MPI

PRINTRONIX®

S828
User Manual

MPI

Printronix Products Information

Thanks for choosing the **Printronix S828** printer models.

Your printer is a reliable working equipment that will be very useful in your daily job.

Our printers have been designed to be compact and respectful of the work environment.

They offer a wide range of features and multiple functions that confirm the high technological level reached by the Printronix brand.

To maintain these printing performances unchanged in the long run, Printronix has developed specific Printronix branded consumables for each printer type (for example: ribbon cartridges for dot matrix printers) that assure an excellent operation with high printing quality level reliability.

Printronix recommends to use only its original Printronix branded consumables with original packaging (identified by its holographic label). In this way, a proper use of the printer at quality level stated in the product characteristics can be assured. All typical usage problems related to not certified consumables may be avoided, such as an overall quality print level degradation and, often, the reduction of the product life due to the fact that the proper working conditions for the print heads and other printer parts are not assured.

Moreover, Printronix does not only certify its consumables in terms of working conditions but also carefully controls their compliance with the international standard rules concerning:

- no cancerous materials;
- no flammability of the plastic materials;
- other standards

Printronix advises the customers not to use products for which the compliance to this safety rules are not warranted.

Finally seek your dealer or contact a Printronix office and be sure that are provided you the original Printronix branded consumables.

Safety and environmental notices

Safety notices

There are two levels of safety notices: Danger and Cautions.

Danger hazard level
The word Danger indicates the presence of a hazard that has the potential of causing death or serious personal injury.
Most DANGER notices are numbered <1-1>, <1-2>, and so forth where they appear in the text of this manual.

Example of a Danger notice:

DANGER
<1-10> Hazardous voltages are present. Do not touch the pins or sockets of the power receptacle

Caution hazard level
The word Caution indicates the presence of a hazard that has the potential of causing moderate or minor personal injury.
Most CAUTION notices are numbered <2-1>, <2-2>, and so forth where they appear in the text of this manual.

Example of a Caution notice:

CAUTION:
<2-22> Carefully follow all cleaning instructions, using only the materials and solutions recommended.

Attention notices
The word Attention calls attention to the possibility of damage to a program, device, system, or data.
Attention notices are not numbered.
Examples of an Attention notice:
Attention: The above openings must always be protected with their covers. Do not touch inside and do not insert any object into these openings or into the gears.

Safety precautions

> **Never remove any printer cover except to install a printer accessory as expressly described in this manual.**

> **The above opening must always be protected with their cover.**
> **Do not touch inside and do not insert any object into these openings or into the gears.**

Attention: The above openings must always be protected with their covers. Do not touch inside and do not insert any object into these openings or into the gears.

Electrical safety

This printer is inspected and listed by recognized national testing laboratories,
such as Underwriters Laboratories, Inc. (UL) in the U.S.A. and Canadian Standards Association (CSA) in Canada.
Listing of a product by a national testing laboratory indicates that the product is designed and manufactured in accordance with national requirements intended to minimize safety hazards. This equipment meets a very high standard of safety in design and manufacture. Remember, however, that this product operates under conditions of high electrical potentials and heat generation, both of which are functionally necessary.
Because the paper used in the printer can burn, you should take normal precautions to prevent fire. These precautions include common-sense measures, such as keeping potentially combustible materials (for example, curtains and chemicals) away from the printer, providing adequate ventilation and cooling, limiting unattended operation, and having trained personnel available and assigned to the printer.

Approved power cord and receptacle

DANGER
<1-11> Your country may require an approved power cord and plug.
Ensure that you have the correct power cord and plug. Use this cord and plug only with an approved, correctly-installed power receptacle.

Electrical safety and portable power strip receptacles

Extension cords

DANGER

DANGER<1-1> Do not use an extension power-cord.

The customer must supply the correct electrical outlet which must meet the requirements stated under "Printer Specifications" in the User's Guide.

Portable power strip receptacles (temporary power taps)

Portable power strip receptacles (referred to as "temporary power taps" by the National Electrical Code) may be used if they are fully approved in the customer's geographic location. It is the customer's responsibility to supply a fully approved "temporary power tap", if one is to be used.

Connecting or disconnecting a communication port, a teleport, or an attachment connector

DANGER

<1-14> Switch off printer power and unplug the printer power cord before connecting or disconnecting a communication port, a teleport, or other attachment connector.

Servicing during an electrical storm

DANGER

<1-13> Do not connect or disconnect a communication port, a teleport, or any other connector during an electrical storm.

FFC Notes

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy 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 will be required to correct the interference at his own expense. Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. Printronix is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference
received, including interference that may cause undesired operation.

European Union (EU) Conformity Statement

Printronix declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 2006/95/EC, 2004/108/EC*.*
Per the applicable requirements of EU directive 98/37/EC ("machines") sound pressure of the above product (measured according to EN27779) does not exceed 70dBA.
This product has been tested and found to comply with the limits for Class A Information Technology Equipment according to European standard EN 55022. The limits for Class A equipment were derived for commercial and industrial environments to provide reasonable protection against interference with licensed communication devices. **Important** This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
Properly shielded and grounded cables and connectors must be used in order to reduce the potential for causing interference to radio and TV communications and to other electrical or electronic equipment. Printronix cannot accept responsibility for any interference caused by using other than recommended cables and connectors.

Industry Canada Compliance Statement

This Class A digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe A est conform à la norme NMB-003 du Canada.

Statement for CISPR 22 Edition 2 Compliance

Attention: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Table of Contents

Getting to Know Your Printer

Printer Features (S828)

- 18 Needle Print Head
- 136 columns @10 cpi
- High speed Draft printing at 900 cps, Draft printing at 800 cps, NLQ printing at 232 cps
- IBM Proprinter III XL , Personal Printer 2381+, EPSON FX Series, ANSI X3.64 emulations
- Base paper handling configuration: Front1 push path (Fanfold with 6 pins sprockets and paper jam sensor detection)
- Multiple copies (1 original and 7 copies)
- Automatic paper path selection
- Easy operability via operator panel setup and S/W commands
- Usage of all specific features by means of the Specific Software Driver which is applicable to the most popular S/W Packages
- Plug & Play capability for Windows 95/98/2000/XP/NT4.0/Millennium ®/Vista/Win7(32 & 64bit), Windows8, Windows10
- Single controller with four interfaces: Ethernet 10/100 Base-T interface option, Bi-directional IEEE 1284 parallel interface, serial RS-232/C interface and USB interface
- Optional Front2 push path (Fanfold with 6 pins sprockets and paper jam sensor detection)
- Optional printer pedestal

Printer Features (S828 IPDS)

- 18 Needle Print Head
- 136 columns @10 cpi
- High speed Draft printing at 900 cps, Draft printing at 800 cps, NLQ printing at 232 cps
- IBM Proprinter III XL , Personal Printer 2381+, EPSON FX Series, ANSI X3.64 emulations
- Base paper handling configuration: Front1 push path (Fanfold with 6 pins sprockets and paper jam sensor detection)
- Multiple copies (1 original and 7 copies)
- Automatic paper path selection
- Easy operability via operator panel setup and S/W commands
- Usage of all specific features by means of the Specific Software Driver which is applicable to the most popular S/W Packages
- Plug & Play capability for Windows 95/98/2000/XP/NT4.0/Millennium ®/Vista/Win7(32 & 64bit), Windows8, Windows10
- Optional controller (instead of the standard one) with four interfaces:Ethernet 10/100 Base-T with IPDS over LAN, Bi-directional IEEE 1284 parallel interface, serial RS-232/C interface and USB interface
- Optional Front2 push path (Fanfold with 6 pins sprockets and paper jam sensor detection)
- Optional printer pedestal

Unpacking Your Printer

The following items are included in the box:

Notify any damage to your supplier

Quick Setup Guide

CD Driver with User documentation
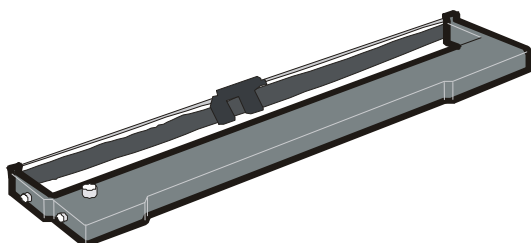
Ribbon Cartridge

Power Cable

Repacking Strips

Printer Assembly

To unpack the printer proceed as follows:

Keep the packing material in a safe place. It must be used if you need to repack the printer for shipment.

1. Bring the printer box near the final printer location.

2. Cut the packing ribbons and remove the plastic angles.

3. Remove the polystyrene panel out of the packing box.
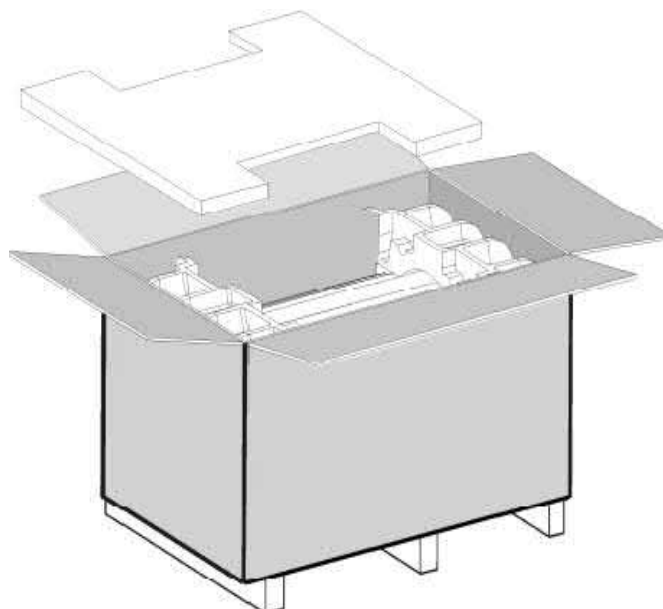
Remove the accessories out of the packing box and slide the packing box off the printer.
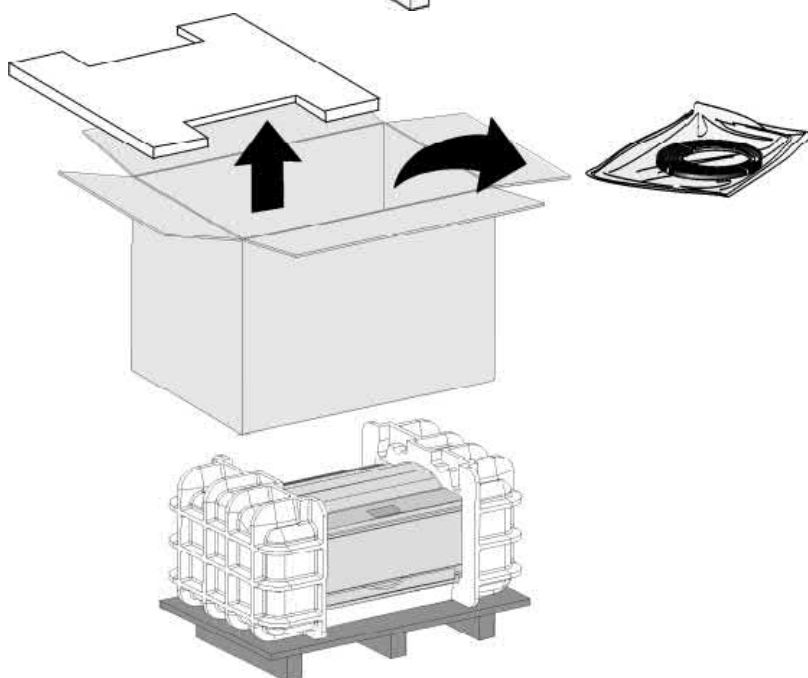
With the help of another person remove the two foam shells on either side of the printer, the
plastic bag covering the printer and the two carton strips.
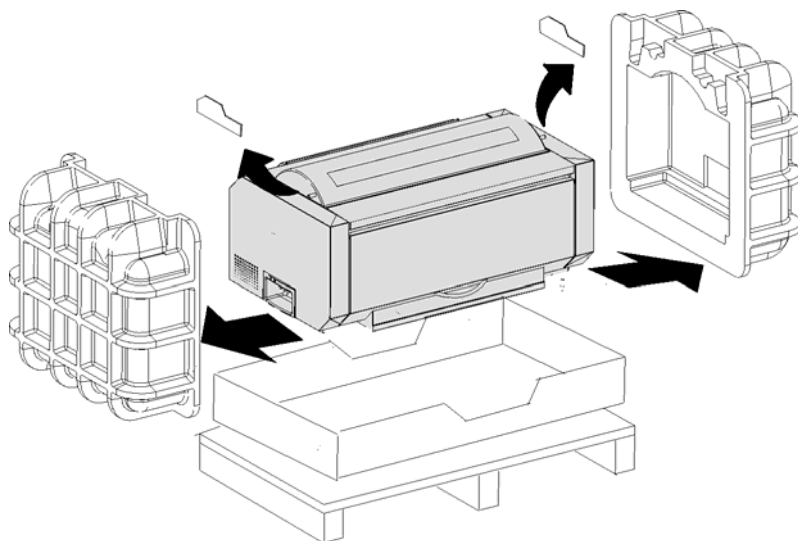
With the help of another person, move the printer to its final position:

- onto the printer cabinet (optional);
- onto a stable surface, i.e. a table.
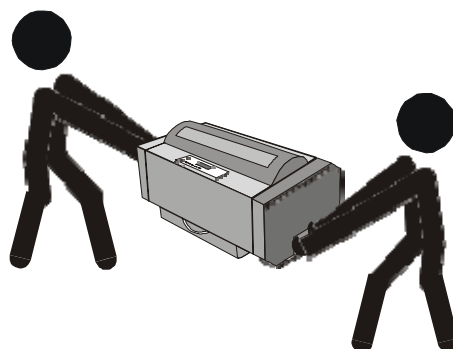
33 Kg / 73 Lbs

Connecting the Ground Cable

For the printer model with the cabinet option, connect the ground cable in the interface area on the rear side of the printer cabinet.

If the printer is installed on a table, it is not necessary to connect the ground cable.

Removal of the Shipment Locks

1. Open the tractor area cover and make sure that you remove the shipment lock from the printer.
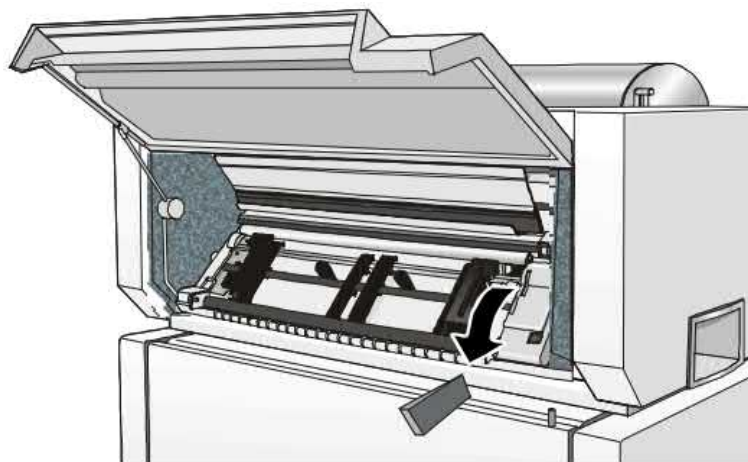
2. Unscrew the two fixing screws.
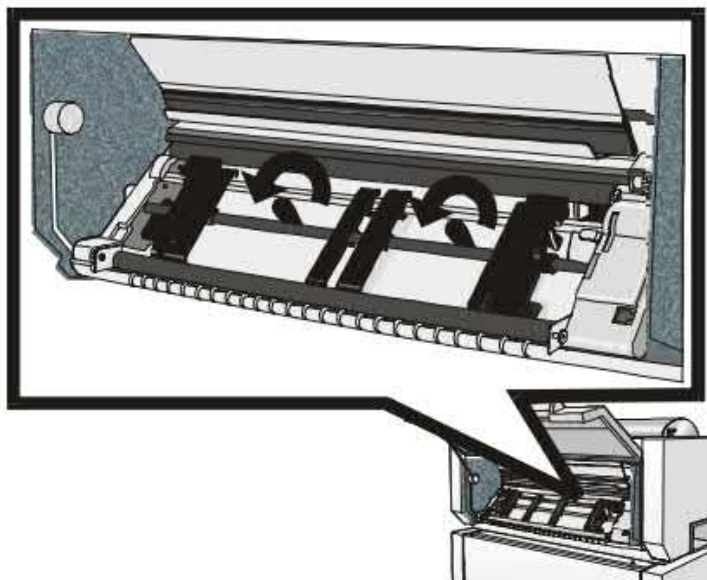
3. Open the upper printer cover and remove the fixing strip from the print head and from the bail (two strips).
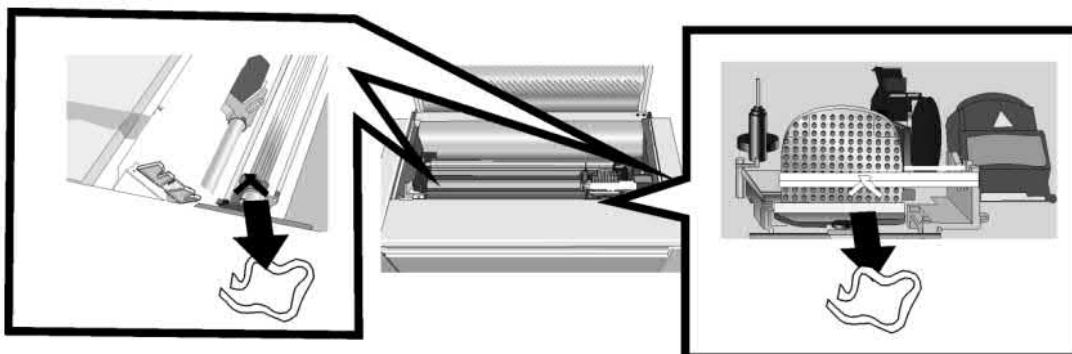
Keep all the packing material, together with the repacking kit, in a safe place. Repack the printer in its original packaging if you need to ship or transport it.
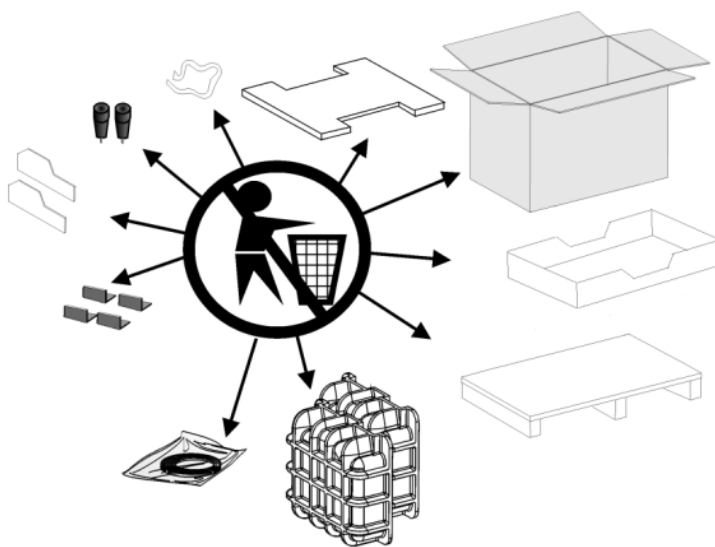
Printer Parts

Front View
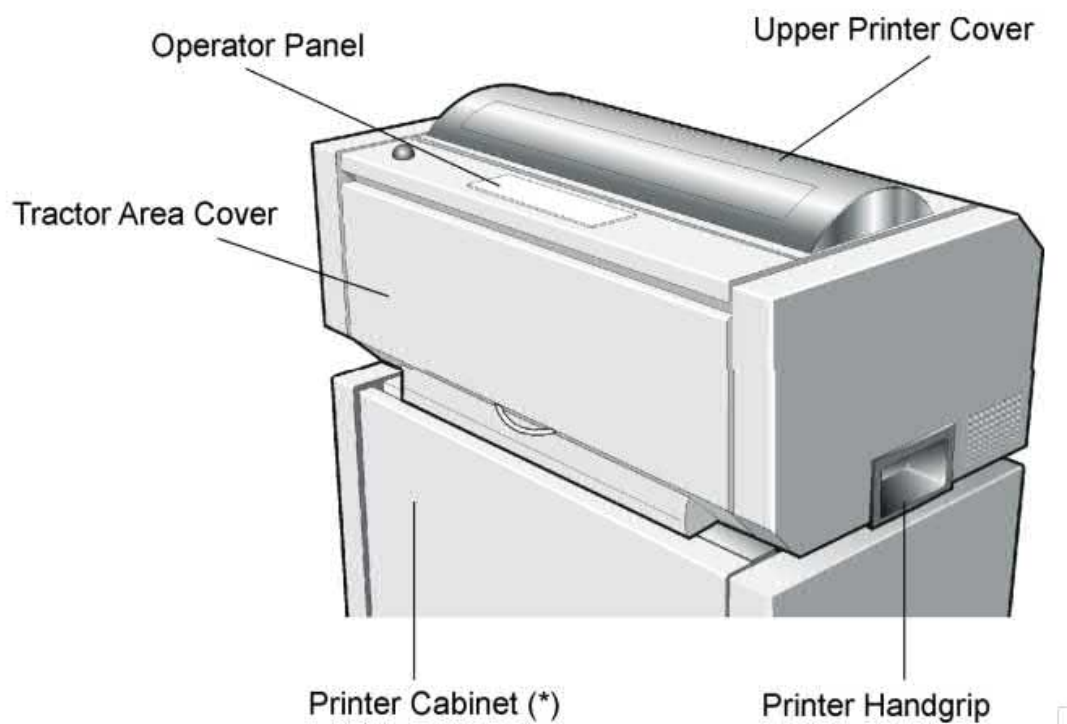
(*) The printer cabinet is available as an option.

Left Side View
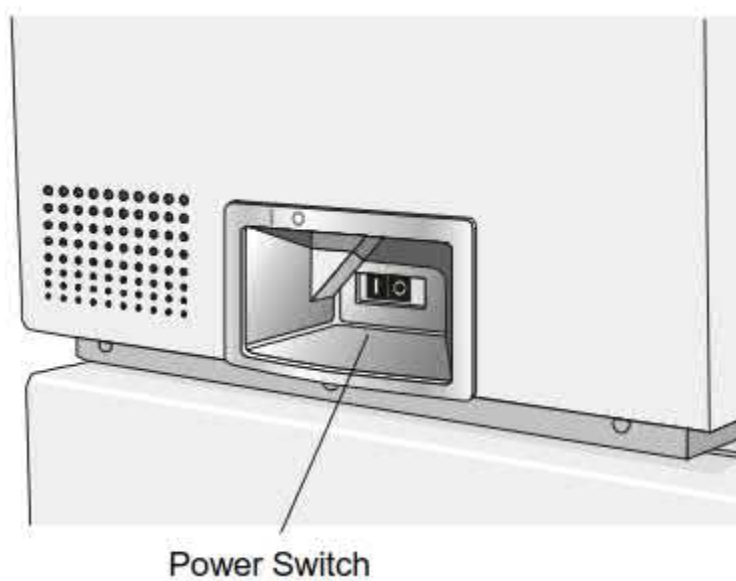
Rear View
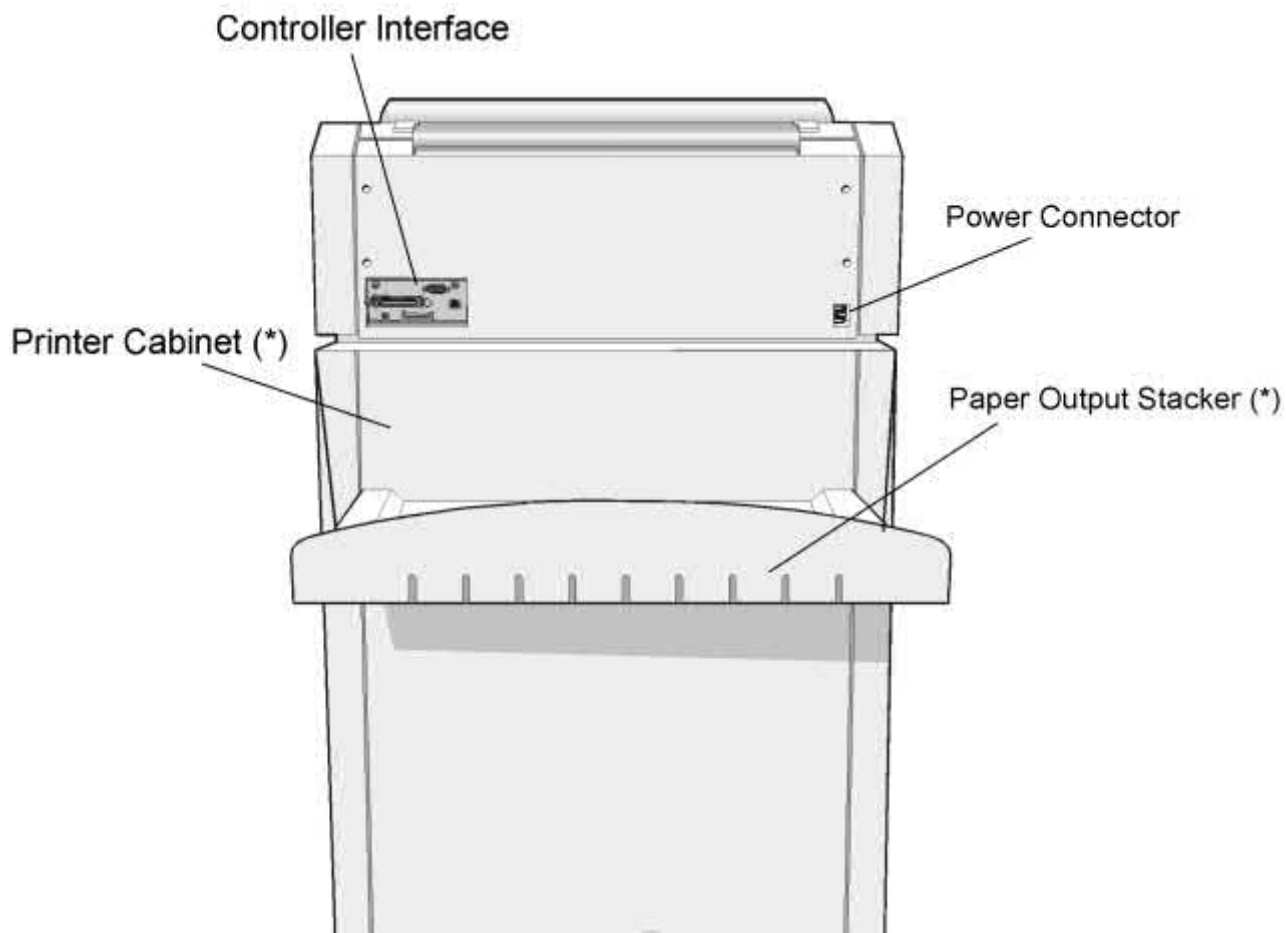
(*) The printer cabinet is available as an option.

Inside View
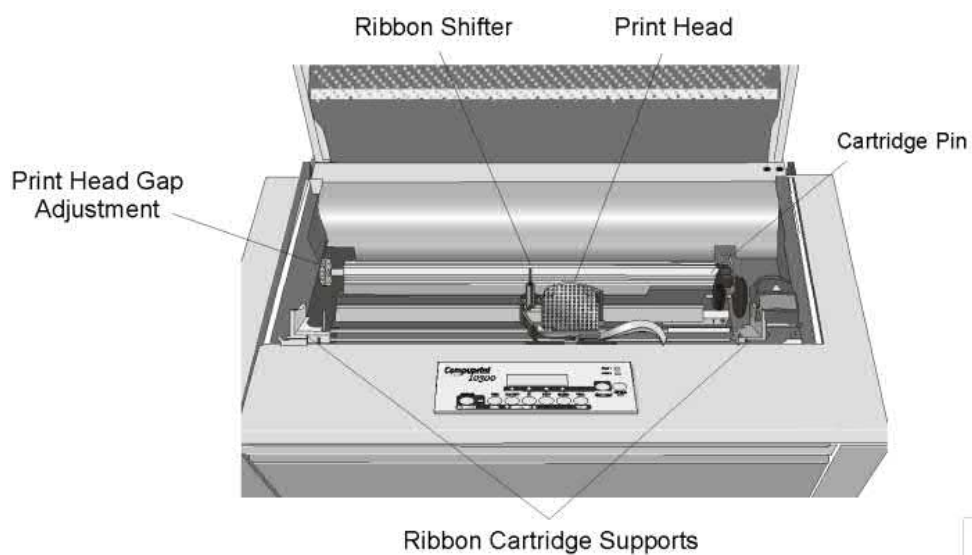
Setting Up Your Printer

Choosing a Suitable Location

CAUTION:

The S828 printer weighs 33 kg (72 lbs). Two persons are required to lift it..

Consider the following points when you choose the location for your printer:

- The distance between the printer and the host computer must not exceed the length of the interface cable;
- The location must be sturdy, horizontal and stable;
- Your printer must not be exposed to direct sunlight, extreme heat, cold, dust or humidity (see"Printer Specifications " later);
- The power outlet must be compatible with the plug of the printer's power cord.
- There must be sufficient clearances on all sides for easy operation.
- The required space is shown in the figure:
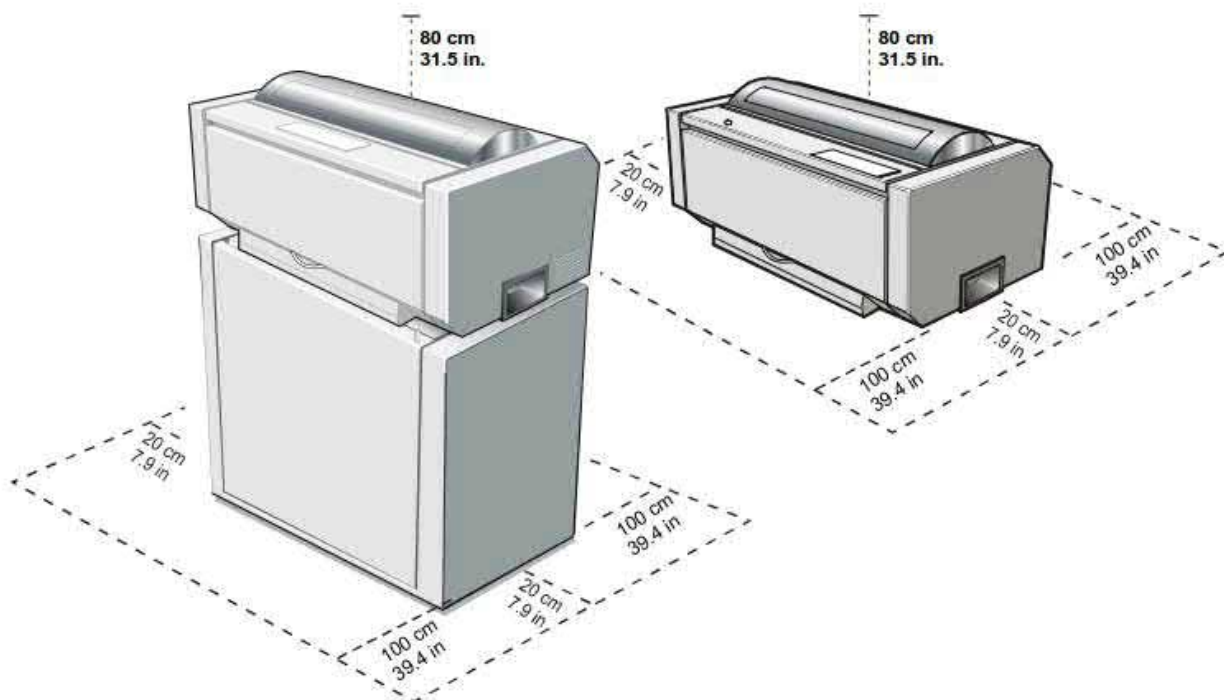
Ribbon Cartridge Installation

Make sure that you are using only Printronix original consumables

1. Make sure that the printer is turned off.
2. Find the ribbon cartridge among the accessories
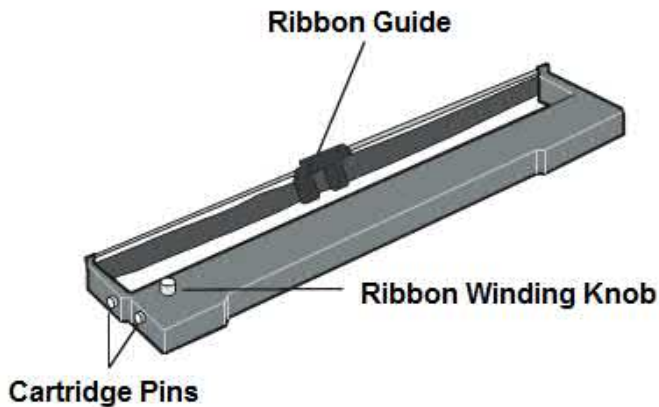
To be used when the ribbon shifter option is not installed
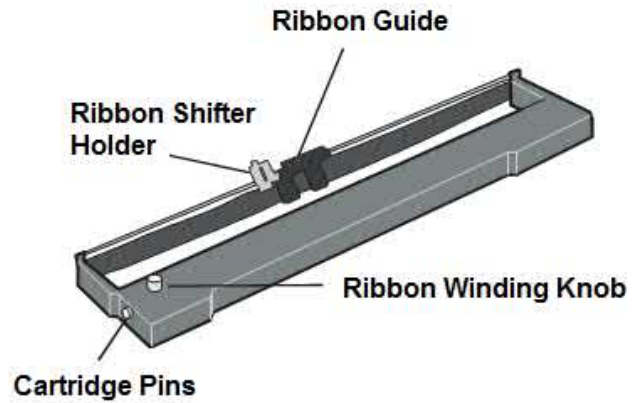
To be used when the ribbon shifter option is installed

3. Turn the printer on and wait for printer initialization.
4. With the printer powered on, enter the OFF LINE status pressing the ON-LINE Key and then checking ON-LINE indicator unlit.
5. Open the top cover using the small handles on either side of the top cover

6. Before installing the ribbon cartridge turn the ribbon-winding knob in the arrow direction (located on the cartridge) to take up slack in the ribbon

Cartridge Pins   **Ribbon Winding Knob**
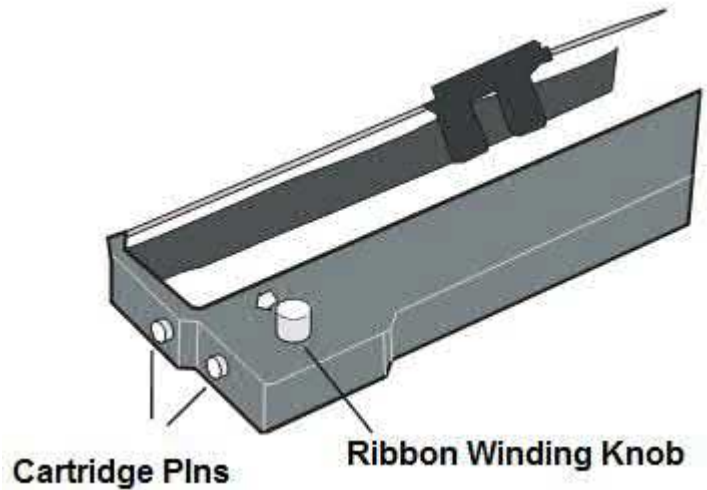
7. Move the print carriage in the middle of the area to prepare it for ribbon cartridge installation
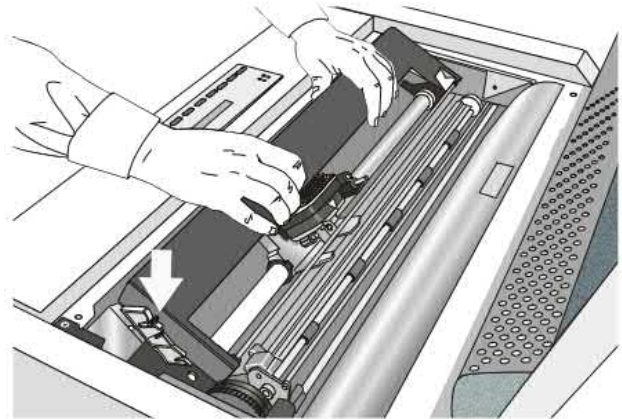
To avoid damage to the ribbon, do not turn the winding knob in the wrong direction

1. Align the right and left cartridge pins with the printer locking points.
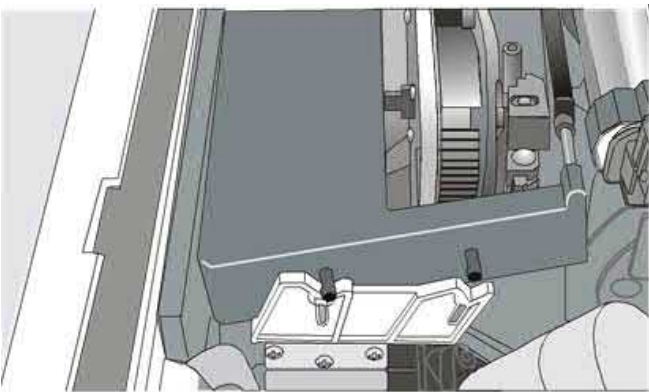
Black cartridge when the ribbon shifter option is not installed
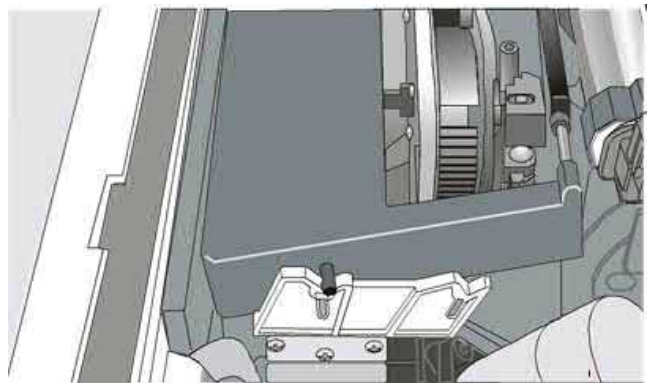
Black "Long Life" cartridge when the ribbon shifter option is installed

Slide and insert the ribbon guide between the print head and the ribbon guide mask holding it perpendicular to the print head.

