder on the power switch.

Rewinding onto 76 mm (3 in) Cardboard Core

Note: First remove the spring from the rewind axle!

Consider that the cardboard core (3) should be about 1 mm (0.04 in) broader than the label strip.

Warning! Risk of injury by rotating engine parts.

When switching on the Rewinder starts immediately and winds to the material is tightened.
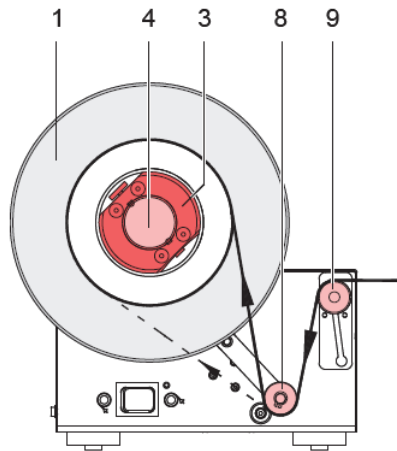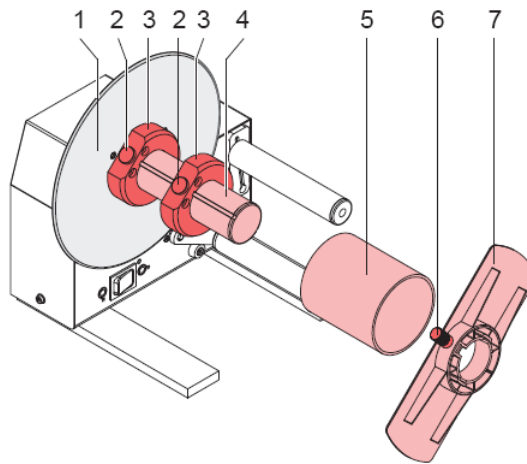
ER4

1   Put the first rewind adapter (3) onto the rewind axle (4) and slide it up to the disc (1) until it stops. Make sure that the knurled screw (2) of the rewind adapter is led in the groove of the rewind axle.Tighten the knurled screw (2).

2   Put the second rewind adapter (3) onto the rewind axle (4) and slide it towards the first adapter until the clearance between the outer edge of it and the disc (1) is a little less than the width of the cardboard core. Tighten the knurled screw (2).

3   Put the cardboard core (5) on the rewind axle (2).

Note: Consider the required direction of rewinding:

• The broken line is valid for inside wound labels.
• The full line is valid for outside wound labels.

4   Feed the label strip over the guide axle (9) and under the roller (8) up to the cardboard core (5).

5   Affix the end of the label strip with consideration of the selected rewinding direction to the cardboard core using adhesive tape or label.

6   Slide the flange (7) with the knurled screw outward onto the rewind axle until it stops.

7   Tighten the knurled screw (6) on the flange.

8   Switch on the rewinder on the power switch.

External Unwinder (EU4)

Note: This accessory is compatible only with the Pronto! 482 and 486 models.

The external unwinder is used if the label roll outside diameter is greater than 8 inches and/or the roll is heavy. It allows you to unwind complete rolls of label material.

Safety Instructions

Caution:

- During operation, the rotating rewinder axle, with the flange mounted upon it, is freely accessible.

- The operator must ensure that loose hanging jewelry, hair, etc. are kept clear of the moving parts.

Risk of injury from moving parts!

Delivery Contents

Note: Retain packing material for later use!

1   Unwinder
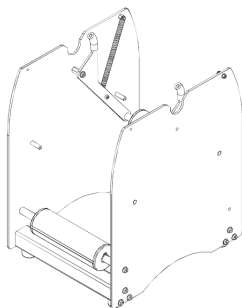
2   Winding Axle
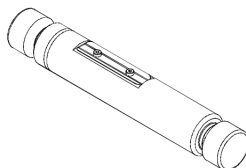
3 Flanges (2)
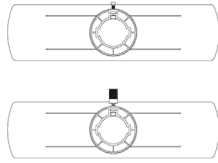
4 Winding Adapters (2)
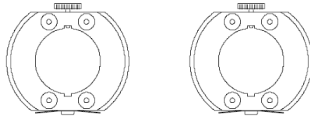
5 Screws (8)

Placing the Unwinder

When you switch between outside and inside wound materials you have to turn the unwinder 180 degrees. Compare the position of the swing arm (7) in the two following figures.

Placing the unwinder for outside wound labels

7
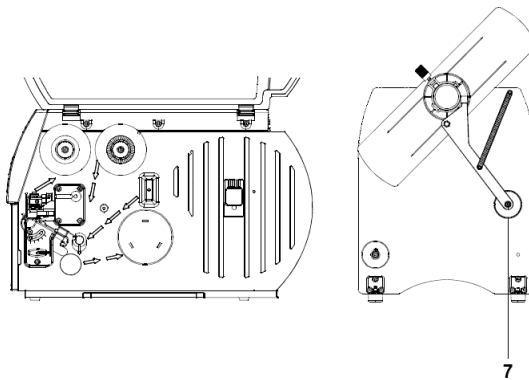
Placing the unwinder for inside wound labels
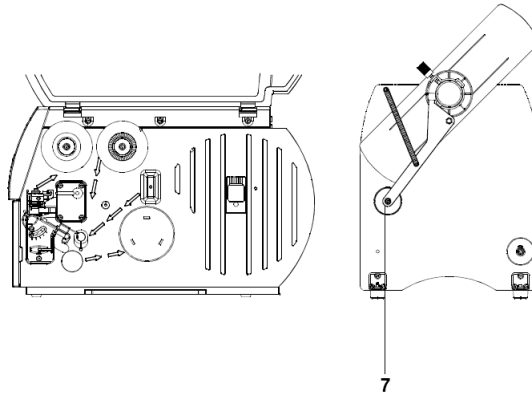
Media Loading

The mounting steps depend on the cardboard core of the chosen material roll. Possible cardboard cores are 1.56 in (40 mm) and 3 in (76 mm). At first you have to prepare the flanges and the winding axle in dependence to the cardboard core.

Preparing the Winding Axle and the Flanges

There is a spring (8) mounted on the winding axle (2) to guarantee proper stability of the unwinding material when using rolls with a 1.56 in (40 mm) cardboard core.

When unwinding from rolls with a 3 in (76 mm) cardboard core this spring has to be removed. For this you have to loosen the two screws (9).

Preparing the winding axle
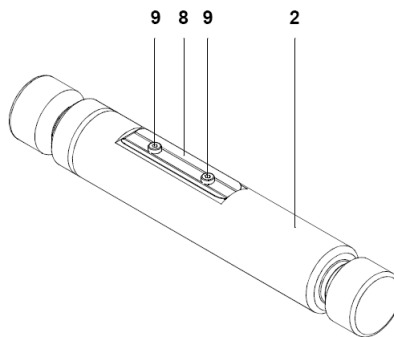
When using material rolls with 3 in (76 mm) cardboard core a winding adapter (4) has to be fixed on each of the two flanges (3) for proper stability of

the roll. Fix the winding adapters (4) on the flanges (3) by using the screws (5) included in the delivery content.

Preparing the flanges
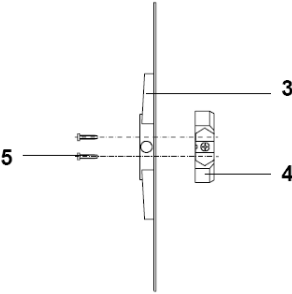
Retaining Rolls with 1.56 in (40 mm) Cardboard Core on the Winding Axle

Note: Before mounting the winding axle read this section and *Insertion of the Prepared Winding Axle* on page 8-34. Pay attention to the running of the media in dependence to inside and outside wound label rolls.

Note: For rolls with 1.56 in (40 mm) cardboard core you have to dismount the winding adapters from the flanges. The spring has to be mounted on the winding axle (see *Preparing the Winding Axle and the Flanges* on page 8-30).
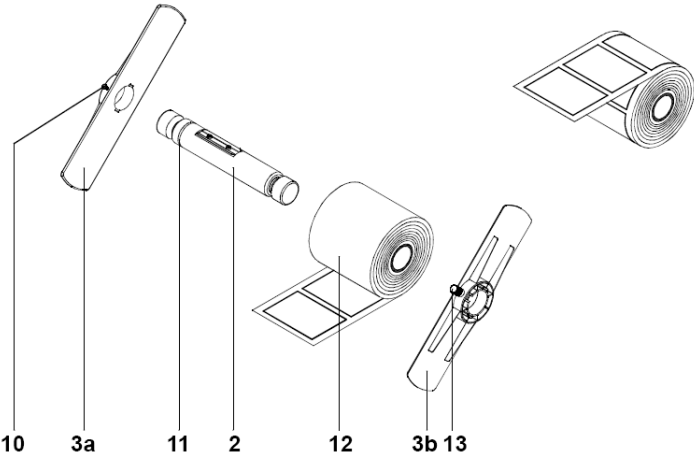
Mounting the winding axle

- Slide the flange (3a) on the winding axle (2) so that the attachment of the flange points to the outside.

- Align the flange (3a) so that the screw (10) grasps into the groove (11) of the winding axle (2). Tighten the screw (10) in the flange.

- Slide the material roll (12) onto the axle until it touches the flange slightly.

- Push the second flange (3b) with the attachment outside onto the axle until it touches the material roll.

Note: Align the second flange (3b) to the first flange (3a)!

If the material roll is smaller than the spring on the axle, ensure that the spring on the axle is guided in the groove of the flange. If necessary align flange (3a) to flange (3b)!

- Tighten the knurled screw (13) in the flange (3b).

Now you can continue with the *Insertion of the Prepared Winding Axle* on page 8-34.

Retaining Rolls with 3 in (76 mm) Cardboard Core on the Winding Axle

Note: Before mounting the winding axle read this section and *Insertion of the Prepared Winding Axle* on page 8-34. Pay attention to the running of the media in dependence to inside and outside wound label rolls.

Note: For rolls with 3 in (76 mm) cardboard core you have to mount the winding adapter on the flanges and remove the spring from the winding axle as described in *Preparing the Winding Axle and the Flanges* on page 8-30.
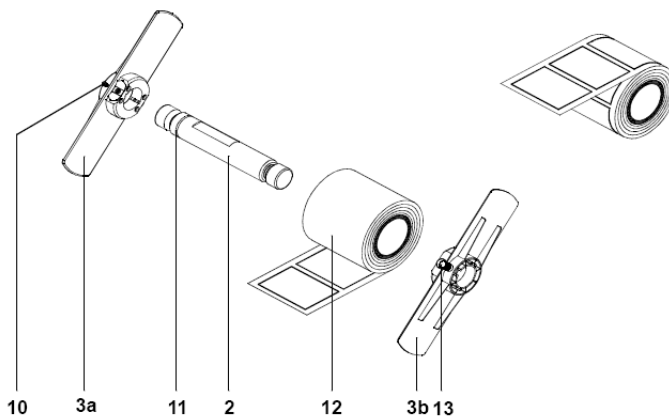
Mounting the winding axle

- Slide the flange (3a) on the winding axle (2) so that the attachment of the flange points to the outside.

- Align the flange (3a) so that the screw (10) grasps into the groove (11) of the winding axle (2). Tighten the screw (10) in the flange.

- Slide the material roll (12) onto the axle until it touches the flange slightly.

- Push the second flange (3b) with the attachment outside onto the axle until it touches the material roll. The cardboard core of the material roll has to be positioned on the winding adapters.

- Tighten the knurled screw (13) in the flange (3b).

Now you can mount the winding axle on the unwinder.

Insertion of the Prepared Winding Axle

Note: Pay attention to the different positions of the unwinder. The position depends on the winding of the material rolls as described in *Placing the Unwinder* on page 8-29.

Unwinding from a roll with outside wound labels

14   15   7
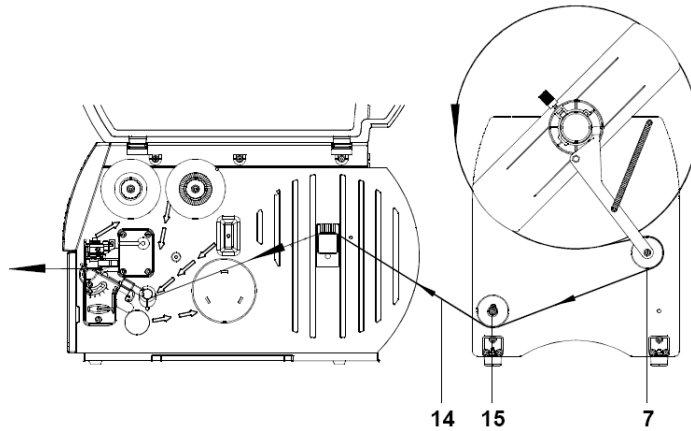
Unwinding from a roll with inside wound labels

14   7   15
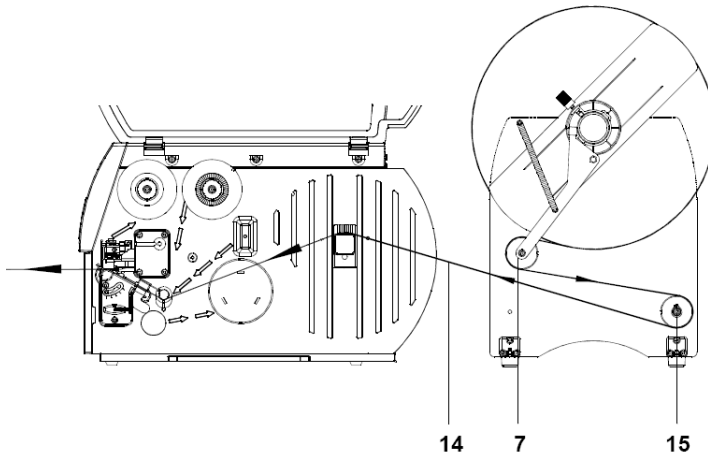
- Hang up the axle with material in the unwinder. When hanging up, the flange with the knurled screw has to be in front.

- Feed the label strip (14) over the swing arm (7) and the rewind axle (15) to the printer.

- Insert the material according to the instructions of the printers operator`s manual.

- Align the unwinder to the printer (see *Adjusting the Unwinder* on page 8-35).

Adjusting the Unwinder

To avoid crinkling in the material the unwinder has to be aligned exactly to the printer.

The printer is correctly aligned, when the running of the material at the printer chassis (A) is in line with the material-sided edge of the flange (B):

Adjust the unwinder for outside wound labels

A   **B**
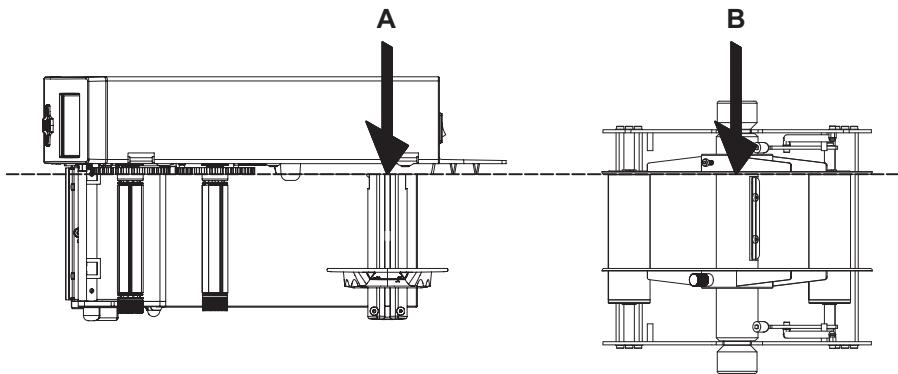
Adjust the unwinder for inside wound labels

A   **B**
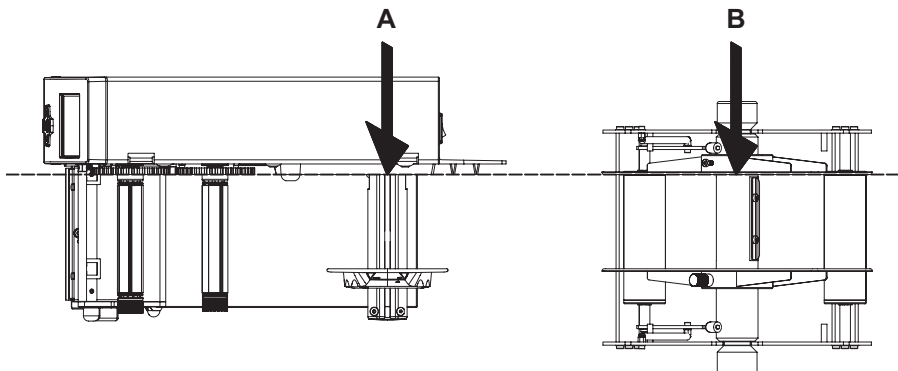
Label Present Sensor (PS6)

Note: This accessory is compatible only with the Pronto! 482, 486, and 682 models.

Product Description

The Present Sensor PS6 is optional for P-version-printers. These printers are equipped with an internal rewinder and a dispense edge for operation in peel-off mode.

In peel-off mode, labels are removed from the liner immediately after printing. The labels are then placed in the peel position for further processing. Once a signal is sent to the printer indicating that the label has been removed from the peel position, the printer will begin printing the next label of the print job.
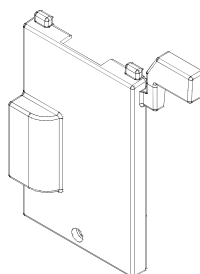
- The integrated present sensor registers removal of the label from the peel position.

- The integrated present sensor or an external start signal triggers the printer to begin printing the next label.

- Peripheral interface:

    - Reception of printer status signals
    - Connection of an external control for dispense on demand mode
    - Connection of an trigger switch

Operation Modes

Note: Before mounting the Present Sensor PS6 (1), check that the jumper (4) on the circuit board (2) is positioned on the jumper position JP4 (3).

To position the jumper correctly, pull the jumper (4) carefully from the pins on the circuit board (2) and reposition it on the jumper position JP4 (3).
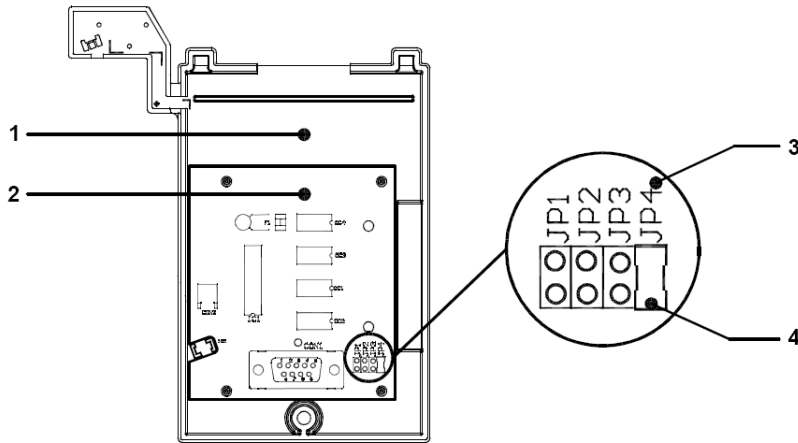
The Present Sensor PS6 can be used in several operation modes. The operation mode depends on the peripheral device connected to the Present Sensor PS6.

For a detailed description of the signals, see *Explanation of the Signals* on page 8-43.

Print after Label is removed

Once a present sensor is mounted on the printer and is ready for operation, the printer can be used in dispense mode.

The print of a label is executed if:

• A print job is available

• There is no label waiting to be removed

Print on Demand with Manual Releasing

In this operation mode the connection of a trigger switch to the peripheral interface of the Present Sensor PS6 is necessary.

After removing the label, printing of the next label will be executed by pressing the trigger switch.

The print of a label is executed if:

- A print job is available

- There is no label waiting to be removed from peel position

- The trigger switch sends the XSTART signal

This operation mode requires that there is a contact between PIN13 (STA) and PIN12 (GND).

Print on Demand with Releasing via an External Control

In this operation mode an external control is connected to the peripheral interface of the Present Sensor PS6.

