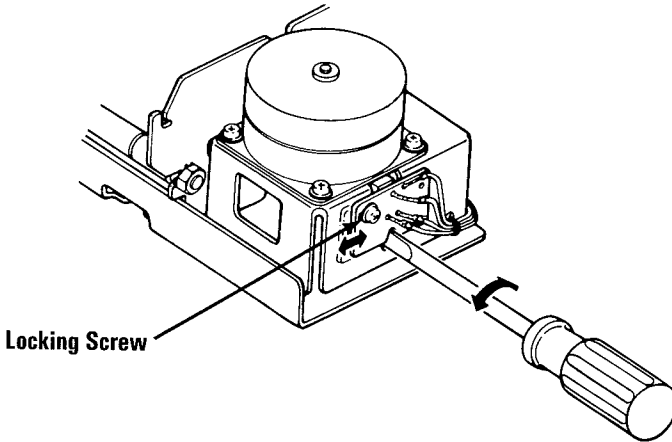


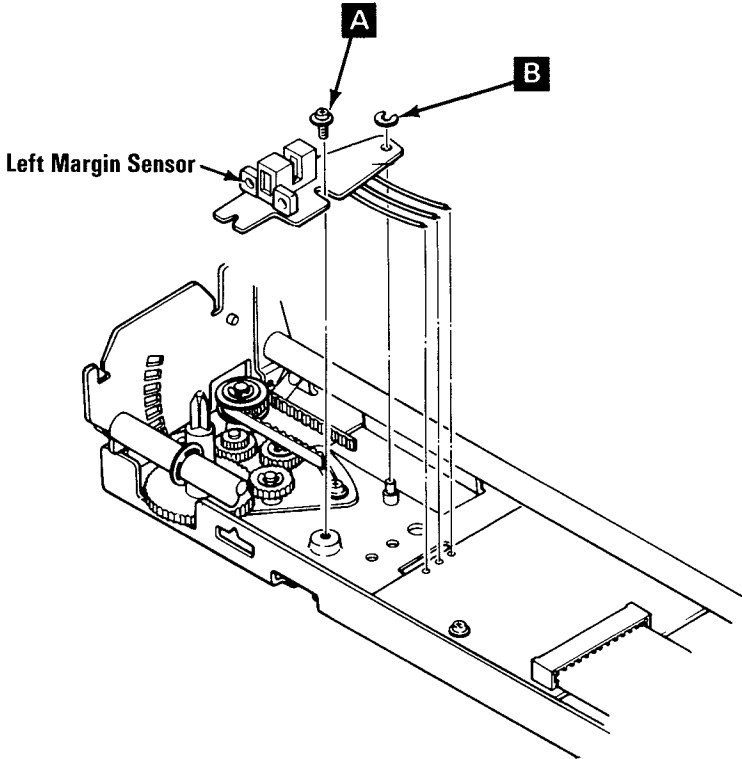
22. Tighten the printer timing sensor locking screw and recheck step 21. Realign if necessary.



Adjustments of PTS Sensor Board

23. Run the "Printer Offline Diagnostic Test" and observe the speed in both directions.
24. If the buzzer sounds the printer timing sensor board is set incorrectly. Repeat the procedure starting at step 18.
25. If the speed is different between forward and reverse printing, perform the following steps.
 - a. Place the positive (+) lead of the voltage meter on the yellow wire solder connection on the printer timing sensor board.
 - b. Loosen the printer timing sensor board locking screw.
 - c. Move the printer timing sensor board until another up level location is observed and repeat the procedure from step 21.
26. If it is the same speed in both directions, the adjustment is complete.

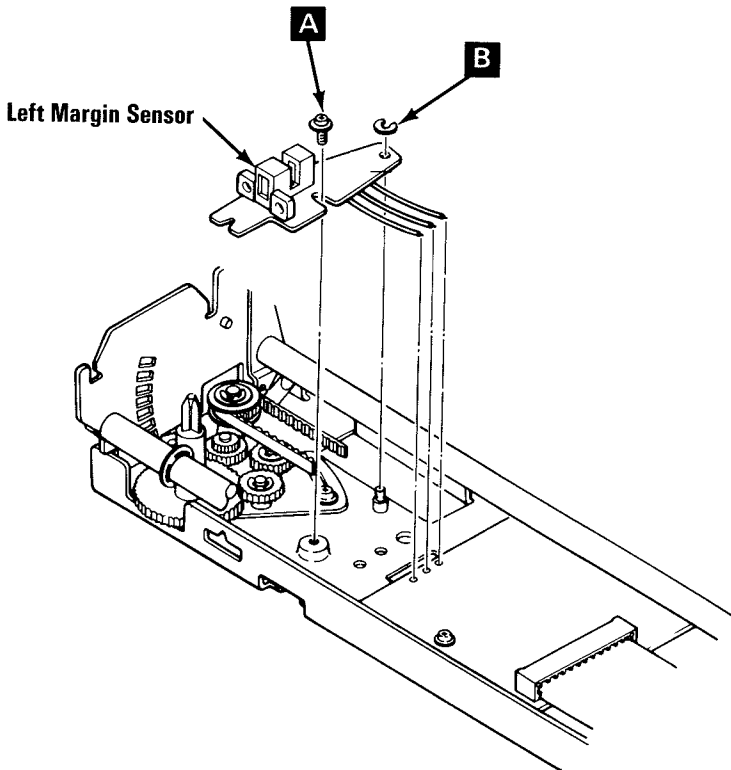
1. Set printer Power switch to OFF; unplug printer power cord from wall outlet and disconnect printer cable.
2. Remove forms.
3. Remove forms rack (5640).
4. Remove access cover (5630).
5. Remove ribbon cartridge.
6. Remove top cover (5630).
7. Move carriage to right frame.
8. Remove retaining screw **A** and retaining clip **B**.
9. Unsolder three wires from left margin sensor.
10. Lift left margin sensor from printer.



Left Margin Sensor Replacement

5670

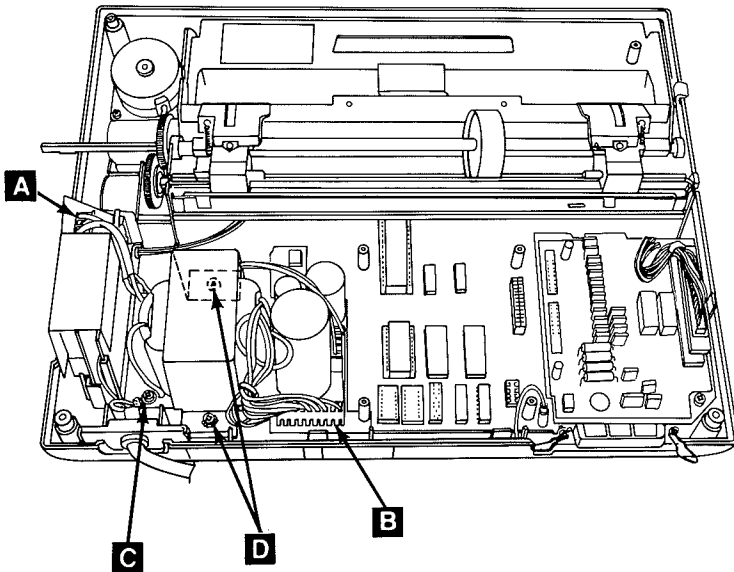
1. Solder three wires from terminal board to left margin sensor.
2. Position left margin sensor pivot hole over post.
3. Replace retaining screw **A** and retaining clip **B**.
4. Readjust left margin sensor (5670).
5. Replace top cover (5630).
6. Replace ribbon cartridge.
7. Replace access cover (5630).
8. Replace forms rack (5640).



1. Set printer Power switch to OFF; unplug printer power cord from wall outlet and disconnect printer cable.
2. Remove forms.
3. Remove forms rack (5640).
4. Remove access cover (5630).
5. Remove top cover (5630).

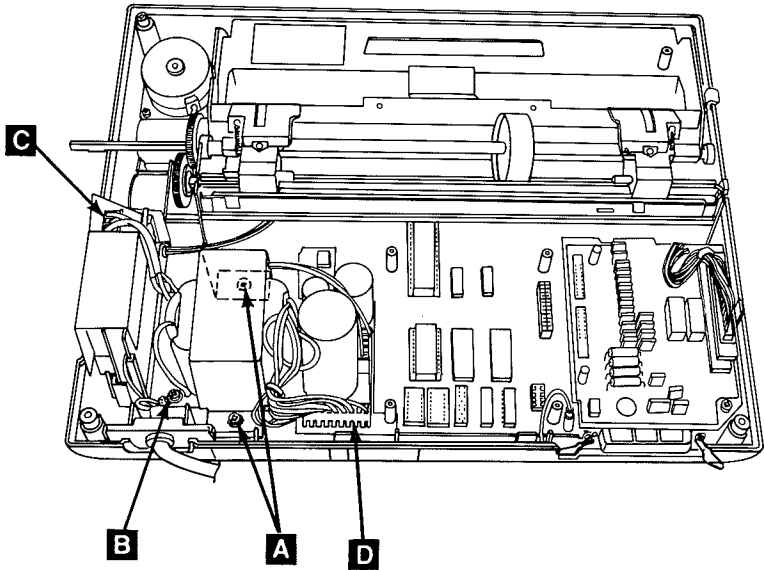
DANGER: Static Voltage May Be Present On The Fuse-Filter Card. Use Caution In This Area.

6. Unplug connector **A** from fuse-filter card.
7. Unplug connector **B** from control circuit card.
8. Remove screw **C** from transformer ground wire.
9. Remove two screws **D** from base of transformer.
10. Lift transformer from base.