Make sure that the ribbon is inserted correctly between the print head and the print head mask.
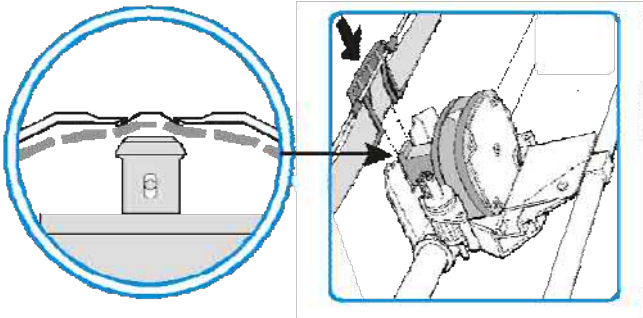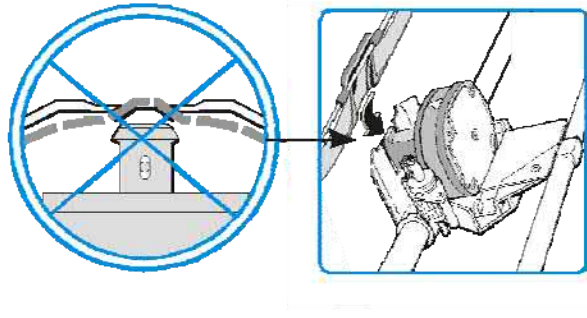
OK   **NO**

8. If the shifter kit option is installed on your printer, insert the shifter holder onto the ribbon shifter as shown in this figure.
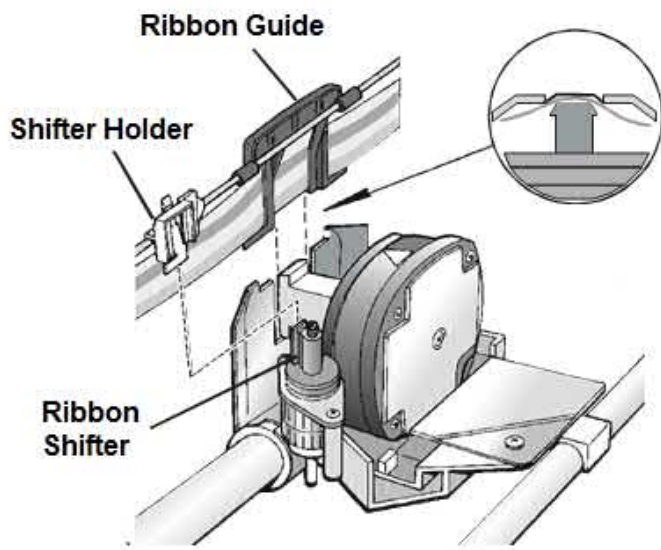
9. Insert the shifter holder onto the ribbon shifter as shown in the following figure.
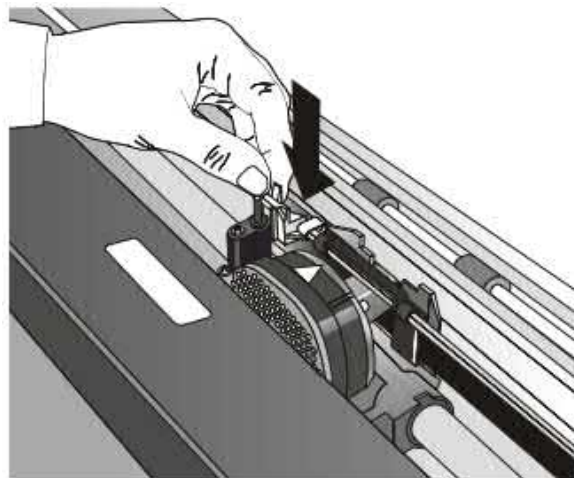
10. Turn the ribbon-winding knob in the arrow direction (located on the cartridge) to take up slack in the ribbon.

10. Push the cartridge down gently until it clips into place at locking points
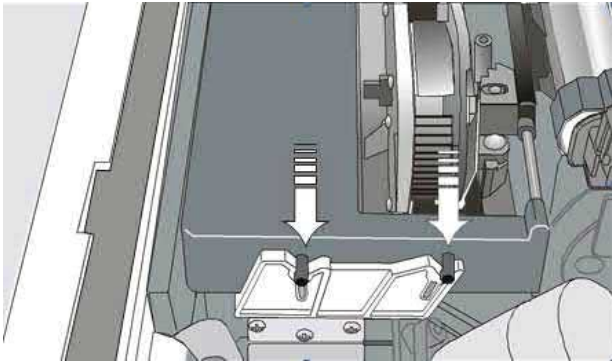
Black cartridge when the ribbon shifter option is not installed
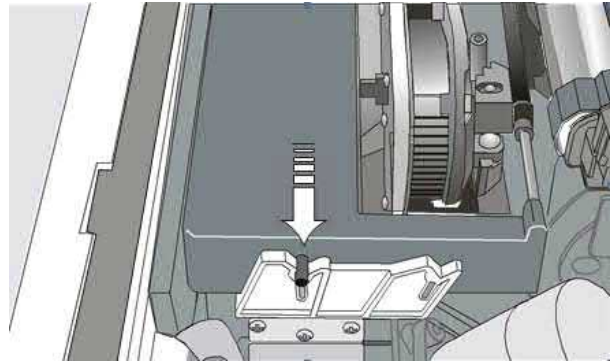
Black "Long Life" cartridge when the ribbon shifter option is installed

11. Turn the ribbon-winding knob again in the direction of the arrow to take up slack in the ribbon.

12. To ensure that the ribbon guide runs freely along the ribbon, manually move the print carriage horizontally.

If the used ribbon cartridge needs to be replaced, see "Replacing The Ribbon Cartridge", later in this manual.

Host Computer Connection

The S828 printer can be connected to your host computer via different available interfaces on a single controller. Two different controllers are available:

- LAN ASCII controller
- LAN IPDS controller

DANGER

<1-14> Switch off printer power and unplug the printer power cord before connecting or disconnecting a communication port, a teleport, or other attachment connector.

The controller provides the following four interfaces**:**
- A bidirectional IEEE1284 parallel interface
- A RS-232C serial interface
- An USB interface.
- An Ethernet LAN interface (optionally IPDS over Ethernet LAN Interface).

The interface connectors are located on the rear of the printer.

PARALLEL INTERFACE   SERIAL INTERFACE

MAC: 00-06-6D-21-14-3E

LAN INTERFACE   USB INTERFACE
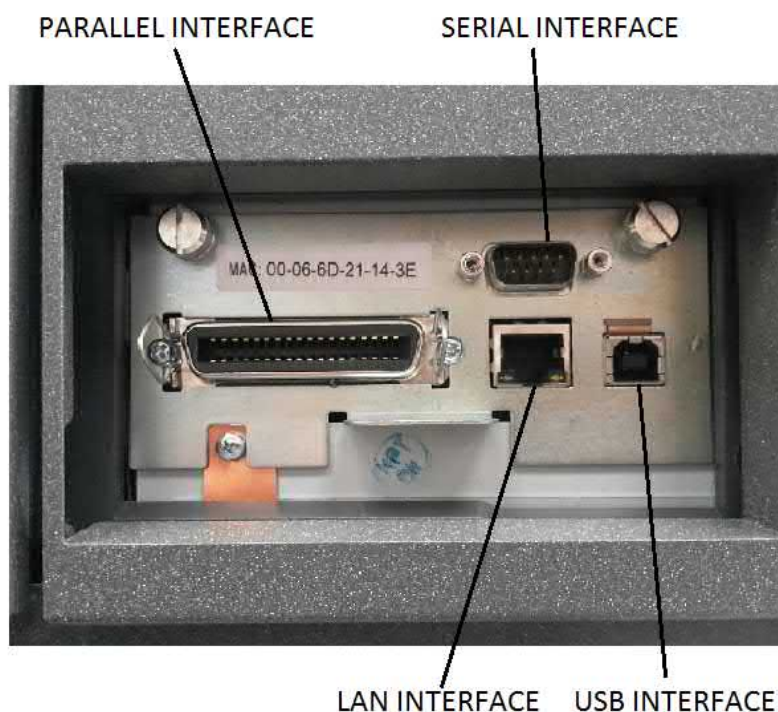
Driver Installation

Windows Environment

At this point it is necessary to configure your printer for your Operating System.
The installation procedures depend upon the host environment.

**The printer drivers of all current Printronix printers can be found
at the Internet Address: http://www.Printronix.com**

Starting from WINDOWS 95/98/2000/XP/NT4.0/Millennium®/Vista/Win7/Win8/Win10 environments the printer supports the Plug & Play feature.

In the CD-ROM shipped with the printer there is an auto-run tool which automatically install the selected printer driver.

LAN Connection

To work under LAN (Local Area Network) it is mandatory to set the LAN Interface Through the Printer Operator Panel to match the network setting. See later on the specific LAN configuration chapter.
Contact your system administrator for the correct values.

In the Local Area Network printing environment, the PCs can share a printer, that is, different users can use the same printer.
Software installation must be carried out on every PC requiring access to the Printronix printer.
For the communication between the PCs and the Printronix printer is necessary that the same LAN protocol is used for all connected devices: the TCP/IP or the NetBEUI protocol in a Windows environment.

From Windows XP the O.S. gives automatically the function to create a TCP/IP port and connect the printer in a TCP/IP protocol.

Monitoring Printer & Remote Printer Configuration in LAN using a Browser

The LAN interface of the printer has a built-in web pages which can be used for monitoring the status of the network printer and for the remote configuration.
Following procedure describes the use of an Intenet Browser (i.e.: IE, Mozilla, Chrome, etc.)

To browse the printer Home web page, enter the IP Address as web page address.

> **The IP Address must correspond with the IP Address set in the INIT IP ADDRESS parameter of the LAN INTERFACE item**

Home Page

The Printer Home Web Page screen appears as the mask on the right:

This Printer Home Web Page shows the current status of the printer :

Product Name:Printronix S828
MAC Address: xxxxxxxxxxxx
Printer Base Code: Version 1.00
Product Description: Printronix S828 Impact Matrix Printer

And can activates following types of information about the printer:

Printer Configuration: printer setting that you can configure by remote control.
Product support: reference to contact Printronix support
Power On Reset: feature to reboot the printer

When click on Printer Configuration the System Page is opened:

It is possible to choose :

- Loading the default factory setting parameters overwriting the current ones for all setup pages (All, Macrox, Configuration)
- Setting the default Macro at power on
- Setting the security password
- Select one of the different webpages (Home, System, Config, Interface, Lan, Macro#) described hereafter.
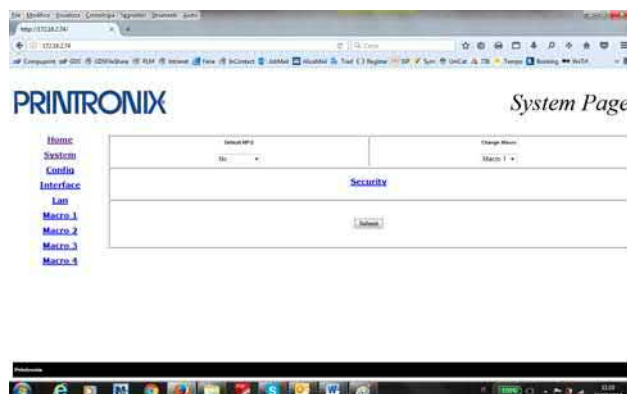
System Page

In the System Page click on Security Setting button. The first time the following screen appears:
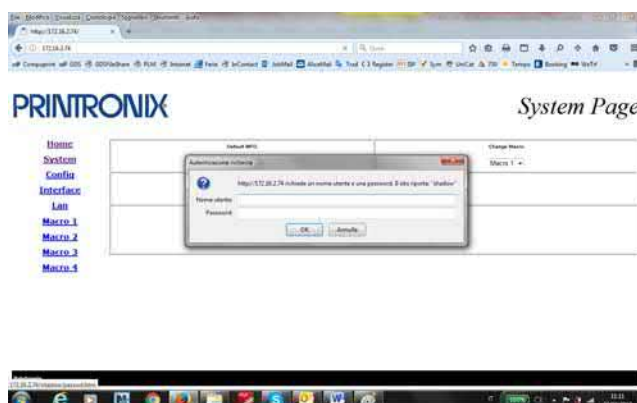
Type root for User Name
Type root for password

Security Page

It is now possible to indicate a new password to protect the setting

---

Security Page

The following screen appears
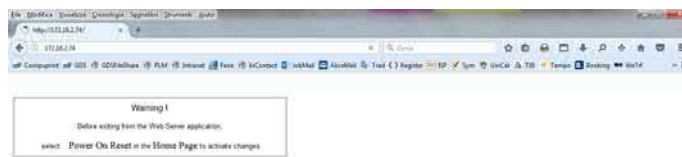
REMARK

Remind you that it is necessary to select Power on Reset button to go to Reboot Page and save the changes.

Screen after Reboot Printer action
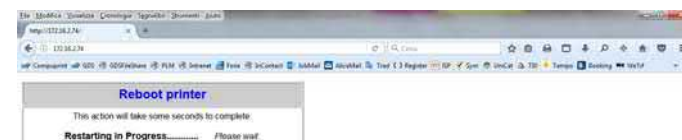
Printer Configuration

Config Options Page

To obtain the Printer Configuration information tables, click on the respective left button.

This page contains a series of tables with the corresponding printer set-up. For a detailed description of each parameters and values refer to the Configuration chapter later on in this manual.

This is the Configuration Options Page
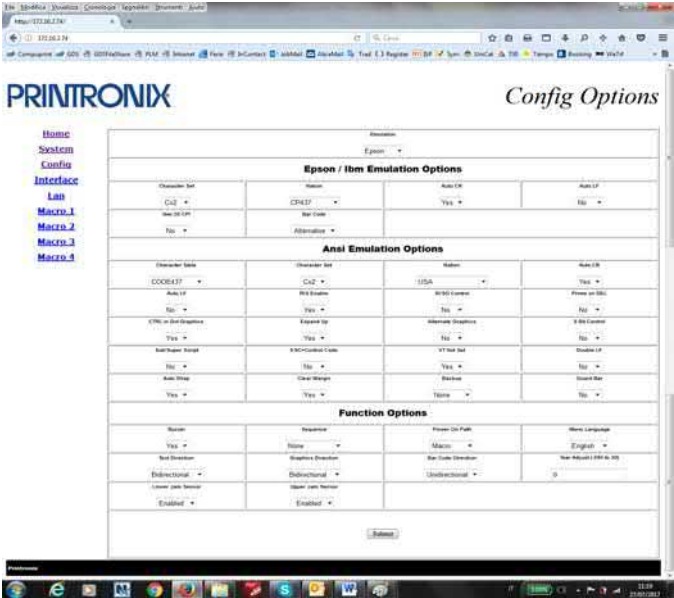
Interface Options Page

This is the Interface Options Page

Lan Settings Page

This is the Lan Setting Page

User Macrox Page

This is the User Macro# Page

You can now choose the network printer configuration. When the parameters are set as necessary, click on the Submit button at the end of the table. If a password has already been set in the Security item, to enter the remote printer configuration mode you need to type the network password

Support

This is the Printronix Support Page
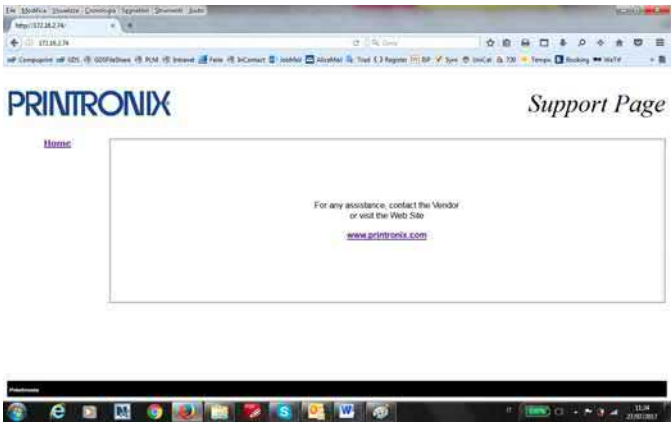
NetViewMaster Utility

The NetViewMaster Utility is a software tool for network administrators that allows the configuration and control of Printronix Serial Dot Matrix and Transactional Dot Matrix Printers remotely connected to the Ethernet LAN. With this tool the installed printers may be controlled, configured and organized easily.
Detailed information can be found in the specific NetViewMaster Utility User Manual p.n. MANxxxxx.
This tool is available on CD driver in the folder: ..\source\tools\NetViewMaster

The main features are the following:

- Device Discovery: searches for the devices within a range of IP addresses.
- Printer Organization: the printers connected to the network can be organized into logical groups in a hierarchically structured tree.
- Printer Status Report: checks the printer's status and reports alarms
- Printer Configuration: the remotely connected printers may be configured as needed from the administrator's workstation.
- Firmware Updating: provides a firmware downloading function to upgrade both the base and the LAN card firmware.
- Remote Operator Panel Management: provides a virtual operator panel for the remotely connected printer at the administrator's workstation that allows to perform all functions normally achieved pressing the operator panel keys.

The NetViewMaster Utility also provides the basic status management for third-party printers compliant to the standard MIB objects. The NetVieMasteris a Java based application and can be run on any platform supporting the Java Run Time Environment version 6 or newer.
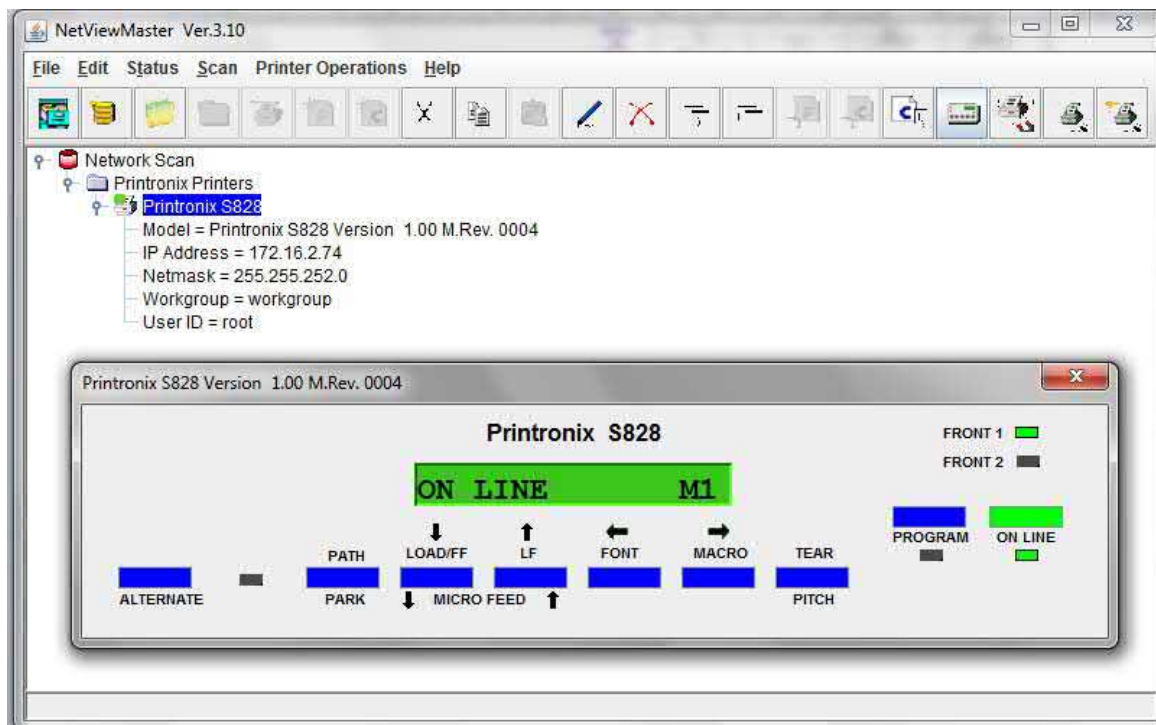
UNIX Environment

To configure the printer in Unix environment, you have to run the "cmpwizard.sh" script from the drivers\unix directory included in this CD-ROM , except for Linus 7.x and Solaris 7.x operating systems described later in this section.

Port Installation & Configuration
Check that the Printer is powered on and the Green Power led of the LAN Interface Port is lit.

It is necessary to be SUPER USER

Insert the *Printronix Ethernet LAN* CD-ROM.

1. From the shell bush, run the "cmpwizard.sh" script from the drivers\unix directory included in the CD-ROM labeled *Printronix Ethernet LAN.* See the following screen:
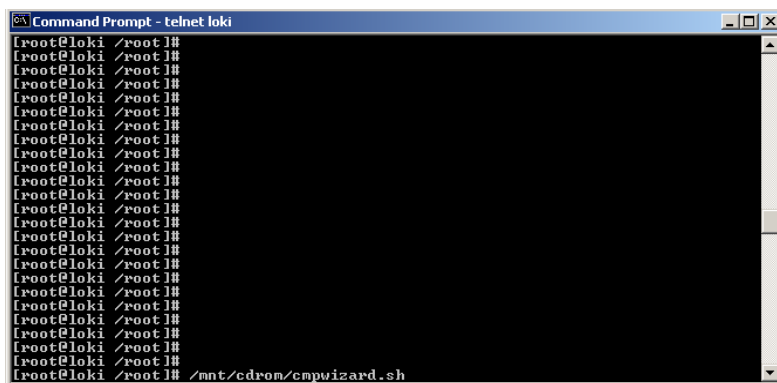
2. Select the operating system (n.7).
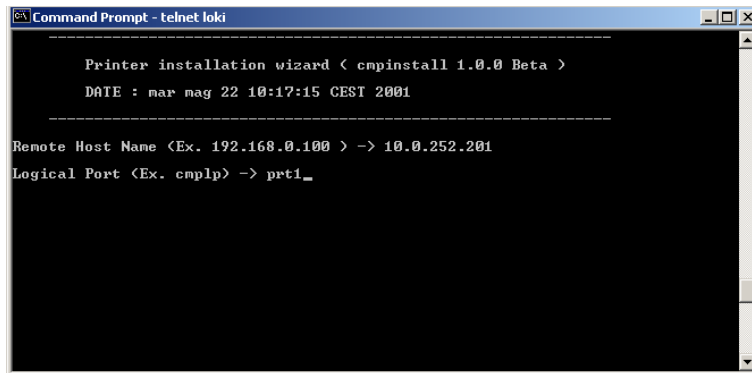
3. Add the *IP address.* This address must match the IP address selected in the INIT IP ADDRESS parameter of the LAN INTERFACE item in the *Power-On*

Configuration setup.
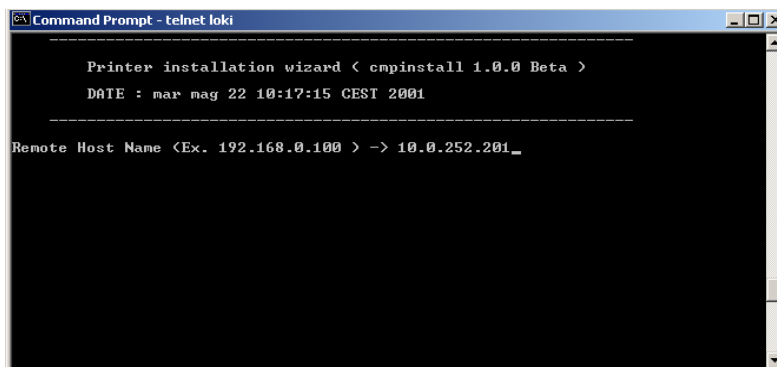
4. Enter the *Logical Port Name*.

The Logical Port Name is "prt1**".**
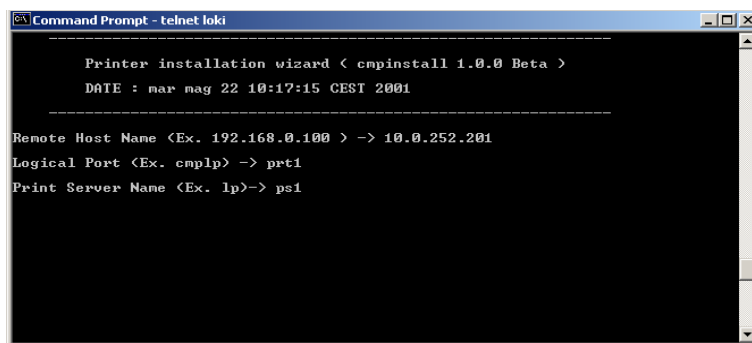
```
Command Prompt - telnet loki                                    _|□|×|
        Printer installation wizard ( cmpinstall 1.0.0 Beta )
        DATE : mar mag 22 10:17:15 CEST 2001
        ------------------------------------------------------
Remote Host Name (Ex. 192.168.0.100 ) -> 10.0.252.201
Logical Port (Ex. cmplp) -> prt1_
```

5. Enter the Print Server Name.

The printer server name is "ps1".
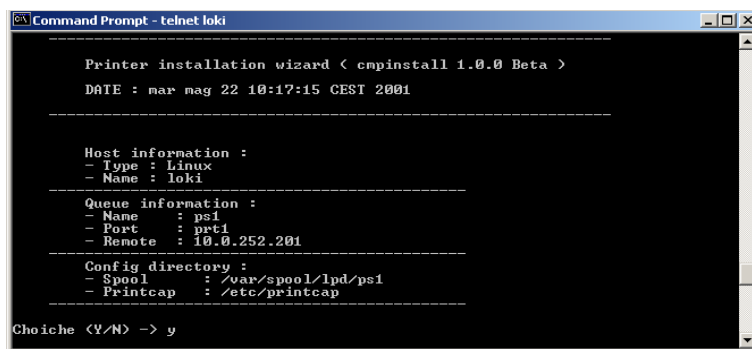
```
Command Prompt - telnet loki                                    _|□|×|
        Printer installation wizard ( cmpinstall 1.0.0 Beta )
        DATE : mar mag 22 10:17:15 CEST 2001
        ------------------------------------------------------
Remote Host Name (Ex. 192.168.0.100 ) -> 10.0.252.201
Logical Port (Ex. cmplp) -> prt1
Print Server Name (Ex. lp)-> ps1
```

6. If this configuration is ok , enter "y" to confirm.

```
Command Prompt - telnet loki                                    _|□|×|
        Printer installation wizard ( cmpinstall 1.0.0 Beta )
        DATE : mar mag 22 10:17:15 CEST 2001

        ------------------------------------------------------
        Host information :
        - Type : Linux
        - Name : loki
        ------------------------------------------------
        Queue information :
        - Name    : ps1
        - Port    : prt1
        - Remote  : 10.0.252.201
        ------------------------------------------------
        Config directory :
        - Spool     : /var/spool/lpd/ps1
        - Printcap  : /etc/printcap
        ------------------------------------------------
Choiche (Y/N) -> y
```

The installation is now complete. If you want to print the test file, enter the *lpr -Pps1 test* command.

Linux 7.x & Solaris 7.x Operating Systems

To configure the printer for the Linux 7.x and Solaris 7.x operating systems, follow the corresponding procedure described below:

Configuring a Remote Printer for the Red Hot Linux 7.x Operating System

1. Open the "/etc/hosts" file as *root user* in a Terminal windows.
2. Add the *IP address* and the *Printer Name* information.
   Here is an example of an "/etc/hosts" file:

   Ip-address   Printer-name
   10.0.128.220.1   prt1
   10.0.128.220.2   prt2

3. Type "printconf-gui&" from a prompt
4. Click *New* button. You are asked to enter a *queue name* for the printer. Type the *queue name* you want.
5. Then select "Type of queue". Select Unix Printer (lpd queue) in the "Queue type" box.
6. Insert the *printer name* used in "/etc/hosts" file (i.e. *prt1* or *prt2*) in the "Server" or "Remote Hosts" box.
7. Insert the *local spool directory* (where the print jobs for the Unix computer are to be placed) in the "Queue" or "Spool Directory" box.
8. Select *text only* in the "Printer Driver" box. Set up the configuration you want and then click *OK* button.
9. Click *File ->Save Changes* in the "printconf-gui" window.
10. Restart *lpd* to have (let) the printer daemon receive the new printer entry.

If the print job is rejected when it is sent to test the printer, ask the remote computer's administrator to check permission in the "/etc/lpd.perms" file

Configuring a Remote Printer for the Solaris 7.x Operating System

1. Open the "/etc/hosts" file as root user in a Terminal windows.
2. Add the IP address and the Printer Name information

Here is an example of an "/etc/hosts" file:

   Ip-address   printer-name
   10.0.128.220.3   prt1
   10.0.128.220.4   prt2

3. Type "admintool&" in a Terminal windows.
4. Select Browse button and then Printers.
5. Select Edit->Add->Access to Print in the "Admintool Printer Menu".
6. Insert the printer name you want in the "Printer Name" box.
7. Insert the printer name used in "/etc/hosts" file (i.e. prt1 or prt2) in the "Printer Server" box.
8. Click Apply and then OK button.

Now you are ready to use the printer.

AS/400 Environment

Configuring AS/400 for ASCII (TCP/IP protocol)
Configuring with ADDTCPIFC

ADDTCPIFC is used to add a TCP/IP interface to AS/400. This step configures the AS/400 for connection to a TCP/IP

1.   At the AS/400 command line, enter the following command:

ADDTCPIFC
INTNETADR('127.000.000.000')LIND(ETHLAN)
SUBNETMASK ('255.255.254.000')

This screen should look like the following one:

Internet address   127.000.000.000.
…………………………….. :
Subnet Mask   255.255.254.000.
…………………………….. :
Line   ETHLINE
…………………………….. :

To specify the IP Address and the Subnet Mask, see the values set in the LAN Configuration parameters.

Configuring a Router Definition with ADDTCPRTE
If necessary, use the ADDTCPRTE command to create a route definition.
This is required if the printer is somewhere other than a local segment.

Configuring a Local Domain and Host Name
The AS/400 print commands require a local name and host name. If you have already configured LAN attached TCP/IP printers on the AS/400 system, you will have a local domain name and hostname configured on the system. To configure the local domain, you will run the CFGTCO command.

Configuring a TCP/IP Host Table Entry
Although it is optional to create a TCP/IP host table entry, it is suggested that you take this step.
Add the AS/400 name and the LAN IP address to the "Host Table Entries".

Configuring AS/400 for Printing
The procedure for configuring an AS/400 for printing requires that you:
    1. Setup the printing capability
    2. Verify the setup with a print job

In order to accomplish this configuration, you need the following information:

a.   Remote Printer Queue Name. Set for any of 'pr1' through 'pr4'.

The Remote Printer Queue name must be all lower case.

b) IP Address

See the IP Address value set in the parameter of the LAN INTERFACE item in the Power-On Configuration setup.

Setting up Printing for ASII Files

The next step in configuring the AS/400 is to setup the remote printing capability.
There are two ways to do this:
1. You can specify the LPR parameters Manually each time you senda file to the printer
2. Use remote writer and a remote output queue for automatic printing to the printer

Tu Use LPR Manually
1. Start TCP/IP, if it not already running, by entering the STRTCP command
2. At the AS/400 command line, enter 'LPR'.
3. The following example shows only the parameters you need to specify:

Remote System	RMTSYS	INTNETADR
Printer Queue	RTQ	d1prn
Destination Type	DESTTYP	OTHER
Transform SCS to ASCII	TRANSFORM	YES
Manufacturer Type and Model	MFRTYPMDL	IBM6400EP
Internet Address	INTNETADR	127.000.000.000

where:

- Remote System: enter the host name of your printer or INTNETADR, whic then prompts you to specify the IP address of your printer.
- Printer Queue: set to "pr1" through "pr4". The remote printer queue name must be all lower case, entered in single quotes.
- Destination Type: specify "OTHER" for the DESTTYP parameter.
- Transform: specify "YES".
- Manufacturer Type and Model: select a manufacturer type and model. Select "IBM6400EP" for Epson emulation or "IBM6400" or "IBM42023" for IBM Proprinter.
- Internet Address: specify the IP address of the printer.

