616 CN Printer Operator Guide

ND-12.044.1 EN

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ND-12.044.1 EN

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Preface

The product

The ND Matrix Printer 616 CN is a multifunction, correspondence quality, impact dot matrix printer. The 616 CN fully supports all print functions offered by ND-NOTIS, Norsk Data's integrated office-support system.

The 616 CN is capable of printing both text and graphics, and of printing draft quality at high speed. It offers a convenient way of including graphics in word processing documents, and also for printing graphs directly from ND-NOTIS graphics software such as NOTIS BUSINESS GRAPHICS and NOTIS DRAW. Both a double sheet feeder option and a tractor option are available.

ND-printers are divided into three classes (A, B and C) according to intended usage and functions available. The 616 CN is a class A printer, which means that the printer fully supports the NOTIS character set. For a print sample, see appendix D on page 39.

The reader

This manual is intended for the non-technically minded, daily user of the printer.

The manual

The manual describes the most common tasks the daily user should know about. It also describes how to install the printer, and gives a print sample.

Related manuals

ND 12.044.EN 616 CN Printer, User Manual

Table of contents

CHAPTER 1 INSTALLATION

1.1 Unpacking

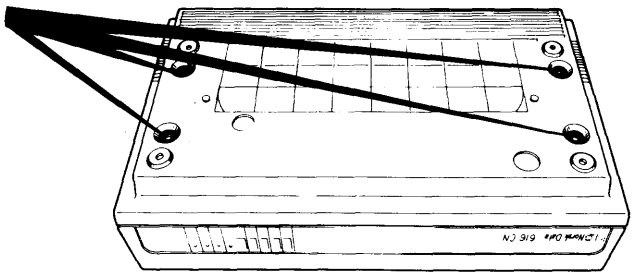
We recommend that you keep the original packing for possible re-use.

Packing contents:

- 1 printer (ND-110143)
- 1 bag with spare fuses
- 1 mains cable
- 1 ribbon cartridge
- 2 manuals
- 1 rear paper support
- 1 quality check list

Remove the printer from the box and unscrew the four transport screws situated under the printer near each rubber foot (see figure). Place the printer where it is going to stand, and remove the packing from the print-head and the carriage.

Transport screws



Bottom view

1.2 Electrical connection

See figure on next page for location of the mains ON/OFF switch, fuse and voltage selector.

The printer can be switched to one of the following AC mains voltage ranges:

100/120V or 220/240V

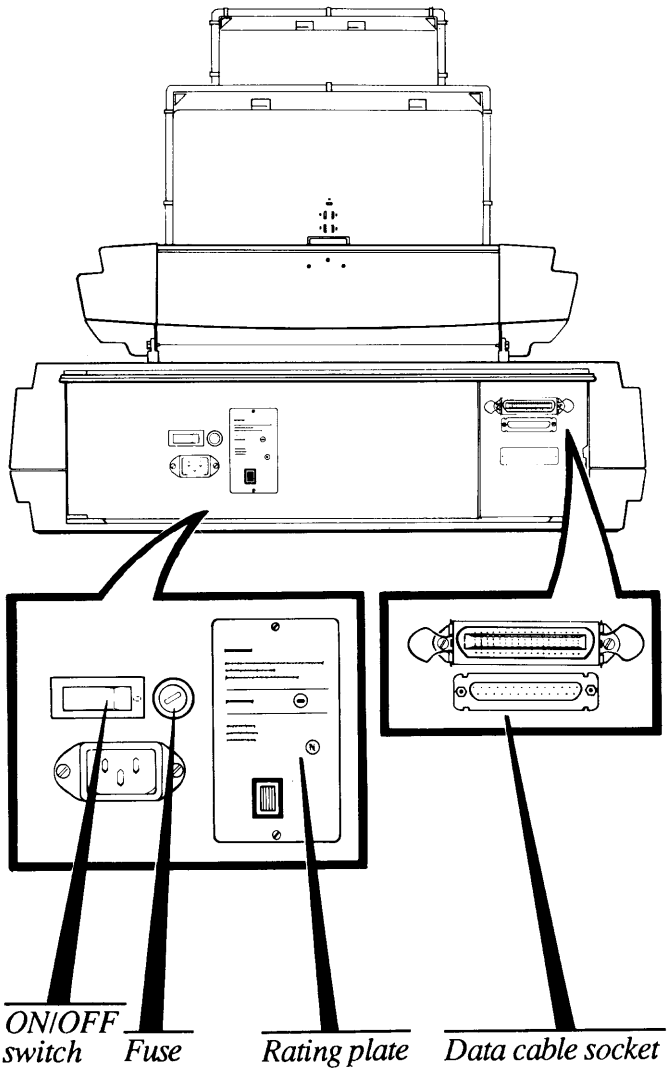
Check that the voltage range marked on the rating plate at the rear of the printer corresponds to your mains voltage.

If it does not, unscrew the plate and change the position of the red voltage selector. Check that the fuse fitted corresponds to the value indicated on the rating plate. Turn over the rating plate and refit it to relock the voltage selector.

The 2A American-sized fuses are used with the gray fuseholder cap, and the 1A European-sized fuses are used with the black fuseholder cap.

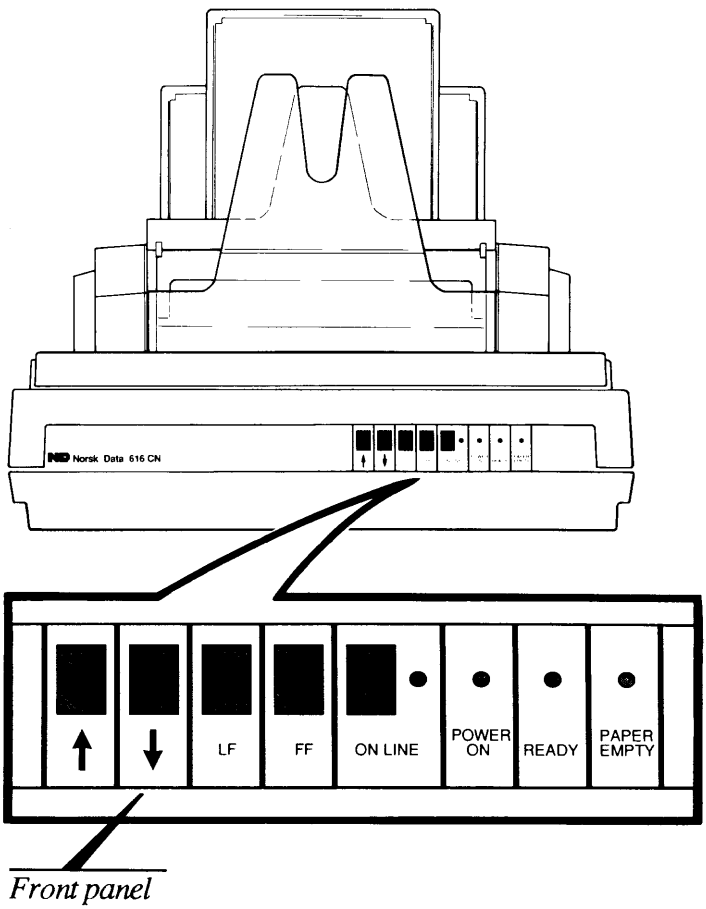
The printer must be connected to a 2 pole + earth AC supply. The earth conductor in the mains cable is coloured GREEN and YELLOW.

Connect the cable from the computer to the data cable socket.


ON/OFF switch
Fuse
Rating plate
Data cable socket

CHAPTER 2 THE FRONT PANEL

This chapter describes the functions of the buttons and LEDs (Light Emitting Diode) on the front panel. In addition it describes how to use the front panel to select the tractor or the sheet feeder.



Front panel

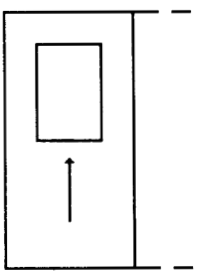
2.1 The front-panel functions

See the figure on the previous page for the location of the front panel. There are five buttons and four LEDs on the front panel. The five buttons can be used at two levels. Only the highest level (the functions that are indicated on the front panel) will be described here. The other level, where the five buttons act as programmable buttons, is described in the manual 616 CN PRINTER, USER MANUAL, ND-12.043 EN, under "Front Panel Set-up".

The front-panel functions are as follows:

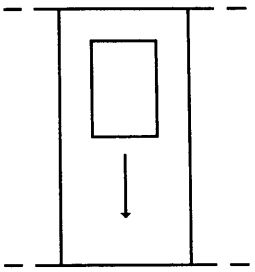
Note

The following four buttons are only operative in off-line mode (the "ON-LINE" light not lit). The functions are repeated if the buttons are pressed and held down.



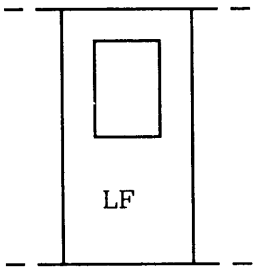
Paper Advance

Pressing this button once will cause the paper to advance 1/72 inch, even with sheet feeders.



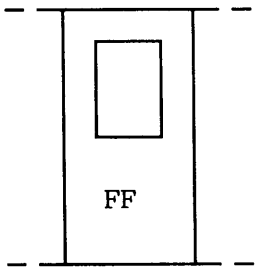
Paper
Reverse

Pressing this button once will cause the paper to reverse 1/72 inch, even with sheet feeders.



Line Feed

Pressing this button once will cause the paper to advance one line. If line space is not modified, this will be 1/6 inch.

