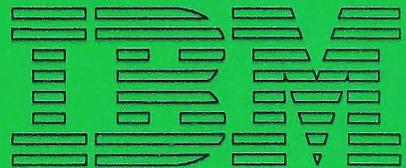


# IBM 3192-G Color Graphics Display Station and IBM 3979 Expansion Unit Setup Instructions

File No. S370/4300-09  
GA18-2590-1



## **Federal Communications Commission (FCC) Statement**

**Warning: This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.**

The above FCC statement applies only to those machines used in the U.S.

**Notice for Customers in Chicago, Illinois:** If two different length of power cords, 1.8 m (5.9 ft) and 2.8 m (9.2 ft), are shipped with the IBM 3192-G, do not use the 2.8 m (9.2 ft) length power cord; use a 1.8 m (5.9 ft) length power cord.

## **Second Edition (January 1987)**

Changes are made periodically to the information herein; any such changes will be reported in subsequent revisions.

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## Keyboard Layout Change

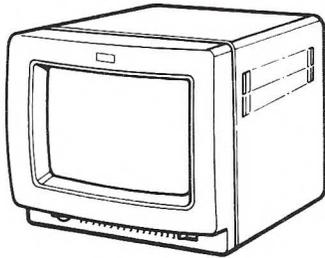
- Step C1. Change Keyboard Layout 37

If you have any problem in setting up the IBM 3192-G Color Graphics Display Station see *IBM 3192-G Color Graphics Display Station Operator Reference and Problem Solving Guide, GA18-2591*.

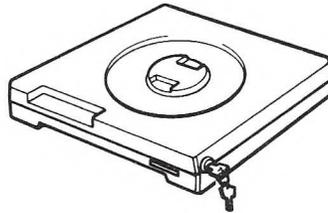
## 1a. Check basic components

Check the boxes  as you identify each item. If any are missing, call your IBM marketing representative.

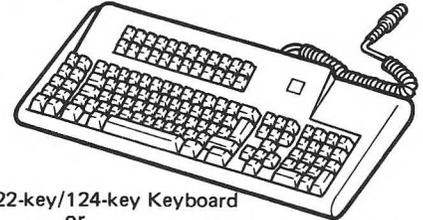
Video Element



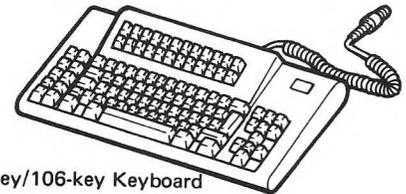
Logic Element and Security Keys



Keyboard Element

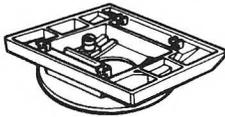


122-key/124-key Keyboard  
or

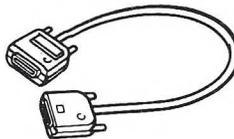


104-key/106-key Keyboard

Video Stand



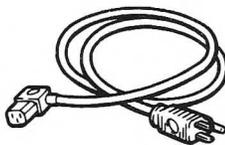
Video Cable



Keyboard Overlay



Power Cord



Key Cap Removal Tool



Operator Reference and Problem Solving Guide



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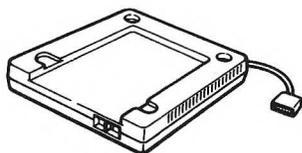
### Notes:

1. The 122-key/124-key keyboard is used in these setup instructions. If you have a 104-key/106-key keyboard, use it in place of the 122-key/124-key keyboard.
2. Save all packaging material for possible later use.
3. Store one of the security keys in a safe place.
4. The security keys may not, as shown, come inserted in the logic element.

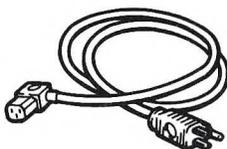
# 1b. Check options

If you have one of the following auxiliary devices, check the boxes  as you identify each item. If any are missing, call your IBM marketing representative.

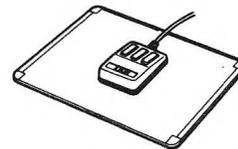
IBM 3979 Expansion Unit



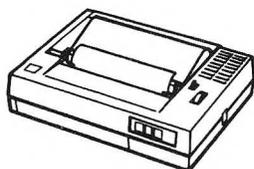
Power Cord for the 3979



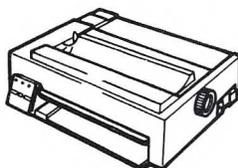
IBM 5277-1 Mouse and Pad



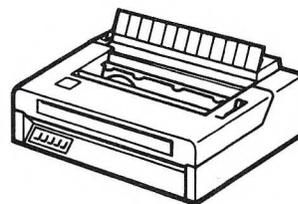
IBM 3852-2 Color Jetprinter



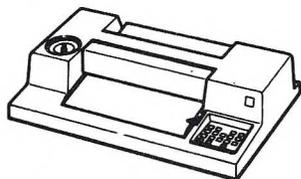
IBM 4201 Proprinter/  
IBM 4202 Proprinter-XL



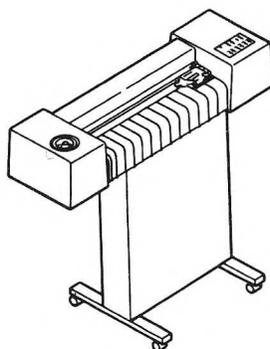
IBM 5201-2 Quietwriter



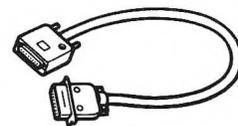
IBM 6180/7371/7372  
Color Plotter



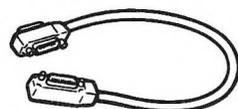
IBM 6184 Color Plotter



Printer Cable  
(P/N 6342058)



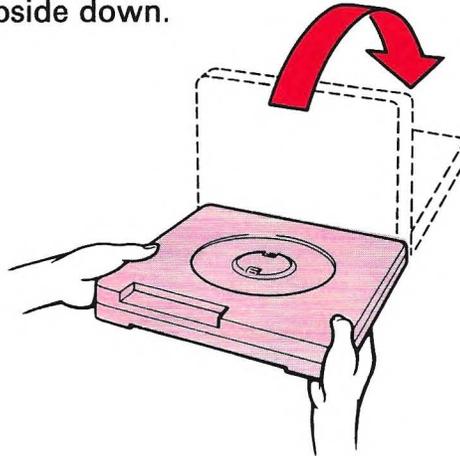
Plotter Cable  
(P/N 2720020)



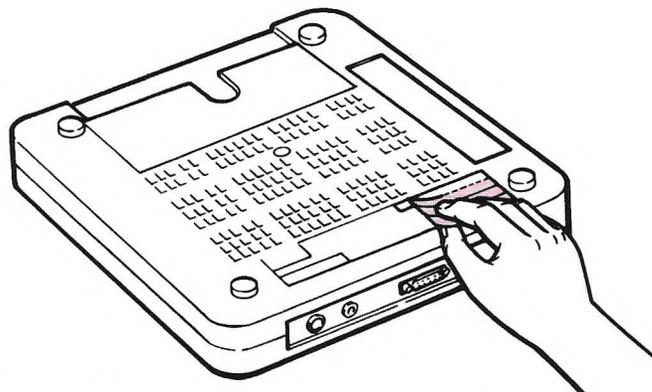
## 2. Attach labels

**IMPORTANT:** It is important that you attach all labels to avoid possible delay if it becomes necessary to return the unit for repair to IBM.

**a** Turn the logic element upside down.

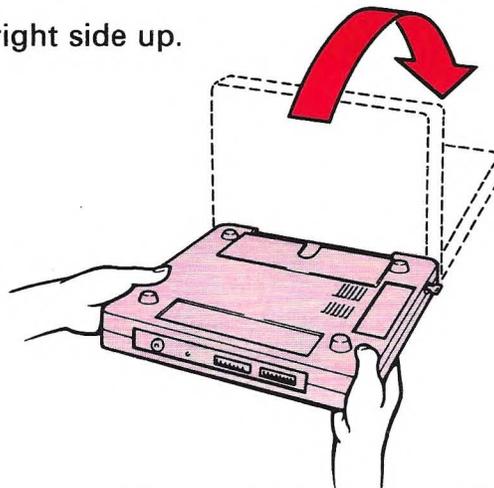


**b** Tear off the labels from the bottom of the logic element.

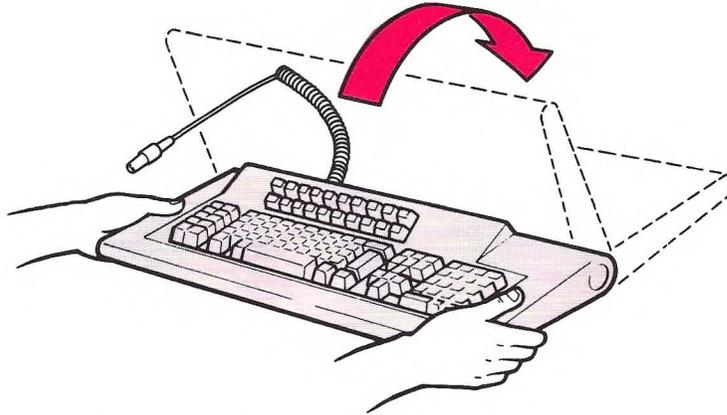


Note: The labels and their location may not be exactly as shown.

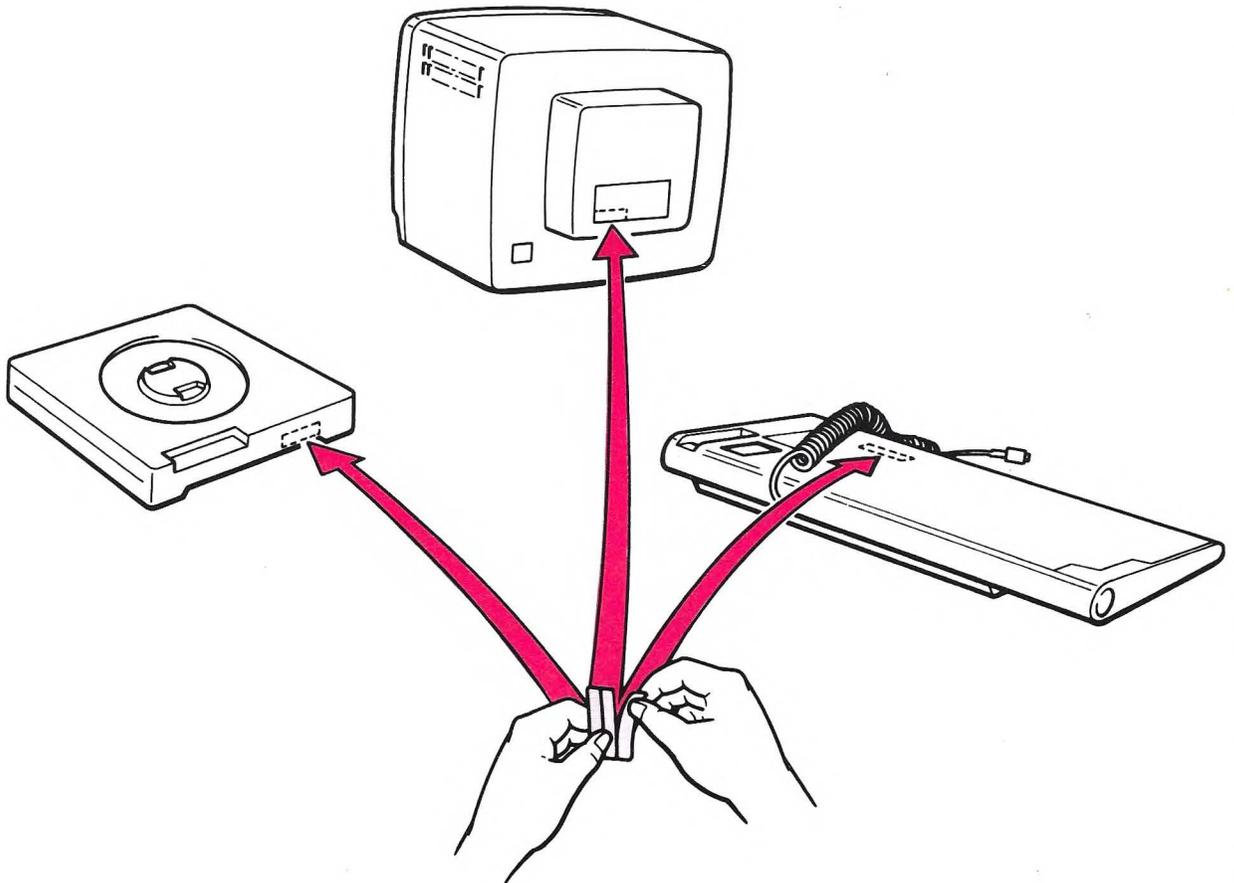
**c** Turn the logic element right side up.



