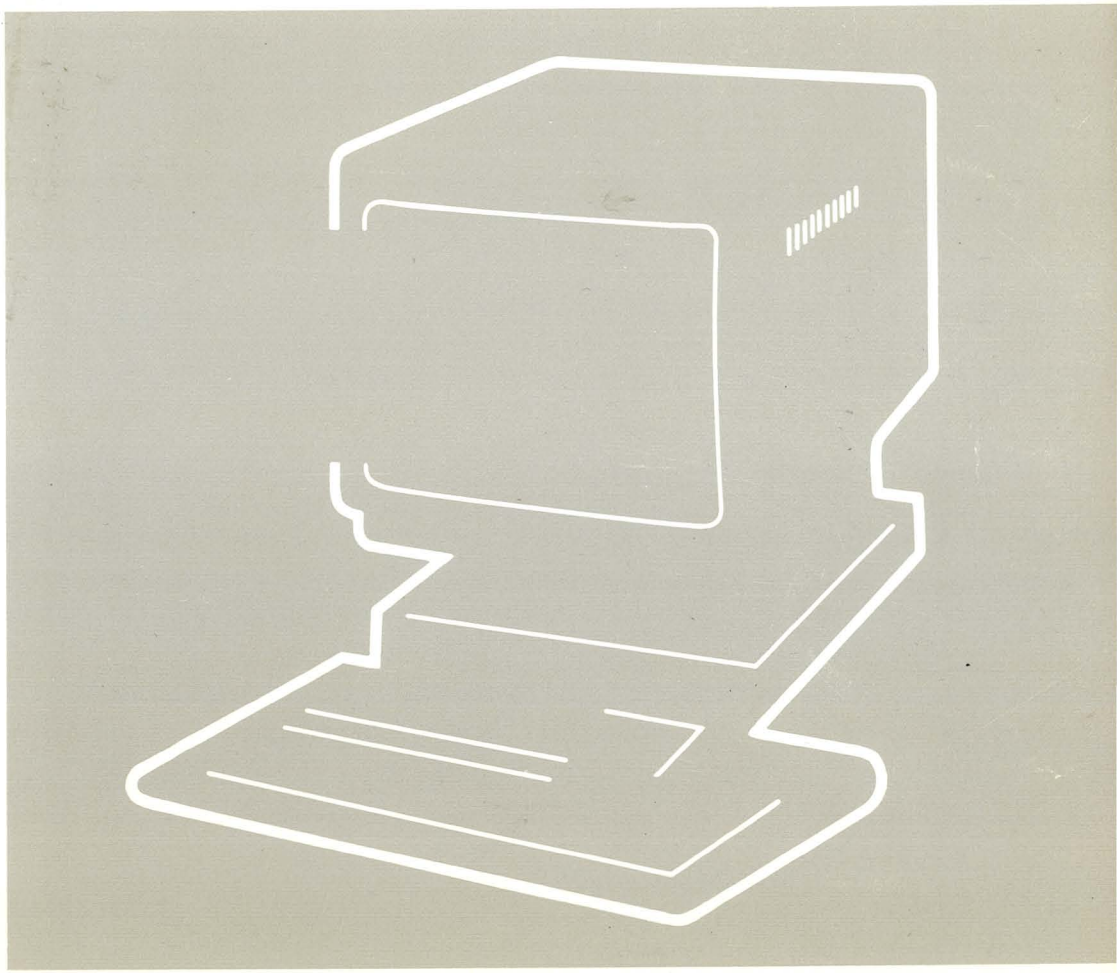
IBM 3196 Display Station

Setup Instructions



IBM

GA18-2488-2
Part Number 81X5374

IBM 3196 Display Station

Setup Instructions

GA18-2488-2
Part Number 81X5374
File Number S5250/36/38-06

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.

SAFETY PRECAUTION

An improperly wired outlet or plug can place hazardous voltages on accessible metal parts of this display station. The power cord and plug (when supplied) on your display station have been approved for use with this display station and meet the necessary testing laboratory/test house standards. For your safety, the power cord and plug must be connected to a properly wired and grounded outlet. The customer is responsible for the outlet and plug wiring.

If it becomes necessary to change power cord or plug or if the outlet is improperly wired, have the change made by a qualified electrician according to local or national code. A new power cord may be ordered from your IBM sales representative.

Third Edition (April 1987)

This major revision obsoletes GA18-2488-1. Changes are made occasionally to the information herein; any such changes will be reported in subsequent revisions.

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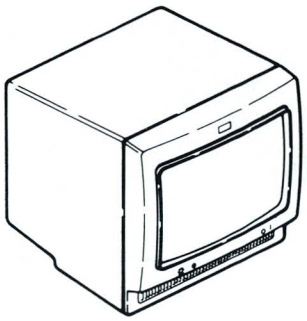
Section 1. Inventorying the Elements

No tools are necessary for setting up your display station.

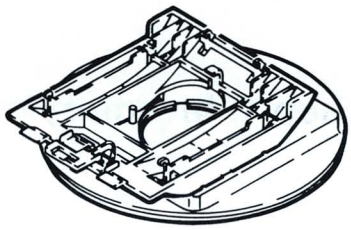
If you have any problems in setting up the IBM 3196 Display Station, see the *IBM 3196 Display Station Problem Solving Guide*, GA18-2483.

Check each box (☐) as you unpack and identify each item.
If any are missing, call your IBM marketing representative.

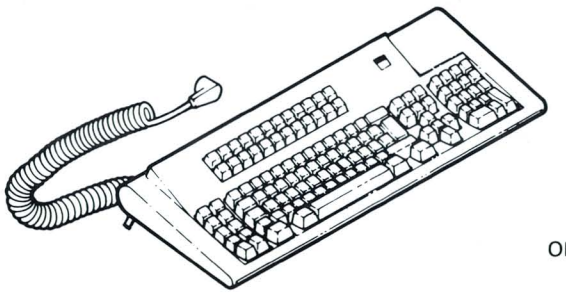
☐ Video Element



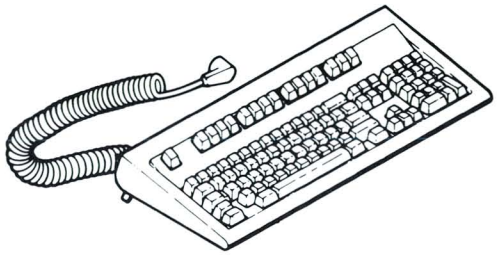
☐ Video Stand



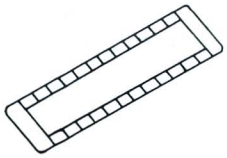
☐ Keyboard

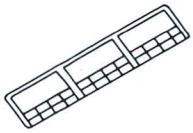


OR

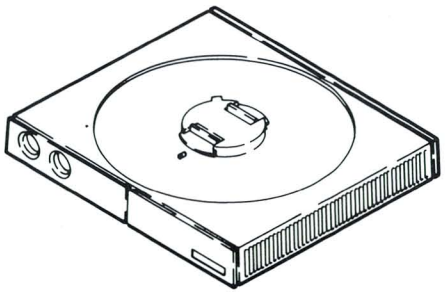


☐ Keyboard Overlay

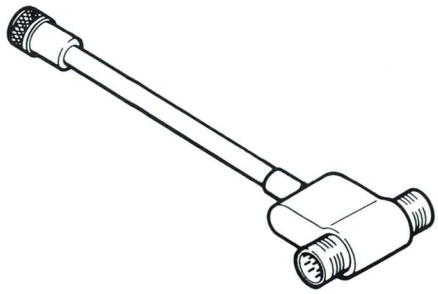




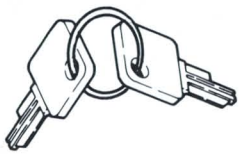
☐ Logic Element



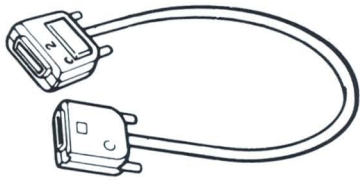
☐ Auto-Termination Unit



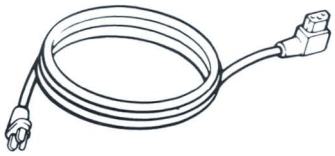
☐ Security Keys
(inserted in the logic element)



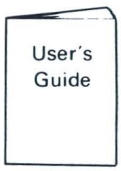
☐ Video Cable



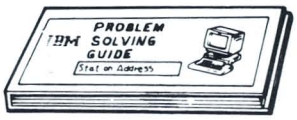
☐ Power Cord



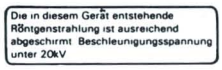
☐ IBM 3196 Display Station
User's Guide,
GA18-2482



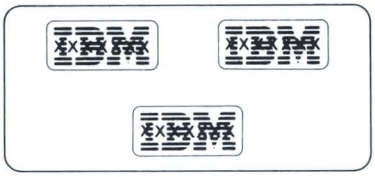
☐ IBM 3196 Display Station
Problem Solving Guide,
GA18-2483



☐ X-ray Label
(Germany Only)



☐ Repair Identification (RID) Tags
(located on the underside of the
logic element)



☐ Safety Label
(Spain Only)

Notes:

1. *Save all packaging material for use if service is required.*
2. *Record the security key identification number in case the keys are lost and replacement is needed.*
3. *Store one of the security keys in a safe place.*

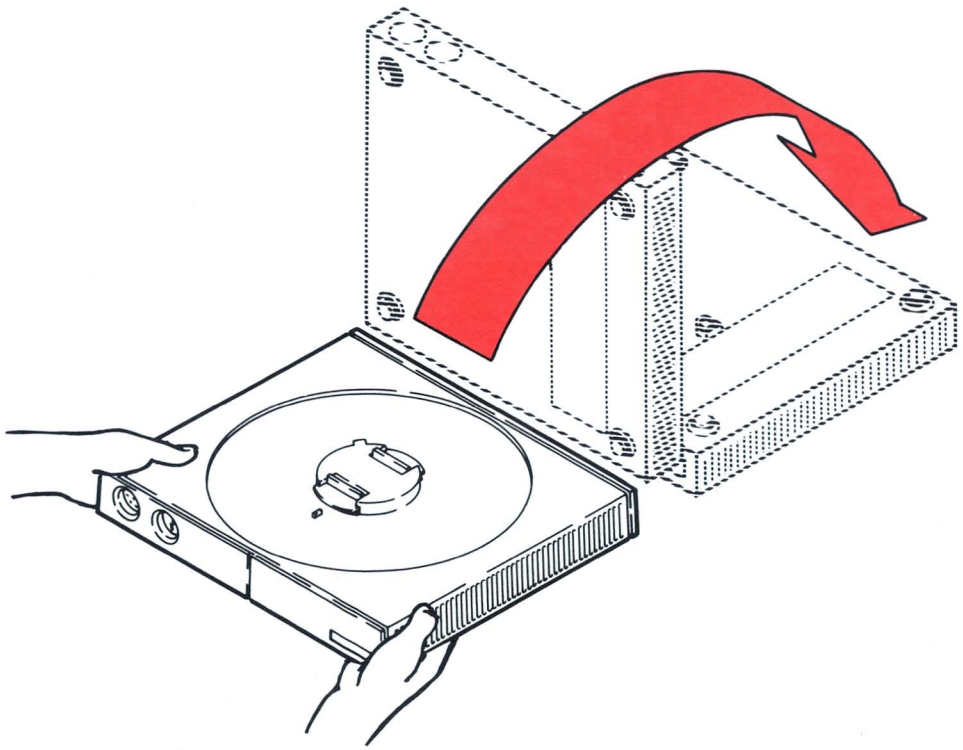
Section 2. Setting Up the Display Station

Be sure you have met the installation requirements of the *IBM 3196 Display Station Description,* **GA18-2481, and the** *IBM 5250 Information Display System Planning and Site Planning Guide,* **GA21-9337, before setting up your display station.**

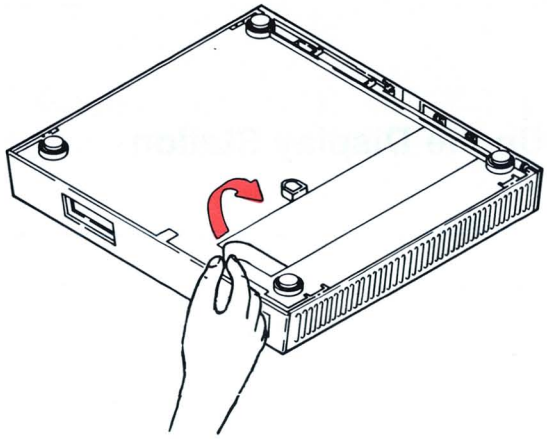
2.1 ATTACHING THE TAGS TO YOUR VIDEO ELEMENT, LOGIC ELEMENT, AND KEYBOARD ELEMENT.