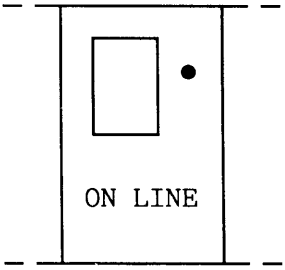


Form Feed

This button will cause the paper to advance one page, corresponding to the selected page height.

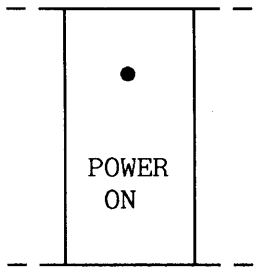
The above four buttons modify the top line of the paper, regardless of the paper-handling device in use.

When paper is loaded through the rear path, a reverse paper movement will slacken the paper. In this case, the paper must be re-tensioned manually.

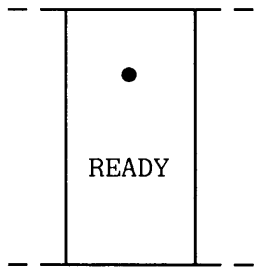


Pressing this button will set the printer OFF LINE if it is ON LINE and vice versa. OFF LINE means that the printer has no contact with the computer. When the printer is set to OFF LINE, printing which has started will eventually stop. The other four buttons on the front panel can only be used in this mode. Pressing the button once more will set the printer back to ON LINE, and the printing will continue from where it stopped.

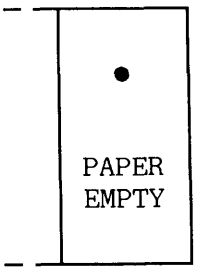
The green LED to the right of the button will light when the printer is ON LINE.



This green LED lights when the power is on.



This green LED lights while the printer is receiving data from the computer. During a print job, it will normally go on and off with uneven intervals.



This yellow LED lights up if there is no paper present.

CHAPTER 3 LOADING PAPER

Once you have learned to load paper into the 616 CN, you will find it very easy. We will describe both loading paper with a tractor feeder and a sheet feeder.

3.1 Loading paper with a tractor

The paper can be loaded either as double or single traction. The double traction version is the recommended way to use the tractor feeder. The single traction mode is ONLY recommended for THICK form sets. No reverse paper movements are possible in this mode.

Note

Make sure that the friction platen is disengaged when using the tractor feeder. The platen friction drive selector (see figure next page) should be in position "o o"

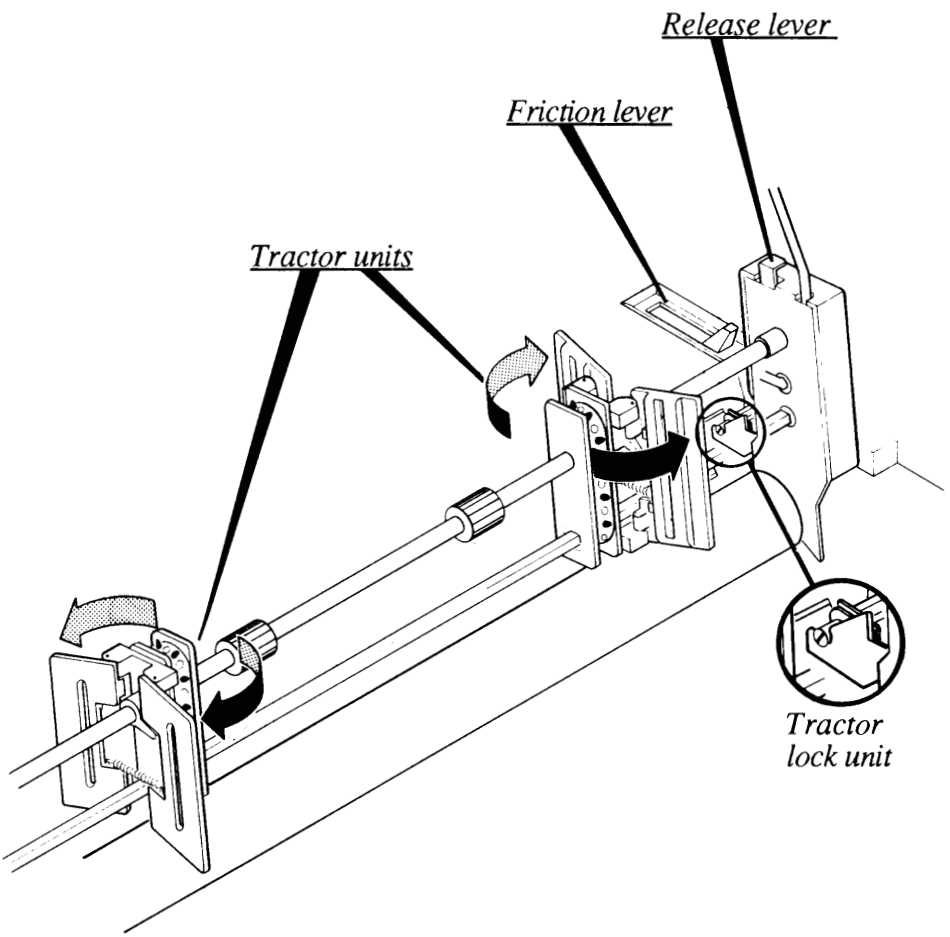
Follow this procedure to load paper into the tractor feeder:

1. Set the printer OFF LINE by pressing the ON LINE button on the front panel. The "ON LINE" light will go out.

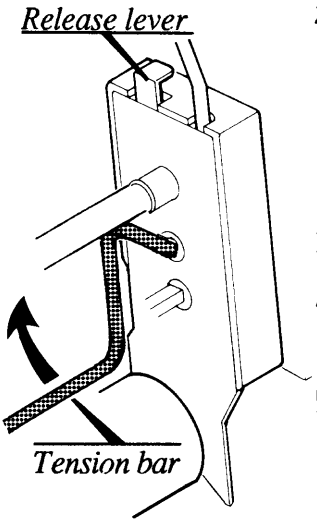
2. Press the release levers and tilt the tractor forwards until it locks in an almost upright position, which is the paper loading position.

3. Open the tractor units.

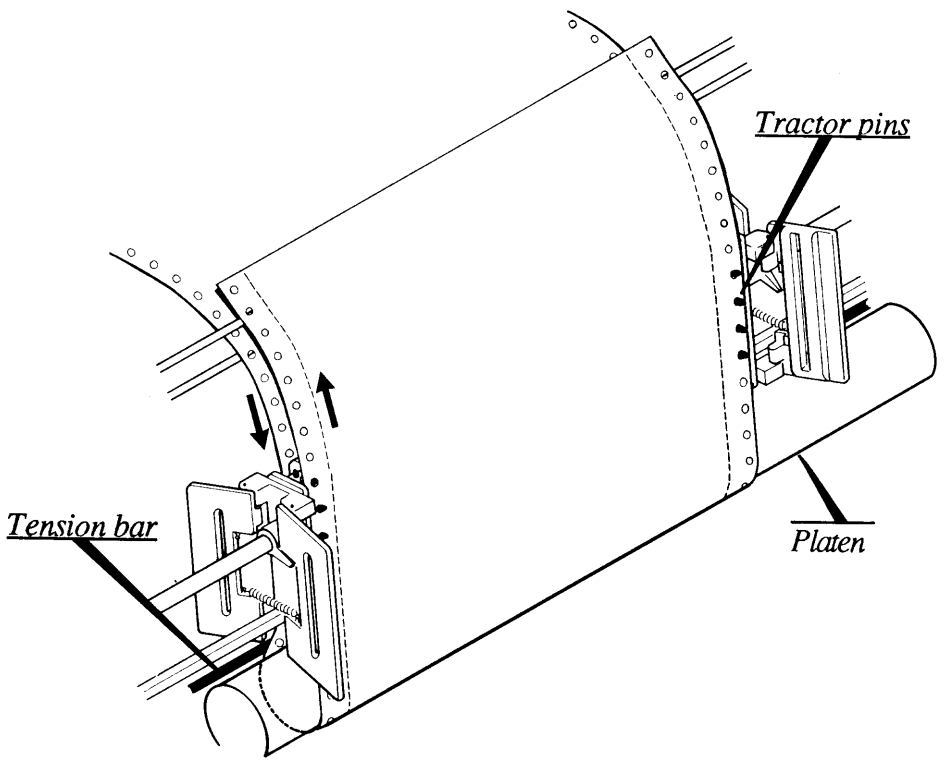
The paper can now be loaded either as double traction (which is the normal use) or single traction (for thick forms etc.).



Double traction

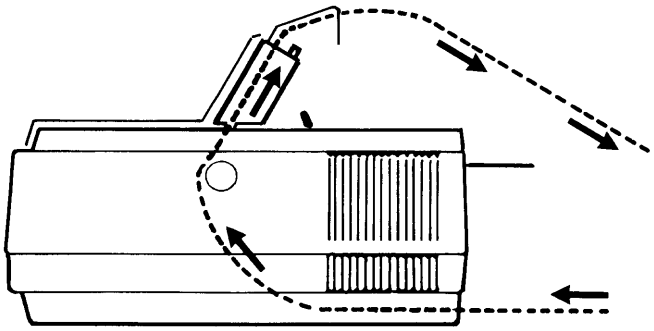


1. Lift the tension bar as far as it will go.
2. It is often easier to thread the paper if it is folded once. For double traction, thread the paper as shown in the figure below. The paper should pass via the rear tractor pins, in front of the tension bar, around the platen and then via the front tractor pins.
3. Close the tractor units.
4. Press the tension bar down until it presses the paper slightly towards the platen
5. Press the release levers and tilt the tractor backwards until it locks in the normal-use position.
6. Press the ON LINE button to set the printer back to on-line operation. The "ON LINE" light will go on.