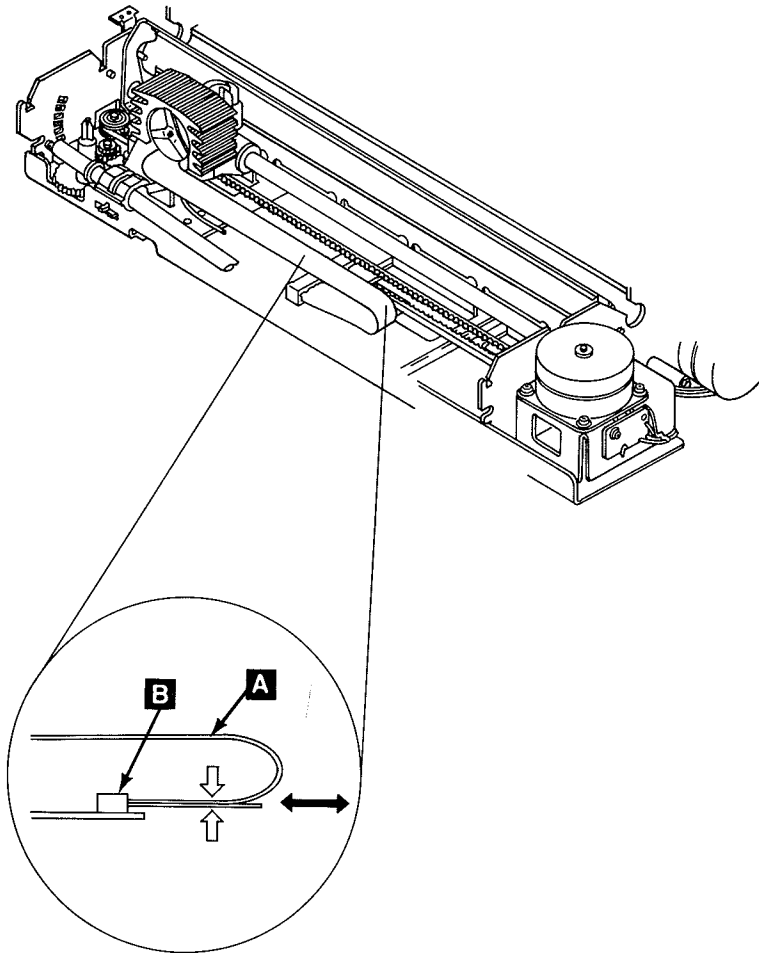
Power Transformer Replacement 5675

1. Place transformer on base in area next to fuse-filter card (note positioning of two connectors).
2. Install two base mounting screws **A**.
3. Install screw in ground wire **B**.
4. Plug connector **C** into fuse-filter card.
5. Plug connector **D** into control circuit card.

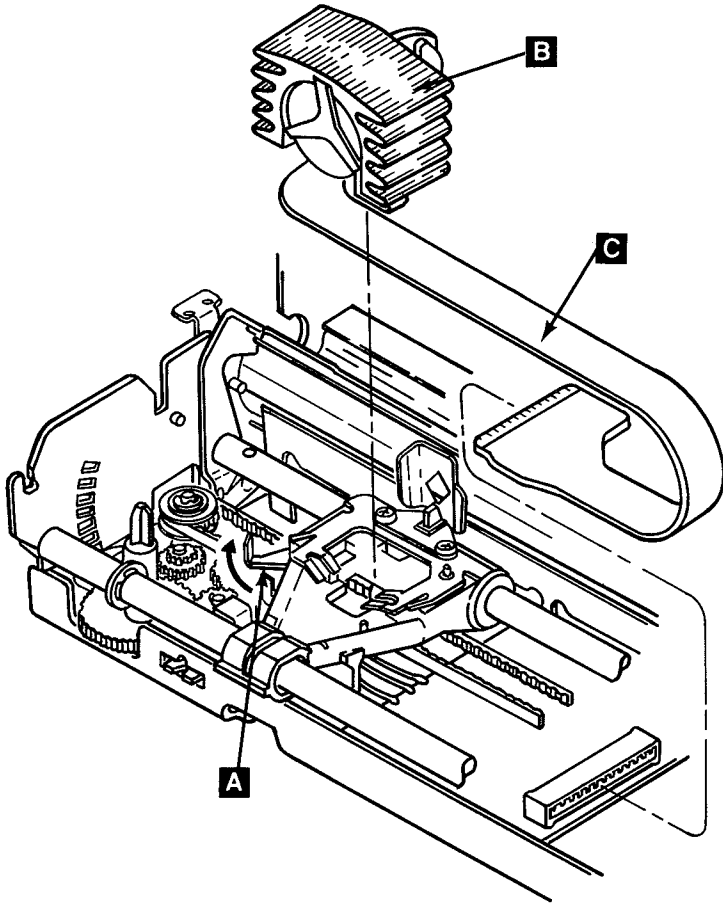


6. Replace top cover (5630).
7. Replace access cover (5630).
8. Replace forms rack (5640).

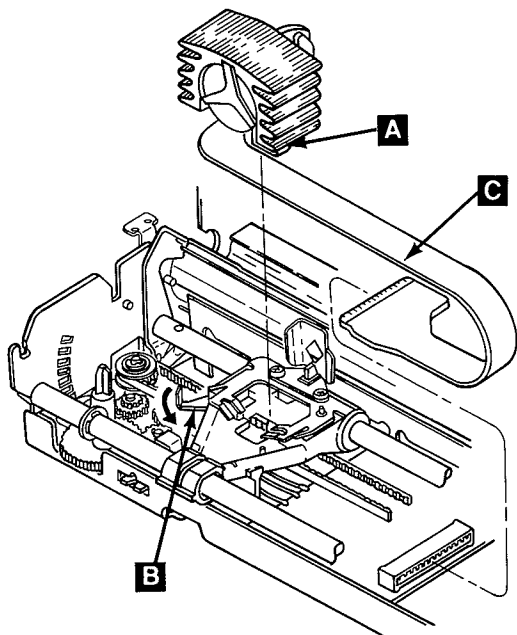
1. Set printer Power switch to OFF; unplug printer power cord from wall outlet and disconnect printer cable.
2. Remove forms rack (5640).
3. Remove access cover (5630).
4. Remove ribbon cartridge.
5. Remove top cover (5630).
6. Pull print head cable **A** from connector **B**.



7. Pivot print head lock lever **A** clockwise.
8. Lift print head **B** and cable **C** from carriage.



1. Insert feet **A** on print head into opening on carriage.
2. Pivot lock lever **B** counterclockwise while pressing down on print head.
3. Connect print head cable **C** at connector.
4. Replace top cover (5630).
5. Replace ribbon cartridge.
6. Replace access cover (5630).
7. Replace forms rack (5640).



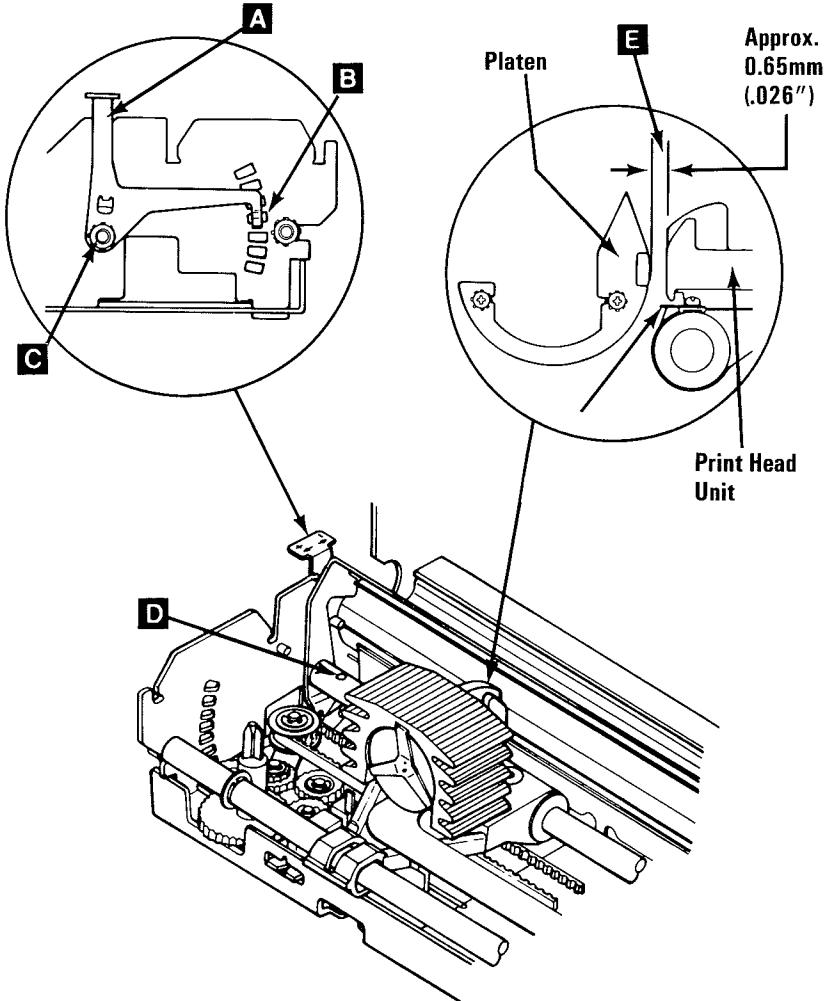
Note: Broken wires may be the result of other problems. If a print head has been replaced because of a broken wire, perform the following steps to prevent damaging the newly installed print head.

1. Remove the top cover. Disconnect CN6 on the driver control card. Check for 22 ohms resistance between pin CN6-10 (male end) and pins CN6-1 through 9. Replace the print mechanism assembly if there are any shorts or opens.
2. Power on. Check for +24 Vdc at pins CN6-1 through 9 on driver card (use ground pin for common lead). If any pin has +24 Vdc, replace the control cards. If all pins read 0 Vdc, power off and reconnect CN6. Print head circuitry is functional.

Print Head Gap Adjustment

5680

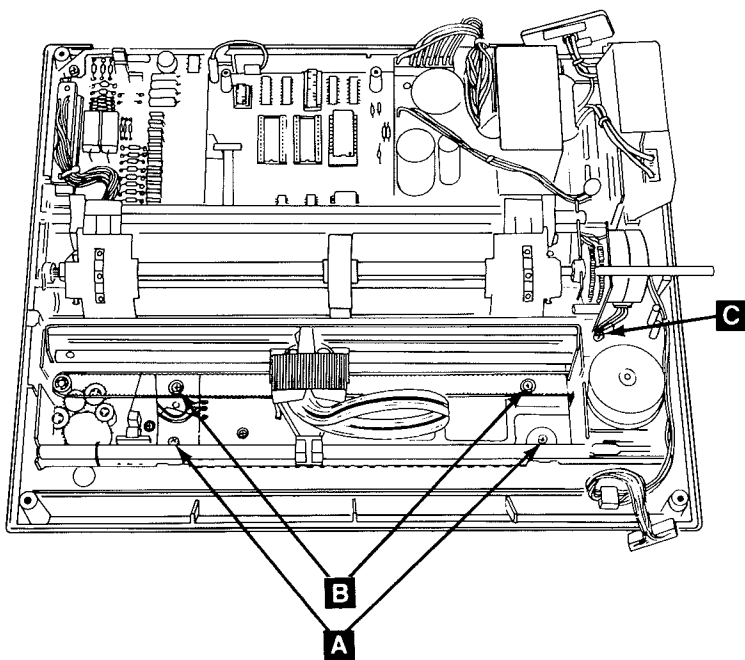
1. Remove print mechanism assembly (5685).
2. Set print head gap adjusting lever **A** to the fourth position **B**.
3. Loosen nut **C**.
4. Rotate carriage shaft **D** to obtain .65mm gap (.026") between print head and platen **E**.
5. Tighten nut **C**.
6. Replace print mechanism assembly (5685).



