

Federal Communications Commission Radio Frequency Interference Statement

Warning : "Changes or modifications not expressly approved by the party responsible for compliance with the FCC's Rules (the FCC "GRANTEE") could void the user's authority to operate the equipment."

NOTE : This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures :

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

"It is necessary to use shielded interconnect cables to insure compliance with FCC Class B limits for radio frequency emissions."

82/499/ECC(for 230V/240V product only)

- This apparatus(240V) complies with the requirements of BS 800 and EEC directive 82/499/ECC.
- Dieses Gerät(230V) stimmt mit den Bedingungen der EG-Richtlinie 82/499/EWG überein.
- Cet appareil(230V) répond aux spécifications de la directive CCE 82/499/CCE.
- Dit apparaat(230V) voldoet aan de vereiste EEG-reglementen 82/499/EEG.
- Apparatet(230V) opfylder kravene i EF direktivet 82/499/EF.
- Questo apparecchio(230V) é stato prodotto in conformità alle direttive CCE 82/499/CEE.

FOR WEST GERMANY (230V product)

Bescheinigung des Herstellers/Importeurs

Hiermit wird bescheinigt, daß der/die/das

Printer HDP-2430/HDP-2440

(Gerät, Typ, Bezeichnung)

in Übereinstimmung mit den Bestimmungen der

Amtsblattverfügung 1046/1984

(Amtsblattverfügung)

funk-entstört ist.

Der deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt.

HYUNDAI ELECTRONICS INDUSTRIES CO., LTD.

Name des Herstellers/Importeurs

THIS DIGITAL APPARATUS DOES NOT EXCEED THE CLASS B LIMITS FOR RADIO NOISE EMISSIONS FROM DIGITAL APPARATUS AS SET OUT IN THE RADIO INTERFERENCE REGULATIONS OF THE CANADIAN DEPARTMENT OF COMMUNICATIONS

LE PRÉSENT APPAREIL NUMÉRIQUE N'ÉMET PAS DE BRUITS RADIOÉLECTRIQUES DÉPASSANT LES LIMITES APPLICABLES AUX APPAREILS NUMÉRIQUES DE CLASSE B PRESCRITES DANS LE RÈGLEMENT SUR LE BROUILLAGE RADIOÉLECTRIQUE ÉDICTÉ PAR LE MINISTÈRE DES COMMUNICATIONS DU CANADA.

The socket outlet must be installed near the equipment and must be easily accessible.

ABOUT THIS MANUAL

This is the operation manual of the Pinovia 2430/2440 printers. This manual provides step-by-step instructions on setting and operating the Pinovia 2430/2440 printers.

Read all of their instructions before installation and if any question for the printer, consult your dealer or distributor.

Finding your way around

- Chapter 1* introduces the features of your printer, and explains names of the printer parts and their functions.
- Chapter 2* contains information on unpacking, setting up, assembling the printer, and loading paper, so be sure to read and follow the instructions in this chapter.
- Chapter 3* provides important information on general printer operation including testing and connecting the printer, as well as control panel operation which is necessary for the day-to-day operation of your printer.
- Chapter 4* contains information designed to help you to maintain the printer at its best and to fix problems that may occur.
- Chapter 5* includes detailed technical specifications for advanced users.
- Chapter 6* summarizes and describes the commands supported by this printer.
- Chapter 7* explains how to control the printer using the control codes. It also describes how to define new characters and how to print bit images.

The Appendixes contain this additional information:

- Character Set Table
- Commands Summary
- Print Area
- Optional Supplies



The Pinovia 2430 and Pinovia 2440 are basically the same printers except for their column width. Therefore, the illustrations in this manual show only the Pinovia 2440.

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Chapter 1

INTRODUCTION

1.1 FEATURES

The Pinovia 2430 and 2440 are advanced 24-pin impact dot matrix printers, combining high performance and reliability with a wide range of features.

In addition to high performance and reliability, your printer offers the followings:

- High quality printing using the 24-pin printhead.
- High speed printing of 264 CPS(in Elite mode) or 88 CPS(in LQ Elite mode).
- High versatility supporting wide range of control codes. IBM-Proprinter XL24 and EPSON-LQ1050 are supported.
- Parallel interface is standard and serial one is optional.
- An improved control panel design that allows direct selection of character fonts and pitch.
- An easy-to-use menu mode to control the various printer functions.
- High adaptability to wide range of paper types. The optional auto cut sheet feeder can automatically feed single sheets.

1.2 PRINTER PARTS AND THEIR FUNCTIONS

In this section, printer parts and their functions are explained. The following figure describes the Pinovia 2440, which is similar to that of the Pinovia 2430.

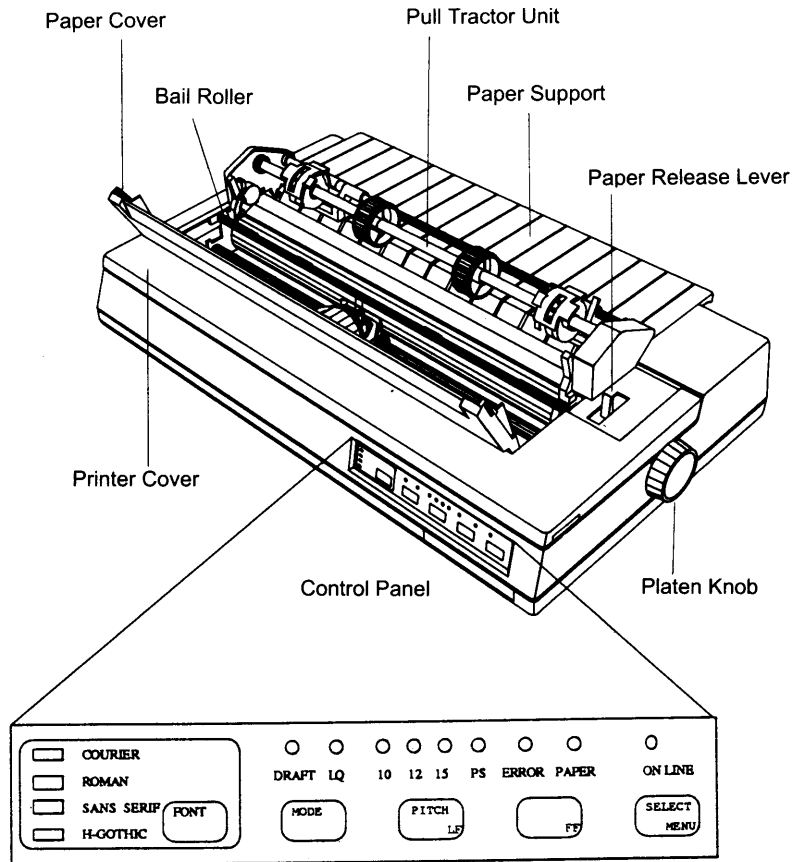


Fig. 1-1 (1)