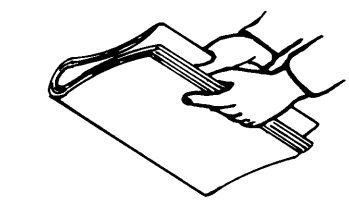
Single traction

1. Thread the paper via the rear or bottom channel of the printer (see figure below).
2. Pass the paper via the front tractor pins, and close the tractor units.
3. Press the release levers and tilt the tractor backwards until it locks in the normal-use position.
4. Press the ON LINE button on the front panel to set the printer back to on-line operation. The "ON LINE" light will go on.

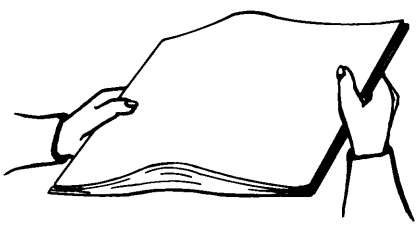


3.2 Loading paper into a sheet feeder

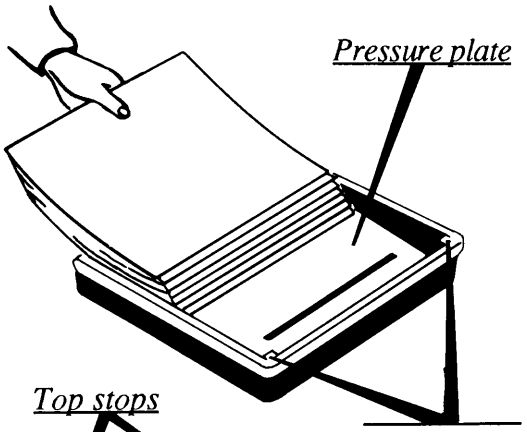
Follow this procedure to load paper into a sheet feeder:



- Remove the paper from its packing. Maximum capacity of each paper tray is 200 sheets. A 12 mm pile represents about 120 sheets of 80 g/m^2 paper.

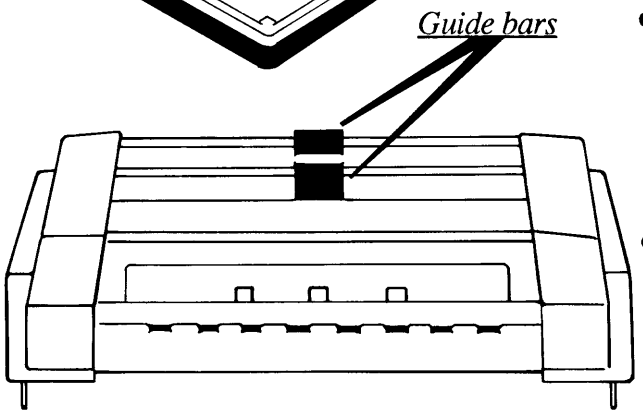


- Fan and flex the pile of sheets. Then tap the edges of the pile lightly to realign the sheets.



- Press the pressure plate of the paper tray down and slide the pile of sheets under the lower stops. If headed paper or multipart forms are used, loading must be face down, top down.

- Arch the pile of sheets slightly and slide the pile under the top stops. Hold the tray vertically and tap the bottom edge lightly on the table to align the sheets.



- Line up the slots on the back of the paper tray with the black guide bars on the sheet feeder.

- Allow the paper tray to decend vertically and then allow it to tip backwards slightly.

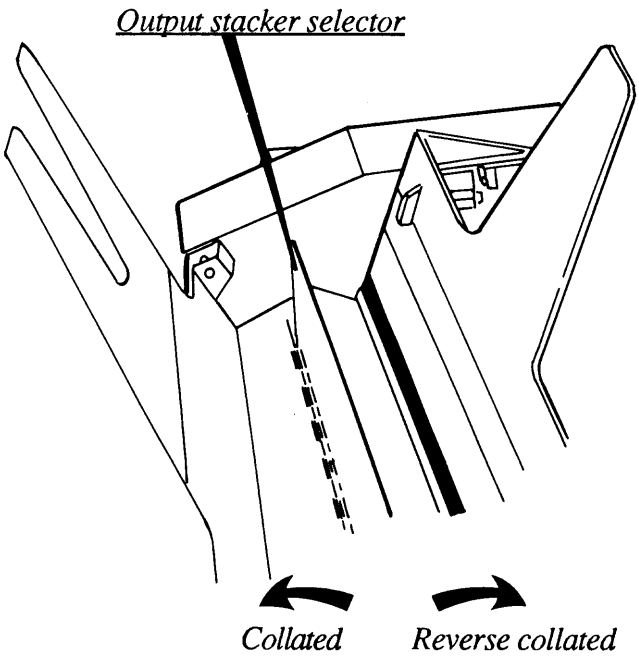
If the type of paper has not been used before on the printer, make a test run. Set the printer OFF LINE and introduce sheets by pressing the FF button on the printer's front panel. Each FF should cause one sheet to be fed. If misfeeds occur (either no sheet or two sheets together), fan the sheets once more, check the paper edges for damage and try again.

3.3 Output stacker selector

The output stacker selector allows two output modes:

- Collated
- Reverse collated

The output stacker selector (see figure below) should be pulled forwards for collated order and pushed backwards for reverse collated order.

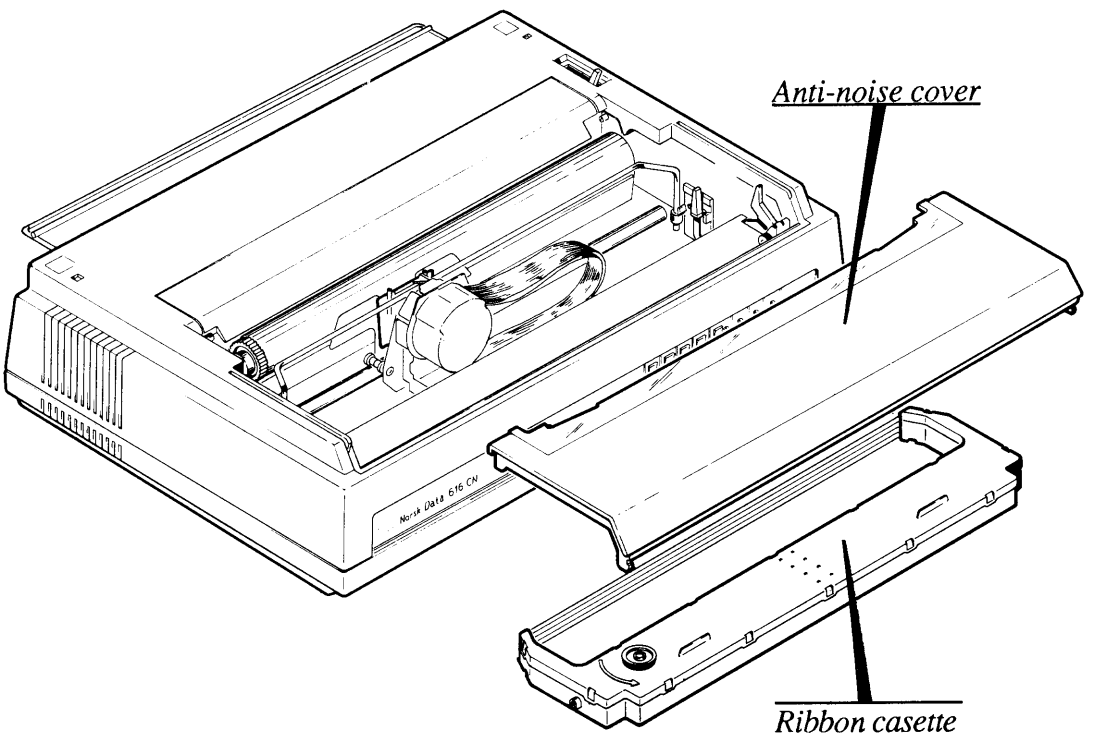


CHAPTER 4 CHANGING THE RIBBON

To change the ribbon on the 616 CN, follow the steps below:

1. Set the printer OFF LINE by pressing the ON LINE button on the front panel. The "ON LINE" light will go out.

2. Remove the anti-noise cover by pulling the non-transparent part of the cover upwards close to the platen, using the finger slots provided.