Print Mechanism Assembly Removal

5685

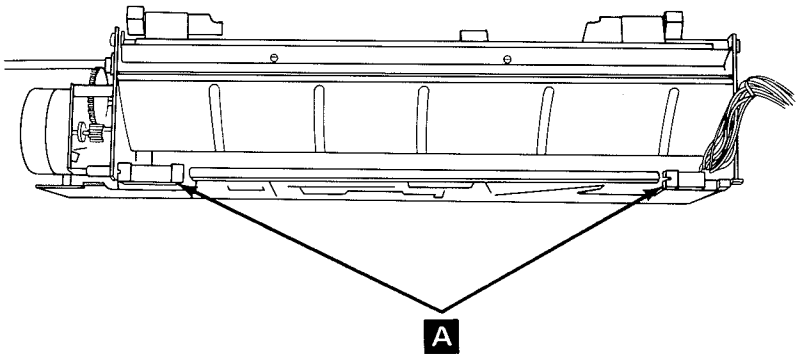
1. Set printer Power switch to OFF; unplug printer power cord from wall outlet and disconnect printer cable.
2. Remove forms.
3. Remove forms rack (5640).
4. Remove access cover (5630).
5. Remove ribbon cartridge.
6. Remove top cover (5630).
7. Remove driver circuit card (5620).
8. Remove control circuit card (5615).
9. Remove two screws **A** from base of Print Mechanism assembly.
10. Remove shipping screws **B** if still installed.
11. Remove screw **C** from ground strap.
12. Lift print mechanism assembly from base cover.



Print Mechanism Assembly Replacement

5685

1. Verify that the rubber grommets **A** are in position shown.

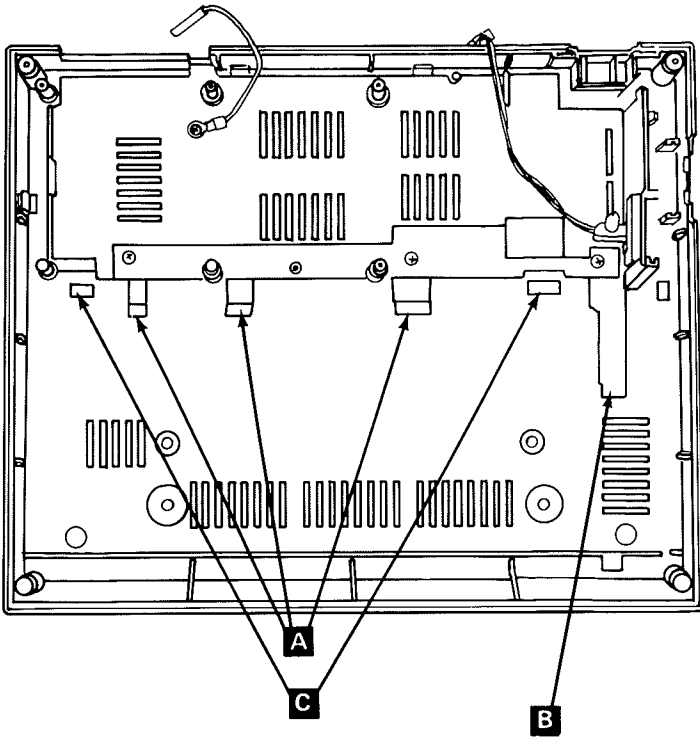


(Rear View)

Print Mechanism Assembly Replacement (cont.)

5685

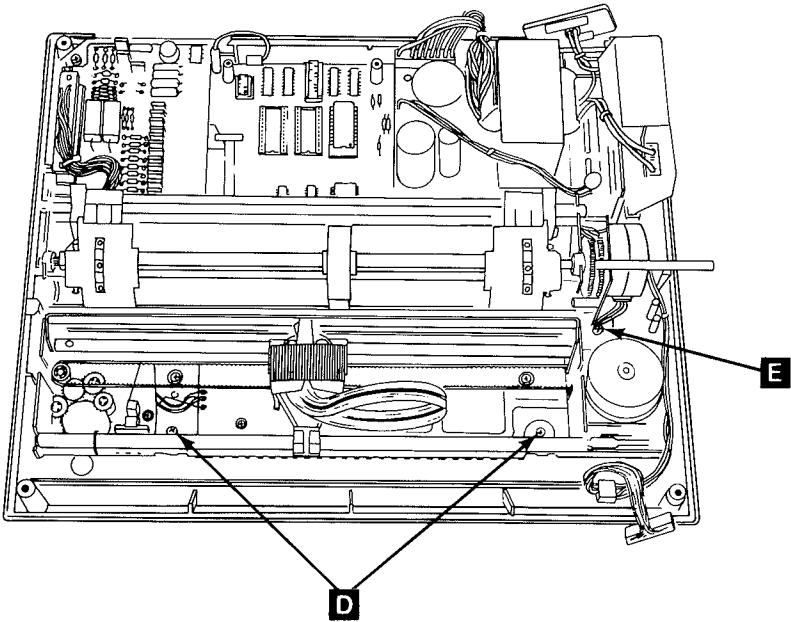
2. Place print mechanism assembly on base cover.
3. Slide print mechanism assembly toward the rear over three grounding tabs **A** and under ground strap **B**.
4. Position rubber grommets around plastic stops **C**.



Print Mechanism Assembly Replacement (cont.)

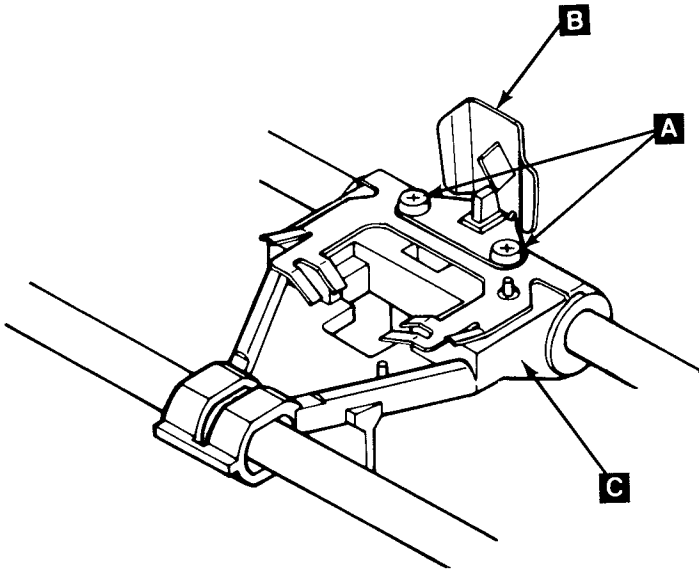
5685

5. Install two screws **D**.



6. Install screw **E** in ground strap.
7. Replace control circuit card (5615).
8. Replace driver circuit card (5620).
9. Replace top cover (5630).
10. Replace ribbon cartridge.
11. Replace access cover (5630).
12. Replace forms rack (5640).

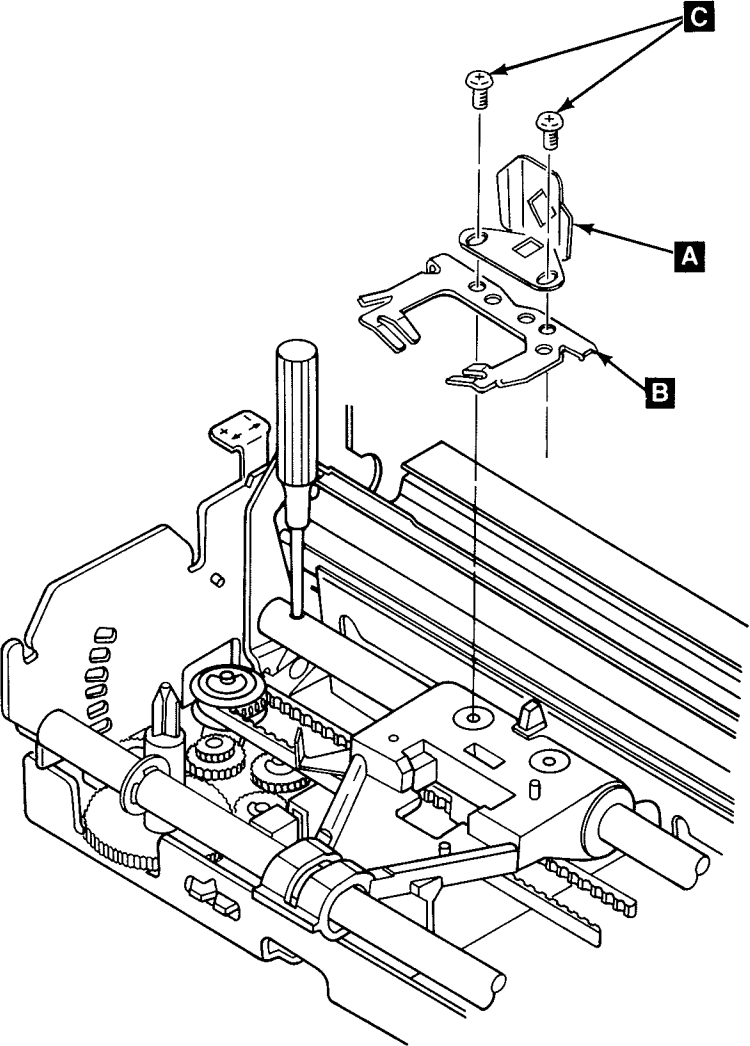
1. Set printer Power switch to OFF; unplug printer power cord from wall outlet and disconnect printer cable.
2. Remove forms.
3. Remove forms rack (5640).
4. Remove ribbon cartridge.
5. Remove access cover (5630).
6. Remove top cover (5630).
7. Remove print head (5680).
8. Remove two screws **A** at base of ribbon shield **B**.
9. Lift shield straight up from carriage **C**.



