

# Printer Maintenance and Troubleshooting

## Cleaning 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.

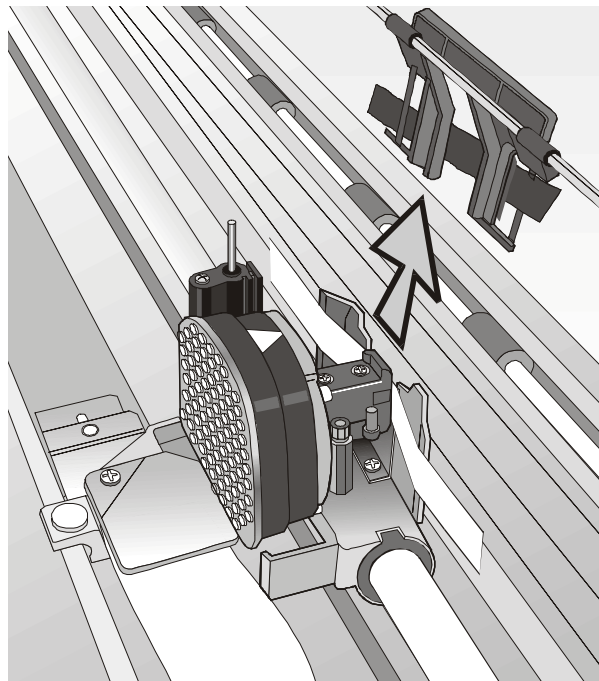
- Use a neutral detergent or water solution on a soft cloth to clean dirt and grease from the cabinet of the printer.
- Do not use an abrasive cloth, alcohol, paint thinner or similar agents because they may cause discoloration and scratching.
- Be especially careful not to damage the electronic and mechanical components.

# Replacing the Ribbon Cartridge

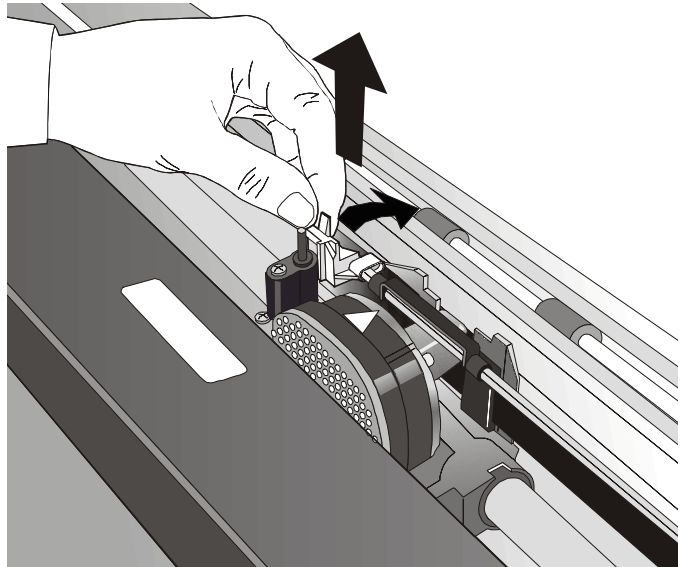
1. Make sure that the printer is turned off for at least 15 minutes.

**Pay attention to the print head because it becomes hot during operation.**

2. Open the top printer cover.
3. Slide the ribbon guide out of the print head.



4. Free the shifter holder pushing the tab towards the rear and pulling the shifter holder up.



5. Remove the used ribbon cartridge by lifting it up.

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 KEY.
2. When you release the key, the printer starts the self-test printout.
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.	<p>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 <i>Program Menu</i>.</p> <ul style="list-style-type: none"><li>• Press the PROGRAM key when the printer is disabled (ON LINE indicator unlit) to enter the <i>Program Setup</i></li><li>• Press the ↓ key until the USER MACRO function is displayed. Press the → key until the desired macro is displayed (MACRO#x).</li></ul> <p>Press the → key to enter the macro parameters. Press the ↓ key until the FIXED GAP parameter is displayed. Press the → o ← keys to select the fixed gap adjustment values. From FIXED GAP 1 (simple fanfold paper) to FIXED GAP 4 (multipart fanfold paper).</p>

<b>Messages</b>	<b>Indication</b>	<b>Solution</b>
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.
DATA SET OFF	The DSR Signal is not connected to the printer and is not ready for data transfer (if the serial interface is selected). This condition may happen in a remote connection (via modem) and the DSR (DATA SET READY) signal is missing.	Press the ON LINE key to reset the error condition.
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 lower or upper tractor 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.