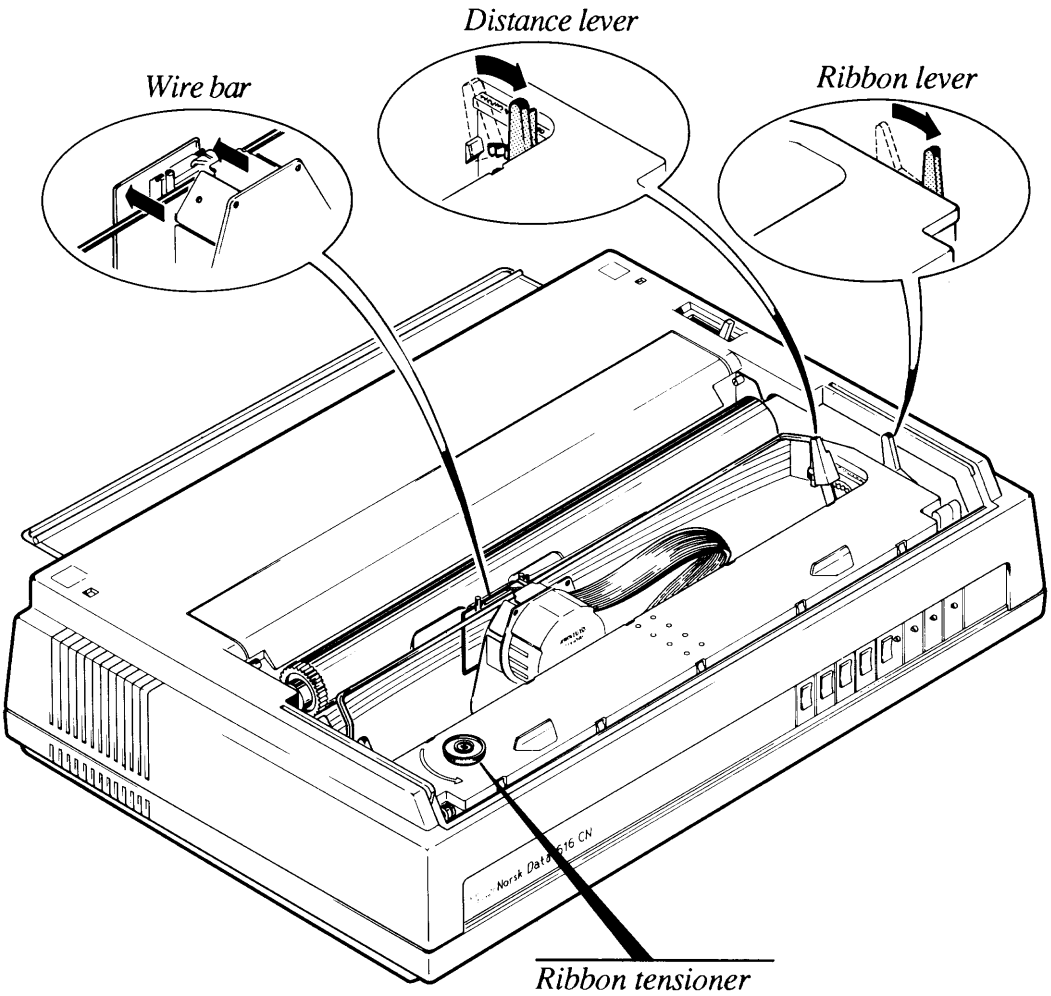


3. It is not necessary to remove the tractor, but if the sheet feeder is mounted, it is advisable to remove this by tilting it slightly forwards and lifting it up.

4. Note the position of the distance lever and move it to position 8.

5. Press the wire bar towards the back of the printer.

6. Press the ribbon levers on each side of the ribbon cassette towards the front of the printer.



7. Lift out the ribbon cassette.

8. Place the new ribbon cassette into position. Be sure that the ribbon is lying correctly in front of the print head.

9. Turn the ribbon-tensioner counter clockwise about one full turn, to tension the ribbon.

10. Press the ribbon-levers on each side of the ribbon cassette towards the back of the printer.

11. Press the wire bar back over the print head.

12. Set the distance lever back where it was.

13. Replace the sheet feeder if it was demounted.

14. Replace the anti-noise cover.

15. Press the ON LINE button on the front panel to set the printer back to on-line operation. The "ON LINE" light will go on.

CHAPTER 5 MOUNTING THE SHEET FEEDER OR TRACTOR FEEDER

This chapter tells you how to mount a sheet feeder or a tractor on the 616 CN. In addition, we briefly discuss about paper quality.

5.1 Mounting the sheet feeder

The printer can be used with a double sheet feeder. The sheet feeder can be configured with fixed cassettes or with a cassette adjustable in height (11" to 14").

Available paper cassettes:

- A4 portrait (210mm x 297mm)
- A4 landscape (297mm x 210mm)
- US letter portrait (11" x 8.5")
- US letter landscape (8.5" x 11")
- US legal portrait (8.5" x 14")
- Adjustable (210mm x (280mm -> 355mm)

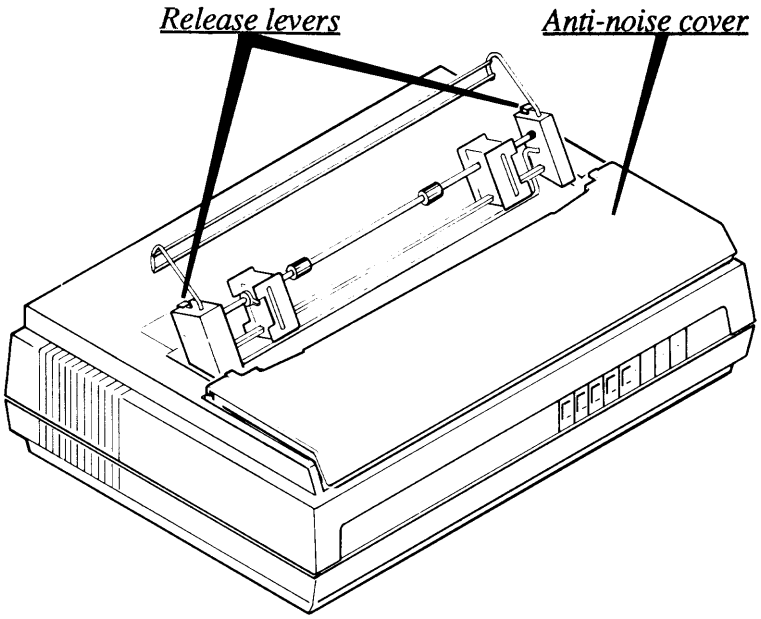
The sheet feeder is delivered with A4 portrait cassette in the front-bin, and a A4 landscape cassette in the rear-bin.

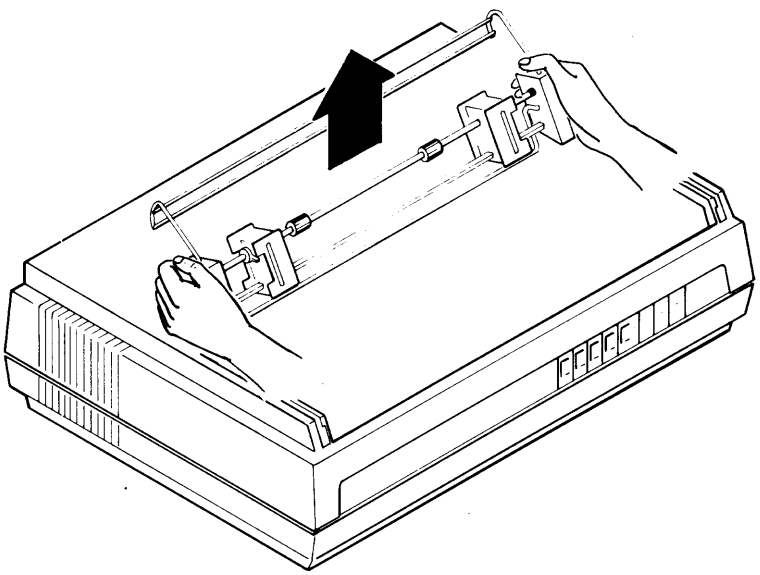
Mounting the sheet feeder onto the printer is very simple. See the figure on the next page and follow the instructions:

1. Set the printer OFF LINE by pressing the ON LINE button on the front panel. The "ON LINE" light will go out.

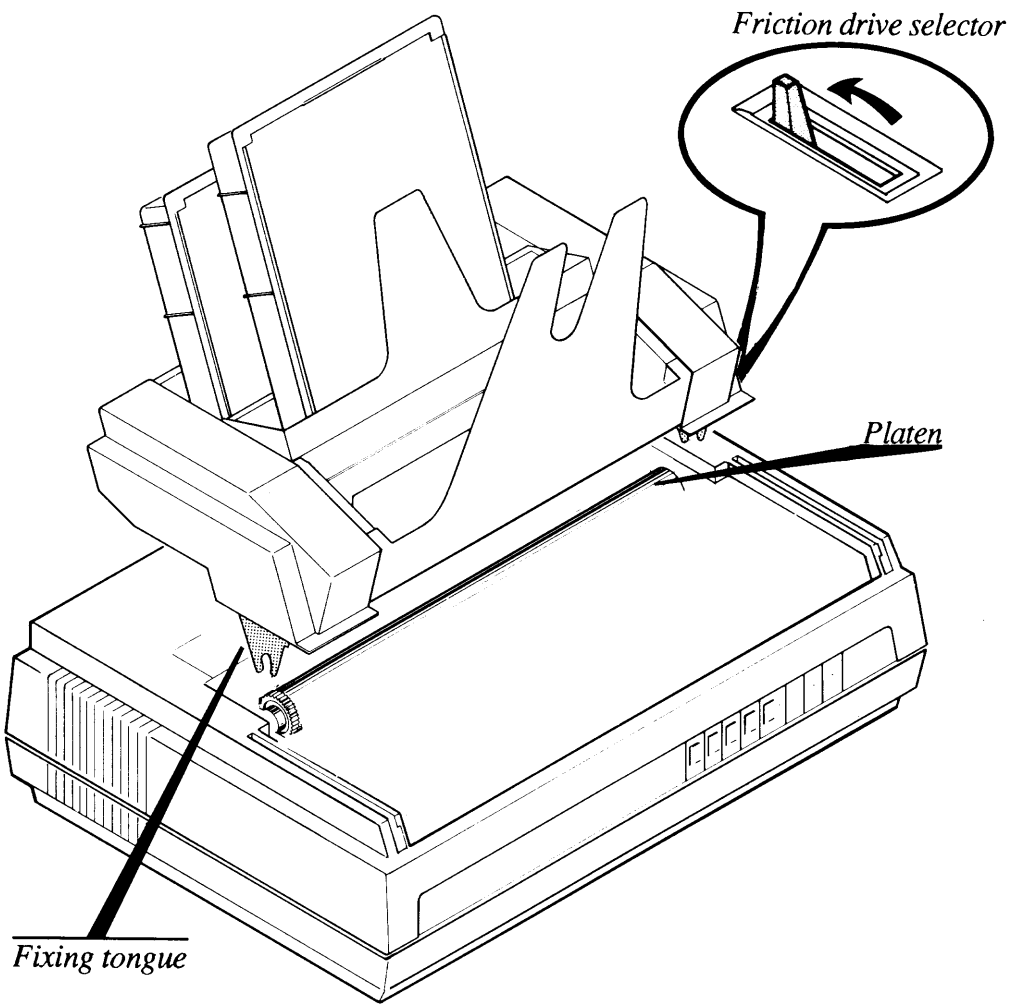
2. Remove the anti-noise cover by pulling the non-transparent part of the cover upwards close to the platen, using the finger slots provided.