After removing the label printing of the next label will be executed by the start signal from an external control device.

The print of a label is executed if:

- A print job is available

- There is no label waiting to be removed from peel position

- The external control sends the XSTART signal

This operation mode requires that there is a contact between PIN13 (STA) and PIN12 (GND).

Safety Instructions

Caution:

- The printer must be powered off before attaching the module!

- The module may only be used for the purposes described in this manual. Using this module for any other purpose is not allowed!

- The printer must be powered off before attaching a control device to the module!

Mounting

Note: For operation of the Present Sensor PS6 you may have to reposition the jumper on the circuit board of the module before mounting (see *Operation Modes* on page 8-37).
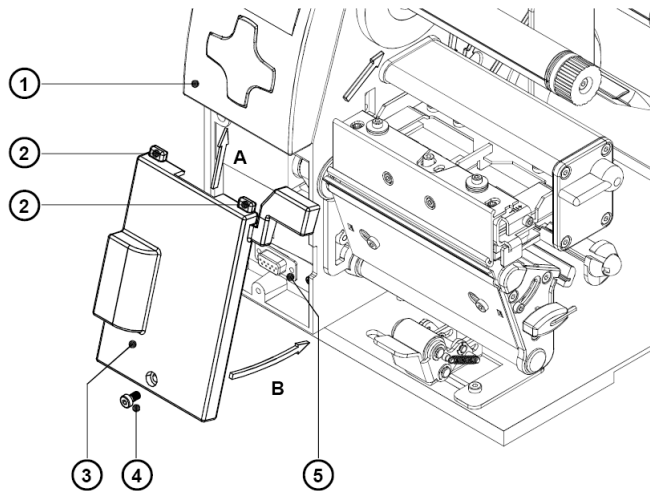
1   Switch off the printer.

2   2. Slide the guiding pins (2) of the module (3) according to arrow A under the control panel cover (1).

3   Swing the lower edge of the module according to arrow B against the printer.

    Make sure the plug-in connector of the module is inserted into the 15 pin peripheral port (5) of the printer.

4   Secure the module (3) by tightening the screw (4).

Note: The power supply of the module is made by the peripheral port of the printer. Connecting an external voltage at the modules peripheral interface could damage the module.

Printer Configuration

Once the module is connected to the printer it will be recognized by the printer automatically.

The printer can be configured to suit the individual requirements of peel-off mode in the Setup. When the module is installed, the "Demand sensor" menu will appear.

Setup >> Machine param. >> Demand sensor		
Peel position	Shift the position of the dispensed label relative to the dispensing edge Default: 0,0 mm	+9,9 ... -9,9
Backfeed delay	Delay time between removing the label from the peel position and the backfeed of the label. Default: 250 ms	50 ms ... 0 ms in 50 ms increments
Limit peel-off spd.	Limitation of the print speed in the spd. peel-off mode to 100 mm/s Default: Off	Off On

In the menu Setup >> Print parameters the method of backfeed for the peeloff mode can be selected.

Setup >> Print parameters		
Backfeed	Method of backfeed when using peel-off mode or cut mode Default: smart	smart always

- **Peel position** - This parameter allows for adjustment of the presentation position of the printed label on the dispense plate. Peel position with the

initial offset value of "0"causes the printed label to be peeled off from the liner leaving approximately a .1"(2mm) wide strip of the label still adhering to the liner. The amount of label left adhering to the liner can be altered with this parameter. Positive offset values cause more of the label surface to protrude past the dispense plate. The offset values from "Peel position" and from software are added together for execution. The software value does not replace the "Peel position" value, but temporarily adjusts it for the current job.

- **Backfeed delay** - The "Backfeed delay" adjustment allows you to input an amount of time in milliseconds between when the label is removed from the peel edge and when the backfeed is executed. Using "Backfeed delay" should prevent labels from becoming jammed between the printhead and print roller when the liner is fed back too quickly.

- **Limit peel-off spd**. - This parameter allows to limit the print speed in peel-off mode to 4 ips (100mm/s). For Pronto! 482/486/682/863 such a limitation is not necessary. So the setting "Off" should be chosen.

- **Backfeed** - In peel-off mode, the material will be stopped in a position where the leading edge of the following label has already been forwarded beyond the printhead. The printer then will backfeed the label material from its peel position to the printhead. Therefore, the next label can be printed completely. A backfeed will always be performed if the parameter is set to "always". If the setting is "smart", the backfeed will only be performed if the front label is in its peel position and the printer has not yet received all of the data for printing the following label. Otherwise, the print of the second label will be started, but only completed once the first label has been removed.

Operation

The printer is ready for operation if all connections have been made and all materials are loaded correctly.

Note: For loading the media for operation in peel-off mode follow the instructions in *Chapter 6: Loading media*.

After loading the media it is necessary to locate top of form by pressing the FEED key. Remove the dispensed labels manually from the dispense plate. Locating the top of form is not necessary when the printhead was not lifted between print jobs. This also applies if the printer was powered off between print jobs.

Note: To operate the present sensor the peel-off mode must be activated in the software! For direct programming use the P-command (see "QuickLabel Pronto 482/486/682/863 Programmer's Guide").

Overview Signals

For use in a network environment or with a switch, the Present Sensor PS6 is equipped with a peripheral interface to allow control of the dispensing process. The interface has a 15 pin SUB-D connector (1).
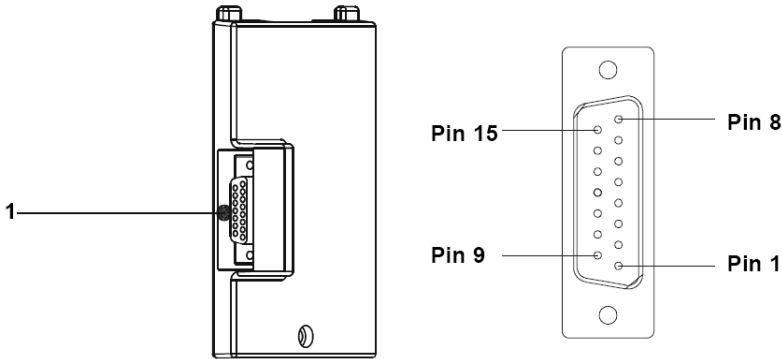
Pin	Signal	Direction	System Function	User Function
1	XSTART	Input	Start signal	
2	XFEH	Input	External Error	
3				
4	XESP	Output	Label in peel position	Control bit 3
5	XEDG	Output	No existing print job	Control bit 1
6	XDNB	Output	Printer is not ready	Control bit 2
7	XEDST	Output	Print of a label has started	Control bit 0
8	GND		Ground (0V)	
9	RXSTART	(Input)	Start signal (revers line)	
10	RXFEH	(Input)	External error (revers line)	
11				
12	GND		Ground (0V)	
13	STA	Input	Start signal is active	
14	RÜL	Output	Revers line (for all output signals)	
15	24P	(Output)	Operating voltage +24V, Si T 100mA	

Note: For more information about the user functions see the "QuickLabel Pronto 482/486/682/863 Programmer's Guide" (Commands x and X).

Explanation of the Signals

- **PIN1 - XSTART** - Start

    The activation of the signal XSTART triggers the start of printing a label. This signal is checked if there is a connection between signal STA and ground GND.

    The signal XSTART is active when current flows between PIN1 and PIN9.

- **PIN2 - XFEH** - External error

    An error has occurred on the external device. The label print is stopped and the display of the printer shows the message "External error". The signal XDNB is active.

    To continue the print job you might have to remove by hand the label from the peel position. In following open the print head and place the label material backward so that the next printable label on the silicon liner will be moved through the label sensor again. Close the print head.

    After the external error is corrected, it is possible to press the PAUSE key to continue the print job. Printing of the next label starts when the signal XSTART is active.

    If the external error occurred while the printer was printing, the label will be printed again.

    A label which was in peel position while the external error occurred will not be printed again. In that case the signal XESP stays active until the next label is taken from the peel position or, in case of the last label, until you press the CANCEL key.

    If you press the CANCEL key after the error is corrected the print job will be canceled and the printer will be reset to its initial state.

    The signal XFEH is active, when current flows between PIN2 and PIN10.

- **PIN4 - XESP** - Label is in peel position

    There is a label in the peel position.

    This signal is active if the contact between PIN4 and PIN14 is opened.

- **PIN5 - XEDG** - No existing print job

    There is no print job currently available.

In this state the contact between PIN5 and PIN14 is opened.

- **PIN6 - XDNB** - Printer is not ready

  An error has occurred on the printer.

  The label print is stopped and the details and type of error can be read from the printer's display ('Ribbon out'; 'Paper out'; 'No label'; 'External Error').

  To continue the print job you might have to remove by hand the label from the peel position. In following open the print head and place the label material backward so that the next printable label on the silicon liner will be moved through the label sensor again. Close the print head.

  After the external error is corrected, it is possible to press the PAUSE key to continue the print job. Printing of the next label starts when the signal XSTART is active.

  If the external error occurred while the printer was printing, the label will be printed again.

  A label which was in peel position while the external error occurred will not be printed again. In that case the signal XESP stays active until the next label is taken from the peel position or, in case of the last label, until you press the CANCEL key.

  If you press the CANCEL key after the error is corrected the print job will be canceled and the printer will be reset to its initial state.

  The signal XDNB is active if the contact between PIN6 and PIN14 is opened.

- **PIN7 - XEDST** - Print of label has started

  The printing of a label is indicated with a 20ms pulse.

  This signal is active if the contact between PIN7 and PIN14 is opened.

- **PIN8 - GND** - Ground (0V)

- **PIN9 - RXSTART** - Reverse line of the signal XSTART

- **PIN10 - RXFEH** - Reverse line of the signal XFEH

- **PIN12 - GND** - Ground (0V)

- **PIN13 - STA** - Start signal is active

  In operation mode 1 "Print after label is removed", do not use the signal STA

In operation mode 2 and 3 "Print on demand", connect the signal STA (PIN13) with GND (PIN12)

- **PIN14 - RUEL** - Reverse line (for all output signals)

- **PIN15 - 24P** - Operating voltage +24V, Si T 100mA

  The printer provides an operating voltage of 24V at PIN15.

  Caution: DO NOT connect any external voltage at PIN 15!

Circuit Diagram of Inputs

The XSTART and XFEH inputs are optocouplers with a current limiting resistor of 2.2kW giving a voltage of 24V in the input circuit.

For each signal X[IN] there is a separate reverse line X[IN]R via the plug connector. From that, the following matching pairs of signals result:
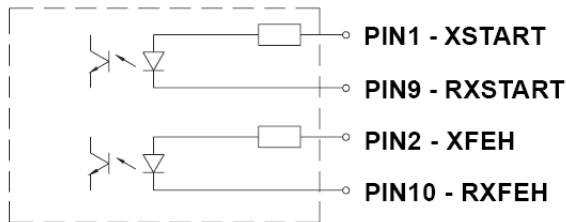
The external control device must be equipped with a 15 pin SUB-D connector. For some operation modes the input signal STA (PIN13) has to be connected with GND (PIN12).

Circuit Diagram of Outputs

All outputs are recognized through solid state relays Their outputs are connected to one another on one-side. The joint line is lead to the plug connector as a RÜL signal.

The switch function of the outputs is to open or close the contact between the joint line RÜL and the respective output.

Electrical requirements : $U_{max} = 42V$
$I_{max} = 100mA$

PIN4 - XESP
PIN5 - XEDG
PIN6 - XDNB
PIN7 - XEDST
PIN14 - RUEL

Examples External Circuits to operate Present Sensor PS6

The external control device (trigger switch, external control, optical sensor) must be equipped with a 15 pin SUB-D connector.

For some operation modes the input signal STA (PIN13) has to be connected with GND (PIN12).
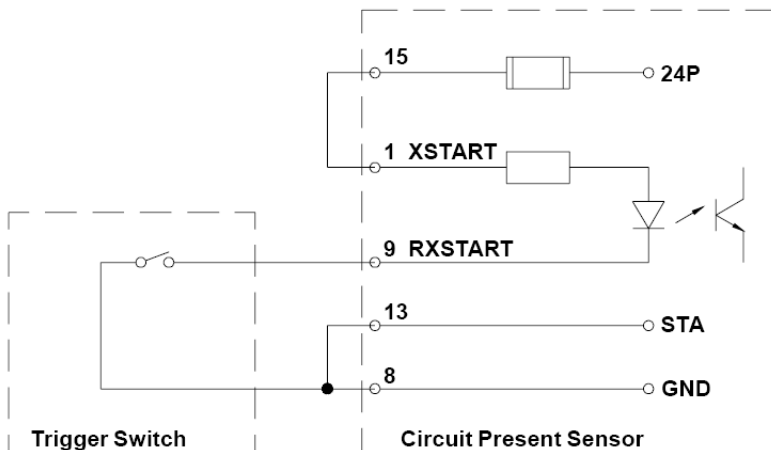
Example with Trigger Switch

brown 15 24P

white / black* 1 XSTART

9 RXSTART

13 STA

blue 8 GND

Sensor with pnp-Output Circuit Present Sensor

* in depence to the used sensor

Example for an optical Sensor with pnp-output

brown 15 24P

1 XSTART

white / black* 9 RXSTART

13 STA

blue 8 GND

Sensor with npn-Output Circuit Present Sensor

* in dependence to the used sensor
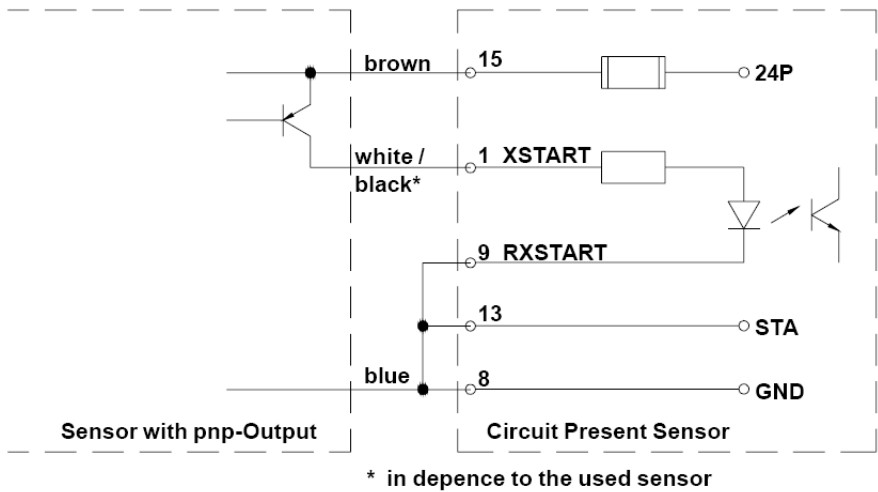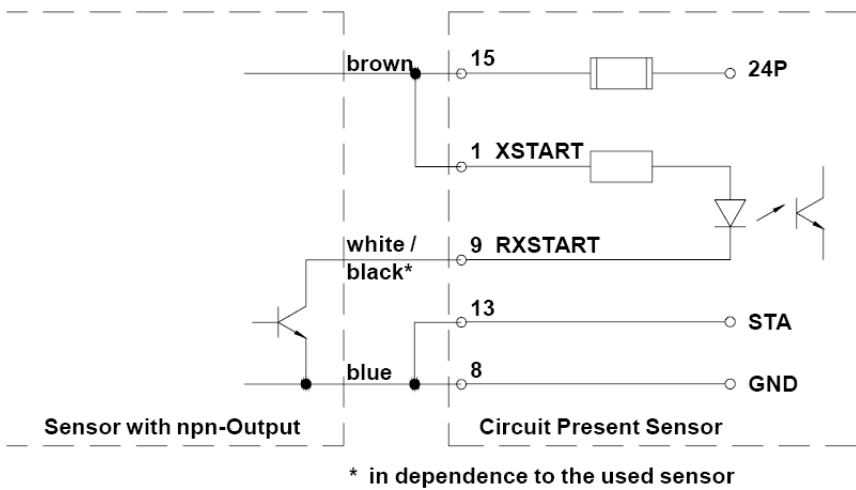
Example for an optical Sensor with npn-output

Pause Adapter PS7

Product Description

The Pause Adapter allows an external control of the Pronto! 482/486/682/863. This external control can pause printing the labels by sending a pause signal. The printer finishes the current printed label and pauses the print job until the pause signal expires. When pause signal becomes inactive the printer continues its job at the pause position.

The external control could be realized by sensors in the peripheral device which is connected to the Pause Adapter PS7. For example you can forward the media immediately after printing to an external device like a loop control.

Connection is made between the Pause Adapter and the printer using the peripheral connector on the printer.

The Pause Adapter is equipped with an interface to allow connection of the external control.

The following signals are the most important signals which can be exchanged between the printer and the external system or device:

1   Pause/ continue printing by sending an external pause signal

2   You can send error messages to the printer if an error in the external control has occurred.

3   An error message sent from the printer will indicate that a printer error has occurred

4   A message sent from the printer informs that a print job has started
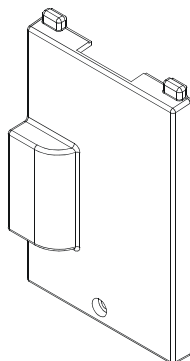
Mounting the Pause Adapter

Caution:

- The printer must be powered off before attaching the Pause Adapter!

- The Pause Adapter may only be used for the purposes described in this manual. Using the Pause Adapter for any other purpose is not recommended!

- The printer must be powered off before attaching a control device to the Pause Adapter!

When operating with the Pause Adapter, solely the front cover (1) has to be replaced by the Pause Adapter PS7.
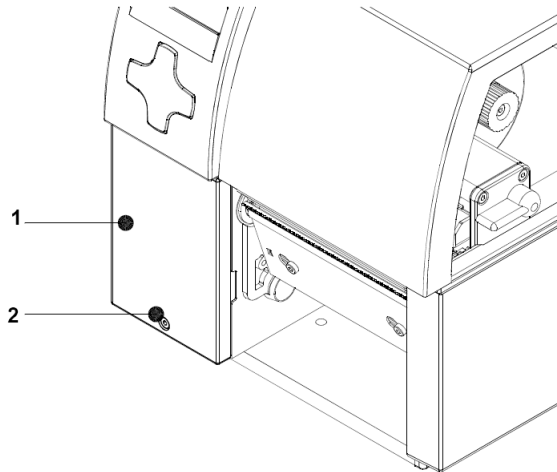
1   Loosen the screw (2).

2   Remove the front cover (1).
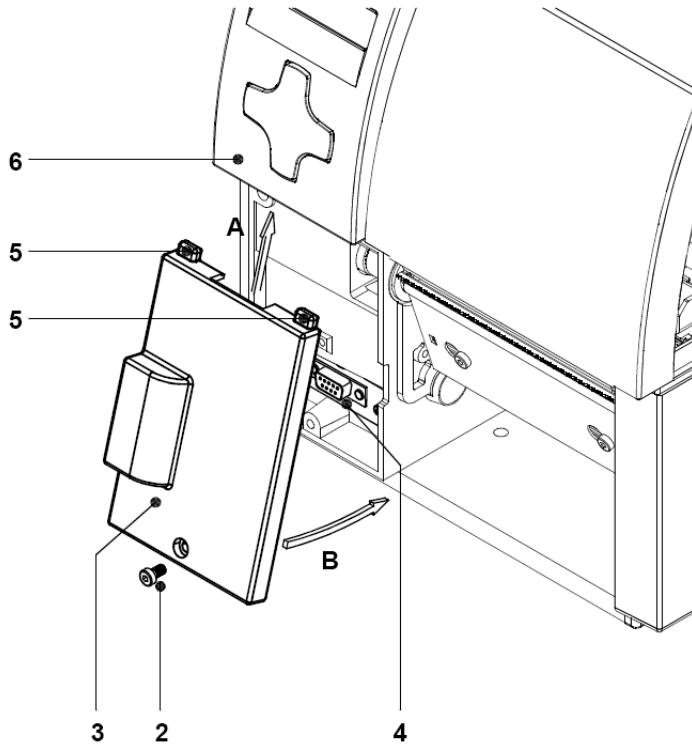
3   Angle the Pause Adapter (3) slightly and slide it according to arrow A inserting the guiding pins (5) under the control panel cover (6).