Note: IBM uses the Repair Identification (RID) tags to determine the maintenance status of your display station. Without these tags, service may be delayed or unobtainable.

2.1.1 Turn the logic element upside down.



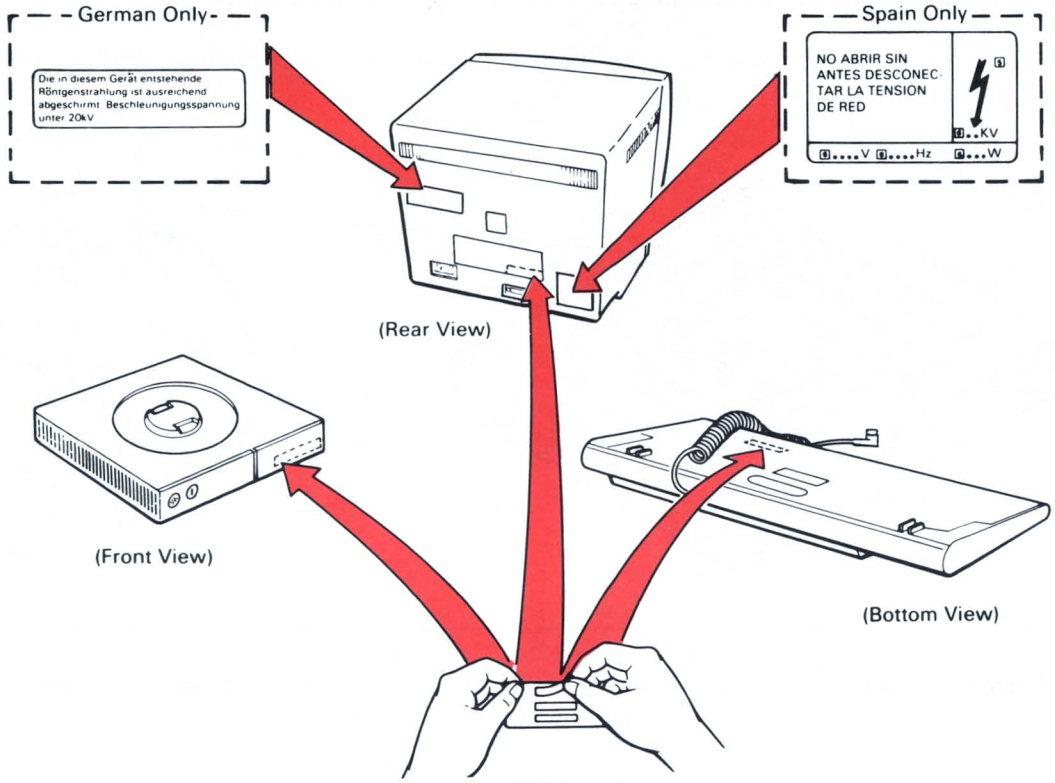
2.1.2 Remove the tags from the underside of the logic element.



Note: The tags and their location may not appear exactly as shown.

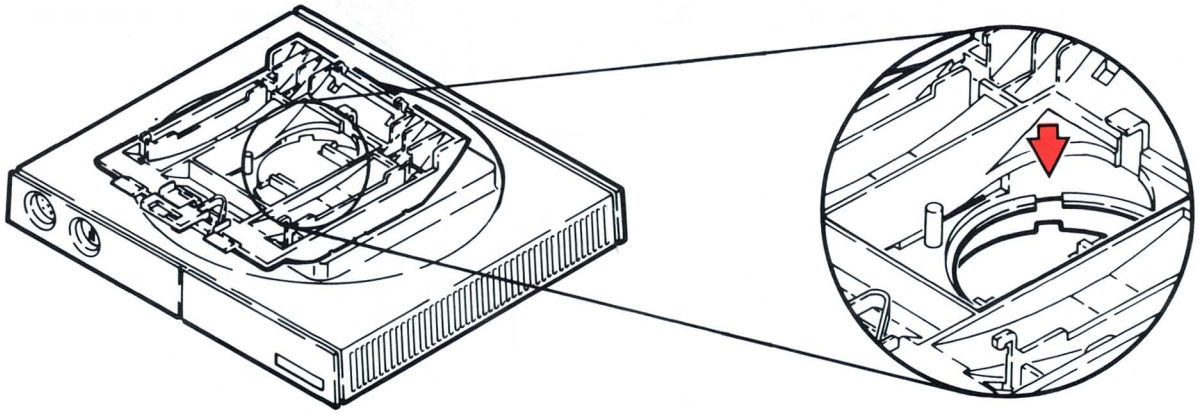
2.1.3 Turn the logic element right side up.

2.1.4 Peel off the tags and place one on each of the elements in the locations shown below.

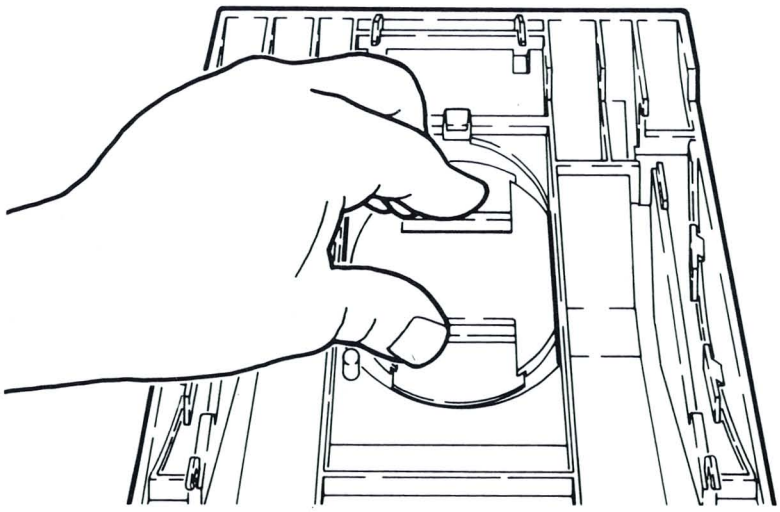


2.2 ATTACHING THE VIDEO STAND TO THE LOGIC ELEMENT.

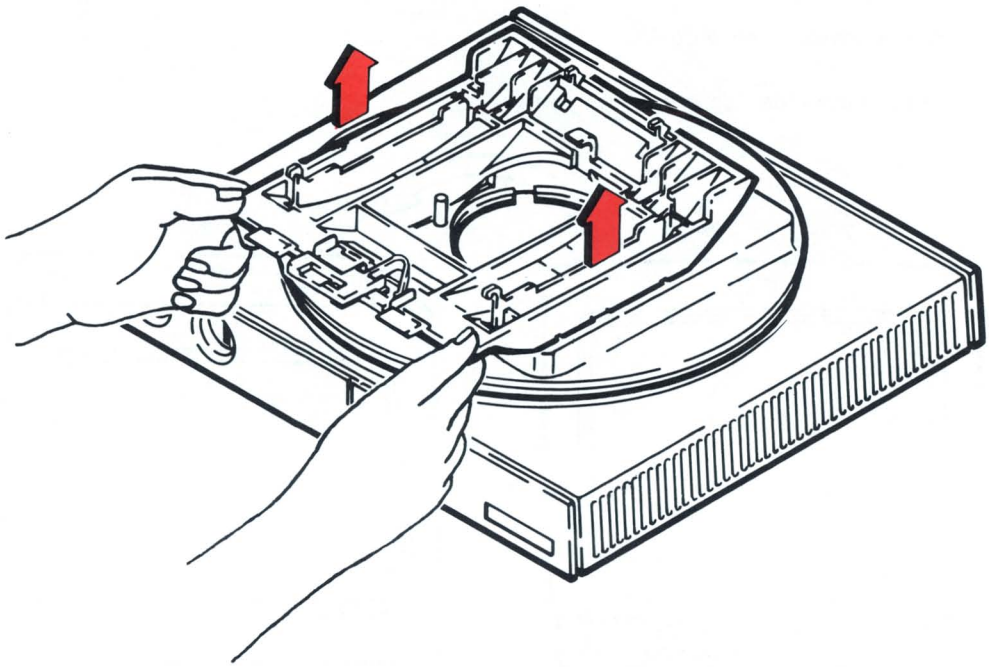
2.2.1 Place the circular portion of the video stand in the circular recess on top of the logic element, and align the notch and tab.



2.2.2 Pinch in the two latches to lock the video stand into the logic element; then release the latches.



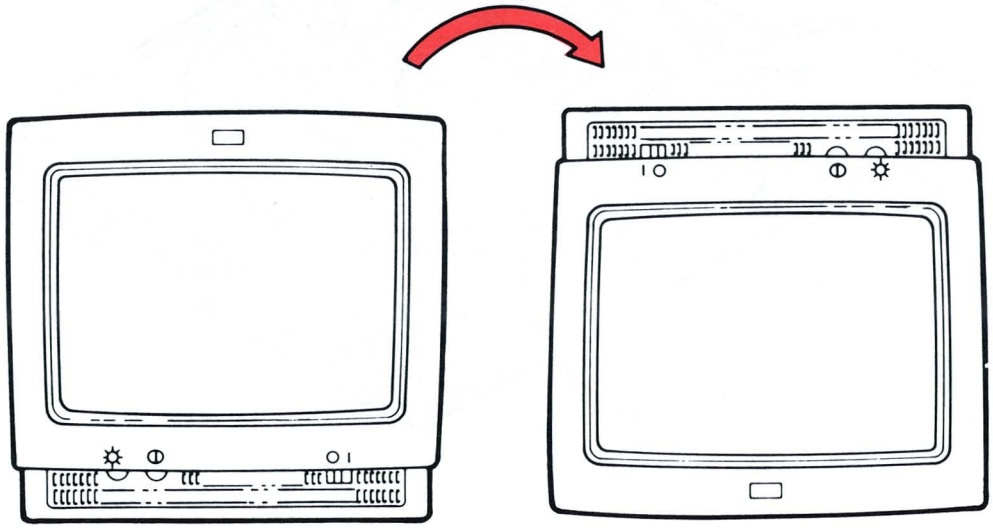
2.2.3 Check the video stand to make sure it is securely locked into the logic element.



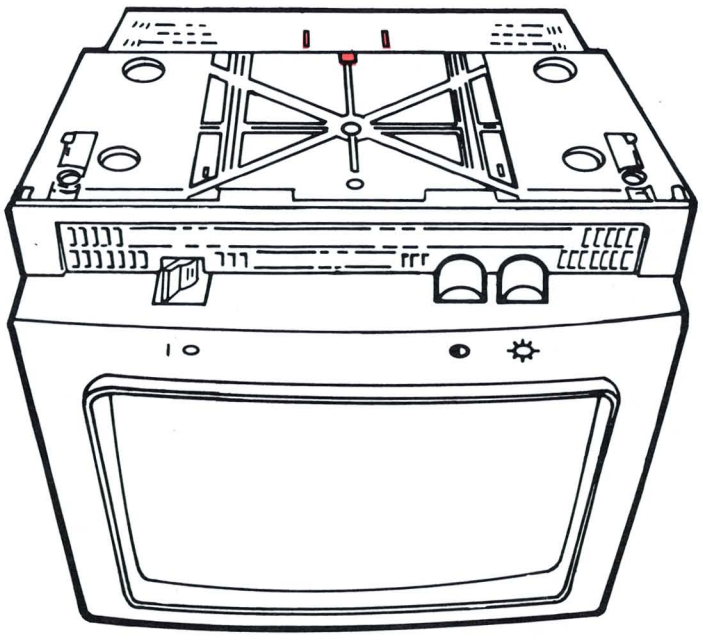
2.3 ATTACHING THE LOGIC ELEMENT TO THE VIDEO ELEMENT.