3. Remove the tractor (if fitted) by pressing the release levers at the top of each cover and lifting upwards.





4. Hold the sheet feeder with both hands, tilt it forwards gently and position it so that the sheet feeder fixing tongues engage on the platen shaft on each side of the platen. The left hand fixing tongue should engage the V-shaped notch of the locating ring.



5. Gently lower the rear of the sheet feeder so that the feet rest on the printer casing.

6. Place the friction drive selector in position "oo" (friction drive).

7. Press the LF or the ↑ button on the front panel to check that the output rollers turn.

8. Fit the flat anti-noise cover supplied with the sheet feeder.

9. Set the printer ON LINE again by pressing the ON LINE button.

10. Continue with the next section "Selecting the sheet feeder from the front panel"

5.1.1 Selecting the sheet feeder from the front panel

The printer has to be "told" via the front panel that you now are using the sheet feeder.

Note

The printer is initially set up for sheet feeder. This procedure has therefore only to be done if the printer later has been set up for tractor.

To do this, follow the procedure below (for more detailed information on the program mode, see the manual 616 CN PRINTER, USER MANUAL, ND-12.043 EN).

Action	*Comments*
1. Press the ON LINE button until the printer beeps twice.	Enter the program mode. When in program mode the printer will beep twice, and the READY light will flash (once per second).
2. Press and hold the leftmost button, then press ON LINE.	Select the group "paper devices". The printer will beep twice, and the READY light will flash (twice per second).
3. Press and hold the leftmost button, then press ON LINE once more.	Select the sheet feeder. The printer beeps each time a button is pressed. In case of error, start the operation again.
4. Press the ON LINE button.	Exit from the program mode. The printer will beep twice and the READY light will stop flashing.
5. Press the ON LINE button.	Set the printer back to on-line operation. The "ON LINE" light will go on.

5.1.2 Choice of paper for the sheet feeder

The sheet feeder is designed to use 80 g/m^2 paper for maximum performance. However, papers between 65 g/m^2 and 90 g/m^2 may be used, but it is advisable to run a test with them first.

Multi-part forms may be used (1 original + 4 copies/4 carbons). They must be in very good condition and top-glued (no staples etc.)

Always use paper taken directly from its original packing for maximum reliability. This is the only way to be sure that the edges of the sheets are undamaged.

The ideal paper to use is that supplied for plain-paper photo copiers. This is easy to obtain, and is very often already available in most offices. It works well because this type of paper is very smooth and the sheets slide easily over each other.

Avoid paper with a heavily patterned surface and, with preprinted forms or headed paper, avoid embossed paper or engraved printing. Offset-printed notepaper is flatter and smoother and will usually feed more reliably. It is also more economical, particularly when multi-color printing is used.

In many cases, "difficult" paper can be used successfully, provided that a little extra care is taken to fan the sheets so that they are well separated.

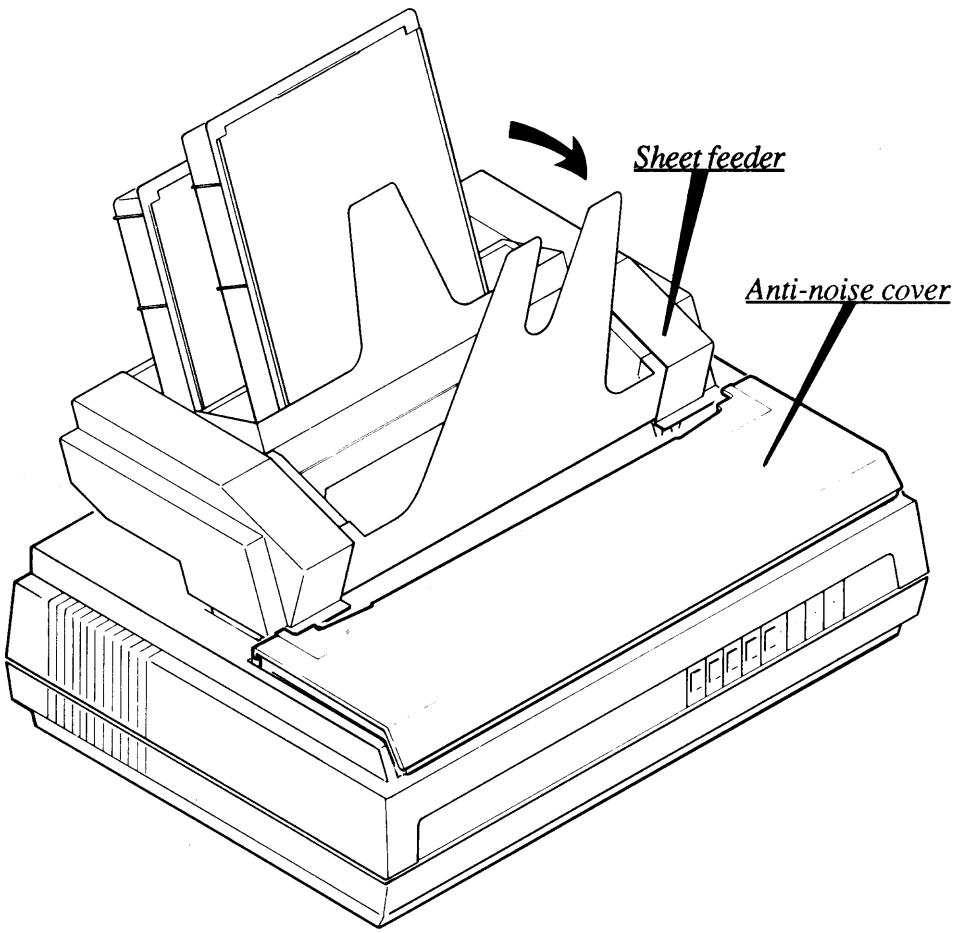
5.2 Mounting the tractor feeder

Follow this procedure to mount the tractor feeder:

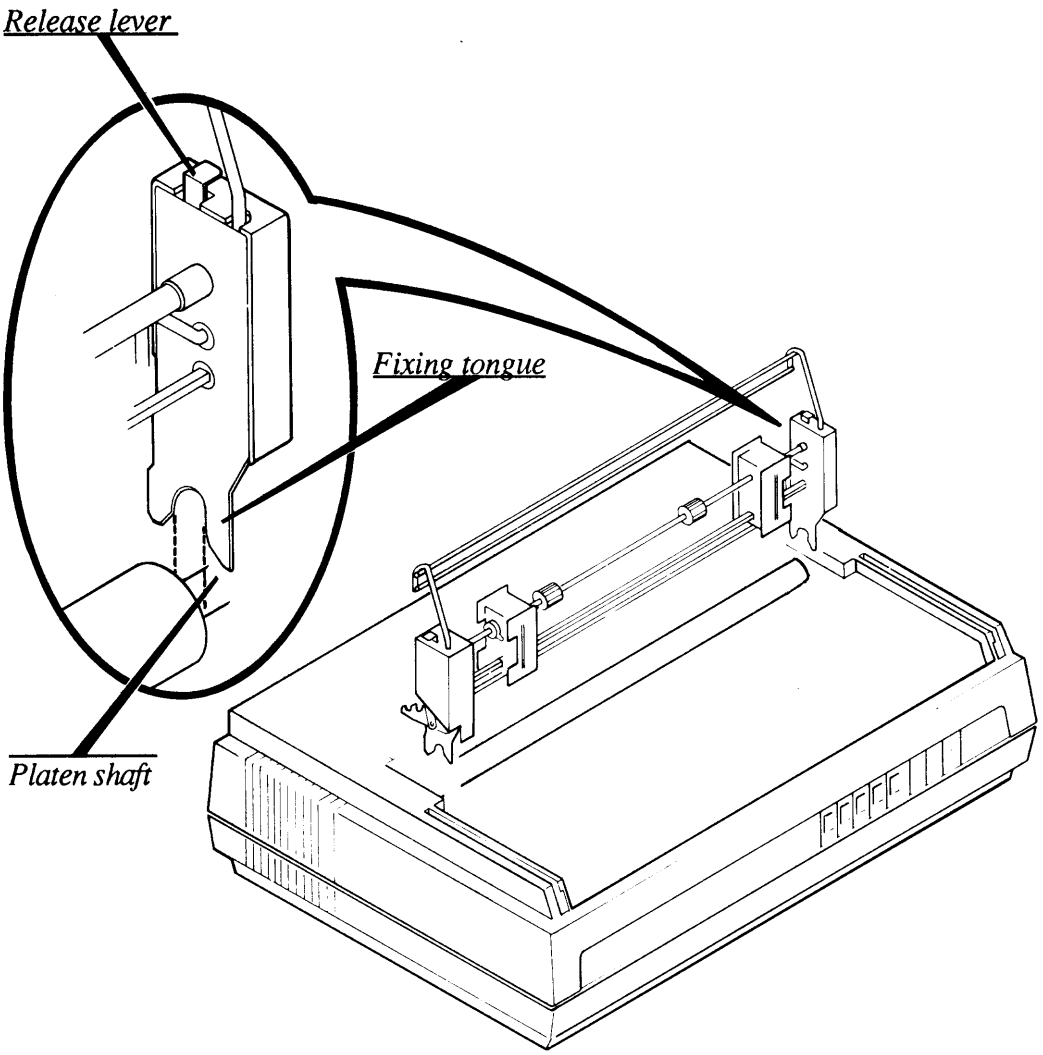
1. Set the printer OFF LINE by pressing the ON LINE button on the front panel. The "ON LINE" light will go out.