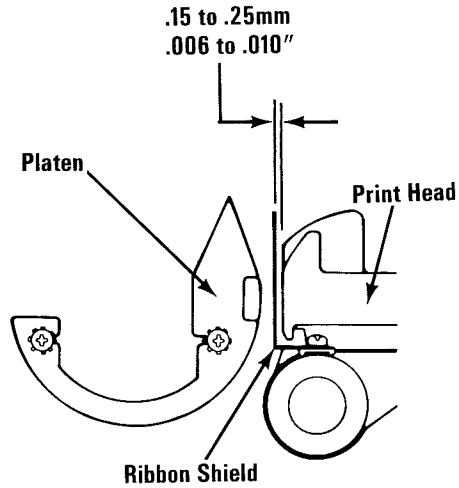
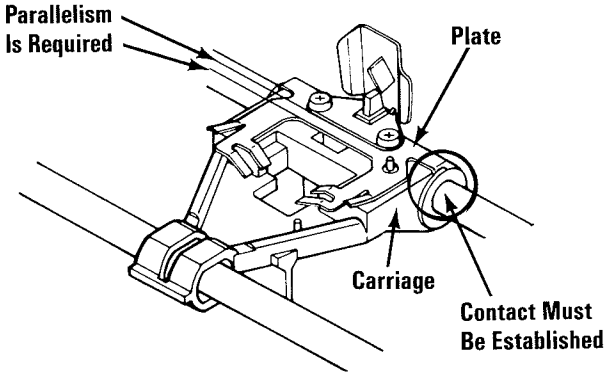
Ribbon Shield Replacement

5690

1. Position shield **A** and plate **B** on print head carriage.
2. Insert screws **C** . (Do not tighten.)



3. Position shield and plate as shown. Tighten screws.



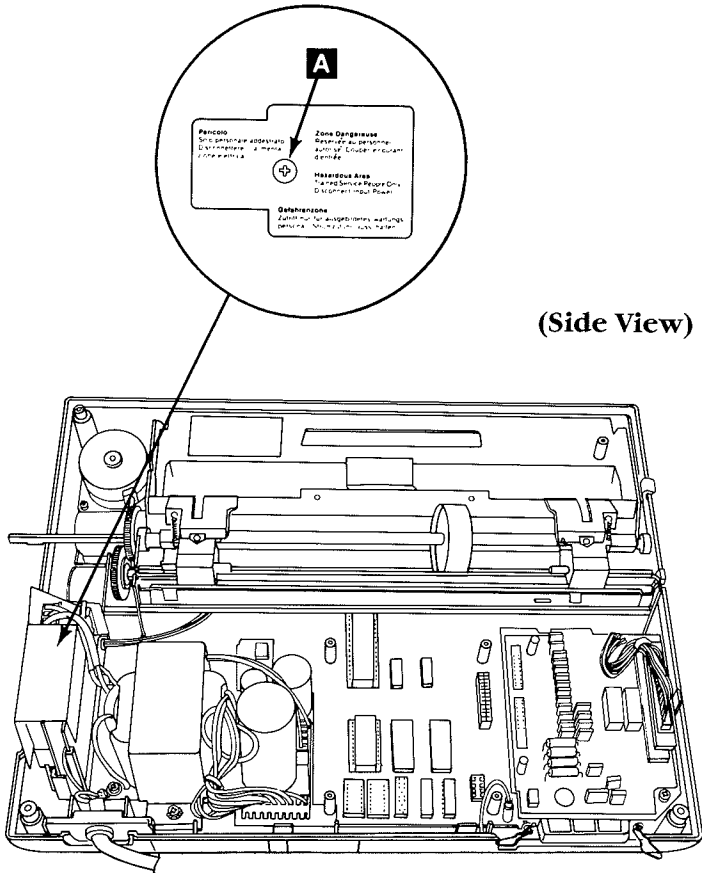
(Left View)

4. Replace print head (5680).
5. Replace top cover (5630).
6. Replace ribbon cartridge.
7. Replace access cover (5630).
8. Replace forms rack (5640).

1. Set printer Power switch to OFF; unplug Printer power cord from wall outlet and disconnect printer cable.
2. Remove forms.
3. Remove forms rack (5640).
4. Remove access cover (5630).
5. Remove top cover (5630).

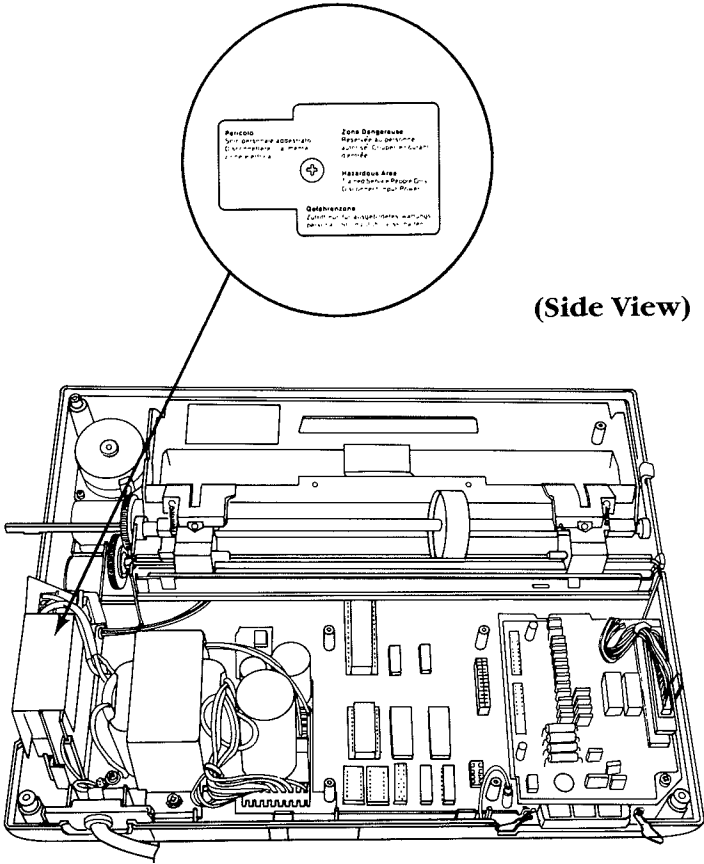
DANGER: Static voltage may be present on the fuse-filter card. Use caution in this area.

6. Loosen screw **A**.
7. Lift safety shield from fuse-filter card.



DANGER: Static voltage may be present on the fuse-filter card.
Use caution in this area.

1. Position safety shield on fuse-filter card.
2. Install screw .



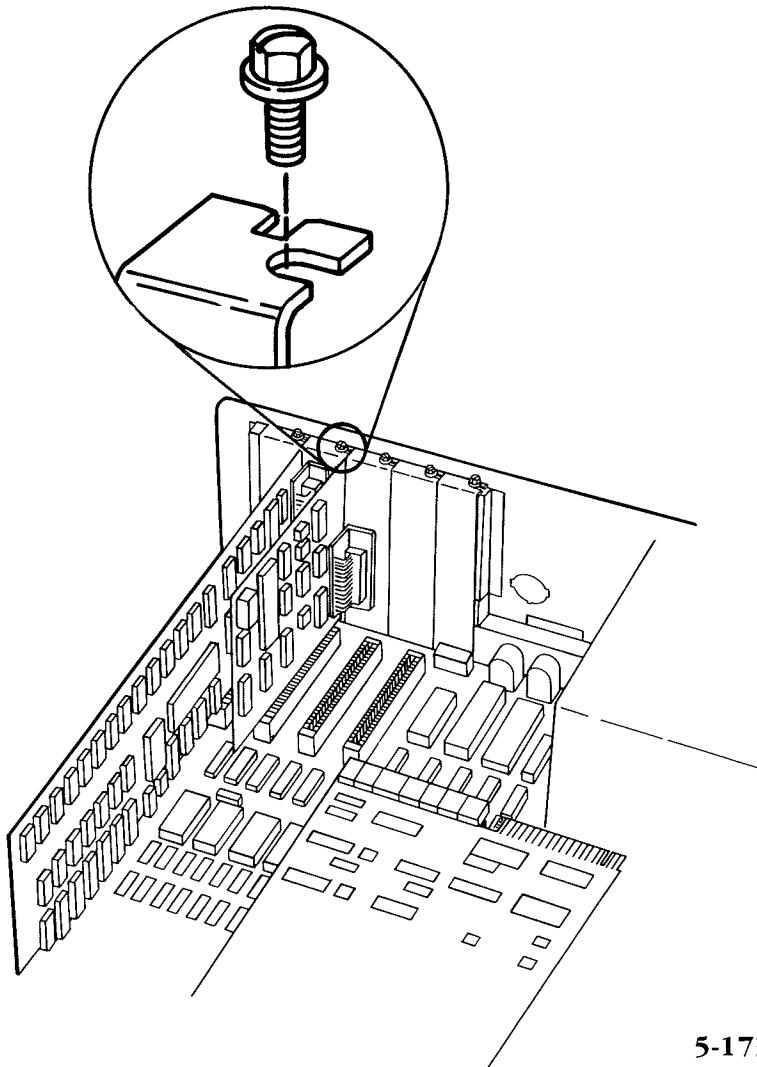
3. Replace top cover (5630).
4. Replace access cover (5630).
5. Replace forms rack (5640).

Option Adapters

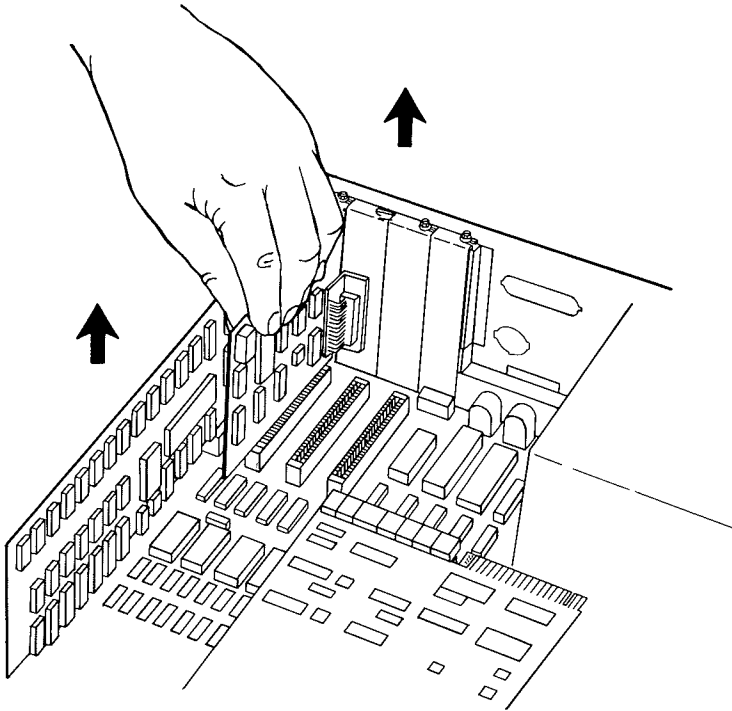
Option Adapters Removal

5800

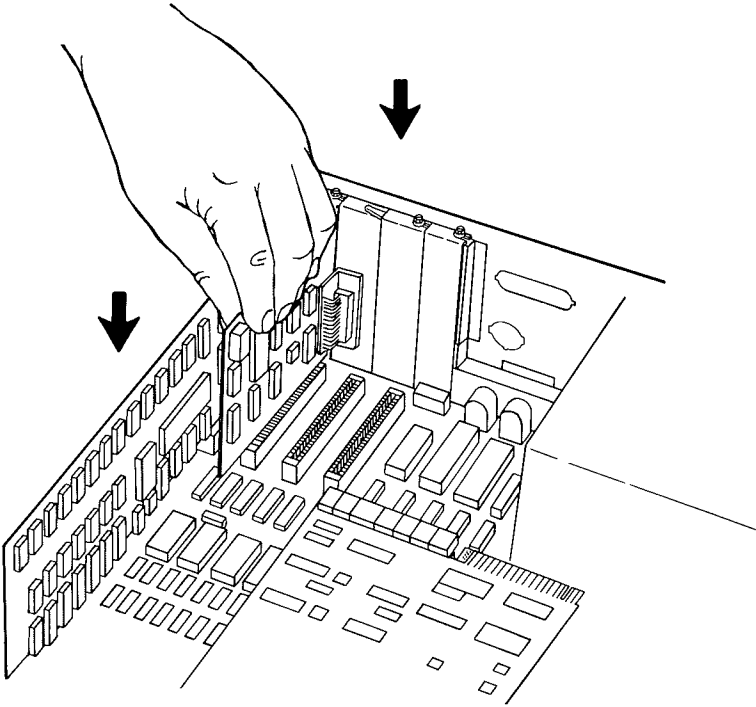
1. Set the Power switch on the system unit (and expansion unit, if attached) to Off.
2. Unplug the system unit's (and expansion unit's) power cord(s) from the wall outlet and disconnect all cables from rear of the unit(s).
3. Remove the unit cover (5900).
4. Remove the option adapter mounting screw.