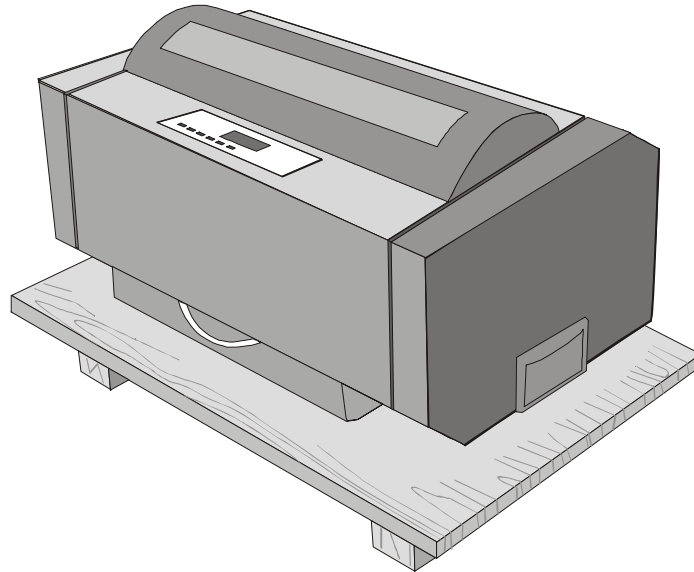
<b>Messages</b>	<b>Indication</b>	<b>Solution</b>
PAPER JAM CHECK ALL PATHS	A paper jam error condition occurs in the paper path	Check all the paper paths and remove the jammed paper. Press the ON LINE key to reset the error condition.
RIBBON BLOCKED CHECK RIBBON	The ribbon of the cartridge is blocked	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.

# Repacking the Printer for Shipment

If you need to ship your printer, it is necessary to repack it to avoid damaging during the transport. Proceed as follows:

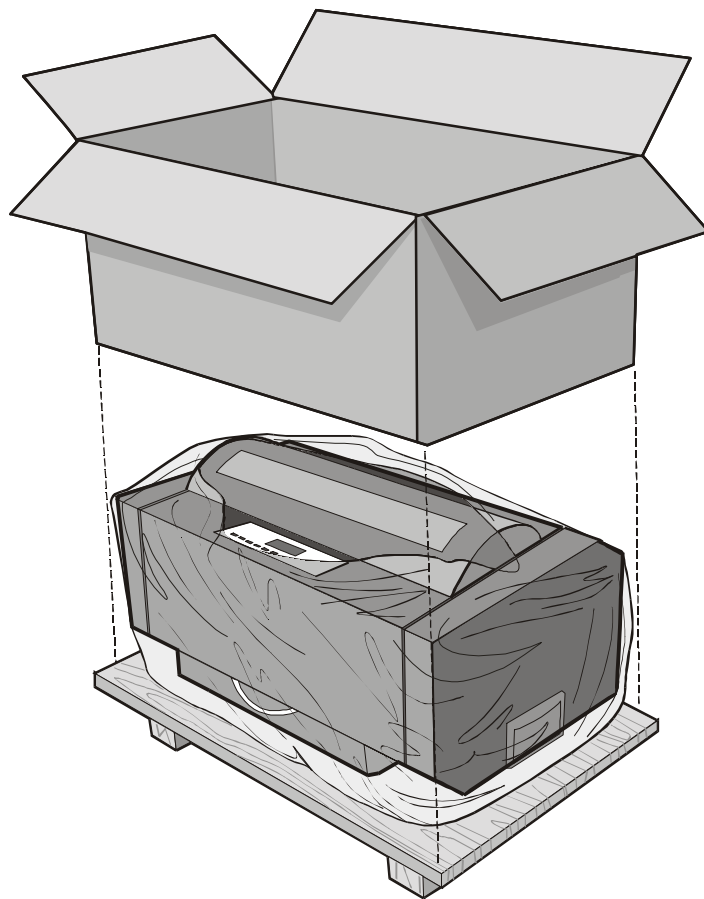
**When repacking the printer always use the original packing material**

1. Find the packing material and the repacking kit.
2. With the help of another person move the printer onto the transport foam on the transport pallet.