4   Swing the lower edge of the Pause Adapter according to arrow B against the printer. Make sure that the plug-in connector of the present sensor is inserted into the 15 pin peripheral port (4) of the printer.

5   Secure the Pause Adapter (3) by tighten the screw (2).

Modes of Operation

The printer is ready for operation if all connections have been made and all materials are loaded correctly. Answers about loading the materials you find in the operator`s manual of your printer.

When Pause Adapter PS7 is connected you should deactivate all special print mods (peal-off mode, cutter mode).

1   Print under control of an external device

The printer does its regular print job during the pause signal is inactive. The printer receives the pause signal by the Pause Adapter from the external control.

When the pause signal (XPSE) is getting active during a print job, the printer finishes the current printed label. Then the printer pauses the print job. By inactivation of the pause signal (XPSE) the printer continues its regular print job.

If you turn on the printer and start the first print job with activated pause signal (XPSE) the printer pauses the print job after finishing the first label. The printer does not recognize the activation of the pause signal (XPSE) between the ending of a print job and the start of the next one.

The pause signal is active when current flows between PIN1 (XPSE) and PIN9 (RXPSE)

Note: Whenever the pause signal becomes active the printer pauses the print job after finishing the current printed label.

The print job is executed if

- a print job is available

- between XPSE and RXPSE is low level signal (pause inactive)

- between XFEH and RXFEH is low level signal, there is no external error.

2   Printing while external device is turned off

In this mode the external device does not send any signal to the printer. The printer does his print job without being paused.

A detailed description of the signals can be found in *Pin Assignment of the Peripheral Interface* on page 8-51.

Pin Assignment of the Peripheral Interface

The Pause Adapter is equipped with a peripheral interface to allow control of the dispensing process. The interface has a 15 pin SUB-D connector (1).
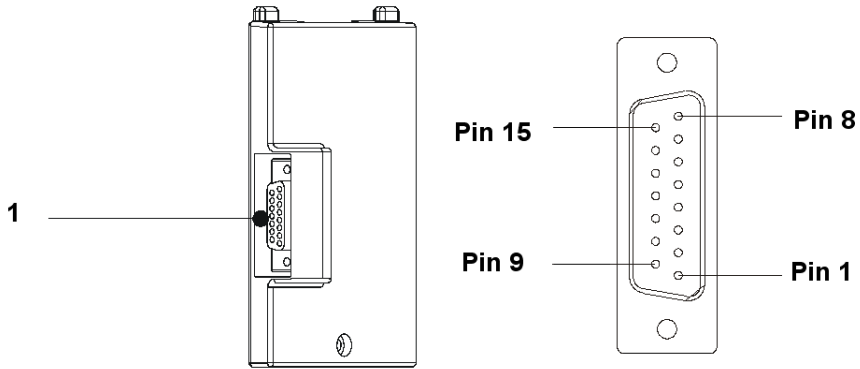
Pin	Signal	Direction	System Function
1	XPSE	Input	Pause signal
2	XFEH	Input	External error
3	---	---	Do not use!
4	---	---	Do not use!
5	XEDG	Output	No existing print job
6	XDNB	Output	Printer is not ready
7	XEDST	Output	Print of a label has started
8	GND		Ground (0V)
9	RXPSE	(Input)	Pause (reverse line)
10	RXFEH	(Input)	External error (reverse line)
11	---	---	Do not use!
12	GND		Ground (0V)
13	---	---	Do not use!
14	RÜL	Output	Reverse line (for all output signals)
15	24P	(Output)	Operating voltage +24V, Si T 100mA

Explanation of the Signals

- **XPSE - Pause**

    If the pause signal XPSE becomes active the printer will finish the current printed label. Then the printer will pause the print job as long as the

signal is active. On inactive pause signal the printer continues the print job at the pause position.

XPSE is active when current flows between PIN1 and PIN9.

Note: During a print job you can send the pause signal XPSE to the printer alternatively to pressing the PAUSE key.

- **XFEH - External error**

  An error has occurred on the external device.

  The label print is stopped and the display of the printer shows the message "External error". After the error is corrected, it is possible to press the PAUSE key or alternatively send the XPSE signal and the print job will continue. The last label printed before the error occurred will be repeated.

  Pressing the CANCEL key will stop the print job and the printer will be reset. XFEH is active when current flows between PIN2 and PIN10.

- **XEDG - No existing print job**

  There is no print job currently available.

  In this state the contact between PIN5 and PIN14 is opened.

- **XDNB - Printer is not ready**

  An error has occurred on the printer.

  The label print is stopped and the details and type of error can be read from the printer display ('Ribbon out'; 'Paper out'; 'No label').

  After the error is corrected, it is possible to press the PAUSE key or alternatively send the XPSE signal and the print job will be continued. The last label printed before the error occurred will be repeated.

  Pressing the CANCEL key will stop the print job and reset the printer.

  XDNB is active if the contact between PIN6 and PIN14 is opened.

- **XEDST - Print of label has started**

  The printing of a label is indicated with a 20ms pulse.

  XEDST is active if the contact between PIN7 and PIN14 is opened.

- **GND - Ground (0V)**

- **RXPSE - Reverse line of the pause signal XPSE**

- **RXFEH - Reverse line of the signal XFEH**

- **RUEL - Reverse line (for all output signals)**

- **24P - Operating voltage +24V, Si T 100mA**

  The printer provides an operating voltage of 24V at PIN15.

  Using that voltage a trigger switch or an optical sensor can be connected to control the peel-off operation without having an external voltage.

  Caution: DO NOT connect any external voltage at PIN 15!

Circuit Diagram of Inputs

The XPSE and XFEH inputs are optocouplers with a current limiting resistor of 2.2kW giving a voltage of 24V in the input circuit.

For each signal X[IN] there is a separate reverse line X[IN]R via the plug connector. From that, the following matching pairs of signals result:
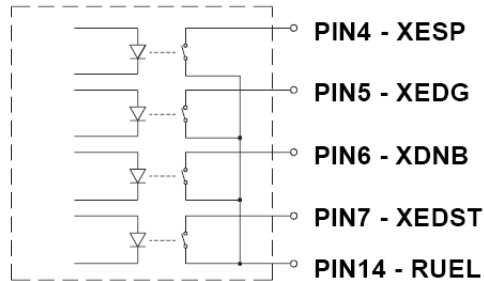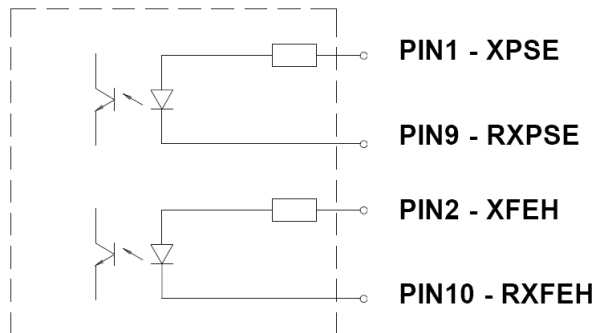

The external control device must be equipped with a 15 pin SUB-D connector. Power supply is given by the peripheral port on the printer.

Minimum external circuit for operation with Pause Adapter PS7
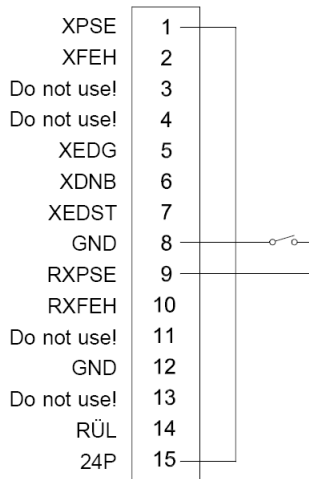
Signal	Pin
XPSE	1
XFEH	2
Do not use!	3
Do not use!	4
XEDG	5
XDNB	6
XEDST	7
GND	8
RXPSE	9
RXFEH	10
Do not use!	11
GND	12
Do not use!	13
RÜL	14
24P	15

Circuit Diagram of Outputs

All outputs are recognized through solid state relays. Their outputs are connected to one another on one-side. The joint line is lead to the plug connector as a RÜL signal.

The switch function of the outputs is to open or close the contact between the joint line RÜL and the respective output.

Electrical requirements : $U_{max} = 42V$
$I_{max} = 100mA$

PIN4 - Do not use!

PIN5 - XEDG

PIN6 - XDNB

PIN7 - XEDST

PIN14 - RÜL
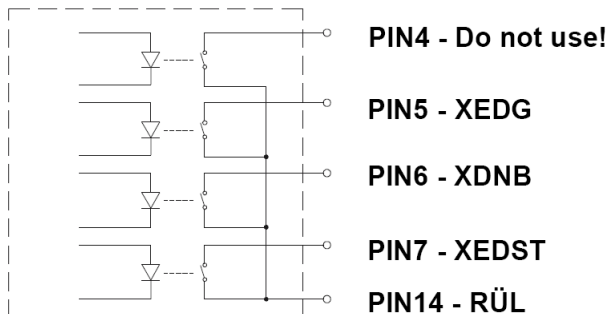
WLAN-Card

Function

The WLAN-card 802.11 b/g allows to link a printer to a wireless network which contains a Wireless Access Point. The ad-hoc mode for direct connection between several end devices is not supported.

Note: When using the WLAN-card the printer port for the wired Ethernet connection is disabled!

Mounting

Slide the WLAN-card (1) considering the correct orientation of the two-rail guide (3) into the PC Card slot (2) until it stops.
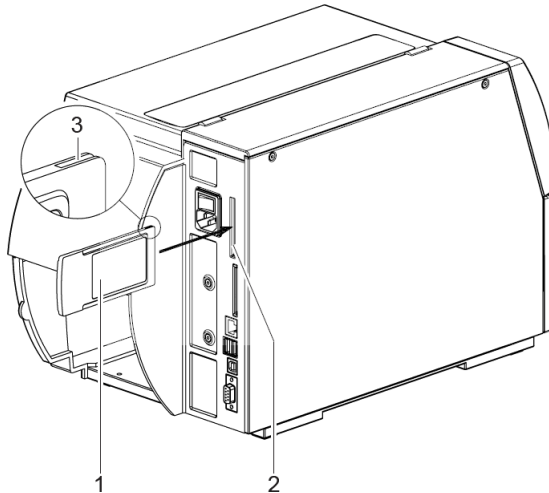
Note: The function Test > WiFi status allows to print a list (4) of the accessible Wireless Access Points. For the printout material must be loaded which extends across the entire printing width.

Setup

Set the following parameters of the menu Setup > Interfaces > Wireless LAN 802.11 matching to the configuration of the Access Point:

Setup > Interfaces > Wireless LAN 802.11	
SSID	A case sensitive text string of a maximum of 32 alphanumeric characters, used as name of the wireless LAN
Encryption	Selection of the encryption type: Off, WEP 64Bit, WEP 128Bit, WPA-PSK (TKIP) Key: WEP 64 Bit: 10 Hexadecimal.l. characters WEP 128 Bit: 26 Hexadezimal.l. characters WPA-PSK (TKIP): 8 up to 63.

Set the remaining parameters of the menu (DHCP, IP, Mask, Gateway, Network error). Those parameters conform to the parameters of the menu Setup > Interfaces > Ethernet and are described in *Chapter 5: Configuration*.

Ⓐ : Channel; frequency range of the Access Point
Ⓑ : Name of the wireless LAN
    MAC address of the Access Points
Ⓒ : Scale of the WiFi signal strength
    Data transfer rate
Ⓓ : Type of data encryption

To check the reception conditions at the installation location of the printer, in the menu Setup > Status line the widget Wi-Fi signal strength can be activated. So the signal strength will be shown in the printer display (5).

External Operating Panel

Delivery Contents
- External Operating Panel
- Cable SUB-D-9 socket - USB A
- 2 Screws DIN7984-M4x10

Function
The external operating panel is designed as a build-in module and has the same functionality as the printer integrated operating panel.

Additionally the external operating panel is equipped with a slot (1) for a CompactFlash memory card and a USB master interface (3) to connect a keyboard, a scanner or an USB flash drive.

If both panels are connected to the printer you can use both with the same priority. The displays show the same.

Note: It is possible to operate the memory cards both in the printer and in the external operating panel. But you can only operate the card slot set in the setup menu "Interfaces > Default card slot" via the operating panels (see *Chapter 5: Configuration*). When operating via an interface, each card slot can be addressed via a path (see "QuickLabel Pronto 482/486/682/863 Programmer's Guide").
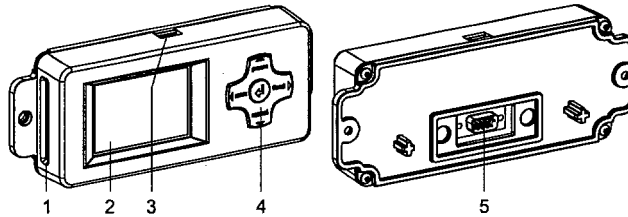
1 Slot for CompactFlash memory card

2 Display

3 USB master interface

4 Navigator pad

5 9-pin SUB-D plug

Mounting

- Prepare the installation point for the external operating panel as shown in the drilling template. Dimensions are in millimeters.
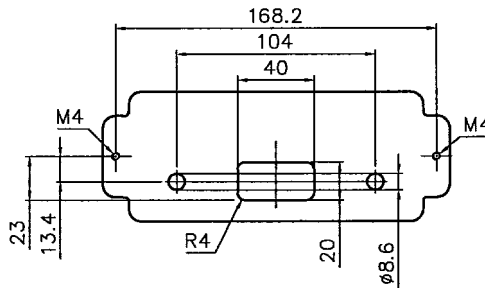
- Fix the external operating panel with 2 screws (DIN7984-M4x10). Dimensions are in millimeters.
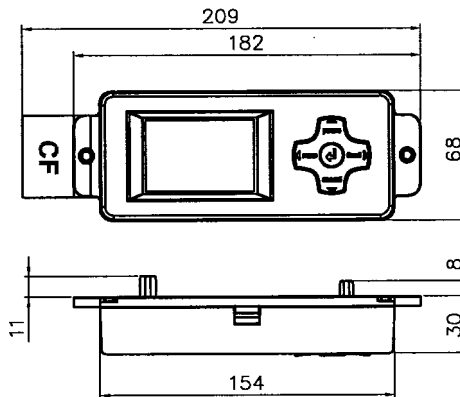
- Connect the delivered cable at the 9-pin SUB-D plug of the panel and at one of the USB interfaces (6) of the printer. The connection may be made while the printer is switched on.
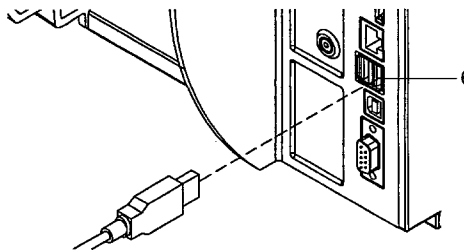
Directly after plug-in the external operating panel is ready.

Antistatic Brush

Note: This accessory is compatible only with the Pronto! 482 and 486 models.

Delivery Contents
*   Antistatic Brush
*   2 Screws DIN7984-M4x6
*   Washer DIN125-A4.3

Function
The antistatic brush is made to reduce electrostatic charges around the printhead unit.

Mounting

Danger!: Risk of death via electric shock! Before opening the housing cover, disconnect the device from the mains supply and wait at lease one minute until the power supply unit has discharged.

1   Remove the rear cover.

2   Insert the screw (3) incl. washer (2) from the rear side into the drilling (1).
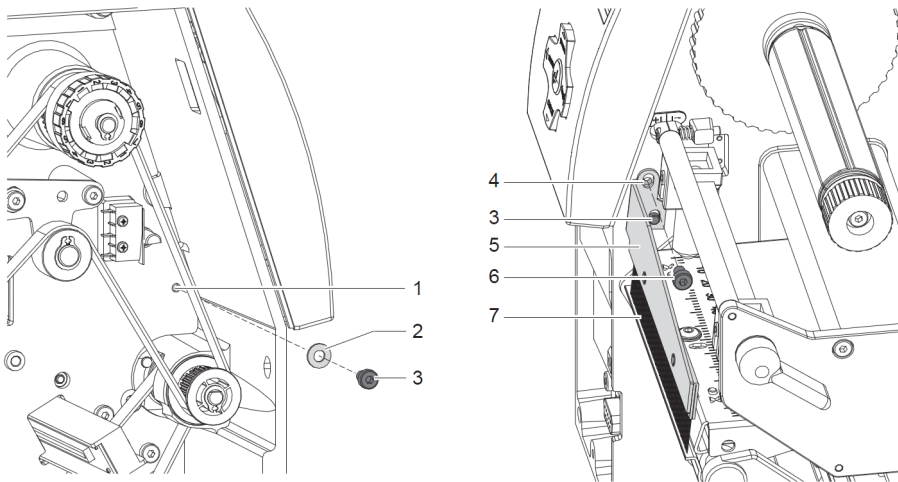
Attention!: Do not insert screw (3) without washer (2). Otherwise the screw (3) protruding through the chassis would hinder opening and closing the printhead.

3 Tighten the screw (3).

4 Mount the rear cover.

5 Put the antistatic brush (5) with the lower elongated hole onto the thread of screw (3)

6 Fix the antistatic brush in the upper elongated hole with the screw (6) at the drilling (4).

Adjustment

1 Load label material.

2 Loosen the screw (6).

3 Move the antistatic brush (5) as close as possible to the labels without touching them with fibers (7) during printing.

4 Tighten the screw (6).

Chapter 9: CU4 Cutter Accessory

Note: This accessory is compatible only with the Pronto! 482 and 486 models.

This chapter contains the following sections:

- **Cutter -** Describes available cutter types

- **Safety Instructions -** Describes safety precautions

- **Mounting the Tear-off Plate / Dispense Plate -** Describes how to install

- **Mounting the Cutter Tray -** Describes how to mount the cutter tray

- **Mounting the Cutter -** Describes how to mount the cutter

- **Printer Configuration -** Describes printer configuration options

- **Media Loading -** References media loading information

- **Operation -** Describes how to operate the cutter

- **Lubrication -** Describes how to lubricate the cutter

- **Cleaning -** Describes how to clean the cutter

- **Changing the Blades -** Describes how to change cutter blades

- **Adjusting the Circular Blade and the Clock Wheel -** Describes how to adjust cutter components

Cutter

Cutter

The Cutter is an optional peripheral device. With the cutter unit installed, labels or continuous material may be cut when desired.

Cutter options include a choice of: cut after each label, cut after a specific quantity of labels, or cut at the end of a print job. The cutters are powered and controlled directly by the peripheral port of the printer.

For cutter operation, the printer firmware will extend the label for cutting based on specified displacements, then automatically backfeed the label, so that after making a cut, the label roll will be repositioned and ready for printing the next label.

An optional Cutter Tray is available.
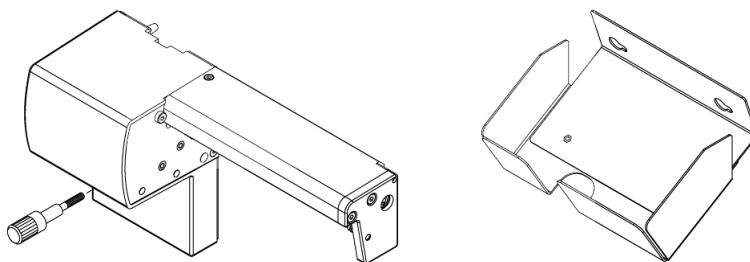
Perf/Cutter

The Perf/Cutter is mainly designed for perforating textile materials, for other or thick materials tests are recommended.

The Perf/Cutter is, in comparison to the Cutter, equipped with another linear blade and other electronics.