**d** Turn the keyboard upside down.

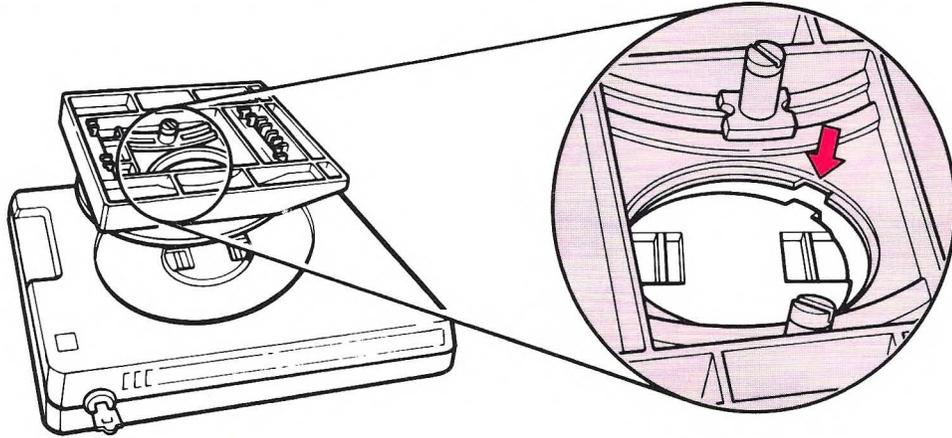


**e** Peel off the labels and place one on each of the elements as shown.

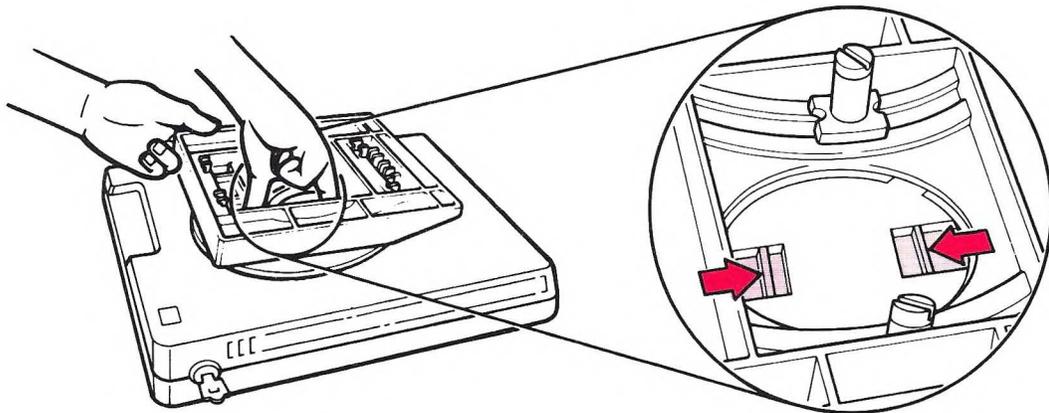


## 4. Attach stand to logic element

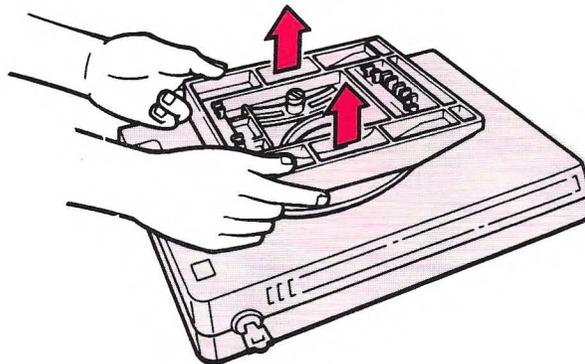
**a** Attach the stand on the logic element and align the notch and the tab.



**b** Pinch the two gray latches to lock the stand onto the logic element; then, release them.

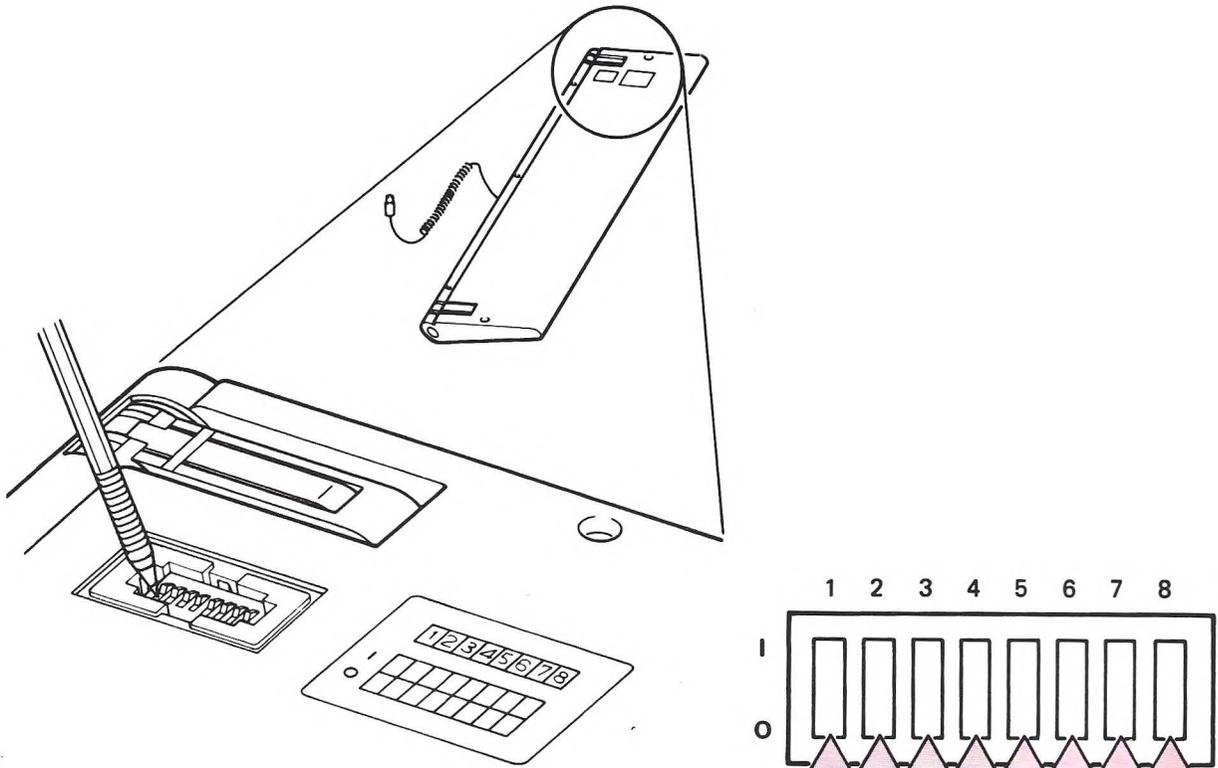


**c** Lift the stand to make sure it is locked onto the logic element.



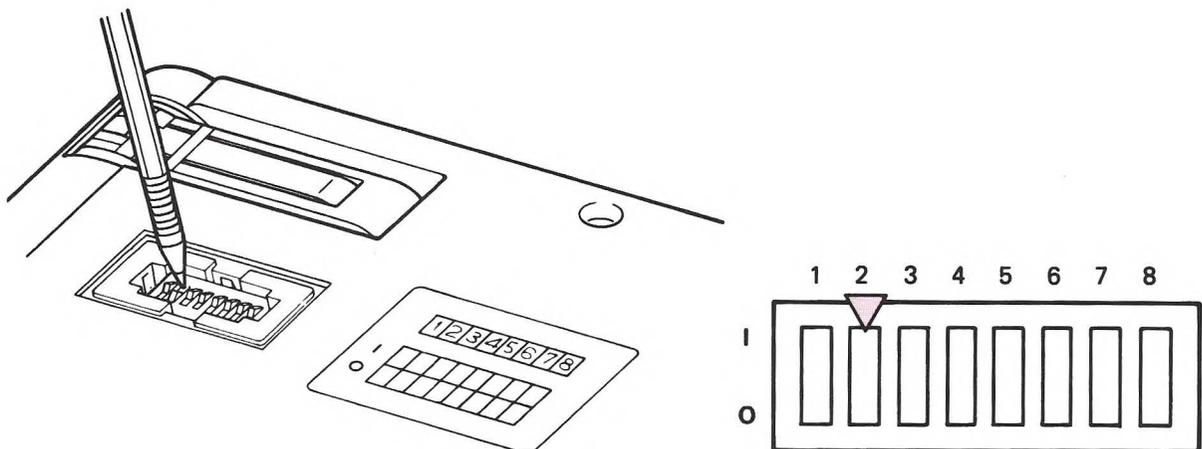
### 3. Set keyboard switches

- a** Set the 8 switches on the bottom of the keyboard to 0 (Off) using a pointed object like a ball point pen. Do not use a pencil.



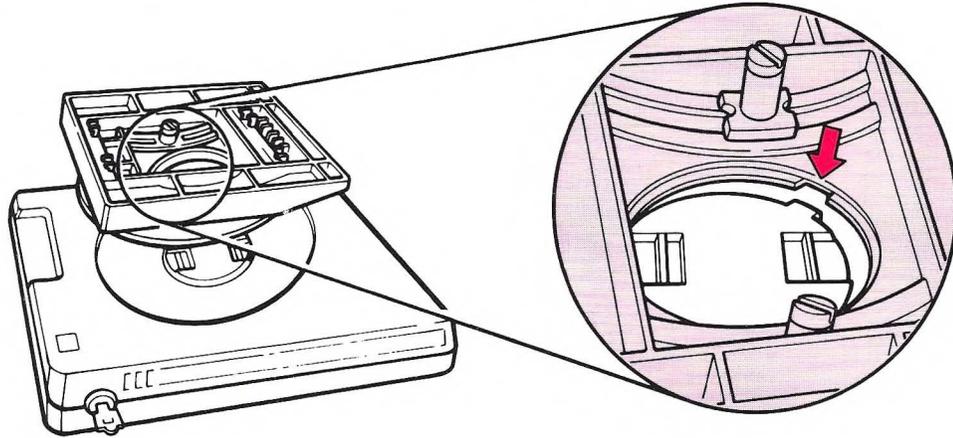
Note: The switches and the label may not be exactly as shown. The switches of the 104-key/106-key keyboard are located under the legs.

- b** If you need to turn on the numeric lock (ask your supervisor), set switch 2 to 1 (On) as shown.

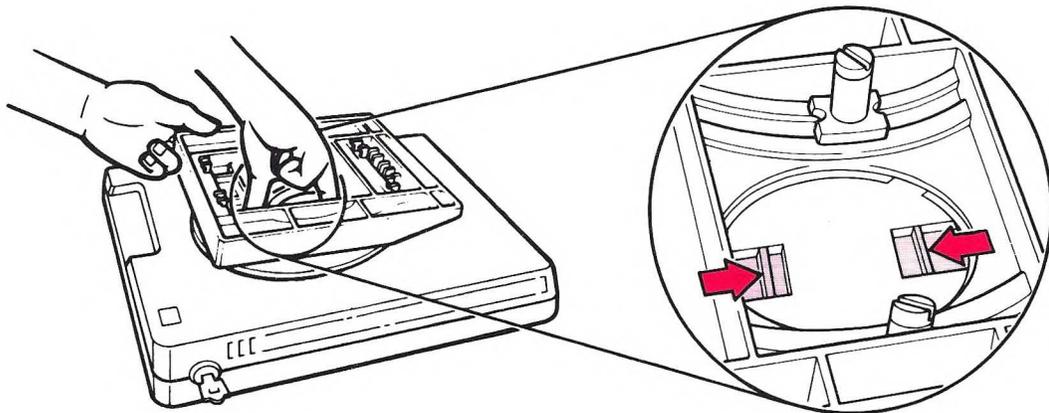


## 4. Attach stand to logic element

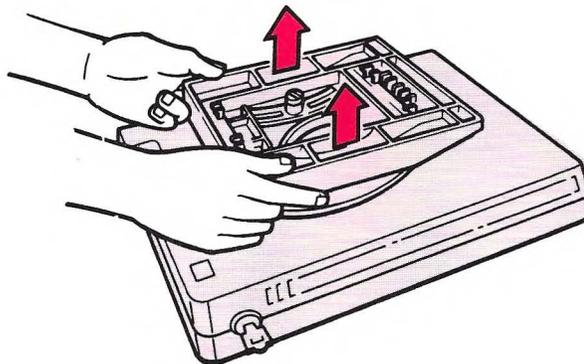
**a** Attach the stand on the logic element and align the notch and the tab.



**b** Pinch the two gray latches to lock the stand onto the logic element; then, release them.

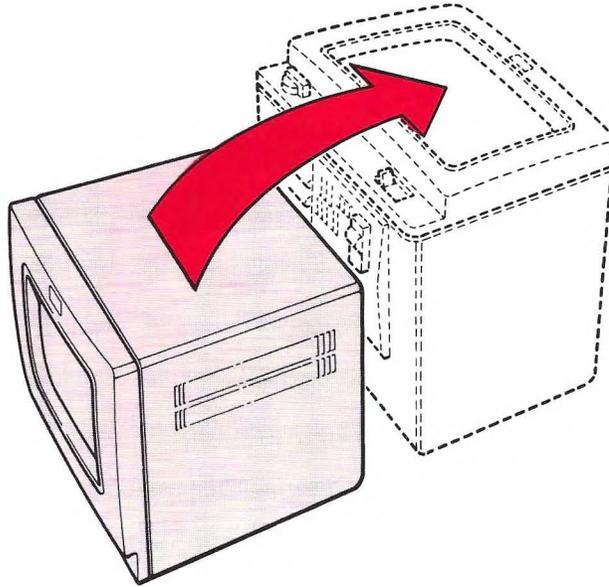


**c** Lift the stand to make sure it is locked onto the logic element.

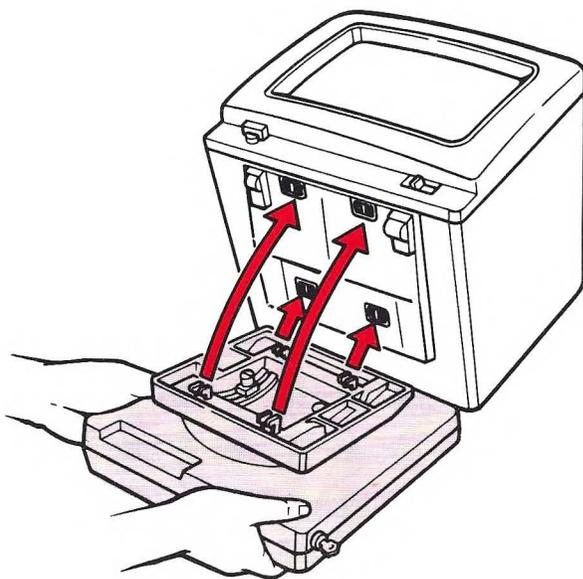


## 5. Attach logic element to video stand

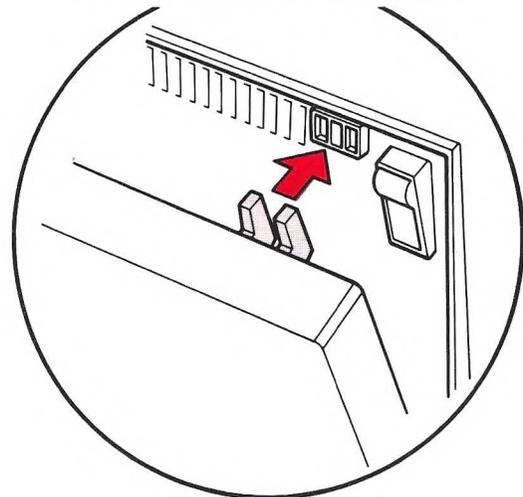
**a** Turn the video element so that the screen faces up.