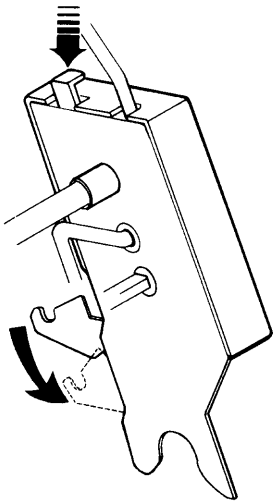
2. Remove the anti-noise cover by pulling the non-transparent part upwards close to the platen, using the finger slots provided.

3. Remove the sheet feeder (if fitted) by tilting it slightly towards the front of the printer and lifting it upwards. If a sheet of paper is left in the printer, press FF (on the front panel) to get it out.

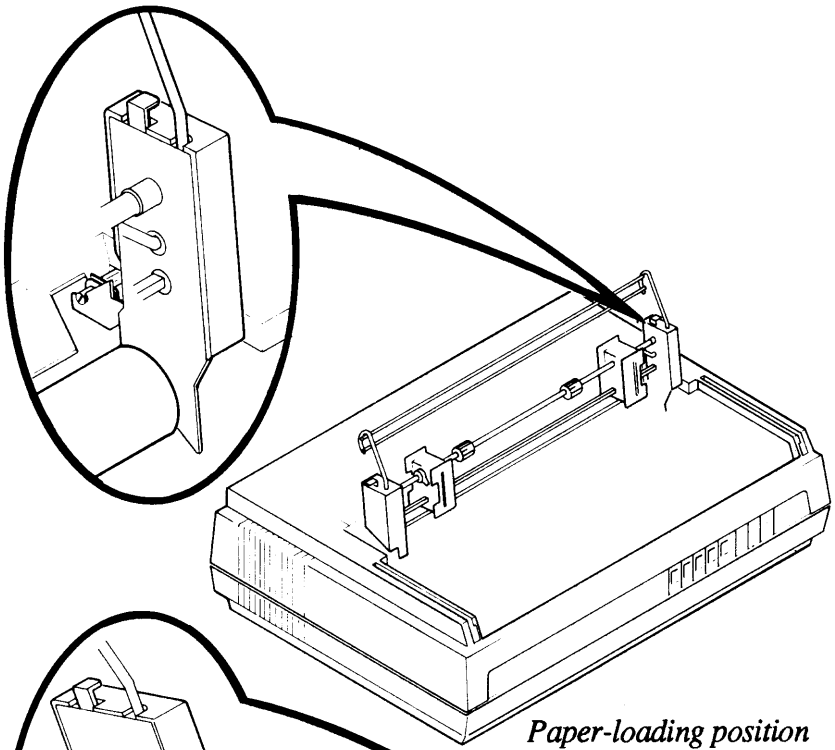


4. Take hold of the tractor with both hands and place it so that the tractor fixing tongues engage on the platen shaft on each side of the platen. The left-hand fixing tongue should engage the V-shaped notch of the locating ring.

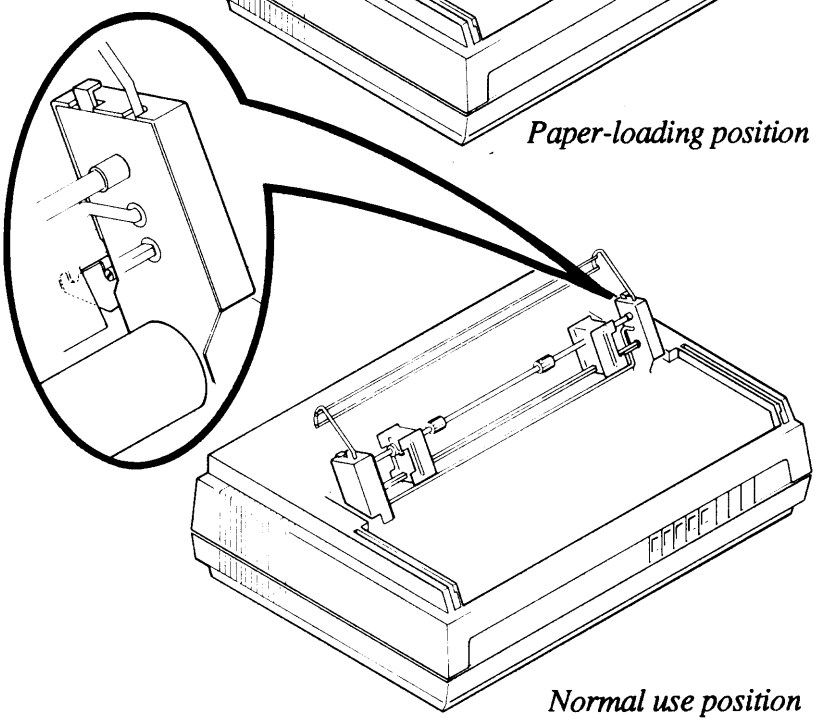




5. Press the release levers at the top of each cover, tilt it backwards and release the release levers. The tractor will lock in two different angles. One almost upright and one more tilted backwards. The first position is for paper-loading, and the other is the normal position when in use.



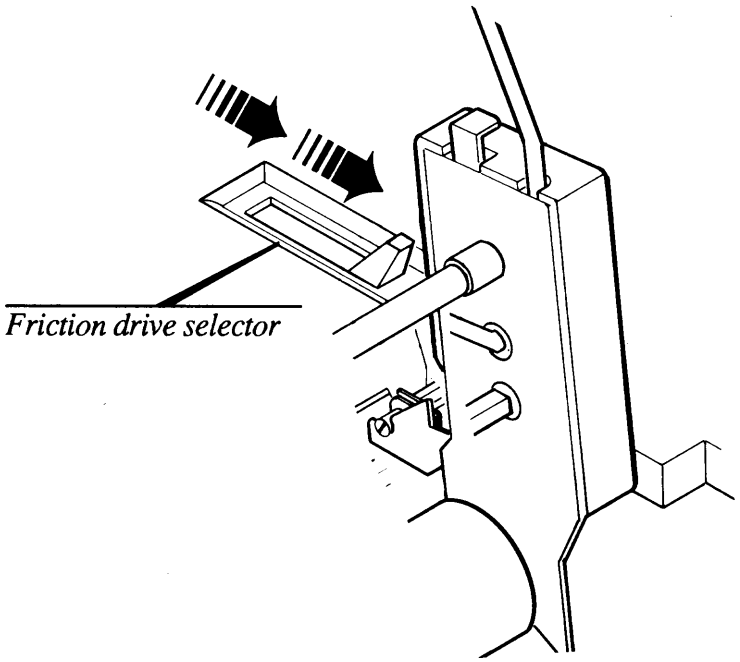
Paper-loading position



Normal use position

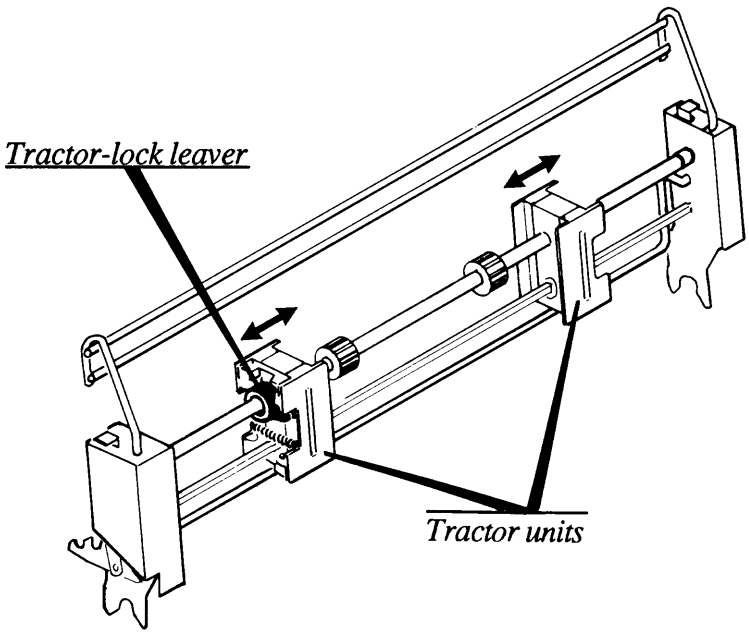
6. Press the LF or the ↑ button on the front panel to check that the output rollers turn.

7. Place the friction drive selector in the non-friction drive position "o o".



8. Fit the anti-noise cover supplied with the tractor.

9. Adjust the tractor units (see figure on next page) to fit the width of the paper. This is done by releasing one or both tractor-lock leavers and sliding the tractor units horizontally. Remember to lock the tractor units afterwards. The tractor can take paper widths from 44 to 390 mm.