The perforation distance and the border width of the Perf/Cutter linear blade are custom-designed.

With the Cutter linear blade installed the Perf/Cutter can be used similar to the Cutter.

Note: Because of the different electronics, the Cutter can not be used as Perf/Cutter.

Safety Instructions

CAUTION!

- Switch off the before attaching the cutter!

- Risk of injury, particularly during maintenance, the cutter blades are sharp!

- The cutter may only be used when it is mounted on the printer!

- Do not try to cut any materials which exceed the maximum width or thickness specifications.

- Do NOT touch the area of the moving blades!
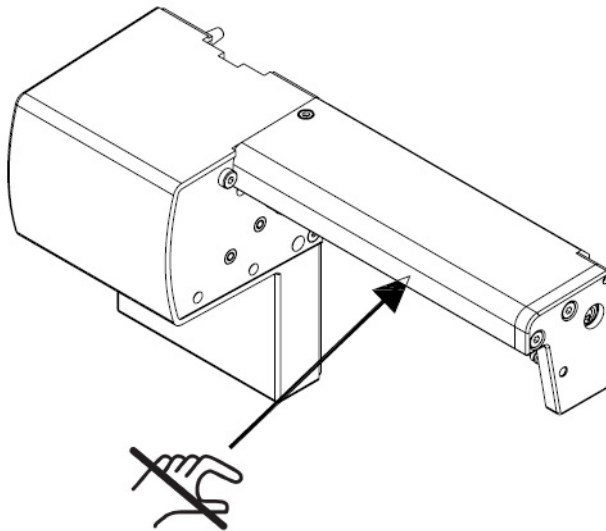
Mounting the Tear-off Plate / Dispense Plate

For cutter operation there has to be mounted a tear-off plate or a dispense plate on the printer, to lead the material through the blades of the cutter.

The printers have such a plate mounted when delivered.
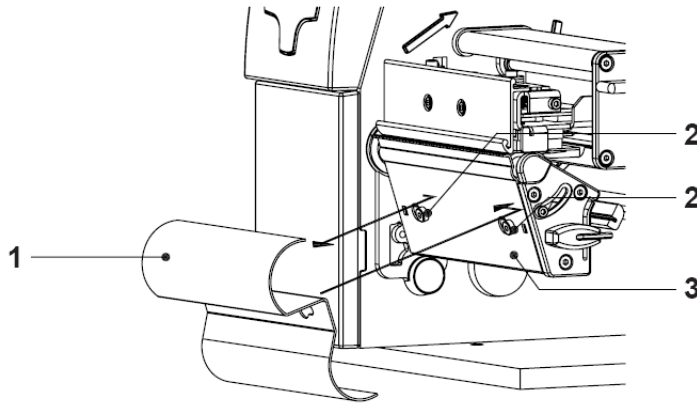
1   To dismount the rewind guide plate loosen the screws (2).

2   Slide the rewind guide plate (1) to the right and remove it.

3   Place the tear-off plate (3) on the screws (2) and tighten these screws.

Mounting the Cutter Tray
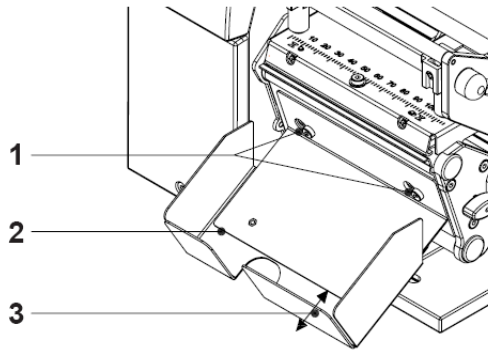
1   Loosen the screws (1).

2   Place the cutter tray (2) on the screws (1) in front of the tear-off plate or the dispense plate and slide it to the left until it stops.

3   Tighten the screws (1).

4   The length of the cutter tray (2) may be modified by moving the slide (3).

Mounting the Cutter

Caution: The printer must be switched off before attaching the cutter!

In order to install the cutter, the front cover is to be removed.
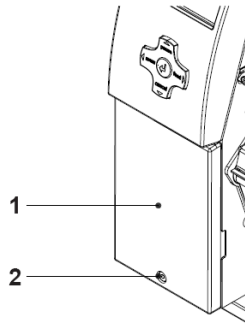
1 Turn the printer off. Open the media cover.

2 Loosen the screw (2).

3 Remove the front cover (1).
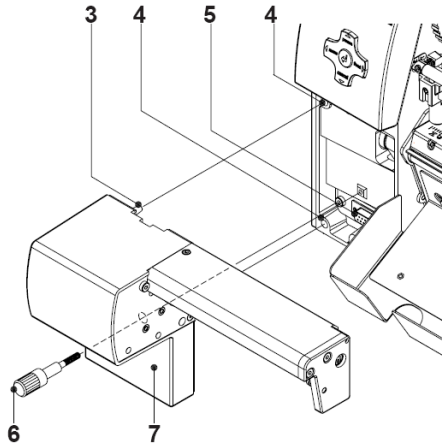
4 Insert the pins (3) of the cutter (7) into the holes (4) of the printer.

5 Press the cutter against the printer. That way the plug of the cutter will be connected to the peripheral port (5) of the printer.

6 Secure the cutter (7) with the screw (6).

Printer Configuration

Once the cutter is connected to the printer, the printer will automatically recognize it on turn on. Once the cutter is recognized, the printer can be operated in cut mode. The printer can be configured to suit the individual requirements of cut mode in the Setup menu. When the cutter is installed, the Cutter menu will appear.

For setting the cutter parameters select Setup > Machine param. > Cutter.

Cut Position

The Cut position parameter allows to adjust the distance between the cut position and the rear edge of the label. Cut position with the initial offset value of "0" causes to cut in the middle of the gap between two labels. If the real cut position deviates from the middle of the gap, the amount of the cut offset can be altered in the range from -9.9mm to +9.9mm. If the cut position value is positive, the media will be advanced before it is cut, that means the distance between the cut edge and the rear edge of the label increases.

The setting should be made when first operating the printer and cutter, or when changes that will effect all print jobs sent to the printer.

Note: Changes to individual print jobs can be accomplished by changing the software settings.

The offset values from Cut position and from software are added together for execution. The software value does not replace the Cut position value, but temporarily adjusts it for the current print job.

Under Setup > Print parameters the method for recognizing the start of label and the method of backfeed when using cut mode can be selected.

Label Sensor

For recognizing the start of label the printer offers besides the two standard methods (Gap sensor / Bottom reflect) the setting Endless media. This setting should be used when operating with continuous material in cut mode. That way it is possible to realize the movement forward and the cut after loading the media and then pressing the feed key.

Backfeed

In cut mode, the media will be stopped in a position where the leading edge of the following label has already been moved beyond the printhead. The printer can backfeed the label material from its cut position to the printhead. Therefore, the next label can be printed completely.

A backfeed will always be performed if the parameter is set to "always". If the setting is set to "smart", the backfeed will only be performed if the front label is in its cut position and the printer has not yet received all of the data for printing the following label. Otherwise, the print of the second label will be started, but it will only be completed after the first label has been cut.

Media Loading

Load the transfer ribbon as described in *Chapter 6: Loading media*.

Load the label media for cut mode similar to the way it would be loaded for tear-off mode.

Place the media strip between the printhead and the drive roller, so that the beginning of the strip reaches into the cutter.

Operation

Standard Operation

The printer is ready for operation when all connections have been made and all materials are loaded correctly.

After loading the media it is necessary to locate top of form by pressing the **feed** key. The media will be moved forward and then cut.

Note: To operate the cutter with continuous material in the printer menu Setup > Print parameters > Label sensor the setting Endless media has to be selected. Otherwise no cut is carried out.

Locating the top of form is not necessary when the printhead was not opened between print jobs, even if the printer was powered off between print jobs.

Note: To operate the cutter the cut mode must be activated in the software! For direct programming use the C-command (refer to "QuickLabel Pronto 482/486/682/863 Programmer's Guide").

Once the cutter is mounted on the printer and is ready for operation, the printer can be used in cut mode.

All labels in a print job will be printed without stopping and be cut as chosen in the software: after each label, after a specific quantity of labels, or at the end of a print job.

Lubrication

To guarantee of a normal function of the cutter the cylindrical area (1) of the circular blade (2) must be greased regularly. We recommend for lubrication an All round-High quality Grease.
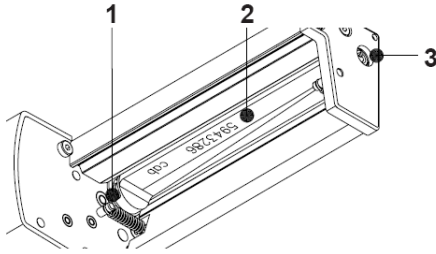
Warning: Disconnect the printer from the electrical outlet!

• Hold a greased brush on the cylindrical area and turn the axle (3) with a screwdriver for slotted head screws (slot width 7 mm). During the turning the area is all-around greased.

Cleaning

Warning: Before starting any maintenance, turn the printer OFF and disconnect the printer from the electrical outlet!

During the normal operation of the cutter, particles of dust and paper can accumulate inside the cutter. Remove these particles with a soft brush or a vacuum.

When cutting through the label material instead of the label gap remains of adhesive may accumulate on the blades. If operating in backfeed mode, such remains of adhesive may be deposited on the drive roller as well.

Therefore both, the drive roller and the cutter blades, must be cleaned often.

Caution: Risk of injury! The cutter blades are sharp!
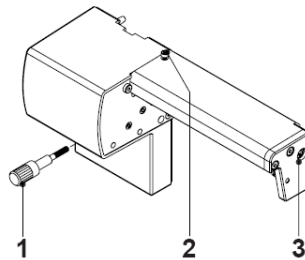
1   Loosen the screw (1) and remove the cutter from the printer.

2   For cleaning the drive roller open the print head and remove the media from the printer.

3   For cleaning the circular blade you can turn the axle (3) with a screwdriver for slotted head screws (slot width 7 mm).

Note: With the screw (2) the rotation angle of the circular blade is limited to 120°. If you could not remove all pollutions from the circular blade you can loosen the screw (2) about 5 mm from the profile to turn the axle (3) 360°.

1   Remove all deposits both at the drive roller and the cutter blades with isopropyl alcohol and a soft cloth.

2   Grease the circular blade according to *Lubrication* on page 9-10.

Caution: When you have loosen the screw (2) the circular blade has to be repositioned after cleaning as described in section *Adjusting the Circular Blade and the Clock Wheel* on page 9-14.

Changing the Blades

1   Turn the printer off and dismount the cutter from the printer.

2   Turn the axle (3) of the circular blade (2) with a screwdriver for slotted head screws (slot width 7 mm) so that the inscription (1) of the blade points downward.

In this position the set screw (4) on the gear-wheel circular blade can be achieved from the rear of the cutter. Loosen this set screw (4) a few turns.
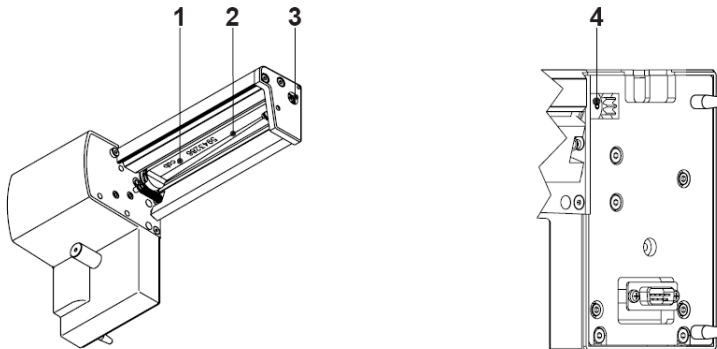
3   Hang out the spring (13) on the bearing plate (15) and the linear blade (11).

Note: Attend on the washers (A, B, C) for the circular blade (2) and the linear blade (11) when you dismount the bearing plate. The washers could get lost because of their smallness.

Caution: Always keep the linear knife with one hand (11) in its position and push its axle slightly to the mounting plate (9) of the cutter, because the spring (6) is tense.

---

4   Unscrew the screws (8) and remove the bearing plate (15) sideways.

5   Take the circular blade (2) out of its bearing (5). Now you can slacken the spring (6) of the linear blade.

If you don`t want to change the linear blade you can skip to step 9.

6 Take the spring (6) and the linear blade (11) from the mounting plate (9).

7 Insert the axle of the (new) linear blade withe the washer (B) in the bearing (10) of the mounting plate. (The inscription of the linear blade has to point downwards.)

8 Hang the spring (6) without tense on the pins of the mounting plate (9) and the linear blade (11).
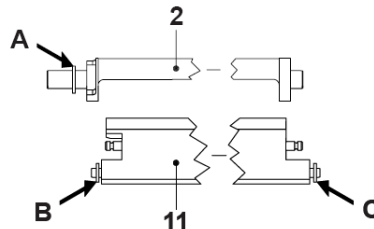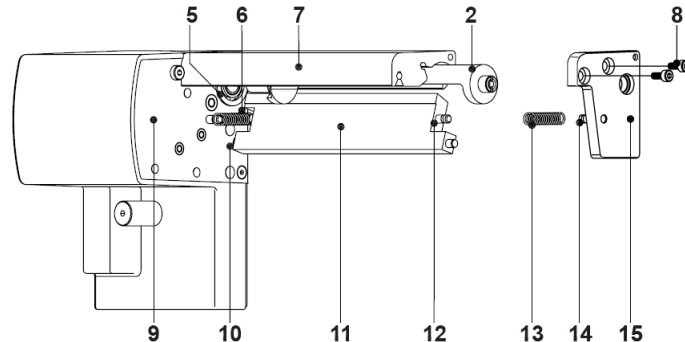
1 Turn the linear blade (11) backwards. The spring (6) gets tense. Insert the Axle of the (new) circular blade (2) with the washer (A) in the bearing (5) of the mounting plate.

2 Place the washer (C) on the axle of the linear blade.

3 Hang the spring (13) without tense on the pins of the linear blade (12) and the bearing plate (14).

4 Positioning the bearing plate (14) on the axles (2, 11). The spring (13) gets tense.

Note: Attend on an accurate position of the bearing plate (15) to the profile (7) of the cutter. A bad positioning could cause undefined cutting edges.

1   Tighten the bearing plate (15) with the screws (8) at the profile (7). Keep the bearing plate in position and push it slightly to the profile (7) during tightening.

2   Tighten the screw set (4) of the gear-wheel circular blade at the rear of the printer.

3   Grease the circular blade according to *Lubrication* on page 9-10.

Caution: Before mounting the cutter the circular blade has to be repositioned as described in section Adjusting the Circular Blade and the Clock Wheel.

Adjusting the Circular Blade and the Clock Wheel

To operate the cutter correctly after cleaning or after changing the blades you have to adjust the circular blade (1) and the clock wheel (2) to another.
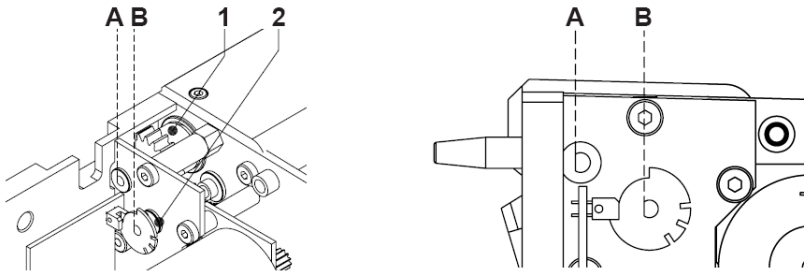
1   Unscrew the cover (4) by loosening the screws (3), (5) and (9, at the rear).

2   Loosen the screw (8) about 5 mm from the profile of the cutter.

3   Turn the axle (7) of the circular blade with a screwdriver for slotted head screws (slot width 7 mm) so that the inscription (4) of the blade points downward.

On the axles of the circular blade (1) and the clock wheel (2) you can find a planar area (A, B). Now or after one or two more full turns of the circular blade the axles (1, 2) are justified and the areas (A, B) both are pointing to the rear of the cutter.

4 Tighten the screw (8) for arresting the circular blade.

> **Caution:** If you tight screw (8) too strong, you could damage the screw thread.
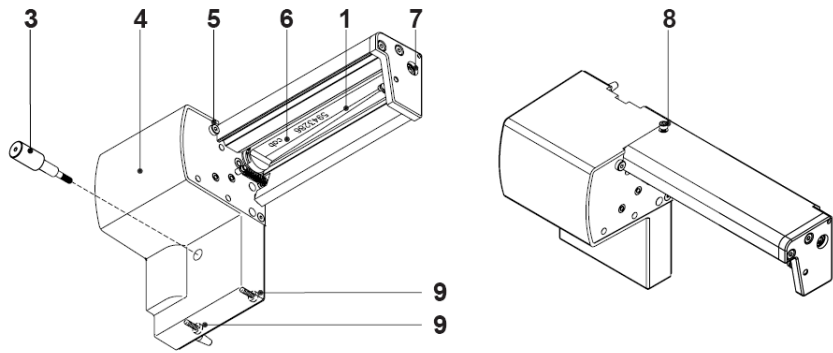
Chapter 10: CS4 Cutter/Stacker Accessory

Note: This accessory is compatible only with the Pronto! 482 and 486 models.

This chapter contains the following sections:

- **CS4 Cutter/Stacker -** Describes the CS4 cutter/stacker

- **Safety Instructions -** Provides important safety information

- **Installation -** Describes how to install the CS4 cutter/stacker

- **Printer Configuration -** Describes how to configure the printer for use with the CS4 cutter/stacker

- **Loading Material -** Describes how to load media

- **Operation -** Describes the operation of the CS4 cutter/stacker

- **Maintenance -** Describes how to clean the cutter blades

- **Error Messages -** Describes error messages related to the CS4 cutter/stacker

CS4 Cutter/Stacker
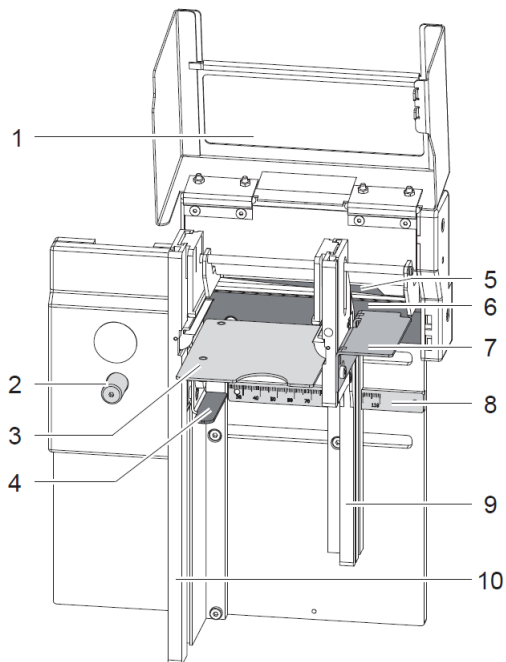
1	Cover	**6**	Lower blade
2	Knurled screw	**7**	Safety cover
3	Table	**8**	Scale
4	Handle for height displacement of the table	**9**	Side plate (movable)
5	Upper blade	**10**	Side plate (fixed)

Safety Instructions

- Disconnect the printer from the electrical outlet before mounting or removing the stacker (2).

- The stacker protrudes the base plate of the printer. Therefore the system must be positioned at the edge of the platform or on a mounting unit. Position the system in such a way that a risk of tilting will be avoided.

- The stacker may only be operated when it is mounted on the printer.

- There is a risk of injury, particularly during maintenance, as the cutter blades (3,4) are sharp.

- Operate the stacker with properly mounted safety covers (5) only.

- Mount matching safety covers (5) when adapting the stacker for another material width. For a table width greater than 95 mm no safety covers are needed.

- When the table (6) is not mounted or it is lowered manually the blades (3,4) are accessible. Do not operate the stacker under these circumstances. Do not touch the area of the blades.