- 5. Grasp the option adapter by the top corners and lift straight up.

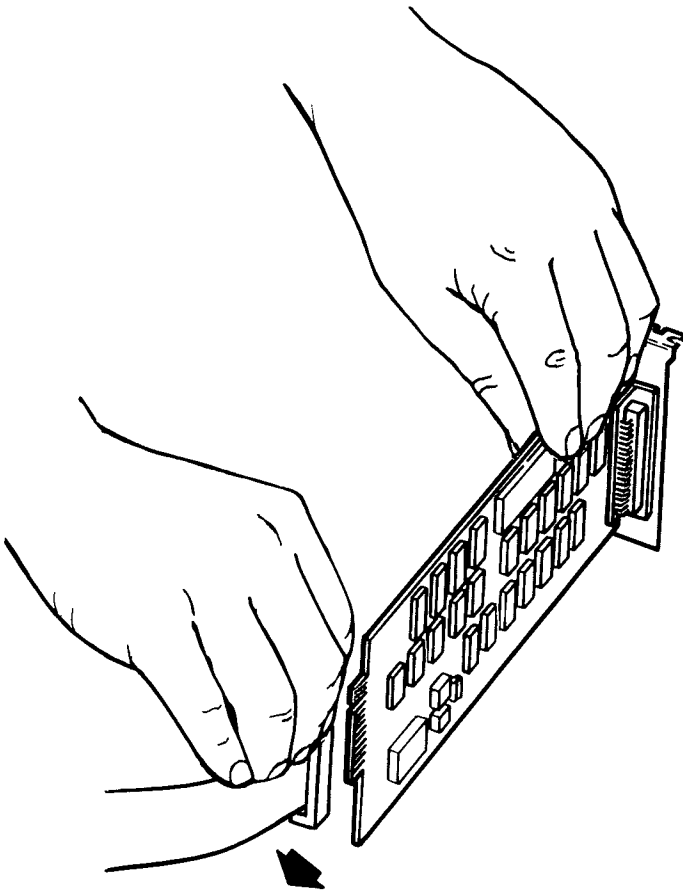


1. Insert the option adapter into an option expansion slot. Press down firmly on the option adapter to seat the connector.



2. Install the option adapter mounting screw.
3. Replace the unit cover (5900).

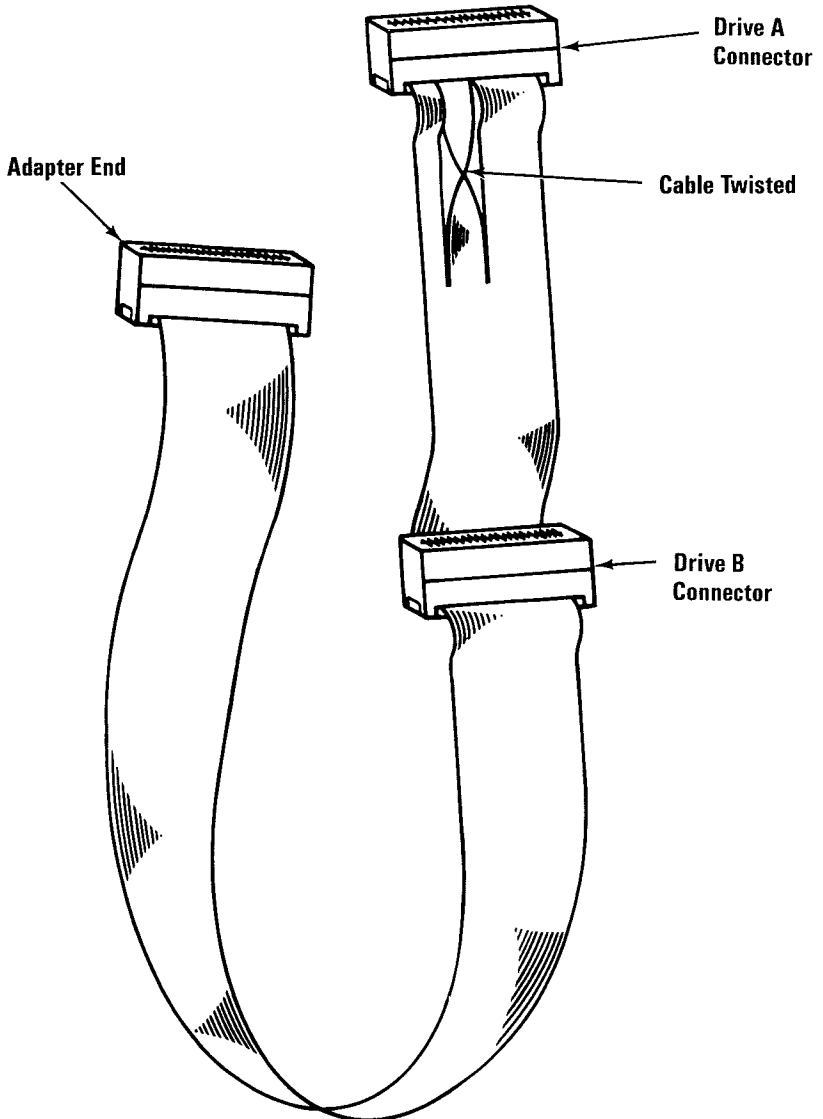
1. Set the Power switch on the system unit (and expansion unit, if attached) to Off.
2. Unplug system unit's (and expansion unit's) power cord(s) from the wall outlet and disconnect all cables from rear of the unit(s).
3. Remove unit cover (5900).
4. Remove the diskette adapter mounting screw.
5. Grasp the diskette adapter by the top corners and lift straight up.
6. Disconnect the signal cable from the diskette adapter.



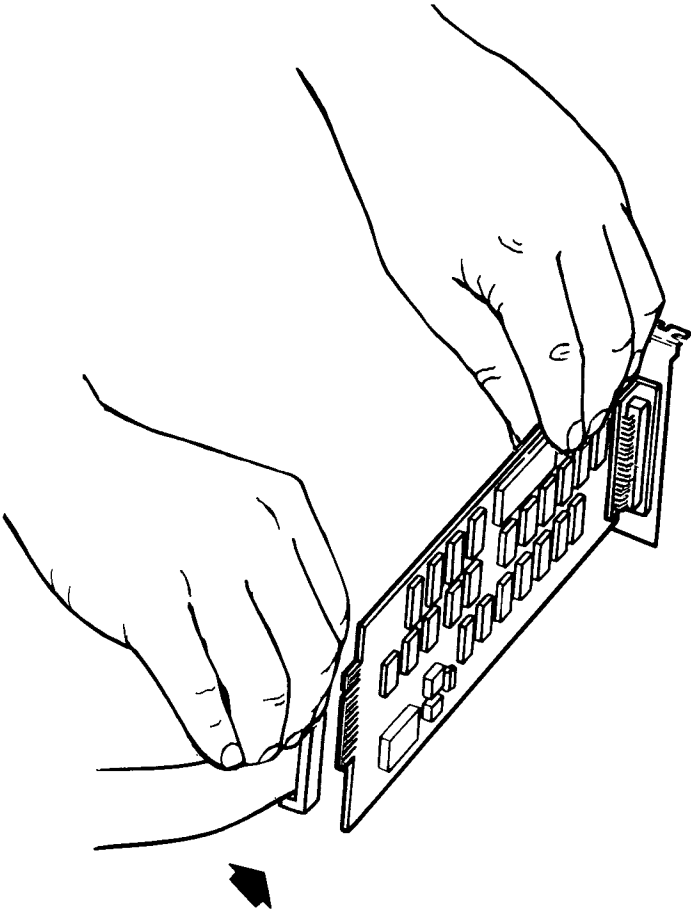
Diskette Drive Adapter Replacement

5810

1. Familiarize yourself with the signal cable before installing the connector.



2. Connect the adapter end of the signal cable to the diskette adapter.

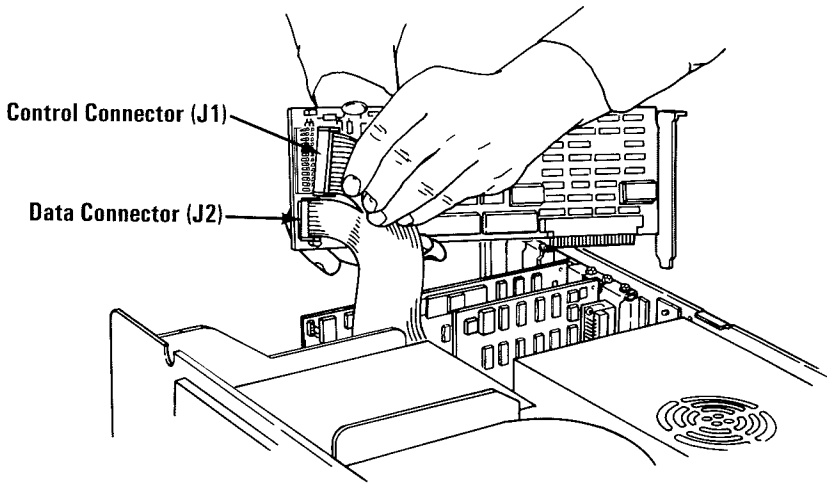


3. Insert the diskette adapter into the option expansion slot. Press down firmly on the diskette adapter to seat the connector.
4. Install the diskette adapter mounting screw.
5. Replace the unit cover (5900).