2.3.1 Turn the video element upside down.

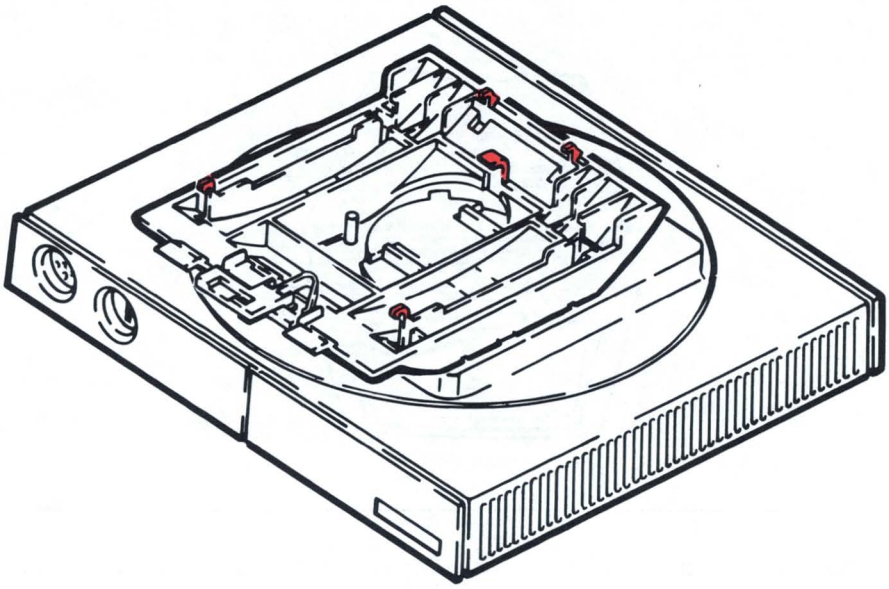
Note: Make sure the video screen faces you.



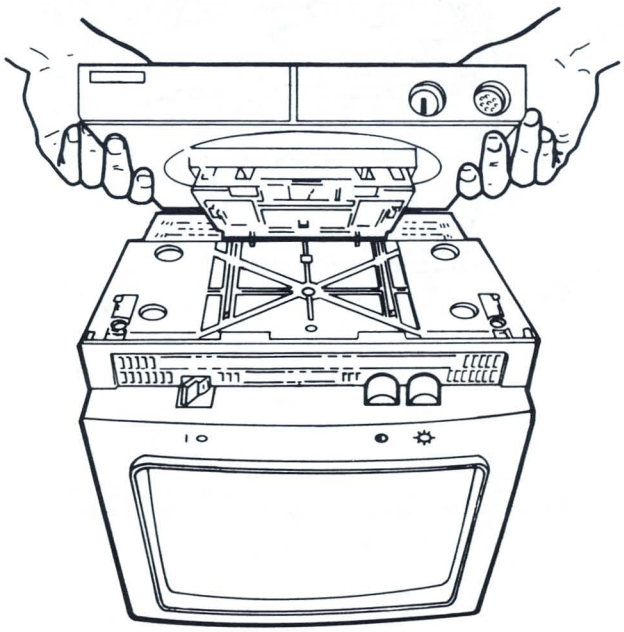
2.3.2 Locate the five slots on the bottom of the video element.



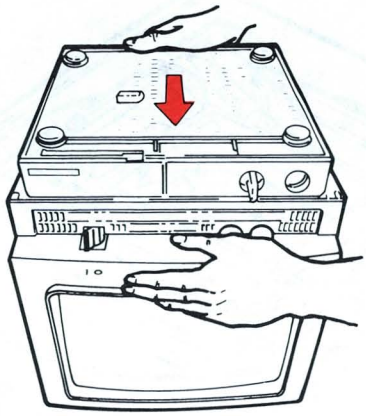
2.3.3 Locate the five hooks on the top of the video stand.



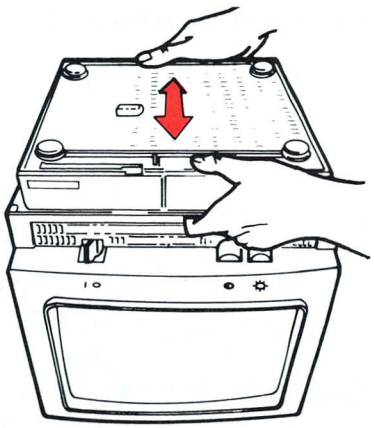
2.3.4 Turn the logic element upside down and insert the five hooks on the video stand into the five slots on the video element.



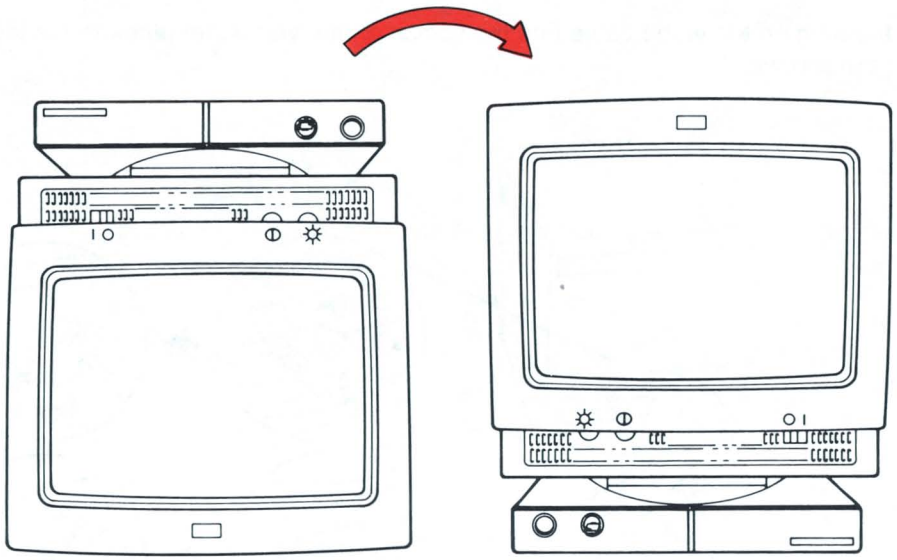
2.3.5 Hold the front side of the video element, and push the logic element forward (in the same direction the screen faces) until the video stand snaps into place.



2.3.6 Make sure the video stand is locked into the video element by trying to move the logic element forward and backward.

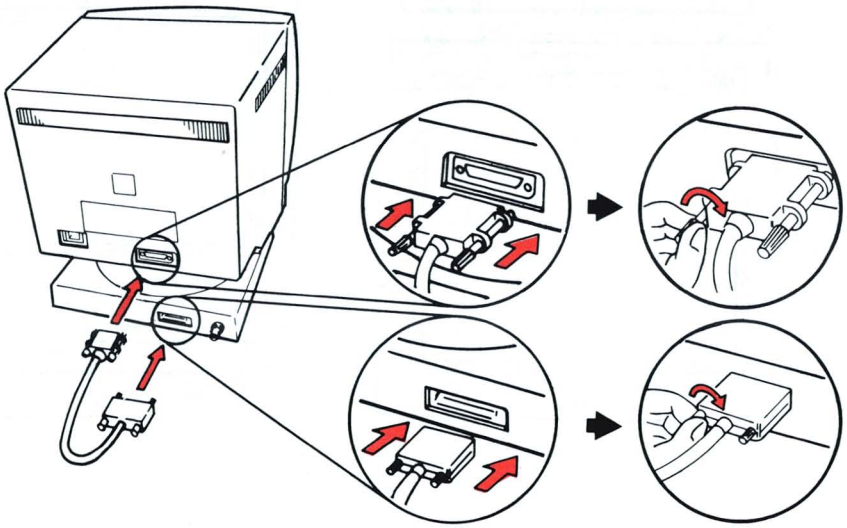


2.3.7 Turn the video element right side up.



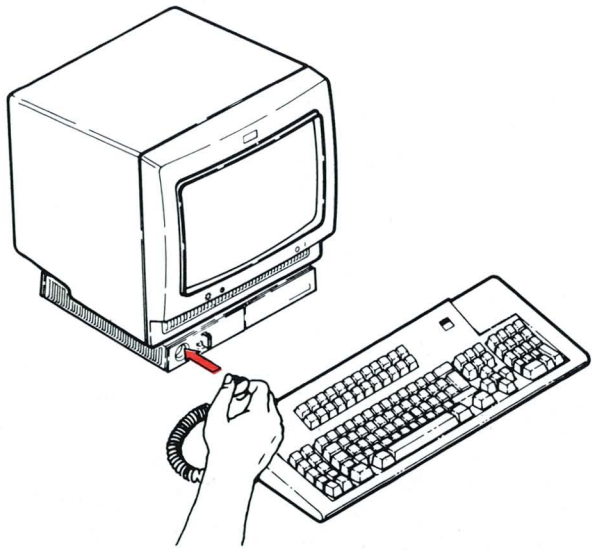
2.4 CONNECTING THE VIDEO AND KEYBOARD CABLES.

2.4.1 Insert the plug on the video cable into the socket on the video element and the logic element, then tighten the screws.



Note: The video cable is permanently attached to some video elements.

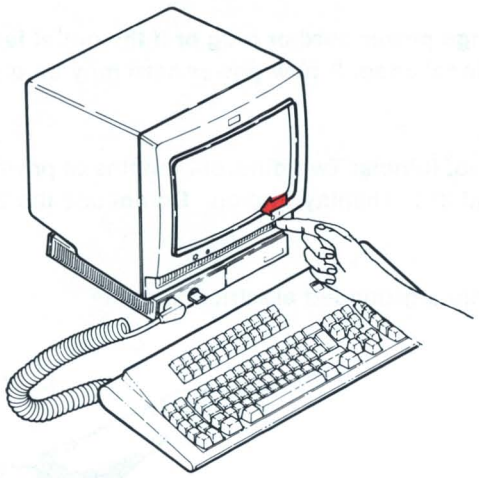
2.4.2 Remove the cap from the keyboard cable plug, hold the plug so that the IBM logo is facing up, then insert the plug into the socket on the front of the logic element.



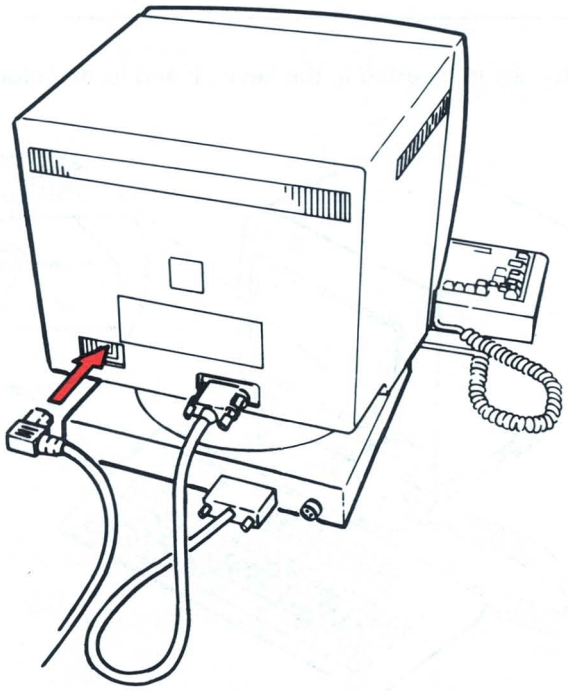
Note: Your keyboard may be different in appearance from the one shown.