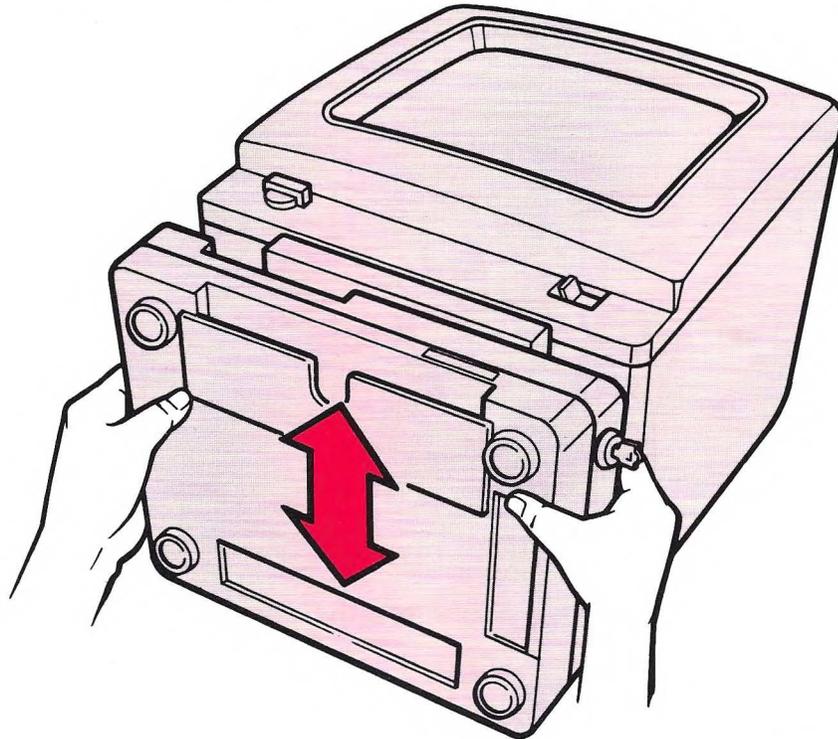
**b** Insert the hooks into the slots and lift the logic element to lock it to the video element.



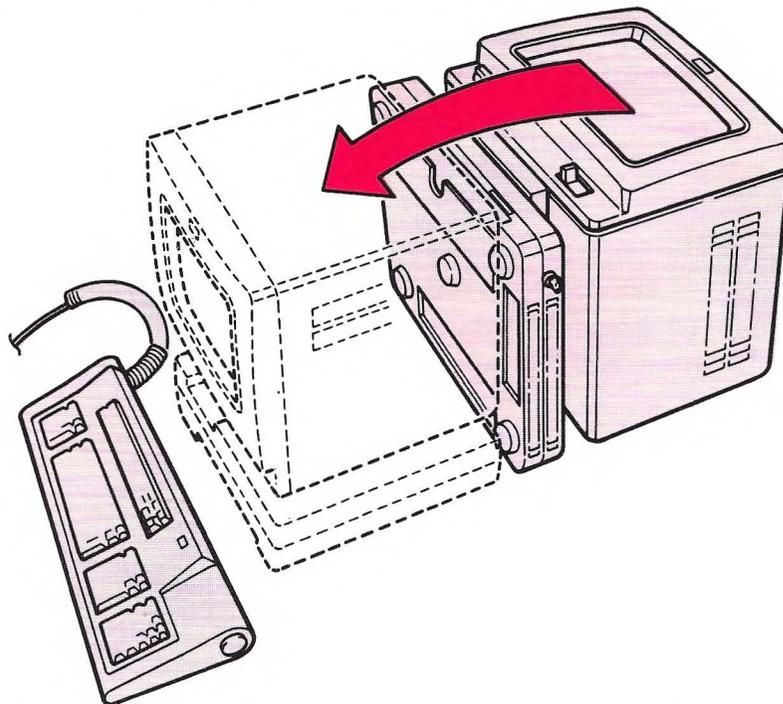
Make sure the hooks are pointing up.



**C** Move the logic element up and down to make sure it is locked to the video element.

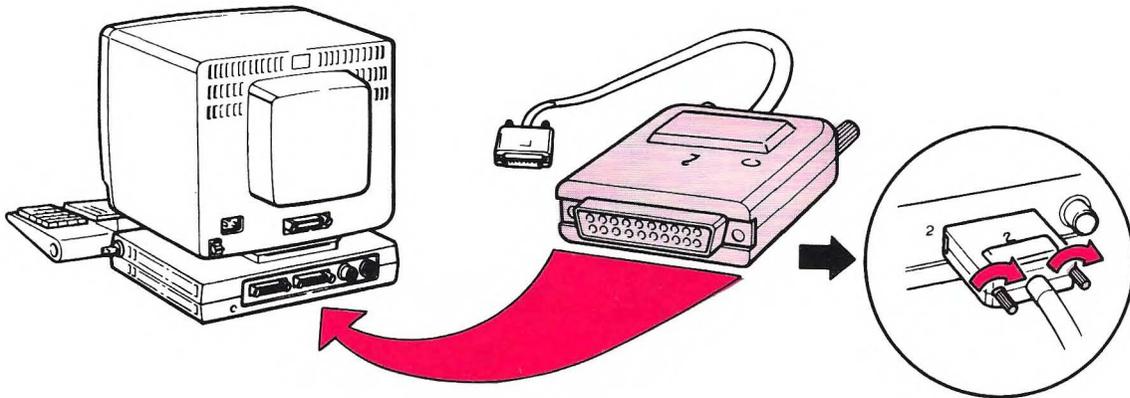


**d** Turn the video element right side up and place the keyboard as shown.

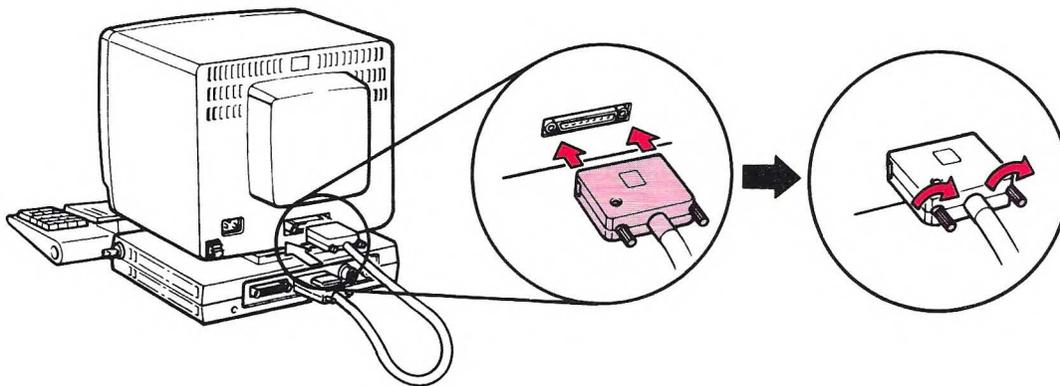


## 6. Connect cables

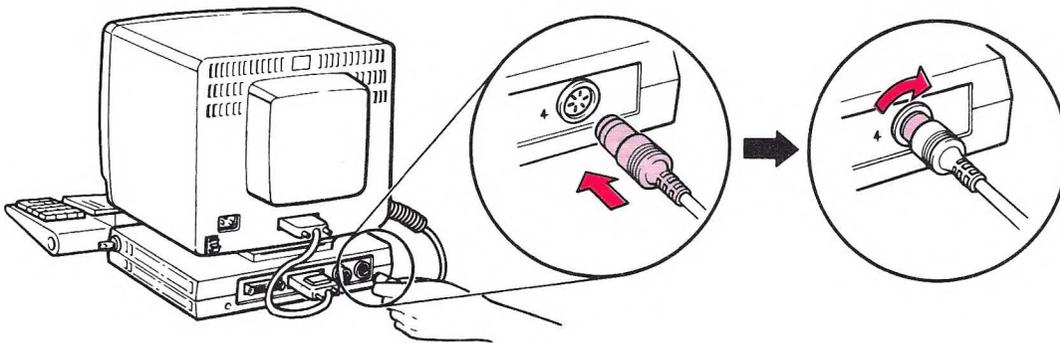
- a** Insert the end of the video cable (marked '2') into connector 2 of the logic element and tighten screws.



- b** Insert the other end of the video cable into the connector of the video element and tighten screws.

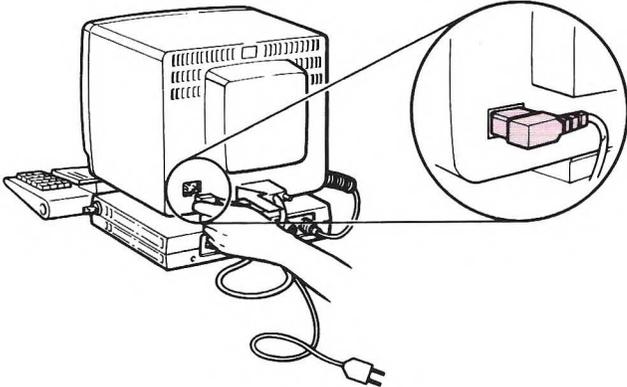


- c** Remove the cap (if present) from the keyboard connector. Insert the keyboard cable into connector 4 and tighten ring by turning it clockwise.

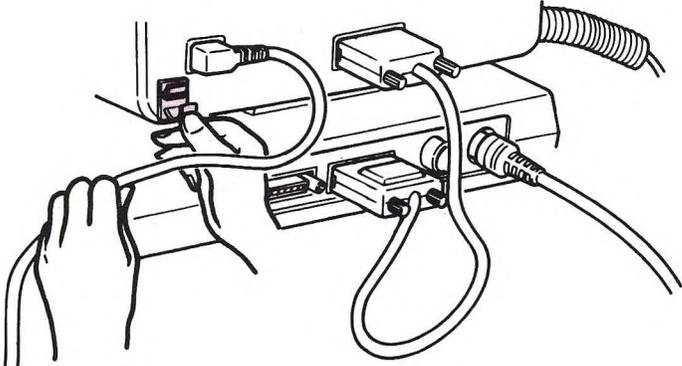


# 7. Connect power cord

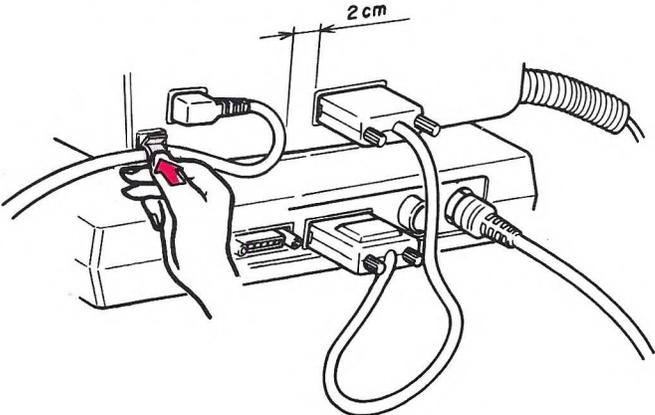
**a** Insert the power cord into the video element.



**b** Open the cable clamp and insert the power cord.

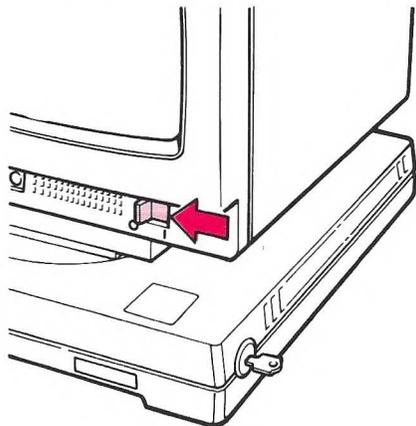


**c** Make sure the distance between the power cord and the video-cable connector is at least 2 centimeters (0.8 inches). Close the cable clamp.