- Warning stickers (1,2) must not be removed, as then you and other people cannot be aware of dangers and may be injured.
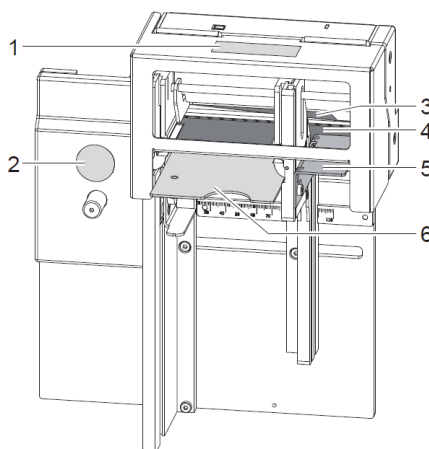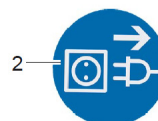
- The device may only be used in a dry environment, do not expose it to moisture (sprays of water, mists, etc.).

- Do not use the device in an explosive atmosphere.

- Do not use the device close to high-voltage power lines.

- Perform only those actions described in this operating manual. Work going beyond this may only be performed by trained personnel or service technicians.

- Unauthorized interference with electronic modules or their software can cause malfunctions.

- Other unauthorized work on or modifications to the device can also endanger operational safety.

- Always have service work done in a qualified workshop, where the personnel have the technical knowledge and tools required to do the necessary work.

- The maximum sound pressure level is less than 70 dB(A).

Installation

Caution: The device and printing materials will be damaged by moisture and wetness. Set up label printer with stacker only in dry locations protected from splash water.

Preparing the Printer
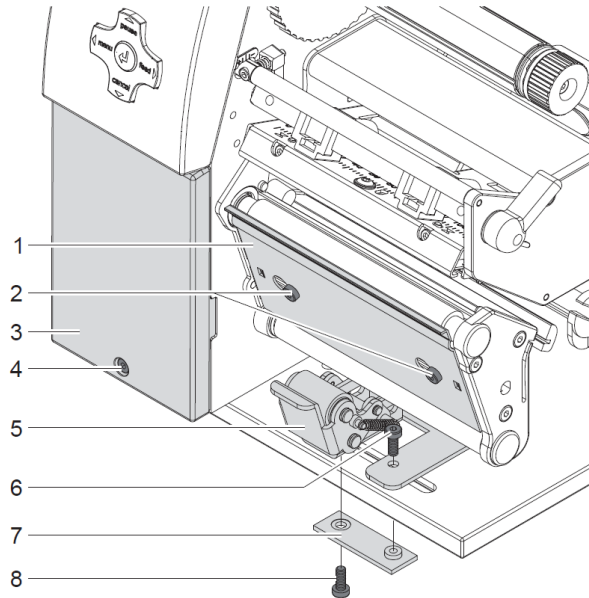
Removing Tear-off Plate, Dispense Plate or Rewind Guide Plate

1 Loosen screws (2) several turns.

2 Slide plate (1) to the right and remove it.

Removing Cover or Present Sensor

1 Loosen screw (4).

2 Remove cover (3) or present sensor.

Removing the locking system

1 Position printer at edge of table so that the oblong hole is accessible from below.

2 Screw out screws (6,8) and remove them.

3 Remove the pinch roller (5) and bottom plate (7).

Mounting the Stacker to the Printer

Warning: Disconnect the printer from the electrical outlet before mounting or removing the stacker.

Warning: The stacker protrudes the base plate of the printer. Therefore the system must be positioned at the edge of the platform or on a mounting unit. Position the system in such a way that a risk of tilting will be avoided.
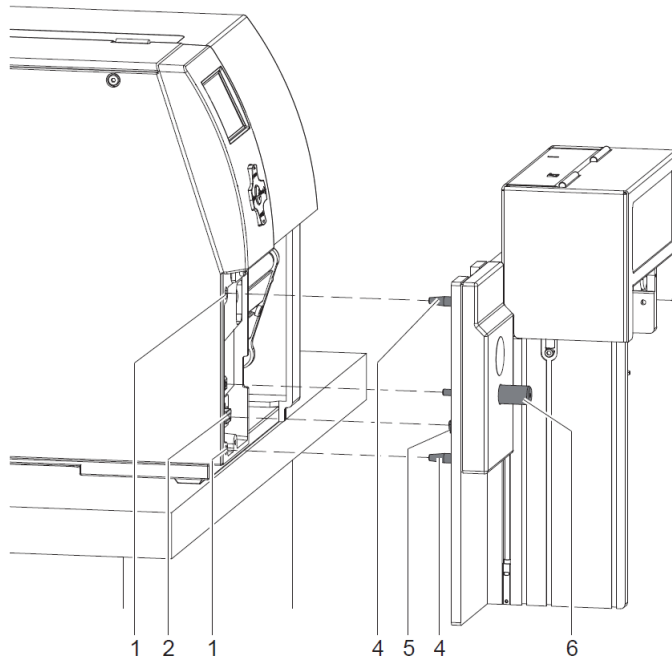
To Mount the Stacker to the Printer:

1   Insert the pins (4) of the stacker into the holes (1) of the printer.

2   Press the stacker against the printer. That way the plug (5) of the stacker will be connected to the peripheral port (2) of the printer.

3   Secure the stacker with the screw (6).

Adapting the Stacker to the Media Size

Warning: Equip the stacker only with a table designated for the media to be used and the matching safety covers. With inappropriate tables and safety covers the reliability and machinery safety cannot be guaranteed.

Adjusting the Side Plates
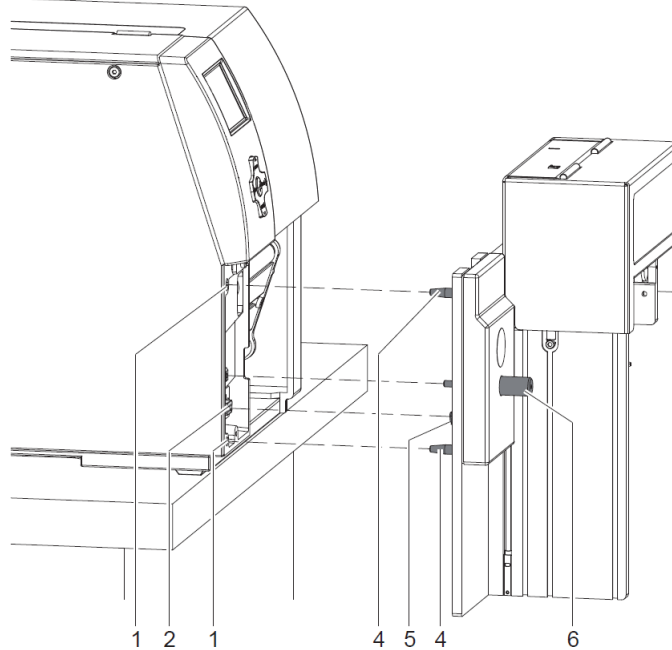
1   Loosen screws (2).

2   Adjust the side plates (4) to the media width using the scale (1). Use the edges (3) of the side plates as pointers.

3   Tighten screws (2).

Mounting the Table
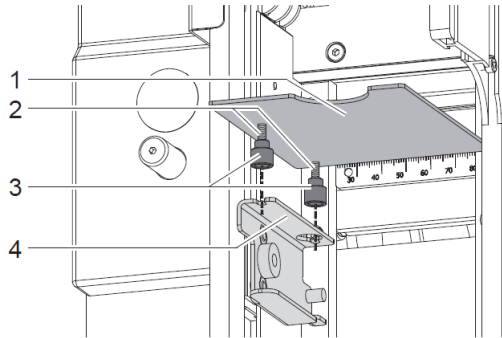
1   Loosely screw the knurled nuts (3) contained in the delivery contents of the table onto the threaded pins (2).

2   Insert the threaded pins of the table (1) into the holes of the retainer (4) and move the table to the printer until it stops.

3   Tighten the knurled nuts (3).

Mounting the Safety Cover

Warning: Equip the stacker only with safety covers designated for the media to be used. Mount the safety covers in the correct position. Without safety covers or with improperly mounted safety covers the reliability and machinery safety cannot be guaranteed.
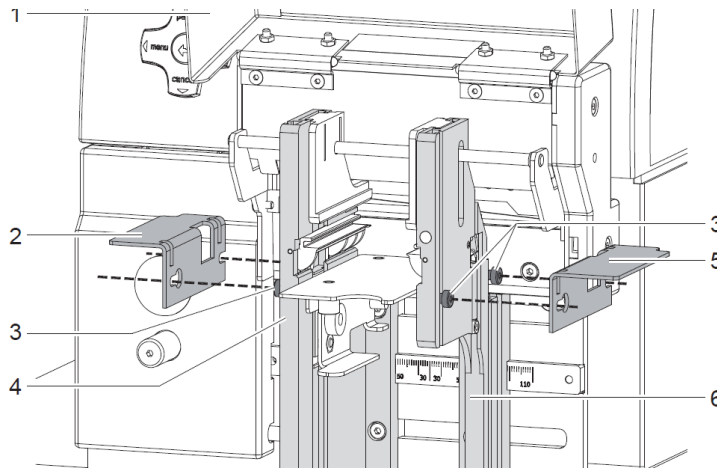
Note: Mount safety cover (5) only.

1.   Open cover (1).

2.   Loosen two screws (3) in the side plates (4,6) several turns.

3.   Place the safety cover (2) onto the screws (3) and slide the cover to the printer.

4.   Tighten the screws (3).

5.   Close cover (1).

Printer Configuration

Once the stacker is connected to the printer, the printer will automatically recognize it on turn on.

The printer can be configured to suit the individual requirements of cut mode in the "Setup" menu. When the stacker is installed, the "Cutter" menu will appear.

For setting the cutter parameters select Setup > Machine param. > Cutter.

Parameter	Meaning	Default
Cutter ✂	Configuration of cutter.	
Cut Position ✂	Offset of the cut position relative to the printed image. Cut position with the initial offset value of "0" causes cut in the middle of the gap between two labels. If the cut position value is positive, the media will be advanced before it is cut, that means the distance between the cut edge and the rear edge of the label increases.	0

Note: The values of the setup are basic settings for the actual combination printer-stacker w/cutter. After changing the stacker or printer a re-adjustment may be necessary.

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

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

Under Setup> Print parameters the method for recognizing the material and the method of backfeed when using cut mode can be selected.

Parameter	Meaning	Default
Label Sensor	Method for detecting the starting end of the label.	Gap Sensor
	Gap Sensor: Detection using changes in the transparency between the label and label gap.	
	Bottom-Reflect: Detection using reflective marks on the bottom of the medium.	
	Continuos media: Synchronization of the paper feed when using endless media in cutting mode.	
	After loading media press the feed key. That way a short feed and a synchronization cut are realized.	
Backfeed	Method for backfeeding the material.	Smart
	Backfeeding is necessary in the cutting mode since the front edge of a second section already passes the print line when the first label is moved to the cut position.	
	Always: Backfeeding occurs independently of print contents.	
	Smart: Backfeeding only occurs when the print contents of the next section is not yet fully prepared when cutting the current section. Otherwise, the second section is pushed on and completed after removal of the first section without backfeeding.	

Loading Material

- Load transfer ribbon and endless material as described in *Loading media* on page 6-1.

- Use the tear-off mode information for loading endless material for cut mode. Place the media strip between the printhead and the drive roller, so that the front edge of the strip reaches through the cutter.

Operation

The printer is ready for operation when all connections have been made and all materials are loaded correctly.

Note: To operate the cutter with continuous material in the printer, "Endless media" has to be selected in the Setup > Print parameters > Label sensor menu. Otherwise no synchronization cut is carried out.
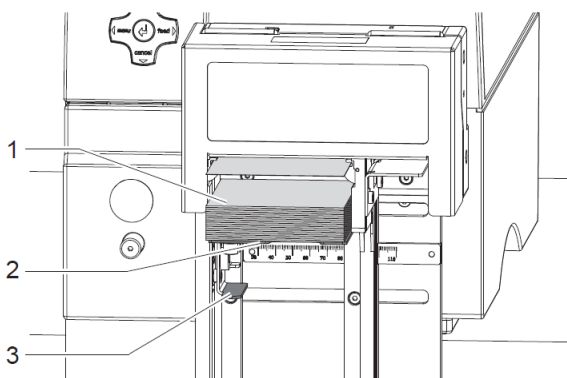
Warning: Operate the stacker only with a table designated for the media to be used and the matching safety covers. Do not operate the stacker when the table is lowered manually.

With inappropriate tables and safety covers or with manually lowered table the reliability and machinery safety cannot be guaranteed.

- Move the table (2) upwards using the handle (3) until it stops.

- Switch on the printer.

- The cutter performs a cut.

- Press the feed key. For synchronization the media will be moved forward and cut off. Synchronization is not necessary when the printhead was not opened between print jobs, even if the printer was powered off between print jobs.

- Remove the cuts from the table.

- Activate the cut mode in the software.

- For direct programming use the C-command (QuickLabel Pronto 482/486/682/863 Programmer's Guide).

- Send a print job.

  All labels in the job will be printed without stopping and be cut. With the movement of the upper blade the labels will be pressed onto the stack (1) and the table will be moved down little by little.

  - When the table reaches the lower end position the print job will be stopped and the error message Box full appears in the display of the printer.

- After the end of the print job or when the error Box full occurs, remove the stack from the table.

- After the error Box full resume the print job by pressing the pause key.

Maintenance

The maintenance is limited to monthly cleaning of the device. The most important is the cleaning of the cutter blades.

Warning: Disconnect the printer from the electrical outlet.

Risk of injury. The cutter blades are sharp.

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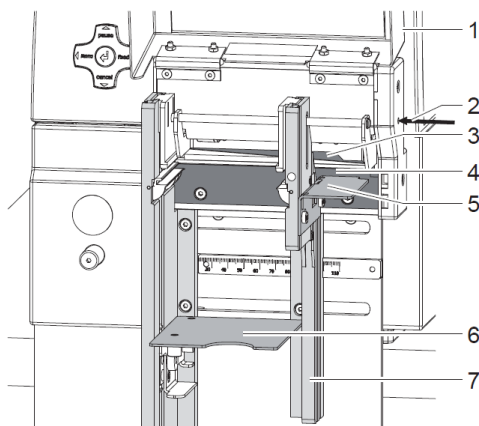
1 Open cover (1).

2 Move table (6) downwards.

3 Remove safety covers (*Mounting the Safety Cover* on page 10-8) and shift the movable side plates (7) apart from each other as far as possible (*Adjusting the Side Plates* on page 10-7).

4 The cutter shaft can be reached through the hole (2). If necessary turn the cutter shaft with an Allen key (2.5 mm) and that way displace the upper blade (3).

5 Remove dust and paper particles with a soft brush or a vacuum.

6 Remove all deposits at the cutter blades (3,4) with isopropyl alcohol and a soft cloth.

Note: When cutting through the label material instead of the label gap remains of adhesive may accumulate on the blades. If operating in backfeed mode, such remains of adhesive may be deposited on the drive roller as well. Clean the drive roller and the cutter blades often.

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7 Re-adjust the side plates and re-mount the safety covers.

8   Move the table upwards until it stops.

9   Close cover.

Error Messages

Specific Error Messages concerning the Stacker with Cutter

Error message	Cause	Remedy
Cutter jammed	Motor current increases too much, cutter returns in the home position without completion of the cut.	
	Material too thick	Change material
	Bracket on the upper blade collides with safety cover	Use safety covers matching the table width. Re-adjust the movable side plates.
	Table does not move downwards while stacking	Reduce the brake of table movement as necessary by turning the screw (1) anti-clockwise in steps of quarter turns.
Cutter blocked	Cutter cannot reach the home position within a defined time after cut start	Switch off the printer. Remove material. Switch on the printer. Restart print job. Change material
	No cutter function	Switch the printer off and then on. If error recurs call service.
Cutter open	Cover of the stacker is not closed	Close cover. Press pause key to continue the print job.
Box full	Table has reached the lower end position and cannot take anymore labels	Remove stack. Move table upwards until it stops. Press pause key to continue the print job.

CS4 Cutter/Stacker Accessory
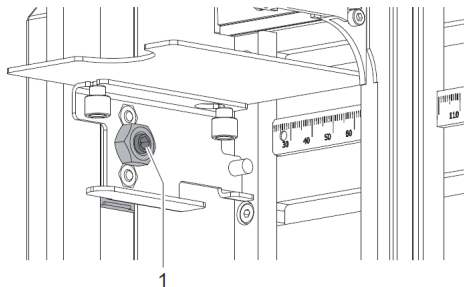
Chapter 11:
Cleaning and basic maintenance

- **Maintenance plan -** Describes how often maintenance tasks should be performed

- **Tools and cleaning agents -** Describes the tools needed for maintenance

- **General cleaning -** Describes general cleaning

- **Cleaning the print roller -** Describes how to clean the print roller

- **Cleaning the printhead -** Describes how to clean the printhead

- **Cleaning the label sensor -** Describes how to clean the label sensor

- **Replacing the printhead on Pronto! 482/486 models -** Describes how to replace the printhead

- **Replacing the printhead on Pronto! 682/863 -** Describes how to replace the printhead

- **Replacing the print roller and rewind assist roller -** Describes how to replace the print roller and rewind assist roller

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DANGER!: Risk of death via electric shock! Disconnect the printer from the power supply before performing any maintenance work.

Maintenance plan

Maintenance task	When
General cleaning (see *General cleaning* on page 11-3)	as necessary
Clean print roller (see *Cleaning the print roller* on page 11-4)	each time the label roll is changed or when the print image and label transport are adversely affected.
Clean printhead (see *Cleaning the printhead* on page 11-5)	**direct thermal printing**: each time the label roll is changed **thermal transfer printing**: each time the transfer ribbon is changed or when the print image is adversely affected
Clean label sensor (see *Cleaning the label sensor* on page 11-6)	when the label roll is changed
Replace printhead (*Replacing the printhead on Pronto! 482/486 models* on page 11-7)	when errors in the print image occur
Replace print roller and rewind assist roller (see *Replacing the print roller and rewind assist roller* on page 11-12)	when print image and label transport are adversely affected

Tools and cleaning agents

Note: For adjustments and simple installation work, use the accompanying hexagonal wrench located in the bottom section of the print unit. No other tools are required for the work described here.

Cleaning agents

- soft brush

- roller cleaner

- soft cloth

- cotton swabs

- pure alcohol

- special cleaning pen

General cleaning

Caution: Abrasive cleaning agents can damage the printer! Do not use abrasives or solvents to clean the outer surfaces or assemblies.

- Remove dust and paper fuzz in the printing area with a soft brush or vacuum cleaner.

- Clean outer surfaces with an all-purpose cleaner.

Cleaning the print roller

1 Turn lever counterclockwise to lift the printhead.
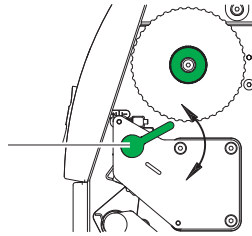
2 Remove labels and transfer ribbon from the printer.

3 Remove deposits with roller cleaner and a soft cloth.

4 If the roller appears damaged, replace it (see *Replacing the print roller and rewind assist roller* on page 11-12).

Cleaning the printhead

Substances may accumulate on the printhead during printing and adversely affect printing, e.g. differences in contrast or vertical stripes.

Caution: Printhead can be damaged! Do not use sharp or hard objects to clean the printhead. Do not touch protective glass layer of the printhead.

Caution: Risk of injury from the hot printhead line. Ensure that the printhead has cooled down before starting cleaning.

1   Turn lever counterclockwise to lift the printhead.
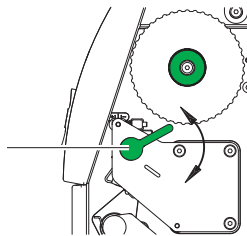
2   Remove labels and transfer ribbon from the printer.