2.5 PREPARING THE DISPLAY STATION FOR POWER-ON.

2.5.1 Make sure that the power switch is set to off (O).



2.5.2 Insert the power cord plug into the power socket on the rear of the video element.



SAFETY PRECAUTION

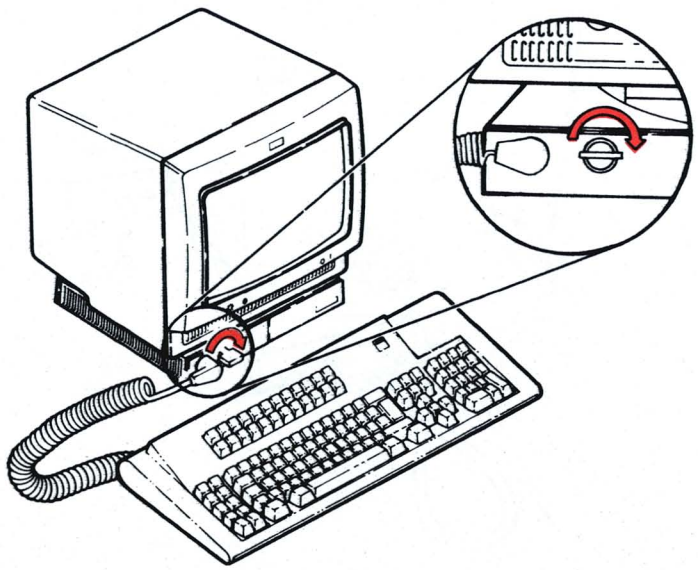
An improperly wired outlet or plug can place hazardous voltages on accessible metal parts of this display station. The power cord and plug (when supplied) on your display station have been approved for use with this display station and meet the necessary testing laboratory/test-house standards. For your safety, the power cord and plug must be connected to a properly wired and grounded outlet. The customer is responsible for the outlet and plug wiring.

If it becomes necessary to change power cord or plug or if the outlet is improperly wired, have the change made according to local or national code. A new power cord may be ordered from your IBM sales representative.

Notice For Customers in Chicago, Illinois: Two different lengths of power cords, 1.8 m (5.9 ft) and 2.8 m (9.2 ft), are shipped with the IBM 3196 Display Station. Do not use the 2.8 m (9.2 ft) power cord; use a 1.8 m (5.9 ft) power cord.

2.5.3 Plug the power cord into a grounded electrical outlet.

2.5.4 Make sure the security key is inserted in the keylock and turned clockwise.

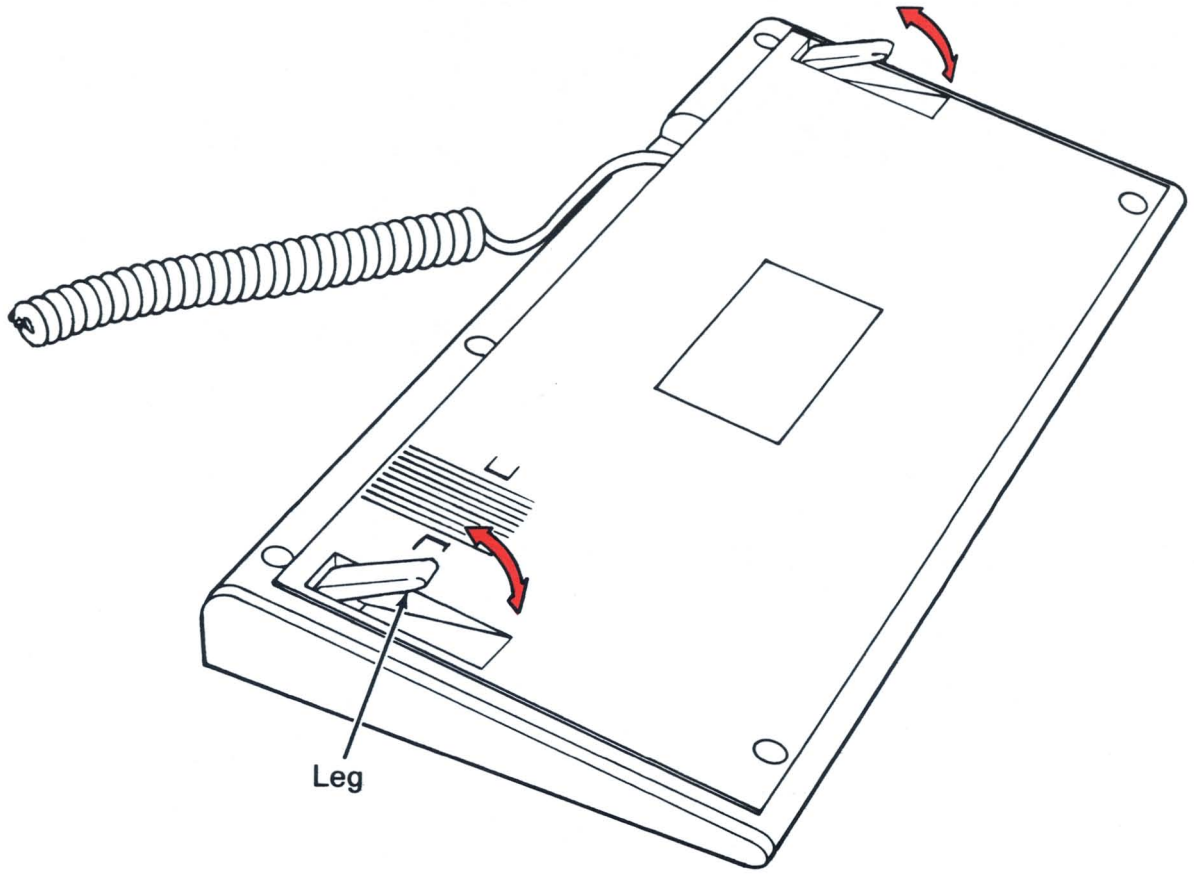


2.6 DISPLAY STATION POWER ON AND ADJUSTMENTS.

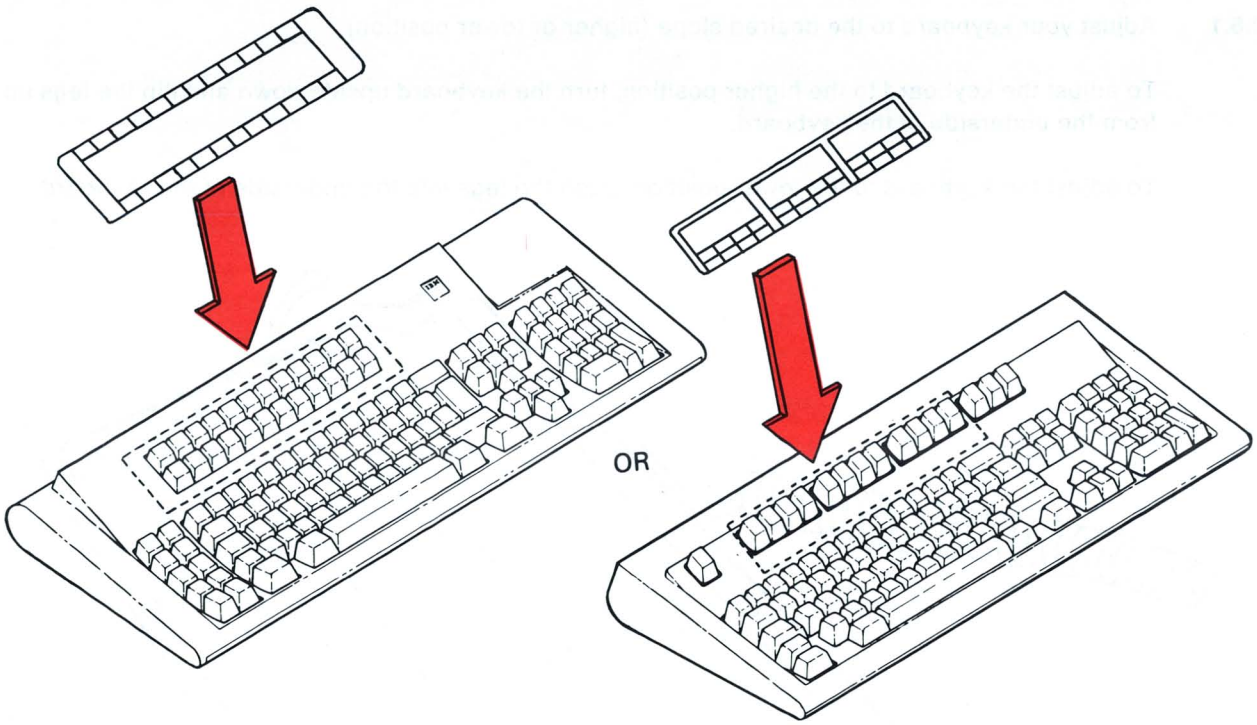
2.6.1 Adjust your keyboard to the desired slope (higher or lower position).

To adjust the keyboard to the higher position, turn the keyboard upside down and flip the legs up from the underside of the keyboard.

To adjust the keyboard to the lower position, push the legs into the underside of the keyboard.

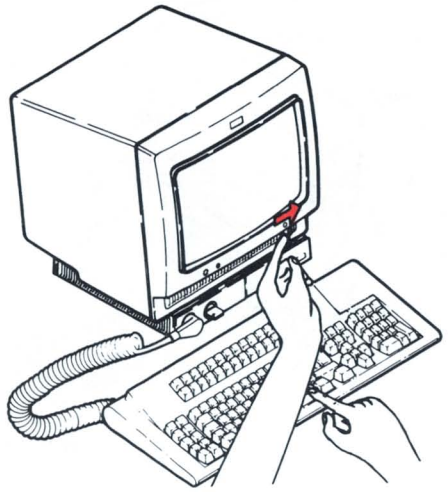


2.6.2 Place the keyboard overlay on your keyboard.

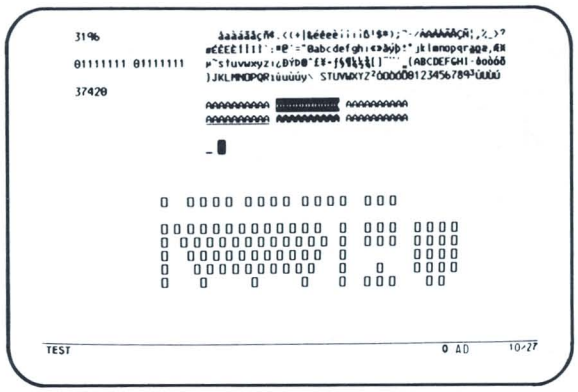


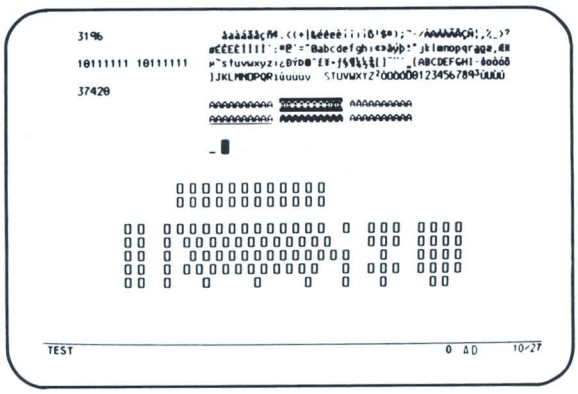
2.6.3 *Press and hold the space bar* and set the power switch to on (I).

Note: Your keyboard may be different in appearance from the one shown.



Continue holding the space bar until one of the following displays appears.