To Create an Automatic Remote Output Queue

1. From the AS/400 command line, enter CRTOUTQ.
2. The following example shows only the parameters you need to specify:

Output Queue	OUTQ	USERNAME
Remote system	RMTSYS	INTNETADR
Remote printer queue	RMTPRTQ	d1prn
Writer to Autostart	AUTOSRTWTR	1
Connection type	CNNTYP	IP
Destination type	DESTTYP	XAUTOQXAIX
Transform	TRANSFORM	YES
Manufacturer type	MFRTYPMDL	IBM6400EP
Internet Address	INTNETADR	127.000.000

where:

- Output queue: enter the name of the AS/400 outpu queue.
- Remote System: enter the host name of your printer or INTNETADR, which then prompts you to specify the IP address of your printer.
- Remote Printer Queue: set to "pr1" through "pr4". The remote printer queue name must be all lower case, entered in single quotes.
- Writer to Autostart: set the value to "1".
- Connection Type: specify this value as "IP".
- Destination Type: specify "XAUTOQXAIX".
- Transform: specify "YES".
- Manufacturer Type: select a manufacturer type and model. Select "IBM6400EP" for Epson emulation or "IBM6400PR" or "IBM42023" for IBM Proprinter.
- Internet Address: specify the IP address of the printer.

Power Connection

⚠️ DANGER

<1-11> Your country may require an approved power cord and plug. Ensure that you have the correct power cord and plug. Use this cord and plug only with an approved, correctly-installed power receptacle.

1. Make sure the power outlet is near the printer location and easily accessible.
2. Make sure that the power switch is in *0 position (*OFF)*.
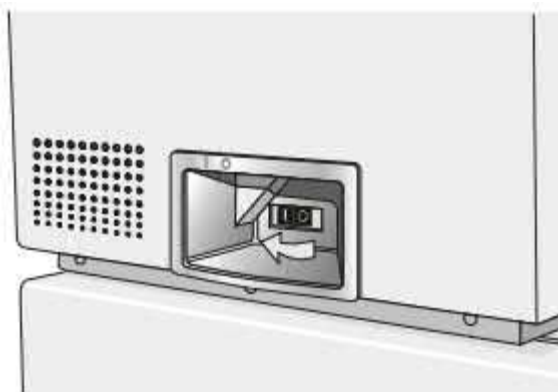
3. Insert the power cable plug into the printer connector and the other power cable end into a convenient outlet (the figure shows the European version).
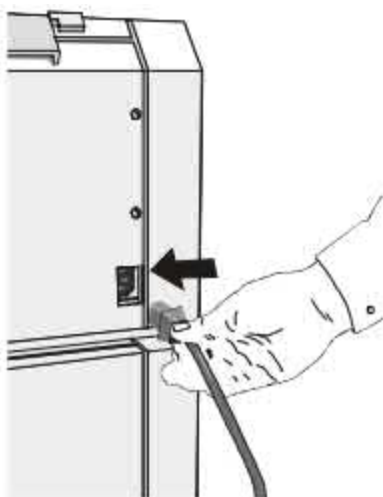
4. If you need to turn the printer on, press the power switch in the I position (ON).

Selecting the Display Language

The display messages for this printer can be displayed in five different languages: English (Default), French, German, Italian and Spanish. To select the language, that you prefer, proceed as follows:

1. Press the PROGRAM key and keep it pressed while powering on the printer until the following message wil be displayed:

> RELEASE KEYS

2. When you release the PROGRAM key, the following messages will be displayed

> STARTING UP

then

> S828 Rel. x.yz

then

> PRINT OUT? NO

3. Press the ↓ key to enter the setup. The first setup item is displayed

> EMUL. OPTIONS

4. Press the ↓ key until the language first level function is displayed:

> FUNCTIONS

5. Press the → key to pass to the second level functions

> BUZZER YES

6. Press the ↓ key until the setup language is displayed

> MENU ENGLISH

7. Press the → key to scroll the setup languages. When the desired language is displayed, press the PROGRAM key to select it. The printer exits the setup. From now on the display messages appear in the selected language.

Configuring the Printer

Operator Panel Presentation

The operator panel enables you to perform many of the printer functions including paper path selections, font selection and the printer setup.
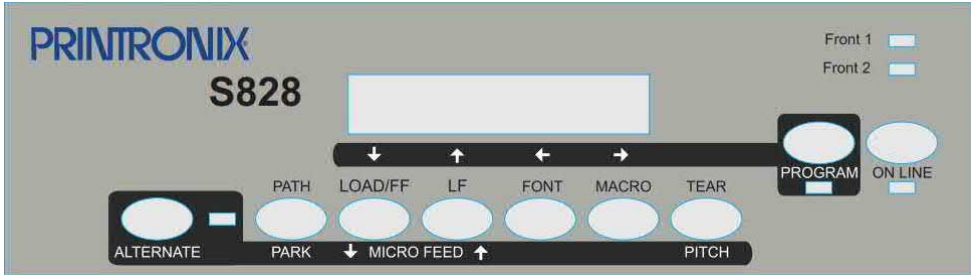
The operator panel consists of:
- A 16 character display (Liquid Crystal Display)
- Five led indicators
- Nine function keys

Display Messages

The printer display is used to indicate the printer status or to request an user intervention. When the printer is in Ready state, the display gives the following information:

- when paper is already loaded and the printer is off line (ON LINE indicator unlit):

| OFF LINE   M1 |

Printer Status   Current Macro

- when paper is already loaded and the printer is on line (ON LINE indicator lit):

| ON LINE   M1 |

Printer Status   Current Macro

Where:

OFF LINE ON LINE	Indicates the printer status
M1, M2, ME, M4, M5, M6, M7, M8	Indicate which of the four (or eight) User Macros is currently used. The N° depending by the Firmware level installed.

- when there is no paper loaded and the printer is off line (ON LINE indicator unlit):

| LOAD FRONT1 |

Current Paper Path

- when there is no paper loaded and the printer is on line (ON LINE indicator lit):

| ON LINE   M1 |

Printer Status   Current Macro

Where:

LOAD FRONT1 LOAD FRONT2	Indicates that the currently selected paper path is out of paper. The messages are displayed only for the available paper paths, according to the installed devices.
OFF LINE ON LINE	Indicates the printer status
M1, M2, ME, M4, M5, M6, M7, M8	Indicate which of the four (or eight) User Macros is currently used. The N° depending by the Firmware level installed.

The following messages appear to indicate other printer conditions or user intervention requests.
The list is in alphabetical order.

MESSAGE	DESCRIPTION
ALTERNATE	This message appears to indicate that the Alternate functions of the operator panel keys have been selected pressing the ALTERNATE key.
BUSY M1	This message appears to indicate that the printer is printing. It is busy
COVER OPEN CLOSE COVER	When the printer cover is not closed correctly, the buzzer sounds and the display shows alternately these two messages. Close the printer cover
INITIALIZING LAN	This message is displayed when the LAN is reset (only if the LAN interface is present)
INVALID KEY	This message is displayed if you push a key that is not allowed in the current printer status
LOAD FRONT1 LOAD FRON2	These messages are displayed when the corresponding paper path is out of paper. The printer displays only the messages related to the installed devices
LOCKED MENU	When the access to the Printer Setups has been locked at the power on, the printer displays this message
MACRO CHANGING	The macro has been changed and the printer is updating the settings
MICRO FEED DOWN	The paper is fed in microsteps downwards when pressing the ↓ arrow key
MICRON FEED UP	The paper is fed in microsteps upwards when pressing the ↑ arrow key
OPER.INTERRUPTED	This message is displayed if the ALTERNATE key has been pressed to interrupt a park procedure
PARKING	The printer is parking the fanfold paper
PARK PAPER TEAR IS NECESSARY	The parking action is run with the message for operator to tear the printed paper
PARK PAPER TEAR OFF PAPER	The parking action is already run but the paper remain in the printer path because too long (maximum paper length for automatic parking is 28" (711,2mm). The operator is advise to tear paper.
PATH CHANGING	The path has been changed and the printer is updating the settings
PRESS A KEY NVM CHANGED	The NVM has been changed. Press any key to set the printer. This message appears when the FW is updated.
RELEASE KEYS	This message is displayed when you can release the ON LINE key in the Self-test selection or the PROGRAM key in the Power-on Configuration procedure
REMOTE CONTROL	This message is displayed when the printer operates from remote control (only if the LAN interface is present).
RESET & BREAK	This message is displayed when the input buffer corresponding to the active interface is cleared
SELF TEST	Printing the self-test page.
STARTING UP	The starting-up phase after power on is running
TEAR IF NECESS. EJECT PAPER	These messages are displayed when the printer receives a paper parking command and the TEAR NO item is selected for the tear-off function. Tear off the fanfold then press the PARK key to eject the paper
TEAR IF NECESS. PARK PAPER	These messages are displayed when the printer receives a paper parking command. Tear off the fanfold paper if necessary and then press the PARK key to park the paper
UNLOCKED MENU	When the access to the Printer Setups has been unlocked at the power on, the printer displays this message
WAITING CODE	The special function to download a new FW Release is running
UNLOCKED MENU	When the access to the Printer Setups has been unlocked at the power on, the printer displays this message

For the error messages see "Error Handling" later in this manual

Indicators

ON-LINE	• Lit when the printer can receive and print data (printer online). • Blinks when there is data in the buffer and the printer is offline. • Unlit when the printer is disabled and the buffer does not contain any data, or during the initialization, setup or tests
PROGRAM	• Lit when one of the printer setup procedures has been selected: Program Configuration or Power-On Configuration
ALTERNATE	• Lit when the alternate function of the keys has been enabled pressing the ALTERNATE key
FRONT 1	• Lit when the Front1 paper path is selected • Unlit when the Front1 paper path is not selected
FRONT 2	• Lit when the Front2 paper path is selected • Unlit when the Front2 paper path is not selected

Function Keys

Pressing the function keys it is possible to activate the functions indicated by the word or symbol signed near the key. Each key may have different functions, according to the selected function modes: *Normal*, *Alternate* or *Program*.

Normal Function	The normal function of the keys is written above the keys and does not require any previous action to select it.
Alternate Function	The alternate function of the keys is written below the keys and is selected pressing the ALTERNATE key. When the alternate function of the keys is selected, the ALTERNATE indicator is lit and the display shows ALTERNATE.
Program Function	The program function of the keys is selected pressing the PROGRAM key, where: • If you press the key while powering the printer on, the Power-On Configuration is selected. • If you press the key when the printer is enabled without printing or disabled (ON LINE indicator unlit), the Program Setup is selected. • In the Program Setup mode only the four arrow keys and the PROGRAM key are enabled and the PROGRAM indicator is lit
Special Function	The special function means a specific function of a key or a combination of two or more keys. The detailed function can be found in the Maintenance Manual of the printer.

ON LINE Key

ON LINE	Normal Function	Enables or disables the printer.
		• If this key is pressed while powering the printer on, the self test is printed; the printout is stopped pressing this key again.
		• In an error condition, once the error cause has been removed, press this key to enable the printer
		• Pressing this key with MACRO and TEAR, lock or unlock the access to the printer setups. See later "How to Lock/Unlock the Printer Setups" section.
	Program Function	Pressing this key, the input buffer is cleared. The message RESET & BREAK is displayed
	Special Function	Pressing this key together the MACRO key at power on starts the T&D tests (Test & Diagnostic).

PROGRAM Key

PROGRAM	Normal Function	Enables the printer setups as follows: Pressing this key while powering on the printer, the **Power-On Configuration** is selected. Pressing this key when the printer is enabled without printing or disabled the **Program Setup** is enabled (PROGRAM indicator lit).
	Program Function	Exits the printer setups

MACRO Key

MACRO	Normal Function	• Selects one of the user macros (Macro 1, Macro 2, Macro 3 or Macro 4). If you want to select the displayed macro, wait for 2 seconds without pressing any key and the parameters of this macro will be set.
		• Pressing this key with ONLINE and TEAR, lock or unlock the access to the printer setups. See later "How to Lock/Unlock the Printer Setups" section.
→	Program Function	Scrolls the parameters of the functions or macros forwards
	Special Function	Pressing this key together the ON LINE key at power on starts the T&D tests (Test & Diagnostic)

FONT Key

FONT	Normal Function	Selects the font to be used with the currently selected pitch. The selected font is valid until the printer is turned off or a new font is selected using this key.
←	Program Function	Scrolls the parameters of the functions or macros backwards.

LF Key

LF	Normal Function	Performs a line feed according to the current line spacing settings.
MICROFEED	Alternate Function	Moves the paper forward in microsteps. Keeping the key pressed the paper is moved continuously at increasing speed.
↑	Program Function	Scrolls the setup and macro functions backwards..
	Special Function	Pressing this key together the MACRO key at power on starts the updating of the FW Release

LOAD/FF Key

FF	Normal Function	Executes a Form Feed (FF). When paper is loaded into the printer, it advances to the following page; if no paper is loaded, it is positioned for printing
MICROFEED	Alternate Function	Moves the paper backward in microsteps. Keeping the key pressed the paper is moved continuously at increasing speed.
↑	Program Function	Scrolls the setup and macro functions forwards..

ALTERNATE Key

ALTERNATE	Normal Function	Enables the alternative key functions.
		If the printer is receiving print data, press the ON LINE key before pressing the ALTERNATE key.
		If no printing data are in the print buffer, pressing the ALTERNATE key, the printer goes offline.
		The display then shows ALTERNATE to indicate that the Alternate Function of the keys is enabled (ALTERNATE indicator lit). May be used to abort paper parking procedure. See also "How to Handle the Paper Parking", later in this manual.
		When the printer is in Program Setup Mode, this key is disabled.
	Alternate Function	Disables the alternative key functions

TEAR/PITCH Key

TEAR	Normal Function	• Moves the paper to the tear-off position (TEAR NORMAL function must be selected in the Program Setup). • Pressing this key with ONLINE and MACRO, lock or unlock the access to the printer setups. See later "How to Lock/Unlock the Printer Setups" section.
PITCH	Alternate Function	Selects the pitch to be used with the currently selected font. The selected pitch is valid until the printer is turned off.

PATH/PARK Key

PATH	Normal Function	Selects one of the paper paths in offline status. The parameters of the displayed path are set after 2 seconds without pressing any key.
PARK	Alternate Function	Parks the paper in the currently selected paper path.

Printer Setups

The main printer setup parameters can be selected via the operator panel. The setup parameters are divided into two printer setups, the **Power-On Configuration**, that allows a complete configuration at installation time according to the hardware and the emulation types, and the **Program Setup**, that allows you to set the functions that are the most useful in your daily job. These settings can be selected when the printer is online without printing or offline (ON LINE indicator unlit) and stored in the NVM.

Entering the Printer Setups

- Press the PROGRAM key and keep it pressed at the printer power on until the RELEASE KEYS message is displayed to select the Power-On Configuration.
- Press the PROGRAM key when the printer is online without printing or offline (ON LINE indicator unlit) to select the Program Setup.

Moving within the Printer Setups

The arrow keys ↑, ↓, ⟵, ⟶ are used to move within the different functions inside the Printer Setups. See the following description of the setup items.

Leaving the Printer Setups

- Pressing the PROGRAM key in the **Power-On Configuration** the printer exits from the setup and the new settings will be automatically saved.
- Pressing the PROGRAM key in the **Program Setup**, the following choice is offered for the storage of the values set:

STORE?	QUIT	The new settings are not activated and the old settings remain valid.
STORE?	SAVE	The new settings are stored permanently in the NVM (Non Volatile Memory).
STORE?	CURRENT	The new settings remain valid until the printer is turned off.

Press the ⟶ or ⟵ keys to scan these selections forward and backwards. When the desired setting is displayed, press the PROGRAM key to exit from the Setup.

Printer Setup Item

When the **Program Setup** is run, these are the available ITEM :.

	PRINT OUT?	Print Program Setup
then		
	PRINT STATS? NO	Print Statistics
then		
	USER MACRO	Enter in the Macro Setup
then		
	CONFIG MENU NO	Enter in the Power-on Configuration
then		
	HEX DUMP NO	Enter in Hex Dump mode
then		
	STORE? QUIT	Leaving Setup

Power-On Configuration Setup

The default values of the various functions are indicated in bold.

Entering the Power-On Configuration Setup

1. Make sure that the printer is turned off.

2. Press and hold the PROGRAM key pressed while powering on the printer until the RELEASE KEYS message is displayed. As soon as the PROGRAM key gets released, the following message will be displayed:

```
            STARTING UP
```

then

```
            S828 Rel. x.yz
```

then

```
            PRINT OUT? NO
```
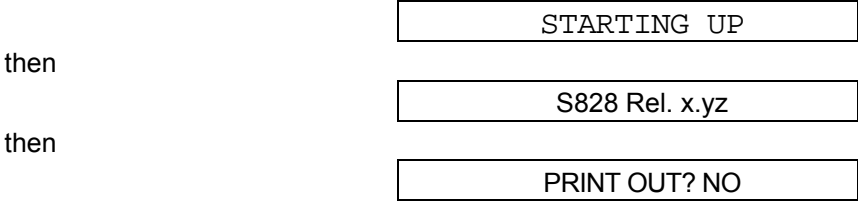
Main Structure

This figure shows the structure of the Power-On Configuration and how to move inside the Setup.
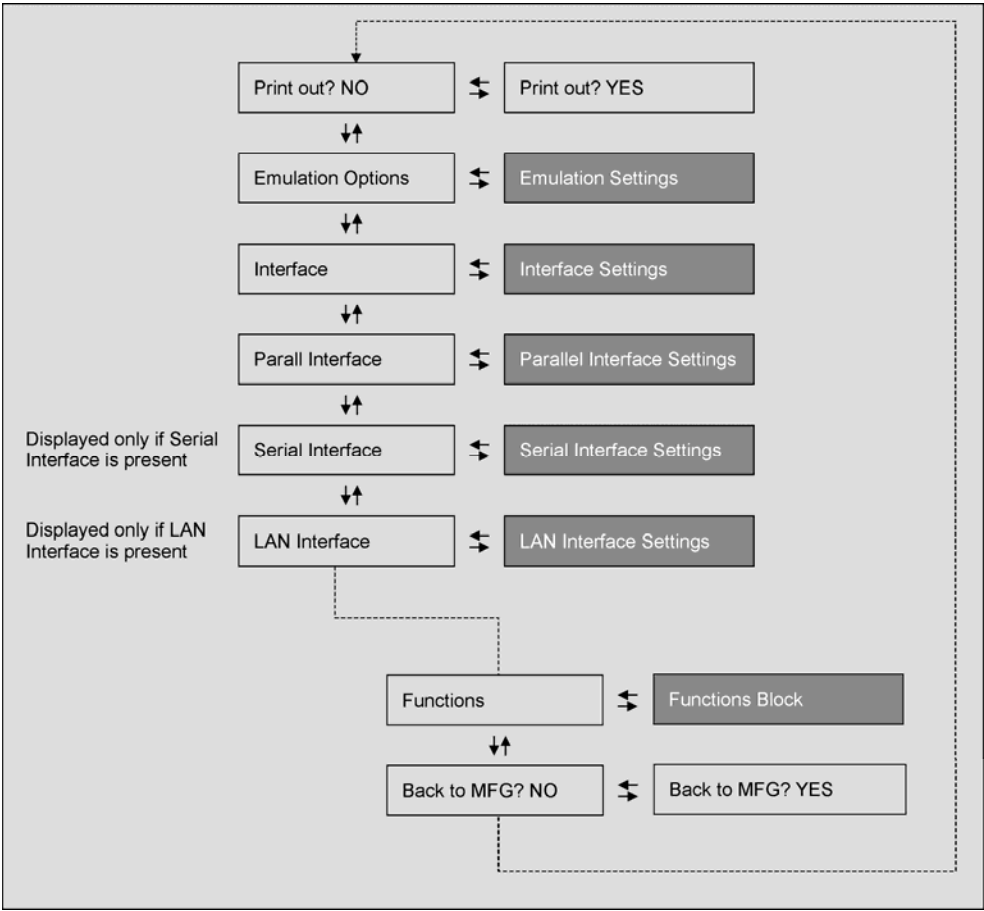
Printout of the Configuration Printer Settings

| PRINT OUT? NO | → or ← | PRINT OUT? YES |

↓
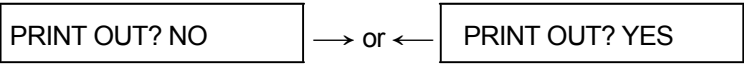
EMUL. OPTIONS

PRINT OUT? NO	The Setup is not printed.
PRINT OUT? YES	The printer setup is printed showing the currently selected values.
	The printout starts as soon as you select this value.

```
-CONFIGURATION SETUP PRINTOUT:

PRINTER MODEL: S828
FIRMWARE CODE: ver.  1.00  S828.v..
SERIAL NUMBER: 0000000
MAC ADDRESS:   000660211106

EMUL.   OPTIONS    EMUL.      EPSON
                   CHAR. SET    CS2
                   NATION     CP437
                   AUTO CR      YES
                   AUTO LF       NO
                   BAR CODE   ALT.1

INTERFACE          I/F TYPE   AUTO

PARALL INTERFACE   1284 BIDIR.  I/F
                   SELECT-IN   HOST
                   DATA BITS      8
                   INP. BUFFER   2K

SERIAL INTERFACE   SERIAL I/F  232
                   BAUD        9600
                   DATA BITS      8
                   PARITY      NONE
                   HANDSHAKE    DTR
                   CONNECTION LOCAL
                   INP. BUFFER   2K

LAN   INTERFACE    IP ASSIGN   DHCP
                   INIT IP ADDRESS  172.016.002.074
                   INIT NET MASK    255.255.252.000
                   DEF. GATEWAY ID  172.016.000.001
                   INIT HOST NAME   PTX_2111D6
                   INIT WORKGROUP   workgroup
                   SMTP ENABL.  YES
                   MAIL SERV.ADDRES 000.000.000.000
                   EMAIL ADDRESS
                   SENDER ADDRESS
                   LPR  ENABL.  YES
                   FTP  ENABL.  YES
                   TELNET ENAB. YES
                   DIRIP ENABL. YES
                   HTTP ENABL.  YES
                   SNMPD ENABL. YES
                   SMBD ENABL.  YES

FUNCTIONS          BUZZER       YES
                   TEXT DIRECT   BI
                   GRAPH DIRECT  BI
                   BARCODES DIR.UNI
                   F.ON PATH  MACRO
                   MENU     ENGLISH
                   F1 JAM SENS.   Y
                   TEAR ADJUST    0
```

Emulation Options

This setup defines the available options according to the selected emulation and is structured as follows:
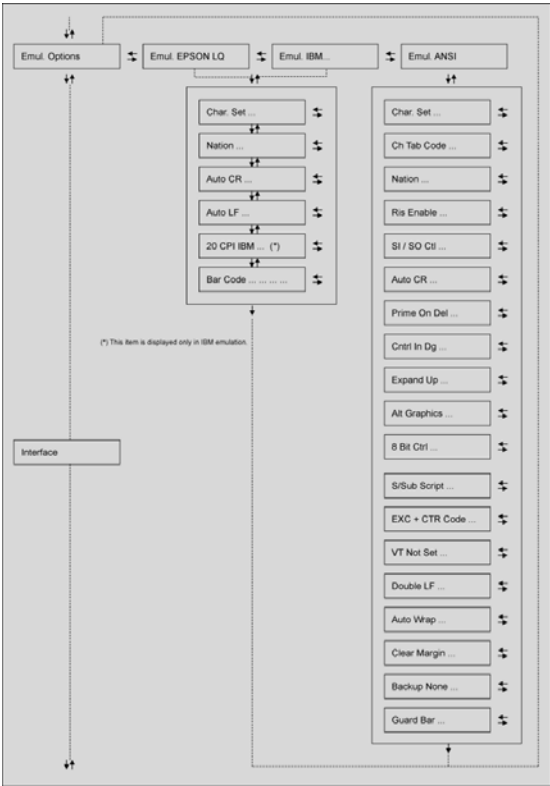
Setting the Emulation Options

Printer Emulation

↑   ↑

| EMUL. OPTIONS | → | **EMUL. EPSON** | → or |

↓   EMUL. IBM XLIII   → or

EMUL. IBM 2381   → or

                        EMUL. ANSI   → or

                        ↓
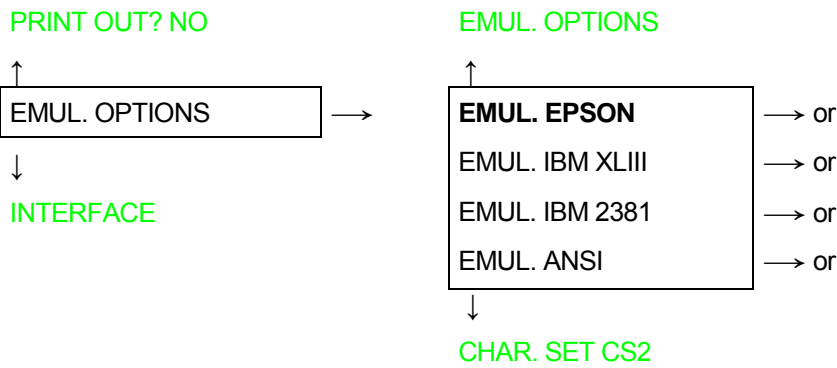
EMUL EPSON   The printer uses the EPSON FX Series emulation.
EMUL IBM XLIII   The printer uses the IBM Proprinter XLIII emulation.
EMUL. IBM 2381   The printer uses the IBM Personal 2391+ emulation.
EMUL. ANSI   The printer uses the ANSI 3.64 emulation.

If ANSI emulations has been selected, specific ANSI parameters are available, see later on in thus manual.

EPSON Character Sets

EMUL. EPSON LQ

↑

CHAR. SET CS1	⟶ or ⟵
CHAR. SET CS2	⟶ or ⟵
CHAR. SET ITALIC	⟶ or ⟵

↓

NATION CP437

These items select the character set to be used in EPSON emulation.

IBM Character sets

EMUL. IBM xxx

↑

CHAR. SET CS1	⟶ or ⟵
CHAR. SET CS2	⟶ or ⟵

↓

NATION CP437

These items select the character set to be used in IBM Proprinter emulation.

EPSON National Character sets

CHAR. SET CS2

↑

NATION CP437	⟶ or ⟵
NATION …	⟶ or ⟵
NATION LATIN A1	⟶ or ⟵

↓

AUTO CR YES

The following national character sets are available:

CP 437	CP437 G	96GREEK	CP850	CP851	CP 852	CP 853	CP 855
CP 857	CP 858	CP 860	CP 862	CP 863	CP 864	CP 865	CP 866
CP 867	CP 876	CP 877	CP 1250	CP 1251	CP 1252	CP 1253	CP 1254
CP 1255	CP 1256	CP 1257	GOST	TASS	MAZOWIA	ISO 8859/1	ISO 8859/2
8859/3	ISO 8859/4	ISO 8859/5	ISO 8859/6	ISO 8859/7	ISO 8859/8	ISO 8859/9	ISO 8859/15
CP 437SL	CP 1098	UKRAIN	KOI8-U	FARSI1	FARSI2	USA	FRANCE
GERMANY	ENGLAND	DENMARK1	SWEDEN	ITALY	SPAIN1	JAPAN	NORWAY
DENMARK2	SPAIN2	LATIN A1					

The CP 858 and ISO 8859/15 character sets contain the Euro character

IBM National Character Sets

CHAR. SET CS2

↑

NATION CP437	$\longrightarrow$ or $\longleftarrow$
NATION …	$\longrightarrow$ or $\longleftarrow$
NATION FARSI2	$\longrightarrow$ or $\longleftarrow$

↓

AUTO CR NO

The following national character sets can be selected:

CP 437	CP437 G	96GREEK	CP850	CP851	CP 852	CP 853	CP 855
CP 857	CP 858	CP 860	CP 862	CP 863	CP 864	CP 865	CP 866
CP 867	CP 876	CP 877	CP 1250	CP 1251	CP 1252	CP 1253	CP 1254
CP 1255	CP 1256	CP 1257	GOST	TASS	MAZOWIA	ISO 8859/1	ISO 8859/2
ISO 8859/3	ISO 8859/4	ISO 8859/5	ISO 8859/6	ISO 8859/7	ISO 8859/8	ISO 8859/9	ISO 8859/15
CP 437SL	CP 1098	UKRAIN	KOI8-U	FARSI1	FARSI2		

The CP 858 and ISO 8859/15 character sets contain the Euro character

CR Code Behavior

NATION xxx

↑

| AUTO CR NO | $\longrightarrow$ or $\longleftarrow$ |
| **AUTO CR YES** | $\longrightarrow$ or $\longleftarrow$ |

↓

AUTO LF NO

AUTO CR NO   No automatic carriage return is performed after a LF, VT or ESCJ code. Default value in IBM emulation.

AUTO CR YES   The printer performs an automatic carriage return after a LF, VT or ESCJ code. Default value in EPSON emulation.

LF Code Behavior

AUTO CR xx

↑

AUTO LF NO	⟶ or ⟵
AUTO LF YES	⟶ or ⟵
AUTO LF HOST	⟶ or ⟵

↓
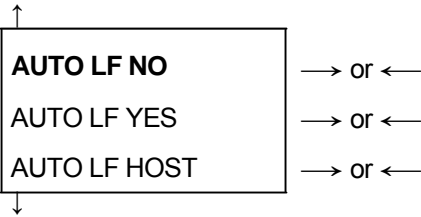
20 CPI IBM NO

or

BAR CODE NATIV

AUTO LF NO	No Automatic LF after CR.
AUTO LF YES	Automatic LF after CR.
AUTO LF HOST	Only in EPSON emulation. The printer checks the AUTOFEEDXT signal coming from the host and executes an automatic LF after CR, if the signal is low.

IBM Compressed Printing

These items are displayed only if the IBM emulation is selected.

AUTO LF NO

↑

20 CPI IBM NO	⟶ or ⟵
20 CPI IBM YES	⟶ or ⟵

↓
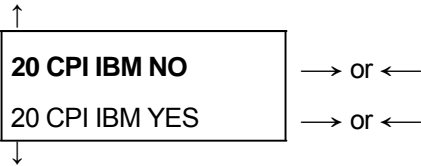
BAR CODE NATIV

20 CPI IBM NO	The compressed printing is performed at 17.1 cpi.
20 CPI IBM YES	The compressed printing is performed at 20 cpi.

Bar code mode

20 CPI IBM NO

or

AUTOLF NO

↑

BAR CODE NATIV	⟶ or ⟵
BAR CODE ALT.1	⟶ or ⟵
BAR CODE ALT.2	

↓
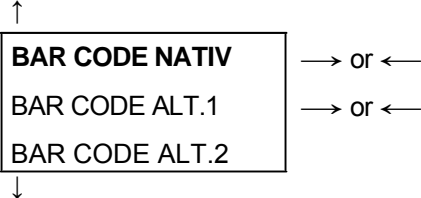
EMUL. OPTIONS

BAR CODE NATIV	Enables bar code printing using the native commands (DC4, DC4, …).
BAR CODE ALT.1	Enables bar code printing using ANSI commands even if the emulation in use is EPSON or IBM.
BAR CODE ALT.2	Enables bar code printing using xxxx commands even if the emulation in use is EPSON or IBM.

Interface
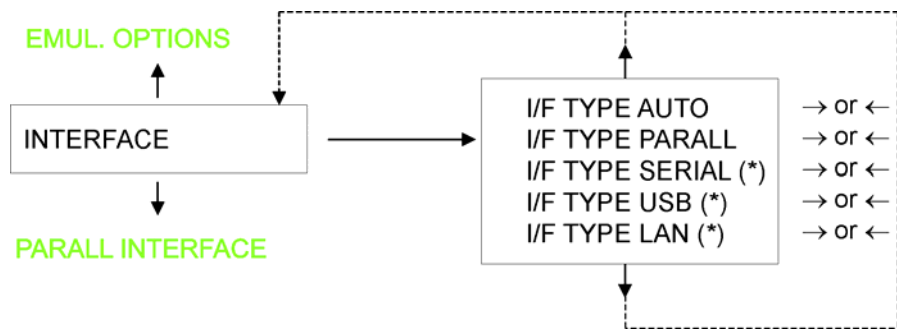
Interface Type Settings

Depending upon the installed Controller Board, the printer model can be equipped with different interfaces to connect to the host system.

The possible interfaces are:

	S828	S828 IPDS
• Parallel Centronics	YES	YES
• Serial 232C	YES	YES
• USB	YES	YES
• Ethernet LAN 10/100	YES	NO
• Ethernet LAN 10/100 IPDS	NO	YES

The following paragraphs describe how to configure the parameters of the interfaces.

AUTO	All the interfaces installed onto the interface board (controller) are active and the hot port feature is operative.
PARALLEL	Only the Centronics Parallel Interface is active. Hot Port is not operative.
SERIAL	Only the Serial RS232 Interface is active. Hot Port is not operative.
USB	Only the USB Interface is active. Hot Port is not operative.
LAN-A	Only the Ethernet LAN ASCII Interface is active. Hot Port is not operative.
LAN-I	Only the Ethernet LAN IPDS Interface is active. Hot Port is not operative.

Parallel Interface

This setup defines the use of the parallel interface and is structured according to the interface specific parameters.
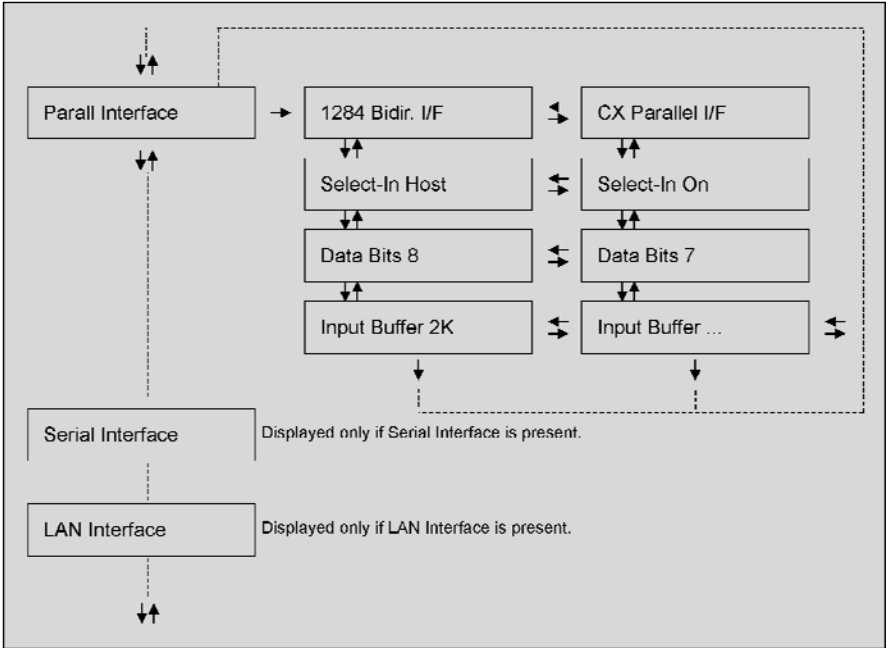
Setting the Parallel Interface Parameters
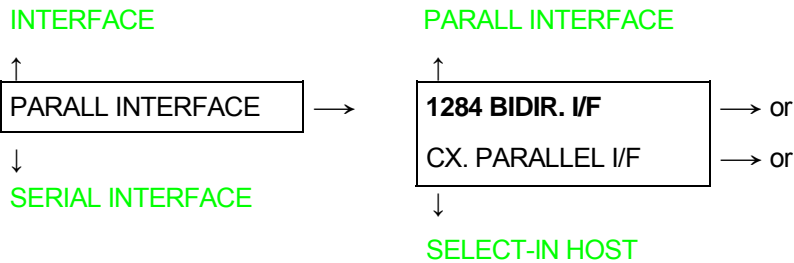
Interface Type

1284 BIDIR. I/F	Bidirectional IEEE 1284 parallel interface.
CX. PARALLEL I/F	Centronics type parallel interface (mono-directional).