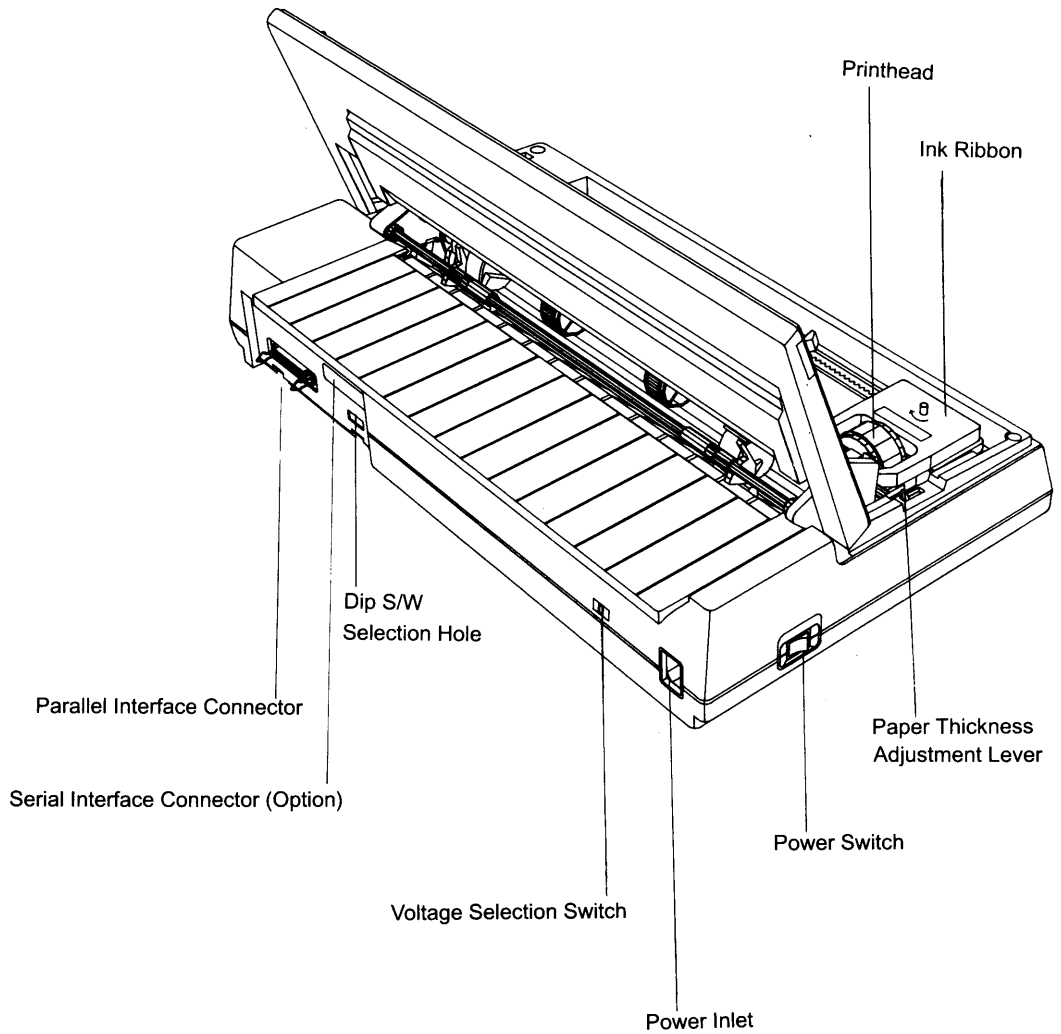


Fig. 1-1 (2)

1.3 NOTICE FOR YOUR SAFETY

- Keep all warnings and instructions marked on the printer in mind.
- Slots and openings on the cabinet at the back or bottom are provided for ventilation. To ensure reliable operation of the printer and protect it from overheating, do not block or cover up its openings.
- This printer should be operated by the type of power source as indicated. Do not pull the power cord.
- Unplug the power cord if the following occurs:
 - If liquid has been spilled in the printer
 - If the printer has been exposed to rain or water
 - If the printer has been dropped or the cabinet has been damaged.
 - If the printer exhibits a distinctive change in performance, indicating a need for service.
- Make sure that the total length of the power cord (including extension) is not more than 5 meters. Reduced voltage and possible malfunction may result if a longer cord is used.
- Do not push objects of any kind into the printer through cabinet slot as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock.
- Use the ribbon cassette which is designed for this printer. If head is damaged for using other ribbons, our company does not take the responsibility of it.
- See if the new ribbon is set properly after replacing the ribbon.
- Turn off the power when you do not use the printer.



CAUTION

This product is designed to operate on both 100-120V~/220-240V~ source by setting of voltage selection switch. If you want to operate the product on other voltage, please be sure to follow the instructions of "Selecting AC Input Power" in section 2.2.



Dieses Gerät wurde für den Betrieb mit einer Netzspannung von 100-120V~/220-240V~ konstruiert, die man mit dem Voltwahlschalter einstellen kann. Wenn Sie das Gerät mit andere spannung in Betrieb nehmen wollen, befolgen Sie bitte genau die Anweisung von "Auswahl der AC-Netzspannung" im Abschnitt 2.2.

Chapter 2

SETTING UP THE PRINTER

2.1 UNPACKING THE PRINTER

Checking the Parts

As you unpack the printer, make sure you have all the parts shown below and that none have been damaged during transportation. If these parts are damaged or omitted, contact the dealer or distributor you bought the printer.

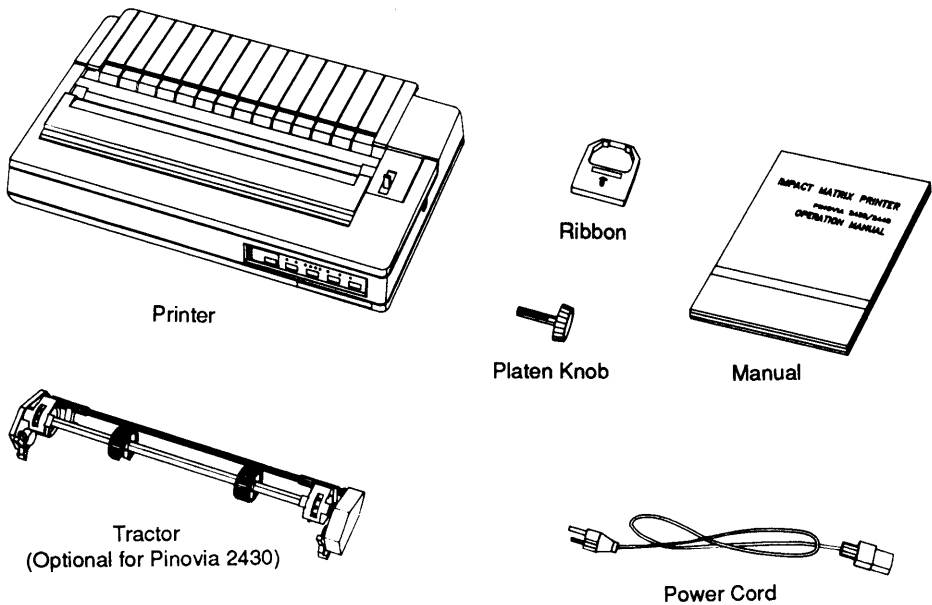


Fig. 2-1

Removing the Protective Materials

The main body of the printer is packaged in such a way as to minimize the possibility of damage during shipment. To unpack the printer package, follow these steps:

- 1) Remove the pieces of tape shown in the illustration.

