2.1

Site Requirements

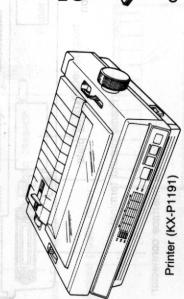
of 4" (10 cm) clearance on all sides is necessary to insure proper ventilation. The printer should be placed on a flat horizon-This printer can be installed in any normal office environment. No special wiring or cooling is required. However, a minimum tal surface away from a heater or other heat source. The printer should not be used in an excessively humid or dusty environment. The following table lists the operating requirements of the

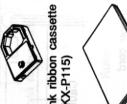
Refer to the nameplate located on the 50~95'F (10~35'C) 30~80% rear of the printer. Line Voltage: Temperature: Frequency: Humidity:

Unpacking and Inspection 2.2

Carefully open the shipping carton and remove the contents. Inspect the printer and accessories for damage. Report damage You may have already seen the area inside the manual's front cover where you should record important information regarding or shortages to the store from which the unit was purchased. the printer.

should you wish to transport the printer in the future. They are Please keep all the packing materials so that they may be used specifically designed to protect your printer during shipment.



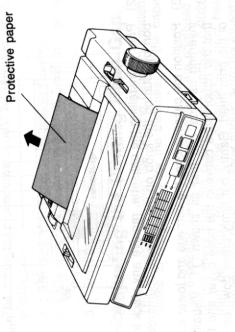


Ink ribbon cassette (KX-P115)

Operating manual

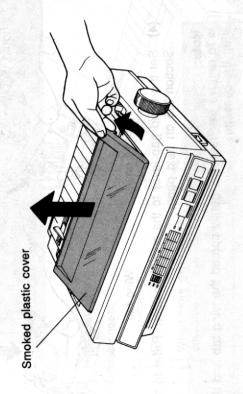
Initial Setup 2.3

Removing the Protective Paper (Around the Platen)



Removing the Printer Cover

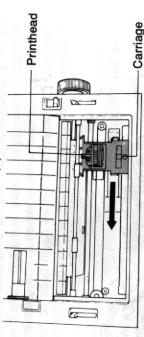
To remove the smoked plastic cover, lift the right side as shown



2-5

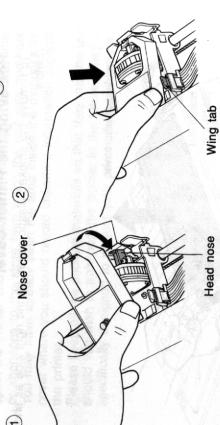
Mounting the Ribbon Cassette

 Make sure the printer is off. Gently slide the printhead carriage toward the center of the unit. Be sure the head gap lever is in the lower position (+).



(2) Prior to installing the cassette, remove any slack in the ribbon by rotating the knob on the cassette counterclockwise.

(3) Position the cassette over the carriage and lower it in place, inserting its rear end first as shown (1). Visually insure that the ribbon slips between the nose cover and the nose of the print head. Gently, but firmly press down on the cassette until the two wing tab snap into place (2).



(4) Set the head gap lever to the proper position. Refer to the Section 2.5 on next page.

Note:

 To remove the cassette, gently spread the wing tab and lift up the cassette.

2.4 Power Up

The power switch is located on the right side of the printer toward the front. It is used to turn the AC power ON or OFF. When the power is supplied to the printer, the power indicator light on the front panel will be lit.

The following procedures should be followed when turning the printer on:

Be sure the ribbon is installed correctly.

Be sure the power cord is plugged into an outlet of the proper rating.

3. Turn the power ON.

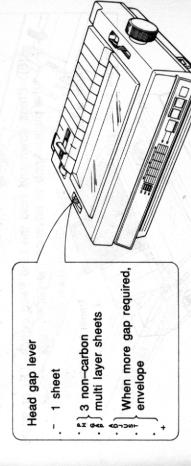
2.5 Adjusting the Printing Head Gap

The distance between the printing head and platen can be adjusted to compensate for the thickness of the paper.

The 6-position head gap lever moves the printhead closer to or farther away from the platen approximately 0.0028 inch (0.07 mm) per step. To avoid the possibility of print head or ribbon damage, the head gap lever should normally be set to the upper position (–) when printing on single sheet paper. For thick paper or multi-part forms, move the lever toward the lower position (+). Maximum paper thickness is 0.013 inch (0.32 mm).

Note:

 If an ink smear occurs when loading paper or during printing, move the lever toward the lower position (+) until the smear no longer appears.



2-4

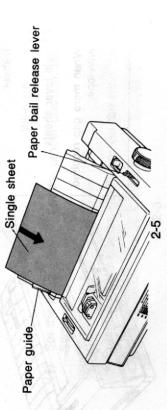
2.6 Paper Installation

The paper feed mechanism uses friction for single sheet paper or envelopes and tractors for continuous fanfold paper. Alternating between the two is accomplished by using the lever on the right side of the printer labeled "F" (friction) and "T" (tractor). In the friction mode the paper is held by pinch rollers which press the paper against the platen. The tractor mode is for use with continuous fanfold paper. You can insert the continuous fanfold paper from either the rear or bottom of the printer. Rear feeding allows continuous forms to be torn off without wasting a copy between printouts.