10. Set the printer ON LINE again by pressing the ON LINE button.

11. Continue with the next section "Selecting the tractor from the front panel".

5.2.1 Selecting the tractor feeder from the front panel

The printer has to be "told" via the front panel that you are now using the tractor.

To do this, follow the procedure below (for more detailed information on the program mode, see the manual 616 CN PRINTER, USER MANUAL, ND-12.043 EN)

Action	*Comments*
1. Press the ON LINE button until the printer beeps twice	Enter the program mode. When in program mode the printer will beep twice, and the READY light will flash (once per second).
2. Press and hold the leftmost button, then press ON LINE	Select the group "paper devices". The printer will beep twice, and the READY light will flash (twice per second).
3. Press and hold the LF button, then press ON LINE	Select the tractor. The printer beeps each time a button is pressed. In case of error, start the operation again.
4. Press the ON LINE button	Exit the program mode. The printer will beep twice and the READY light will stop flashing.
5. Press the ON LINE button	Set the printer back to on-line operation. The "ON LINE" light will go on.

5.2.2 Choice of paper for the tractor feeder

The paper quality is not so critical with the tractor feeder as with the sheet feeder. Printing of one original + 3 copies is possible without any difficulty, with:

- original: 65 g/m^2
- copy : 60 g/m^2
- carbon : 25 g/m^2

APPENDIX A INSTALLING THE PRINTER IN SINTRAN

The printer has to be installed in SINTRAN. This must be done by the system supervisor. Use the following procedure:

(What you type is underlined. xxxx represents numbers written by the computer. yyy represents a number to be typed in by the system supervisor. The error message "NOT EXISTING IN IMAGE/SAVE-AREA" can be ignored).

```
@SINTRAN-SERVICE↵
*change-datafield↵
LOGICAL UNIT NUMBER (OCT):yyy↵          Where the printer is
                                        connected
INPUT OR OUTPUT? I Y Y Y↵
   MEMORY IMAGE SAVE-AREA
TSPEED/xxxx xxxx xxxx 210↵              Transmission speed
CNTREG/xxxx xxxx xxxx 5↵                8 data-bits, 2 stop-bits
                                        no parity
DFLAG/xxxx xxxx xxxx 1001↵              X-ON/X-OFF
TINFO/xxxx
NOT EXISTING IN IMAGE/SAVE-AREA
150↵                                    Parity bit skip. Should be
                                        151 if you have FIFO
                                        interface
.                                       Terminate command
*EXIT↵
```

The driver for Philips GP-300 should be used for NOTIS-BG and NOTIS-DRAW.

APPENDIX B INSTALLING THE 616 CN IN THE FILE WP-PRINTERS

Note

You need only do this if you have NOTIS-WP, version M, revision 07 or later.

The system supervisor should to do this.

sheet feeder To tell the printer-driver which paper cassettes are used, it is necessary to use a start value for the parameter Bin in the columns headed
"<----Default start values---->"
in the file WP-PRINTERS. This parameter is composed of two digits, the first digit for the front-bin and the second digit for the rear-bin:

- 1 = A4-portrait
- 2 = A4-landscape
- 3 = Letter-portrait
- 4 = Letter-landscape
- 5 = Legal-portrait
- 9 = Adjustable

Example 1: A4-portrait in front and A4-landscape in the rear position gives BIN = 12

Example 2: A4-landscape in front and A4-landscape in the rear position gives BIN = 22

Example 3: Letter-portrait in front and A4-landscape in the rear position gives BIN = 32

Note that if a fixed cassette is used, the parameters PL and PW are already known by the

driver, and therefore have no meaning. If one adjustable cassette is used, use PL and PW to define the size of the paper.

Tractor If tractor feed is used, PL and PW must be used to define the printable area on the page. FORM must be used to define the length of the form-feed.

EXAMPLE 1: ND-616CN with double sheet feeder A4-portrait in front-bin, A4-landscape in rear-bin:

	FEED	FORM	DISP	PL	PW	HP	VP	BIN	FONT	NAT
Default start values:	D	11.7	0	11.7	7.8	12	6	12	2	1
Restore values:		11.7	0	11.7	7.8	12	6	1	1	1

EXAMPLE 2: ND-616CN with double sheet feeder A4-portrait in front-bin, A4-portrait in rear-bin:

	FEED	FORM	DISP	PL	PW	HP	VP	BIN	FONT	NAT
Default start values:	D	11.7	0	11.7	7.8	12	6	11	2	1
Restore values:		11.7	0	11.7	7.8	12	6	1	1	1

EXAMPLE 3: ND-616CN with double sheet feeder A4-portrait in front-bin, adjustable in rear-bin (8.2" x 13"):

	FEED	FORM	DISP	PL	PW	HP	VP	BIN	FONT	NAT
Default start values:	D	13	0	12.7	7.8	12	6	19	2	1
Restore values:		12	0	11.7	7.8	12	6	1	1	1

EXAMPLE 4: ND-616CN with tractor: (12" x 8"):

	FEED	FORM	DISP	PL	PW	HP	VP	BIN	FONT	NAT
Default start values:	T	12	0	11.7	8.0	12	6	1	2	1
Restore values:		12	0	11.7	8.0	12	6	1	1	1

Note

Restore value for FONT in the file WP-PRINTERS should always be 1. If not, there will be problems with printouts from SINTRAN.

APPENDIX C INSTALLATION OF THE PRINTER IN THE SPRINT SPOOLING SYSTEM

Note

You need only do this if you have NOTIS-WP, version N or later.

If you have NOTIS-WP version N or later, you must install the printer in the SPRINT spooling system. Your system supervisor should do this.

The printer table should be checked and filled in. This procedure is described in the manual "The SPRINT USER GUIDE", ND-60.252.1. The ND 616 CN will be in the printer tables. On defining a local printer the questions "Printer name", "Device number" and "SINTRAN III queue?" need to be filled in or checked.

The next task is to define (or check) the paper forms for the printer. This is described in the manual "The SPRINT USER GUIDE", ND-60.252.1. Be sure to define forms that are actually present in the sheet feeder!

Note

"Default font number" in the default form specifications should always be 1. If not, there will be problems with printouts from SINTRAN.

The A4 landscape and the A4 portrait form is already defined in SPRINT, and form tables for the other forms that can be used with the printer are given on the pages that follow. The first three values only (feeder length, page length and page width) depend on the page format.

US letter-portrait

Feeder length (xx.x)	11.0
Page length (xx.x)	11.0
Page width (xx.x)	8.5
Horizontal pitch	12
Vertical pitch	6
Default font number	1
Default nationality	5
Header? (Y/N)	N

US letter-landscape

Feeder length (xx.x)	8.5
Page length (xx.x)	8.5
Page width (xx.x)	11.0
Horizontal pitch	12
Vertical pitch	6
Default font number	1
Default nationality	5
Header? (Y/N)	N

US legal-portrait

Feeder length (xx.x)	14.0
Page length (xx.x)	14.0
Page width (xx.x)	8.5
Horizontal pitch	12
Vertical pitch	6
Default font number	1
Default nationality	5
Header? (Y/N)	N

You will also have to define the printout forms. This is described in the manual "The SPRINT USER GUIDE", ND-60.252.1. It is important that the printout forms correspond to the physical paper format in the sheet feeder. Later on the users can manipulate these forms themselves.

APPENDIX D AVAILABLE FONTS AND PRINT SAMPLES

Resident fonts

- DATA - available in 10 and 12 cpi. Font=1 in NOTIS-WP
- GOTHIC - available in 10 and 12 cpi. Font=2 in NOTIS-WP
- MICRO - available in 10, 12 and 15 cpi. Font=4 in NOTIS-WP
- ORATOR - available in 10 and 12 cpi. Font=5 in NOTIS-WP
- COURIER - available in 10 and 12 cpi. Font=6 in NOTIS-WP
- NOTIS - available in 10 and 12 cpi. Reached from NOTIS-WP via the greek (FUNC-G), mathematic (FUNC-H), and semigrafic (FUNK-A) character sets.

Additional fonts

A FONT-LOAD program for the 616 CN makes it possible to load fonts in addition to the resident fonts. It is possible to load two extra fonts at a time in the printer's memory. As the printer has battery backup for its memory, it will not be necessary to load these fonts every time the printer is switched on.

Greek and mathematical fonts

In addition, there is a resident character set containing greek, mathematical and some special characters. This character set is only available in 10 and 12 cpi.

Print samples

The following seven print samples are printed by the 616 CN. As the 616 CN can print the whole NOTIS character set, these print samples represent all the characters in the NOTIS character set.

--- DATA 10/12 ---

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0				0	@	P	`	p								
1			!	1	A	Q	a	q								
2			"	2	B	R	b	r								
3			#	3	C	S	c	s								
4			$	4	D	T	d	t								
5			%	5	E	U	e	u								
6			&	6	F	V	f	v								
7			'	7	G	W	g	w								
8			(	8	H	X	h	x								
9			)	9	I	Y	i	y								
A			*	:	J	Z	j	z								
B			+	;	K	[	k	{								
C			,	<	L	\	l	|							
D			-	=	M	]	m	}								
E			.	>	N	^	n	~								
F			/	?	O	_	o									

NATIONAL CHARACTERS!