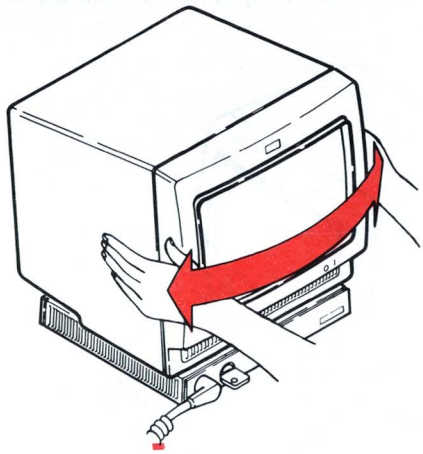


Note: *This "AD" error code is normal if this is the first time that the display station has been powered on since being shipped from IBM. It will reset when the display station address is set.*

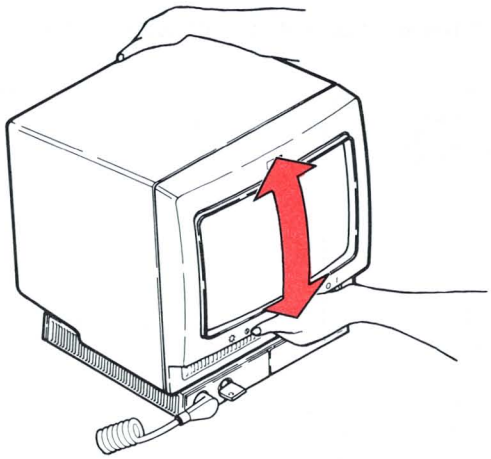
If the correct display does not appear, set the power switch to off (O), and repeat step 2.6.3. If the correct display still does not appear, refer to the *IBM 3196 Display Station Problem Solving Guide*, GA18-2483.

Continue with the setup instructions.

2.6.4 Adjust the video element to the desired viewing position.



To rotate the video element, place your hands on both sides of the video element near the front edge and turn it left or right.

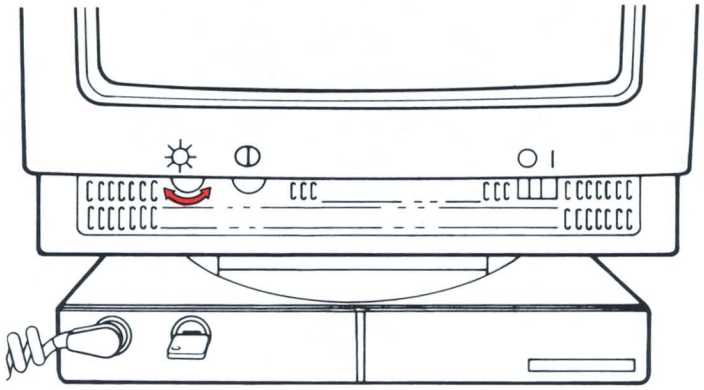


To tilt the video element, place your hands on the upper back edge and front edge of the video element as shown above. Then pull upward or push downward.

2.6.5 Adjust the screen brightness to a comfortable viewing level.

To increase the screen brightness, turn the brightness control clockwise.

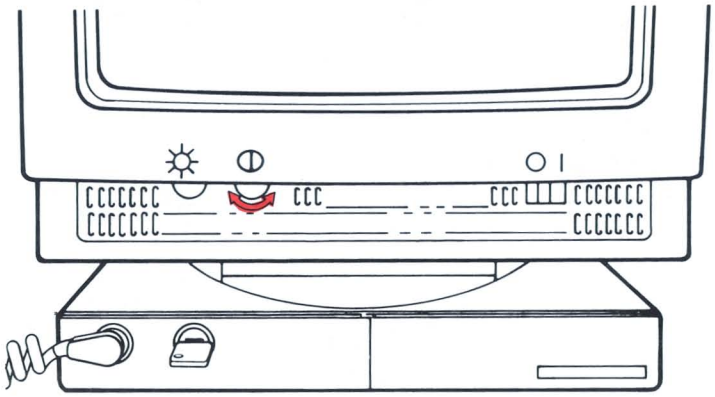
To decrease the screen brightness, turn the brightness control counterclockwise.



2.6.6 Adjust the screen contrast to a comfortable viewing level.

To increase the screen contrast, turn the contrast control clockwise.

To decrease the screen contrast, turn the contrast control counterclockwise.



Section 3. Display Station Configurations

Before entering the display station address, make sure that:

- ☐ The system or workstation controller you are connecting your IBM 3196 to is set up and operating.

  Note: If you are connecting your display station to a 5294 Control Unit, you may be setting up the workstations (display stations and printers) before the workstation controller is set up and operating.

- ☐ You have a floor plan identifying the location and address of your IBM 3196 and any other workstation (display station or printer) that connects to the system or remote workstation controller. The address for each workstation (display station and printer) must be different when workstations are connected together.

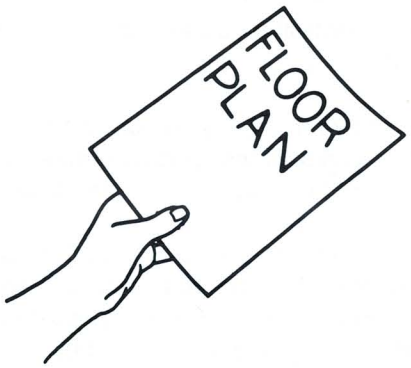
Some Important Points to Remember About Setup

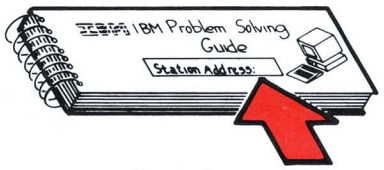
- When you have *more than one* workstation (display station or printer) to set up and they will be connected together, always begin with the workstation that will be connected directly to the system or workstation controller.
- Do not attempt to set up more than one workstation at a time.

3.1 ENTERING YOUR DISPLAY STATION ADDRESS, KEYBOARD ID, AND MULTINATIONAL CHARACTER SET.

3.1.1 Refer to your floor plan and find your display station address, then record the address on the front cover of the *IBM 3196 Display Station Problem Solving Guide*.

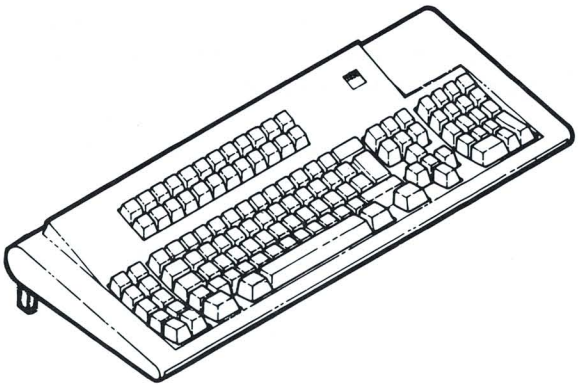
Note: Each workstation address (for each display station and printer) must be different when workstations are connected together.





Record your address here!

3.1.2 Determine which keyboard you are using. Does your keyboard look like this one?



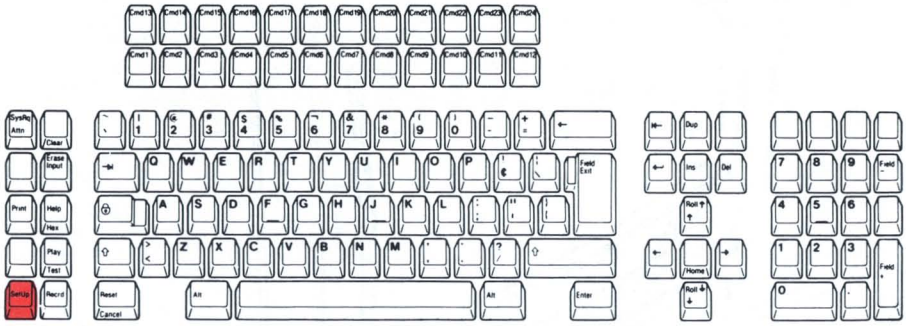
YES

You have the 122-key keyboard.
Go to step 3.1.3.

NO

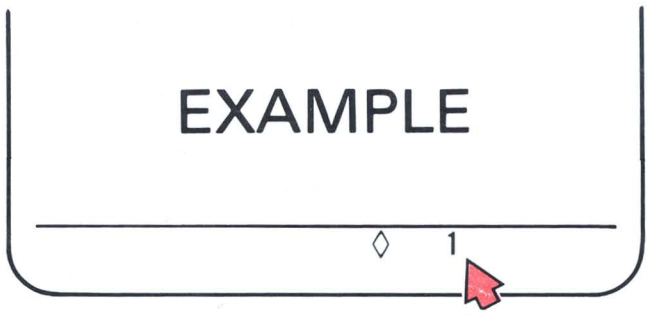
You have the 102-key keyboard.
Go to step 3.1.10.

3.1.3 Press the SetUp key.



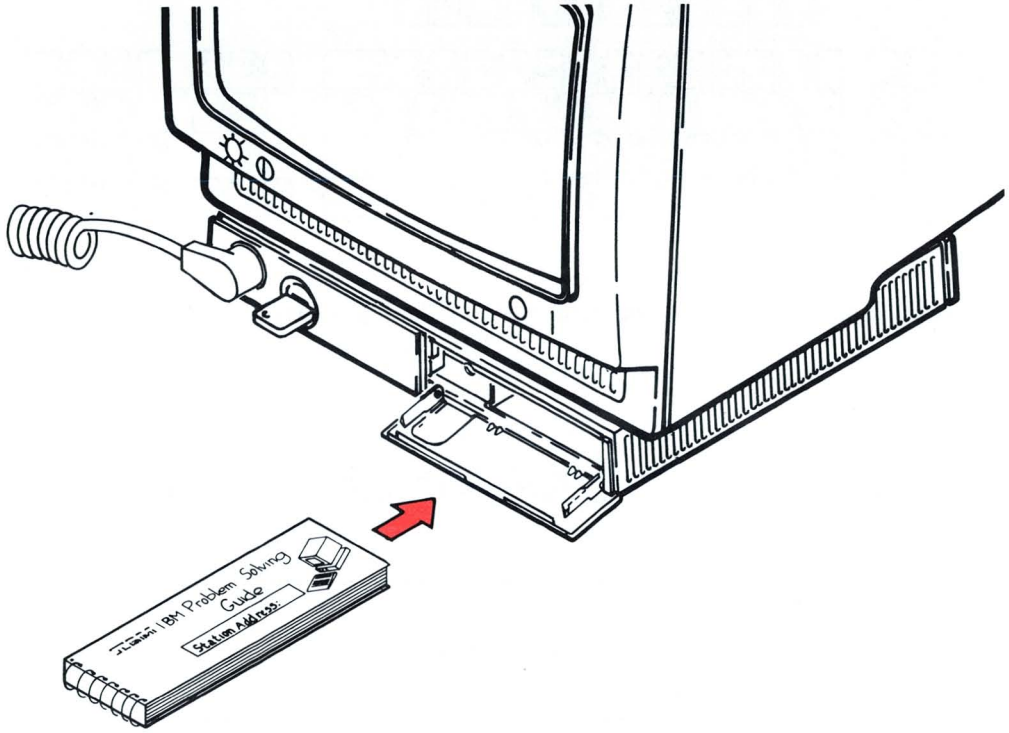
A blinking diamond appears at the bottom of the display screen.

3.1.4 Press and hold the Set Address (Cmd24) key until the display station address (a number 0 through 6) you previously recorded on the front of your *IBM 3196 Display Station Problem Solving Guide*, GA18-2483, appears to the right of the blinking diamond at the bottom of your display screen.

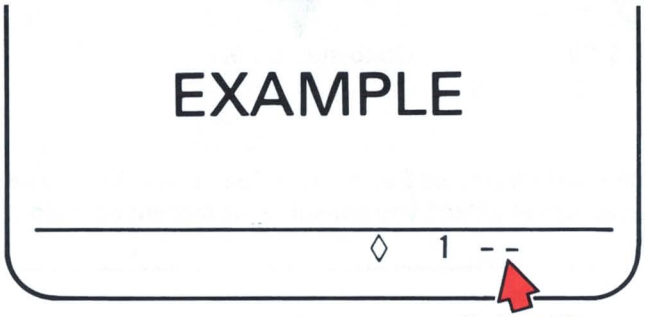


Note: If 9012 appears on the bottom of the display screen, repeat step 3.1.4.