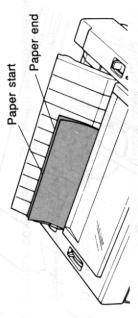
Single Sheet and Envelopes

To install a single sheet of paper or envelope, follow these procedures:

- (1) Turn the power switch ON. A one second beep will sound.
- (2) Make sure that the head gap lever position is appropriate to the type of paper being used.
- (3) Verify that the paper feed selecter in the "F" position.
- (4) Raise the top cover and insert the paper behind the platen. Use the makings and paper guide on the top cover as a guide. Keeping the left edge of the paper in line with the paper guide.
- (5) Pull the paper bail release lever toward the front of the printer to wrap the paper automatically around the platen.
- (6) Press down and hold the Line Feed switch (LF) or rotate the platen knob to advance the paper.



7) To align the paper horizontally or vertically, set the PAPER FEED selector to the "T" position. This releases the pinch rollers and allows the paper to be positioned manually as required. Set the selector back to "F" before printing.

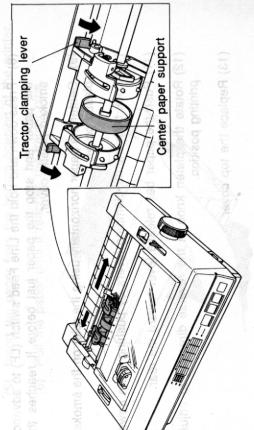


(8) Push the paper bail release lever toward the rear.

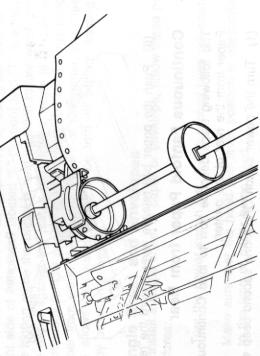
Continuous Fanfold Paper from Rear

The following steps describe how to load Continuous Fanfold Paper from the rear of the printer:

- (1) Turn the power switch ON. A one second beep will sound.
- (2) Remove the top cover.
- (3) Unlock the tractors by pulling up on the tractor clamping levers. Slide the tractors out toward the sides.



- 4) Place the PAPER FEED selector in the "T" position.
- (5) Insert the paper so that the sprocket holes align with and catch on the tractor pins.

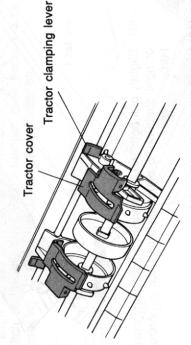


- (6) Rotate the platen knob to advance half-way around.
- (7) Pull the paper bail release lever toward you. The printer will rotate the paper about half-way around the platen.
- (8) Press down and hold the Line Feed switch (LF) to advance the paper and stop the paper just before it reaches the smoked plastic cover.
- (9) Center the paper horizontally using the ruler on the smoked plastic cover.
- (10) Lock both tractor clamping levers by pushing them down.
- (11) Push the paper bail release lever toward the rear.
- (12) Rotate the platen knob in the reverse direction to adjust printing position.
- (13) Replace the top cover.

Continuous Fanfold Paper from Bottom

The following steps describe how to load continuous fanfold paper from the bottom of the printer:

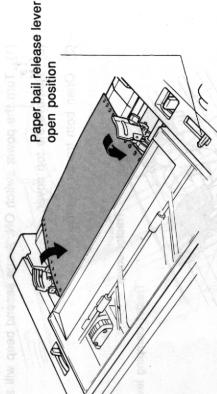
- (1) Turn the power switch ON. A one second beep will sound.
- (2) Remove the top cover.
- (3) Open both tractor covers.



- (4) Place the paper feed selector in the "T" position and move the paper bail release lever toward you.
- (5) Insert the paper from the bottom opening of the printer.
- (6) Pull the paper until it reaches the tractor pins.



- Adjust the positions of the tractor devices in accordance with the width of the paper, unlock both tractors by pulling forward on the tractor clamp levers.
- (8) Align the paper sprocket holes with the tractor pins and close the tractor covers.



- (9) Slightly pull both tractor devices respectively toward the left or right direction to eliminate any slack in horizontal direction.
- (10) Lock both tractor clamping levers by pushing them down.
- (11) Slightly pull the paper from the bottom to eliminate any vertical slack.
- (12) Visually ensure that the tractor pins are positioned properly in the sprocket holes.
- (13) Replace the top cover.

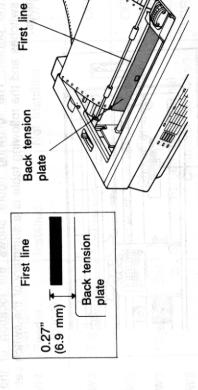
Note:

- When feeding paper from the bottom:
- -To insure proper paper feeding, the paper bail release lever must be placed in the open position (ie: toward the front of the printer).
- If you use the functions accompanied with reverse feed, such as ESC+j, ESC+w (Standard Mode) and ESC+[+@ (IBM Mode) commands, the printer will not feed correctly and print out result may not be correct.