3   Clean printhead surface with special cleaning pen or a cotton swab dipped in pure alcohol.

4   Allow printhead to dry for 2–3 minutes before commissioning the printer.

Cleaning the label sensor

Caution: The cleaning method described here cannot be used for the Pronto! 682 and Pronto! 863 label printers. There is a risk that the label sensor cable could be ripped out. Contact Technical Support for assistance.

Caution: Label sensor can be damaged! Do not use sharp or hard objects or solvents to clean the label sensor.

The label sensor can become dirtied with paper dust. This can adversely affect label detection.
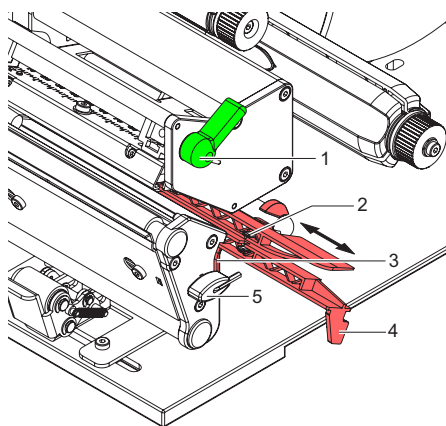
1. Turn lever (1) counterclockwise to lift the printhead.
2. Remove labels and transfer ribbon from the printer.
3. Remove hexagonal wrench (5) from its retainer.
4. Press the latch (3) and slowly pull label sensor outward via the tab (4). Ensure that the label sensor cable is not tensioned by this.
5. Clean label sensor and sensor units (2) with brush or cotton swab soaked in pure alcohol.
6. Push label sensor back via tab (3) and set it (see *Setting the label sensor* on page 6-4).
7. Push hexagonal wrench (4) into retainer.
8. Reload labels and transfer ribbon (see *Chapter 6: Loading media*).

Replacing the printhead on Pronto! 482/486 models

Replacing the printhead
The printhead of the label printer can be replaced without the need for fine adjustment. The printhead must be replaced if worn or when switching to a printhead with higher or lower resolution. For better differentiation, the print heads have a label stating the printer type and resolution.

1	Head plate
2	Plug connection
3	Plug connection
4	Screw
5	Printing line
6	Pins
7	Printhead
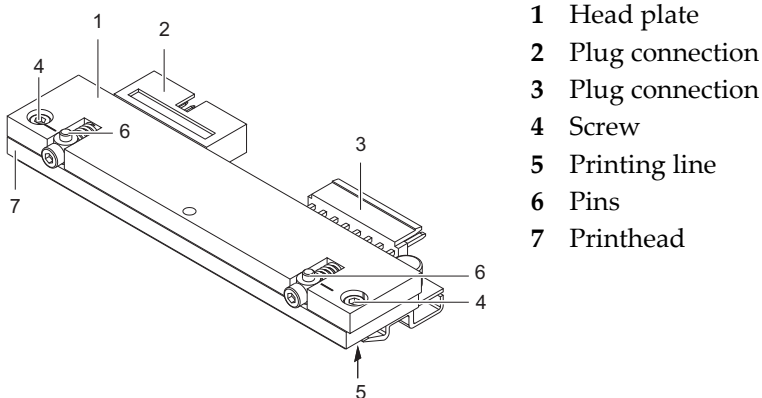
Note: The printhead (7) is preinstalled on a head plate (1) and precisely aligned at the factory. Do not loosen the screws (4) under any circumstances.

Caution: The printhead can be damaged by static electricity discharges and impacts!

• Set up printer on a grounded, conductive surface.

• Ground your body, e.g. by wearing a grounded wristband.

• Do not touch contacts on the plug connections (2, 3).

• Do not touch printing line (5) with hard objects or your hands.
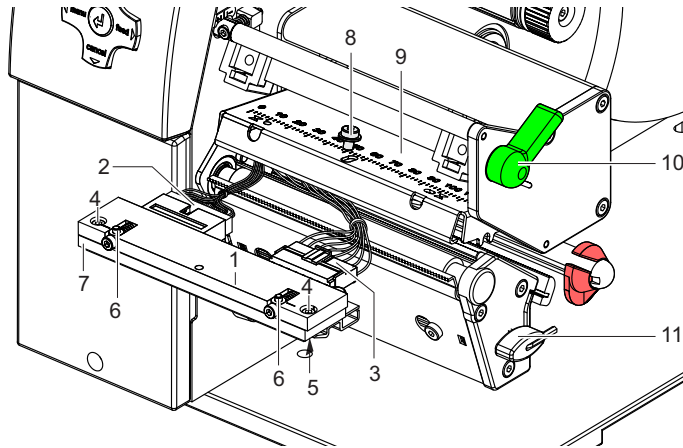
Removing the printhead

1   Turn lever (10) counterclockwise to lift the printhead.

2   Remove labels and transfer ribbon from the printer.

3   Remove hexagonal wrench (11) from its retainer.

4   Lightly keep printhead mounting bracket (9) on the print roller with one finger and screw out screw (8) with the hexagonal wrench and remove it and the washer.

5   Swivel printhead mounting bracket (9) upward.

6   Remove printhead from the printhead mounting bracket (9) if necessary.

7   Loosen both plug connections (2, 3) on the printhead and set printhead down on a clean, soft surface.

Installing the printhead

1   Attach plug connections (2, 3).

2   Position printhead in printhead mounting bracket (9) in such a way that the pins (6) are secured in the corresponding holes in the printhead mounting bracket (9).

3   Lightly keep printhead mounting bracket (9) on the print roller with one finger and check for correct positioning of the printhead mounting bracket (9).

4   Screw in screw (8) with washer with the hexagonal wrench and tighten it.

5   Reload labels and transfer ribbon (see *Chapter 6: Loading media*).

Replacing the printhead on Pronto! 682/863

Replacing the printhead

The printhead of the label printer can be replaced without the need for fine adjustment. The printhead must be replaced if worn or when switching to a printhead with higher or lower resolution. For better differentiation, the print heads have a label stating the printer type and resolution.
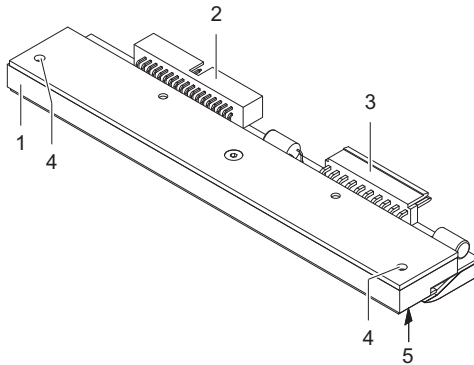
1	Head plate
2	Plug connection
3	Plug connection
4	Screw
5	Printing line

Caution: The printhead can be damaged by static electricity discharges and impacts!

- Set up printer on a grounded, conductive surface.

- Ground your body, e.g. by wearing a grounded wristband.

- Do not touch contacts on the plug connections (2, 3).

- Do not touch printing line (5) with hard objects or your hands.
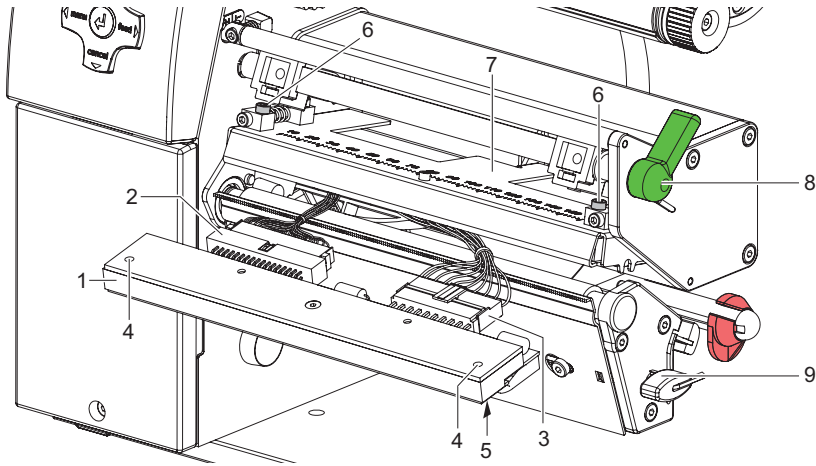
Removing the printhead

1 Turn lever (8) counterclockwise to lift the printhead.

2 Remove labels and transfer ribbon from the printer.

3 Remove hexagonal wrench (9) from its retainer.

4 Lightly keep printhead mounting bracket (7) on the print roller with one finger and loosen screws (6) with the hexagonal wrench.

5 Swivel printhead mounting bracket (7) upward.

6 Remove printhead from the printhead mounting bracket (7) if necessary.

7 Loosen both plug connections (2, 3) on the printhead.
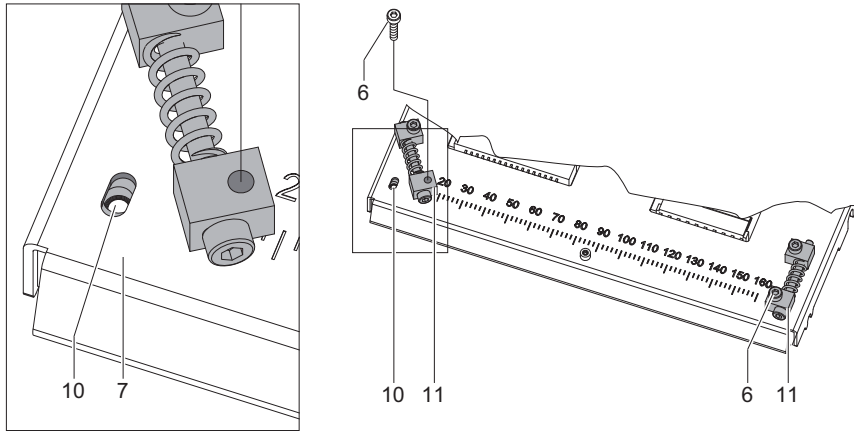
Installing the printhead

1   Attach plug connections (2, 3).

2   Swing the adjustment elements (11) sidewards to uncover the slots (10) in the printhead carriage.

3   Put in the printhead into the printhead carriage and swing down the printhead assembly by hand and hold it.

4   Position the printhead in such a way that the threaded holes of the printhead are centered into the slots (10) of the printhead carriage.

5   Swing back the adjustment elements (11) to the home position.

6   Insert and tighten the screws (6).

7   Reload labels and transfer ribbon (see *Chapter 6: Loading media*).

Replacing the print roller and rewind assist roller
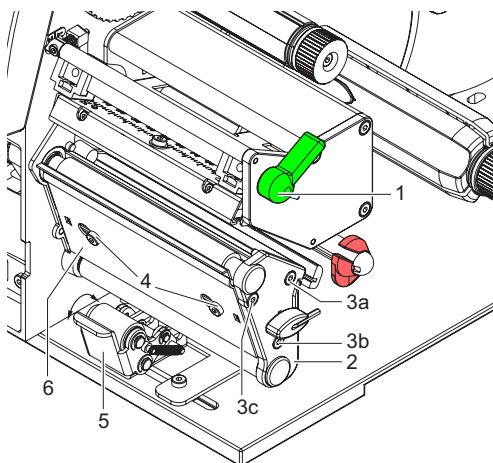
Removing the side plate

1 Turn lever (1) counterclockwise to lift the printhead.

2 Lift the pinch roller (5) off the rewind assist roller.

3 Remove labels and transfer ribbon from the printer.

4 Loosen screws (4) on plate (6) with hexagonal wrench by several turns and remove plate (6).

5 Unscrew screws (3abc) of the side plate (2) with hexagonal wrench. In the Pronto! 863 a pin with a hexagonal shaft is mounted instead of the screw (3b). Loosen the pin with a jaw wrench.

6 Remove side plate (2).
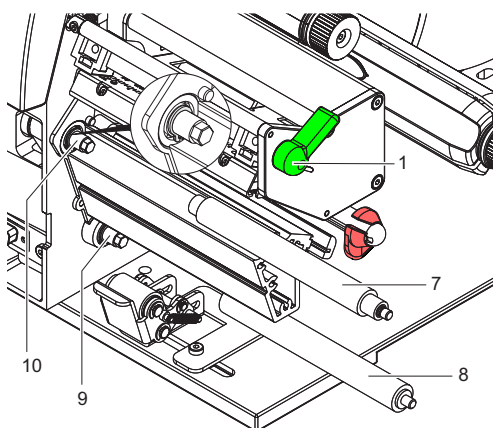
Removing and installing rollers

1 Pull print roller (7) and rewind assist roller (8) from the shafts (9, 10) on the housing.

2 Clean shafts (9, 10) of the rollers (see expanded view at shaft (10)).

3 Slide print roller (7) and rewind assist roller (8) onto their respective shafts and turn slightly until the hexagon of the shaft engages in the hexagon socket of the print roller.

4 Set side plate (2) in place and screw it down with the screws (3abc) by tightening the screws in order, i.e. a, b then c.

5 Set plate (6) in place and tighten screws (4) with hexagonal wrench.

Chapter 12:
Test functions

This chapter contains the following sections:

- **Overview -** Provides an overview of test functions

- **Short status -** Describes the short status menu

- **Status print -** Describes the status print function

- **Font list -** Describes the font list function

- **Device list -** Describes the device list function

- **WiFi Status -** Describes the WiFi status print function.

- **ASCII Dump Mode -** Describes the ASCII dump mode function

- **Test grid -** Describes the test grid function.

- **Label profile -** Describes the label profile function.

Overview

The printer is equipped with different test functions providing information on:

- the most important configuration parameters

- the fonts available in the printer

- important hardware components and connected peripheral devices

- the print image quality and state of the thermal printhead

- the function of label detection in conjunction with the optical properties of the label medium

- the label data sent from the computer or read out from the memory card

The test functions are found in the Test menu:

1   Press the menu button.

2   Select Test menu.

3   Switch to the test function level with the down arrow button.

4   Select the desired test function with the right and left arrow buttons.

5   Start the selected test function with the ↵ button.

Short status

The Short status menu provides an overview of important status information in the display of the printer.

1 Press the menu button.

2 Select Short status menu.

3 Scroll through the individual lines with the up and down arrow buttons.

You can exit the Short status menu with the ↵ button.

The following configuration parameters are displayed in the Short status menu:

Line	Meaning	Example
1	Printer type	Pronto 482
2	Version number of the printer operating system (firmware)	Firmware V3.02
3	Creation date of firmware	(MAR 2 2006)
4	Version number of the system loader (bootloader)	Bootloader V1.09
5	Creation date of the bootloader	(FEB 20 2006)
6	Serial number of the PCB CPU	PCB #111070553751
7	Revision of the CPU PCB and the CPU	PCB/CPU Rev. 7/4
8	Operative time and number of printed labels	Hours/no. of labels: 156h/3564
9	Previously printed paper lengths with thermal direct printing / thermal transfer printing	Thermal/Transfer 13,54m/269,11m
10	IP address of the label printer when connected to a network	DHCP-IP 192.168.9.13
11	mDNS name of the printer for Zeroconf (Zeroconf is a set of techniques that automatically create a usable IP network without configuration or special servers.)	mDNS: cab-28154.local

Line	Meaning	Example
12	MAC address of the network adapter on the CPU PCB	MAC 0002E70228F4
13	Type and size of the installed memory medium	CF 30MB
14	Size of the Internal Flash-File-Systems see the "QuickLabel Pronto 482/486/682/863 Programmer's Guide"	IFFS 8MB
15	Resolution of the installed thermal printhead	TPH 300dpi,1248dots

Status print

The Status print function prints a test image containing information on the configuration and status of the printer. The printout occurs using the heat level and print speed specified in the Setup > Print param. menu.

Note: The printout occurs without taking the label gaps into consideration. This is why endless media are most suitable for this purpose.

1 Insert printable medium (labels, endless paper) which extends across the entire printing width.

2 If the printout is to occur using thermal transfer printing, insert transfer ribbon with the maximum width.

3 Press the menu button.

4 Select Test > Status print menu.

5 Start printout with the ↵ button.

You can cancel the printout with the cancel button.

Status print

Pronto 486 (quicklabel-systems-9875)	
Firmware V3.11 (Aug 9 2007)	
Bootloader V1.18 (May 29 2007)	
PCB serial #111070553751	

Local settings

Country	United Kingdom
Timezone	UTC+1
Daylight saving	EU
Date	10/09/2007
Time	13:17:28

Machine param.

Printhead pos. X	0.0 mm
Printhead pos. Y	0.0 mm
Tear-off pos.	0.0 mm

Demand sensor

Peel position	0.0 mm
Trigger input	Off
Limit peel-off spd.	On
Backfeed delay	250 ms

D

Cutter

Cut position	0.0 mm
Trigger input	Off

C

Applicator

Mode of oper.	Stamp on
Mode of appl.	Print-Apply
Waiting position	up
Blow time	10 ms
Roll-on time	0 ms
Support delay on	0 ms
Support delay off	270 ms
Delay time	0 ms
Lock time	0 ms
Peel position	0.0 mm
Vacuum control	On

A

Backfeed position	1.0 mm
Brightn. LCD	9
Contrast LCD	6
Time Powersave	5 min
Debug mode	On

Print param.

Heat level	0
Print speed	100 mm/s
Transfer print	On
Warn level ribbon	32 mm
Label sensor	Gap Sensor
Tear-off mode	On
Backfeed	always
Backfeed	head down
Error-Reprint	On
Protocol error	On
Barcode error	On
Pause reprint	Off
Width ASCII dump	Automatic

S

Interfaces

Default card slot	CompactFlash
Character set	Windows 1252
IEEE 1284	
Bidirectional	On

O

RS-232	
Baud rate	57600
Handshake	RTS/CTS
Keyboard	
Layout	Automatic
NumLock	On
RS-422/485	
Interface	RS-422
Baud rate	57600
Handshake	XON/XOFF

D

O

Ethernet	
SSID	MyNet
Encryption	WPA-PSK (TKIP)
IP	DHCP;0.0.0.0
Gateway	Off
SMTP server	Off
Return address	
Raw-IP port	9100
LPD	On
LPD queue name	lp
SNMP	On
Sink 1	0.0.0.0;public
Sink 2	0.0.0.0;public
Time server	Off
Anonymous FTP	Off
Network error	Off

W

R

L

E

Security

PIN	On

Printer info

Operative time	760h 50min
	(Service: 760h 50min)
Number of labels	10931
	(Service: 10931)
Thermal transfer	713.504m
	(Service: 713.504m)
Thermal direct	690.315m
	(Service: 690.315m)
Temperature	24°C (CPU 37°C)
Heat voltage	24.0V
Brightness	1/3,14/85

The Status print contains the following information:

Symbol	Information
	• Device type • Version and creation date of the firmware • Version and creation date of the system loader (bootloader)
	Current values of selected local settings (see *Local settings* on page 5-2).
	Current values of selected device settings (see *Device settings* on page 5-3).
	Current values of selected print parameters (see *Printing parameters* on page 5-5).
	Current values of selected interface parameters (see *Interfaces* on page 5-8).
	Status of PIN activation (see *Security* on page 5-12).
	• Operative time • Number of labels printed • Printed length with thermal transfer printing and thermal direct printing • Current measured values of the printhead temperature and heat voltage • Information on the working points of the label sensor
Line pattern	The Status print presents lines differing in thickness at various distances at the end. They are used to evaluate the print quality.

Font list

The Font list function prints the most important parameters of the fonts available in the printer in tabular form. The table contains both the original fonts in the printer and other fonts loaded into the printer. The printout occurs using the heat level and print speed specified in the Setup > Print param. menu.

Note: The printout occurs without taking the label gaps into consideration. This is why endless media are most suitable for this purpose.

1   Insert printable medium (labels, endless paper) which extends across the entire printing width.

2   If the printout is to occur using thermal transfer printing, insert transfer ribbon with the maximum width.

3   Press the menu button.

4   Select Test > Font list menu.

5   Start printout with the ↵ button.

You can cancel the printout with the cancel button.