3.1.5 Open the door on the right-front of the logic element and store the *IBM 3196 Display Station Problem Solving Guide*, GA18-2483, in the compartment. Then close the door.

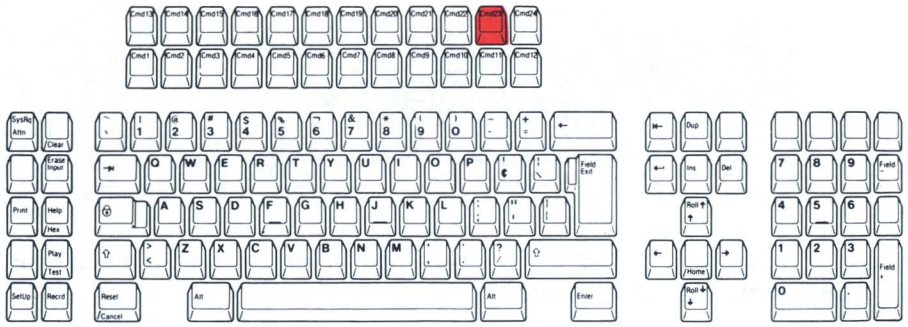


3.1.6 Make sure that the keyboard ID displayed to the right of the display station address (at the bottom of your display screen) is a "- -".



Keyboard ID
Sample Only

If the displayed keyboard ID is 00 through 63, press the Keyboard ID (Cmd23) key until a "- -" appears beside the display station address. A "- -" immediately follows the number 63 when the Keyboard ID key is pressed.



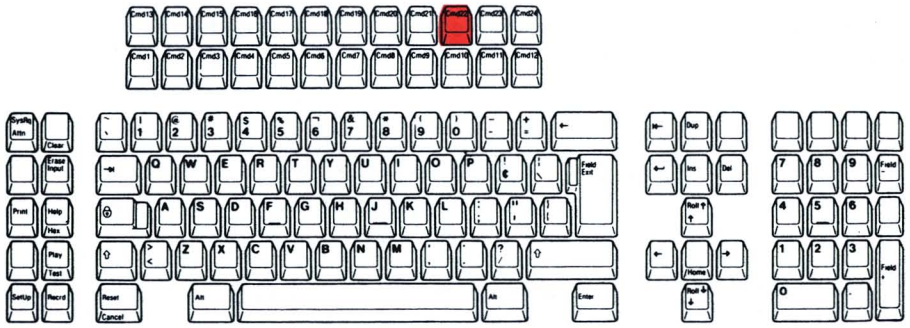
3.1.7 Do you want to select the multinational character set?

YES → Go to step 3.1.8

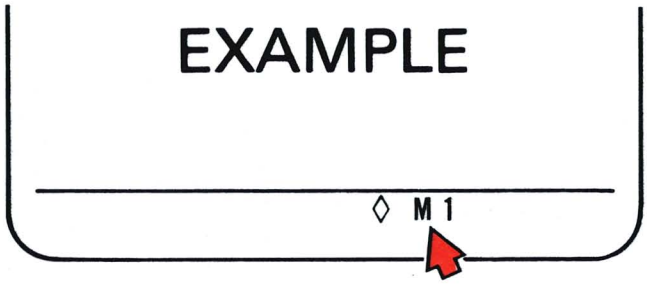
NO → Go to step 3.1.9.

Note: The Multinational Character Set is a function of your host system. Do not select the multinational character set unless you consult your system operator.

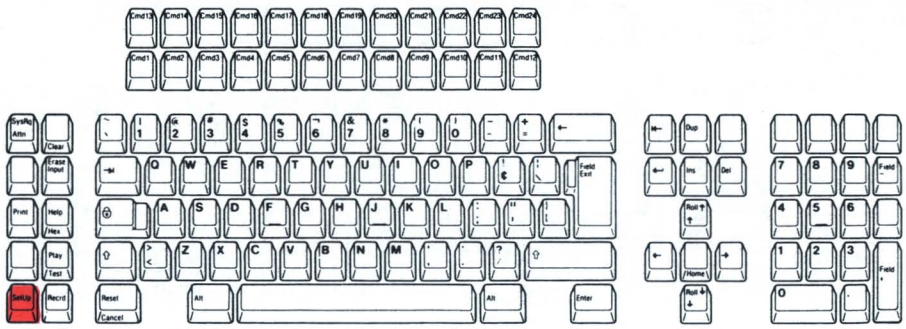
3.1.8 Press the Multinational Character Set (Cmd 22) key to alternately enable/disable the multinational character set.



When an "M" appears to the right of the blinking diamond at the bottom of your display screen, the multinational character set is enabled.



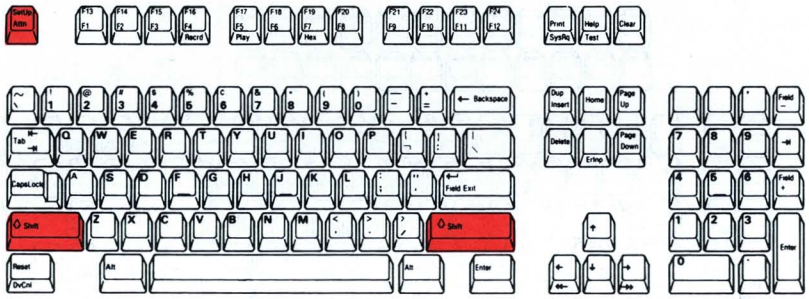
3.1.9 Press the SetUp key.



The display station options are now set and will not be changed even if the display station power switch is set to off (O).

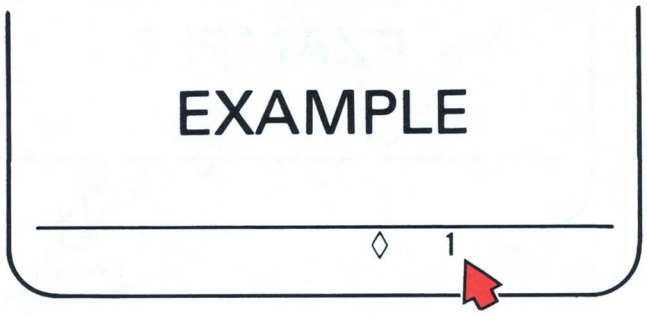
Go to Section 4. Connecting to a Host System or a Controller.

3.1.10 Press and hold a Shift key, then press the SetUp key.



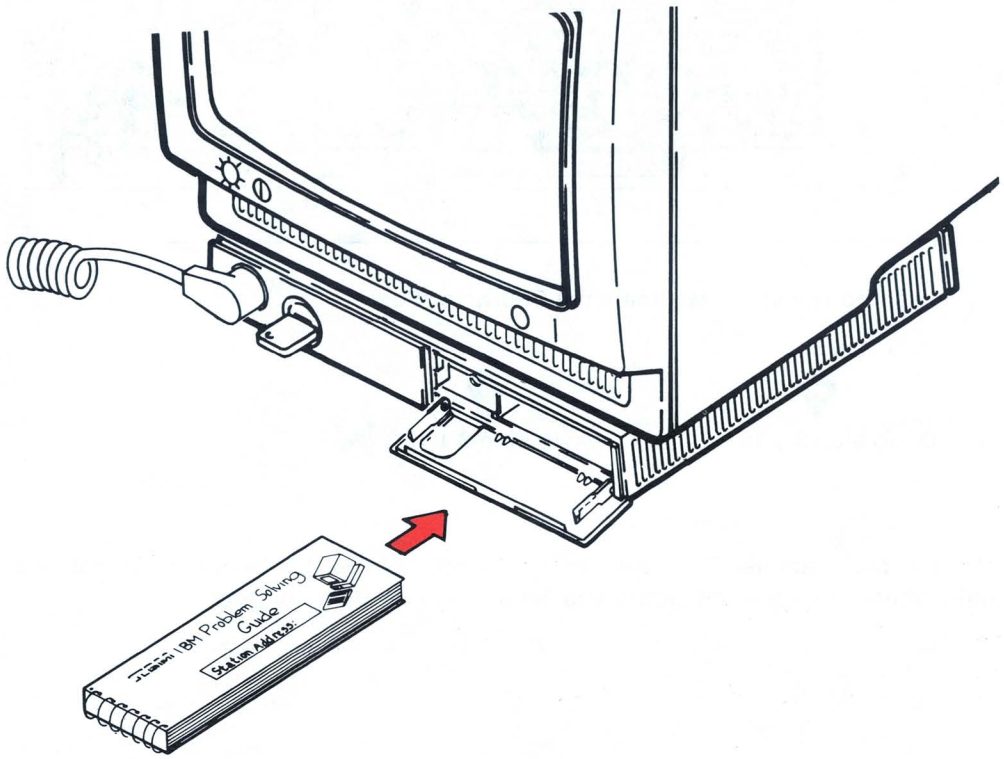
A blinking diamond appears at the bottom of the display screen.

3.1.11 Press and hold a Shift key, then press the Set Address key (F24/F12) until the display station address (a number 0 through 6) you previously recorded on the front of your *IBM 3196 Display Station Problem Solving Guide*, GA18-2483, appears to the right of the blinking diamond at the bottom of your display screen.

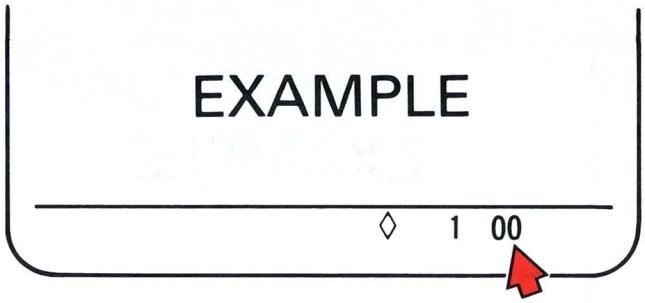


Note: If 9012 appears on the bottom of the display screen, repeat step 3.1.11.

3.1.12 Open the door on the right-front of the logic element and store the *IBM 3196 Display Station Problem Solving Guide*, GA18-2483, in the compartment. Then close the door.

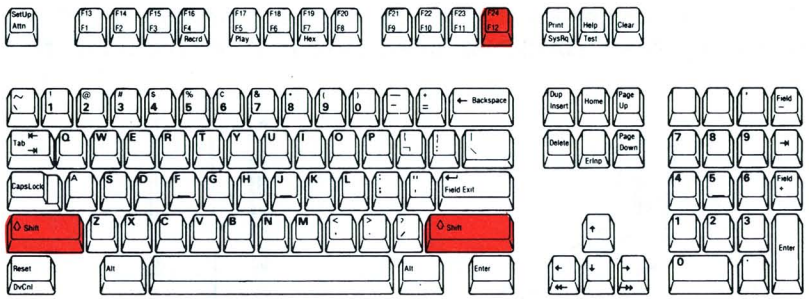


3.1.13 Make sure that the keyboard ID displayed to the right of the display station address (at the bottom of your display screen) is a 00.



Keyboard ID
Sample Only

If the displayed ID is 01 through 31, press and hold a Shift key, then press the Keyboard ID (F23/F11) key until a 00 appears beside the display station address. A 00 immediately follows the number 31 when the Keyboard ID key is pressed.



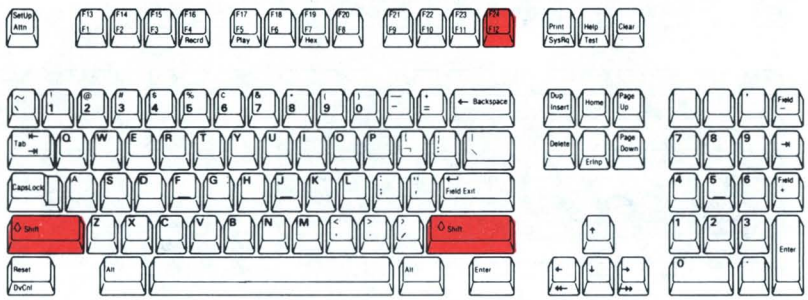
3.1.14 Do you want to select the Multinational Character Set?