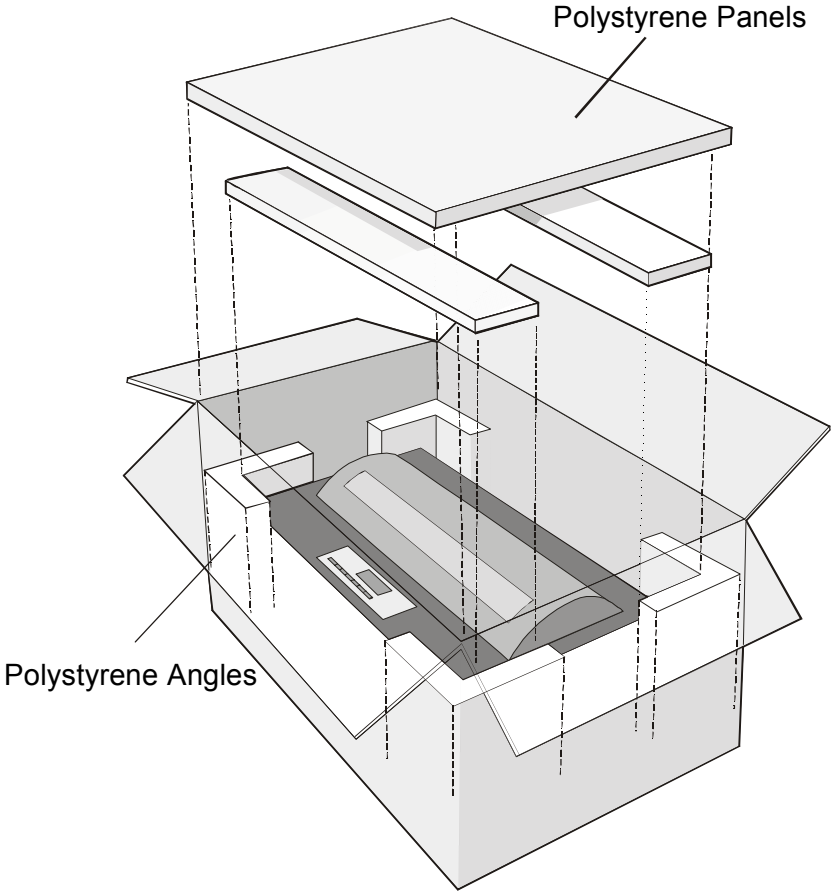




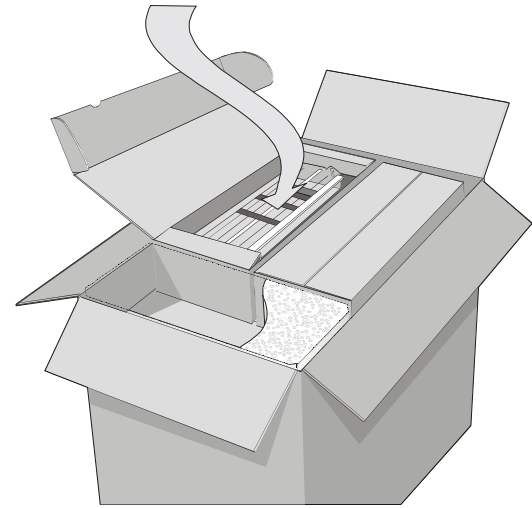
3. Insert the plastic bag over the printer and slide the packing box over the printer.



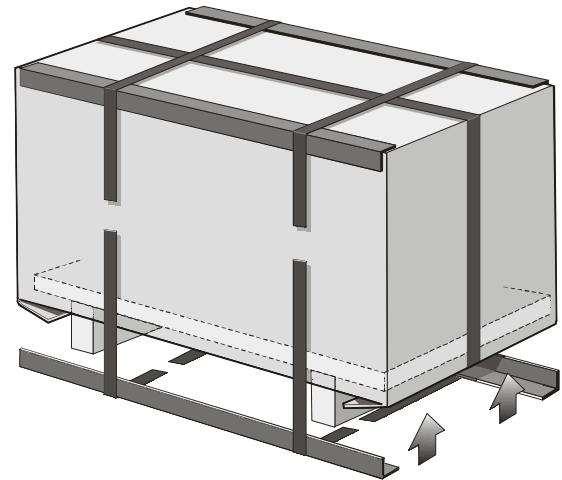
4. Insert the four polystyrene angles into the packing box and the polystyrene panel onto the printer.



5. Insert the Front 2 tractor and the accessory boxes onto the polystyrene panel.



6. Close the packing box and fix it to the transport panel by means of the packing strip, inserting the plastic angles between the packing strip and the carton.



7. Fix the packing ribbon with the corresponding clips.

# Options

## LAN Interface Board

A LAN Interface board is available for the network connections through an integrated Ethernet 10/100 Base-T interface, which coexists with the parallel interface.

For the installation of this board, please refer to the *Installation Guide* you receive together with the Ethernet 10/100 Base-T board.