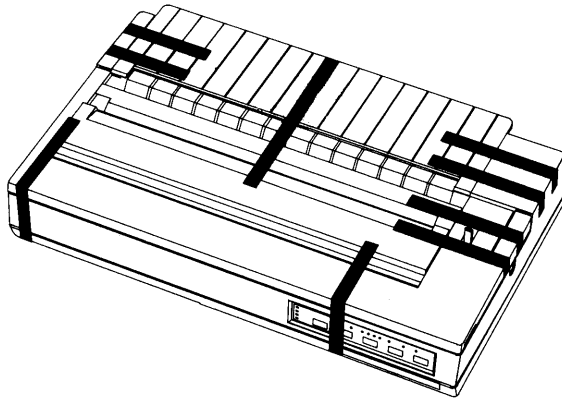


Fig. 2-2

- 2) Open the front cover and remove the tapes securing the printhead and the paper thickness Adjustment lever.

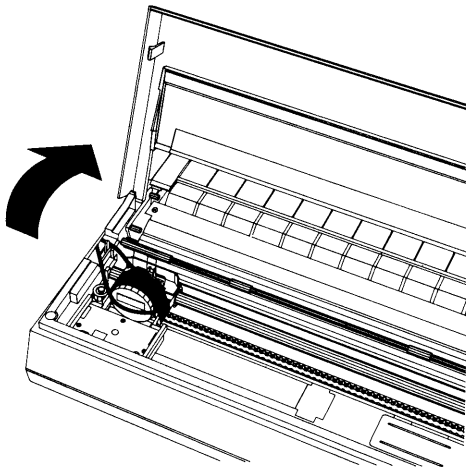


Fig. 2-3

- 3) Lift up the paper support and remove the pad shown as follows.

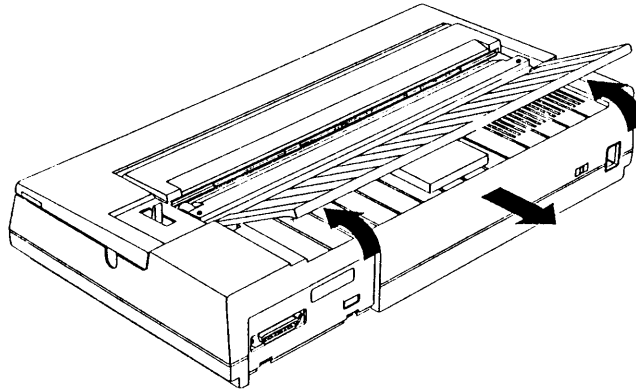


Fig. 2-4

2.2 CHOOSING A PLACE FOR THE PRINTER

There are several considerations in selecting a location for your printer. Be sure to keep the following in mind.

Power Supply

- 1) Use an appropriate voltage and frequency.
U.S.A./Canada : 100-120V~, 60Hz
Europe/U.K./Australia : 220-240V~, 50Hz
Others : 100-120V~, 60Hz
or
220-240V~, 50Hz
- 2) Make sure that the total length of the power cord (including any extension cord) is not more than 5 meters (16 feet).
- 3) Avoid using electrical outlets on the same circuit with any large motors or other appliances that might disturb the power supply.
- 4) Use a grounded outlet; do not use an adapter plug.



CAUTION

Always wait more than five seconds after turning the power off before turning it back on.



Warten Sie immer mehr als fünf Sekunden nach dem Ausschalten, bevor Sie das Gerät wieder einschalten.

Selecting AC Input Power

 **CAUTION**

Before switching on this printer make sure the printer is set to the voltage of the power source.





Bevor Sie den Drucker einschalten, achten Sie darauf, daß er auf die richtig Spannung eingestellt ist.

The followings are a figure and instructions showing how to adjust the line voltage selector :

How to adjust line voltage selector

1. Turn the power switch off.
2. Unplug the power cord.
3. Select appropriate voltage on the line voltage selector located beside power supply.

For this line voltage	Use this switch setting
100V~ to 120V~	Line Set 
220V~ to 240V~	Line Set 

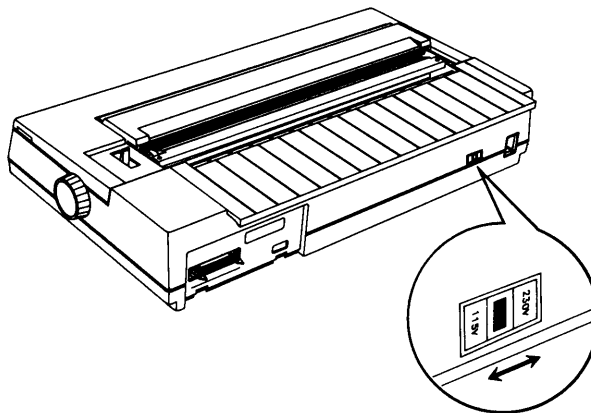


Fig. 2-5

Operating Environment

- 1) Place the printer close enough to the computer for its cable to reach.
- 2) Place the printer on a flat, stable surface.
- 3) Leave room for easy printer operation and maintenance.
- 4) Avoid locations that are subject to direct sunlight, excessive heat, moisture, or dust.
Ambient temperature: 41°F to 95°F (5°C to 35°C)
Ambient humidity: 10% to 90% RH (without condensation)
- 5) Keep the entire computer system away from potential sources of interference such as loudspeakers and the base units of cordless telephones.

2.3 ASSEMBLING THE PRINTER

In all the following cases, make sure the power is off except when instructed to turn the power on.

Installing the Platen Knob

- 1) Insert the "D"-shaped knob into the hole matching those shapes on the right side of the printer.
- 2) Firmly push on the knob until it fits against the printer case.

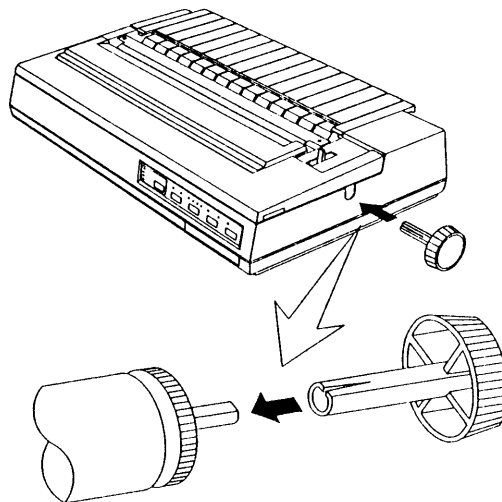


Fig. 2-6

Installing the Ribbon

- 1) Open the front cover and slide the printhead towards the center of the printer.

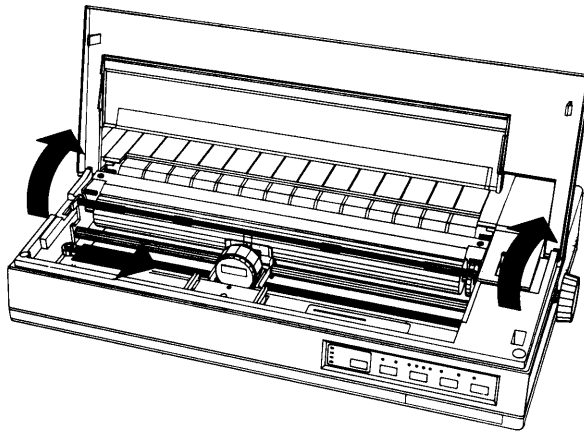


Fig. 2-7

- 2) Turn the ribbon-tightening knob in the direction of the arrow to tighten the ribbon. This step removes excess slack in the ribbon and makes it easier to install.