YES → Go to step 3.1.15.

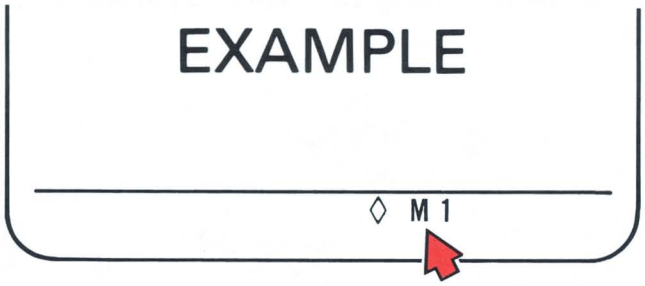
NO → Go to step 3.1.16.

Note: The Multinational Character Set is a function of your host system. Do not select the multinational character set unless you consult your system operator.

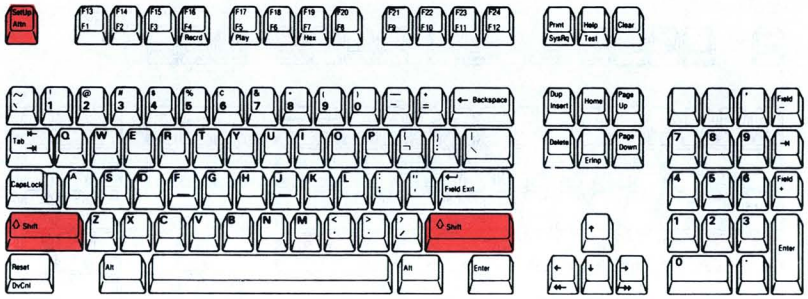
3.1.15 Press and hold a Shift key, then press the Multinational Character Set (F22/F10) key to alternately enable/disable the multinational character set.



When an "M" appears to the right of the blinking diamond at the bottom of your display screen, the multinational character set is enabled.



3.1.16 Press and hold a Shift key, then press the SetUp key.



The display station options are now set and will not be changed even if the display station power switch is set to off (O).

Go to Section 4. Connecting to a Host System or a Controller.

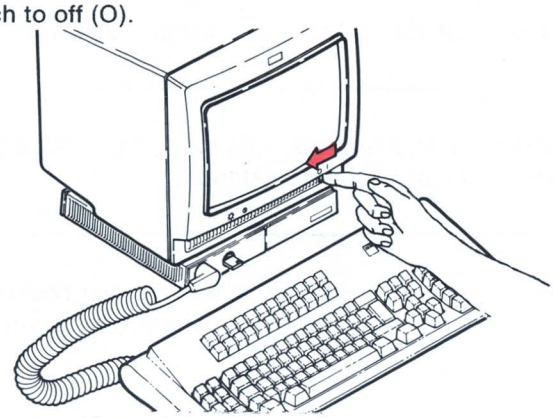
Section 4. Connecting to a Host System or a Controller

4.1 BEFORE YOU CONNECT YOUR DISPLAY STATION TO A HOST SYSTEM OR A REMOTE WORKSTATION CONTROLLER, REVIEW YOUR FLOOR PLAN.

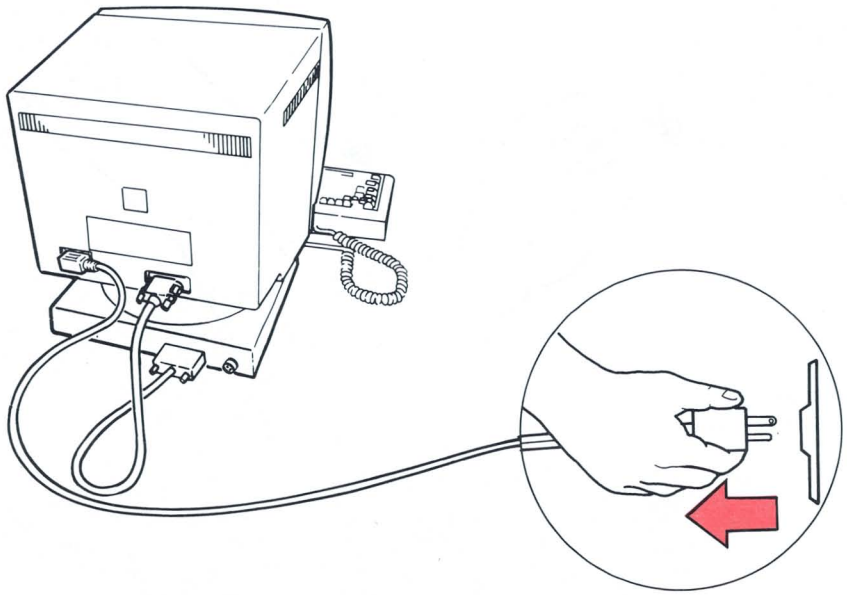
SAFETY PRECAUTION
Do not connect or disconnect cables during an electrical storm. You could be seriously injured.

4.1.1 Do the following.

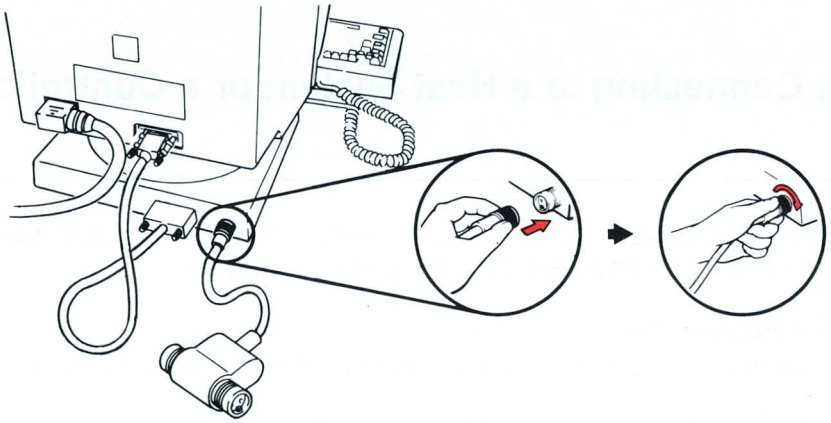
1. Set the power switch to off (O).



2. Disconnect the power cord from the power outlet.



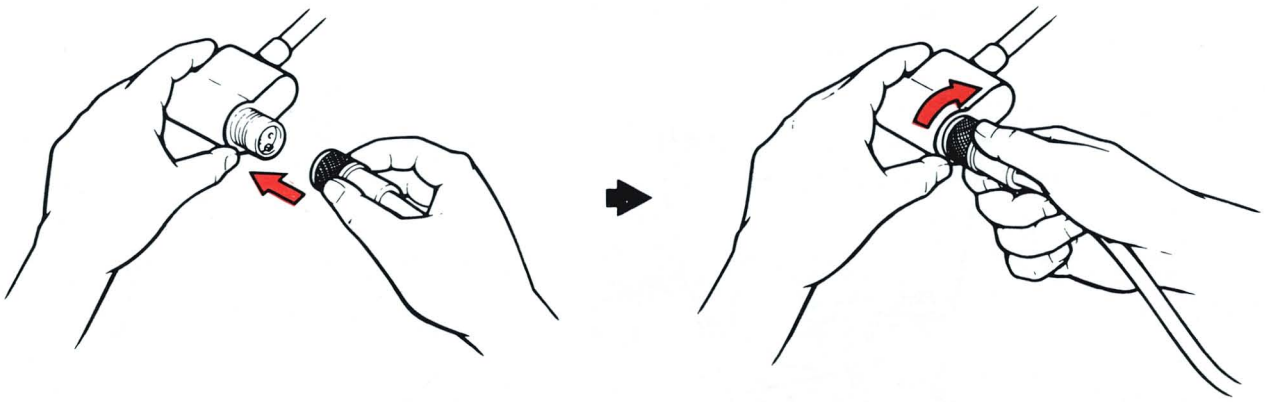
4.1.2 Align the widest slot in the plug on the auto-termination unit cable with the key in socket on the rear of the logic element. Then push the plug into the socket and turn the retaining ring clockwise until tight.



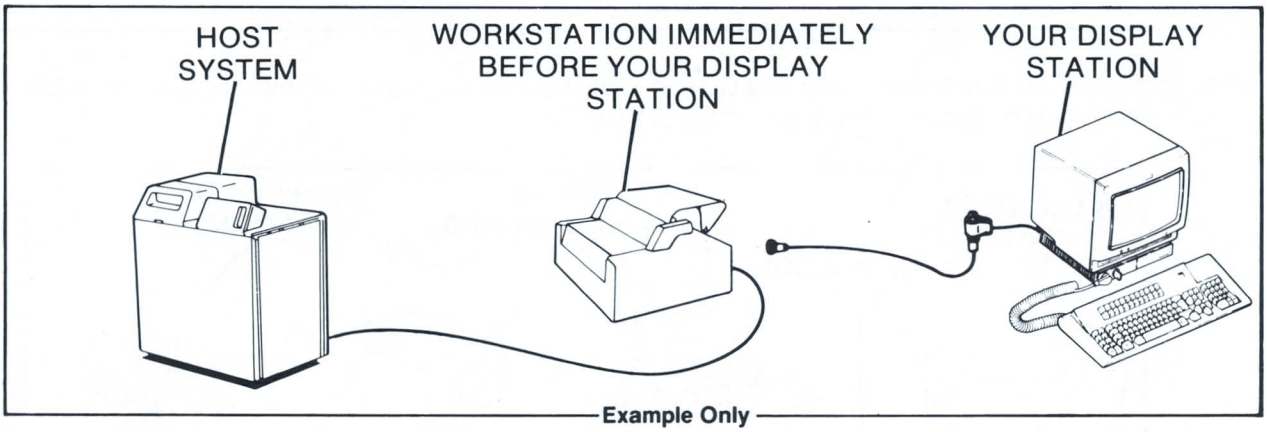
CAUTION
Never connect the communications cable directly to your display station. Always connect the communications cable to the auto-termination unit.

4.1.3 Locate the correct communications cable. This may be the cable from the host system, the workstation controller, or the previous workstation.

4.1.4 Align the widest slot in the cable plug with the key in either socket of the auto-termination unit. Then push the plug into the socket and turn the retaining ring clockwise until tight.



4.1.5 Refer to your floor plan. Is there a workstation (display station or printer) on the cable immediately before your IBM 3196?



Example Only

YES → Go to step 4.1.6.

NO → Go to step 4.1.9.

4.1.6 Connect the communications cable to the unused port on the workstation immediately before your IBM 3196.

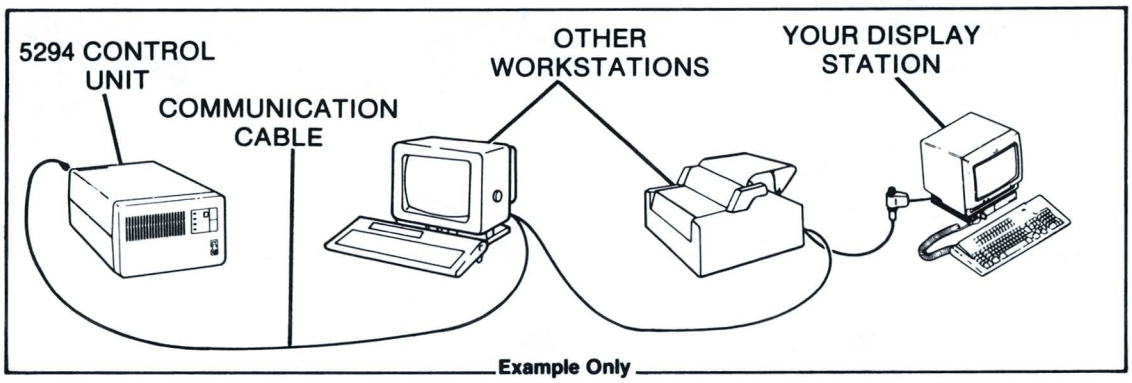
4.1.7 Does the workstation immediately before yours have a terminator switch? (See Appendix A for locations of terminator switches.)