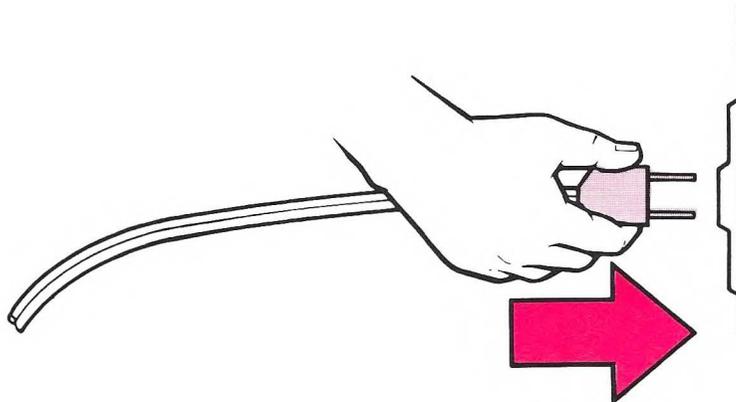


## 8. Plug in power cord of display station

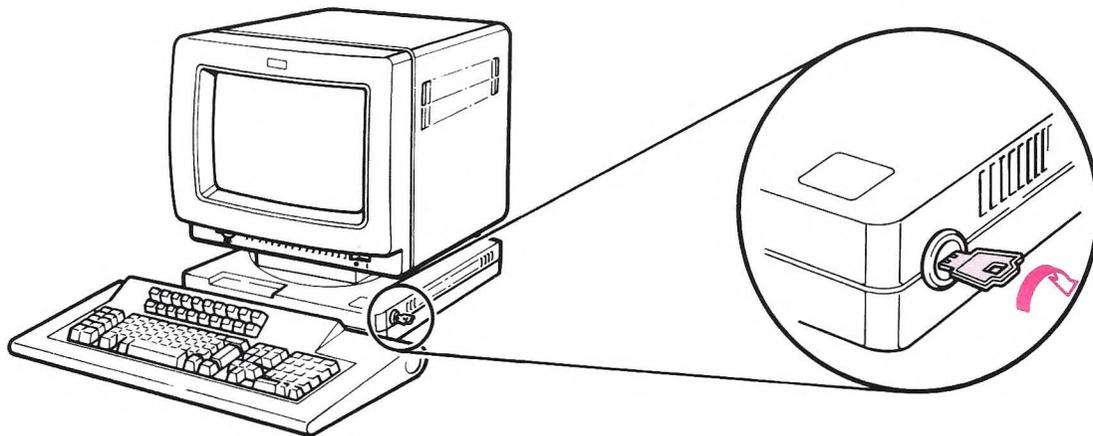
**a** Make sure the power switch of the video element is set to O(Off).



**b** Plug in the power cord of the video element to the power outlet.



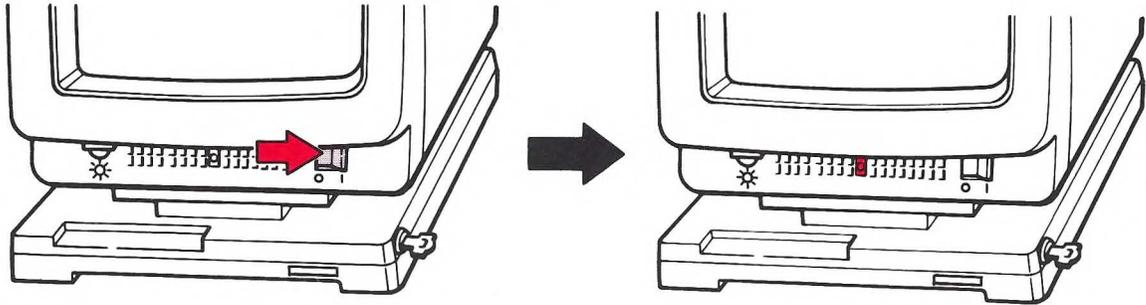
**c** Make sure the security key is turned fully clockwise.



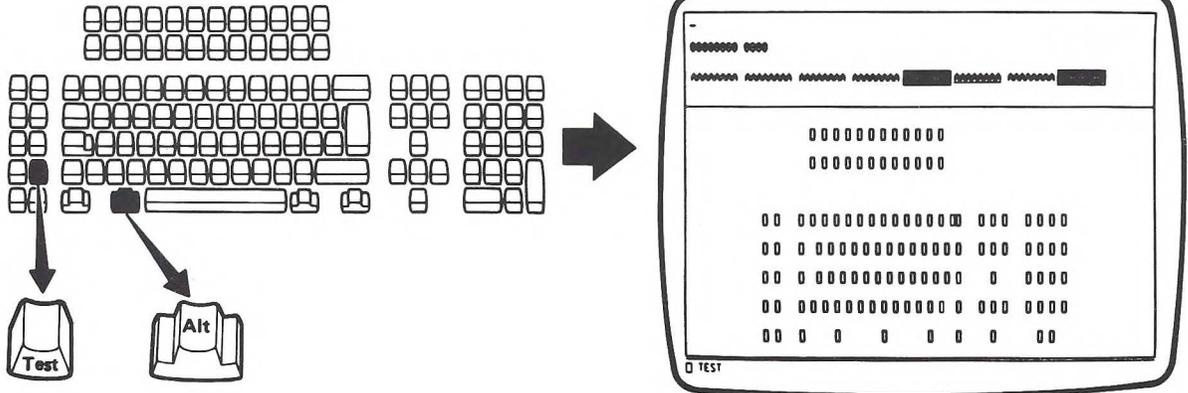
# 9. Adjust screen brightness

*Note: If you have any problems, see the Operator Reference and Problem Solving Guide.*

- a** Set the power switch of the video element to I(On). The power-on light should come on, and about 12 seconds later you should hear an alarm.

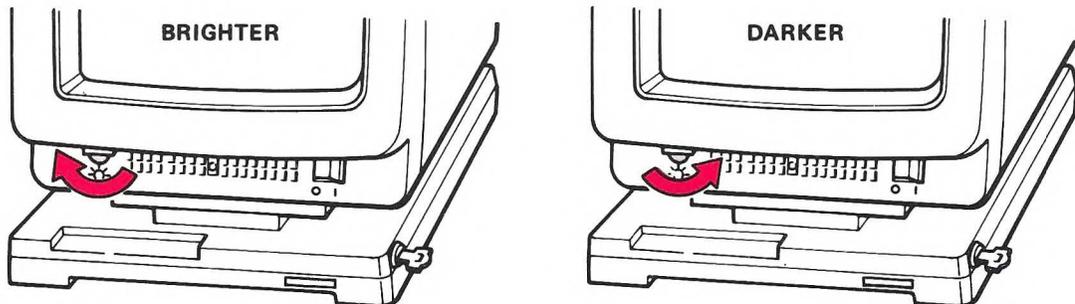


- b** Press and hold the Alt key, then press the Test key. Your screen should look as shown.



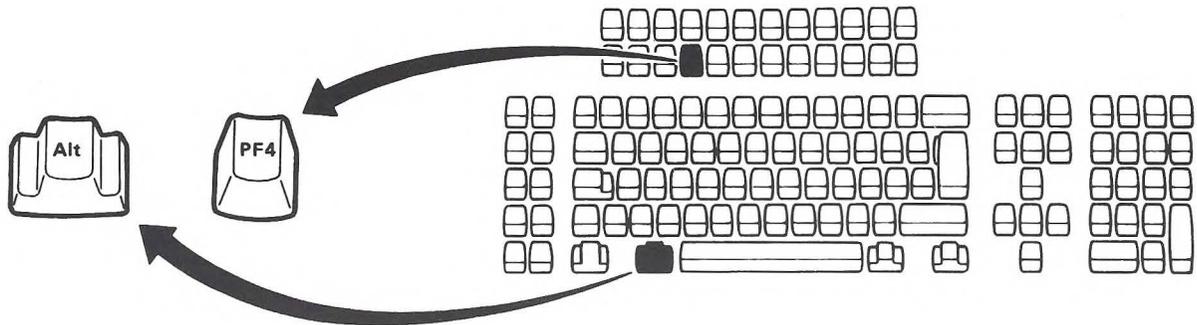
*Note: The same screen appears for the 104-key/106-key keyboard.*

- c** Turn the knob to adjust the brightness.



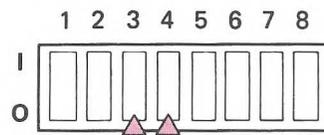
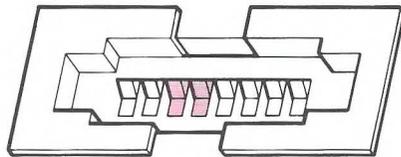
# 10. Adjust alarm volume

**a** Press and hold the Alt key, then press the PF4 key. You should hear the alarm.

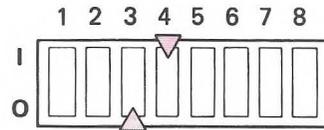
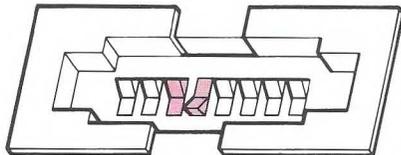


**b** Turn the keyboard upside down. Set switches 3 and 4 at the bottom of the keyboard for desired volume. Repeat the above step 10a to check the desired volume.

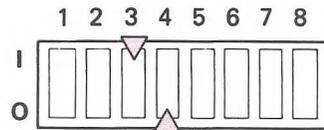
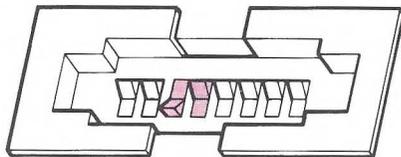
**LOUD**



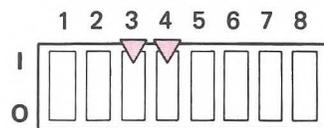
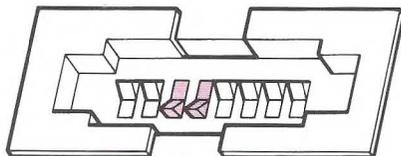
**MEDIUM**



**SOFT**



**NO SOUND**

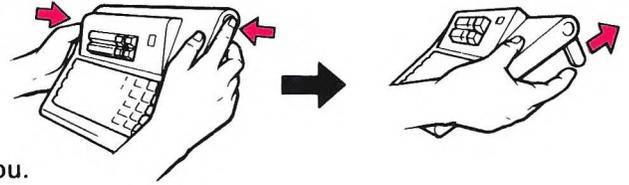


# 11. Personalize display station

## a Adjust the keyboard slope.

If you use the 122-key/124 key keyboard,

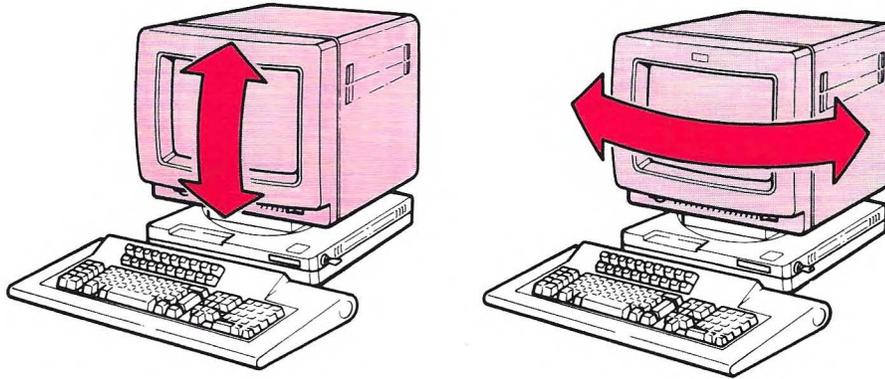
1. Lift the keyboard.
2. Push in the buttons on each side.
  - Push until short legs release.
  - Push further to release long legs.
3. Release both buttons.
4. Lock the legs by pushing them away from you.



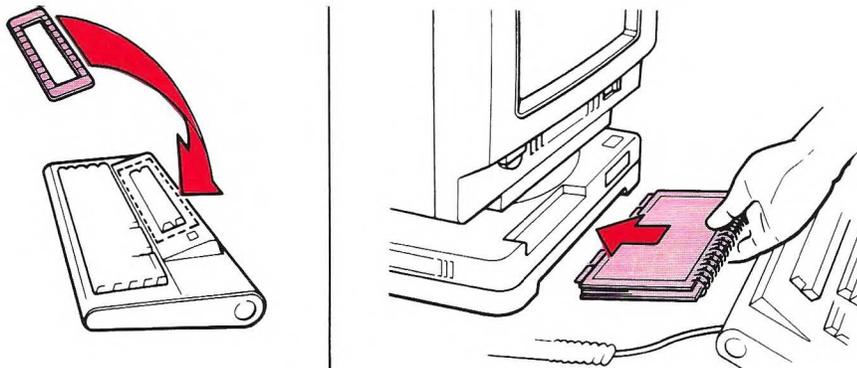
If you use 104-key/106-key keyboard,

Turn the keyboard upside down and lift the legs further until it stops.

## b Adjust the video element angle.



## c Place the keyboard overlay over the keys and store the *IBM 3192-G Color Graphics Display Station Operator Reference and Problem Solving Guide* in the pocket under the front of the logic element.



**SETUP OF YOUR DISPLAY STATION IS COMPLETED.**

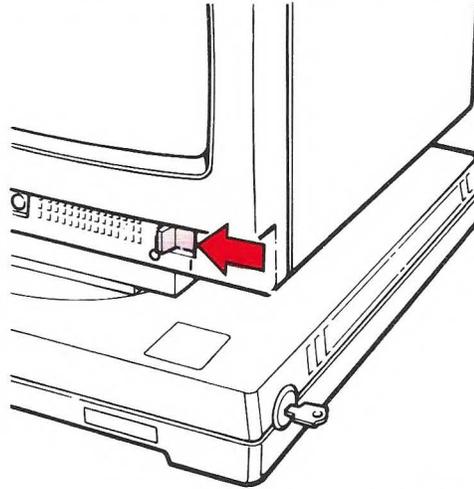
*Note:* Go to the next page to connect your display station to the host system.