Setting the Select-In Signal
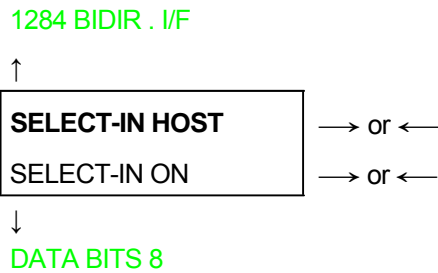
SELECT-IN HOST	The printer checks the SELECT-IN signal coming from the host.
SELECT-IN ON	The SELECT-IN signal of the parallel interface is ignored and treated always as ON.

Number of Data Bits

SELECT-IN HOST

↑

DATA BITS 8	$\longrightarrow$ or $\longleftarrow$
DATA BITS 7	$\longrightarrow$ or $\longleftarrow$

↓

INP. BUFFER 2K
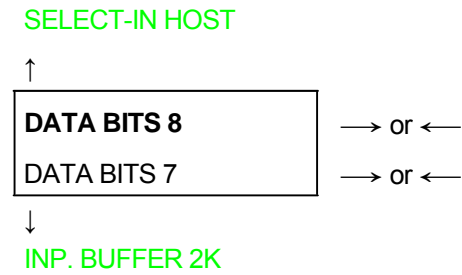
Selection of the number of data bits: 7 or 8.

Input Buffer Size

DATA BITS 8

↑

INP. BUFFER 256	$\longrightarrow$ or $\longleftarrow$
INP. BUFFER 2K	$\longrightarrow$ or $\longleftarrow$
INP. BUFFER 12K	$\longrightarrow$ or $\longleftarrow$
INP. BUFFER 32K	$\longrightarrow$ or $\longleftarrow$
INP. BUFFER 64K	$\longrightarrow$ or $\longleftarrow$
INP. BUFFER 128K	$\longrightarrow$ or $\longleftarrow$

↓
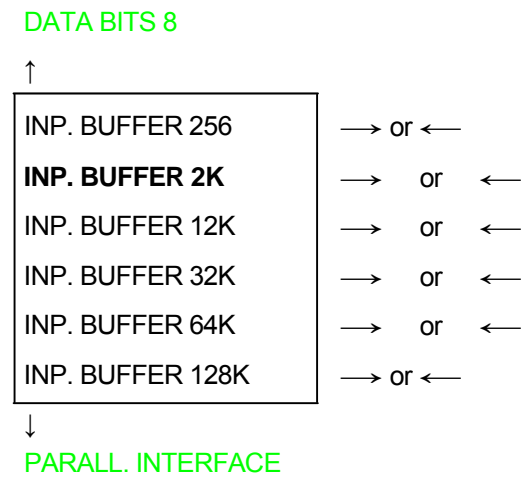
PARALL. INTERFACE

Selects the input buffer size.

Serial Interface

The following Serial Interface Parameters will display only if the Serial Interface is present

This setup defines the use of the serial interface and is structured according to the interface specific parameters.
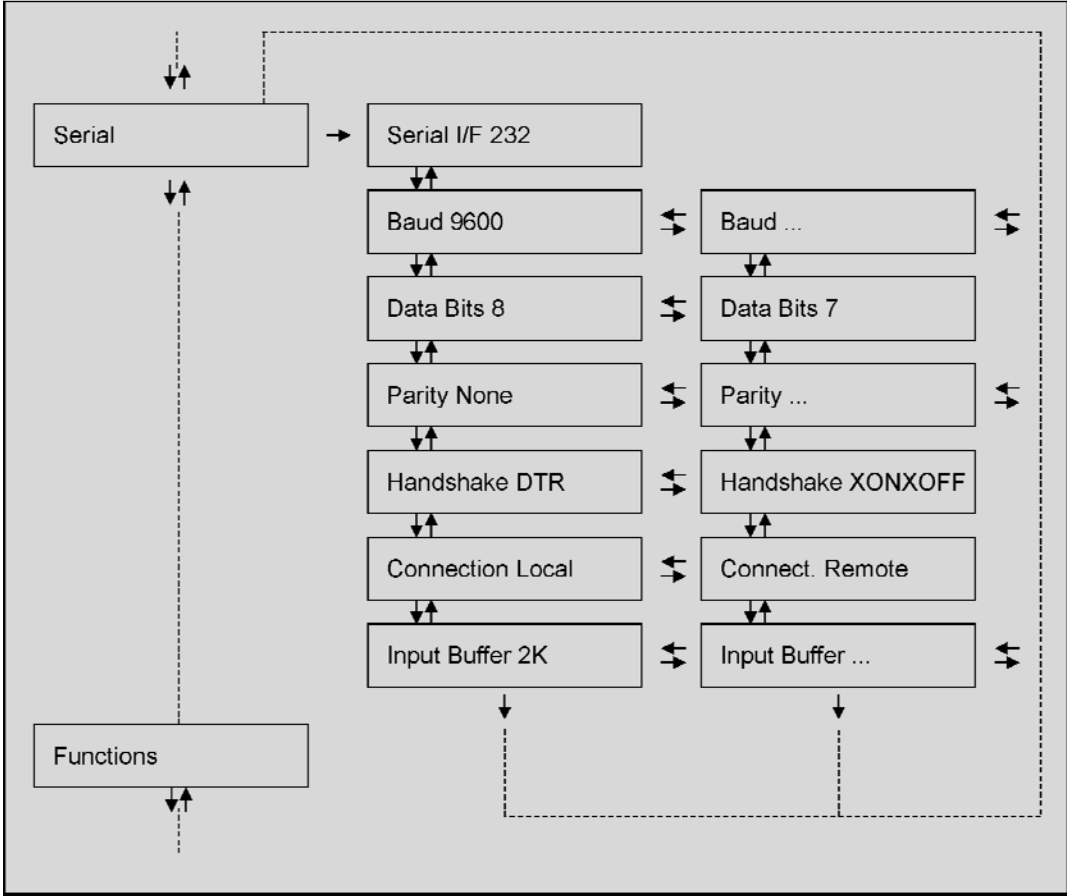
Setting the Serial Interface Parameters

Interface Type

PARALL INTERFACE   SERIAL INTERFACE

↑   ↑

SERIAL INTERFACE ⟶ **SERIAL I/F 232** ⟶ or ⟵

↓   ↓

FUNCTIONS   BAUD 9600
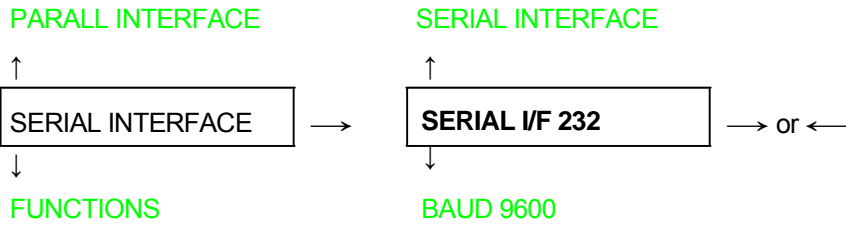
SERIAL I/F 232   It is available the serial interface RS-232/C only.

Baud Rate

↑

BAUD 300	⟶ or ⟵
BAUD 600	⟶ or ⟵
BAUD 1200	⟶ or ⟵
BAUD 2400	⟶ or ⟵
BAUD 4800	⟶ or ⟵
BAUD 9600	⟶ or ⟵
BAUD 19200	⟶ or ⟵
BAUD 38400	⟶ or ⟵
BAUD 115200	⟶ or ⟵

↓
DATA BITS 8

The baud rate is selected in bits per second. The above values can be selected.

Number of Data Bits

BAUD 9600
↑

| **DATA BITS 8** | ⟶ or ⟵ |
| DATA BITS 7 | ⟶ or ⟵ |

↓
PARITY NONE

Selection of the number of data bits: 7 or 8.

Parity Check

DATA BITS 8
↑

PARITY NONE	⟶ or ⟵
PARITYODD	⟶ or ⟵
PARITY EVEN	⟶ or ⟵
PARITY MARK	⟶ or ⟵
PARITY SPACE	⟶ or ⟵

↓
HANDSHAKE DTR

PARITY NONE	Data does not have a parity bit, i.e. 8 bit data are transferred and the parity check is disabled.
PARITY ODD	Parity check is enabled for odd parity.
PARITY EVEN	Parity check is enabled for even parity.
PARITY MARK	Parity check is disabled and the transmitted parity bit is always a Mark.
PARITY SPACE	Parity check is disabled and the transmitted parity bit is always a Space.

Handshake Protocol

PARITY NONE

↑

HANDSHAKE DTR	⟶ or ⟵
HANDSHAKE XONXOF	⟶ or ⟵

↓

CONNECTION LOCAL

HANDSHAKE DTR	The Handshake is performed using the DTR Protocol. HANDSHAKE XONXOF
HANDSHAKE XONXOFF	The Handshake is performed using the XON-XOFF Protocol.

Connection Type

HANDSHAKE DTR

↑

CONNECTION LOCAL	⟶ or ⟵
CONNECT. REMOTE	⟶ or ⟵

↓

INP. BUFFER 2K

Selects the connection type: local or remote.

Input Buffer Size

CONNECTION LOCAL

↑

INP. BUFFER256	⟶ or ⟵
INP. BUFFER 2K	⟶ or ⟵
INP. BUFFER12K	⟶ or ⟵
INP. BUFFER32K	⟶ or ⟵
INP. BUFFER64K	⟶ or ⟵
INP. BUFFER128K	⟶ or ⟵↓

SERIAL INTERFACE

Selects the input buffer size.

LAN Interface

| The following LAN interface parameters will display only if the Ethernet 10/100 Mbit interface is present |

This setup defines the use of the LAN interface and is structured according to the interface specific parameters.
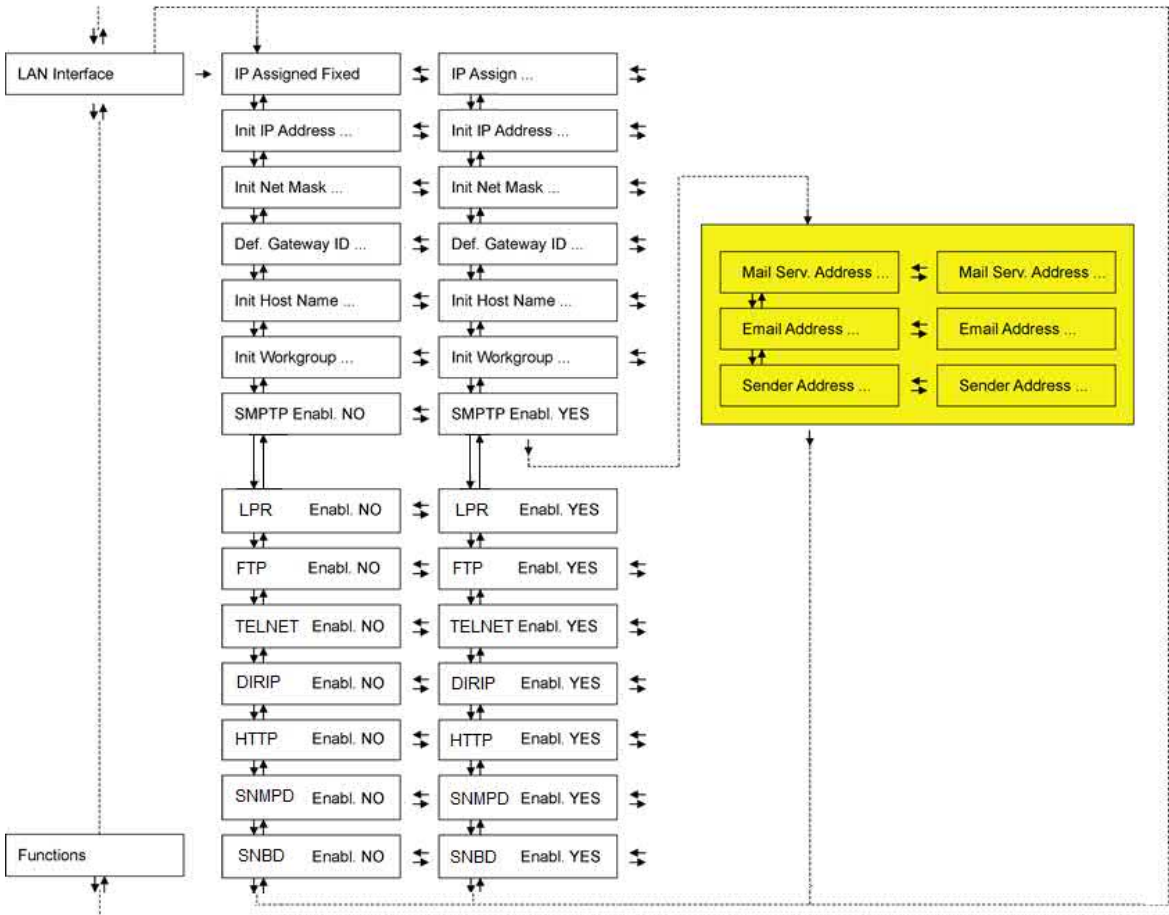
# Setting the LAN Interface Parameters

IP Assignment

PARALL INTERFACE

↑

| LAN INTERFACE | → |

↓

FUNCTIONS

LAN INTERFACE

↑

| **IP ASSIGN FIXED** | → or ← |
| IP ASSIGN DHCP | → or ← |

↓

INIT IP ADDRESS 127.000.000.000
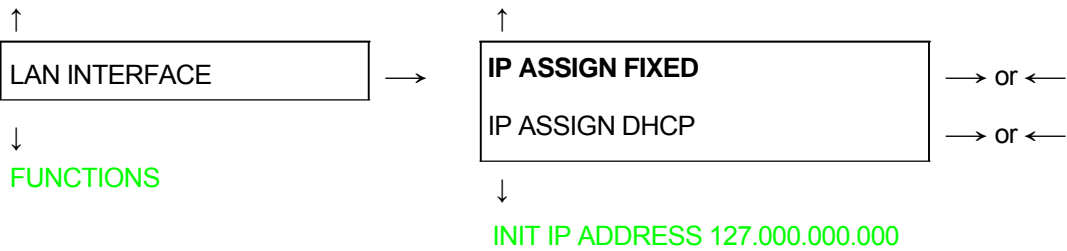
| IP ASSIGN FIXED | Assigns the static or fixed IP address. |
| IP ASSIGN DHCP | Assigns the dynamic IP address (DHCP protocol). |

Init IP Address

IP ASSIGN FIXED

↑

INIT IP ADDRESS 000.000.000.000	⟶ or ⟵
INIT IP ADDRESS …	⟶ or ⟵
INIT IP ADDRESS 255.255.255.255	⟶ or ⟵

↓

INIT NET MASK 255.255.254.000

These values set the INIT IP address. The IP address is represented by a decimal notation where the decimal values are divided by points in four fields. Each field ranges between 0 and 255. Use the ⟵ or ⟶ keys to increase or decrease the values in one field and the ↓ or ↑ keys to move to the next field (↓ to move to the right and ↑ to move to the left).

The default value is 127.000.000.000.

Init Net Mask

INIT IP ADDRESS 127.000.000.000

↑

INIT NET MASK 000.000.000.000	⟶ or ⟵
INIT NET MASK …	⟶ or ⟵
INIT NET MASK 255.255.255.255	⟶ or ⟵

↓

DEF. GATEWAY ID 000.000.000.000

These values set the INIT net mask number. This number is represented by a decimal notation where the decimal values are divided by points in four fields. Each field ranges between 0 and 255. Use the ⟵ or ⟶ keys to increase or decrease the values in one field and the ↓ or ↑ keys to move to the next field (↓ to move to the right and ↑ to move to the left). The default value is 255.255.254.000.

ID Default Gateway

INIT NET MASK 255.255.254.000

↑

DEF. GATEWAY ID **000.000.000.000**	⟶ or ⟵
DEF. GATEWAY ID …	⟶ or ⟵
DEF. GATEWAY ID 255.255.255.255	⟶ or ⟵

↓

INIT HOST NAME CMP_xxxxxx

These values set the ID default gateway number. This number is represented by a decimal notation where the decimal values are divided by points in four fields. Each field ranges between 0 and 255. Use the ⟵ or ⟶ keys to increase or decrease the values in one field and the ↓ or ↑ keys to move to the next field (↓ to move to the right and ↑ to move to the left).

Init Host Name

DEF. GATEWAY ID 000.000.000.000

↑

INIT HOST NAME ……………

⟶ or ⟵

PROGRAM key

↓

INIT WORKGROUP CMP_GROUP

The host is identified by a name. This function allows to create the name of the init host using a 14- character string. Use the ⟵ or ⟶ keys to increase or decrease the values in one field and the ↓ or ↑ keys to move to the next field (↓ to move to the right and ↑ to move to the left). Press the PROGRAM key to save the selected init host name. The default name is CMP_xxxxxx.

Init Workgroup Name

INIT HOST NAME CMP_xxxxxx

↑

INIT WORKGROUP ……………

⟶ or ⟵

PROGRAM key

↓

SMTP ENABL. NO

The workgroup is identified by a name. This function allows to create the name of the workgroup using a 14-character string. Use the ⟵ or ⟶ keys to increase or decrease the values in one field and the ↓ or ↑ keys to move to the next field (↓ to move to the right and ↑ to move to the left). Press thePROGRAM key to save the selected init workgroup name. The default name is workgroup.

Enable/Disable the SMTP Service

INIT WORKGROUP workgroup

↑

SMTP ENABL. NO	⟶ or	SMTP ENABL. YES

↓   ↓

LPR ENABL.   MAIL SERV.ADDRES   000.000.000.000

SMTP ENABL. NO	Disables the SMTP (Simple Mail Transfer Protocol) service, that is disables the reception/transfer/error service of the e-mail.
SMTP ENABL. YES	Enables the SMTP (Simple Mail Transfer Protocol) service, that is enables the reception/transfer/error service of the e-mail.

Mail Server Address

This item is displayed only if the SMTP ENABL. function is selected in YES

SMTP ENABL. YES

↑

MAIL SERV.ADDRES **000.000.000.000**	⟶ or ⟵
MAIL SERV.ADDRES …	⟶ or ⟵
MAIL SERV.ADDRES 255.255.255.255	⟶ or ⟵

↓

EMAIL ADDRESS xxxxxxxxxxx

These values set the mail server address. This number is represented by a decimal notation where the decimal values are divided by points in four fields. Each field ranges between 0 and 255. Use the ⟵ or ⟶ keys to increase or decrease the values in one field and the ↓ or ↑ keys to move to the next field (↓ to move to the right and ↑ to move to the left).

E-mail Address

This item is displayed only if the SMTP ENABL. function is selected YES

MAIL SERV.ADDRES

↑

| EMAIL ADDRESS   xxxxxxxxxxx | ⟶ or ⟵ |

↓

SENDER ADDRESS xxxxxxxxxxx

This function allows to write the e-mail address where you can notify the failures. Use the ⟵ or ⟶ keys to increase or decrease the values in one field and the ↓ or ↑ keys to move to the next field (↓ to move to the right and ↑ to move to the left). Press the PROGRAM key to save the e-mail address.

Sender Address

This item is displayed only if the SMTP ENABL. function is selected YES

EMAIL ADDRESS   xxxxxxxxxxx

↑

| SENDER ADDRESS   xxxxxxxxxxx | ⟶ or ⟵ |

↓

LPR ENABL.

This function identifies the address of the sender's e-mail using a string of characters. Use the ⟵ or ⟶ keys to increase or decrease the values in one field and the ↓ or ↑ keys to move to the next field (↓ to move to the right and ↑ to move to the left). Press the PROGRAM key to save the sender's e-mail address.

Enable/Disable the LPR Service

SENDER ADDRESS xxxxxxxxxx   or   SMTP ENABL. NO

↑

LPR ENABL. YES

⟶ or

LPR ENABL. NO

↓

FTP ENABL.

| LPR ENABL. YES | Enables the LPR (Line Printer Remote Protocol) service. |
| LPR ENABL. NO | Disables the LPR (Line Printer Remote Protocol) service |

Enable/Disable the FTP Service

LPR ENABL

↑

FTP ENABL. YES

⟶ or

FTP ENABL. NO

↓

TELNET ENABL..

| FTP ENABL. YES | Enables the FTP (File Transfer Protocol) service. |
| FTP ENABL. NO | Disables the FTP (File Transfer Protocol) service |

Enable/Disable the TELNET Service

FTP ENABL

↑

TELNET ENABL. YES

⟶ or

TELNET ENABL. NO

↓

DIRIP ENABL..

| TELNET ENABL. YES | Enables the TELNET service. |
| TELNET ENABL. NO | Disables the TELNET service |

Enable/Disable the DIRIP Service

TELNET ENABL

↑

DIRIP ENABL. YES

⟶ or

DIRIP ENABL. NO

↓

HTTP ENABL..

| DIRIP ENABL. YES | Enables the DIRIP service. |
| DIRIP ENABL. NO | Disables the DIRIP service |

Enable/Disable the HTTP Service

DIRIP ENABL

↑

HTTP ENABL. YES	→ or	HTTP ENABL. NO

↓

TELNET ENABL..

HTTP ENABL. YES	Enables the HTTP (HyperText Transfer Protocol) service.
HTTP ENABL. NO	Disables the HTTP (HyperText Transfer Protocol) service

Enable/Disable the SNMPD Service

HTTP ENABL

↑

SNMPD ENABL. YES	→ or	SNMPD ENABL. NO

↓

SMBD ENABL..

SNMPD ENABL. YES	Enables the SNMPD service.
SNMPD ENABL. NO	Disables the SNMPD service

Enable/Disable the SMBD Service

SNMPD ENABL

↑

SMBD ENABL. YES	→ or	SMBD ENABL. NO

↓

FUNCTION..

SMBD ENABL. YES	Enables the SMBD service.
SMBD ENABL. NO	Disables the SMBD service

Functions

The Functions item groups the following printer functions:

- Buzzer setting,
- Paper loading sequence,
- Bar code density,
- Text printing direction,
- Graphics printing direction,
- Bar code printing direction,
- Graphics printing speed,
- Paper path at power on,
- Language of the display messages,
- Paper tractor jam sensors (if the 6 pin Front1/Front2 Push tractors are installed),
- Tear-off position adjustment.

(*)   This item is displayed only if the pin 6 Front1 push tractor option is installed.

(**)   This item is displayed only if the pin 6 Front2 push tractor option is installed.
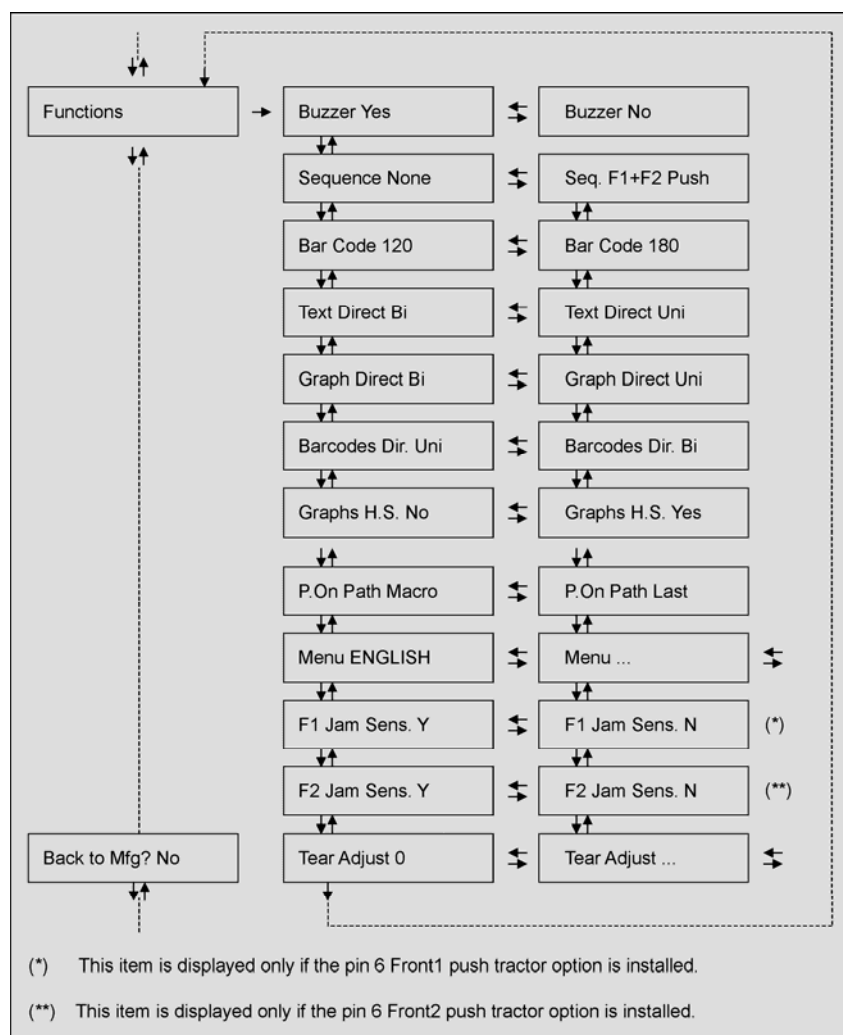
Setting the Functions Group Items

Enable/Disable the Buzzer

SERIAL INTERFACE (*)

or

LAN INTERFACE (**)   FUNCTIONS

↑   ↑

| FUNCTIONS | ⟶ | **BUZZER YES** | ⟶ or ⟵ |
| | | BUZZER NO | ⟶ or ⟵ |

↓   ↓

RETURN TO MFG: NO
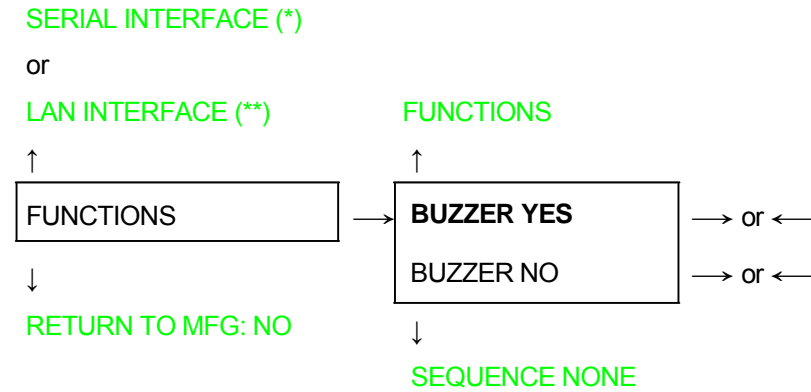
                       SEQUENCE NONE

Enable or disables the buzzer.

(*) If Serial Interface is present.

(**) If LAN Interface is present.

Paper Loading Sequence

BUZZER YES

↑

| **SEQUENCE NONE** | ⟶ or ⟵ |
| SEQ. F1+F2 PUSH | ⟶ or ⟵ |

↓

BAR CODE   120 DPI
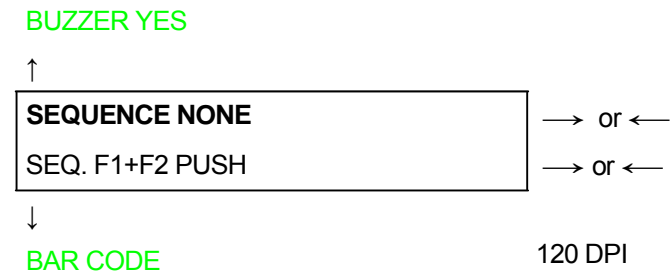
These items are displayed only if the accessories to which they refer are installed

SEQUENCE NONE   The paper is fed only through the path selected by operator panel.

SEQ. F1+F2 PUSH   The paper is fed firstly with the Front1 push tractor and successively through the Front2 push tractor option.

Bar Code Density

SEQUENCE NONE

↑

| **BAR CODE 120DPI** | ⟶ or ⟵ |
| BAR CODE 180DPI | ⟶ or ⟵ |

↓
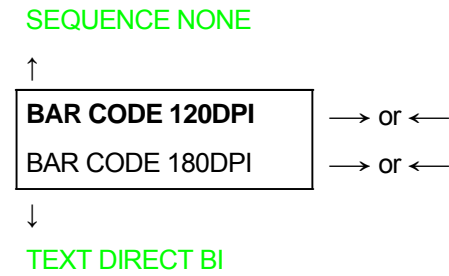
TEXT DIRECT BI

Selects the bar code print density: 120 or 180 dpi.

Text Print Direction

BAR CODE 120DPI

↑

| **TEXT DIRECT BI** | ⟶ or ⟵ |
| TEXT DIRECT UNI | ⟶ or ⟵ |

↓

GRAPH DIRECT BI

Selects the print direction for text: bidirectional or unidirectional.

Graphics Print Direction

TEXT DIRECT BI

↑

| **GRAPH DIRECT BI** | ⟶ or ⟵ |
| GRAPH DIRECT UNI | ⟶ or ⟵ |

↓

BARCODES DIR. UNI

Selects the print direction for graphics: bidirectional or unidirectional.

Bar Codes Print Direction

GRAPH DIRECT BI

↑

| BARCODES DIR. BI | ⟶ or ⟵ |
| **BARCODES DIR. UNI** | ⟶ or ⟵ |

↓

GRAPH H.S. YES

Selects the print direction for bar codes: bidirectional or unidirectional.

Graphics Printing Speed Selection

BARCODES DIR. UNI

↑

| GRAPH H.S. NO | ⟶ or ⟵ |
| **GRAPH H.S. YES** | ⟶ or ⟵ |

↓

P. ON PATH MACRO

| GRAPH H.S. NO | Selects graphics printing (bit image data) at normal speed. |
| GRAPH H.S. YES | Selects graphics printing (bit image data) at high speed. |

Paper Path at Power-On

GRAPH H.S. YES

↑

| P. ON PATH MACRO | ⟶ or ⟵ |
| P. ON PATH LAST | ⟶ or ⟵ |

↓

MENU ENGLISH

P. ON PATH MACRO   The paper path at power-on is the one from the default Macro.

P. ON PATH LAST   The paper path at power-on is the last one that was selected before the printer was powered off.

Selection of the Language of the Display Messages

P. ON PATH MACRO

↑

MENU ENGLISH	⟶ or ⟵
MENU ITALIANO	⟶ or ⟵
MENU FRANCAIS	⟶ or ⟵
MENU ESPANOL	⟶ or ⟵
MENUE DEUTSCH	⟶ or ⟵

↓

F1 JAM SENS. Y (if 6 pin Front1 Push Tractor option is installed)

or

TEAR ADJUST:xxx

These items are self-explaining.

See also "Selecting the Display Language" before in this manual

Enable/Disable Front1 Tractor Jam Sensor

This item is displayed only if the 6 pin Front1 Push Tractor option is installed

MENU ENGLISH

↑

| F1 JAM SENS. Y | ⟶ or ⟵ |
| F1 JAM SENS. N | ⟶ or ⟵ |

↓

F2 JAM SENS. Y (if 6 pin Front2 Push Tractor option is installed)

or

TEAR ADJUST:xxx

| F1 JAM SENS. Y | Enables the paper jam sensor located in the 6 pin Front1 push tractor option. |
| F1 JAM SENS. N | Disables the paper jam sensor located in the 6 pin Front1 push tractor option. |

Enable/Disable Front2 Tractor Jam Sensor

This item is displayed only if the 6 pin Front2 push tractor option is installed

F1 JAM SENS. Y

↑

| F2 JAM SENS. Y | ⟶ or ⟵ |
| F2 JAM SENS. N | ⟶ or ⟵ |

↓

TEAR ADJUST: xxx

| F2 JAM SENS. Y | Enables the paper jam sensor located in the 6 pin Front2 push tractor option. |
| F2 JAM SENS. N | Disables the paper jam sensor located in the 6 pin Front2 push tractor option. |

Adjusting the Tear-Off Position

F2 JAM SENS. Y (if 6 pin Front2 Push Tractor is installed)

or

F1 JAM SENS. Y (if 6 pin Front1 Push Tractor is installed)

or

MENU ENGLISH

↑

TEAR ADJUST: +30	⟶ or ⟵
TEAR ADJUST: ...	⟶ or ⟵
TEAR ADJUST: -390	⟶ or ⟵

↓

FUNCTIONS

| TEAR ADJUST: xxx | These values adjust the distance between the Tear-Off Perforation and the Tear-Off Bar. The values correspond to 1/180 inch units, i.e. the tuning ranges between +1/6 and -13/6 inch. **0** is the default value. |

See also "How to Use the Tear-Off Function", later in this Chapter

Resetting to Factory Default Values

With the BACK TO MFG function it is possible to reset all items in the *Power On Configuration Setup* and in the *Program Setup* to their factory default values. This may be useful if you do not remember the values you set in the setups, or because you simply changed you mind about the settings you have just done. The default values for the setup items are indicated in bold.

FUNCTIONS

↑

| BACK TO MFG: NO | → or ← | BACK TO MFG: YES |

↓ or PROG

PRINT OUT ?

If you want to select BACK TO MFG: YES, you have to exit from this item using the ↑ or the ↓ key, in order to confirm the selection of this value.

At this point, the **Power On Configuration Setup** procedure is finished. If you exit pressing the ↓ and the PROGRAM key, the new settings will be saved.

Do not power off the printer before all data have been written into the NVM and the printer has returned online.

Program Setup

The default values of the various functions are indicated in bold.