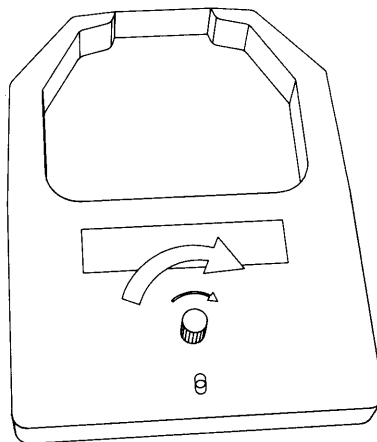


Fig. 2-8

- 3) Push the cassette firmly into position, making sure that the ribbon cassette hooks fit into the slots on the cassette holder.

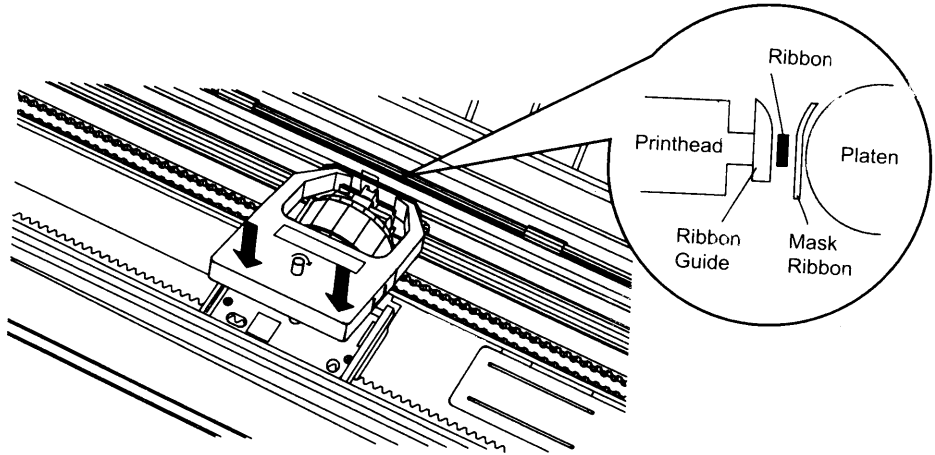


Fig. 2-9

- 4) Turn the tightening-knob 3~4 times to make sure that the ribbon is placed in front of the head nose exactly.

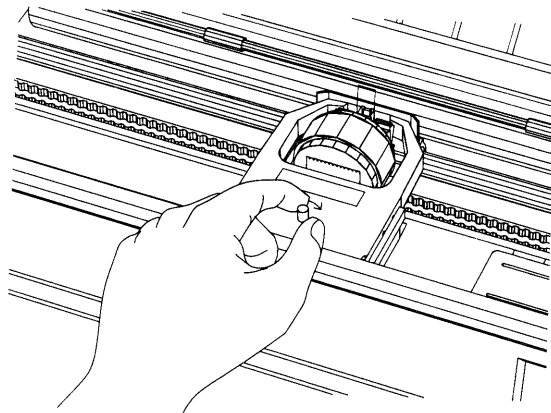


Fig. 2-10

- 5) Check your installation by sliding the printhead from side to side along the carriage. Make sure that the ribbon is not twisted or creased.

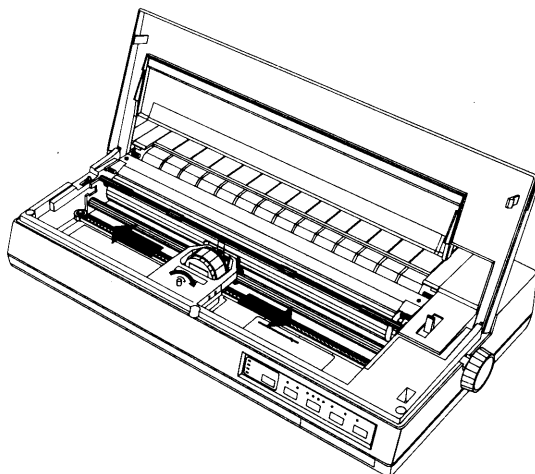


Fig. 2-11

Attaching the Pull Tractor(Optional for Pinovia 2430)

- 1) Open the paper cover.

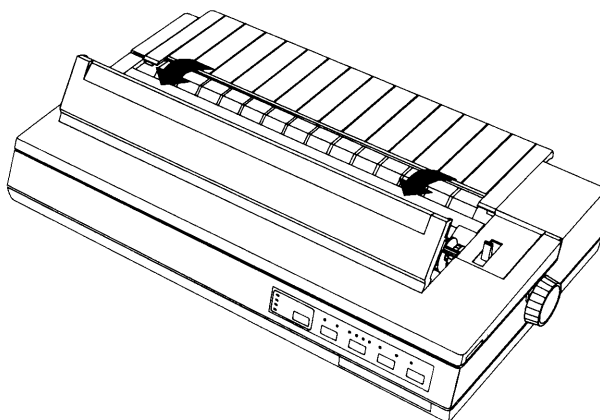


Fig. 2-12

- 2) Pull the paper release lever toward the **PAPER SET** position to raise the paper bail.

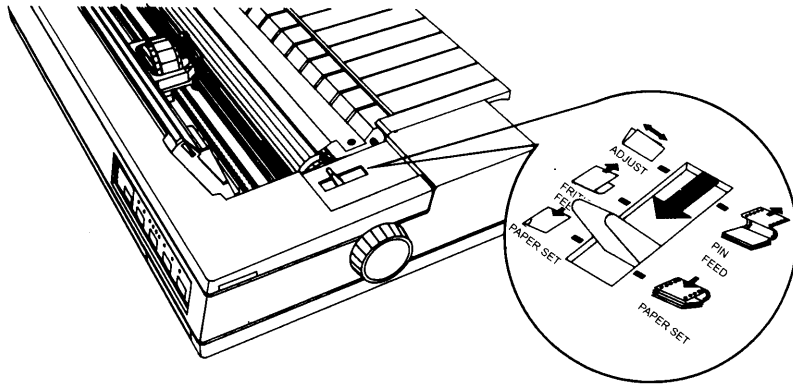


Fig. 2-13

- 3) Hold the pull tractor with the gears to the right and fit the rear notches on the tractor over the rear mounting pins on the printer.