# 12. Connect display station to host

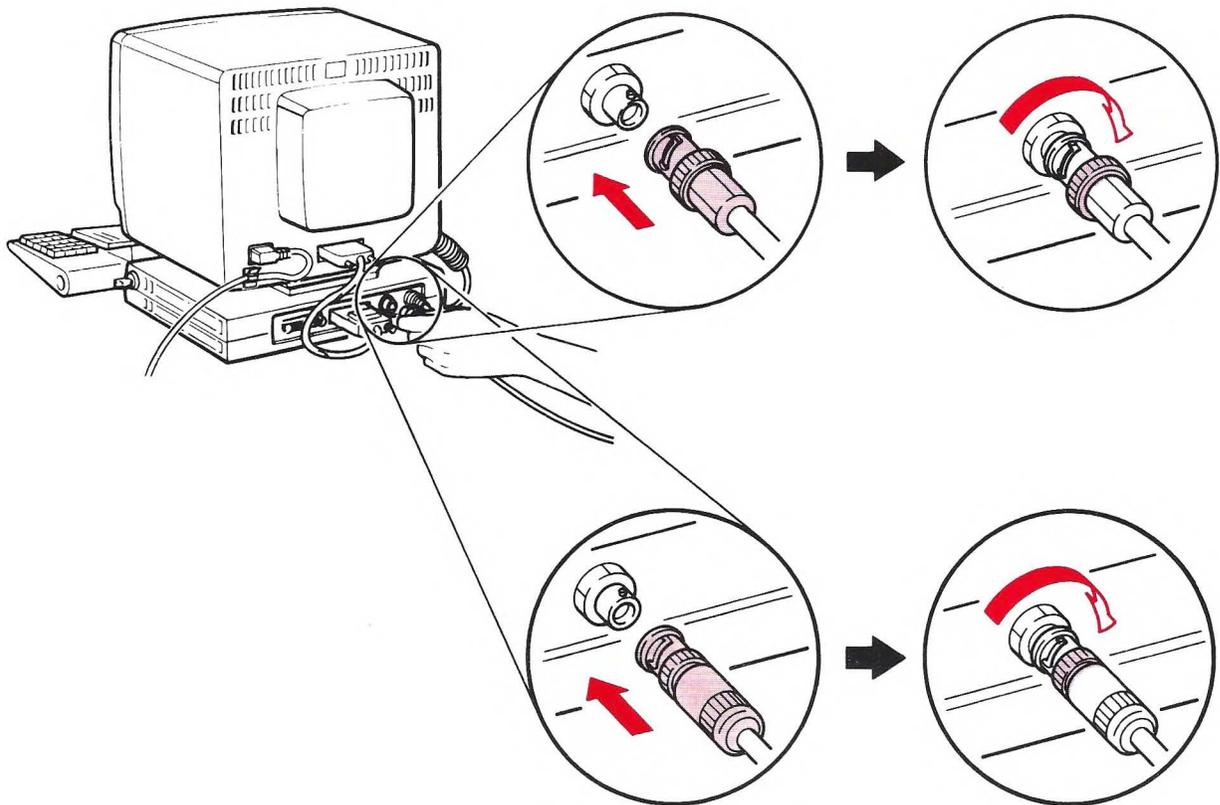
## CAUTION

Do not connect the communication cable during an electrical storm.  
Communication cables can conduct lethal charges of electricity.

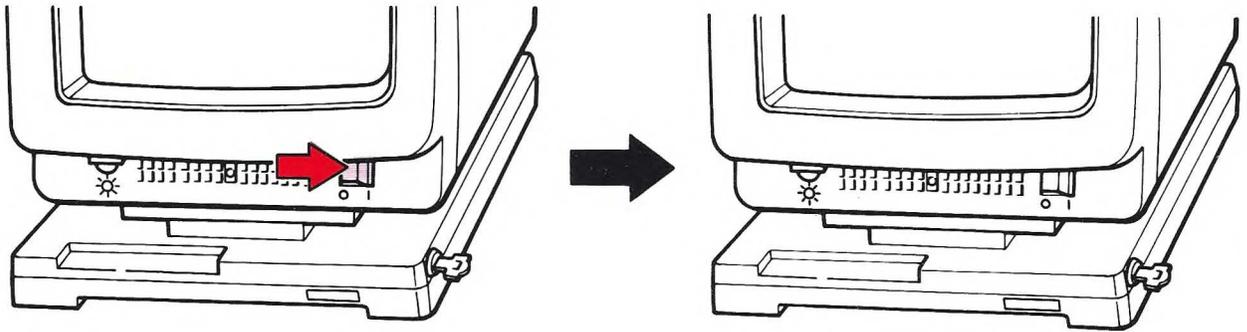
**a** Set the power switch of the video element to O(Off).



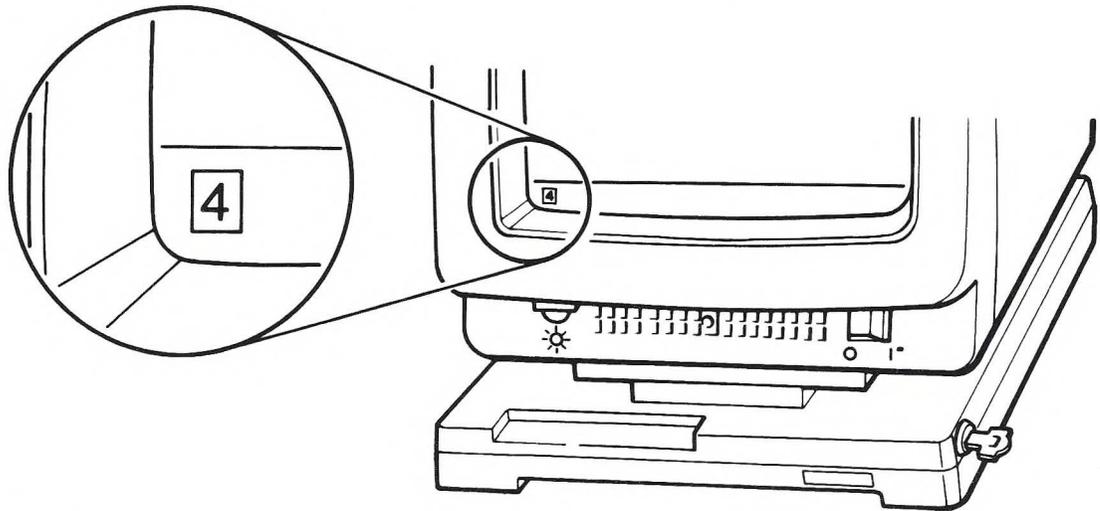
**b** Insert the communication cable into connector 3 of the logic element and turn it clockwise.



**C** Set the power switch of the video element to I(On). The power-on light should come on, and about 12 seconds later you should hear the alarm.



**d** About 2 minutes later, the symbol  or S appears at the bottom left of your screen.



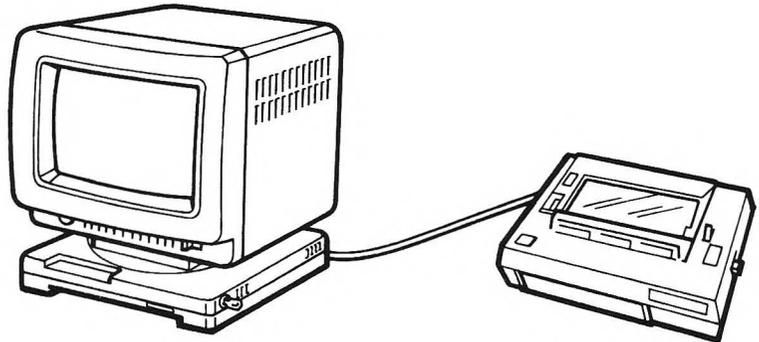
*Note:* If a  or an S does not appear, call the person responsible for the control unit or the host system.

**Notes:**

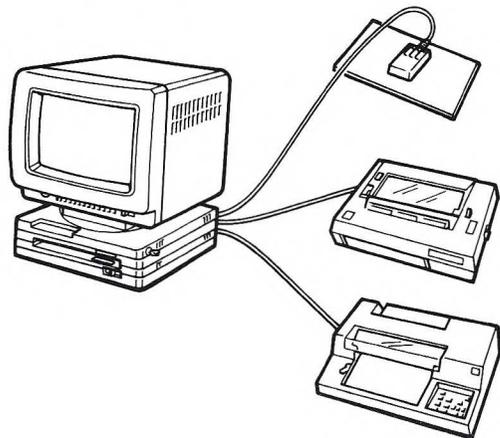
1. Retain this instruction manual for possible later use.
2. Your display station will work even if the key is pulled out.

**Your display station is ready to use.**

**If you have a printer and plan to attach it directly to the display station, go to step A1 (page 19).**



**If you have an expansion unit with a mouse, printer, or plotter, go to step B1 (page 24).**

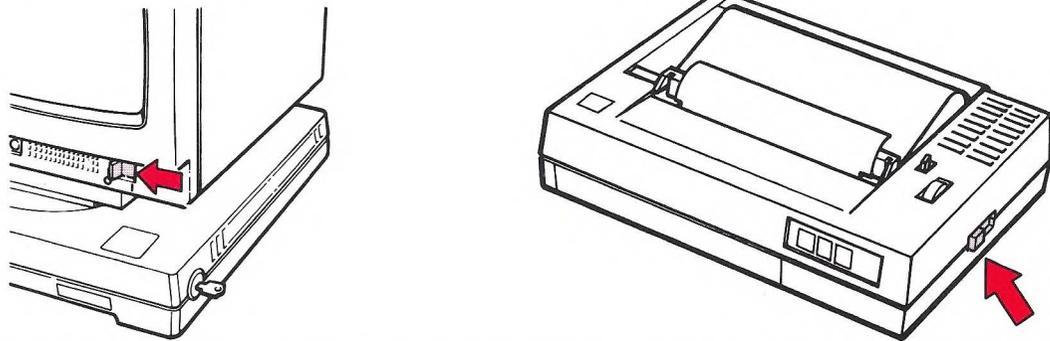


**If you plan to change your keyboard layout, go to step C1 (page 37).**

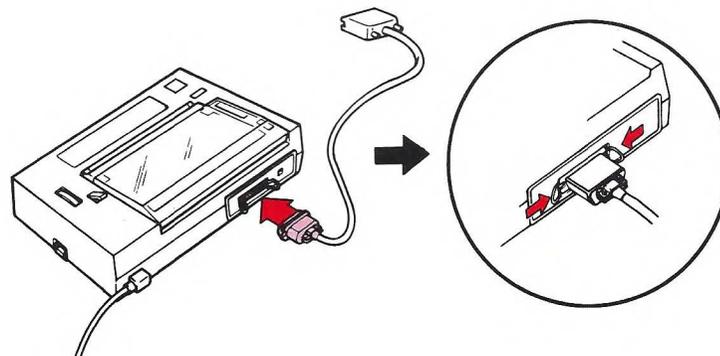
# A1. Connect printer

The figure below uses the IBM 3852-2 Color Jetprinter for the example. Use the printer you plan to attach.

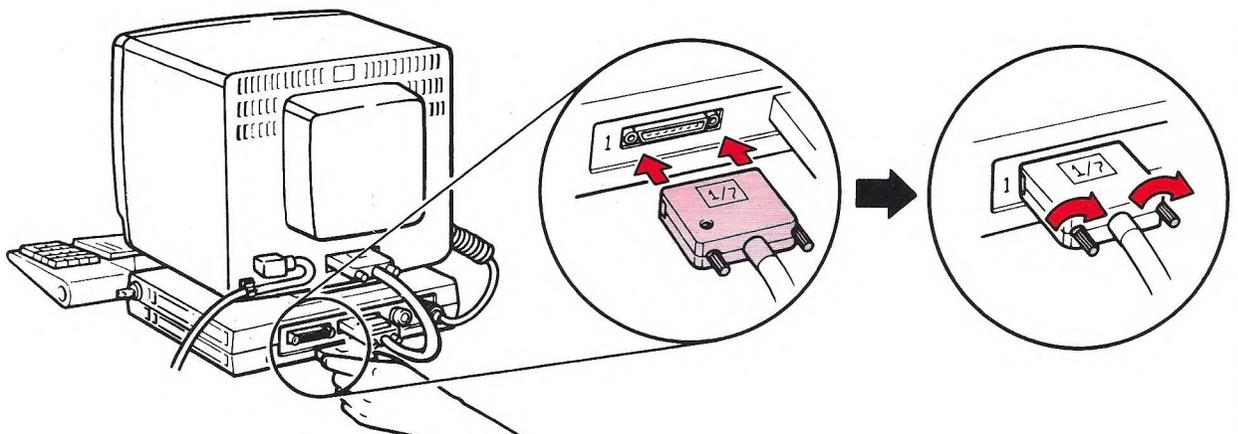
- a** Set the power switch of the display station and the printer to O(Off).



- b** Insert the printer cable into the connector of the printer and pinch the clamps.