Entering the Program Setup

Press the PROGRAM key when the printer is turned on and is offline or online without printing. The following message will be displayed:

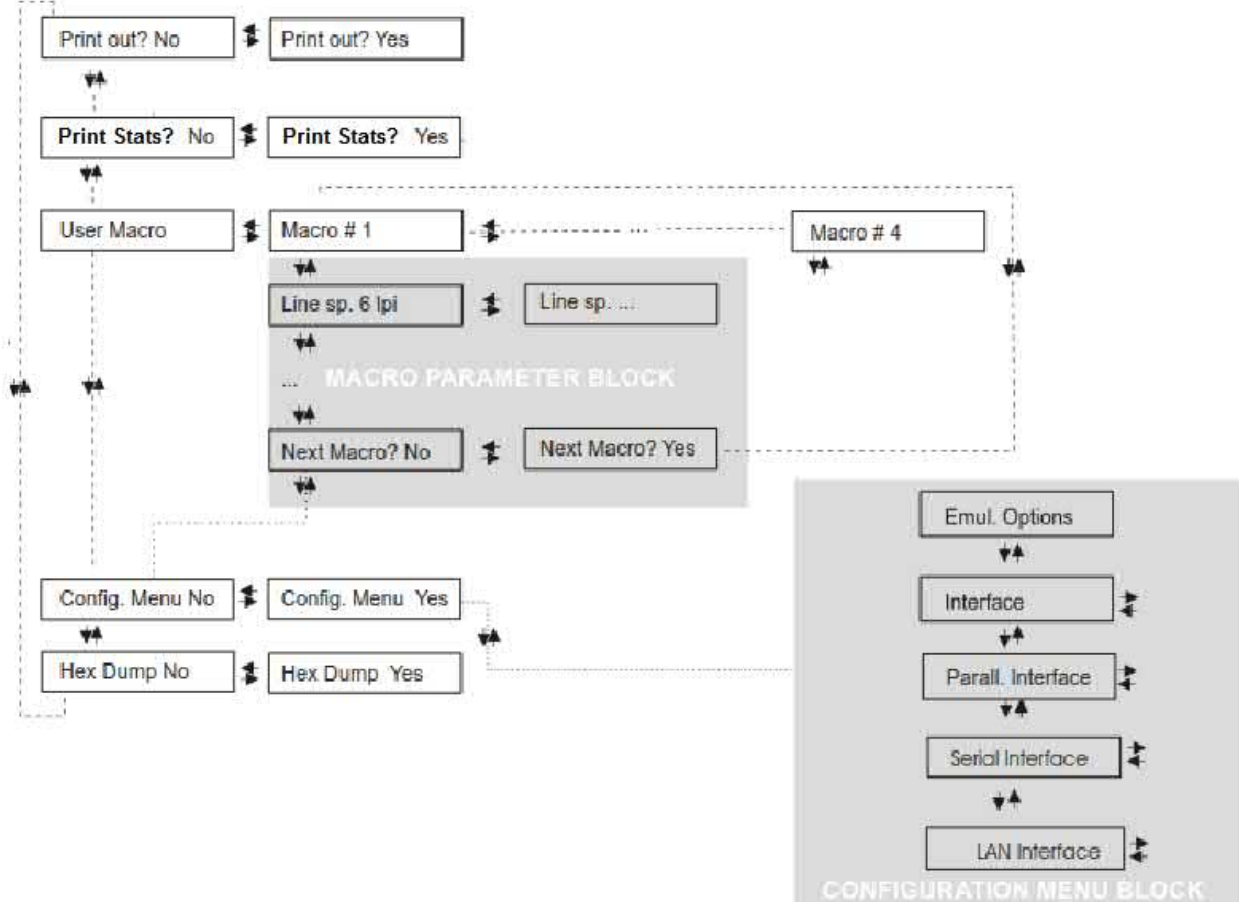| PRINT OUT?   NO |
| --- |

The figure in the following page shows the structure and how to move inside the Program Setup.

Main Structure

The items define the following functions:

- Print Program Setup with #4 (or #8 depending by the model and FW)
- Handling of the #4 or #8 user Macros
- Print Statistics of the printer
- The direct access to the Power-On Configuration
- H

Printout of the Printer Settings

PRINT OUT? NO	→ or ←	PRINT OUT? YES

↓

PRINT STATS? NO
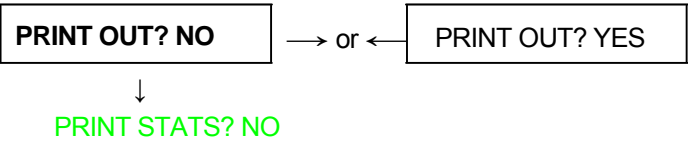
PRINT OUT? NO   The setup is not printed.
PRINT OUT? YES   The printer setup is printed. The printout starts as soon as you select this value.

NOTE: The Program setup printout indicates:

- The printer model
- The current firmware release with Version and FW IDentifier
- The serial number which can be applied as USB ID
- The MAC ADDRESS of the LAN card
- The currently selected values of the #4 or #8 Marcos (the current selected macro is marked with the #x# symbols (USER MACRO #x#)

Printout of the Printer Statistics

PRINT OUT? NO
↑
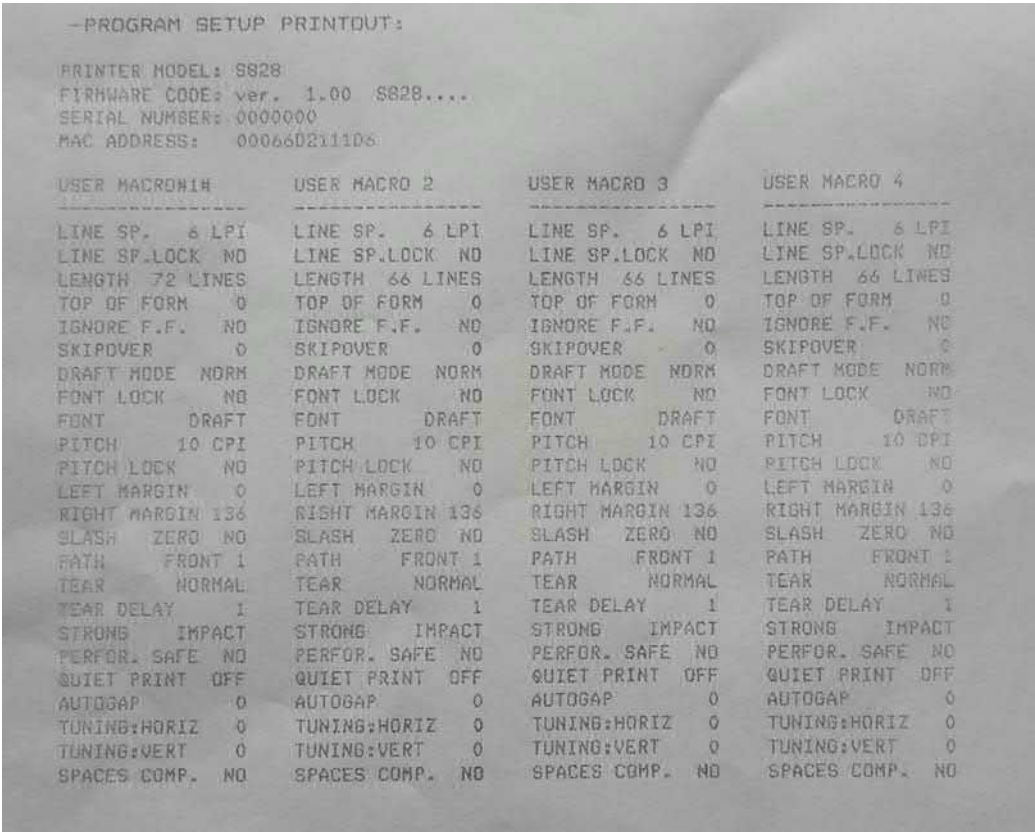| PRINT STATS? NO | → or ← | PRINT STATS? YES |
↓
USER MACRO

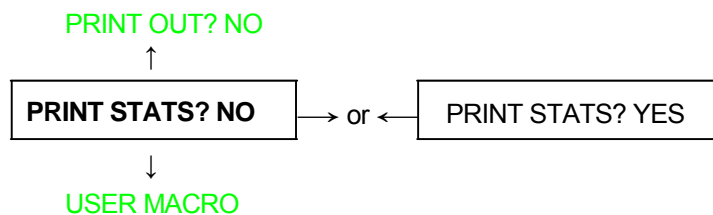PRINT STATS? NO   The printer statistics is not printed.
PRINT STATS? YES   The printer statistics is printed. The printout starts as soon as you select this value.

NOTE: The Printer Statistic printout indicates:

- The printer model
- The current firmware release with Version and FW IDentifier
- The statistic parameters :
    - PowerOn Cycle
    - PowerOn Hours
    - Pages
    - Barcodes
    - Pages with Graphics
    - HS Draft Characters
    - Draft Characters
    - Best Draft Characters
    - NLQ Characters
    - LQ Characters

```
-USAGE STATISTIC DATA PRINTOUT:

PRINTER MODEL: S828
FIRMWARE CODE: ver.  1.00  S828....


PowerOn Cycles:                        12
PowerOn Hours:                          4
Pages:                                 27
BarCodes:                               0
Pages With Graphics:                    9
HS Draft Characters:                    0
DP Characters:                     15,497
DP Text Characters:                     0
LQ Characters:                          4
```
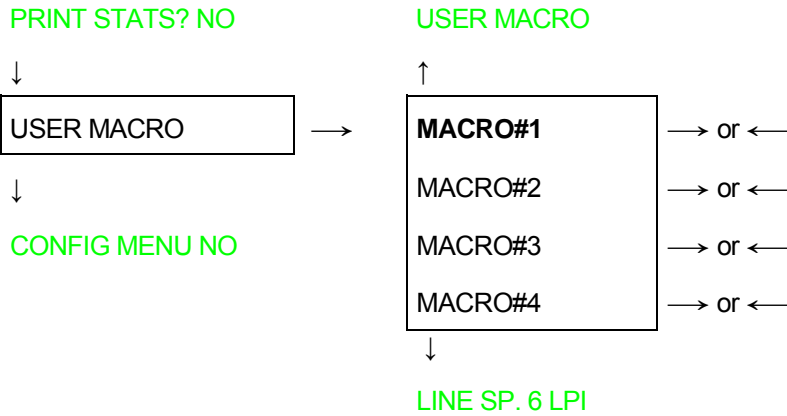
User Macro

The USER MACRO item allows to prepare four printing environments (MACRO#1, MACRO#2, MACRO#3 and MACRO#4). Each macro is composed of a group of parameters which define a configuration that can then be recalled to easily set the printer for four printing environments.

Selection of the User Macro

PRINT STATS? NO   USER MACRO

↓   ↑

USER MACRO ⟶ **MACRO#1** ⟶ or ⟵

↓   MACRO#2 ⟶ or ⟵

CONFIG MENU NO   MACRO#3 ⟶ or ⟵

            MACRO#4 ⟶ or ⟵

           ↓
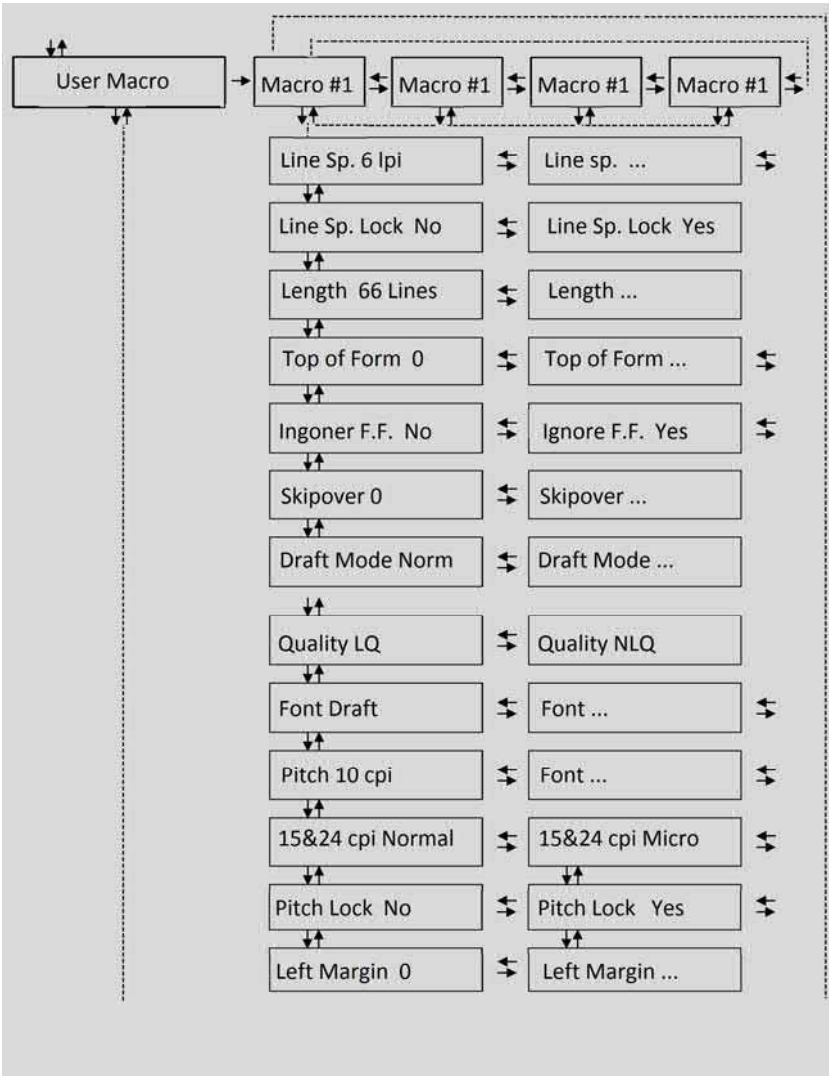
          LINE SP. 6 LPI

Selection of the macro for which you intend to set the parameters.

> **When a new macro is selected and the fanfold paper is present in the paper path set in the previous macro, it will be automatically parked (TEAR IF NECESS/PARK PAPER is displayed). Tear off this fanfold paper and press PARK key.**

User Macro Parameters

The table continues on the next page

Line Spacing

MACRO#1

↑

MACRO#1 ⟶ | **LINE SP. 6 LPI** | ⟶ or ⟵ |
LINE SP. 8 LPI	⟶ or ⟵
LINE SP. 12 LPI	⟶ or ⟵ LINE
SP. 3L/30MM	⟶ or ⟵ LINE
SP. 4L/30MM	⟶ or ⟵ LINE
SP. 6L/30MM	⟶ or ⟵ LINE
SP. 8L/30MM	⟶ or ⟵ LINE
SP. 12L/30MM	⟶ or ⟵

↓
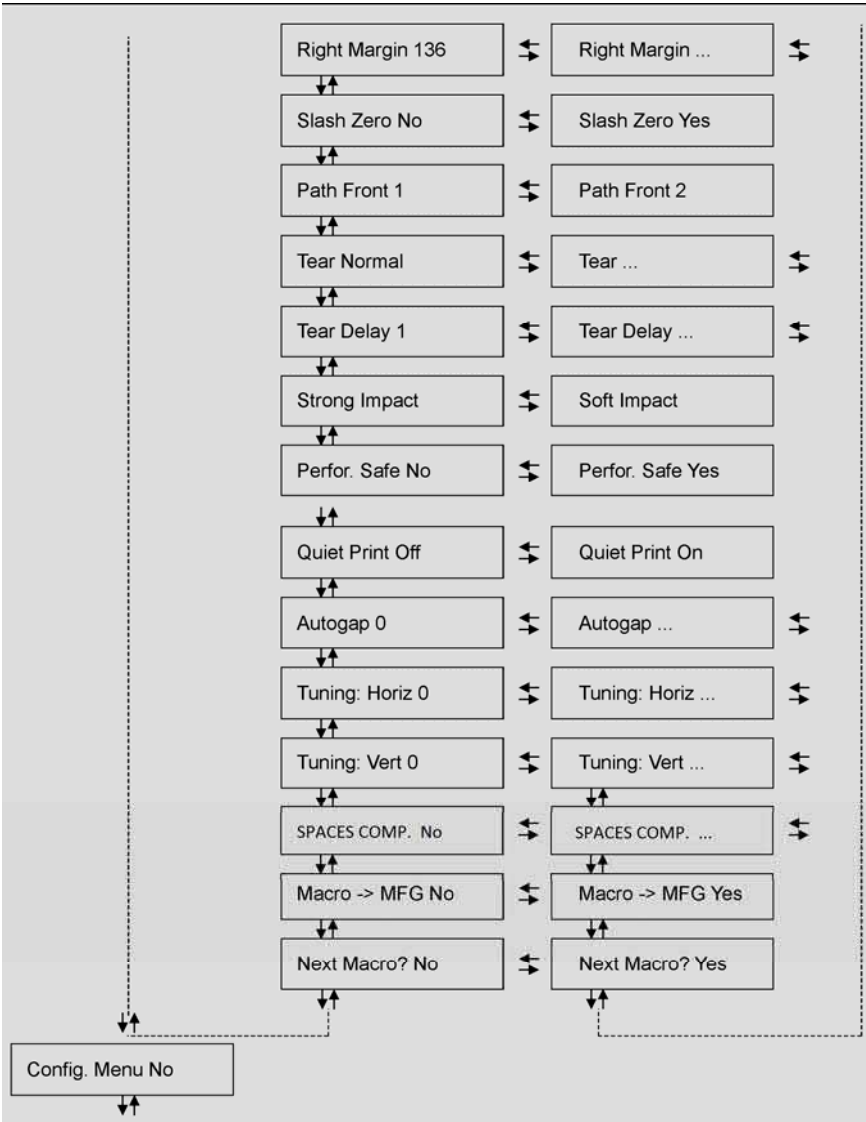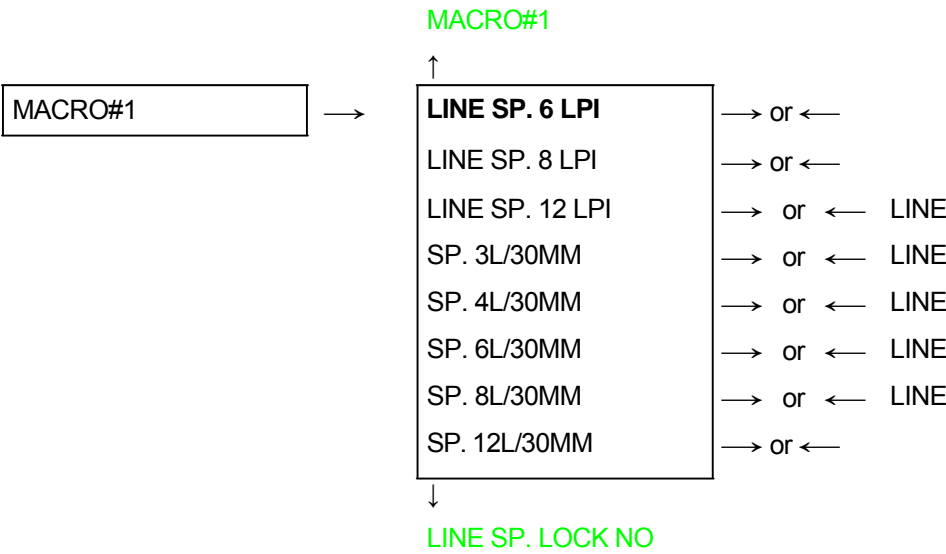
LINE SP. LOCK NO

These values define the line spacing in lines/inch (6, 8, 12) or in lines per 30 mm (3, 4, 6, 8, 12).

Line Spacing Lock

LINE SP. 6 LPI

↑

LINE SP. LOCK NO	⟶ or ⟵
LINE SP. LOCK YES	⟶ or ⟵

↓

LENGTH xxx

LINE SP. LOCK NO   Setting this item, the value set for vertical spacing can be changed by software or operator panel.

LINE SP. LOCK YES   Setting this item, the value set for vertical spacing cannot be changed by software but only by operator panel.

Page Length

LINE SP. LOCK NO

↑

LENGTH 1 LINE	⟶ or ⟵
LENGTH ... LINES	⟶ or ⟵
LENGTH 244 LINES	⟶ or ⟵

↓

TOP OF FORM 0

These items set the page length for fanfold paper in number of lines depending on the current vertical spacing. Default value is **66 lines**.

Top of Form

LENGTH xx

↑

TOP OF FORM 0	⟶ or ⟵
TOP OF FORM …	⟶ or ⟵
TOP OF FORM xxx	⟶ or ⟵

↓

IGNORE F.F. NO

These items set the top of form. The values range between 0 and the page length - 1.

Form Feed (FF) Command

TOP OF FORM 0

↑

| IGNORE F.F. NO | ⟶ or ⟵ |
| IGNORE F.F. YES | ⟶ or ⟵ |

↓

SKIPOVER 0

| IGNORE F.F. NO | The Form Feed (FF) command is always executed. |
| IGNORE F.F. YES | The Form Feed (FF) command is ignored when the paper is in the top of form (TOF) position. A Form Feed can be performed if the LOAD/FF key is pressed. |

Skip Over Perforation

IGNORE F.F. NO

↑

SKIPOVER 0	⟶ or ⟵
SKIPOVER …	⟶ or ⟵
SKIPOVER xxx	⟶ or ⟵

↓

DRAFT MODE NORM

These items set the skipover perforation. The values range between 0 and the page length - 1.

Draft Print Mode Selection

SKIPOVER 0

↑

| DRAFT MODE NORM | ⟶ or ⟵ |
| DRAFT MODE HS | ⟶ or ⟵ |

↓

FONT LOCK NO

| DRAFT MODE NORM | The printer performs the draft printing at normal speed. |
| DRAFT MODE HS | The printer performs the draft printing at high speed. |

Font Lock

DRAFT MODE NORM

↑

| FONT LOCK NO | → or ← |
| FONT LOCK YES | → or ← |

↓

FONT DRAFT

| FONT LOCK NO | Setting this item, the Font can be changed by software or operator panel. |
| FONT LOCK YES | Setting this item, the Font can be changed ONLY by operator panel. |

Font Selection

FONT LOCK NO

↑

FONT Draft	→ or ←
FONT DP Text	→ or ←
FONT Courier	→ or ←
FONT OCR-B	→ or ←
FONT Gothic	→ or ←
FONT OCR-A	→ or ←

↓

PITCH 10 CPI

Selects the fonts. OCR-A is displayed only if a not proportional pitch has been selected.

Pitch Selection

FONT DRAFT

↑

PITCH 5 CPI	⟶ or ⟵
PITCH 6 CPI	⟶ or ⟵
PITCH 7.5 CPI	⟶ or ⟵
PITCH 8.5 CPI	⟶ or ⟵
PITCH 10 CPI	⟶ or ⟵
PITCH 12 CPI	⟶ or ⟵
PITCH 15 CPI	⟶ or ⟵
PITCH 17.1 CPI	⟶ or ⟵
PITCH 20 CPI	⟶ or ⟵
PITCH 24 CPI	⟶ or ⟵
PITCH PROP	⟶ or ⟵

↓

PITCH LOCK NO

These items set the horizontal spacing in characters per inch. The PITCH PROP item sets proportional character spacing.

Pitch Lock

PITCH 10 CPI

↑

PITCH LOCK NO	⟶ or ⟵
PITCH LOCK YES	⟶ or ⟵

↓

LEFT MARGIN 0

PITCH LOCK NO   Setting this item, the pitch can be changed by software or operator panel.

PITCH LOCK YES   Setting this item, the pitch can be changed ONLY by operator panel.

Left Margin

↑

LEFT MARGIN 0	⟶ or ⟵
LEFT MARGIN ...	⟶ or ⟵
LEFT MARGIN xxx	⟶ or ⟵

↓

The Left Margin is set in number of columns (depending on the current pitch) starting from the physical left edge.

Right Margin

↑

RIGHT MARGIN. 2	⟶ or ⟵
RIGHT MARGIN. ...	⟶ or ⟵
RIGHT MARGIN. xxx	⟶ or ⟵

↓

The Right Margin is set in number of columns (depending on the current pitch) starting from the physical left edge.
The default value is **136**.

Zero Character Printing

↑

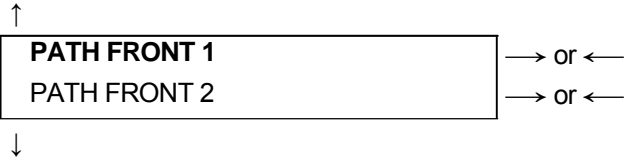|	
SLASH ZERO NO	⟶ or ⟵
SLASH ZERO YES	⟶ or ⟵

↓

You can select the Zero character printing with or without a slash.

Paper Path Selection

This function defines the default paper path for the current macro. Paper Path selection depends upon the printer model and the installed options.
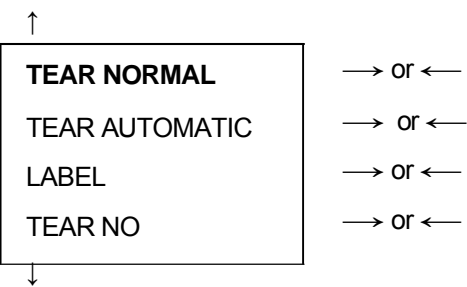
SLASH ZERO NO

↑

| **PATH FRONT 1** | $\longrightarrow$ or $\longleftarrow$ |
| PATH FRONT 2 | $\longrightarrow$ or $\longleftarrow$ |

↓

TEAR NORMAL

| PATH FRONT 1 | Paper loading with the Front1 push tractor (low position). |
| PATH FRONT 2 | Paper loading with the Front2 push tractor (up position). This item is displayed only if the Front2 push tractor option is installed. |

Tear-Off Mode

PATH FRONT 1

↑

TEAR NORMAL	$\longrightarrow$ or $\longleftarrow$
TEAR AUTOMATIC	$\longrightarrow$ or $\longleftarrow$
LABEL	$\longrightarrow$ or $\longleftarrow$
TEAR NO	$\longrightarrow$ or $\longleftarrow$

↓

TEAR DELAY 1

TEAR NORMAL	The Tear-Off Function is performed pressing the TEAR key when the printer is offline.
TEAR AUTOMATIC	When the printer is not receiving any data, the paper is moved to the Tear-Off position. It is returned to the Tear-Off position as soon as it receives printing data.
LABELS	This item must be set when printing on labels, in order to avoid paper jams. The paper does not execute any backward movement. When pressing the PARK key, the paper is ejected.
TEAR NO	The paper does not execute any backward movement.

> **See also "How to Use the Tear-Off Function " and "How to Handle the Paper Parking "**
> **later in this chapter**

Tear Delay Mode

TEAR NORMAL

↑

TEAR DELAY 1	⟶ or ⟵
TEAR DELAY …	⟶ or ⟵
TEAR DELAY 5	⟶ or ⟵

↓

STRONG IMPACT

This item defines the time that printer uses to move paper to the Tear-Off position in automatic tear mode. The range of the tear delay is between 1 and 5 seconds. The default value is **1** sec.

Print Impact Strength

TEAR DELAY 1

↑

| STRONG IMPACT | ⟶ or ⟵ |
| SOFT IMPACT | ⟶ or ⟵ |

↓

PERFOR. SAFE NO

| STRONG IMPACT | The impact strength of the print head is set for printing on multicopy paper. |
| SOFT IMPACT | The impact strength of the print head is set for printing few copies. The printing noise is reduced. |

Paper Perforation

This function allows to move the print head aside the paper when the fanfold paper perforation passes between the mylar and the print bar, to facilitate paper movement on critical forms.

STRONG IMPACT

↑

| PERFOR. SAFE NO | ⟶ or ⟵ |
| PERFOR. SAFE YES | ⟶ or ⟵ |

↓

QUIET PRINT OFF

| PERFOR. SAFE NO | The function is disabled. The print head remains in its position, when the perforation of the paper passes. |
| PERFOR. SAFE YES | The function is enabled. The print head is moved aside, when the perforation passes. |

Quiet Printing

PERFOR. SAFE NO

↑

QUIET PRINT OFF	⟶ or ⟵
QUIET PRINT ON	⟶ or ⟵

↓

AUTOGAP 0

QUIET PRINT OFF	The function is disabled. Printing at normal noise level.
QUIET PRINT ON	The function is enabled. Printing at reduced noise level.

Adjusting the Distance of the Print Head

QUIET PRINT OFF

↑

AUTOGAP -5	⟶ or ⟵
AUTOGAP ...	⟶ or ⟵
AUTOGAP +3	⟶ or ⟵
MANUAL GAP	⟶ or ⟵
FIXED GAP 0.3	⟶ or ⟵
FIXED GAP ...	⟶ or ⟵
FIXED GAP 9.3	⟶ or ⟵

↓

TUNING: HORIZ 0

AUTOGAP xxx	Selecting one of these values sensing the paper thickness. Negative values reduce the distance between the print head and the paper. Default value is AUTOGAP 0.
MANUAL GAP	Selecting this item, the print head must be adjusted manually.
FIXED GAP xxx	Selecting one of these values the printer adjusts the print head gap to a fixed distance.

Horizontal Character Tuning

AUTOGAP 0

↑

TUNING: HORIZ 0	⟶ or ⟵
TUNING: HORIZ ...	⟶ or ⟵
TUNING: HORIZ 60	⟶ or ⟵

↓

TUNING: VERT 0

These values adjust the distance between the left paper margin and the first print character. The values correspond to 1/120 inch units, i.e. the tuning ranges between 0 and 0.5 inch.

Vertical Character Tuning

TUNING: HORIZ 0

↑

TUNING: VERT. -30	⟶ or ⟵
TUNING: VERT. ...	⟶ or ⟵
TUNING: VERT. 360	⟶ or ⟵

↓

SPACE COMP. NO

These values adjust the distance between the top paper margin and the first printable line. The values correspond to 1/180 inch units, i.e. the tuning ranges between -1/6 and 2 inch. **0** is the default value.

Space Compression

TUNING: VERT 0

↑

| SPACE COMPR. YES | ⟶ or ⟵ |
| **SPACE COMPR. NO** | ⟶ or ⟵ |

↓

MACRO -> MFG NO

This setting if YES compress the space characters.

Resetting the Macro Parameters to the Factory Defaults

TUNING: VERT. 0

↑

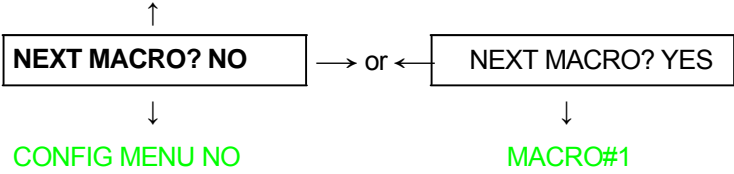| **MACRO -> MFG NO** | ⟶ or ⟵ |
| MACRO -> MFG YES | ⟶ or ⟵ |

↓

NEXT MACRO? NO

MACRO -> MFG NO   The new values set for the macro parameters will be the used.
MACRO -> MFG YES   The values set for the macro parameters will be reset to their factory defaults.

Selecting Another Macro

MACRO -> MFG NO

↑

| **NEXT MACRO? NO** | ⟶ or ← | NEXT MACRO? YES |

↓   ↓

CONFIG MENU NO   MACRO#1

To pass over to another macro, select NEXT MACRO YES. Pressing the ↓ or ↑ key the item MACRO#1is displayed,
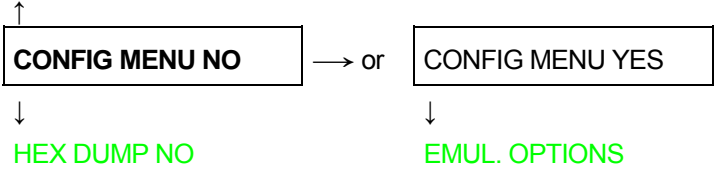then press the ⟶ key to pass over to MACRO#2(MACRO CHANGINGis displayed).

When passing over from one macro to another, the fanfold paper loaded from the paper path, selected in the previous macro, will be automatically parked (TEAR IF NECESS/PARK PAPER is displayed). Tear off this fanfold paper and press PARK key

---

You can now set the parameters for MACRO#2as described above. In this way you prepare the second printing environment. Passing over from one macro to the other then sets two different printing environments.

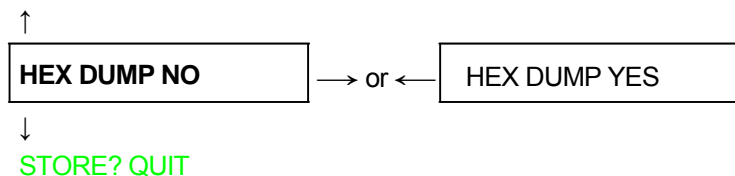## Passing over to the Power-On Configuration

At this point of the setup, it is possible to pass over to the *Power On Configuration* functions setting.
See the specific chapter for detailed item.

NEXT MACRO NO

↑

| **CONFIG MENU NO** | ⟶ or | CONFIG MENU YES |

↓   ↓

HEX DUMP NO   EMUL. OPTIONS

These items are self-explaining.

Hexadecimal Dump

CONFIG MENU NO

↑

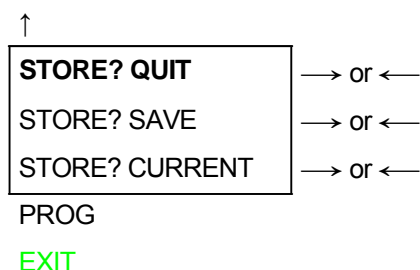| HEX DUMP NO |
|---|

⟶ or ⟵ HEX DUMP YES

↓

STORE? QUIT

If you select HEX DUMP YES, press the PROGRAM key to set this item. The hexadecimal printing continues, until the HEX DUMP NOitem is selected, entering again into the *Program Setup*.
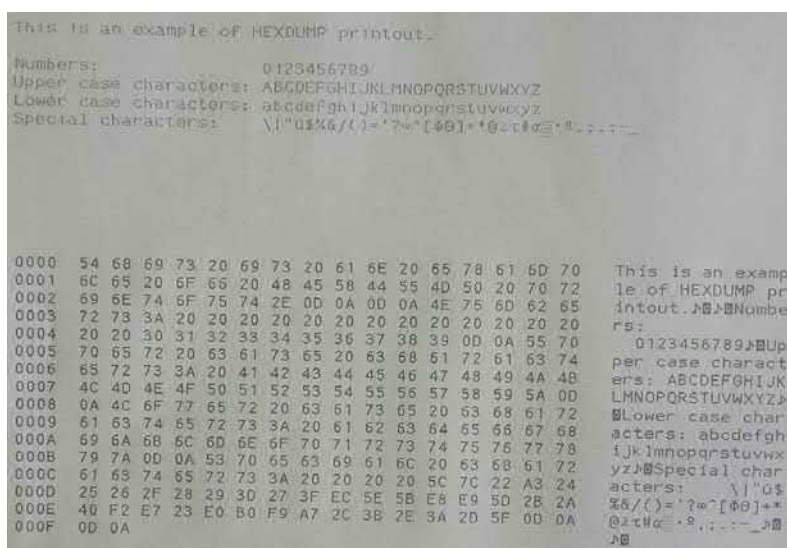
Storing the values

HEX DUMP NO

↑

STORE? QUIT	⟶ or ⟵
STORE? SAVE	⟶ or ⟵
STORE? CURRENT	⟶ or ⟵

PROG

EXIT

| STORE? QUIT	This setting does not save any of the new values set. The values set previously will be used.
STORE? SAVE	The values set are stored permanently (in the NVM) and will be used until they are changed by the operator.
STORE? CURRENT	The values set are valid until the printer is turned off. When you turn the printer on again, the values set in the preceding setup will be used.