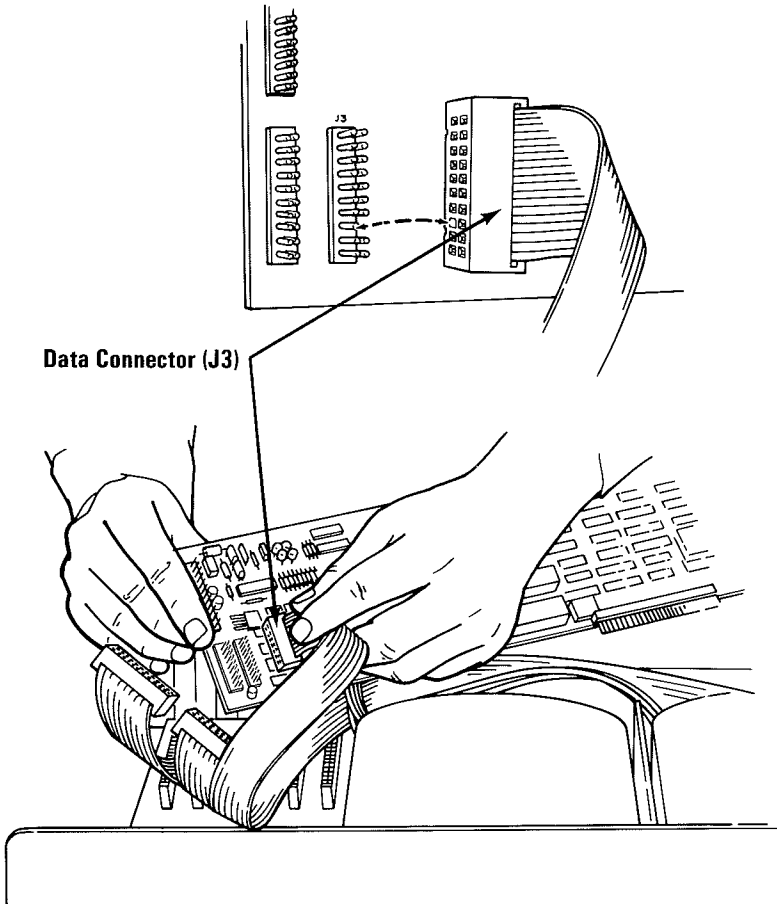
Fixed Disk Drive Adapter Removal

5820

1. Set the Power switch on the system unit (and expansion unit, if attached) to Off.
2. Unplug the system unit's (and expansion unit's) power cord(s) from the wall outlet and disconnect all cables from the rear of the unit(s).
3. Remove the expansion unit cover (**5900**).
4. Remove the disk adapter mounting screw (**5800**).
5. Grasp the disk adapter by the top corners and lift straight up.
6. Remove the J2 data connector and the J1 control connector.



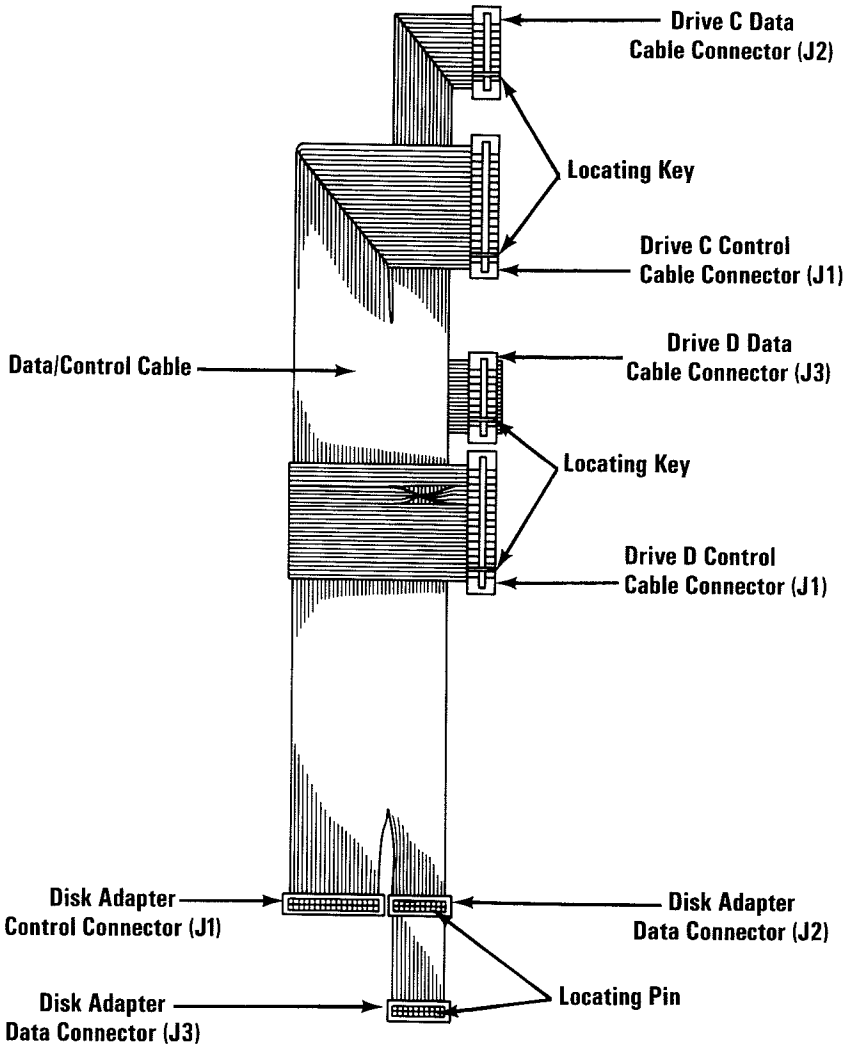
7. If two fixed disk drives are installed, remove the J3 data connector.



Fixed Disk Drive Adapter Replacement

5820

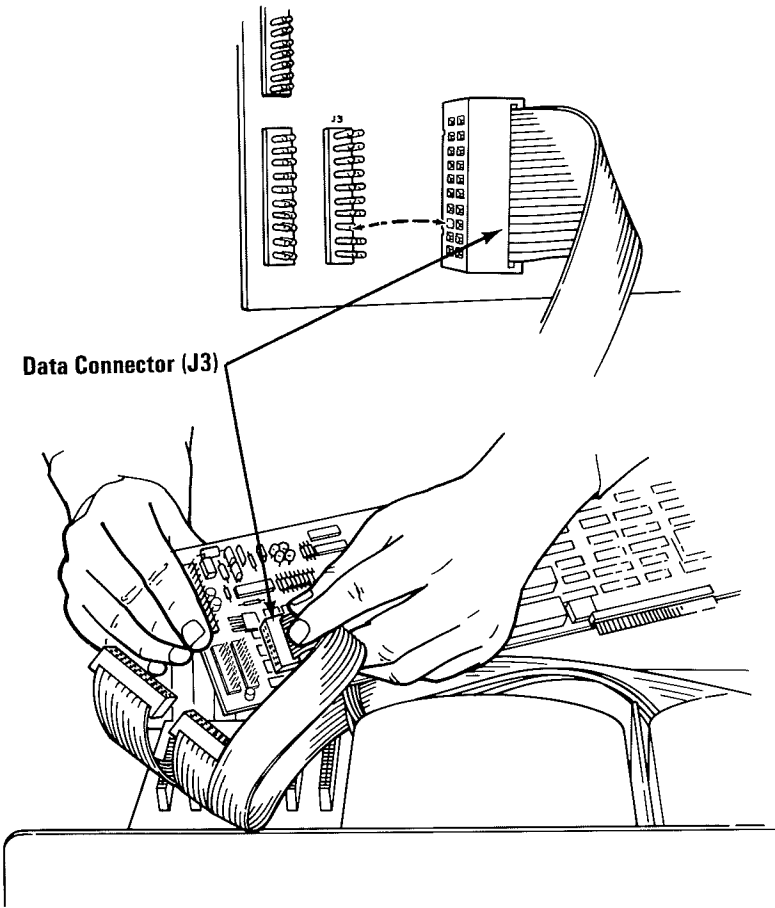
1. Familiarize yourself with the data/control cable before starting the installation.



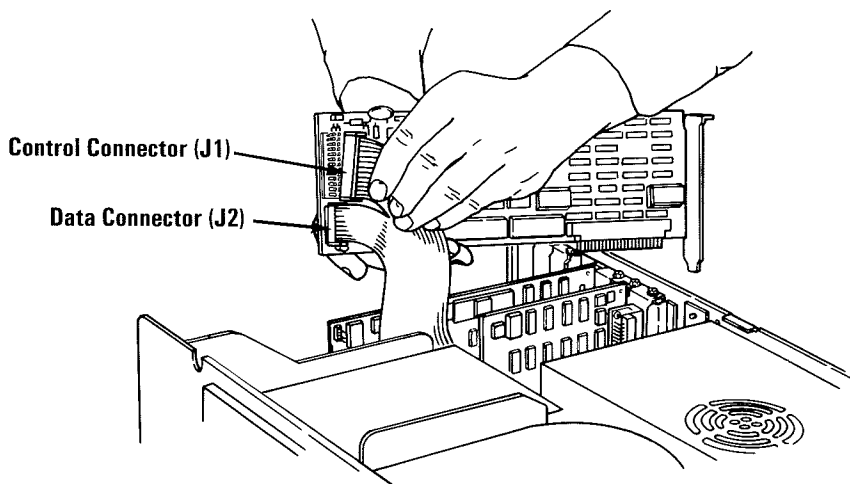
Fixed Disk Drive Adapter Replacement (cont.)

5820

2. If two fixed disk drives are installed, connect the J3 data connector.



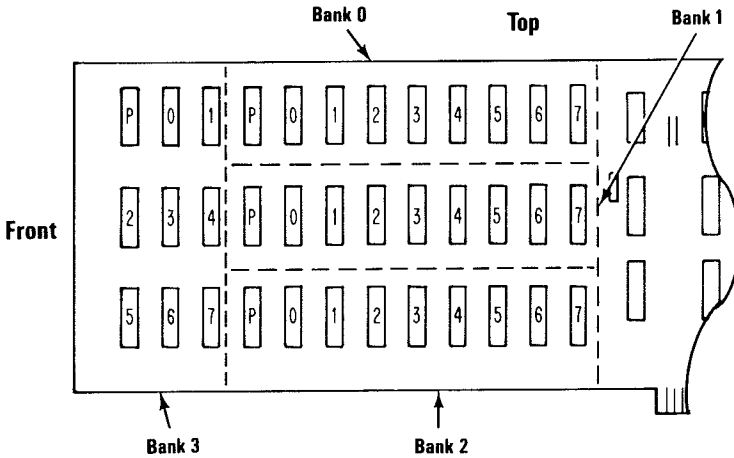
3. Connect the J1 control connector and the J2 data connector.