Font list			
Pronto 486 - 10/09/2007 -15:08:36			
Firmware V3.11 (Aug 9 2007) - #111070553751			
No.	Name	Type	Description
-1	_DEF1	Bitmap	Default Font 12x12 dots
-2	_DEF2	Bitmap	Default Font 16x16 dots
-3	_DEF3	Bitmap	Default Font 16x32 dots
-4	OCR_A_I	Bitmap	OCR-A Size I
-5	OCR_B	Bitmap	OCR-B
3	BX000003	TrueType	Swiss 721
4	BX000005	TrueType	**Swiss 721 Bold**
596	BX000596	TrueType	Monospace 821

The parameters have the following meaning:

Column	Meaning
No.	ID number of the font required for programming (command T).
Name	Name with which the font is saved internally.

Column	Meaning
Type	Type of font generation. It provides information on the variability of the font and is important when programming (command T).
Description	Explanations of the font: size, font family. The printout occurs in the appropriate font.

Device list

The Device list function prints out the most important information on hardware components of the printer and connected devices. The printout occurs using the heat level and print speed specified in the Setup > Print param. menu.

Note: The printout occurs without taking the label gaps into consideration. This is why endless media are most suitable for this purpose.

1   Insert printable medium (labels, endless paper) which extends across the entire printing width.

2   If the printout is to occur using thermal transfer printing, insert transfer ribbon with the maximum width.

3   Press the menu button.

4   Select Test > Device list menu.

5   Start printout with the ↵ button.

You can cancel the printout with the cancel button.

Device list	
Pronto 486 - 10/09/2007 -15:14:17 Firmware V3.11 (Aug 9 2007) - #111070553751	
Name	Description
CPU	Thor, #111070553751
	PCB-Rev. 7, CPU-Rev. 4
TPH	300 dpi, 1248 dots
I/F1	Ethernet 10/100 MBit/s
	MAC: 00:02:E7:02:28:F4
I/F2	USB 2.0 Device
I/F3	RS-232
IFFS	8MB
USB [1]	Generic/Generic Hub
[0] Full	Rev. 3.00
	Mfr: 03EB,Class: 09/00,Protocol: 00, Phase: 20/0
USB [2]	
[1/1] Low	#7-5037793,Rev. 1.05
	Mfr: 0985,Class: FF/00,Protocol: FF, Phase: 20/4
USB [3]	cab/Frontpanel
[1/3] Full	Rev. 2.05
	Mfr: 0985,Class: FF/1C,Protocol: 00, Phase: 20/1

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Name	Information
CPU	• Type and serial number of the CPU PCB • Revision of CPU PCB and FPGA
TPH	Resolution and heating point number of the installed thermal printhead.
I/F [x]	Type of interfaces installed x: Number of interface
IFFS	Size of the Internal Flash File System.
CF / CFEXT / PCCARD / USBMEM	Size and type of an installed external memory medium.
USB [a] [b/c] Speed	Type and revision of installed USB devices **a**: number of USB device **b**: number of USB device to which device a is connected **c**: number of interface of device b to which device a is connected **Speed**: data transfer speed (low, full, high)

WiFi Status

If the WLAN card is installed, the WiFi status function prints out a list of the most important parameters of the accessible Wireless Access Points. The printout occurs using the heat level and print speed specified in the Setup > Print param. menu.

Note: The printout occurs without taking the label gaps into consideration. This is why endless media are most suitable for this purpose.

1 Insert printable medium (labels, endless paper) which extends across the entire printing width.

2 If the printout is to occur using thermal transfer printing, insert transfer ribbon with the maximum width.

3 Press the menu button.

4 Select Test > WiFi status print menu.

5 Start printout with the ↵ button.

You can cancel the printout with the cancel button.

WiFi status			
Pronto! 486 - 10/09/2007 -15:21:00 Firmware V3.11 (Aug 9 2007) - #111070553751			
Channel	Name/BSS ID	WiFi signal strength	Encryption
6	MyNet 00:11:6B:61:8D:C1	●●●●● 54,0 MBit/s	WPA-PSK (TKIP)
11	BT4233SA70 00:11:6B:61:AB:82	●○○○○ 54,0 MBit/s	WEP

Name	**Information**
Channel	Channel; frequency range of the Access Point
Name/BSS ID	Name of the wireless LAN MAC address of the Access Points
WiFi signal strength	Scale of the WiFi signal strength Data transfer rate
Encryption	Type of data encryption

ASCII Dump Mode

ASCII Dump Mode offers the option of checking incoming control sequences at the interface when working with direct programming. The incoming commands at the printer are printed out as text. In addition, a corresponding error message is printed out immediately after an error occurs.

The printout occurs using the heat level and print speed specified in the Setup > Print param. menu and is started after four lines have been received.

Note: The printout occurs without taking the label gaps into consideration and without transfer ribbon checking. This is why endless media are most suitable for this purpose.

If you only have media (labels, endless paper) which do not cover the entire printing width, you can reduce the width of the printout continuously down to 50 mm with the Width ASCII dump parameter (see *Printing parameters* on page 5-5).

If you have questions about programming, keep a printout of your label file which was created in ASCII Dump Mode handy. The printout can be transmitted clearly via fax.

1   Load printable medium (labels, endless paper).

2   If the printout is to occur using thermal transfer printing, insert transfer ribbon.

3   If the printable medium and/or the transfer ribbon does not cover the entire printing width, reduce the width of the printout accordingly with the Width ASCII dump parameter (see *Printing parameters* on page 5-5).

4   Press the menu button.

5   Select Test > ASCII Dump Mode menu.

6   Switch to Monitor mode with the ↵ button.

7   Send print jobs.

8   Call up the last few lines of a label description with the feed button.

Press the cancel button if you would like to cancel the printout or switch to the Ready mode.

The control characters (ASCII code 00 to 31) are presented in the following form:

Code DEC	HEX	Druck	Code DEC	HEX	Druck	Code DEC	HEX	Druck	Code DEC	HEX	Druck
00	00	^N_LU	08	08	B$_S$	16	10	^D_EL	24	18	^C_NA
01	01	^S_HO	09	09	H$_T$	17	11	$^D_{C_1}$	25	19	E$_M$
02	02	$^S_{T_X}$	10	0A	L$_F$	18	12	$^D_{C_2}$	26	1A	^S_BU
03	03	$^E_{T_X}$	11	0B	V$_T$	19	13	$^D_{C_3}$	27	1B	^E_CS
04	04	$^E_{O_T}$	12	0C	F$_F$	20	14	$^D_{C_4}$	28	1C	F$_S$
05	05	$^E_{N_Q}$	13	0D	^C_R	21	15	$^N_{A_K}$	29	1D	G$_S$
06	06	$^A_{C_K}$	14	0E	S$_O$	22	16	$^S_{Y_N}$	30	1E	R$_S$
07	07	$^B_{E_L}$	15	0F	S$_I$	23	17	$^E_{T_B}$	31	1F	U$_S$

Example:

In the following two figures, the printout in Monitor mode is contrasted with the "normal" printout of a label.

free writing turn

150 degree 120 degree 90 degree 60 degree 30 degree

```
J CL
  RF
H 100,4,D CL
           RF
S 11;0,0,68,71,106; CL
                    RF
T 20,10,0,596,pt18;free writing tur
n CL
  RF
T 72,54,30,596,pt18;30 degree CL
                              RF
T 65,46,60,596,pt18;60 degree CL
                              RF
T 56,42,90,596,pt18;90 degree CL
                              RF
T 46,44.5,120,596,pt18;120 degree CL
                                  RF
T 38,50.5,150,596,pt18;150 degree CL
                                  RF
A 1 CL
    RF
```

Test grid

The Test grid function prints out the geometric pattern on a background grid. This allows you to assess the evenness of the print quality.

The printout occurs using the heat level and print speed specified in the Setup > Print param. menu.

Note: The printout occurs without taking the label gaps into consideration. This is why endless media are most suitable for this purpose.

1   Insert printable medium (labels, endless paper) which extends across the entire printing width.

2   If the printout is to occur using thermal transfer printing, insert transfer ribbon with the maximum width.

3   Press the menu button.

4   Select Test > Test grid menu.

5   Start printout with the ↵ button.

The geometric pattern is printed every 5 seconds once the Test grid function is started. You can adjust the printer during the pauses between the printouts.

You can end the printout of the test grid with the cancel button.
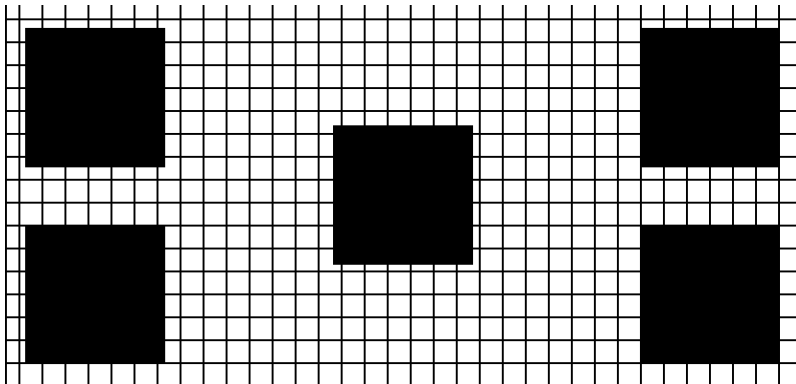
Label profile

The Label profile function carries out a longer label advance. It saves the values measured by the label sensor here and then prints them out in two diagrams. The printout is used to check label detection in conjunction with the optical properties of the label medium.

The printout occurs using the heat level and print speed specified in the Setup > Print param. menu.

Note: The printout occurs without taking the label gaps into consideration. This is why endless media are most suitable for this purpose.

---

1   Select the label sensor to be tested in the menu Setup > Print param. (see *Printing parameters* on page 5-5).

2   Load the label medium to be tested into the printer.

3   Press the menu button.

4   Select Test > Label profile menu.

5   Start the function with the ↵ button.

The printer performs a longer label advance. The label sensor measures the transparency/reflection capacity of the label material here. The message Test print OK appears in the display once the advance is complete.

6   Insert printable medium (labels, endless paper) which extends across the entire printing width.

7   If the printout is to occur using thermal transfer printing, insert transfer ribbon with the maximum width.

8   Start the diagram printout with the ↵ button.

The following figure shows an example label profile. The top diagram shows the gradient determined for label detection. The rise (first derivative) of the gradient is represented in the bottom diagram. The starting end of the label is

located at the point where the rise of the gradient exhibits a minimum (see vertical dotted line).
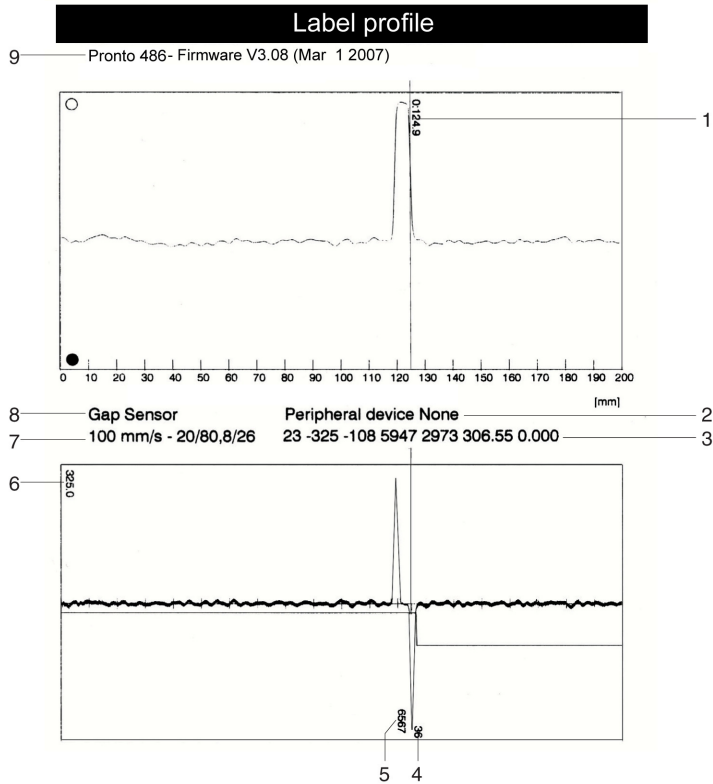
1	Coordinate in the direction of paper flow at which the label start was detected
2	Type of peripheral device connected
3	Information for the firmware developer
4	Width of the negative derivative in motor increments
5	Stroke between start and end of the negative derivative
6	Scale factor for the derivative diagram
7	Service information for adjusting the label sensor
8	Method of label detection (transmitted light/reflex bottom)
9	Device name and current firmware version

Chapter 13:
Service functions

This chapter contains the following sections:

- **Performing firmware update -** Describes how to update the printer firmware

- **Save settings -** Describes how to save printer configurations to a file

- **Load settings -** Describes how to load printer configurations from a file

- **Cleaning Interval -** Describes how to use the cleaning interval function

Performing firmware update

The firmware of the printer is saved in a Flash EPROM. You can update the firmware using the following functions:

- Firmware upd.: Copy a firmware file from a computer connected to one of the interfaces of a label printer (see *Copying new firmware via interface* on page 13-2).

- Firmw. fr. card: Copy a firmware file from a memory card (see *Copying new firmware from memory medium* on page 13-3).

- FTP firmware update via printer management (see *FTP firmware update* on page 14-4).

Copying new firmware via interface

1   Press the menu button.

2   Select Service > Firmware upd. menu.

3   Press the ↵ button.

    The Firmware-Upd message appears in the display.

4   Press the ↵ button.

5   If the function Firmware upd. is protected via a PIN, use the arrow buttons to enter the code number and confirm with the ↵ button.

6   Open the Windows command prompt on the PC.

7   Configure the serial interface of the PC with the mode command. Enter the command **mode com1: baud=115200 parity=n data=8 stop=1**, for example

8   Send the firmware file (e.g. 303_6518.x2) to the printer. Enter the command **copy /b 303_6518.x2 com1:** , for example.

    A progress indicator is displayed while the firmware is being copied. OK appears in the display once copying is successfully completed.

9   Press the ↵ button.

Copying new firmware from memory medium

1 Select in the menu Setup > Interfaces > Default card slot depending on the used memory medium CompactFlash or USB Memory.

2 Format CompactFlash memory card or USB flash drive in the printer (see *Format card* on page 15-7).

The directories "fonts", "images", "labels" and "misc" are created on the memory medium here.

3 Copy the firmware file to the "misc" directory of the memory medium. This can be done on a computer or via FTP on the printer.

4 Insert the prepared memory medium into the printer.

5 Press the menu button.

6 Select Service > Firmw. fr. card menu.

7 Press the ↵ button.

8 If the function Firmw. fr. card is protected via a PIN, use the arrow buttons to enter the code number and confirm with the ↵ button.

The names of the firmware files found on the memory medium are shown in the display.

9 If several firmware files are found on the memory medium, select the desired file with the up and down buttons.

10 Press the ↵ button.

The selected firmware file is copied. A progress indicator is displayed while the firmware is being copied. OK appears in the display once copying is successfully completed.

11 Press the ↵ button.

Error messages during the firmware update

If an error occurs during the update, one of the following error codes is shown in the display:

Error code	Meaning
C	Checksum error. /b may have been forgotten in the COPY command or the file is defective.
H	Header error. /b may have been forgotten in the COPY command or the file is defective.
E	EPROM could not be cleared.
V	Programming voltage is too low.
P	Programming error.

Note: If an error occurs with a firmware update, the old firmware version is no longer usable. Restart programming in this case.

Save settings

Note: Access only possible with memory medium in the default card slot.

You can save the printer configuration to a memory medium (memory card, USB flash drive, Internal Flash File System) in the default card slot. The configuration will be saved as XML file in the folder \MISC of the CF card. The current date is used as file name YYYYMMDD.XML (e.g. 20070427.XML for a file saved on 04-27-2007).

1   Insert memory medium.

2   Press the menu button.

3   Select Service > Save settings menu.

4   If the function Save settings is protected via a PIN, use the arrow buttons to enter the code number and confirm with the ↵ button.

    Saving of the configuration data starts. OK is shown in the display when the entire saving procedure is complete.

5   Press the ↵ button.

6   Do not remove the memory medium until the saving procedure is complete.

An error message appearing during the saving procedure may be caused by an unreadable medium (e.g. unknown card type, unformatted card). Information on formatting the CF card is found in *Format card* on page 15-7.

Load settings

Note: Access only possible with memory medium in the default card slot.

You can load a printer configuration previously saved to a memory medium (memory card, USB flash drive, Internal Flash File System) into the printer with the Load settings function.

1   Insert memory medium.

2   Press the menu button.

3   Select Service > Load settings menu.

4   If the function Load settings is protected via a PIN, use the arrow buttons to enter the code number and confirm with the ↵ button.

5   If several configuration files are found on the memory card, select the desired file with the up and down buttons.

6   Press the ↵ button.

    Loading of the configuration data starts. Do not remove the memory card until the loading procedure is complete. OK is shown in the display when the entire loading procedure is complete.

7   Press the ↵ button.

If an error occurs during the loading procedure, an error message appears in the display. Restart the loading procedure in this case. If an error occurs again, you must enter the configuration parameters via the operating panel.

Cleaning Interval

The Cleaning interval function is used for additional printhead maintenance control. The length of medium which passes the printhead can be selected in increments of 100 m after which the printhead is to be cleaned.

1   Press the menu button.

2   Select Service > Cleaning interval menu.

3   Press the ↵ button.

4   Select the desired value with the left/right arrow buttons or select Off to deactivate the Cleaning interval function.

5   Press the ↵ button.

If the set length of the medium (label strip, transfer ribbon) has passed the printhead and an error occurs in the fl ow of the medium (e.g. label end, transfer ribbon end), the Clean printhead! message appears in the display. The error message for the error which occurred is not displayed until the Clean printhead! message is acknowledged. As long as no errors occur in the medium fl ow, no messages are displayed and the print job is continued even if the cleaning interval has passed.

Chapter 14:
FTP printer management

This chapter contains the following sections:

- **FTP logon -** Describes how to establish an FTP connection

- **Directory structure of the FTP server -** Describes the folder structure of the FTP server

- **FTP firmware update -** Describes how to update firmware via FTP

Using the File Transfer Protocol (FTP), you can manage and transfer files on the network via the Ethernet interface or WLAN card. You will require an FTP program (FTP client) which supports the "binary" transfer mode to manage the printer. The printer functions as an FTP server.

FTP printer management is comprised of four functions:

- management of the memory card installed in the label printer (see *Chapter 15: Memory media*)

- printer firmware update (see *Copying new firmware via interface* on page 13-2)

- IFFS management (see *Directory structure of the FTP server* on page 14-3)

- direct printing via copying .LBL files (see *Directory structure of the FTP server* on page 14-3)

FTP logon

To establish an FTP connection, the client must be logged on to the server. The logon type depends on the client. The following information must be specified in any case, however:

- IP address of the label printer

- User name and password

Access to the printer management functions depends on the user name:

User name	Password	Executable functions
anonymous	any	Display and download of the files stored on the memory media.
root	printer PIN	Display, upload and download of memory medium data, and FTP firmware update. Label files loaded on the memory media must be of the .LBL type.

After logging on, you can access the FTP server in a manner similar to a Windows folder.

Caution: It is absolutely necessary to define a PIN for FTP access with the username "root". The initial setting of the PIN can be made via the operating panel of the printer or via the printer website.

Directory structure of the FTP server

The files accessible via FTP are found in several folders:

Folder name	Contents
execute	Printing of label files stored in this folder is started immediately. The files must be of the type .LBL. The corresponding file is deleted once the print job is complete.
system	Firmware file of the printer
Display of the following folders depends on the installed memory media and the defined default card slot:	
card	Data of the memory medium in the default card slot. The structure of the folder depends on the medium type.
cf	Data of the CompactFlash memory card in the printer if the CF card slot is not default. The files are separated into several subfolders accordingly based on their type. When copying the files to the "cf" folder, type-based sorting occurs automatically in the subfolders.
cfext	Data of the CompactFlash memory card in the external operating panel if the external card slot is not default. The files are separated into several subfolders accordingly based on their type.
iffs	Contents of the IFFS (Internal Flash File System). When logging on with the username "root", the contents of the IFFS can be managed.
pccard	Data of the PC card if the card slot is not primary. This folder does not have a substructure.
usbmem	Data of the USB flash drive if the USB flash drive is not default. The files are separated into several subfolders accordingly based on their type. When copying the files to the "cf" folder, type-based sorting occurs automatically in the subfolders.