2.7 Aligning the Top of Form

The printer has a line counter which keeps track of the vertical position of the print head. Each time power is turned on, the line counter is reset and the current position of the head is designated as line one. This location is referred to as TOP OF FORM. A page is defined by setting the Control Table on the front panel or through the page length designation command. The first line of text will begin 0.27" (6.9 mm) from the top edge of the back tension plate.

To align the top of form, rotate the platen knob or use the LF switch or MICRO LINE FEED function (see Section 3.1), turn printer off, wait a moment, then turn printer on.



2.8 Self Test

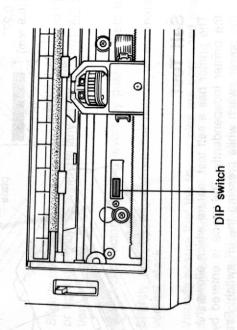
The printer has a self test feature which allows the user to test the printer independently. The mode is entered by turning on the power switch while pressing the LF switch. First, all ASCII characters will be printed in draft and all four NLQ fonts in 10 cpi. Then they will be printed in draft mode for approximately 15 minutes. To release the self test mode, turn the power switch off. It is also possible to print out a list of the current DIP switch settings, allowing the user to check the settings without moving the printer. This feature is activated by turning on the power while pressing the FF switch.

.9 Connecting to Computer

The printer communicates with the computer through an interface cable. The printer has Centronics Parallel interface as standard. An additional RS-232C serial interface is available as an option. See section 7 "Interfacing" for detailed information.

2.10 DIP Switch Setting

Turn the power off before setting the DIP switches. The DIP switches allow the user to set certain operating conditions of the printer. The following figure shows the location of the switches and the following table is a summary of the switch settings.



The switch settings are read into memory on power up. These memory locations then contain an image of the switch settings. The computer can change switch settings by downloading new commands. The International character set, the skip perforation switches, etc., can be changed in this manner.

DIP Switch 1

SWITCH	FUNCTION	8	OFF	POSITION
NOMBER				SHIPPED
SW1	Printer Mode	IBM Mode (Proprinter II)	Standard Mode (FX-86e/FX-800)	OFF
SW2	Skip Perforation	1 inch (25.4 mm) skip	No skip	OFF
SW3	Automatic LF	CR + LF	CR only	OFF
SW4	Cut Sheet Feeder (Option)	Installed	Not Installed	OFF
SW5	7/8 bit	7 bit	8 bit	OFF
SW6		SW1=ON: See IBM Proprinter II	BM Proprinter II	OFF
SW7	Character Set	Chara	Character Set Chart	OFF
SW8		SW1=OFF: See International Character Set Character Set Cha	See International Character Set Chart	OFF

International Character Set

INTERNATIONAL CHARACTER SET	USA	FRANCE	GERMANY	ENGLAND	DENMARK I	SWEDEN	ITALY (nongo)	SPAIN I
SW8	OFF	OFF	OFF	OFF	NO	NO	NO	8
SW7	OFF	OFF	NO	NO	OFF	OFF	NO	No
SW6	OFF	NO	OFF	NO	OFF	NO	OFF	No

When DIP Switch 1 is ON (IBM Mode)

SWITCH	FUNCTION	No	OFF
SW6	Character Set	Set 2	Set 1
SW7	Automatic CR	Causes Auto CR on LF, VT, ESC+J	Causes Auto CR on LF, VT, ESC+J
SW8	Zero font	Zero slash 0	Zero 0

SW1 Printer Mode

ON IBM Mode OFF Standard Mode

Each printer mode has the following character set. IBM character sets are selected by SW6 when SW1 is set to ON.

	96 =	96 =	= 32	= 32	000000000000000000000000000000000000000	96 =	s = 95		96 =	CLT
Standard Mode	ASCII	Italic ASCII	International	Italic International	IBM Character Set 1	ASCII	Special Characters	IBM Character Set 2	ASCII	

Refer to Appendix A for the character set charts.

SW2 Skip Perforation

A 3 line margin is skipped before and after the perforation between pages.
OFF Printing is continuous, NO margins along perforation.

The setting can be changed by software. Refer to page 6-34.

SW3 Automatic LF

ON A Line Feed command (LF) is added to each Carriage Return (CR).

OFF Carriage Return only.

SW4 Cut Sheet Feeder

ON = C.S.F. installed OFF = C.S.F. not installed This setting is effective only when the paper feed selector is in the "F" position and the cut sheet feeder option (KX-P37) is installed.

SW5 7/8 Bit Code Selection

ON = 7 BIT OFF = 8 BIT This switch selects the size of the data word. If the computer sends a 7 bit word, the printer must also be set for 7 bits. If the two settings do not agree, random errors will occur and meaningful communication will not be possible.

SW6, 7 & 8 Character Set

The combination of these switch settings is used with the SW1 setting to select one of 8 International character sets or IBM Modes. The character set diagrams are located in Appendix A.

The International character sets are selected when the SW1 is set to OFF.

The IBM Modes are selected when the SW1 is set to ON.