At this point the Program Configuration Setup is finished
**You exit pressing the PROGRAM key**

ANSI Emulation

The following items appear only when the ANSI emulation has been selected.

ANSI Character Sets

EMULATION ANSI

↑

CHAR SET CS1	⟶ or ⟵
CHAR SET CS2	⟶ or ⟵

↓

CH.TAB CODE 437
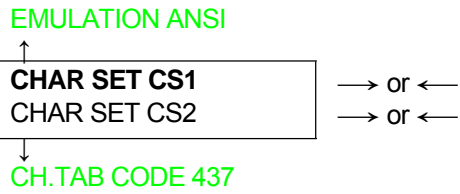
CHAR SET CS1	The printer uses the CS1 character set.
CHAR SET CS2	The printer uses the CS2 character set.

ANSI Code Pages

CHAR. SET CS2

↑

CH.TAB CODE437	⟶ or ⟵
CH.TAB …	⟶ or ⟵
CH.TAB CODE 850	⟶ or ⟵

↓

NATION USA
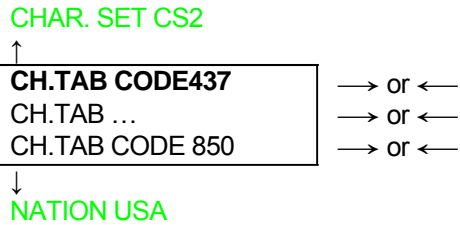
The following code pages are available:

CODE 437	CODE 850	CODE 851	CODE 852	CODE 853	CODE 855	CODE 858	CODE 860
CODE 863	CODE 864	CODE 865	CODE 866	CODE 867	ISO 1	ISO 2	ISO 3
ISO 4	ISO 5	ISO 6	ISO 7	ISO 8	ISO 9	ISO 15	MAZOWIA
TURKISH	CP 437G	ROMAN-8	KAMENICKY CWI		IN2	CODE 864E	CP1250
CP 1251	CP 1252	CP 1253	CP 1254	CP 1255	CP 1256	CP 1257	BULGAR

ANSI Code Pages

CH.TAB.. CODE437

↑

NATION USA	⟶ or ⟵
NATION …	⟶ or ⟵
NATION CYRILLIC	⟶ or ⟵

↓

RIS ENABLE YES
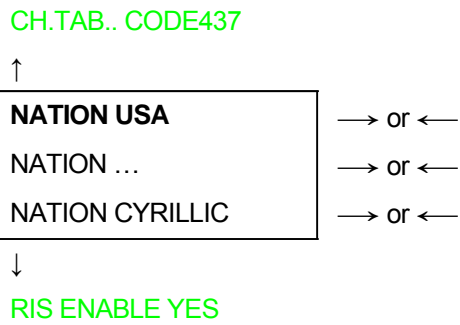
The following code pages are available:

USA	GERMANY	FRANCE A	FRANCE B	FREN/CANA	DUTCH	ITALY	UK
SPAIN	DAN/NOR A	DAN/NOR B	DAN/NOR C	DAN/NOR D	SWE/FIN A	SWE/FIN B	SWE/FIN C
SWE/FIN D	SWISS	YUGOSLAV	UK A	TURKEY	GREEK	CYRILLIC	

Reset Enable

NATION USA
↑

|	
RIS ENABLE YES	⟶ or ⟵
RIS ENABLE NO	⟶ or ⟵

↓
RIS ENABLE YES
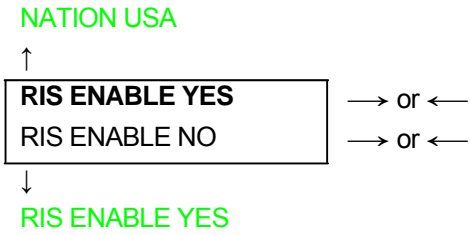
If the printer receives a command (ESC c) from the host to reset the printer, then the printer will (YES) or will not (NO) reset the current configuration to the power-up configuration.

SI/SO Control

RIS ENABLE YES
↑

|	
SI/SO CTL YES	⟶ or ⟵
SI/SO CTL NO	⟶ or ⟵

↓
AUTO CR YES
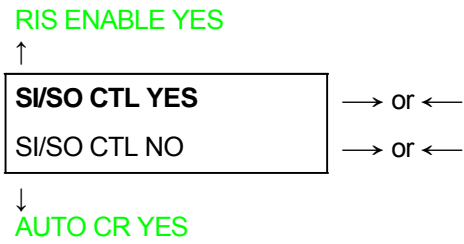
If the printer receives a command (SI or SO) from the host to enable or disable the special modes (oversize, expanded and bar code modes), then the printer will (YES) or will not (NO) respond to the <SI> and <SO> commands based upon your selection.

Auto Carriage Return

SI/SO CTL YES
↑

AUTO CR YES	⟶ or ⟵
AUTO CR NO	⟶ or ⟵

↓
PRIME ON DEL YES
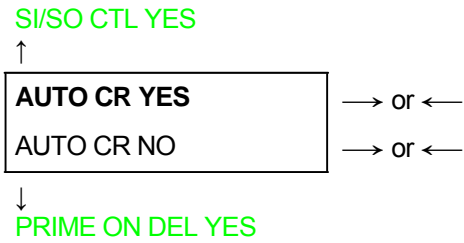
If the printer receives a command (LF) from the host to perform a line feed then the printer will (YES) or will not (NO) append a carriage return based upon your selection.

Prime on Delete

AUTO CR YES
↑

PRIME ON DEL YES	⟶ or ⟵
PRIME ON DEL NO	⟶ or ⟵

↓
CONTRL IN DG YES
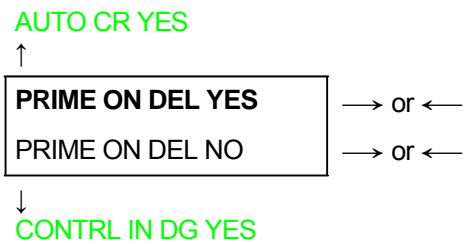
If the printer receives a command (DEL) from the host, then the printer will (YES) or will not (NO) perform a prime (reset) based upon your selection.

Control Codes in Dot Graphics

PRIME ON DEL YES

↑

CONTRL IN DG YES	⟶ or ⟵
CONTRL IN DG NO	⟶ or ⟵

↓

CONTRL IN DG YES

If the printer receives a control code from the host while in dot graphics mode, then the printer will (YES) or will not (NO) respond to the particular control code based upon your selection.

Vertical Expansion

CONTRL IN DG YES

↑

EXPAND UP YES	⟶ or ⟵
EXPAND UP NO	⟶ or ⟵

↓

ALT GRAPHICS YES

This setting defines the vertical expansion from the baseline up (YES)or from the top line down (NO).

ALT Graphics

EXPAND UP YES

↑

ALT GRAPHICS YES	⟶ or ⟵
ALT GRAPHICS NO	⟶ or ⟵

↓

8 BIT CTRL YES

If is selected N: the 6-bit graphics horizontal densities are multiplies of 72.
If is selected Y: the 6-bit graphics horizontal densities are multiplies of 60.

8-bit Control

ALT GRAPHICS YES

↑

8 BIT CTRL YES	⟶ or ⟵
8 BIT CTRL NO	⟶ or ⟵

↓

S/SUB SCRIPT YES

If the printer receives a control code command (80H to 9FH) whose eighth data bit is set, and the character set is selected, then the printer will (YES) or will not (NO) respond to the particular code based upon your selection.

Superscript/Subscript Character Enable

8 BIT CTRL YES

↑

S/SUB SCRIPT YES	⟶ or ⟵
S/SUB SCRIPT NO	⟶ or ⟵

↓

ESC+CTR CODE YES

The printer will (YES) or will not (NO) respond to ESC [2 m and ESC [3 m commands.

ESC+Control Code

S/SUB SCRIPT YES

↑

ESC+ CTR CODE YES	⟶ or ⟵
ESC+ CTR CODE NO	⟶ or ⟵

↓

VT NOT SET YES

In this setting the control codes embedded within escape sequence are valid (YES) or ignored (NO). In both cases, the escape sequence will be valid.

VT Code

ESC+ CTR CODE YES

↑

VT NOT SET YES	⟶ or ⟵
VT NOT SET NO	⟶ or ⟵

↓

DOUBLE LF YES

In this setting the VT code received without tab set will yield line feed (YES) or will be ignored (NO).

Double Line Feed

VT NOT SET YES

↑

DOUBLE LF YES	⟶ or ⟵
DOUBLE LF NO	⟶ or ⟵

↓

DOUBLE LF YES

If the printer receives a command (LF) from the host to execute a line feed, then the printer will (Y) or will not (N) also perform double line feed based upon your selection.

Automatic Wrap

DOUBLE LF YES

↑

AUTO WRAP YES	⟶ or ⟵
AUTO WRAP NO	⟶ or ⟵

↓

CLEAR MARGIN YES

If the printer receives printable data from the host, and such data exceeds the current line length (right margin), then the printer will (Y) or will not (N) continue to print the remaining data on the following line based upon your selection.

If you disable auto wrap by selecting N, then the data beyond the right margin is discarded up to the next line terminator.

Clear Margin

AUTO WRAP YES

↑

CLEAR MARGIN YES	⟶ or ⟵
CLEAR MARGIN NO	⟶ or ⟵

↓

BACKOP NINE

Clears (Y) or preserves (N) top and bottom margins on form length changes.

Backup Option

CLEAR MARGIN YES

↑

BACKUP NONE	⟶ or ⟵
BACKUP BC	⟶ or ⟵
BACKUP OS	⟶ or ⟵
BACKUP BOTH	⟶ or ⟵

↓

GUARD BAR YES

BC	The printer will return the print head to the vertical position established before turning on Barcode modes at the completion of printing of the current barcode symbol.
OS	The printer will return the print head to the vertical position established before turning on Oversize modes at the completion of printing of the current barcode symbol.
BOTH	The printer will return the print head to the vertical position established before turning on both Barcode and Oversize modes at the completion of printing of the current barcode symbol.
NONE	The print head will remain in the vertical and horizontal position active at the completion of printing of the selected symbol.

Barcode Guard Bar Enable

↑

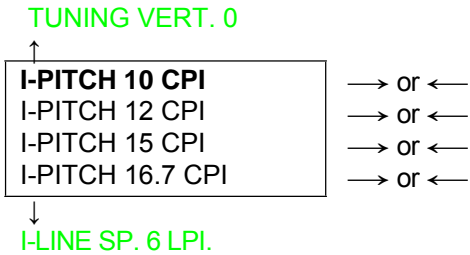| |
|---|
| **GUARD BAR YES** $\longrightarrow$ or $\longleftarrow$ |
| GUARD BAR NO $\longrightarrow$ or $\longleftarrow$ |

↓

The printer will (Y) or will not (N) include left, right and center Guard bars of the barcode styles which use Guard bars based upon your selection. The Guard bars extend into the human readable line of the barcode symbol when it is enabled.

IPDS Emulation

The following is the description of the printer IPDS specific menu items.
These items appear only when the controller board installed on the unit is equipped with Ethernet LAN Interface handling IPDS data stream.
The IPDS emulation menu items have been included in the four user macros. To select the IPDS items, access the Program Setup, select the User Macro and scroll the items up to Vertical Character Tuning.

The IPDS emulation option has the following structure:

Pitch Selection

TUNING VERT. 0
↑

I-PITCH 10 CPI	⟶ or ⟵
I-PITCH 12 CPI	⟶ or ⟵
I-PITCH 15 CPI	⟶ or ⟵
I-PITCH 16.7 CPI	⟶ or ⟵

↓
I-LINE SP. 6 LPI.

These items set the horizontal spacing in characters per inch. The default value is 10 CPI.

Line Spacing

CHAR. SET CS2
↑

| I-LINE SP. 6 LPI | ⟶ or ⟵ |
| I-LINE SP. 8 LPI | ⟶ or ⟵ |

↓
NATION USA
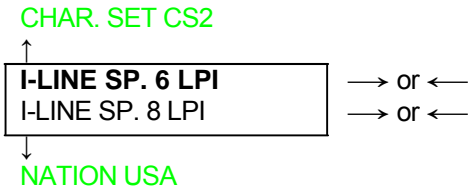
These values define the line spacing in lines/inch (6, 8). The default value is 6 LPI.

Right Margin

I-LINE SP. 6 LPI
↑

I-RIGHT MARGIN. 1	⟶ or ⟵
I-RIGHT MARGIN. 132	⟶ or ⟵
I-RIGHT MARGIN. xxx	⟶ or ⟵

↓
I-FLEN 66 LINES
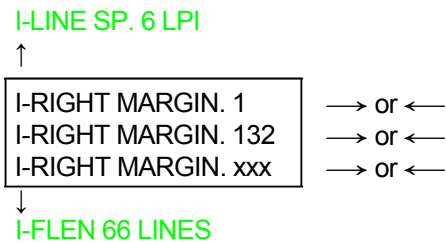
The Right Margin is set in number of characters (depending on the current pitch) the printer prints on a line.

The default value is **132**. The Right Margin and the CPI settings determine the length of the print line.

The maximum line length is 13.6 inches.

Page Lenght

I-RIGHT MARG 132

↑

I-FLEN 1 LINE	⟶ or ⟵
I-FLEN 66 LINES	⟶ or ⟵
I-FLEN xxx LINES	⟶ or ⟵

↓

I-FONT FAST

Selects the page length for the printer from 1-660 lines for 6 LPI and 1-880 lines for 8 LPI. The default value is **66** lines.

Page Lenght

I-FONT FAST

↑

I-FONT FAST	⟶ or ⟵
I-FONT DP	⟶ or ⟵
I-FONT DP TEXT	⟶ or ⟵
I-FONT NLQ	⟶ or ⟵

↓

I-HOST FAST YES

Selects the Print Quality to any of the following values:

- Fast Draft Quality (default value)

- DP (Data processing) Quality

- DP Text Qualità

- Near Letter Quality (NLQ).

Print Quality

I-FONT FAST

↑

I-FONT FAST	⟶ or ⟵
I-FONT DP	⟶ or ⟵
I-FONT DP TEXT	⟶ or ⟵
I-FONT NLQ	⟶ or ⟵

↓

I-HOST FAST YES

Selects the Print Quality to any of the following values:

- Fast Draft Quality (default value)

- DP (Data processing) Quality

- DP Text Qualità

- Near Letter Quality (NLQ).

Host Fast Draft

I-FONT FAST

↑

I-HOST FAST YES	⟶ or ⟵
II-HOST FAST NO	⟶ or ⟵
I-FONT DP TEXT	⟶ or ⟵
I-FONT NLQ	⟶ or ⟵

↓

I-NATION CP500

Selects the Host Fast Draft parameter to the following values:

- YES (default): The highest print speed (lowest print quality) available through the data stream is Fast Draft Quality.

- NO: The highest print speed (lowest print quality) available through the data stream is DP Quality.

Print National Character Sets

I-HOST FAST YES

↑

I-NATION CP37	⟶ or ⟵
I-NATION CPxxx	⟶ or ⟵
I-NATION CP500	⟶ or ⟵
I-NATION CPxxx	⟶ or ⟵
I-NATION CP1149	⟶ or ⟵

↓

I-EMUL. MODE 4247

The following national character sets can be selected:

CP 437 USA/Canada	CP260 Canadian French	CP273 Austrian/German	CP274 Belgian Old	CP275 Brazilian
CP277 Danish/Norwegian	CP278 Finnish/Swedish	CP280 Italian	CP281 Japanese English	CP282 Portuguese
CP284 Spanish	CP285 English (UK)	CP290 Japanese Katakana	CP297 French	CP420 Arabic
CP423 Greek (Old)	CP424 Hebrew	CP500 International 5	CP833 Korean	CP838 Thai
CP870 Latin2 / ROECE	CP871 Icelandic	CP875 Greek (New)	CP880 Cyrillic	CP890 Yugoslav (Old)
CP892 OCR-A	CP893 OCR-B	CP924 Latin 9	CP1025 Cyrillic Multilingual	CP1026 Turkish
CP1097 Farsi	CP1112 Baltic Multilingual	CP1122 Estonian	CP1140 Euro USA/Canada	CP1141 Euro Austrian/German
CP1142 Euro Danish/Norwegian	CP1143 Euro Finish/Swedish	CP1144 Euro Italian	CP1145 Euro Spanish	CP1146 Euro English (UK)
CP1147 Euro French	CP1148 Euro International 5	CP1149 Euro Icelandic		

Emulation Mode

I-NATION CP500

↑

I-EMUL. MODE 4247	→ or ←
I-EMUL. MODE 4224	→ or ←
I-EMUL. MODE 4230	→ or ←

↓

I-MSIZE PRIO ALT
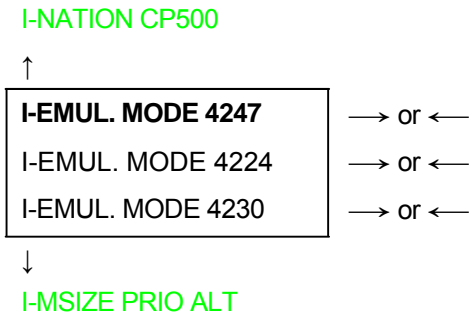
The Selects the Emulation mode to the following values:
- 4247 (default)
- 4224
- 4230

Media Size Priority

I- I-EMUL. MODE 4247

↑

| I-MSIZE PRIO ALT | → or ← |
| I-MSIZE PRIO STD | → or ← |

↓

I-BC MODE HIGH
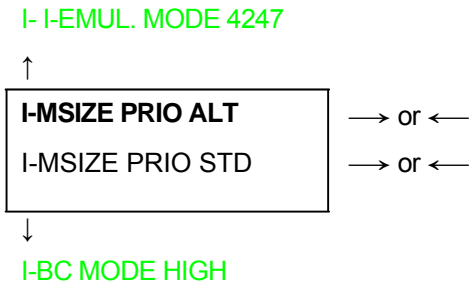
This parameter affects the use of the XOH Set Media Size (SMS) order. The Media Size Priority setting specifies whether XOH-SMS orders take precedence over the Op Panel setting for Right Margin and Form Length.

The following values are available:
- ALT (Alternate) (default): The XOH-SMS order values have priority. If an XOHSMS order is present. Its values will be used to define the page size instead of the Op Panel settings
- STD (Standard): The smaller page size values have priority. The page size will be the smaller values of the Op Panel settings and the XOH-SMS values.

Bar Code Mode

I-MSIZE PRIO ALT

↑

I-BC MODE HIGH	→ or ←
I-MSIZE PRIO LOW	→ or ←
I-MSIZE PRIO HOST	→ or ←

↓
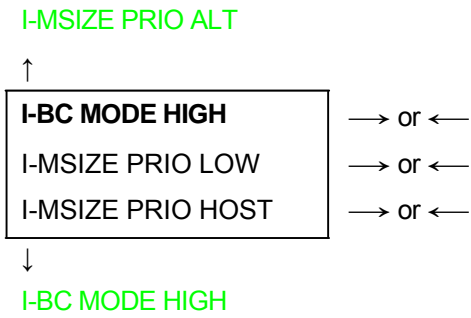
I-BC MODE HIGH

This parameter selects the Bar Code Mode to any of the following values: - HIGH (default): High contrast Bar Codes
- - LOW: Low contrast Bar Codes
- - HOST: Contrast as specified by the IPDS data stream

Graphics Mode

I- I-BC MODE HIGH

↑

I-GRA MODE HIGH	⟶ or ⟵
I-GRA MODE LOW	⟶ or ⟵
I-GRA MODE HOST	⟶ or ⟵

↓

MACRO -> MFG NO

This parameter selects the Graphics Mode to any of the following values:
- HIGH (default): High density graphics
- LOW: Low density graphics
- HOST: Density as specified by the IPDS data stream

How to Select the Paper Path

The paper can be loaded into the printer using different paper paths. The messages indicating the paper paths are shown depending upon the printer model and if the corresponding loading device is installed on the printer.

Proceed as follows:

1. Press the ON LINE key to put the printer offline (ON LINE indicator unlit).

2. Press the PATH key, according to the installed devices the following messages are displayed:

PATH FRONT 1	For the paper path using the Front1 push tractor.
PATH FRONT 2	For the paper path using the Front2 push tractor option.

*   To load fanfold paper go to "Loading Paper Using the Front1 Push Tractor", "Loading Paper Using the Front2 Push Tractor (option)". When a new paper path is selected, the paper loaded in the printer is automatically parked.

How to Use the Tear-Off Function

This function is used to match the paper perforation with the tear-off bar. For this function the following values must be set:

Selection of the Paper Size

1. Press the PROGRAM key when the printer is disabled or enabled without printing to enter the *Program Setup*.

2. Press the ↓ key and the following message appears:

USER MACRO

3. Press the ⟶ key to select the macro for which you want to set the paper size (MACRO#1, MACRO#2, MACRO#3or MACRO#4).

4. Once the desired macro is displayed press the ↓ key until the following parameter is displayed:

LENGTH xx

5. Press the ⟶ or ⟵ key until the desired page size is displayed.

6. Press again the PROGRAM key to exit the setup and set the new value.

Adjusting the Tear-Off Position

To check the Tear-Off Position proceed as follows:

1. Check if the paper perforation matches the tear-off bar on the printer.
2. To move manually the paper to the Tear-Off position, press the TEAR key when the printer is enabled without printing (TEAR NORMALfunction selected YESin the *Program Setup*).

You can leave the manual tear off function by pressing again the TEAR key

If it does not:

1. Turn the printer off and press the PROGRAM key and hold it pressed while powering on the printer until the RELEASE KEYSmessage is displayed to enter the *Power-On Configuration.*

2. Press the ↓ key until the following message appears:

FUNCTIONS

2. Press the → key to enter and then press the ↓ until the following message is displayed:

TEAR ADJUST xxx

3. Press the ⟶ or ⟵ key to scroll the values of this function.

Values below 0 move the tear-off position downwards, values above 0 move the paper upwards. The values can be set between +30 and -390 at 1/180 inches (from +1/6 to -13/6 inches).

5. When the desired value is displayed, press the PROGRAM key.

6. Press the PROGRAM key to save and exit from the setup.

Selection of the Tear-Off Mode

It is now possible to select the Tear-Off Mode.

1. Press the PROGRAM key when the printer is disabled or enabled without printing to enter the *Program Setup*.
3. Press the ↓ key. The following message is displayed:

USER MACRO

3. Press the ⟶ key to select the macro for which you want to set the tear-off mode (MACRO#1, MACRO#2, MACRO#3or MACRO#4).
4. Press the ↓ key, until the following message is displayed:

TEAR NORMAL

Pressing the ⟶ or ⟵ key it is now possible to decide how to execute the tear off function:

TEAR NORMAL   Pressing the TEAR key the paper is moved to the tear-off position.

Pressing again the TEAR key to exit from the tear-off mode, the paper is moved to the printing position.

TEAR AUTOMATIC	If the printer is not receiving data, the paper is moved automatically to the tear position.
LABEL	The TEAR key is disabled for the tear-off function. This selection is useful when printing on labels. Pressing the PARK key, the printer ejects the paper toward the back of the printer.
TEAR NO	The tear-off function is disabled.

5. Press the PROGRAM key to exit the setup.

How to Lock/Unlock the Printer Setups

To prevent not expertise persons changing the printer setup parameters, it is possible to lock/unlock the access to the printer setups as follows:

- Press ON LINE, MACRO and TEAR keys at the same time and keep them pressed while powering the printer on until the display shows RELEASE KEYS message. As soon as these keys are released, the following messages will be displayed:

	STARTING UP
then	S828 Ver. Xx.x
then	LOCKED MENU

Now the access to the printer setups is locked. If the PROGRAM key is pressed, the LOCKED MENU message is displayed (the PROGRAM key is disabled).

- If you decide to unlock the printer setup, turn the printer off, then press the ON LINE, MACRO and TEAR keys at the same time and keep them pressed while powering the printer on again until the display shows RELEASE KEYS message. As soon as these keys are released, the following messages will be displayed:

	STARTING UP
then	S828 Ver. Xx.x
then	UNLOCKED MENU

How to Handle the Paper Parking

According to the setting of the TEARitem in the *Program Setup*, the paper parking procedure is performed in different ways. See the following description:
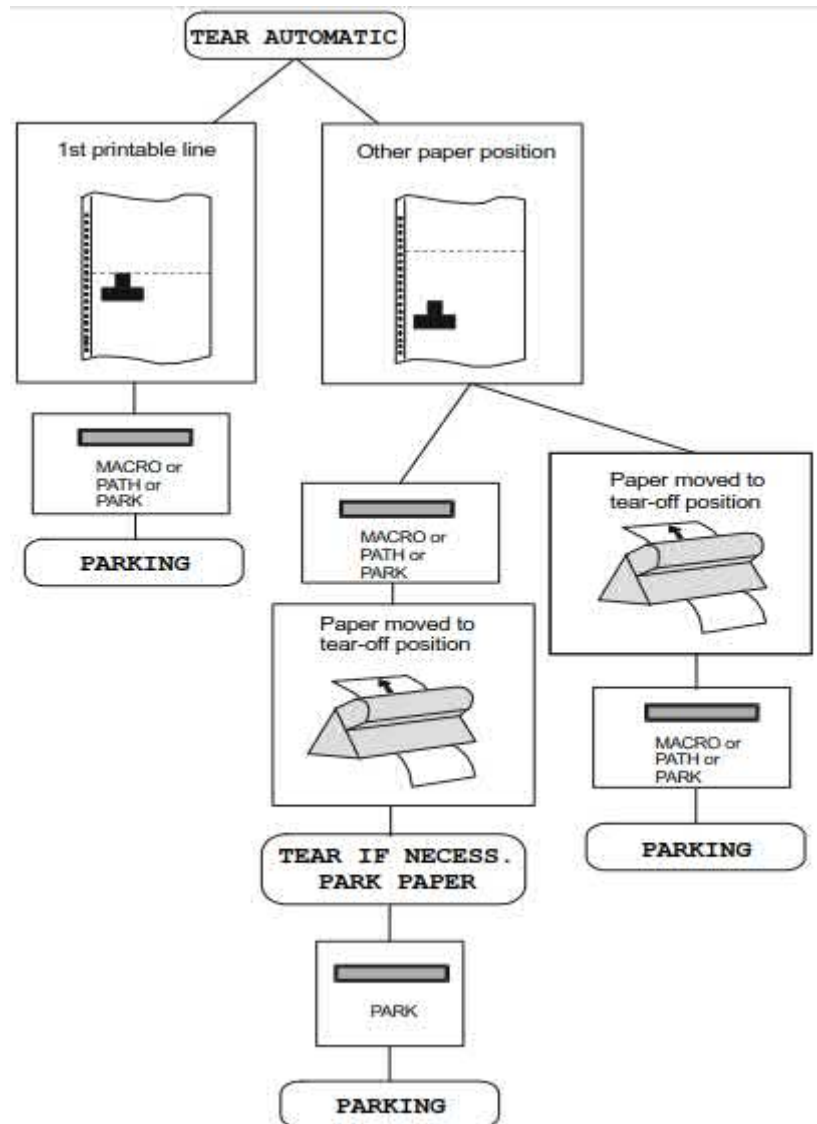
If TEAR NO is selected:

- When the paper is positioned at the first printable line and the paper path is changed (changing the Macro or pressing the PATH key) or the PARK key is pressed, the printer performs automatically the parking procedure.

- If at least one line has been printed, or the paper has been fed forward at least 1 line and the paper path is changed (changing the Macro or pressing the PATH key) or the PARK key is pressed, the display shows TEAR IF NECESS./PARK PAPER.
 If the paper to be parked is longer than 18" tear it off and press the PARK key again to perform the parking procedure.
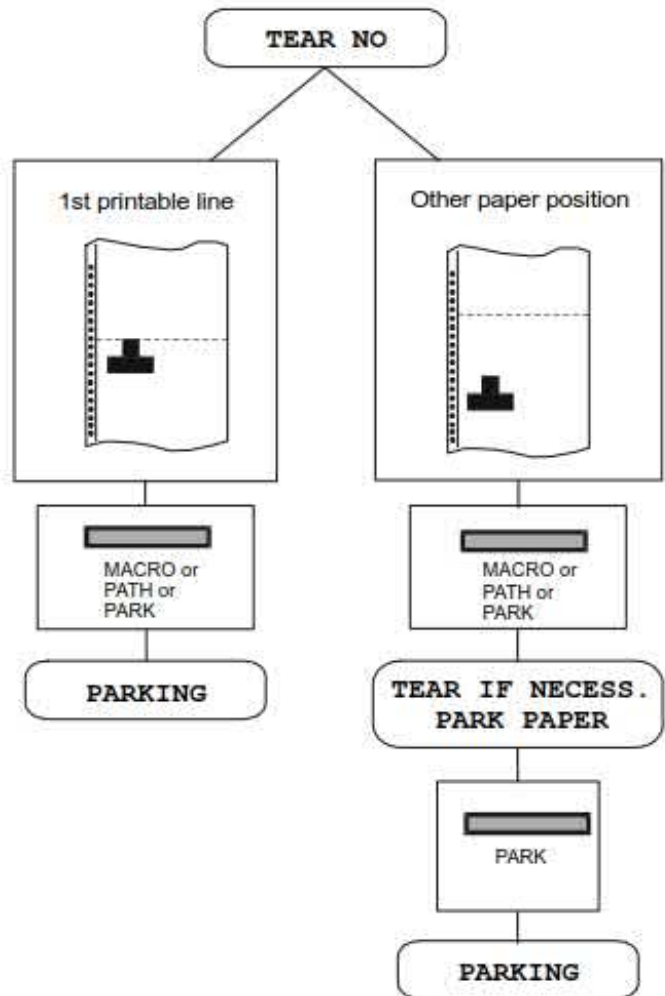
If TEAR NORMAL is selected:

- When the paper is positioned at the first printable line and the paper path is changed (changing the Macro or pressing the PATH key) or the PARK key is pressed, the printer performs automatically the parking procedure.

- If at least one line has been printed, or the paper has been fed forward at least 1 line and the paper path is changed (changing the Macro or pressing the PATH key) or the PARK key is pressed, the paper is moved to the tear-off position and the display shows TEAR IF NECESS./PARK PAPER. If the paper to be parked is longer than 18" tear it off and press the PARK key again to perform the parking procedure.

- When the paper is positioned in the tear-off position after pressing the TEAR key, if you press the PARK key the printer performs automatically the parking procedure.
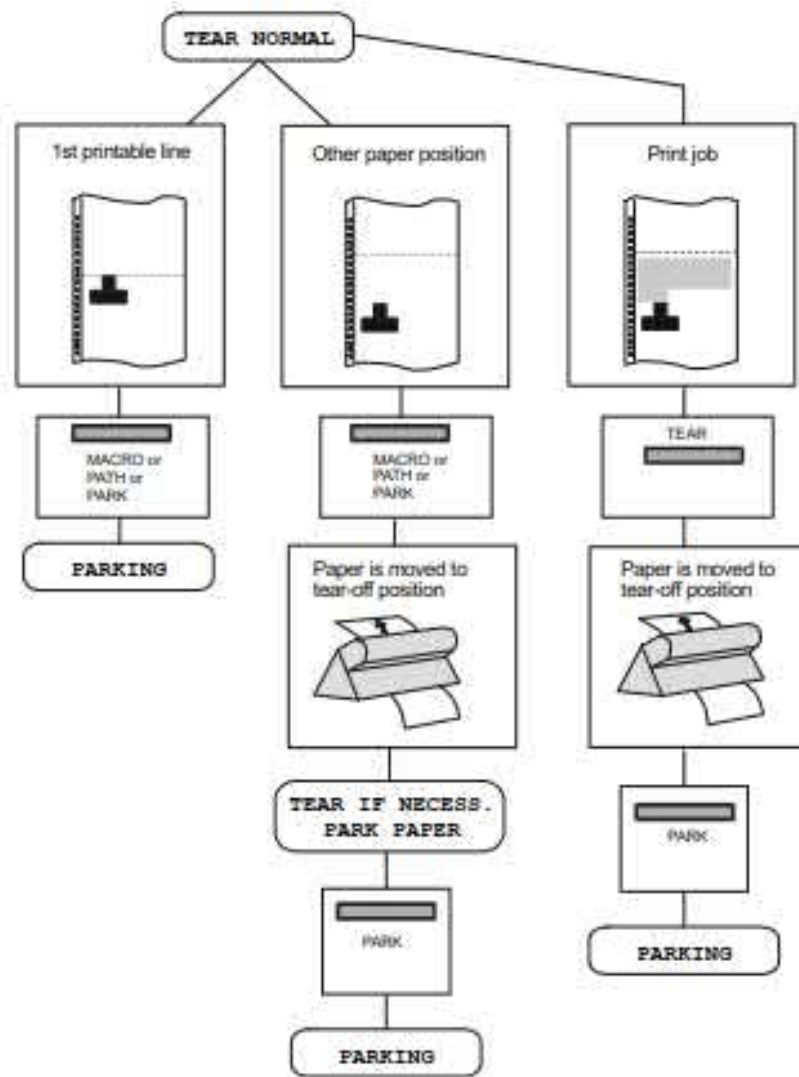
If TEAR AUTOMATIC is selected:

- When the paper is positioned at the first printable line and the paper path is changed (changing the Macro or pressing the PATH key) or the PARK key is pressed, the printer performs automatically the parking procedure.

- If at least one line has been printed, or the paper has been fed forward at least 1 line and the paper path is changed (changing the Macro or pressing the PATH key) or the PARK key is pressed, the paper is moved to the tear position, the display shows TEAR IF NECESS./ PARK PAPER. If the paper to be parked is longer than 18" tear it off and press the PARK key again to perform the parking procedure.
  -
- If at least one line has been printed, or the paper has been fed forward at least 1 line and the paper path is changed (changing the Macro or pressing the PATH key) or the PARK key is pressed when the paper is already in the tear position, the printer performs automatically the parking procedure.

If LABEL is selected:

- When the paper is positioned at the first printable line and the paper path is changed (changing the Macro or pressing the PATH key), or the PARK key is pressed the printer automatically ejects the paper towards the rear of the printer.