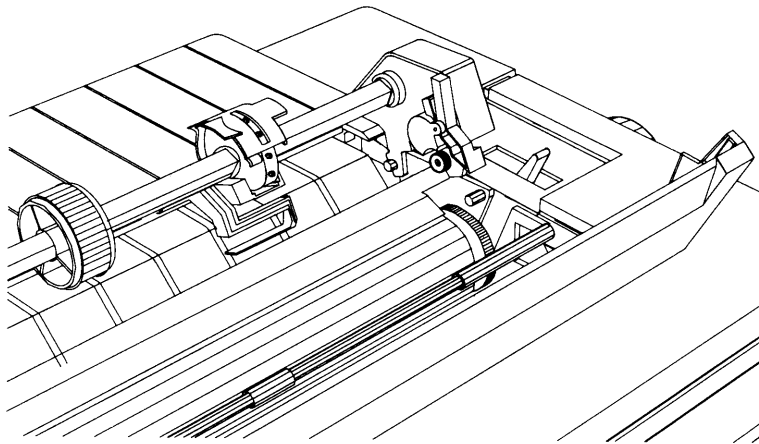


Fig. 2-14

- 4) Maintaining the mounting pins inside the rear notches, tilt the pull tractor unit toward you until the front latches click in place over the front mounting pins of the printer.

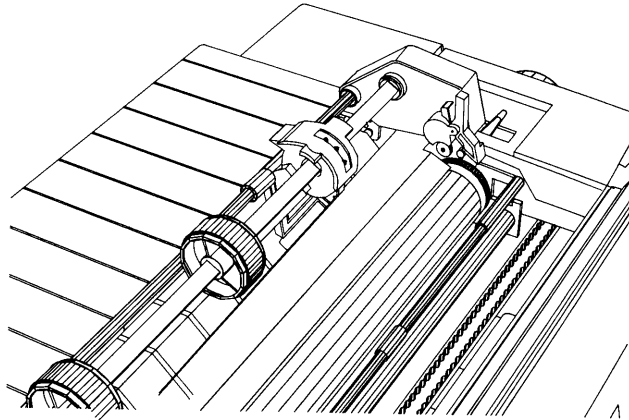


Fig. 2-15

- 5) Make sure that the pull tractor revolves properly when you rotate the platen knob by hand.

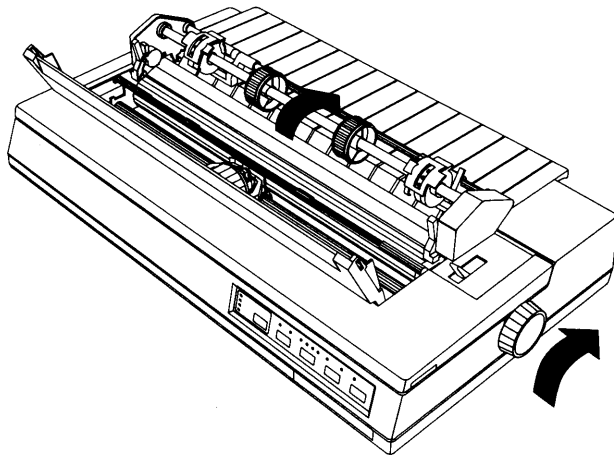


Fig. 2-16

2.4 CONNECTING THE PRINTER TO YOUR COMPUTER

Your printer has a Centronics compatible parallel interface. If you need to use a serial interface, install the optional serial interface card.

The Parallel Interface

When connecting your computer to the parallel interface, follow these steps:

- 1) Make sure both the printer and your computer are turned off.
- 2) Plug the cable connector into the printer as shown. Next squeeze the wire clips together until they lock onto either side of the connector. If your cable has a ground wire, attach this wire to the ground connector of the printer.

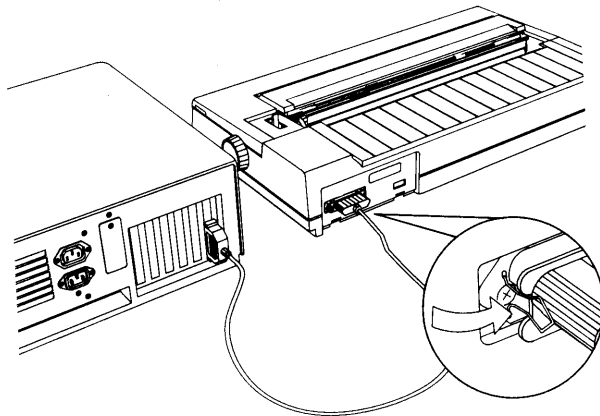


Fig. 2-17

- 3) Plug the other end of the interface cable into the computer (If there is a ground wire at the computer end of the cable, attach it to the ground connector at the back of the computer).

2.5 CONNECTING THE POWER CORD

- 1) Make sure that the power switch is off.
- 2) Connect the power cord into the printer inlet and plug in the other end of the cable.

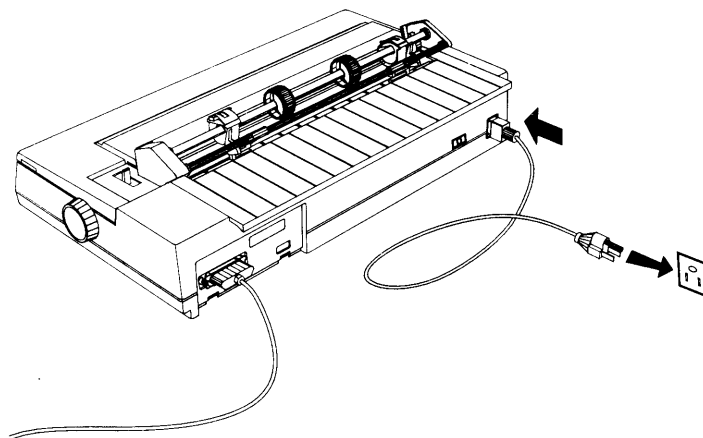


Fig. 2-18

- 3) Set the power switch ON. The power switch is located on the left side of the printer.

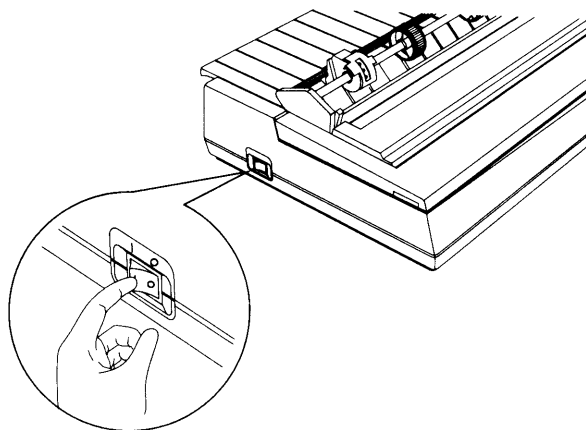


Fig. 2-19

Now your printer is ready for use.

2.6 LOADING PAPER

Either fanfold or cut-sheet paper can be used with this printer.



If you do most of your printing on single sheets, you may find it more convenient to install the optional cut sheet feeder. This option automatically inserts a new sheet whenever required.



CAUTION

Always make sure that your printing is confined to the size of paper you are using. Avoid direct printing on the platen at all times.

Fanfold Paper

■ Pinovia 2440

- 1) Open the paper cover, then position the paper release lever at **PAPER SET** to raise the paper bail.