	23	24	40	5B	5C	5D	5E	5F	60	7B	7C	7D	7E
SACII	: #	$	@	[	\	]	^	_	`	{	|	}	~
RANCE	: £	$	à	°	ç	§	^	_	`	é	ù	è	¨
ERMANY	: #	$	§	Ä	Ö	Ü	^	_	`	ä	ö	ü	ß
.K.	: £	$	@	[	\	]	^	_	`	{	|	}	~
OR/DAN	: #	$	@	Æ	Ø	Å	^	_	`	æ	ø	å	~
JE/FIN	: #	$	É	Ä	Ö	Å	Ü	_	é	ä	ö	å	ü

--- GOTHIC 10/12 ---

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0				0	@	P	`	p				°			Ω	K
1			!	1	A	Q	a	q			ı	±	`		Æ	æ
2			"	2	B	R	b	r			¢	²	´		Ð	ð
3			#	3	C	S	c	s			£	³	^	●	a̲	ð
4			$	4	D	T	d	t			$	×	~	|	Ħ	ħ
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--- MICRO 10/12 ---

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F			/	?	O	_	o				↓	¿	ˇ	¬	ŉ	

A a B b C c D d E e F f G g H h I i J j K k L l M m N n O o P p Q q R r S s T t U u V v W w X x Y y Z z [{ \ |] }
@ + - . , : ; * ! 1 2 3 4 5 6 7 8 9 0

--- MICRO 15 ---

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0				0	∂	P	`	p				°			Ω	κ
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2			"	2	B	R	b	r			¢	²	´		Đ	đ
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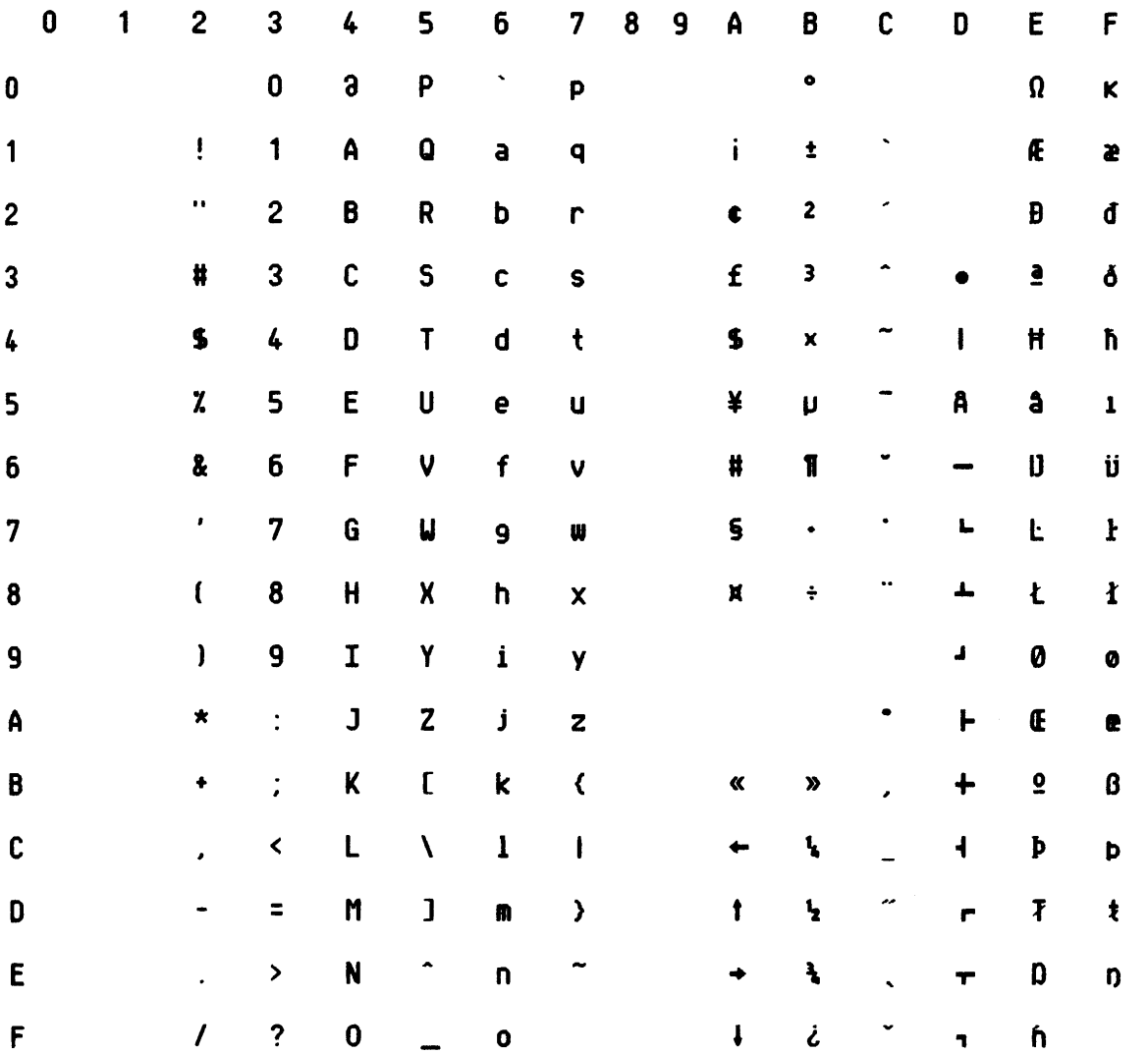
∂+-.,:;*! 1234567890

--- ORATOR 10/12 ---



AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz[{\|]}
ð+-.,:;*! 1234567890

--- COURIER 10/12 ---

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1			!	1	A	Q	a	q			¡	±	̀		Æ	æ
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3			#	3	C	S	c	s			£	³	̂	●	ª	ð
4			$	4	D	T	d	t			$	×	̃	∣	Ħ	ħ
5			%	5	E	U	e	u			¥	µ	̄	Å	å	ı
6			&	6	F	V	f	v			#	¶	̆	—	Ĳ	ĳ
7			'	7	G	W	g	w			§	·	̇	└	Ŀ	ŀ
8			(	8	H	X	h	x			¤	÷	̈	┴	Ł	ł
9			)	9	I	Y	i	y						┘	Ø	ø
A			*	:	J	Z	j	z					°	├	Œ	œ
B			+	;	K	[	k	{			«	»	̣	┼	º	ß
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AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz[{\|]}
@+-.,:;*! 1234567890

--- NOTIS 10/12 ---

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1		▬			»					≡		A	P	α	ϱ
2		▬		□	⅘	∫				≈		B	Σ	β	σ
3		■	¬	\	™	⌡				∽		Γ	T	γ	τ
4		■	≮	÷	®	⌇						Δ	Y	δ	υ
5		═	≯	∩	⅞	⌇				∞		E	φ	ε	φ
6		≡	≠	∪	↵	⌈				⧺		Z	X	ζ	χ
7		≣	†	⊂	±	⌋				∃		H	Ψ	η	ψ
8		≣	©	⊃	⇞					√		Θ	Ω	θ	ω
9		∀		∈	∄					∫		I		ι	σ
A		⊇		¼	⊑					∂		K		κ	
B		⊆		½	₦					∇		Λ		λ	
C		∨		⅓	⇨							M		μ	
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F		⌡		¾	⇩							O		ο	

APPENDIX E SOME ND-NUMBERS RELATED TO THE 616 CN

Cables used between the 616 CN and other ND-equipment:

	B-end	A-end	Type	ND part no.
CABL EXT	ND 616CN	ND-100	V24/RS232	ND-325672
CABL EXT	ND 616CN	ND-100	C/L	ND-325674
CABL EXT	ND 616CN	TELEX	C/L	ND-325686
CABL EXT	ND 616CN	TDV22XX	V11/RS422	ND-325673
CABL EXT	ND 616CN	TDV22XX	V24/RS232	ND-325683
CABL EXT	ND 616CN	KM-1D	V24/RS232	ND-325684
CABL EXT	ND 616CN	BUTTERFLY	PARALEL	ND-325685

Sheet feeder.....ND-110144
Tractor.....ND-110145

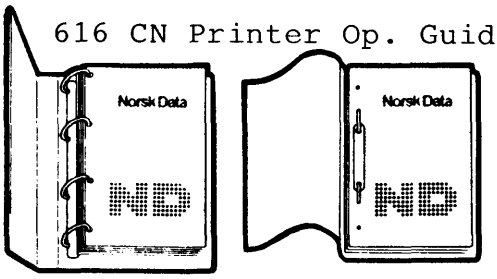
Additional paper cassettes for the sheet feeder:
- A4, portrait.....ND-110146
- A4, landscape.....ND-110147
- Letter, portrait.....ND-110221
- Letter, landscape.....ND-110222
- Legal, portrait.....ND-110148
- Adjustable.....ND-110158

Index

PRINTING RECORD	
PRINTING	NOTES
7/87	Version 1

ND-12.044.1 EN

616 CN Printer Op. Guide



UPDATING

Manuals can be updated in two ways, new versions and revisions. New versions consist of a completely new manual which replaces the old one, and incorporate all revisions since the previous version. Revisions consist of one or more single pages to be merged into the manual by the user, each revised page being listed on the new printing record sent out with the revision. The old printing record should be replaced by the new one.

New versions and revisions are announced in the ND Customer Support Information and can be ordered from the address below.

The reader's comments form at the back of this manual can be used both to report errors in the manual and give an evaluation of the manual. Both detailed and general comments are welcome.

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I would like to order

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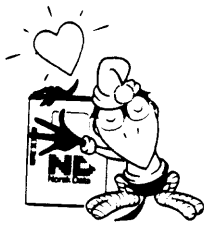
..... Plastic Covers, A4, at NOK 10.- per cover

Name: .....

Company: .....

Address: .....



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– cannot understand information
– cannot find information
– find needless information.

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Documentation Department
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What problems do you have? (use extra pages if needed) _____

Do you have suggestions for improving this manual? _____

Your name: _____ Date: _____

Company: _____ Position: _____

Address: _____

What are you using this manual for? _____

Norsk Data's answer will be found on the reverse side.

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