FTP firmware update

To carry out a firmware update, you must be logged on with the username "root" (see *FTP logon* on page 14-2).

1   Ensure that the label printer is in "Ready" mode. See *Status tab* on page 5-15.

2   Set the "binary" transfer mode in the FTP client.

3   Open the "system" folder.

4   Copy a valid firmware file (e.g. 303_6518.x2) to the "system" folder.

     FTP-Firmware-UPd appears in the display of the printer. The status of the saving procedure is shown by a progress indicator in the display. The printer resets automatically after the update is carried out successfully.

You can check whether the firmware update was carried out successfully on the "Status" tab of the printer website.

Chapter 15:
Memory media

This chapter contains the following sections:

- **Suitable Memory Media -** Describes compatible media types

- **Installation -** Describes how to install external memory media

- **Formatting -** Describes how to format a memory card

- **Directory Structure -** Describes the folder structure for CompactFlash cards and USB flash drives

- **Writing -** Describes how to write to a memory medium

- **Memory media functions in the offline menu -** Describes memory media functions available in the offline menu

Graphics, fonts, label descriptions and database information can be saved for the long-term on memory media.

Note: Always create a backup copy of the memory card in case of a malfunction.

Suitable Memory Media

External media

- Type 1 CompactFlash card up to a maximum size of 2 GB in the corresponding card slot of the printer or in the external operating panel

- PC card (PCMCIA) in the corresponding card slot of the printer

- USB flash drive up to a maximum size of 2 GB at USB master interface

Internal medium

- Approximately 5 MB flash memory inside the printer (Internal Flash File System)

Installation

Note: For external memory media only!

1   Slide memory card contact-side first into the matching slot as far as it will go. The rear section of the inserted memory card still extends from the device housing so that it can be removed by hand.

    or

    Connect USB flash drive to an USB master interface.

Note: When the memory cards are slid onto the contact pins, light physical resistance can be felt.

2   Press the menu button.

3   Check whether the Memory card menu is shown in the display. If the Memory card menu is not shown in the display, it could be because:

    - the card slot being used is not selected as the default card slot

    - the memory card is not inserted far enough into the card slot

    - the memory card is entered incorrectly

Note: Do not remove a memory medium while it is being accessed. You can configure the printer so that access to a memory medium is indicated on the status line

Formatting

Note: For CompactFlash cards and PC cards only!

If the memory medium has not been pre-formatted in a suitable way, it can be formatted it in the following manners:

•   Formatting in the printer via the Format card (see *Formatting* on page 15-3) menu item.

•   Formatting in the printer via the interface with the Mf;name CR command. See "QuickLabel Pronto 482/486/682/863 Programmer's Guide".

Directory Structure

On CompactFlash cards some folders are created during formatting.

On USB flash drives connected to the printer, the same directory structure is automatically generated when uploading files to the flash drive:

Folder name	Contents
fonts	Font files
images	Graphic files
labels	Label description files
misc	Firmware, Setup and TMP files

Note: PC cards have no folders.

Writing

The memory medium can be written to in several ways. The most functionally secure way is writing to the card in the printer via a data interface.

Note: The medium in the default card slot is written to by default. To write to a medium in another slot specify the path name of the slot in the file name (see "QuickLabel Pronto 482/486/682/863 Programmer's Guide").

Example: With direct programming, the command sequence for saving a label (file ABC) has the following form:

```
Ms LBL;                      ABC Command for saving the file ABC
J                            |
H 100,0,T                    |
S |1;0,0,68,71,104           | Contents of the file ABC
T 10,10,0,3,pt15;memory card |
A 1[NOPRINT]                 |
Ms LBL                       End of save command
```

- After transfer of the command sequence, the file ABC is saved on the memory card with the commands from J to A.

- Only one label is printed each time the file ABC is called up.

- The [NOPRINT] parameter in command A suppresses the printing of a label when the file is saved.

- If you would like to print the label a variable number of times, you must put command A after the ending Ms command.

Memory media functions in the offline menu

Accessing the Memory card menu is only possible if a memory medium is installed in the default card slot.

Only the medium in the default slot can be operated via the operating panel (see *Interfaces* on page 5-8). When operating via an interface, each card slot can be addressed via a path.

Label from card

You can print labels whose descriptions are saved on the memory medium using the Label from card function.

1   Select the Label from card function in the Memory card menu.

2   Press the ↵ button.

    The name of the label found at the top of the index of the memory medium is displayed.

3   Select the desired label in the index of the medium with the up and down arrow buttons.

4   Press the ↵ button.

    If you have selected a label which was saved with a fixed label quantity, the print job is started immediately.

    For label descriptions with a variable label quantity, you are requested by the display to enter the label quantity.

    If additional input on the label description is required, the display requests you to enter the variable data.

5   Enter the label quantity/variable data with the following buttons:

    • **Left Arrow** - cursor left

    • **Right Arrow** - cursor right

    • **Up Arrow** - increase value at cursor position by 1 or select next letter in alphabet

    • **Down Arrow** - decrease value at cursor position by 1 or select previous letter in alphabet

6   Press the ↵ button briefly to confirm the input and start the print job.

Canceling input:

You can cancel the selection of the label and the label quantity at any time by pressing and holding the ↵ button (at least 2 seconds).

Print directory

You can print out the index of the installed memory card with the Print directory function.

1   Insert printable medium (labels, endless paper) which extends across the entire printing width.

2   If the printout is to occur using thermal transfer printing, insert transfer ribbon with the maximum width.

3   Press the menu button.

4   Select the Print directory function in the Memory card menu.

5   Start printout with the ↵ button.

The printout contains:

•   the name of the memory card

•   information on the saved files

•   the size of the available memory area

Copy memory card

All the data from one memory medium can be copied to another one of the same type with the Copy memory card function. Copying between memory media with different memory capacities is possible. You can also use memory media which already contain data as a destination medium.

Caution: Data loss when copying.

If files with the same name are found on the original and copy media, the files on the copy medium are overwritten without any prior notification. In addition, removal of the memory medium during the copying procedure leads to data loss.

•   Check files for the same name before copying.

•   Only remove or insert memory media when so instructed in the display.

You can prevent unauthorized copying of memory media by using a PIN. (see *Security* on page 5-12)

1   Insert original medium.

2   Press the menu button.

3   Select Memory card > Copy memory card with the right and left arrow buttons.

4   Press the ↵ button.

    A selection field with the selection No appears in the display.

5   Use the up and down arrow buttons to select Yes.

6   Press the ↵ button.

7   If the function Copy memory card is protected via a PIN, use the arrow buttons to enter the code number and confirm with the ↵ button.

    The copying procedure starts. When copying larger amounts of data, the copying procedure is carried out in several copying cycles. An increasing progress indicator is shown in the display during a copy cycle. The Insert dest. instruction then appears.

8   Remove original medium and insert the medium to be written to.

    The data read from the original medium is transferred to the copy medium. The progress indicator in the display shrinks during this process. If only part of the data from the original card was read out, the Insert source instruction appears.

9   Remove copy medium and insert original medium again.

    The next copy cycle begins.

10 Repeat the previous two steps until all data has been copied.

    OK is shown in the display when the entire copying procedure is complete.

11 Press the ↵ button.

If the medium to be written to can no longer accept data during the copying procedure, the Card full error message appears in the display.

Format card

The Format card function can be used to delete all data from a memory medium. This reformats the memory medium. This is why you can also use the Format card function if the Unknown card or Structural err. error message was output when using the medium.

You can prevent unauthorized deleting of memory cards by using a PIN (see *Security* on page 5-12).

1   Insert original medium.

2   Press the menu button.

3   Select Memory card > Format card with the right and left arrow buttons.

4   Press the ↵ button.

    A selection field with the selection No appears in the display.

5   Use the up and down buttons to select Yes.

6   Press the ↵ button.

7   If the function Format card is protected via a PIN, use the arrow buttons to enter the code number and confirm with the ↵ button.

    The deleting procedure starts.

8   Do not remove the medium from the printer during the deleting procedure.

    The memory volume of the medium is shown in the display as soon as the deleting procedure is complete.

9   Press any button.

Printing file contents

The label files found on a memory medium consist of a sequence of printer commands. You can print these command sequences in the form of text with the ASCII dump (Card) function.

1   Insert printable medium (labels, endless paper) which extends across the entire printing width.

2   If the printout is to occur using thermal transfer printing, insert transfer ribbon with the maximum width.

3   Insert a memory medium.

4   Press the menu button.

5   Select the ASCII dump (Card) function in the Memory card menu.

6   Press the ↵ button.

    The index of the memory medium is shown in the display.

7   Select the desired label file in the index of the medium with the up and down buttons.

8   Start printout with the ↵ button.

The data printout is started after four lines are received. For this reason, it is often necessary to call up the last few lines of a label description with the feed button.

You can cancel the printout of the label description with the cancel button.

Chapter 16: Error treatment

This chapter contains the following sections:

- **Error types -** Describes error types

- **Troubleshooting -** Describes troubleshooting issues and solutions

- **Error messages and recovery -** Describes error messages and solutions

Error types

When an error occurs, the diagnostic system displays the error on the screen and switches the printer into one of the three possible error modes, depending on the error type:

Symbol	Navigator pad	Error type
STOP	**pause** flashes **cancel** illuminates	Fault - correctable (see *'Fault - correctable' mode* on page 2-6)
STOP	**cancel** flashes	Fault - irrecoverable (see *'Fault - irrecoverable' mode* on page 2-7)
☠	—	System error (see *'System error' mode* on page 2-7)

Troubleshooting

Problem	Cause	Solution
Transfer ribbon wrinkles	Transfer ribbon deflection not adjusted	See *Setting the feed path of the transfer ribbon* on page 6-11
	Head locking system not adjusted	See *Setting the head locking system* on page 6-7
	Transfer ribbon too wide	Use only transfer ribbons which are just a bit wider than the label.
Print image is blurred or missing in places	Printhead dirty	See *Cleaning the printhead* on page 11-5
	Temperature too high	Decrease temperature via software
	Unfavorable combination of labels and transfer ribbon	Use another ribbon type or brand.
Printer does not stop when transfer ribbon is done.	Direct thermal printing is selected in the software	Switch to thermal transfer printing in the software
Printer prints a series of characters instead of the label format	Printer is in ASCII dump mode	Cancel the ASCII dump mode.
Printer transports the label medium, but not the transfer ribbon.	Transfer ribbon loaded incorrectly	Check course of transfer ribbon and orientation of the covered side and correct if necessary.
	Unfavorable combination of labels and transfer ribbon	Use another ribbon type or brand.
Printer prints only every second label	Format setting in software is too large.	Change format setting in the software.

Problem	Cause	Solution
Vertical white lines in print image	Printhead dirty	See *Cleaning the printhead* on page 11-5
	Printhead defective (failure of dots)	See *Replacing the printhead on Pronto! 482/486 models* on page 11-7
Horizontal white lines in print image	Printer is being operated in Cutting mode or Peel-Off mode with the setting **Backfeed** > **smart**	Change setup to **Backfeed** > **always**. See *Chapter 5: Configuration*
Printing lighter on one side	Printhead dirty	See *Cleaning the printhead* on page 11-5
	Head locking system not adjusted	See *Setting the head locking system* on page 6-7

Error messages and recovery

Error message	Cause	Error recovery
ADC malfunction	Hardware error	Switch printer off and on again. If it occurs again → Service.
Barcode error	Invalid barcode contents, e.g. alphanumeric characters in numerical barcode	Correct barcode contents.
Barcode too big	Barcode is too large for the allotted area of the label	Shrink or shift barcode.
Battery low	Battery of the PC card is dead	Replace battery in PC card.
Buffer overflow	Data input buffer is full, and the computer is attempting to send more data	Use data transfer with protocol (preferably RTS/ CTS).
Card full	Memory card cannot accept any more data	Change memory card.
Cutter blocked	Cutter cannot return into its home position and stays in an undefined position	Switch off the printer. Remove material. Switch on the printer. Restart print job. Change material
	No cutter function	Switch the printer off and then on. If error recurs call service.
Cutter jammed	The cutter is unable to cut the labels but is able to return into its home position	Press the cancel key. Change material.
Device not conn.	Programming does not respond to existing device	Connect an optional device or correct programming.

Error message	Cause	Error recovery
File not found	Requested file is not on the card	Check the contents of the card.
Font not found	Error with the selected download font	Cancel current print job, change font.
FPGA malfunction	Hardware error	Switch printer off and on again. If it occurs again → Service.
Head error	Hardware error	Switch printer off and on again. If it occurs again → replace printhead (see *Replacing the printhead on Pronto! 482/486 models* on page 11-7).
Head open	Printhead not locked	Lock printhead.
Head too hot	Printhead excessively warm	The print job continues automatically after pausing. If this occurs repeatedly, reduce the heat level or print speed in the software.
Invalid setup	Error in configuration memory	Reconfigure printer. If it occurs again → Service.
Memory overflow	Print job too large: e.g. due to loaded fonts, large graphics	Cancel print job. Reduce amount of data to be printed.
Name exists	Field name in direct programming entered twice	Correct programming.
No DHCP server	Printer is configured for DHCP, and there is no DHCP server or the DHCP server is currently unavailable	Deactivate DHCP in the configuration and issue a permanent IP address. Notify the network administrator.

Error message	Cause	Error recovery
No label found	Several labels are missing from the label strip	Press the **pause** button several times until the next label on the strip is detected by the printer.
	The label format specified in the software does not match the actual format used	Cancel print job. Change label format in the software. Restart print job.
	A continuous medium is located in the printer, but the software is waiting for labels	Cancel print job. Change label format in the software. Restart print job.
No label size	Label size not defined in programming	Check programming.
No Link	There is no network connection	Check network cable and plug. Notify the network administrator.
No record found	Error in the memory card option when accessing the database	Check programming and memory card contents.
No SMTP server	Printer is configured for SMTP, and there is no SMTP server or the SMTP server is currently unavailable	Deactivate SMTP in the configuration. **Caution!** Warnings via email (EAlert) can then no longer be received! Notify the network administrator.
No Timeserver	Timeserver is selected in the configuration, but there is no timeserver or the timeserver is currently not available.	Deactivate Timesaver in the configuration. Notify the network administrator.

Error message	Cause	Error recovery
Out of paper	Label roll used up	Load a label roll (see *Loading labels from a roll* on page 6-3) or Load fanfold labels (see *Loading fanfold labels* on page 6-9).
	Error in paper course	Check paper course.
Out of ribbon	Transfer ribbon used up	Load new transfer ribbon
	Transfer ribbon melted through during printing	Cancel print job. Change heat level via software. Clean printhead (see *Cleaning the printhead* on page 11-5). Load transfer ribbon (*Loading transfer ribbon* on page 6-10). Restart print job.
	Thermal paper labels are to be used, but the software is set to transfer printing	Cancel print job. Switch to direct thermal printing in the software. Restart print job.
	Supply roll of transfer ribbon not secured to ribbon supply hub	Secure transfer ribbon (see *Loading transfer ribbon* on page 6-10).
Protocol error	Printer receives an unknown or incorrect command from the computer.	Press the **pause** button to skip the command or Press the **cancel** button to cancel the print job.
Read error	Read error when accessing memory card	Check data on memory card. Save data. Reformat card.

Error message	Cause	Error recovery
Remove ribbon	Transfer ribbon is loaded although the printer is set to direct thermal printing	for direct thermal printing remove ribbon
		for thermal transfer printing set the printer in the configuration or in the software to transfer printing
Structural err.	Error in directory of the memory card, non-secure data access	Reformat memory card.
Unknown card	Memory card not formatted Memory card type not supported	Format card, use another card type.
USB error Device stalled	USB device is detected, but does not function	Do not use USB device.
USB error Too much current	USB device drawing too much current	Do not use USB device.
USB error Unknown device	USB device not recognized	Do not use USB device.
Voltage error	Hardware error	Switch printer off and on again. If it occurs again → Service. The voltage which has failed is displayed. Please note this.
Write error	Hardware error	Repeat write attempt. Reformat card.
Write protected	Write protection of the PC card is activated.	Deactivate write protection.
Wrong revision	Error when loading a new firmware version. Firmware does not work with hardware version	Load appropriate firmware.

Chapter 17: Specifications

This chapter contains the following sections:

- **Cutter -** Provides specification for the cutter

- **External Rewinder (ER1) -** Provides specifications for the External Rewinder (ER1)

- **External Rewinder (ER4) -** Provides specifications for the External Rewinder (ER4)

- **External Unwinder (EU4) -** Provides specifications for the External Unwinder (EU4)

Cutter

Material width up to (in/mm)	4.7 / 120
Min. cut length (in/mm)	0.08 / 2
Material thickness (g/m²)	up to 500
Power supply	peripheral connector of the printer

Note: The minimum cut length is depending on the media, in particular its adhesive characteristics. Before use tests of the media are recommended. You should test the media too, if the media is very hard or very thin.

The cutters have a durability of more than one million cuts. The blades are self-sharpening. Depending on the type of material cut the blades could wear earlier and have to be replaced. Used blades are not designed to be sharpened again.

Cutter Tray 4	
Material width (in/mm)	up to 4.7 / 120
Length of the cut pieces (in/mm)	up to 3.9 / 100
Stack height (in/mm)	up to 1.4 / 36

External Rewinder (ER1)

Label Width	ER1: up to 4.7 in (120 mm)
Rewind Diameter	max. 8.19 in (210 mm)
Core Diameter	1.56 in (40 mm) on rewind axle 1.56 in (40 mm) on cardboard core with adapter 3 in (76 mm) on cardboard core
Rewind Speed	2 - 12 ips (50 - 300 mm/s)
Label Rewinding	Labels inside or outside
Operating Temperature	50°F - 95°F (10 bis 35°C) at 10 - 85% humidity, non condensing
Transport and Storage Temperature	4°F - 122°F (-20 bis 50°C) at 10 - 85% humidity, non condensing
Dimensions of the Rewinder	
Height	11.0 in (280 mm)
Width	9.8 in (250 mm)
Depth	11.1 in (285 mm)
Weight	9.9 lbs (4,5 kg)

External Rewinder (ER4)

Max. Material Width	120 mm (4.7 in)
Max. Rewind Diameter	210 mm (8.3 in)
Core Diameter	40 mm (1.6 in) on rewind axle 40 mm (1.6 in) on cardboard core 76 mm (3 in) on cardboard core with adapter
Rewind Speed max	300 mm/s (12 in/s)
Label Rewinding	Labels in- or outside
Operating Temperature	10 bis 35°C (50°F - 95°F) at 30 to 85% humidity, non condensing
Storage- and Transport Temperature	-20 bis 50°C (4°F - 122°F) at 10 to 85% humidity, non condensing
Dimensions of the Rewinder	
Height mm (in)	280 (11)
Width mm (in)	260 (10,2)
Depth mm (in)	270 (10.6)
Weight	5,0 kg (11 lb)
Operating Voltage	110 - 240 V~ / 50 - 60 Hz

External Unwinder (EU4)

Label Width	up to 4.7 in (120 mm)
Unwind Diameter	max. 11.7 in (300 mm)
Core Diameter	1.56 in (40 mm) on cardboard core 3 in (76 mm) on cardboard core with adapter
Label Rewinding	Labels inside or outside
Dimensions of the Unwinder	
Height	17.5 in (450 mm)
Width	10 in (260 mm)
Depth	11.7 in (300 mm)
Weight	8.8 lb. (4 kg)

Appendix A:
Menu Map

Pronto 482/486 Menus

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