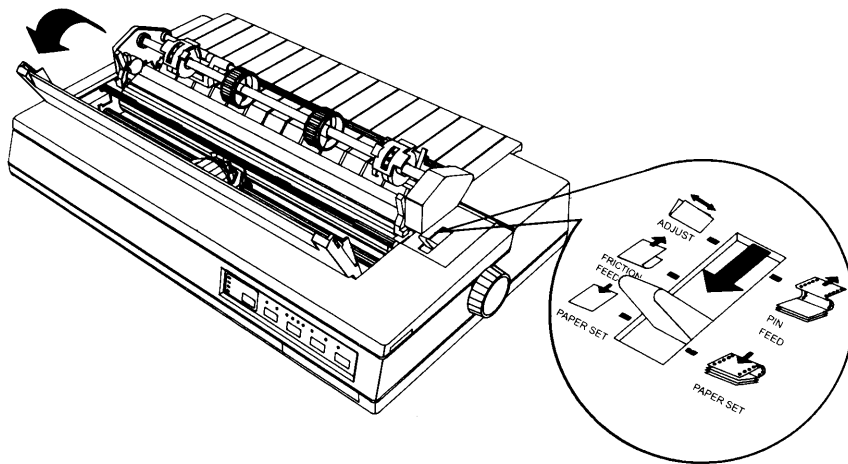


Fig. 2-20

- 2) After unlocking the sprocket lock levers by pushing it, adjust the pin feed tractor to match the width of the paper.

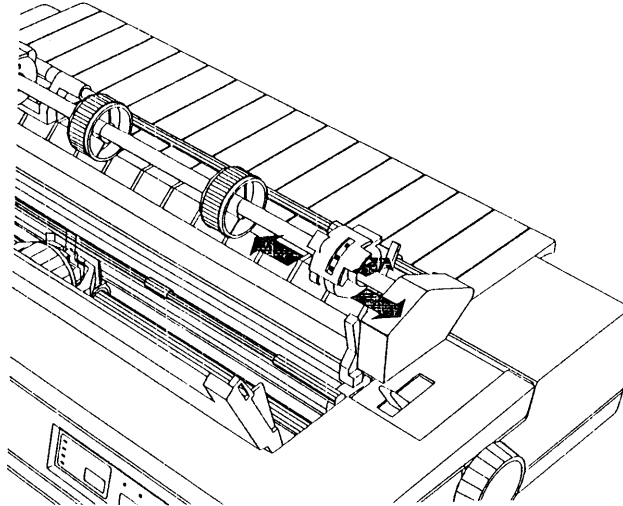


Fig. 2-21

- 3) Lift the paper support and insert the paper through the rear of the printer below the paper support and into the paper inlet through the paper guide of the pull tractor.

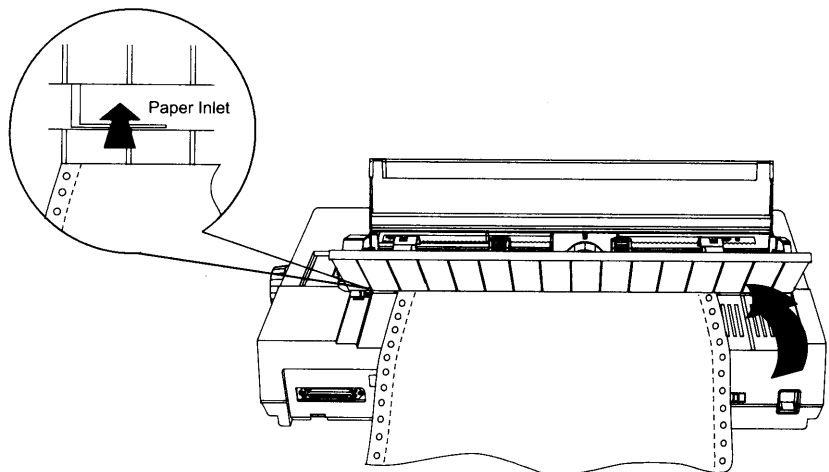


Fig. 2-22

- 4) Set the paper release lever to the middle position (**FRICITION FEED**), and feed the paper long enough to reach to the sprocket pin of the pull tractor.

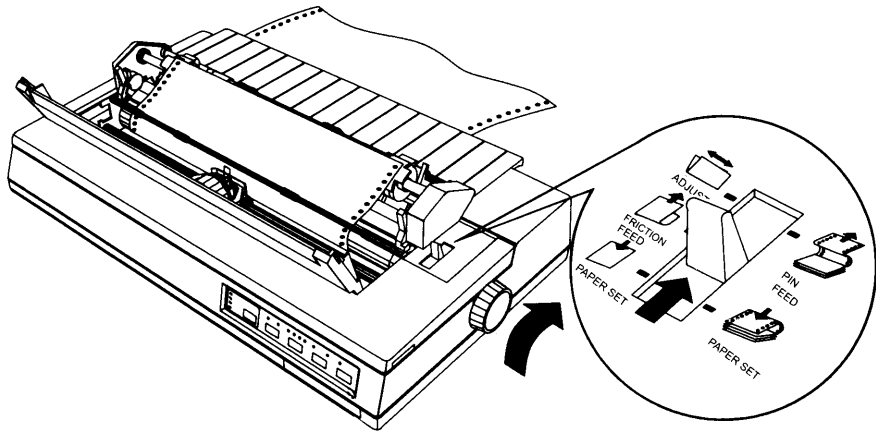


Fig. 2-23

- 5) Set the paper release lever to the back position (**ADJUST**). Open the sprocket covers, and fit the first several holes in the paper over the pins of the sprocket units, making sure the paper is parallel to the printer.

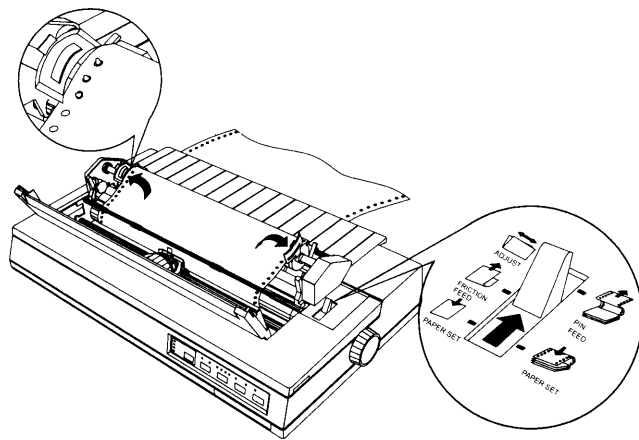


Fig. 2-24

- 6) Close the left sprocket cover. Unlock the left sprocket unit and slide it to align the print starting position of the paper to the "0" mark on the ruler of the paper tension unit, then lock it in place by pulling sprocket lock lever.