4. Insert the disk adapter into the option expansion slot. Press down firmly on the disk adapter to seat the connector.
5. Install the disk adapter mounting screw.
6. Replace the unit cover (5900).

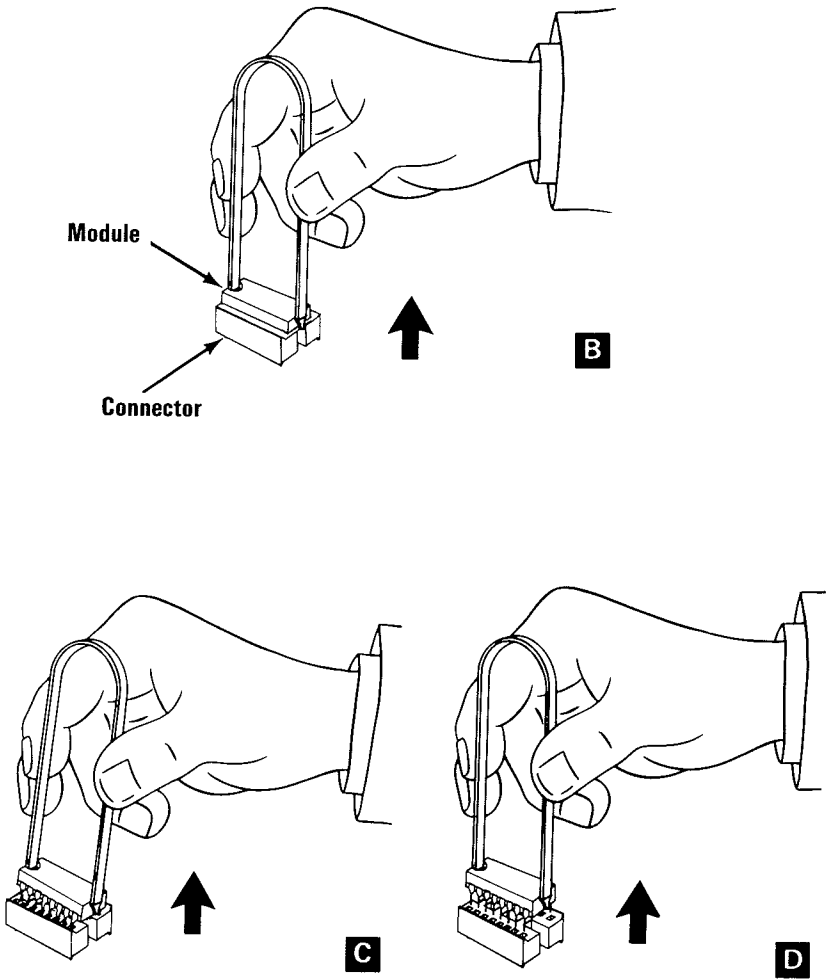
1. Set the Power switch on the system unit (and expansion unit, if attached) to Off.
2. Set all external Power switches to Off (printer, display, etc.).
3. Unplug system unit's (and expansion unit's) line cord(s) from the wall outlet.
4. Disconnect all cables from the rear of the system unit.
5. Remove the system unit cover (5900).
6. Remove the 64/256KB Memory Option Adapter (5800).
7. Locate the module in bank 0, bank 1, bank 2, or bank 3 to be removed. (If you are not certain which module needs to be replaced, refer to PIC 3-200-1, "Memory" to determine which module is failing.)

Note: If the module to be replaced is on the system board, see Memory Module Removal (5920).



64KB Memory Module Removal (cont.) 5830

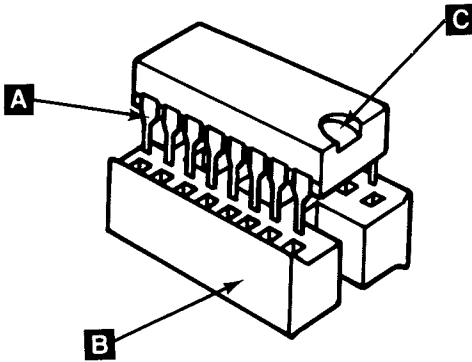
8. To separate the module from the connector, grasp the module as shown in **B**. Lift in a two step motion, as shown in **C** and **D**, to avoid bending pins.



64KB Memory Module Replacement

5830

1. Align the module pins **A** with the connector **B** and firmly press the module into place. Notch **C** on the module should be aligned with the notch in the connector.
2. Replace all option adapters (**5800**). Use the notes you made in the removal procedure to replace the option adapters in the right slots.
3. Replace the system unit cover (**5900**).
4. Recable the system.

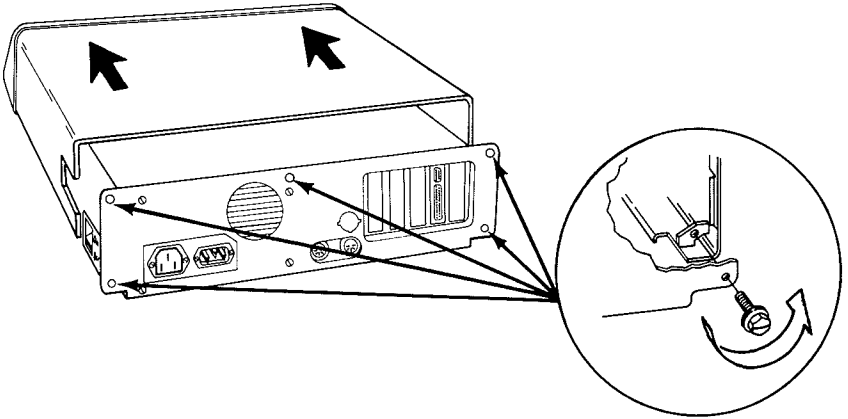


System Unit

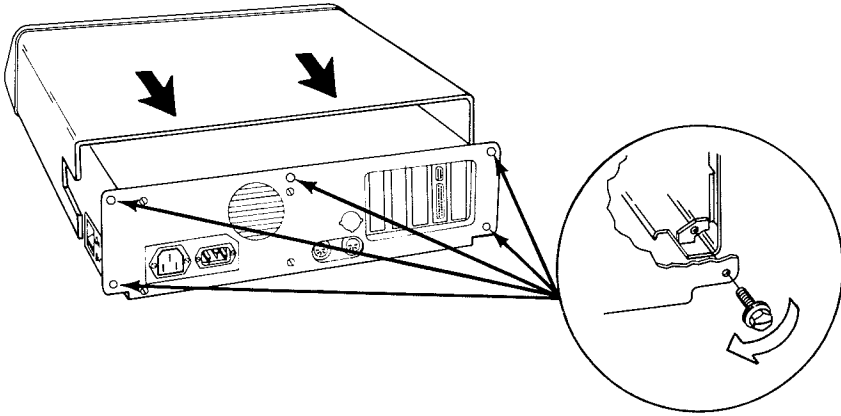
Cover Removal

5900

1. Set the system unit Power switch to Off, then unplug power cord and disconnect all cables from the rear of the unit.
2. Set all external options away from the work surface.
3. Remove the cover mounting screws and slide the cover towards the front until it clears the unit.

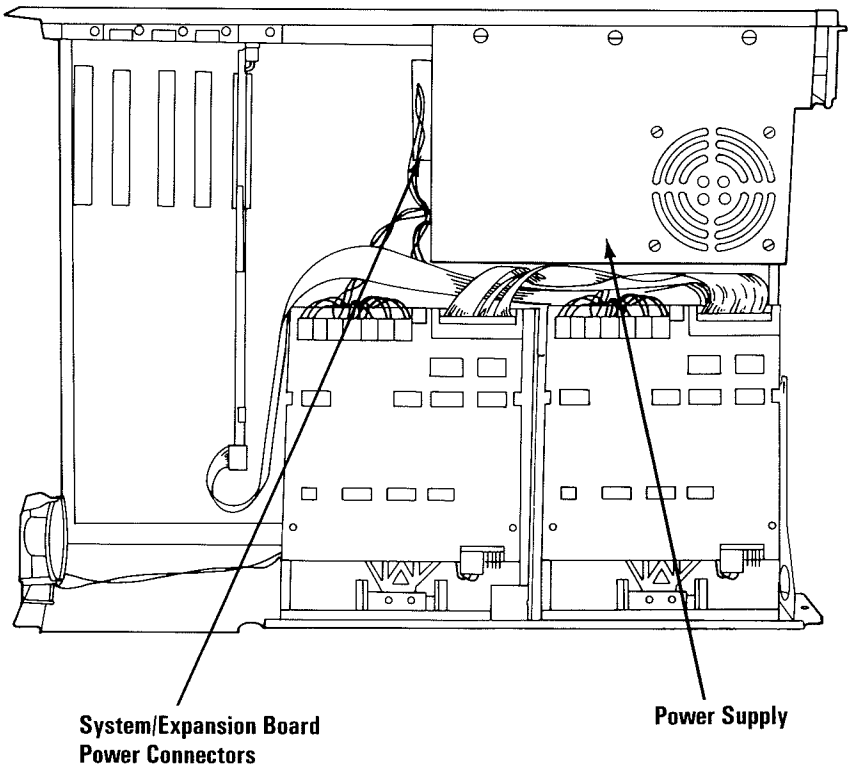


1. Slide the cover towards the rear of the unit.
2. Align the mounting screws with the threaded tabs and tighten.
3. Reconnect the cables to the system unit.



1. Set the Power switch on the system unit (and the expansion unit, if attached) to Off.
2. Unplug system unit's (and expansion unit's) power cord(s) from the wall outlet, then unplug the power cord from the rear of the system/expansion unit.
3. Remove the system/expansion unit cover (**5900**).
4. Disconnect the system/expansion board power connectors by grasping the connectors and pulling straight up.

WARNING: Do not pull on the wires when disconnecting connectors.

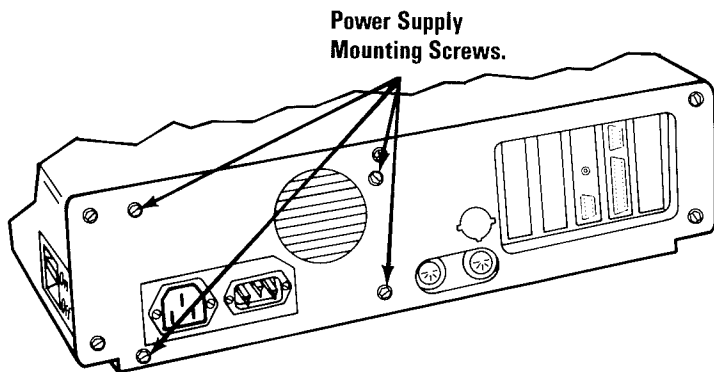


**System Unit
(Top View)**

5. Disconnect the fixed disk drive/diskette drive power connectors. See Section 4, "Locations."
6. Remove the four power supply mounting screws.