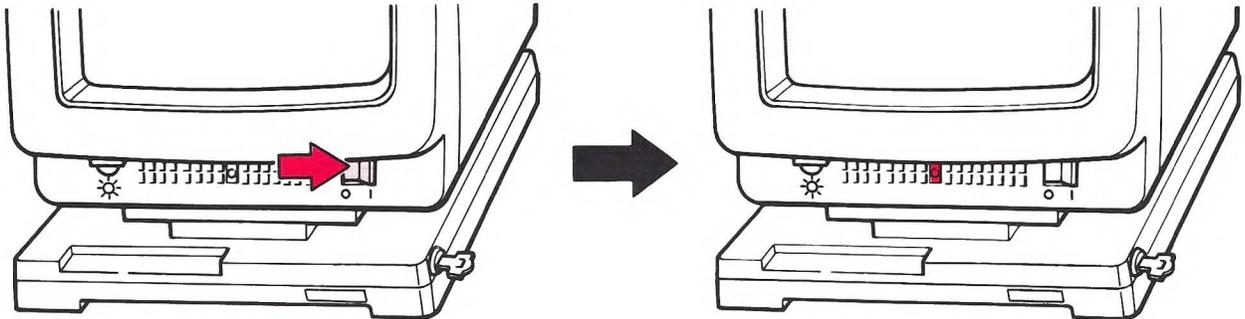


- c** Insert the other end of the printer cable into connector 1 of the logic element and tighten the screws.

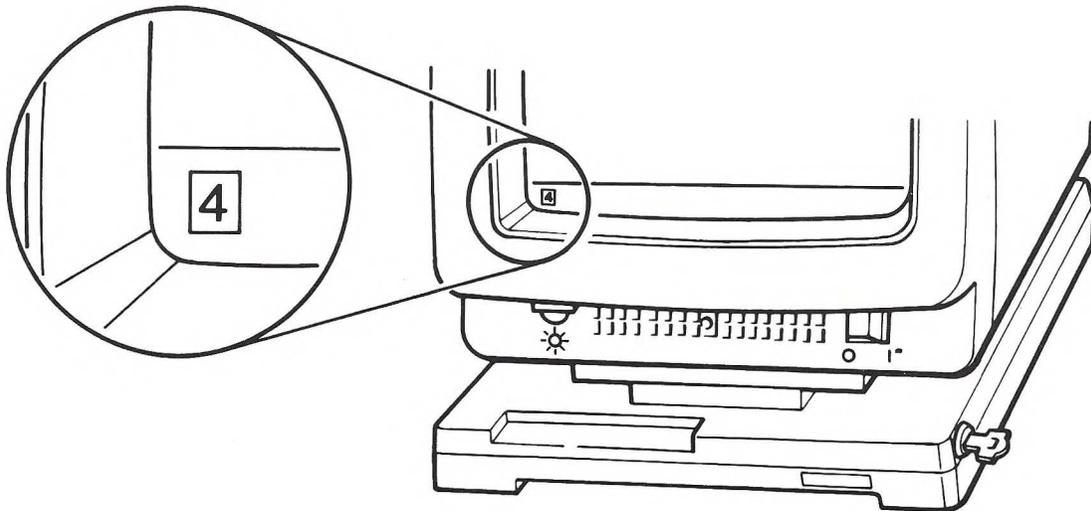


## A2. Check communication

- a** Set the power switch of the display station to I (On). The power-on light should come on, and about 12 seconds later you should hear the alarm.



- b** About 2 minutes later, the symbol  or S appears at the bottom left of your screen.

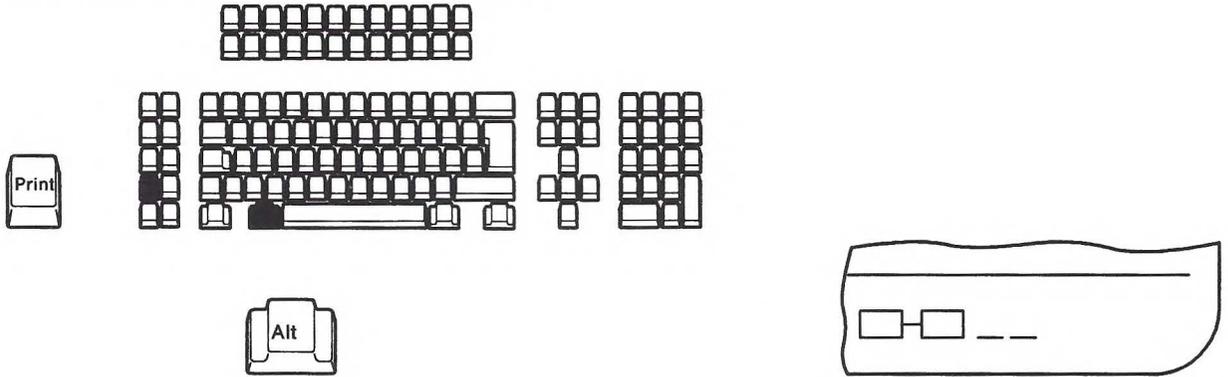


*Note:* If a  or an S does not appear, call the person responsible for the control unit or the host system.

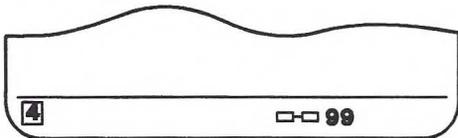
# A3. Check printer

**a** Check that the power switch is set to I (On), the paper is in the printer, and the Ready lamp is on.

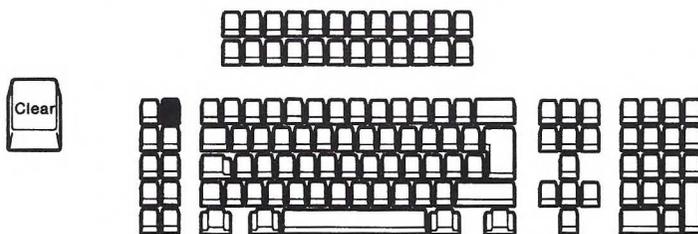
**b** Press and hold the ALT key, then press the Print key. You should see the following at the bottom of the screen.



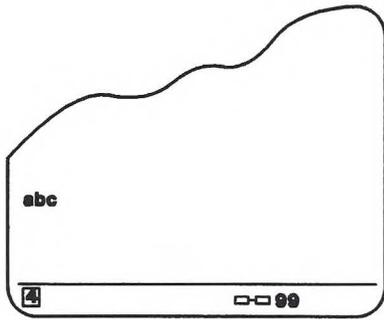
**c** Key in the number 99. The bottom right symbol should now look like this.



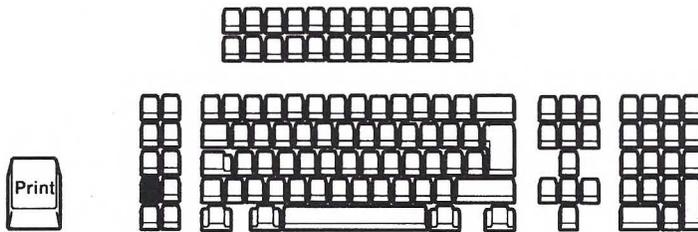
**d** Press the Clear key. The screen will be updated.



- e** Key in any alphanumeric character; for example an a b c. The characters will be displayed on the screen.



- f** Press the Print key. The content of the screen should be printed on the printer.



**Your printer is ready to use.**

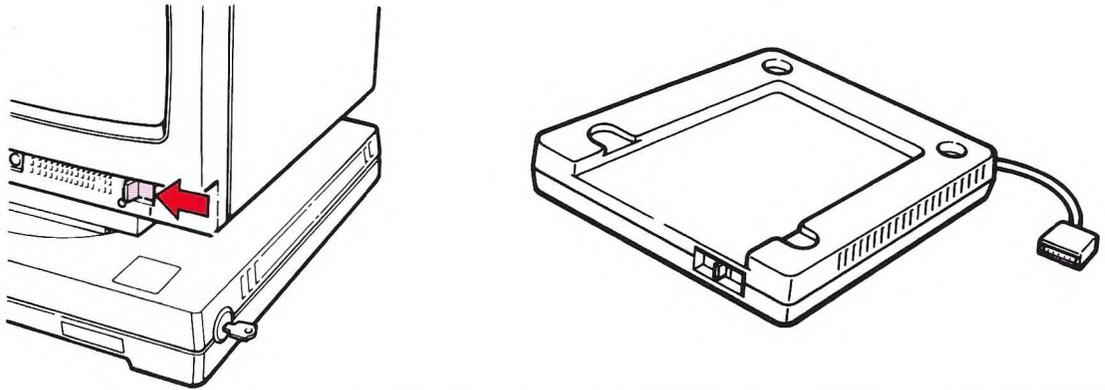
If you have a problem, refer to the *Operator Reference and Problem Solving Guide*.

**If you have an expansion unit with a mouse, plotter, or printer, go to step B1 (page 24).**

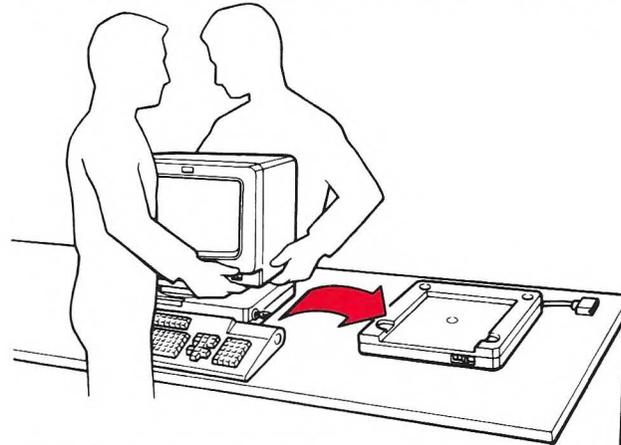
**If you plan to change your keyboard layout, go to step C1 (page 37).**

# B1. Connect expansion unit

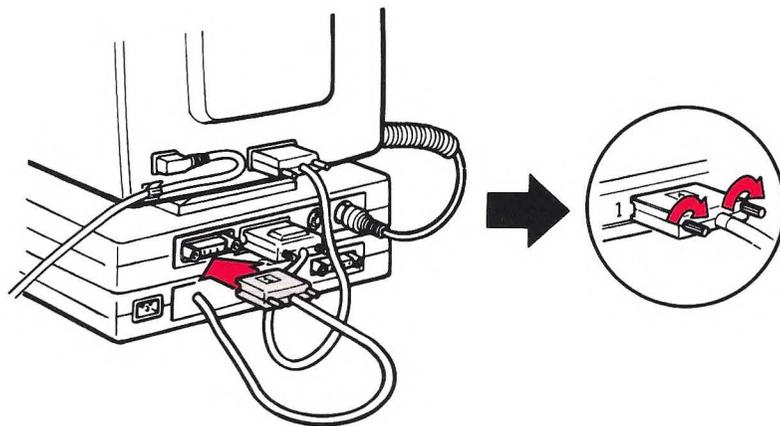
**a** Set the power switch of the display station and the expansion unit to 0 (Off).



**b** With help from another person, hold the video element as shown and lift the display station onto the expansion unit. (Be careful not to pinch your fingers.)

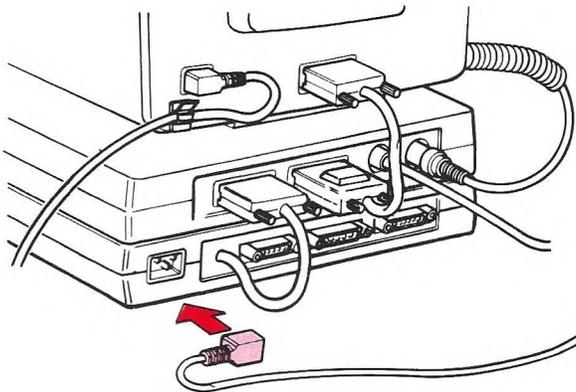


**c** Insert the expansion unit cable into connector 1 of the logic element and tighten the screws.

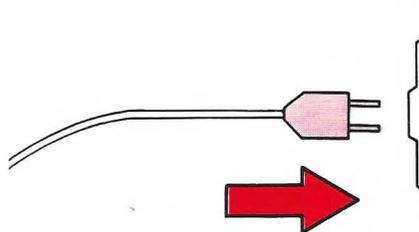


## B2. Connect power cord

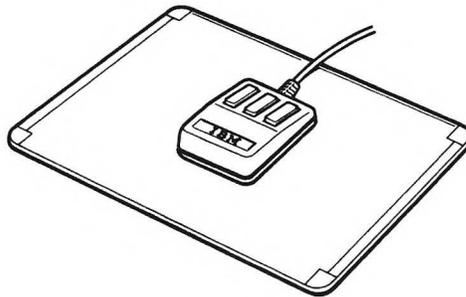
**a** Insert the power cord into the expansion unit.



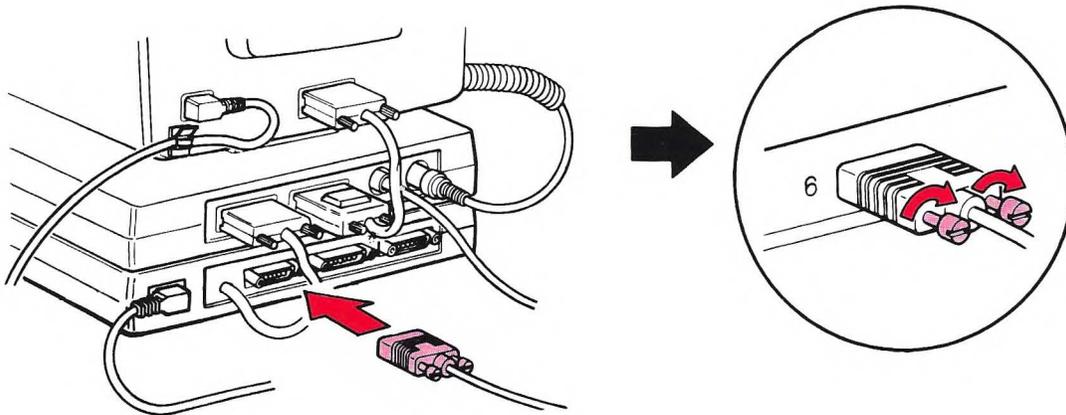
**b** Plug in the power cord to the power outlet.