- If at least one line has been printed, or the paper has been fed forward at least 1 line and the paper path is changed (changing the Macro or pressing the PATH key) or the PARK key is pressed, the display shows TEAR IF NECESS./EJECT PAPER. If the paper to be ejected is longer than 18" tear it off and press the PARK key again to perform the paper ejection.
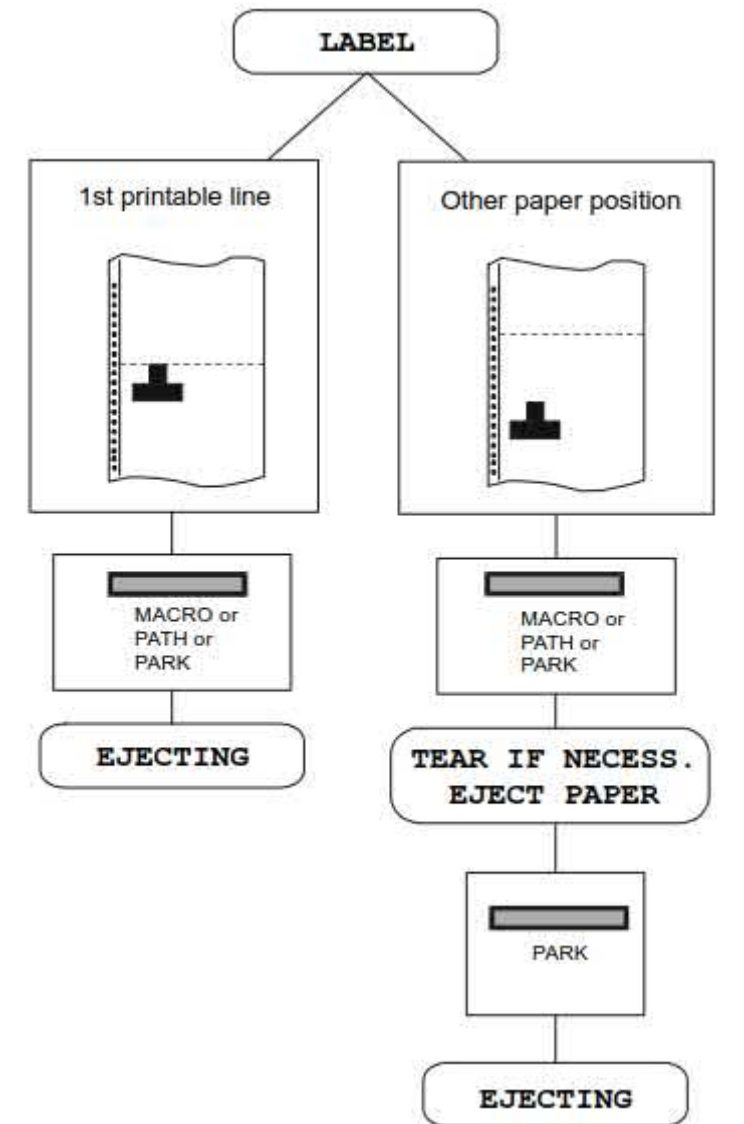
If at power on the paper is already loaded in a paper path that is different to the paper path used by the macro which is valid at power-on, independently from the setting of the TEAR function, the display shows TEAR IF NECESS./EJECT PAPER. If the paper to be ejected is longer than 18" tear it off and press the PARK key again to perform the paper ejection.

In all the above cases the parking procedure may be interrupted pressing the ALTERNATE key. The display shows OPER. INTERRUPTED.

If in any of the above cases you do not tear off the paper and the printer is not able to park it, because it is too long, the display shows TEAR OFF PAPER/PARK PAPER. Tear off the paper and press again the PARK key.

During the parking procedure the display shows PARKING. If the printer is ejecting the paper (see LABEL selection) the display shows EJECTING.

Paper Paths

Paper Handling
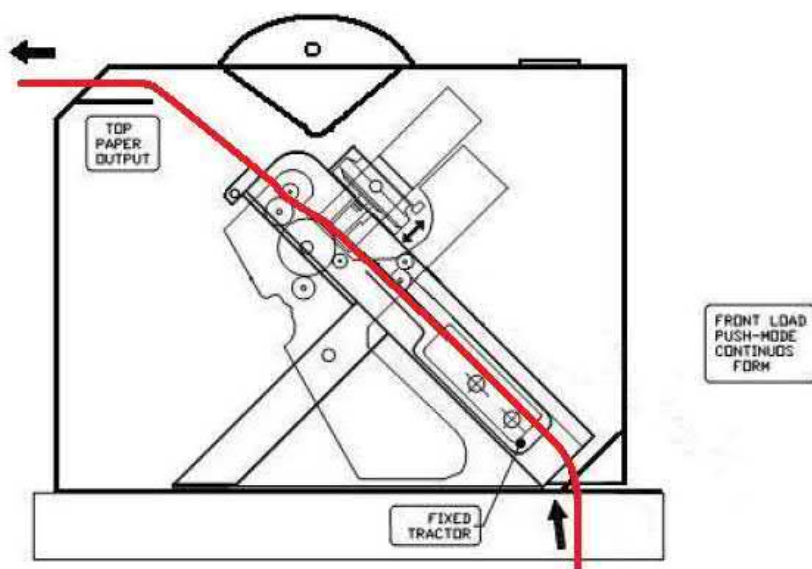
Front1 Push Path

Base Configuration
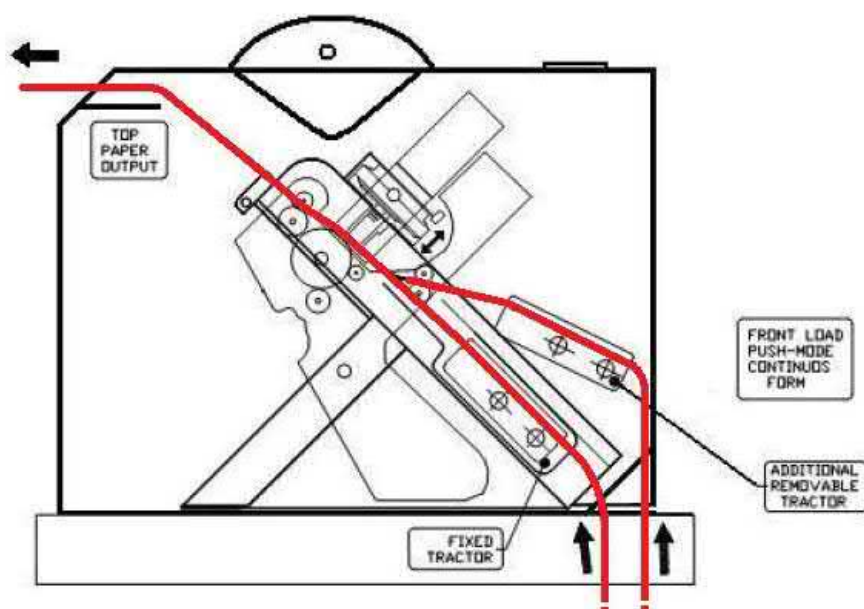
Front 2 Push Path

With Installed Option

Paper Specifications

It is important to use the correct paper for obtaining the best performance. See the information table below:

Fanfold Paper

Loading Mode	Front1 Tractor	Front2 Tractor option
Width	76 to 432 mm 3 to 17 inches	76 to 432 mm 3 to 17 inches
Length	76 to 609 mm 3 to 24 inches	76 to 609 mm 3 to 24 inches
Thickness	max. 0.635 mm 0.025 inches	max. 0.635 mm 0.025 inches
Copies	1 + 7	1 + 7
Weight (g/m2):		
Original	55 to 150	55 to 150
Other sheets	45 to 75	45 to 75
Carbon Paper	35	35

Fanfold Paper Loading

Loading Paper Using the Front1 Push Tractor

1. To select the Front1 push tractor paper path, press the PATH key. The display shows:

<div align="center">

LOAD FRONT1

</div>

- If you have been using a different path, the display shows:

<div align="center">

PATH CHANGING

</div>

- If you have been using fanfold paper in the Front2 push tractor paper path (if the Front2 push tractor option is installed), the printer automatically starts the parking procedure. The display shows alternately:

<div align="center">

TEAR IF NECESS.   and   PARK PAPER

</div>

- Tear off the fanfold loaded with the Front2 push tractor (if it is longer than 18 inches) and press the PARK key. The display shows:

<div align="center">

PARKING

followed by

LOAD FRONT1

</div>

1. Open the Push tractors cover turning it upwards and lay it on the top of the printer
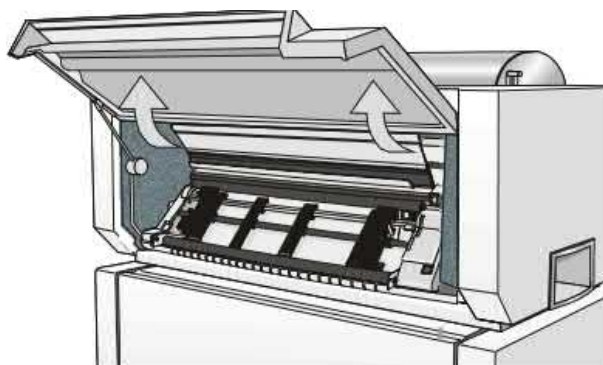
2. Unlock the sprockets of the Front1 tractor moving the sprocket levers down. Slide the left sprocket to the first printing column.
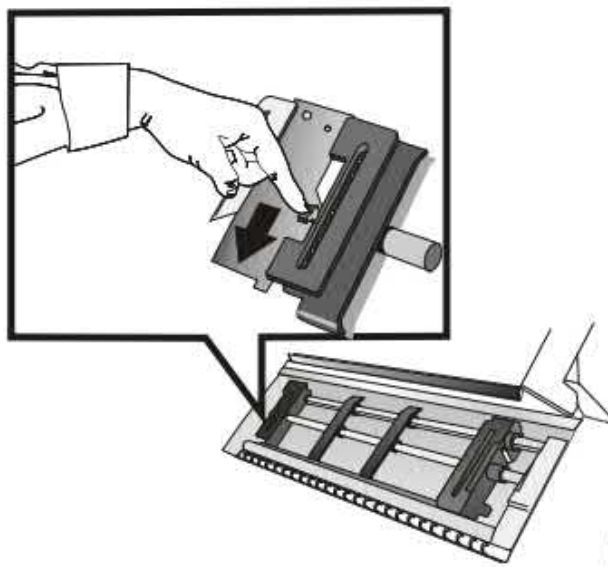
Note: in some version the sprocket levers work in opposite way instead of the same way as the indicated in the figures

3. Space the paper guides along the tractor bar. Open the left and right sprocket covers.

4. Hold the fanfold paper in front of the sprockets and insert the paper perforation on the left sprocket pins and close the left sprocket cover
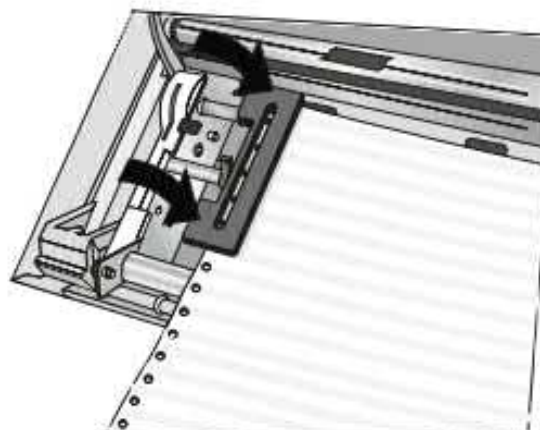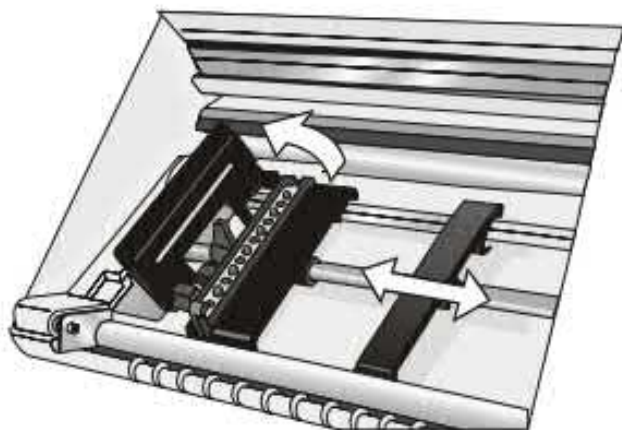
5. Insert the paper on the right sprocket pins and close the right sprocket cover
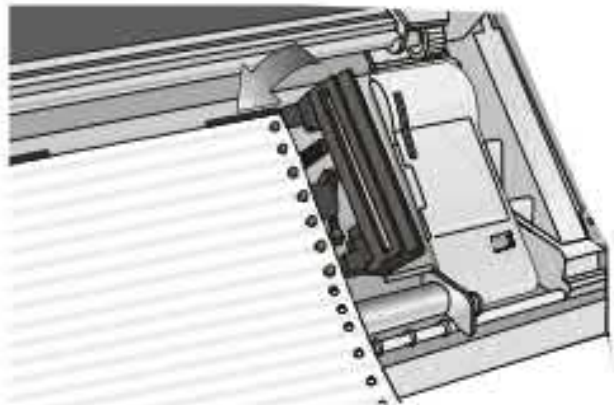
6. If you are using the 6 pin Front1 Push tractor option, make sure the paper goes under the paper sensor, and close the right sprocket cover.
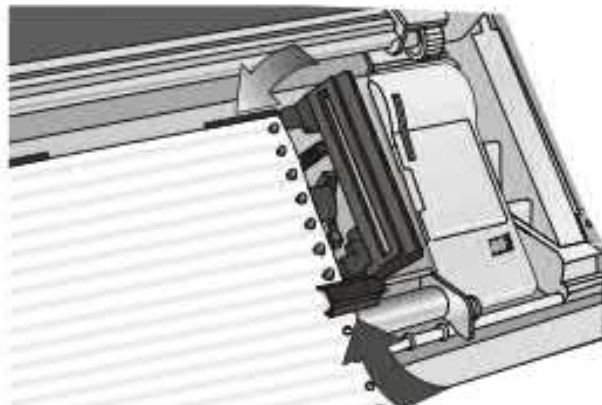
7. Match the left sprocket for the first printing position, i.e. the left paper margin must match the ninth mark on the printer cabinet

   Note: Aligning the left-hand edge of the paper past the 22nd spacer on the printer cabinet will cause the paper to be misaligned with the Paper Load Sensor resulting in a LOAD FORM' error.

8. Adjust the right sprocket gently to remove slack from the paper
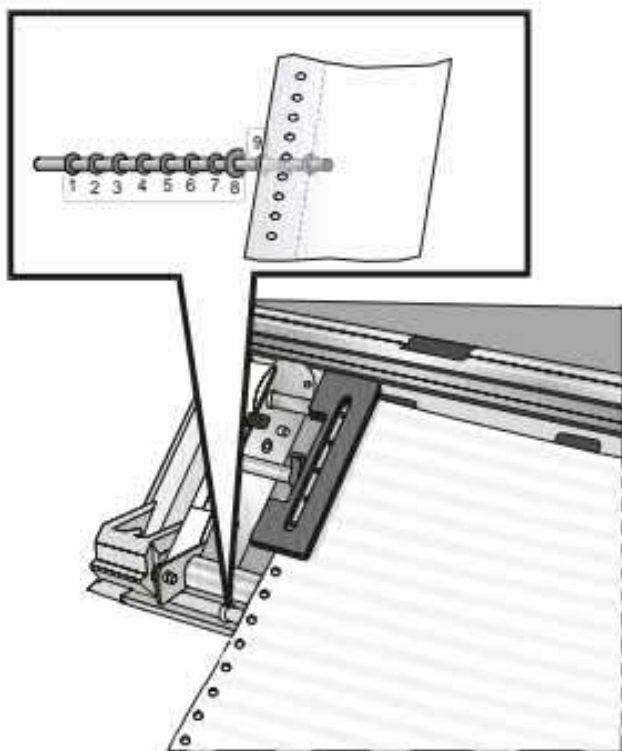
Make sure the paper is not taut

9. Lock the left and right sprockets moving the sprocket levers up

The printed paper is output on the rear side of the printer.

11. If your printer is located on the optional printer cabinet, the printed paper is collected on the output stacker:
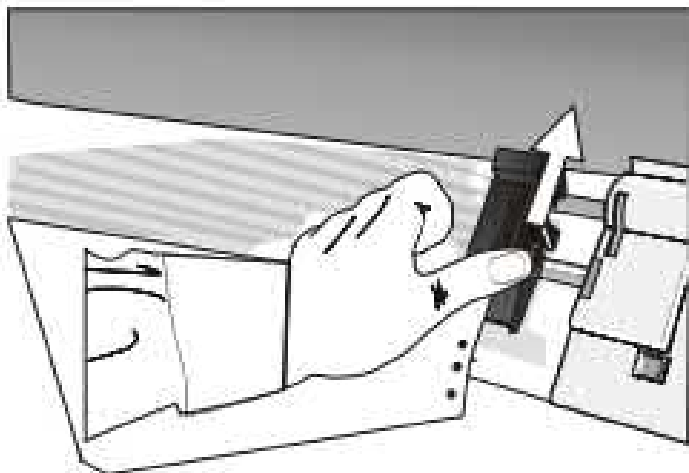
10. Close the Push tractors cover. Press the LOAD/FF key to load the paper into the printer. The paper must be loaded as shown in figure.

Antistatic cable
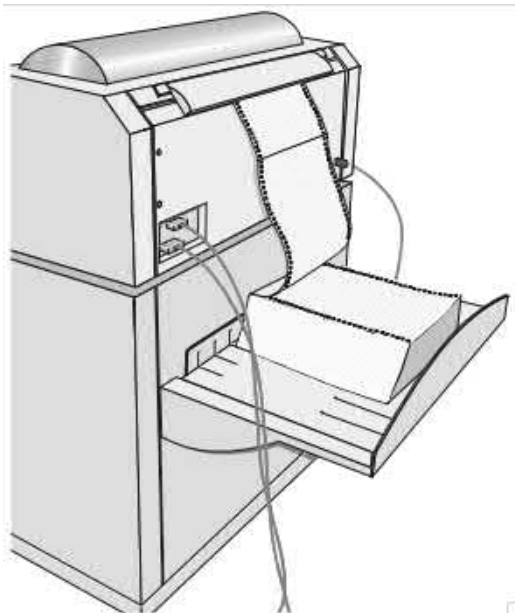
12. If the printer is not installed on the cabinet, make sure that there is enough space to stack the printed paper:
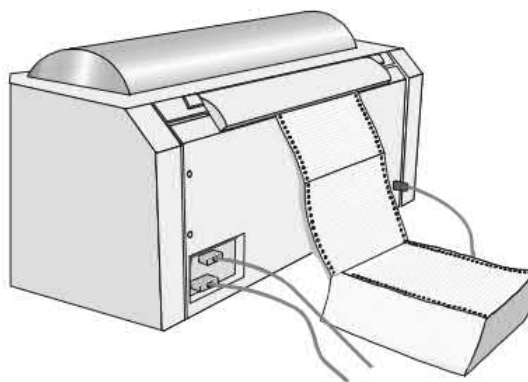
Printing a Configuration Sheet

It is recommend that you now print your printer configuration defaults. Save this printout for future reference. You can create a printout of the printer configuration by following these steps:

1. Press the ON LINE key to take the printer OFF LINE.

2. Press the PROGRAM key.

    | PRINT OUT? NO | Is displayed

3. Press the → key

    | PRINT OUT? YES | The PROGRAM SETUP PRINTOUT is printed

4. Press the ↓ key until

    | PRINT STATS? NO | Is displayed

5. Press the → key

    | PRINT OUT? YES | The USAGE STATISTICS DATA PRINTOUT is printed

6. Press the ↓ key until

    | CONFIG MENU NO | Is displayed

7. Press the → key to display

    | CONFIG MENU YES |

8. Press the ↓ key

    | PRINT OUT? NO | Is displayed

9. Press the → key

    | PRINT OUT? YES | The CONFIGURATION SETUP PRINTOUT is printed

10. Press the PROGRAM key
11. Press the TEAR key and tear off the printout at the perforation

Printer Maintenance and Troubleshooting

Cleaning the Printer

DANGER
<2-22> Carefully follow all cleaning instructions, using only the materials and solutions recommended.

Before you clean the Printer, make sure the printer has been turned off for at least 15 minutes before starting any cleaning operations

Periodic cleaning will help keep your printer in top condition so that it will always provide optimal performance.

Cleaning inside the printer

Every few months, use a soft brush and a vacuum cleaner to remove dust, ribbon lint, and pieces of paper such as chad. Remove the ribbon cartridge to prevent the ribbon from going into the vacuum cleaner. Vacuum any dust from around the print head and in the printer cavity.

Attention: Do not allow any staples, paper clips, or small metal pieces to fall inside the printer.

Cleaning the outside covers

Clean the outside of the printer with a damp cloth and mild soap. Do not use any spray-type or chemical cleaners anywhere on your printer. Do not put any liquids or spray near the air vents. For stubborn ink stains on the cover, use a commercial mechanic's hand cleaner.
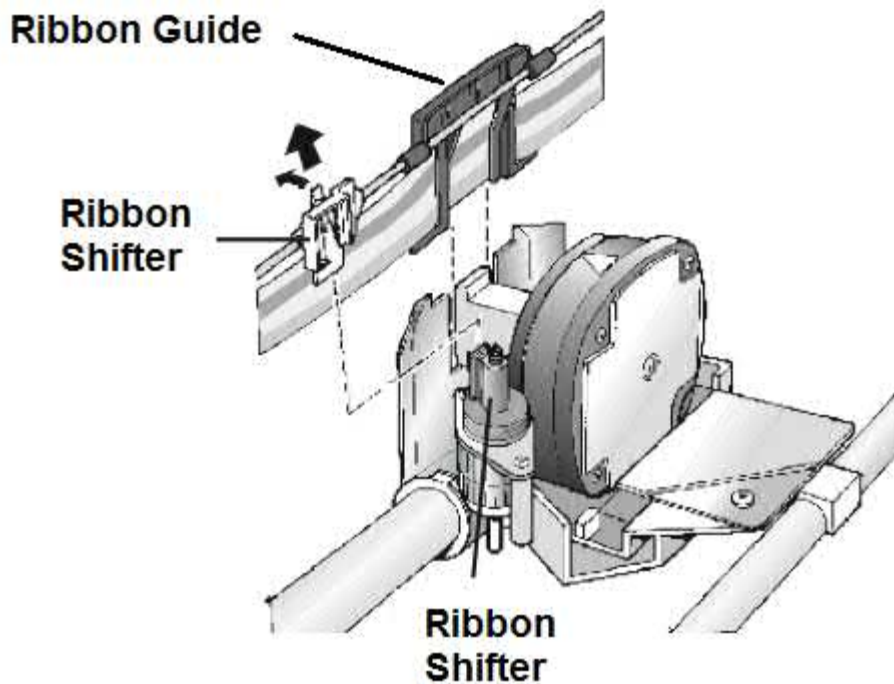
Replacing the Ribbon Cartridge

1. Make sure that the printer is turned off for at least 15 minutes.

CAUTION:
The printhead may get hot during operation. Be careful when removing or replacing the ribbon..

2. Open the top printer cover.

3. Slide the ribbon guide out of the print head. If the Ribbon Shifter kit is installed on the printer, free the shifter holder pushing the tab towards the rear and pulling the shifter holder up.

3. Remove the used ribbon cartridge by lifting it up.
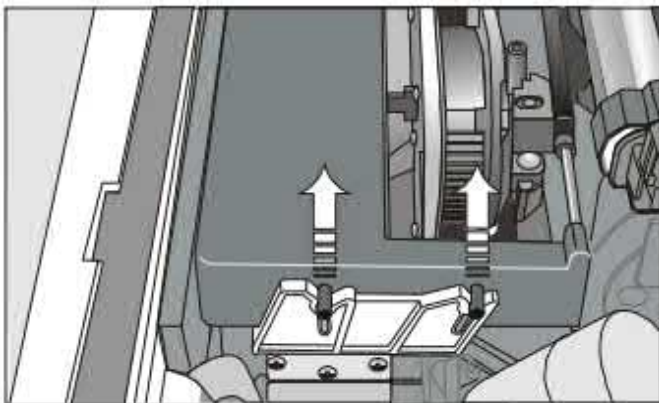
Black cartridge when the ribbon shifter option is not installed
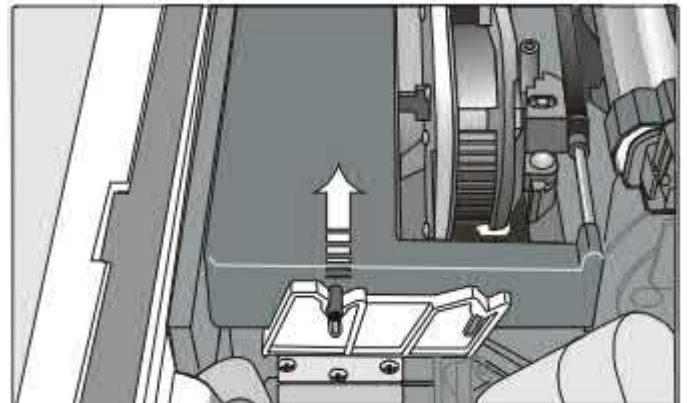
Black "Long Life" cartridge when the ribbon shifter option is installed

Now, you are ready to insert the new ribbon cartridge. See before "Ribbon Cartridge Installation".

Printing the Self Test

If you need to know any printer setting, and to check if the printer is working well, print the self- test.

Proceed as follows:

1. Keep the ON LINE key pressed while powering on the printer until the display shows RELEASE KEYS.

2. When you release the key, after initializing the printer starts the self-test printout.

   It prints:
   - The printer model
   - The current firmware release with Version and FW IDentifier
   - The serial number which can be applied as USB ID
   - The MAC ADDRESS of the LAN card

   a continuous loop of characters in different pitches.

3. To stop the self-test printing, press the ON LINE key again. The printer is offline.
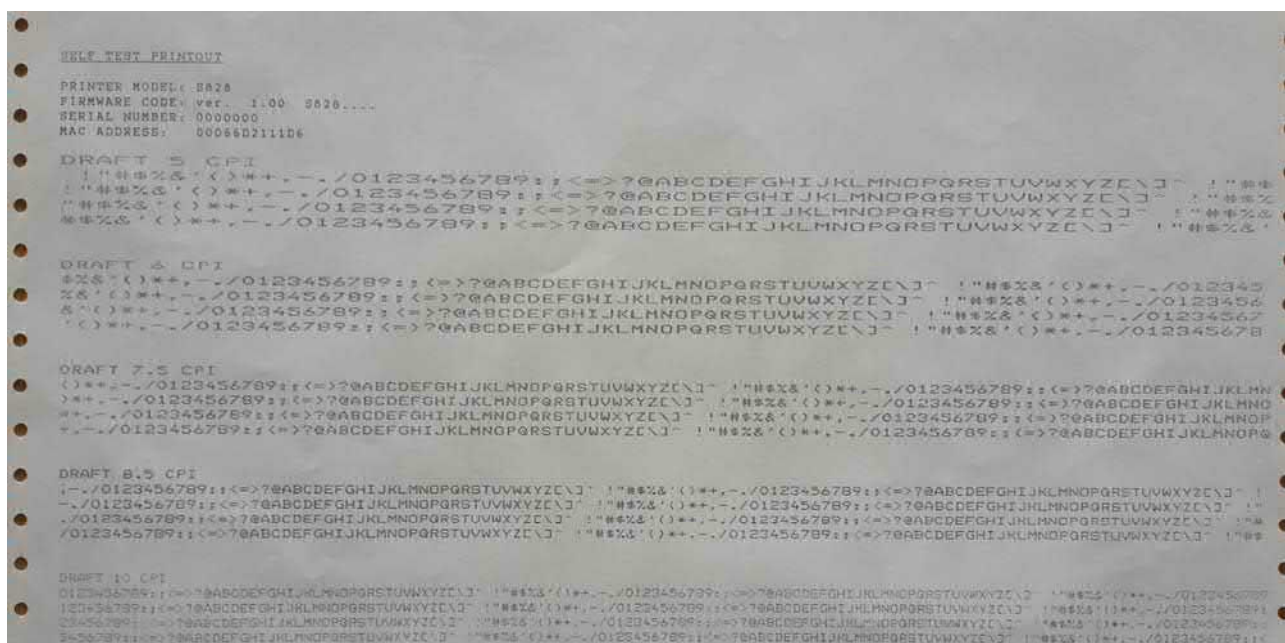
Error Handling

When an error condition occurs:

- the printer is disabled;
- the first message on the display indicates the error, while the second message gives more details concerning the error conditions.

Press always the ON LINE key to reset the error condition

Error Message Description

Messages	Indication	Solution
A.G.A NOT OPER ADJUST THE GAP	The automatic gap adjustment (A.G.A) is not enabled.	Press the ON LINE key to reset the error condition. Adjust the print head gap to a fixed distance. Select the print head fixed gap adjustment function in the *Program Menu*. • Press the PROGRAM key when the printer is disabled (READY indicator unlit) to enter the *Program Setup*. • Press the ↓ key until the USER MACRO function is displayed. Press the ⟶ key until the desired macro is displayed (MACRO#*x*). Press the → key to enter the macro parameters. Press the ↓ key until the FIXED GAP parameter is displayed. Press the → or ← keys to select the fixed gap adjustment values. From FIXED GAP 1 (simple fanfold paper) to FIXED GAP 4 (multipart fanfold paper).
BUFFER OVERFLOW CHARACTER LOST	A buffer overflow condition occurred (for the serial interface).	Turn the printer off and on again, or press the PROGRAM and ON LINE key successively to clear the buffer. • Press ON LINE to clear the error. • Increase the buffer size. • Check the handshaking protocol in the CONFIGURATION SET UP against the host protocol. • Restart the print job.
DATA SET OFF	A remote connection serial interface error condition was detected. The Data Set Ready or Data Carrier Detect signal was not sensed.	Check for the correct serial cable for the remote Connection. • Press the ON LINE key to reset the error condition.
FRAMING ERROR CHARACTER LOST	An error on the serial transmission occurs. The printer recognized a wrong bit.printer recognized a wrong bit.	Turn the printer off and on again, or press the PROGRAM and ON LINE key successively to clear the buffer. • Press ON LINE to clear the error. • Increase the buffer size.

Messages	Indication	Solution
INTERLOCK ERROR CHECK INSERTION	The rear plug cover is not installed on the printer.	Install the rear plug cover on the printer.
JAM FRONT1 PATH CHECK PAPER	A paper jam error condition occurred in the Front1 paper path.	Check the paper path and remove the jammed paper. Press the ON LINE key to reset the error condition.
JAM FRONT2 PATH CHECK PAPER	A paper jam error condition occurred in the Front2 paper path.	Check the paper path and remove the jammed paper. Press the ON LINE key to reset the error condition.
NO PATH AVAILABLE	An electromechanical failure occurs in the paper paths.	Call Service.
NVM CHANGE REMOVE PAPER	If this error is displayed during the printer power on, an NVM error condition occurs.	Turn the printer off and then on again. If the problem is not solved call Service.
OVERRUN ERROR CHARACTER LOST	An error on the serial transmission occurs. The printer recognized a wrong bit.printer recognized a wrong bit.	Turn the printer off and on again, or press the PROGRAM and ON LINE key successively to clear the buffer. • Press ON LINE to clear the error. • Increase the buffer size.
PAPER JAM CHECK ALL PATHS	A paper jam error condition occurs in the paper path.	Check all the paper paths and remove the jammed paper. Press the ON LINE key to reset the error condition.
PARITY ERROR CHARACTER LOST	An error on the serial transmission occurs. The printer recognized a wrong parity bit.	Turn the printer off and on again, or press the PROGRAM and ON LINE key successively to clear the buffer. • Press ON LINE to clear the error.
PRINT INTEGRITY	Anomalous print out because of a possible print carriage blocking.	• Do not move the platen knob. Press the ON LINE key to reset the error condition.
RIBBON BLOCKED CHECK RIBBON	The ribbon of the cartridge is blocked.	Check that the ribbon is correctly inserted. Turn the tension knob to make sure that the ribbon is not jammed. Press the ON LINE key to reset the error condition.
UNKNOWN TRACTOR	A tractor type that is not recognized has been mounted on the printer.	Check that the installed tractor is compatible with the printer.
ENG FLT ERR XYZ	A not-recoverable is detected during initialization phase • carriage movement • ribbon movement • paper sensor	Check for objects inside of the printer blocking carriage, ribbon or paper movement. Turn the printer off and on again, If the problem persists call for service.

Problems List Index

Forms problems

Causes are listed for each problem in order of priority.	
Problem: Forms buckle, twist, jam, or tractor holes tear	
1. The right tractor is adjusted incorrectly	Solution: Move the right tractor to obtain proper forms tension. The tractor pins should be in the center of the tractor holes.
2. The printer is not at the edge of the table.	Solution: Move the printer to the front edge of the table if having problems with front forms path or move the printer to the rear edge of the table if having problems with the rear forms path.
3. The forms supply is not below the level of the printer.	Solution: Move the forms supply to the floor or on a shelf below the level of the printer.
4. The forms supply is not aligned with the printer.	Solution: Reposition the forms supply so that the forms feed evenly.
5. The forms are catching on the carton edge.	Solution: Remove the uneven carton edges, or remove the forms from the carton.
Note: As the forms reach the bottom of the box, this problem can occur more often.	
6. The ribbon is twisted or folded.	Solution: Check the ribbon for folds or twists.
7. The forms contain excessive moisture.	Solution: Store the forms in a cool, dry place before using them, or store the forms in the printer area for 24 hours.
8. The forms are defective or do not meet specifications	Solution: Try unloading the forms and then reloading forms. Forms should meet the requirements specified in "Paper Specifications" on page 87.
Problem: Forms do not feed past printhead	
1. The Automatic Gap Adjustment (AGA) setting for the paper source you are using needs to be changed	Solution: See "Adjusting the Distance of the Print Head" on page 74
2. The ribbon is twisting or folding.	Solution: Replace the ribbon.
3. You are using thick multiple-part forms	Solution: See the procedure for setting perforation safety to Yes through the operator panel. See "Paper Perforation" on page 74.

Problem: Forms do not stack correctly	
1. The forms do not stack correctly on the table behind the printer	Solution: Use the recommended table size (see "Choosing a Suitable Location" on page 5).

Note: Up to 101.6 mm (4 in.) of forms may stack on the table behind the printer without decreasing the ability of the forms to stack correctly.

2.The forms do not stack correctly in the output rack on the table.	Solution: Check for obstructions to the forms path (cables, cords, or other items). If you find an obstruction, remove or relocate it.
3. The forms do not meet specifications.	Solution: The forms may be outside nominal specifications. See "Paper Specifications" on page 87.
4. The forms contain excessive moisture.	Solution: Store the forms in a cool, dry place before using them or leave in the printer for 24 hours.

Note: Forms stack best when the forms are 203.2 to 304.8 mm (8 to 12 in.) long. If the forms length is outside this range, operator assistance may be needed

5. Forms are too dry.	Solution: Condition the forms for 24 hours or more at the manufacturer recommended temperature and humidity settings.
Problem: Characters are off registration	
1. The first print position is adjusted incorrectly.	Solution: Check your settings for the "Left Margin" on page 70, "Horizontal Character Tuning" on page 76, and "Vertical Character Tuning" on page 76.

Print quality and ribbon problems

Problem: Unreadable characters	
1. The ribbon is dry or worn.	Solution: Check the ribbon and replace it if it is dry or worn.
2. The Automatic Gap Adjustment (AGA) setting for the paper source you are using needs to be decreased. Paper must be loaded for this adjustment to be effective.	Solution: See "Adjusting the Distance of the Print Head" on page 74.
3. Poor-quality multiple-part forms.	Solution: Try new forms or select another print quality. See "Quality Print Mode Selection" on page 68.
4. Forms thickness exceeds forms specifications.	Solution: See "Paper Specifications" on page 87.
Problem: Missing dots or irregular characters	
1. The ribbon is worn.	Solution: Check the ribbon for wear; replace it if necessary.
2. The ribbon is twisted or folded.	Solution: Straighten the ribbon.
3. The Automatic Gap Adjustment (AGA) setting for the paper source you are using needs to be changed. Paper must be loaded for this adjustment to be effective.	Solution: See "Adjusting the Distance of the Print Head" on page 74.
Problem: Ribbon smudging forms	

CAUTION:
<2-25> High temperature; switch off the printer and allow at least 20 minutes for parts in this area to cool before handling.