# Printer Specifications

## Printing Characteristics

Print Head	
Matrix	24 pins
Print Head Life	800 mil characters (draft)

Print Speed (cps)				
	Draft		Quality	
10 cpi	Normal	800	LQ	133
	High Speed	1100	-	
Lines per minute	600 at 40 characters per line 450 at 80 characters per line 350 at 100 characters per line			

Throughput (ISO/IEC 10561)
750 pages per hour

**Print Matrix (horizontal x vertical)**

	Draft	Quality	Best	HSD
10 cpi	12 x 12	36 x 24	12 x 24	9 x 12
12 cpi	10 x 12	30 x 24	10 x 24	-
15 cpi	8x8/12 x 12	24 x 16	8x16/12 x 24	-
17.1 cpi	12 x 12	36 x 24	12 x 24	-
20 cpi	12 x 12	30 x 24	-	-
24 cpi	8x8/12 x 12	24 x 16	-	-

**Print Density (characters per inch)**

Normal	10 - 12 - 15 - 17.1 - 20 - 24
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**Line Length (number of characters)**

10 cpi	136	17.1 cpi	233
12 cpi	163	20 cpi	272
15 cpi	204	24 cpi	326

**Vertical Spacing**

6, 8, 12 lpi
3, 4, 6, 8, 12 lines/30 mm
n/60, n/72, n/216, n/80, n/360 per inch

## Print Styles

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, 80, 90, 120, 180, 360

vertical 60, 72, 180

## Characters Sets

International character sets ASCII	Normal and Slanted
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), 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), Central Europe (CP1250), Cyrillic (CP 1251), Windows Latin 1 Ansi (CP 1252), 96 GREEK, GOST, TASS, MAZOWIA
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 LQ Series (ESC/P)

- IBM Proprinter XL24

- IBM Personal Printer 2391+

## Paper Handling

### Base Configuration

1 FRONT1 TRACTOR

Fanfold width: 76 to 432 mm (3 to 17 inches)

Copies: 1 original + 7 copies Max. thickness 0,635 mm (0.025 inches)

1 FRONT2 TRACTOR

Fanfold width: 76 to 432 mm (3 to 17 inches)

Copies: 1 original + 7 copies Max. thickness 0,635 mm (0.025 inches)



## 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
- 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 Compuprint native commands

## Physical and Electrical Characteristics

### Interfaces

Parallel	Centronics Compatible Bi-directional (IEEE-1284) nibble and byte modes - 36 pin Amphenol connector, 7/8 data bits
	Receive Buffer: max. 64 Kbytes
Serial	RS-232/C and RS-422/A - dB 25 connector
	Baud Rate: 300 to 38400 bps, 7/8 data bits, DTR & XonXoff flow
Automatic interface switching	

## Reliability

MTBF	Mean Time between failure: 10000 hours at 25% DC
MTTR	Mean Time To Repair: 30 minutes
Workload	60000 pages/month (ECMA 132 - 4 hours for 20 days)
Printer Life	5 years or 10000 hours @25%
Duty Cycle	Operating: no limitations

## Power Supply

UNIVERSAL	From 90 to 244 VAC
Power Output	Max. 215 W
Power Consumption	Standby: 28W ---- Average Printing: 90 W

## Noise Level

< 55 dBA

## Environment Conditions

### Storage Conditions

Temperature	-40° to 50° C
Relative Humidity	10% to 90% RH (non condensing)

### Operating Conditions

Temperature	10° to 38° C
Relative Humidity	10 % to 90 % RH (non condensing)

## Paper Conditions

Temperature	16° to 24° C
Relative Humidity	40% to 60% RH (non condensing)

## Physical dimensions - Printer

Height	350 mm (13,77 inches)
Width	720 mm (28,34 inches)
Depth	400 mm (15,75 inches)
Weight	33 kg

## Physical dimensions - Pedestal

Height	printer table: 666 mm (16,92 inches)
	paper stacker: 512 mm (13,01 inches)
Width	726 mm (18,44 inches)
Depth	without paper stacker: 522 mm (13,26 inches)
	with paper stacker: 794 mm (20,17 inches)
Weight	40 kg

## Consumables & Options

Black ribbon 'Long Life' cartridge (20 million characters)	PRKN102
Color ribbon cartridge (2 million characters for each band)	PRKN103
LAN Interface Board	PRAN102

## Standards

CE Mark
UL 1950; CSA 22.2 n.950; EN 60950
CISPR 22/EN 55022-class B ; FCC rules part 15, subpart J, class B
EN 55024