## B3. Connect mouse



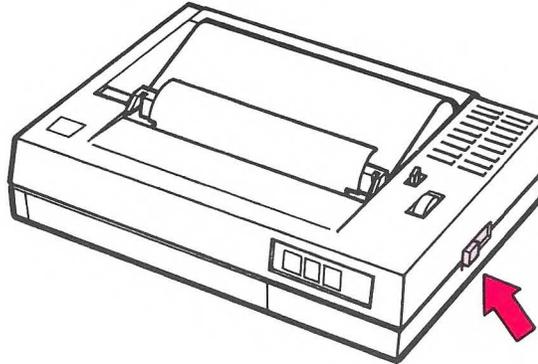
If you have an IBM 5277-1 mouse, insert the cable into connector 6 of the expansion unit and tighten screws.



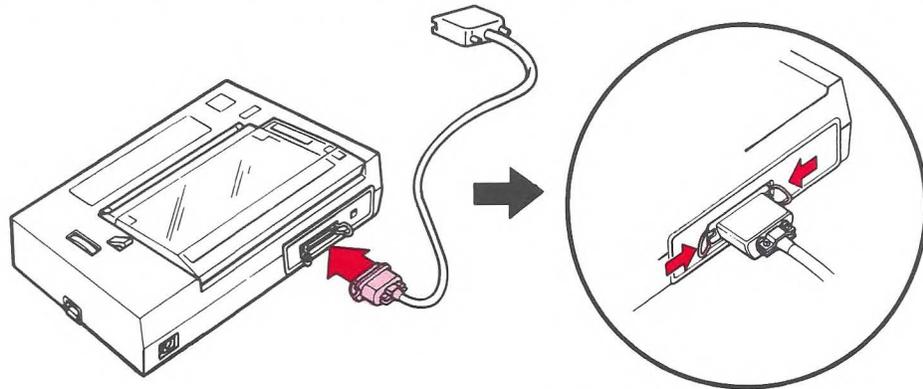
## B4. Connect printer

The figure below uses the IBM 3852-2 Color Jetprinter for the example. Use the printer you plan to attach.

- a** Set the power switch of the printer to O (Off).

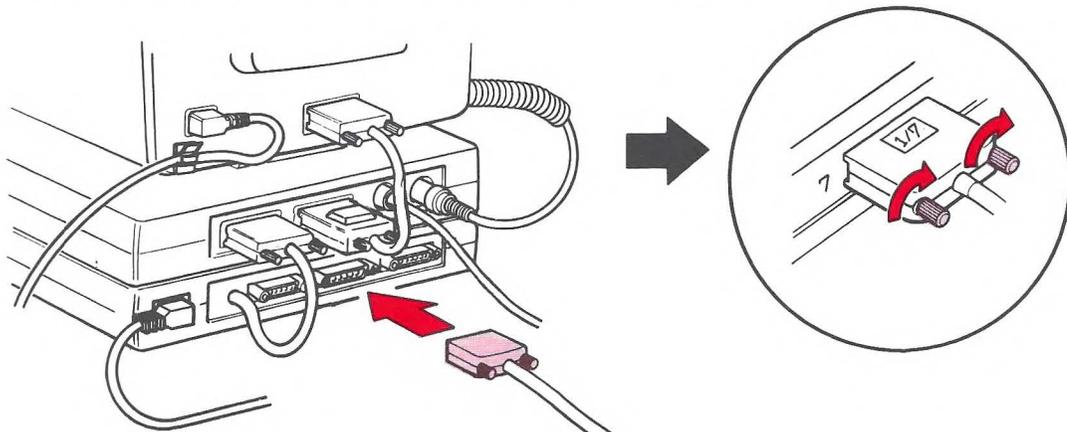


- b** Insert the printer cable into the connector of the printer and pinch the clamps.



Note: Only the unique printer cable (part number 6342058) should be used.

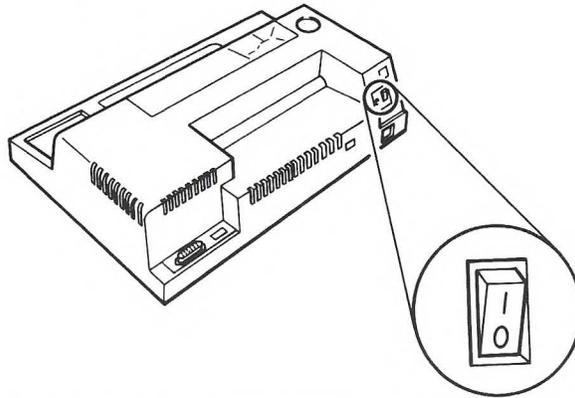
- c** Insert the cable into connector 7 of the expansion unit and tighten the screws.



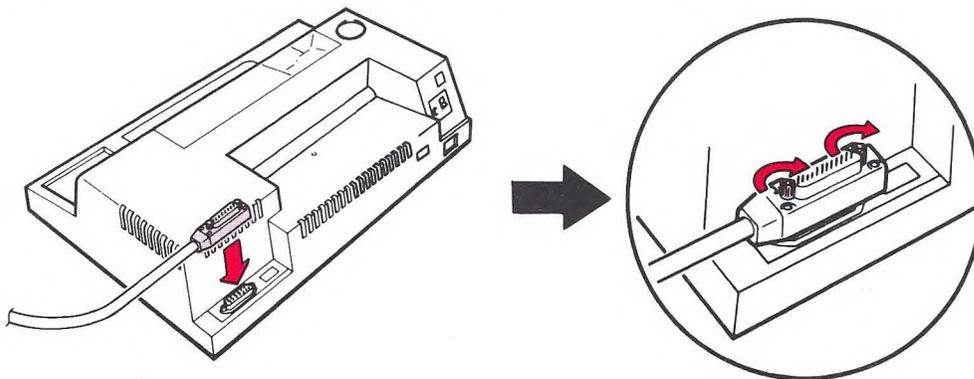
## B5. Connect plotter

The figure below uses the IBM 7372 Color Plotter for the example. Use the plotter you plan to attach.

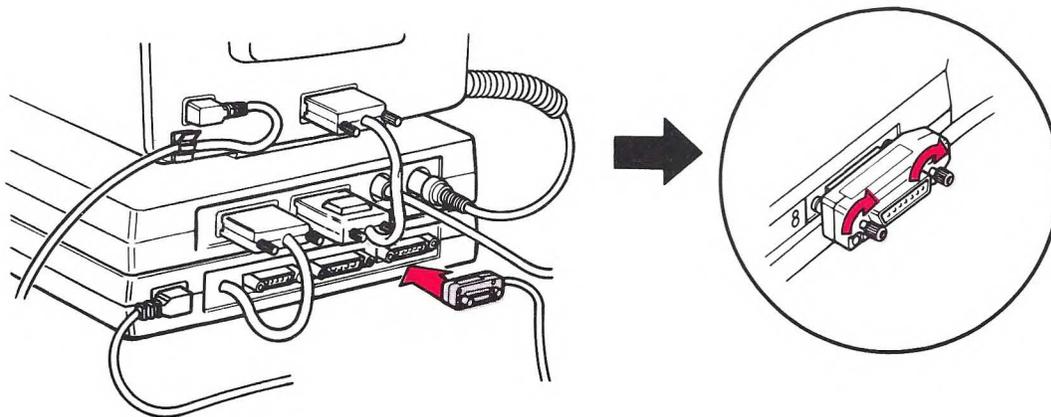
- a** Set the power switch of the plotter to O (Off).



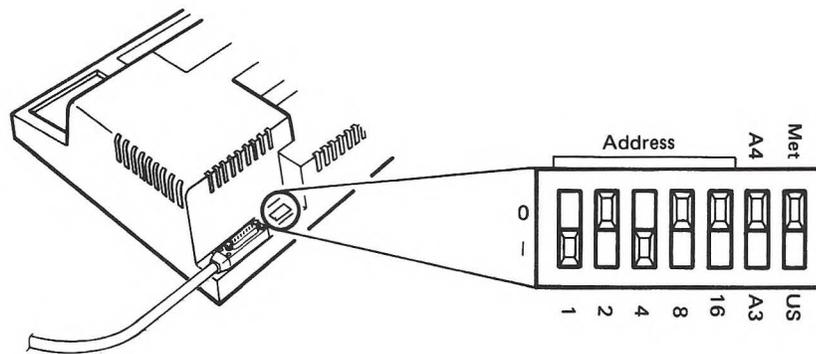
- b** 1. Remove the cap (if present) from the plotter connector.  
2. Insert the plotter cable into the plotter connector, and tighten the screws.



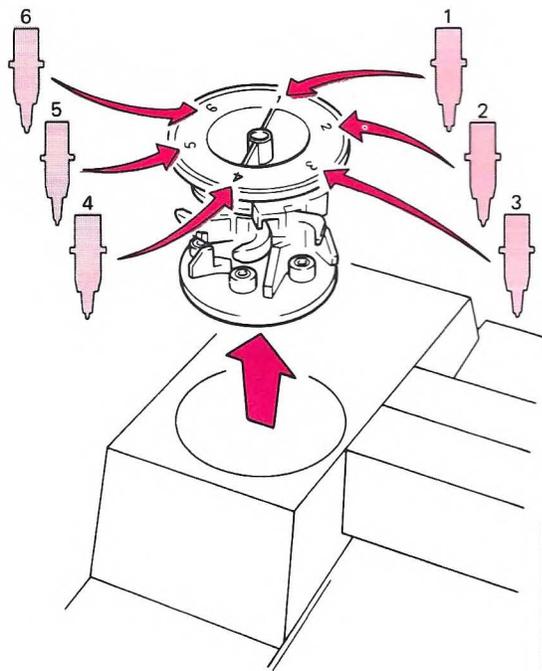
- C** Insert the cable into connector 8 of the expansion unit and tighten screws.



- d** Set the address switches marked '1' and '4' to I(On) and the other address switches to O(Off). Do not use a pencil.



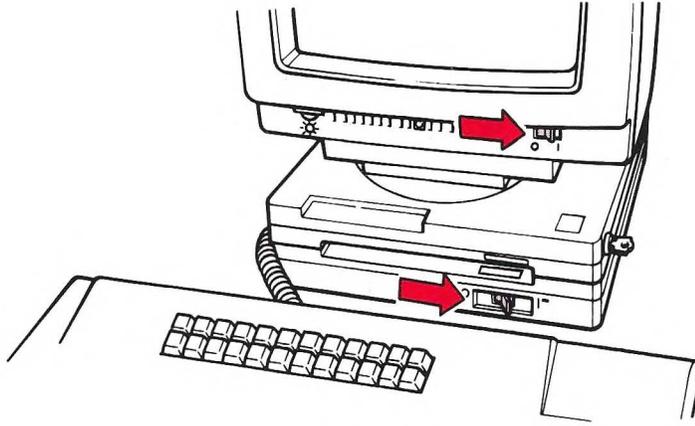
- e** Check pens using the following table:



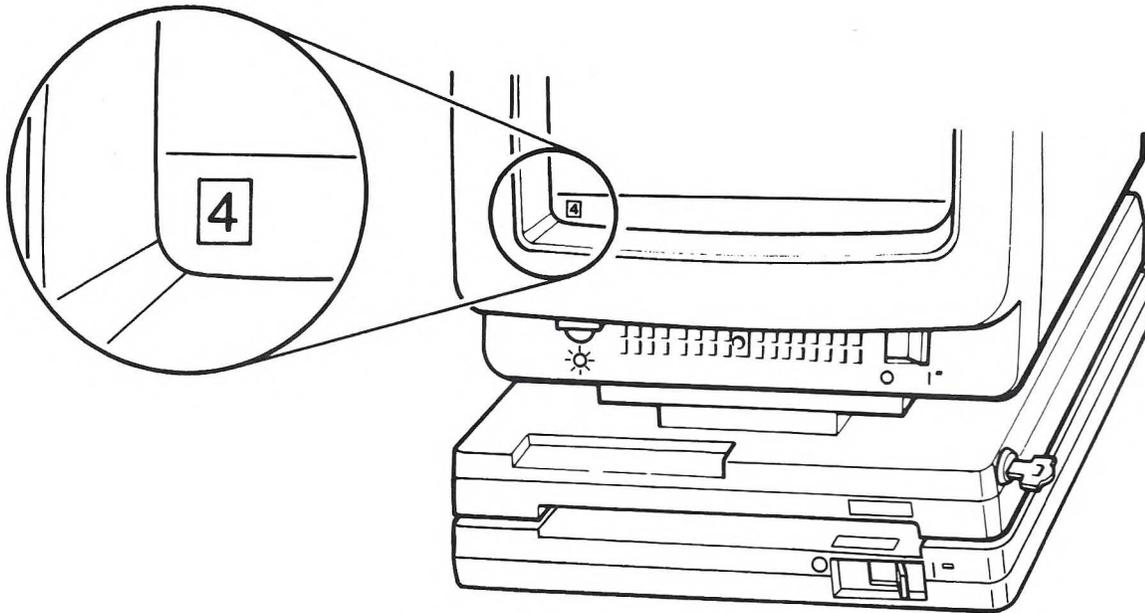
Pen Position No.	2-pen Plotter	6-pen Plotter	8-pen Plotter
1	Blue (left)	Blue	Black
2	Red (right)	Red	Red
3	-	Pink	Blue
4	-	Green	Gold
5	-	Turquoise	Green
6	-	Black	Violet
7	-	-	Turquoise
8	-	-	Burnt Orange

## B6. Power-on display station and expansion unit

- a** Set the power switch of the display station and the expansion unit to I (On).