1. The ribbon is twisted or folded.	Solution: Try moving the printhead back and forth while turning the ribbon advance knob. If the ribbon advance knob does not turn, replace the ribbon.
2. The Automatic Gap Adjustment (AGA) setting for the paper source you are using needs to be increased. Paper must be loaded for this adjustment to be effective.	Solution: See "Adjusting the Distance of the Print Head" on page 74.

3. The ribbon cartridge is defective	Solution: Replace the ribbon cartridge.
4. A new ribbon is over-inked.	Solution: Replace the ribbon.
Problem: Printing is too light or partial characters print	
1. The Automatic Gap Adjustment (AGA) setting for the paper source you are using needs to be changed. Paper must be loaded for this adjustment to be effective	Solution: See "Adjusting the Distance of the Print Head" on page 74.
2. The ribbon guide is seated incorrectly or the cartridge is not snapped into place.	Solution: Remove the ribbon and reinstall it.
Problem: Ribbon snagging, tearing, or not moving	
1. The ribbon is worn	Solution: Replace the ribbon cartridge.
2. The ribbon cartridge is not properly installed	Solution: Remove and then reinstall the same ribbon.

Configuration problems

| **Problem: Printer doesn't print or prints wrong characters**	
1. Nothing is printed or the wrong characters print.	Solution: - Ensure the printer cable is attached to the host. - Check the printer configuration settings.

Miscellaneous problems

Problem: Printer has no power	
1. The power cord is not connected.	Solution: Ensure the power cord is plug into the back of the printer and also into the wall outlet.
Problem: Throughput of printer at half speed	
1. The Quiet Print function is set to ON.	Solution: Set Quiet Print to OFF. See "Quiet Printing" on page 74.

Clearing Forms Jams

Use the following procedure to clear forms jams from the printer
1. Open the top cover
2. Tear off the forms at perforations before it enters the printer and after it exits the printer.
3. Open the tractor doors and remove forms from the tractors.
4. Try to move the printhead off of the form and to the far right. Do not force it.
5. Remove jammed forms by pulling in the direction of printing.
6. If the jam cannot be removed, lightly pull the form in the opposite direction.
7. If the jam still cannot be removed, remove the paper bail assembly:
    a. Remove the ribbon cartridge.
    b. Grip the bail assembly and rotate it toward the front of the printer until the pivot posts on the sides disengage from the printer frame.
    c. Lift the bail assembly out of the printer and set it aside.
    d. Remove jammed forms by pulling in the direction of printing
8. If you removed the paper bail assembly in the previous step, reinstall it, as follows:
    a. Grip the bail assembly as shown in the following illustration.
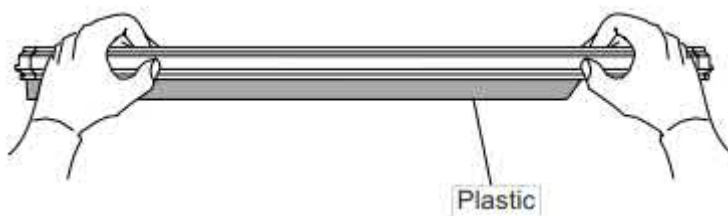
Important!
To avoid damaging the plastic, ensure the plastic points down.
    b. Insert the left and right paper bail end cap pivots into the side frames as indicated in the figure below
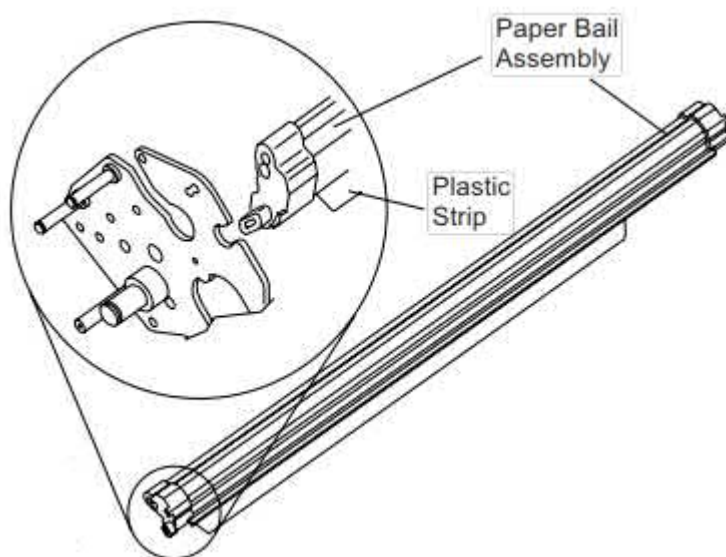
    c. Rotate the paper bail assembly toward the back of the printer, closing it as far as it will go.
    d. Reinstall the ribbon cartridge
9. Reload the forms.

Options

The IPDS Controller Board (only for S828 IPDS)

The S828 IPDS printer's interface available configurations are:

- Controller board with serial, parallel and USB interfaces
- Controller board with LAN and parallel interfaces.

The original configuration may be modified by ordering the controller board with the desired interfaces and replacing the existing board with it.

Installing the Controller Board

Follow the reported instruction in case of Controller Board replacement.

Handling the Controller Board

Attention: Do not remove the Controller Board from the protective package until instructed to do so. Static electricity, though harmless to you, can damage sensitive Controller Board components. Use the information in this section to avoid damaging a Controller Board.

- Limit your movement. Your movement can create static electricity that, when released to the Controller Board, can damage the electronic components on the Controller Board. Sliding your foot across carpeting is an example of how you create unwanted static electricity.
- Handle the Controller Board only by the edges and prevent others from making direct contact with it.
- Before removing the Controller Board from the protective package, ground the package to exposed metal at the back of the printer. This will release any static charge that may have developed on the package or on your body. Hold the package against the metal for at least two seconds.
- When you are instructed, remove the Controller Board and install it directly into the Controller Board slot without setting it down. If you have removed the Controller Board from the protective package and cannot immediately insert it in the printer, place the protective package on a flat surface, and set the Controller Board on top of the protective package.
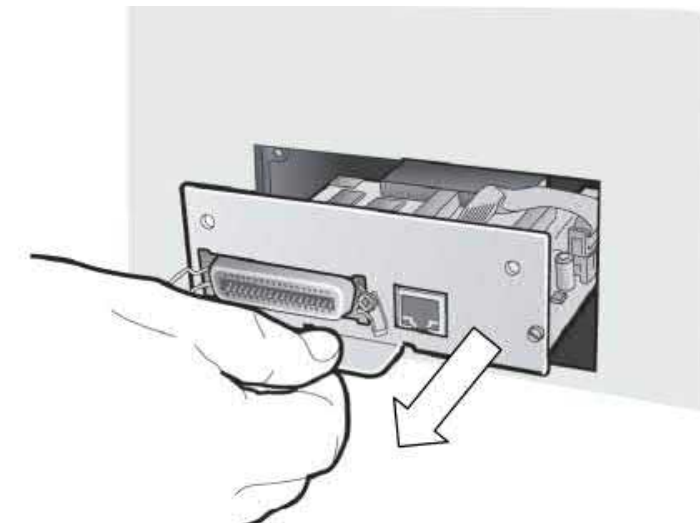
Replacing the Controller Board

Attention: Ensure that the printer is powered off before installing or removing the Controller Board. If the Controller Board is installed while the printer is powered on, the controller will not synchronize with the printer mechanism board.
Unpredictable printer behavior will result.
Perform the following steps to replace the Controller Board:

1. Ensure that the printer is powered off. Installing the Controller Board with the printer power on will result in unpredictable printer behavior.
2. Use the screwdriver that came in the Controller Board box to remove the existing Controller Board and pull out the card.

3. Use the information under "Handling the Controller Board" on the preceding page as you remove the Controller Board from its shipping box and from the protective package.

4. Align the left and right sides of the Controller Board with the guides in the printer and slide it into the slot.

2. Use the information under "Handling the Controller Board" on the preceding page as you remove the Controller Board from its shipping box and from the protective package.

3. Align the left and right sides of the Controller Board with the guides in the printer and slide it into the slot.

4. Gently push the Controller Board into the printer until it is seated in the connector inside the printer.
The Controller Board is correctly seated in the printer when the Controller Board metal plate is aligned with the back profile of the slot.
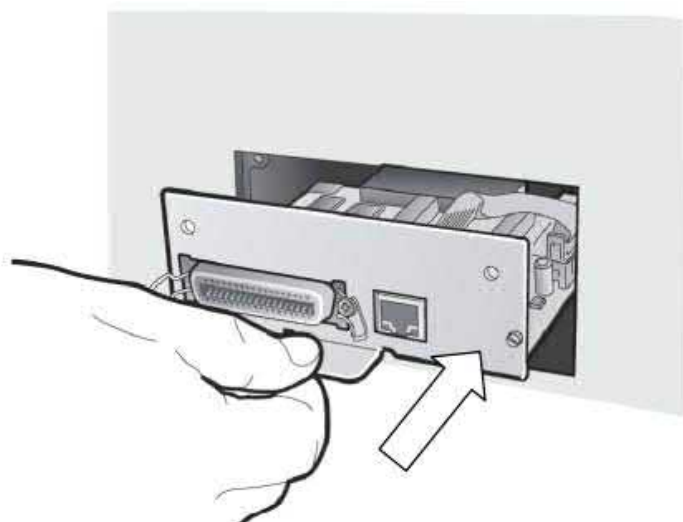
6. Attach the Controller Board with the two screws using the screwdriver that came in the Controller Board box.
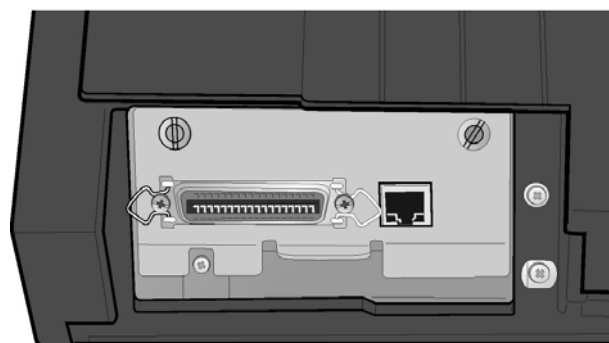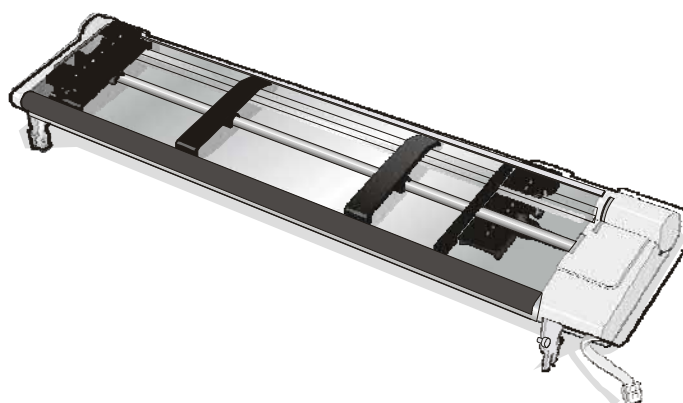
The Front2 Push Tractor

The 6 pin Front2 Push Tractor with paper jam sensor is available for the S828*plus* and S828 printer.

An optional second front push tractor can be installed on the printer model. This tractor allows the handling of a second fanfold paper.
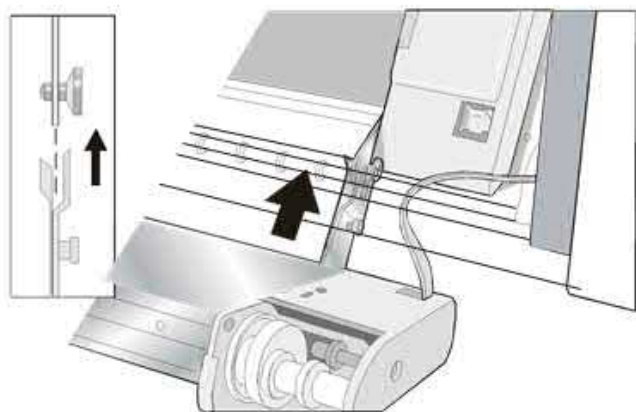
Installing the Front2 Push Tractor

This second push tractor can be installed in front position on the Front1 Push tractor.
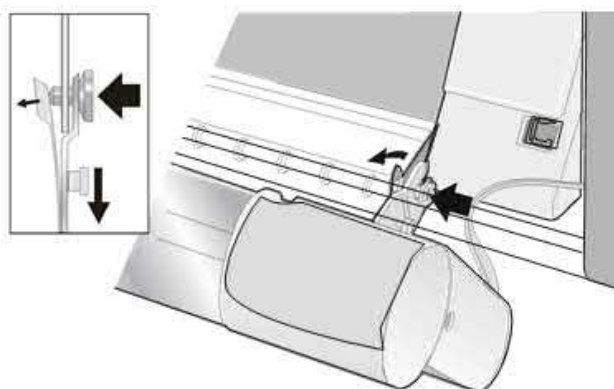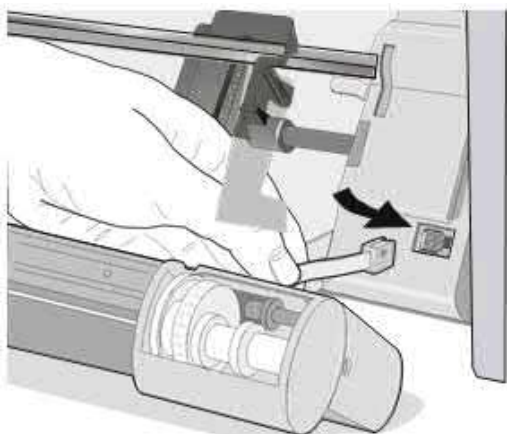

6 pin Front2 Push Tractor option

1. Align the hooks on both sides of the Front2 push tractor with the pins on the Front1 push tractor
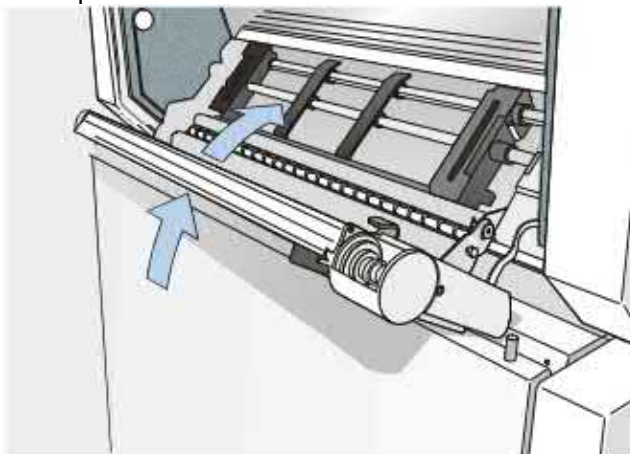

2. Push the Front2 tractor until it is fully engaged

3. Insert the connector cable in the electrical connector located in the lower push tractor
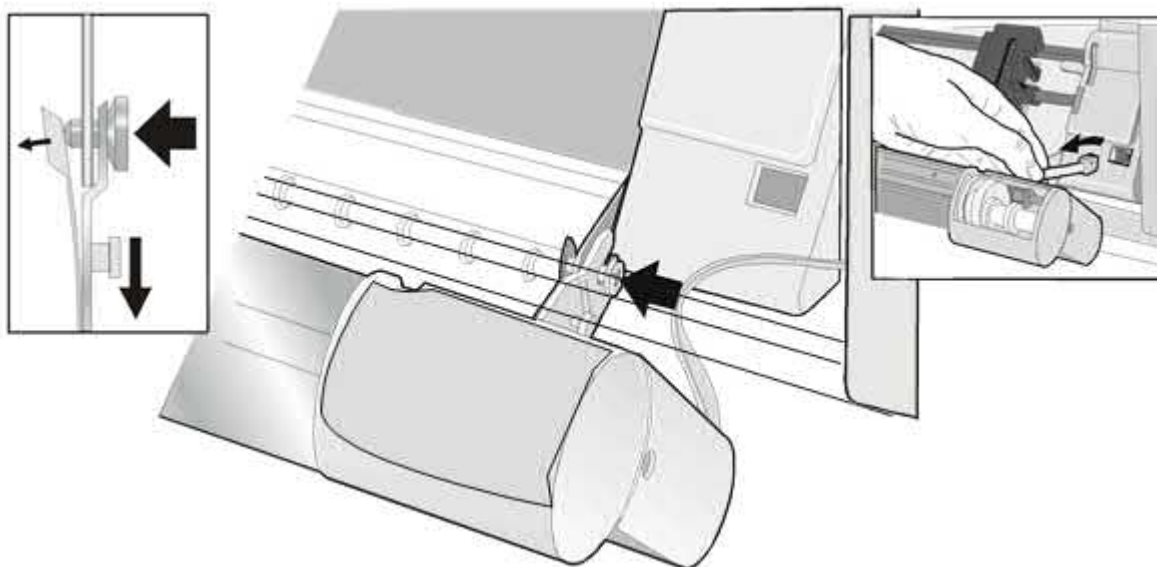
4. Rotate the Front2 push tractor onto the Front1 push tractor.

Removing the Front2 Push Tractor

If you need to remove the upper push tractor, turn the printer off. Disconnect the connector cable and press on the push buttons to disengage the Front2 push tractor

Loading Paper Using the Front2 Push Tractor (option)

1. To select the Front2 push tractor paper path press the PATH key until the display shows:

<div style="text-align:center">

LOAD FRONT2

</div>

- If you have been using a different path, the display shows:

<div style="text-align:center">

PATH CHANGING

</div>

- If you have been using fanfold paper in the Front1 push tractor paper path, the printer automatically
- starts the parking procedure. The display shows alternately.

<div style="text-align:center">

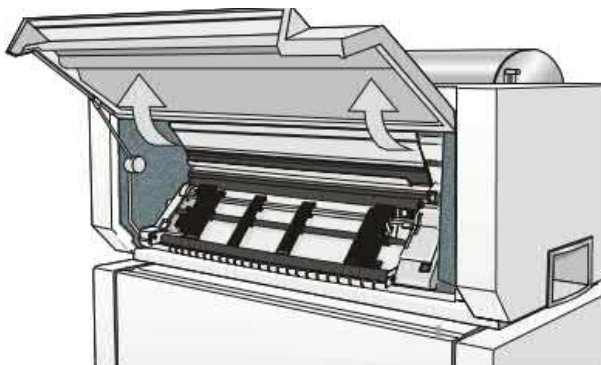| TEAR IF NECESS.	and	PARK PAPER

</div>

- Tear off the fanfold loaded with the Front1 push tractor (if it is longer than 18 inches) and press the PARK key. The display shows:
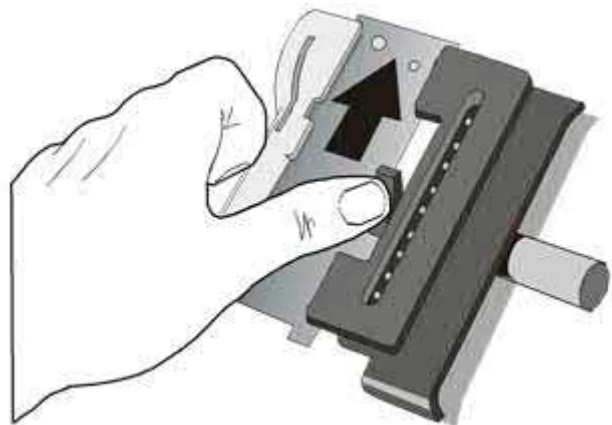
<div style="text-align:center">

PARKING

followed by

LOAD FRONT2

</div>

2. Open the Push tractors cover turning it upwards and lay it on the top of the printer
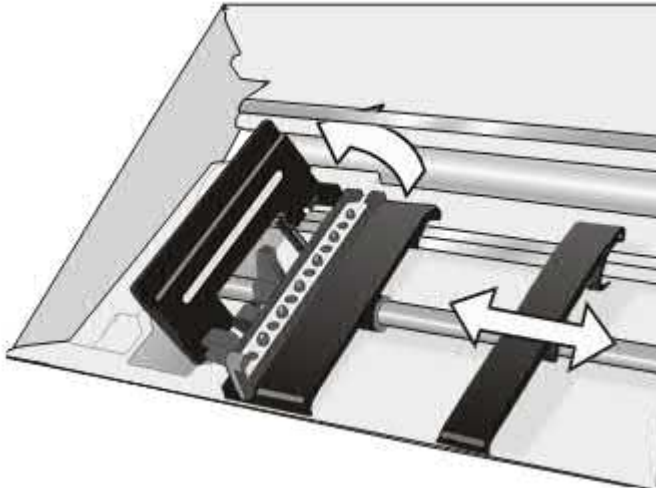
3. Unlock the Front2 push tractor sprockets moving the sprocket levers up


Note: in some version the sprocket levers work in opposite way instead of the same way as the indicated in the figures

4. Space the paper guides along the tractor bar. Open the sprocket covers of the left and right sprocket

5. Hold the fanfold paper in front of the sprockets and insert the paper perforation on the left sprocket pins and close the sprocket cover. Insert the paper on the right sprocket pins and close the sprocket cover.
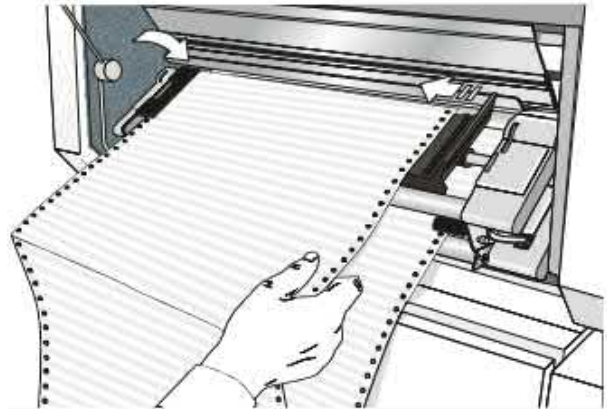
6. If you are using the 6 pin Front2 push tractor option, make sure the paper goes under the paper sensor and close the sprocket cover.
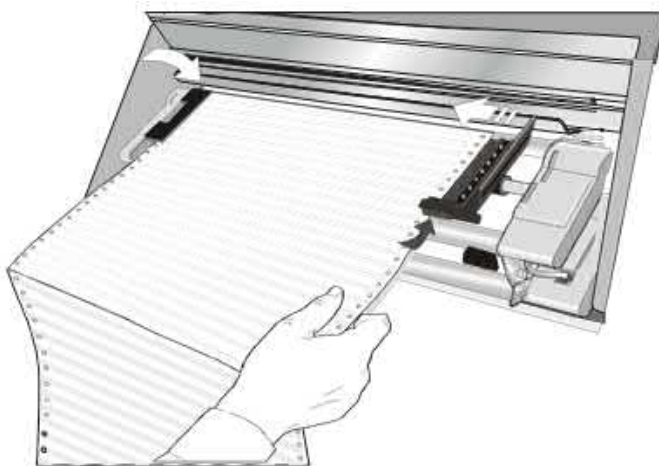
7. Position the left sprocket for printing, matching the left paper margin with the ninth notch on the printer cabinet and lock it in place

Note: Aligning the left-hand edge of the paper past the 22nd spacer on the printer cabinet will cause the paper to be misaligned with the Paper Load Sensor resulting in a LoadForms' error.
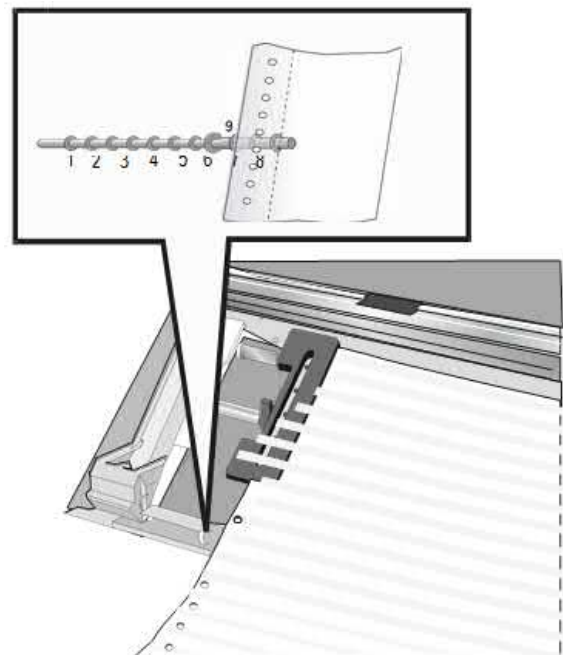
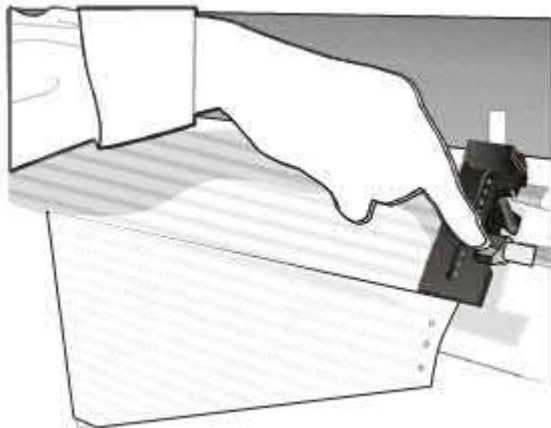8. Adjust gently the right sprocket to remove slack from the paper Lock the Front2 tractor sprockets moving the sprocket levers down

9 Close the Push tractors cover. Press the LOAD/FF key to load the paper into the printer

Loading Paper Using the Front1 Push Tractor when the Front2 Push Tractor (Option) is Installed

When the Front2 push tractor option is installed and you need to load paper on the Front1 push tractor follow this paper loading procedure:

1. Open the Push tractors cover turning it upwards and lay it on the top of the printer. Rotate the Front2 push tractor option outside the printer.

2. Insert the fanfold paper between the Front1 and Front2 push tractor, then proceed to load the paper as described in the section "Loading Paper Using the Front1 Push Tractor".
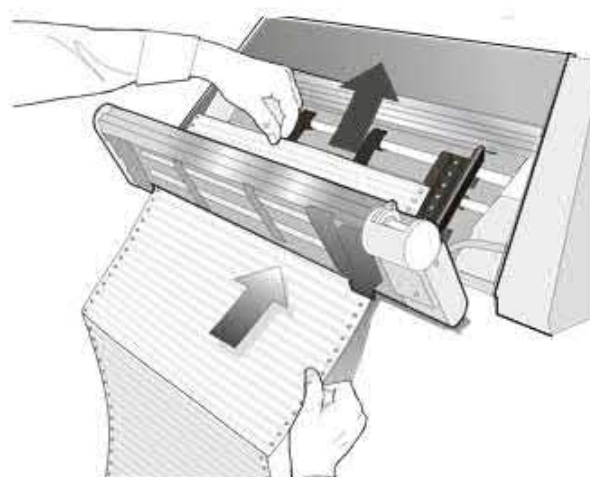
3. When the fanfold paper has been loaded on the Front1 push tractor, reposition the Front2 push tractor in its initial position before closing the Push tractors cover
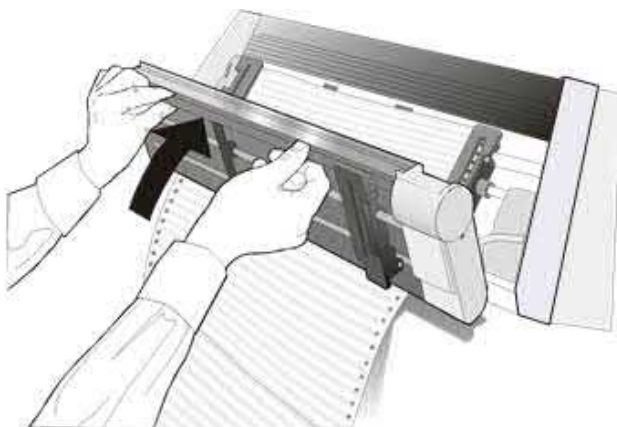
The Printer Pedestal

For better paper handling, use the available Closed Floor printer pedestal option.

Printer Specifications

Printing Characteristics

Print Head	
Matrix	18 pins - 0.25 mm

Print Speed (cps)

CPI	High Speed Draft	Normal Draft	DP Text	NLQ	
10	900	800	480	232	

Throughput Mode (ECMA132)

	Print Mode	Speed
Pages per Hour	Draft-High Speed Draft	660
	Spreadsheet 10CPI	450
Lines per minute @10 cpi	40 characters/line	450
	80 characters/line	330
	136 characters/line	250

Print Matrix (horizontal x vertical)

CPI	Draft			Quality	
Print Mode	High Speed	Normal		DP Text	NLQ
10	9 x 9	9x12		9x20	18x20
12	-	9x10		9x20	18x20
15		9x10		9x20	18x20
17.1		9x12		9x20	18x20
20		9x12		9x20	18x20

Line length (number of characters)

10 cpi	12 cpi	15 cpi	17.1 cpi	20 cpi
136	163	204	233	272

Vertical Spacing

6, 8, 12 lpi
3, 4, 6, 8, 12 lines/30 mm
n/72, n/144, n/216 per inch

Print Style

Draft - Courier - OCR B - Gothic - Prestige - Present - OCR A - Script

Print Attributes

Sub-superscript, Underline, Overscore, Italics, Emphasized, Double Strike, Shadow, Enlarged ,Compressed

Graphic Resolution (dots per inch)

horizontal	60, 72, 80, 90, 120, 144, 240,
vertical	72, 144

Characters Sets	
Standard PC IBM Character Sets	CS1 and CS2
EPSON National Variations	USA, France, Germany, United Kingdom, Denmark-1, Sweden, Italy, Japan, Spain-1, Norway, Denmark-2, Spain-2, Latin America
IBM and EPSON Character Sets	USA (CP437), Greek (CP437-G), Slavic (CP437SL), Multilingual (CP850), Greek (CP851), Eastern Europe (CP852), Turkish (CP 853), Cyrillic (CP855), Turkish (CP857), Euro PC Multilingual (CP858), Portugal (CP860), Hebrew (CP862), Canada/France (CP863), Arabic (CP864), Denmark/Norway (CP865), Russian (CP866), Turkish2 (CP867), OCR-A (CP876), OCR-B (CP877), Farsi (CP1098), Latin 2 Windows (CP1250), Cyrillic Windows (CP1251), Latin 1 Windows (CP1252), Greek Windows (CP1253), Turkish Windows (CP1254), Hebrew Windows (CP1255), Arabic Windows (CP1256), Baltic Windows (CP1257), 96 GREEK, GOST, TASS, MAZOWIA, UKRANIAM, KOI8-U, FARSI1, FARSI2
ISO Character Sets	8859/1 (Latin1), 8859/2 (Latin2), 8859/3 (Latin3), 8859/4 (Latin4), 8859/5 (Latin/Cyrillic), 8859/6 (Latin/Arabic), 8859/7 (Latin/Greek), 8859/8, (Latin/Hebrew), 8859/9 (Latin5). 8859/15 (Latin9)

Bar Codes
UPC-A, UPC-E, EAN-8, EAN-13, UPC-EAN 2, UPC-EAN 5, Code GP, MSI Plessey, Code BCD, C2/5-3 BAR, Code 39, Code 128, Code 11, Code 93, Codabar, 2/5 Bidirectional, 2/5 Interleaved, 2/5 Industrial, 2/5 Matrix, Postnet

Emulations
EPSON FX Series
IBM Proprinter XLIII
IBM Personal Printer 2381+
ANSI 3.64

Drivers and Software	
Drivers	Win10 (32/64), Win8 (32/64), Win7 (32/64), WinNT, 98_ME, 2000-WinXP, Win2003 (32/64), WinServer2008 (32/64), Vista
Software	NetViewMaster for Remote Printer Management

Standard Functions
Automatic print head gap adjustment (AGA)
Automatic paper path switching via operator panel or S/W commands
Paper parking
Plug & Play capability
Bar Code printing
Automatic fanfold positioning for tear-off, selectable time-out
Setting and storage of paper format and print conditions for each paper path in the non volatile memory
Printing of the macro characters using the Printronix native commands

Base Configuration	
FRONT1 and FRONT2 PUSH TRACTOR (6 pin)	
Fanfold Width:	76 to 432 mm (3 to 17 inches)
Copies:	1 original + 7 copies
Thickness	Max. 0,635 mm (0.025 inches)

Optional Configuration	
FRONT2 PUSH TRACTOR (6 pin)	
Fanfold Width:	76 to 432 mm (3 to 17 inches)
Copies:	1 original + 7 copies
Thickness	Max. 0,635 mm (0.025 inches)
Physical and Electrical Characteristics	
Interfaces with Automatic interface switching	
Parallel	Centronics Compatible Bi-directional (IEEE-1284) nibble and byte modes - 36 pin Amphenol connector, 7/8 data bits Receive Buffer: max. 128 Kbytes
Serial	RS-232/C - dB 9 connector, Baud Rate: 300 to 115200 bps, 7/8 data bits, DTR & XonXoff flow, Receive Buffer: max. 128 Kbytes
USB	Type B USB 2.0 Compatible Bi-directional - 4 pin connector, 12Mbit/s
LAN	10BASE-T – 100BASE-TX – RJ45 8 pin connector
LAN-IPDS	
Reliability	
MTBF	Mean Time between failure: 20,000 hours at 25% DC
MTTR	Mean Time To Repair: 30 minutes
Workload	57000 pages/month (ECMA 132 - 4 hours for 22 days)
Printer Life	5 years
Print Head Life	800 MChrs
Power Supply	
UNIVERSAL	From 90 to 244 VAC
Power Output	Max. 154 W
Power Consumption	Standby: 30W - Printing: 120 W
Noise Level	
< 54 dBA	

Environment Conditions	Temperature	Relative Humidity
Storage Conditions	-40° to 50° C	10% to 90% RH (not condensing)
Operating Conditions	10° to 38° C	10% to 90% RH (not condensing)
Paper Conditions	16° to 24° C	40% to 60% RH (not condensing)

Physical dimensions	
Height	315 mm (12,21 inches)
Width	670 mm (26,18 inches)
Depth	390 mm (15,35 inches)
Height	315 mm (12,21 inches)
Basic Printer	
S828	Tbd
S828 IPDS	Tbd
Consumables	
Black ribbon cartridge (25 million chs.)	Tbd
Options	
Additional 6 pin Front2 Push Tractor	Tbd
Three Level Floor Pedestal	Tbd
Standards	
IEC 60950-1:2001, EN 60950-1:2001, EN55022, CISPR22, EN55024, EN61000-3-2 , EN61000-3-3, EN27779	

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