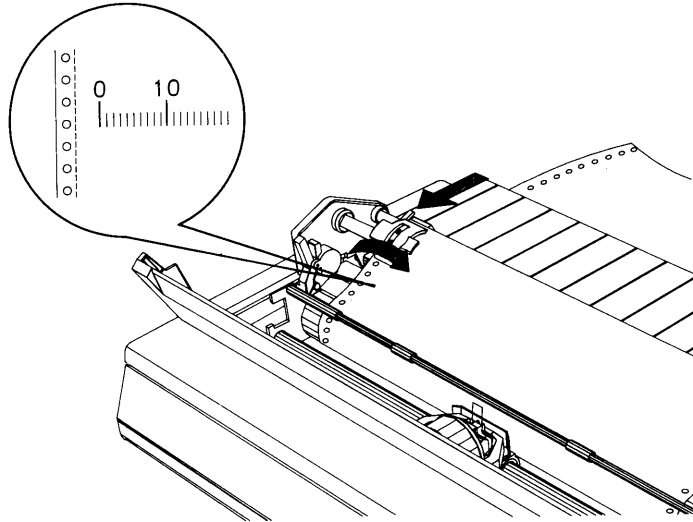


Fig. 2-25

- 7) Close the right sprocket cover and slide the right sprocket unit to a position where the paper is straight and has no wrinkles, then lock it in place by pulling sprocket lock lever.

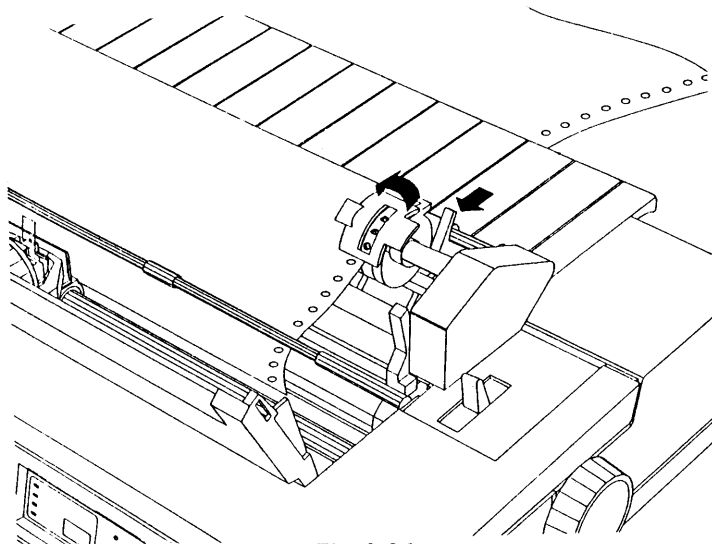


Fig. 2-26

- 8) Close the paper cover. Set the paper release lever to the rear position (**PIN FEED**), and turn the platen knob to set the paper to the desired print position.

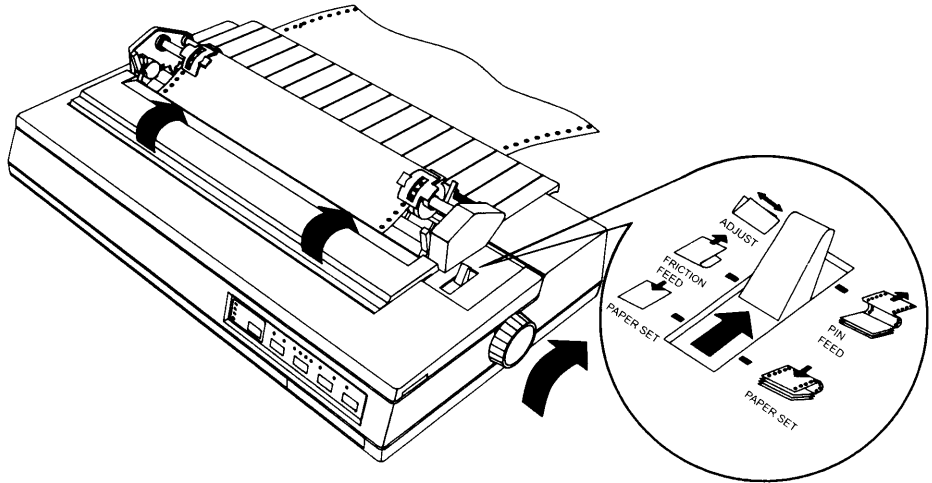


Fig. 2-27



It's important to keep your paper supply aligned with the tractor so that the paper feeds smoothly into the printer.

■ **Pinovia 2430**

- 1) Open the paper cover, and set the paper release lever to the forward position (**PAPER SET**).

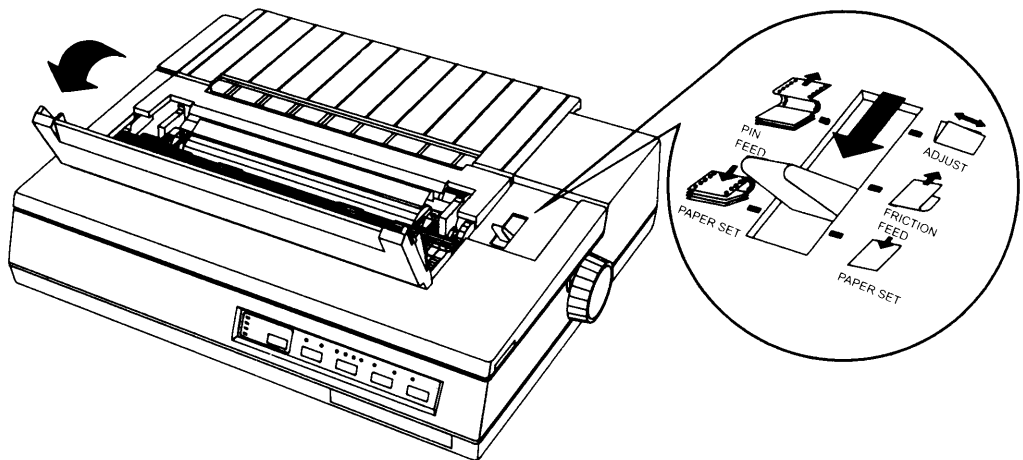


Fig. 2-28

- 2) Unlock both of the tractors by lifting sprocket lock levers, and adjust the tractor to match the width (9.5" or 10") of the paper.

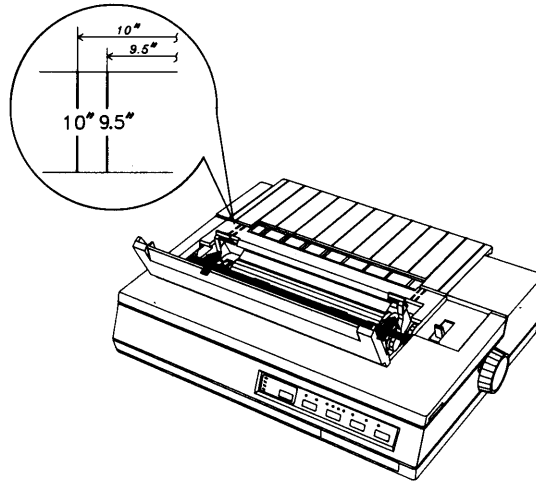


Fig. 2-29

- 3) Lift the paper support and insert paper through the rear of the printer below the paper support, and turn the paper feed knob to feed the paper to the appropriate position.

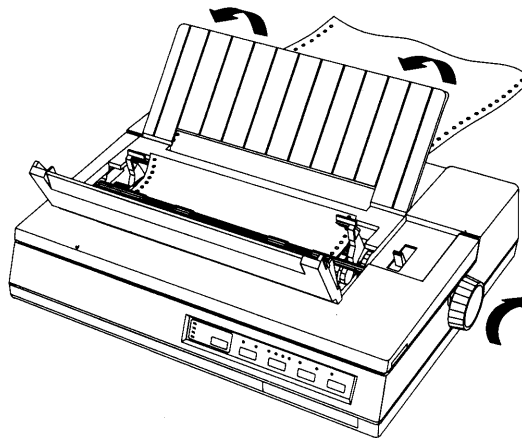


Fig. 2-30

- 4) Lock both of the tractors, set the paper release lever to the rear position (**PIN FEED**), and close the paper covers.