YES → Go to step 4.1.8.

NO → Go to step 4.1.9.

4.1.8 Make sure that the terminator switch on the workstation immediately before yours is set to 2. See Appendix A for the locations of the terminator switches.

4.1.9 Will the communication cable (the cable that connects to the system or the remote workstation controller) be connected to a 5294 Control Unit?



YES

Go to step 4.1.14.

NO

Make sure the communication cable is connected to the host system, then go to step 4.1.10.

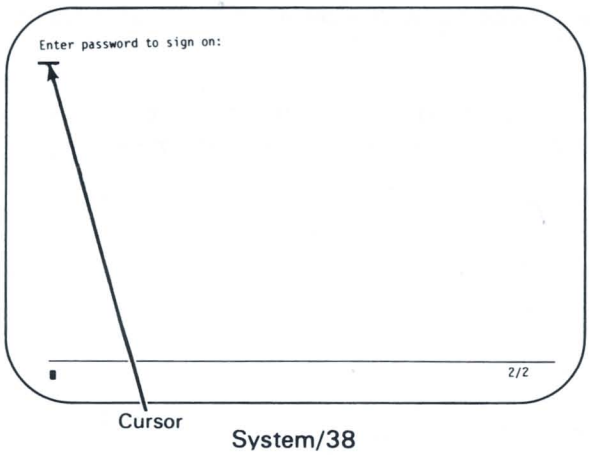
4.1.10 Do the following.

1. Connect the 3196 power cord to a grounded electrical outlet.
2. Set the 3196 power switch to on (|).

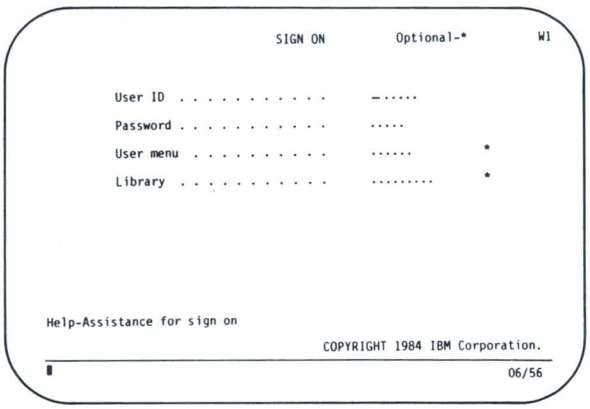
4.1.11 Notify your host system operator that your display station is connected.

Note: You cannot proceed to the next step until your host system operator has performed an initial program load (IPL) for the IBM System/36 or performed reconfiguration for the IBM System/38.

4.1.12 Does a sign-on display (similar to one of the two shown below) appear?



System/38



System/36

YES

Go to step 4.1.14.

NO

Go to step 4.1.13.

4.1.13

1. Ask the person responsible for system operation to:
   a. Check that the system to which your display station is connected is operating and is able to recognize your display station.
   b. Check that your display station has the correct address.

      Note: Your display may be on a cable where multiple workstations are cabled together. If so, check that each workstation on your cable has the correct address.

2. Set the power switch to off (O). Then make sure that the cables on your display station are connected to the correct sockets and are securely fastened.
3. If there is a workstation on the cable immediately before your IBM 3196 and it has a terminator switch, make sure that the terminator switch is set to 2. (See Appendix A in this guide for the locations of the terminator switches.)
4. Set the power switch to on (I).
5. Do the conditions in step 4.1.12 occur now?

YES ⬇ Go to step 4.1.14.

NO ⬇ Go to the *IBM 3196 Display Station Problem Solving Guide,* GA18-2483.

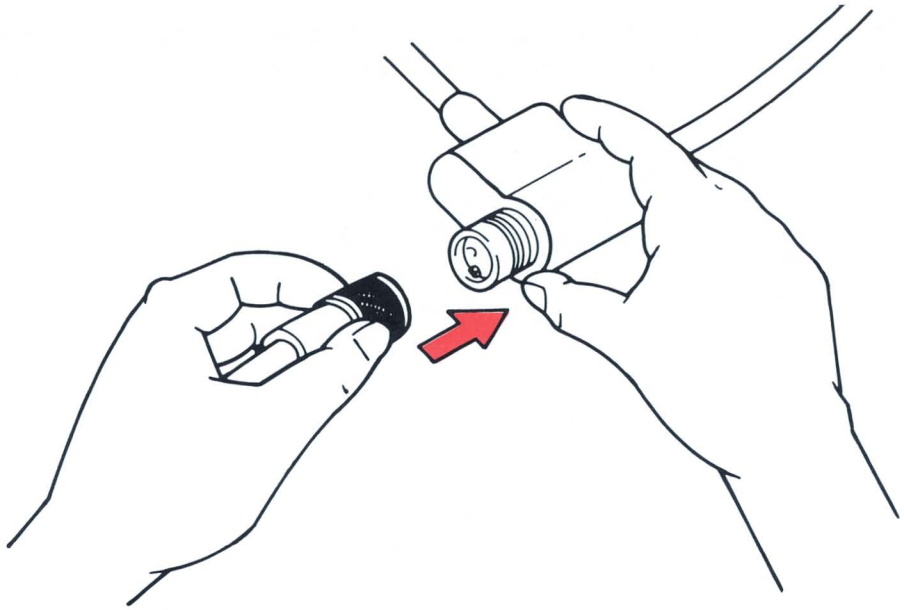
4.1.14 Refer to your floor plan. Do you have another workstation (display station or printer) to connect to this display station?

YES → Go to step 4.1.15.

NO → Go to step 4.1.17.

4.1.15 Set the 3196 power switch to off (O) and disconnect the 3196 power cord from the power outlet.

4.1.16 Connect the second cable to the unused port of the auto-termination unit. The other end of this cable will connect to the next workstation on this cable.



CAUTION
When a second cable is attached to the auto-termination unit, your IBM 3196 is automatically unterminated. Do not connect the second cable unless the other end is connected to another workstation.

4.1.17 Connect the 3196 power cord to a grounded electrical outlet.

4.1.18

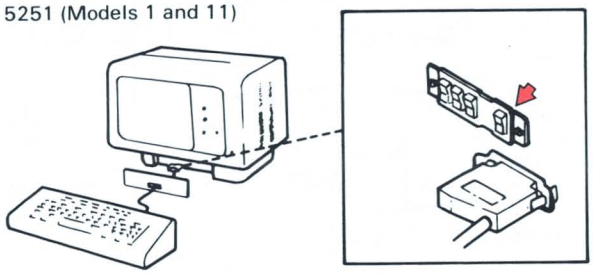
Setup is complete on this display station. If the communication cable will be connected to a 5294 Control Unit, go to the *IBM 5294 Control Unit Setup Procedure, GA21-9369.*

Appendix A. Location of Terminator Switches

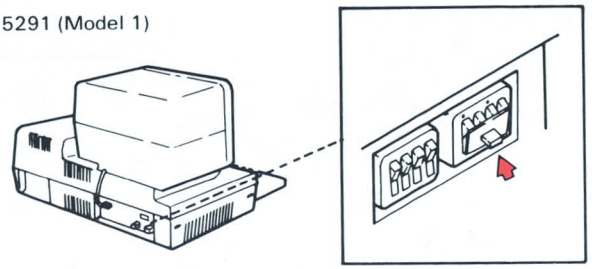
The following illustrations show the location of the terminator switch on display stations.

Note: Some display stations do not have a terminator switch.

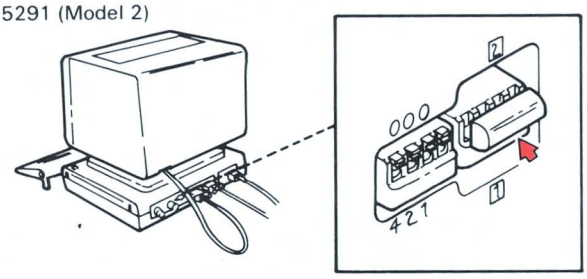
5251 (Models 1 and 11)



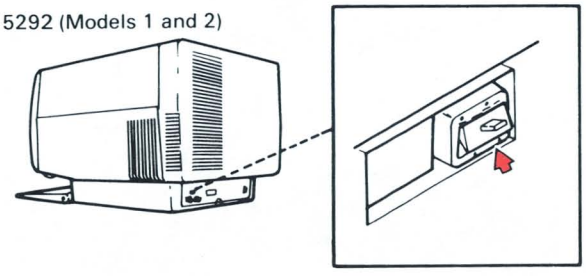
5291 (Model 1)



5291 (Model 2)

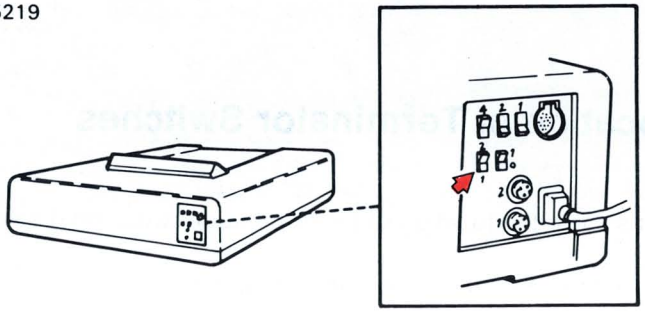


5292 (Models 1 and 2)

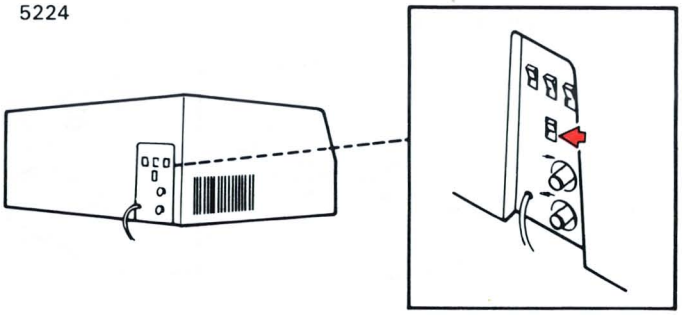


The following illustrations show the location of the terminator switch on printers.

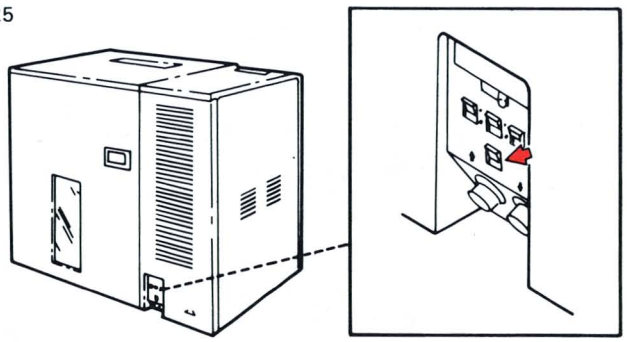
5219



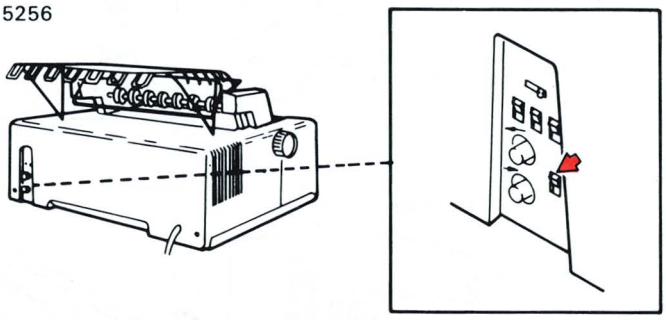
5224



5225



5256



IBM 3196 Display Station

Setup Instructions

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READER'S COMMENT FORM

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