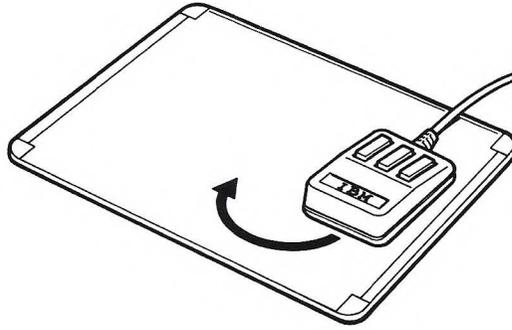
- b** About 2 minutes later, the symbol  or S appears at the bottom left of your screen.



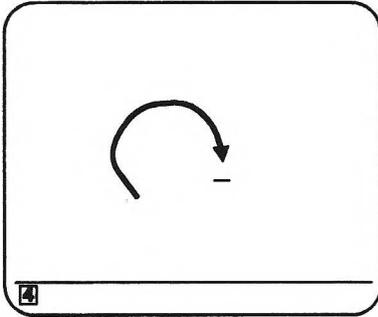
*Note:* If a  or S does not appear, call the person responsible for the control unit or the host system.

## B7. Check mouse

- a** Move the mouse in circles on the pad several times.



- b** Make sure that the cursor on the screen moves like the mouse on the pad.



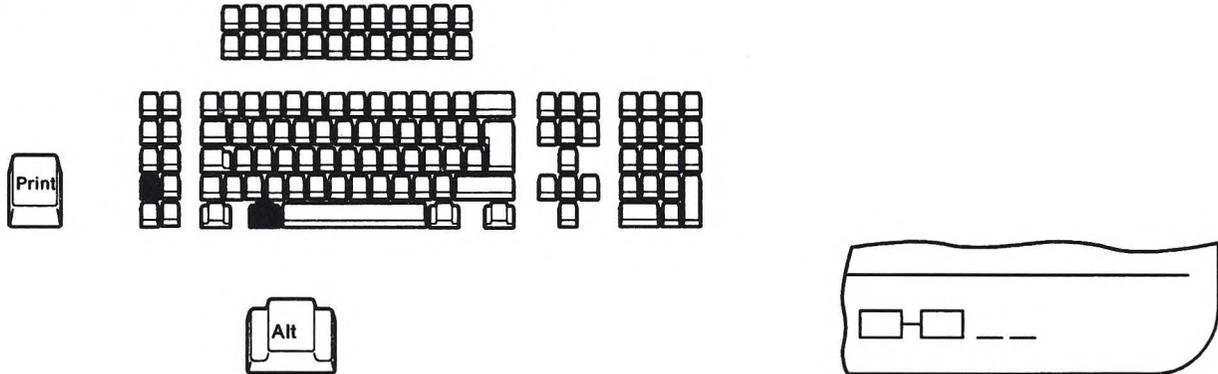
**Your mouse is ready to use.**

If you have a problem, refer to the *Operator Reference and Problem Solving Guide*.

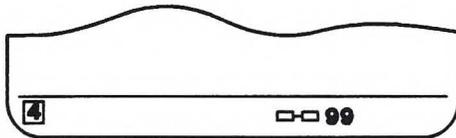
## B8. Check printer

- a** Check that the power switch is set to I (On), the paper is in the printer, and the Ready lamp is on.

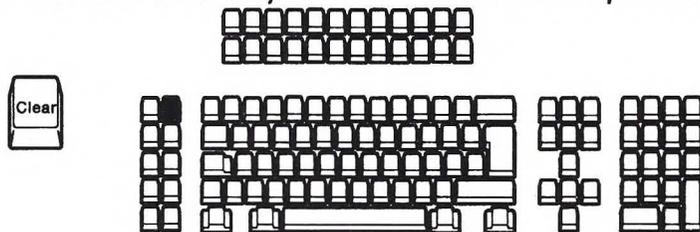
- b** Press and hold the ALT key, then press the Print key. You should see the following at the bottom of the screen.



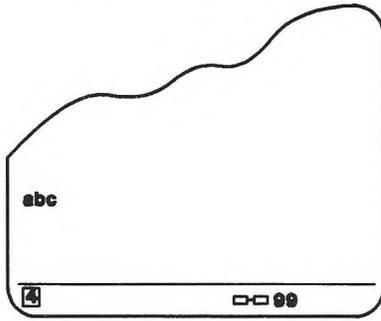
- c** Key in the number 99. The bottom right symbol should now look like this.



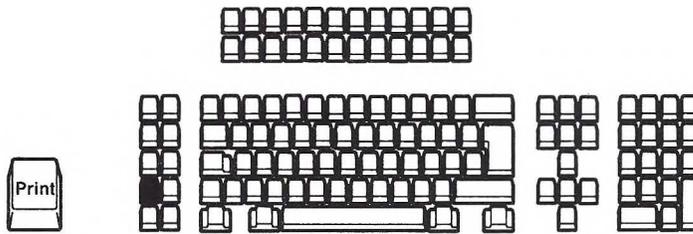
- d** Press the Clear key. The screen will be updated.



- e** Key in any alphanumeric character; for example a b c.  
The characters will be displayed on the screen.



- f** Press the Print key. The content of the screen should be printed on the printer.



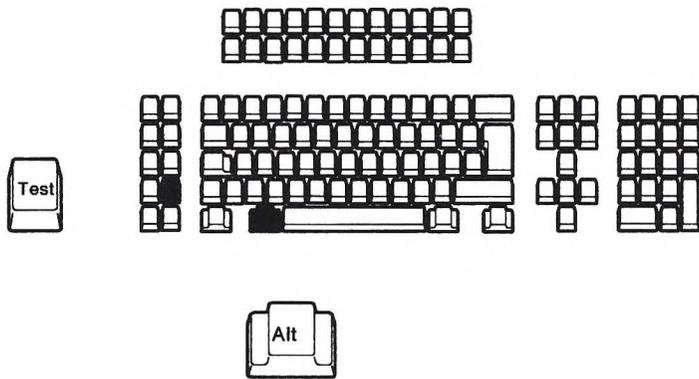
**Your printer is ready to use.**

If you have a problem, refer to the *Operator Reference and Problem Solving Guide*.

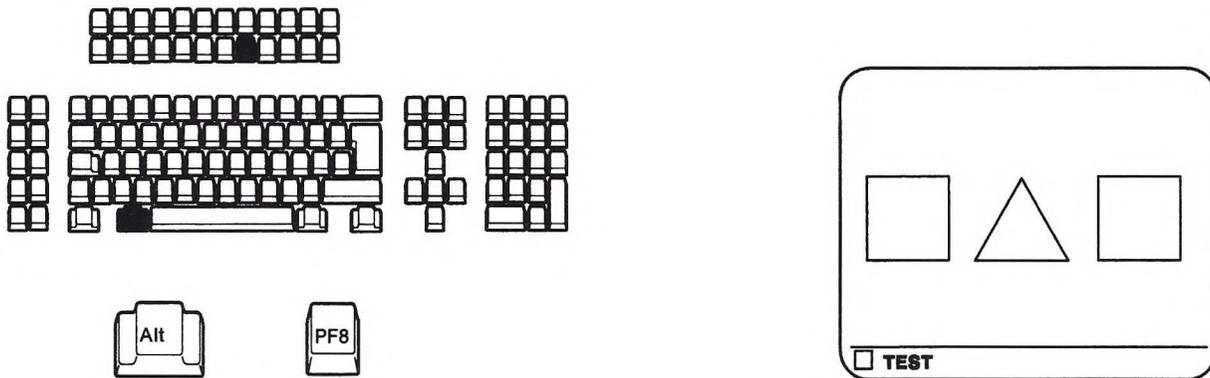
# B9. Check plotter

**a** Check that the power switch is set to I (On), the paper is in the plotter, and the Ready lamp is on. (IBM 7371/7372 does not have the Ready lamp.)

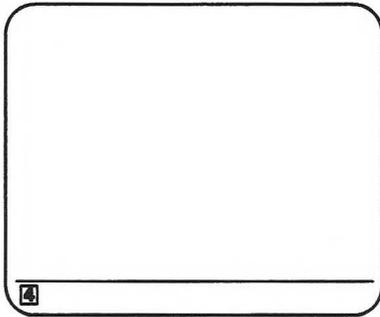
**b** Press and hold the ALT key, then press the Test key. The terminal enters Test mode and you will see TEST at the bottom left of the screen.



**c** Press and hold the ALT key, then press the PF8 key. You will see the following figure on the screen and almost instantly the screen content will be plotted on your plotter.



- d** Press and hold the ALT key, then press the Test key. The display station will exit Test mode and a  or S will appear at the bottom left of the screen in a few seconds.



**Your plotter is ready to use.**

If you have problem, refer to the *Operator Reference and Problem Solving Guide*.

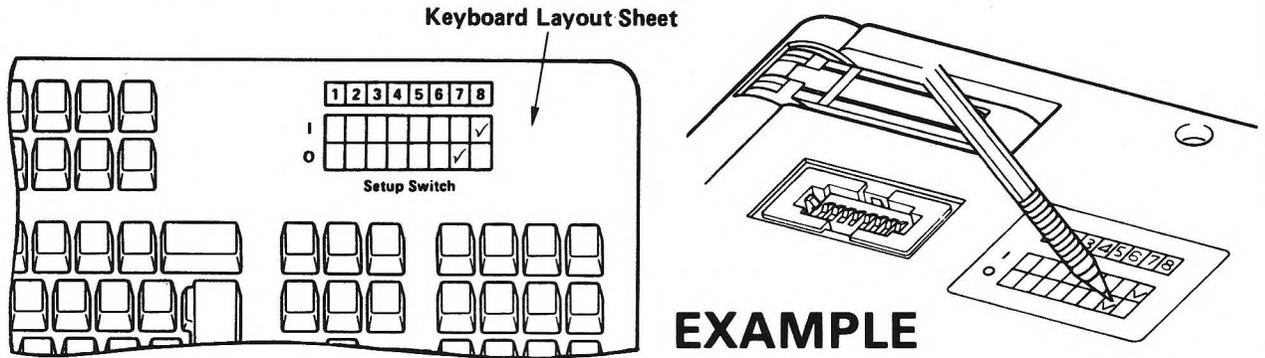
**If you plan to change your keyboard layout, go to step C1 (page 37).**

# C1. Change keyboard layout

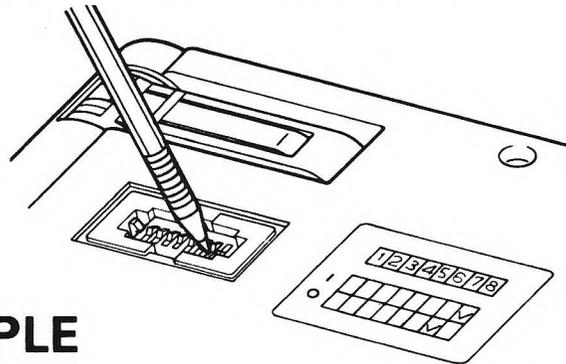
If a keyboard layout change is required, get a copy of the keyboard layout sheet from your supervisor (or the person responsible for the system configuration) for the keyboard layout change and do the following steps.

*Note:* Keyboard Definition Function is described in Chapter 6 of *IBM 3179-G/3192-G Color Graphics Display Station Description, GA18-2589*.

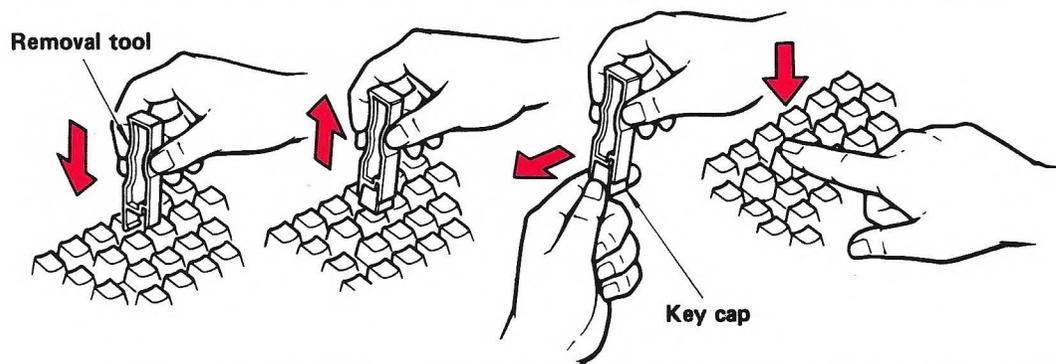
- a** Mark the label on the bottom of the keyboard as it appears on the copy of the keyboard layout sheet.



- b** Set the switches as shown on the copy of the keyboard layout sheet. Use a pointed object like a ball point pen. Do not use a pencil.



- c** If specified on the copy of the keyboard layout sheet, change key caps.



GA18-2590-1

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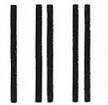
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IBM 3192-G Color Graphics Display Station and IBM 3979 Expansion Unit Setup Instructions Printed in U.S.A. GA18-2590-1

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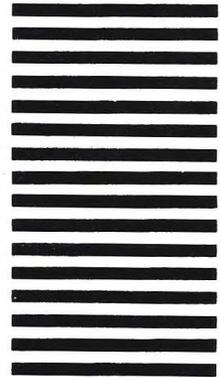
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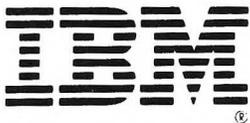
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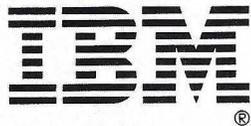
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