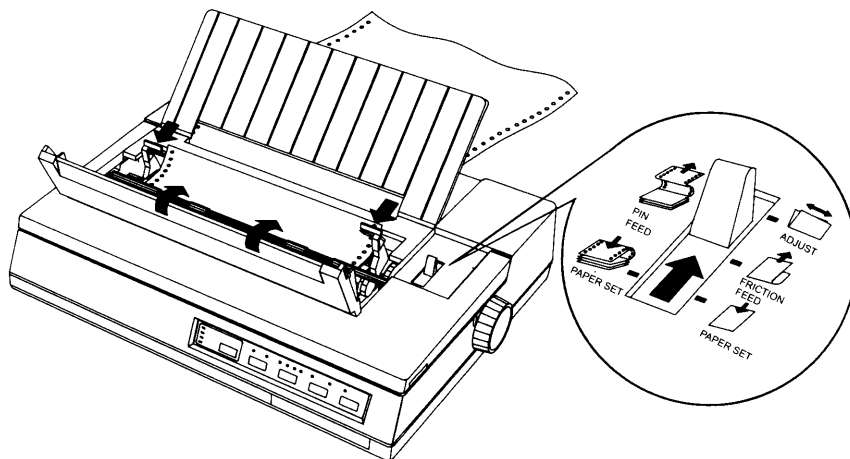


Fig. 2-31

- 5) Set the paper support in its initial position.

Cut-Sheet Paper

Cut sheet paper can be used only after the paper indicator light is lit on and the beeping is heard when power is on.

- 1) Lift the paper support behind the pull tractor and set the paper release lever to the middle (**FRICTION FEED**) position.

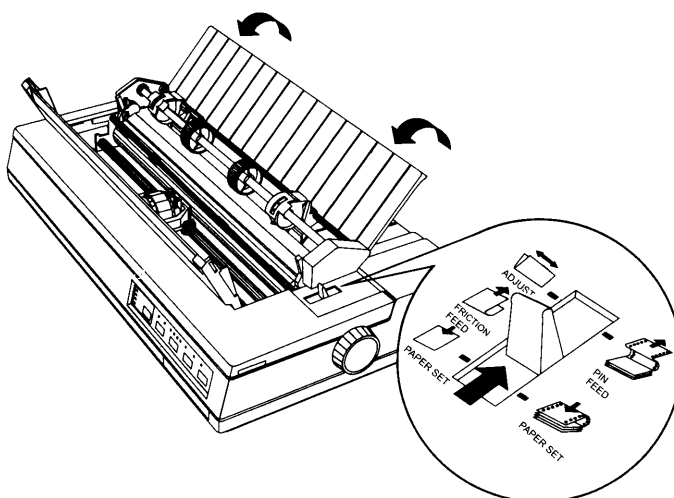


Fig. 2-32

- 2) Insert a sheet of paper over the paper support and the paper release lever to the forward position(PAPER SET). Then the paper loads to the printing position automatically.

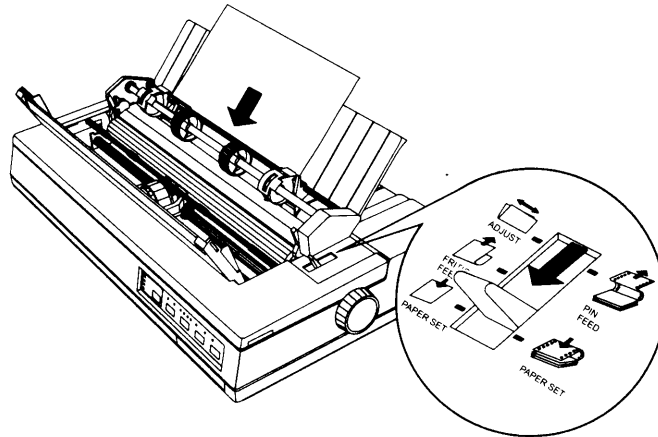


Fig. 2-33

- 3) Set the paper release lever to the middle position(FRICTION FEED).

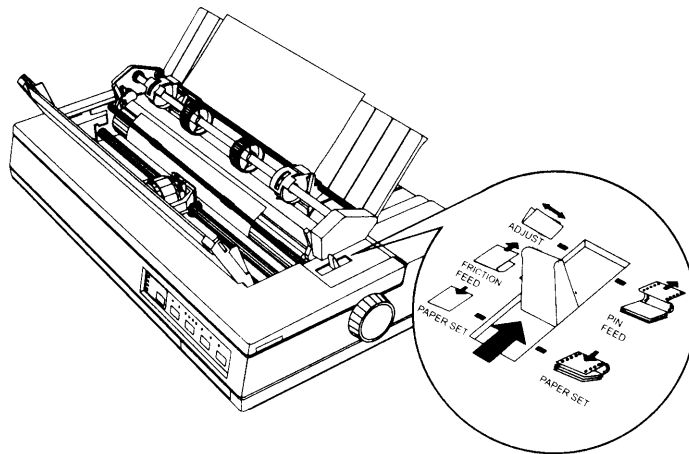


Fig. 2-34



For using cut sheet paper mainly we recommend you to use auto cut sheet feeder. It loads the cut sheet paper automatically.

Fanfold Multipart Copy Paper

This printer is equipped with a paper thickness adjustment lever to allow you to print on multipart copy paper (up to three sheets). The lever has five positions to accommodate paper of different thickness. An incorrect setting may affect the density of the printout.

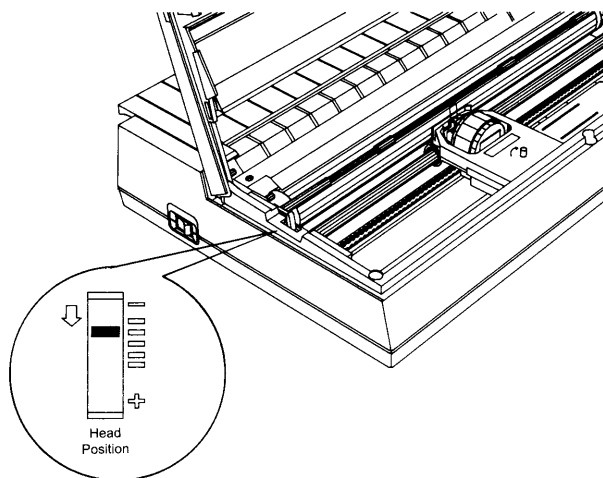


Fig. 2-35

Paper	Lever Position
Single-sheet	1 to 3
Multipart(2-3 sheets)	3 to 5

Table 2-1 Lever Setting Position



Continuous printing with the lever set at a position higher than 3 can shorten the life of the printhead.



CAUTION

Printing past the edge of multipart forms or thicker than normal paper can damage the printhead.