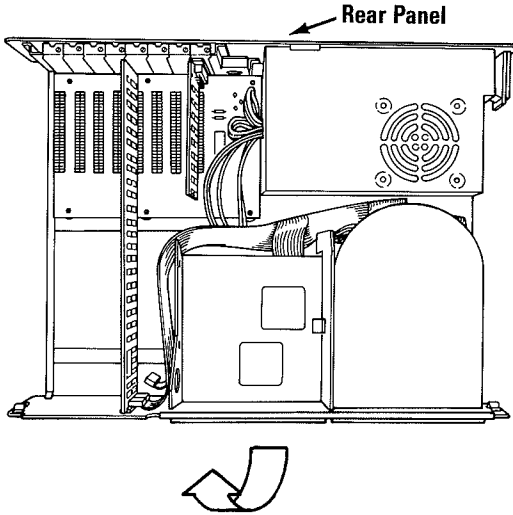
If you are replacing the system unit power supply, continue with step 11.

If you are replacing the expansion unit power supply, continue with step 7.

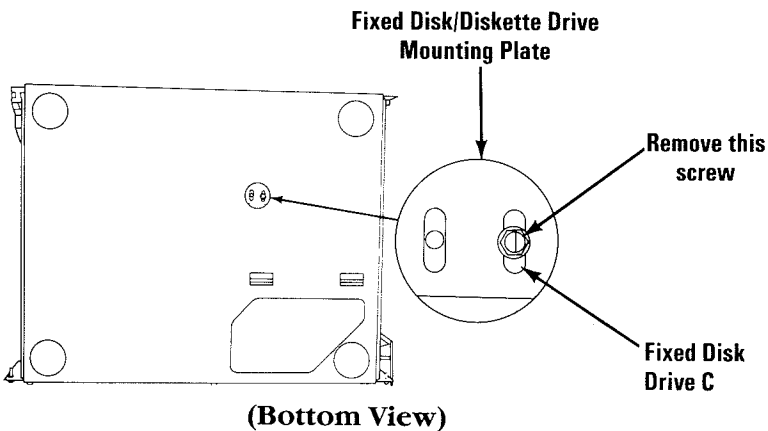


(Rear View)

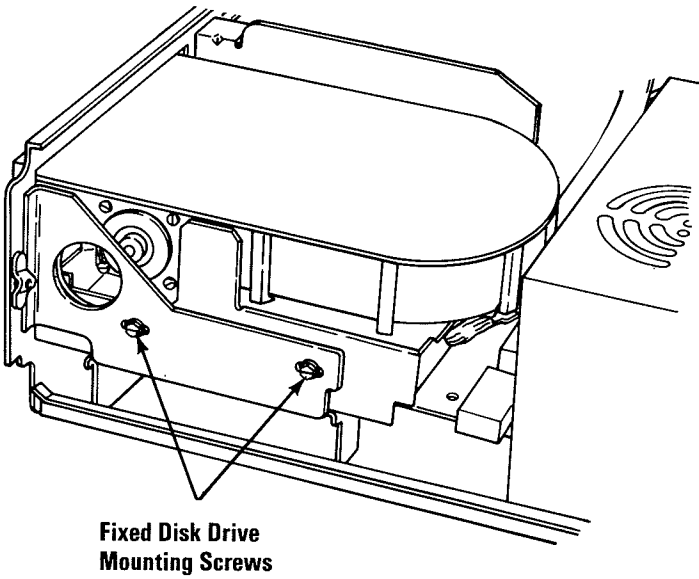
7. Hold the expansion unit by the front panel and tilt up until it rests on the rear panel.



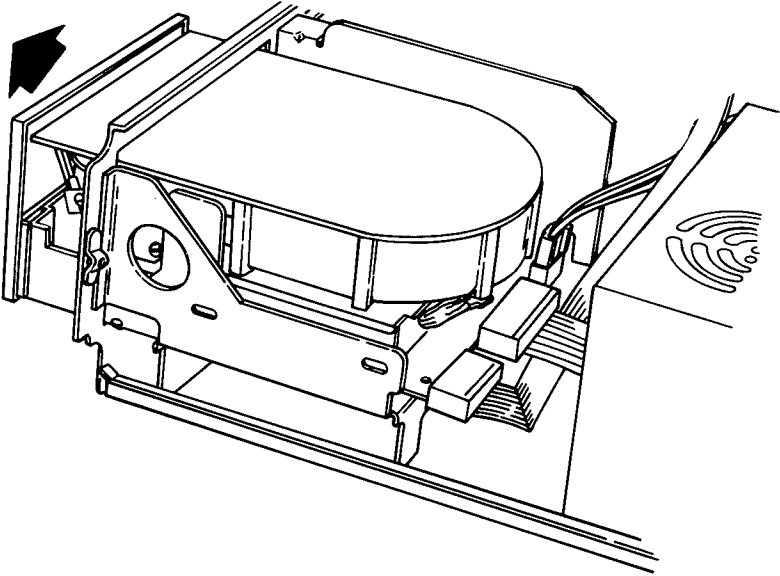
8. Remove the fixed disk mounting plate screw (turn counterclockwise) with a flat-blade screwdriver or 3/16" nutdriver.



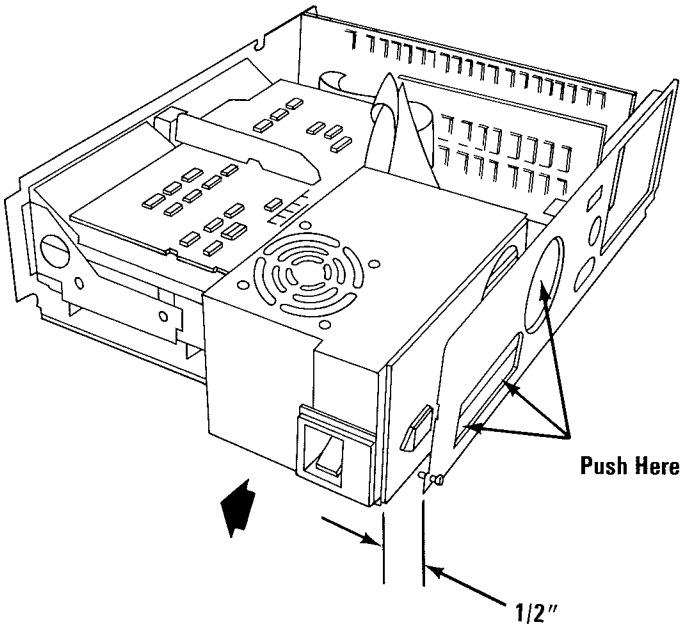
9. Remove the 2 fixed disk drive mounting screws.



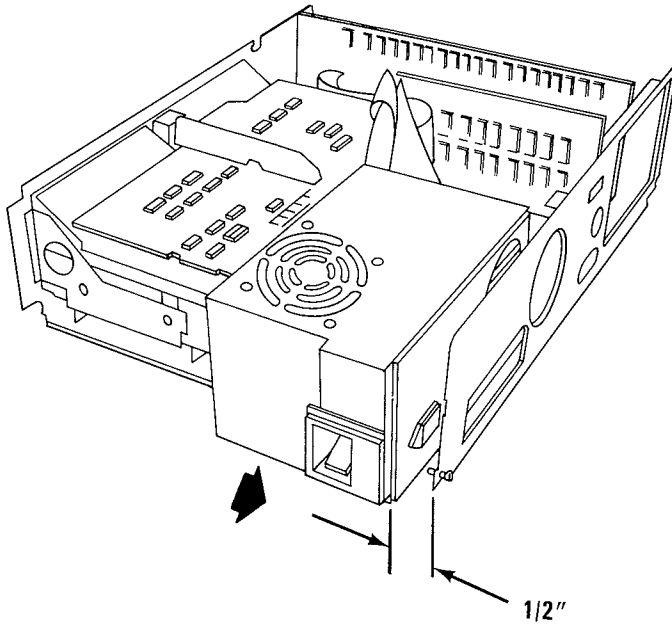
- 10. Slide the fixed disk drive assembly to the front of the machine about one inch.



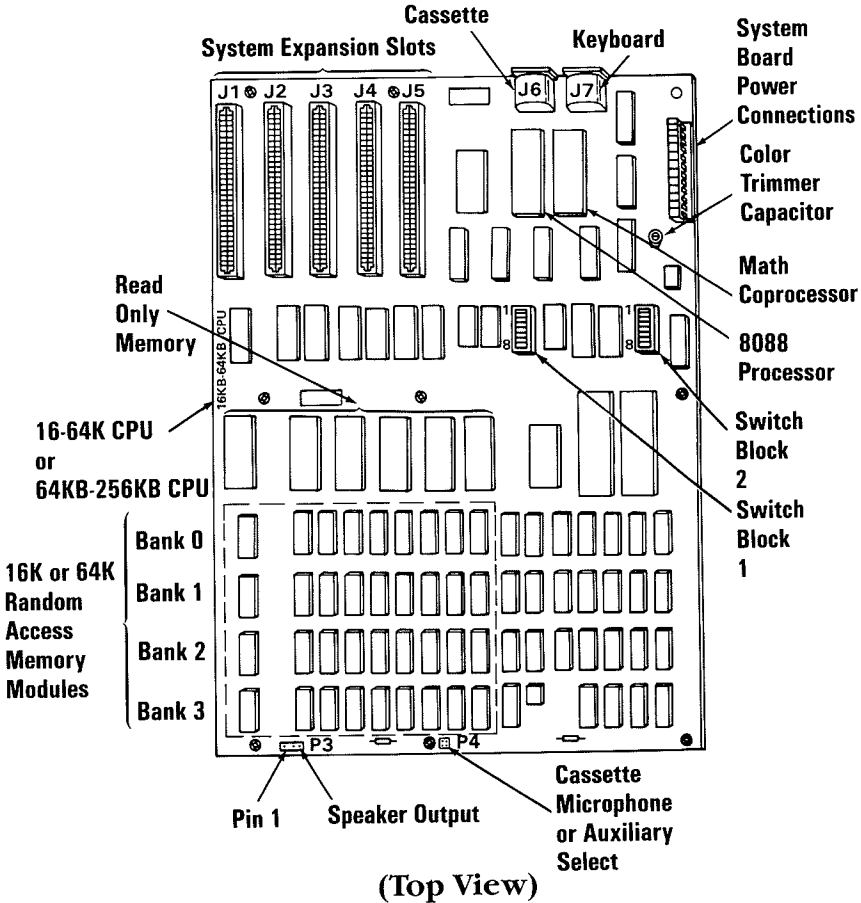
- 11. Push the power supply forward about 1/2" lift up and remove.



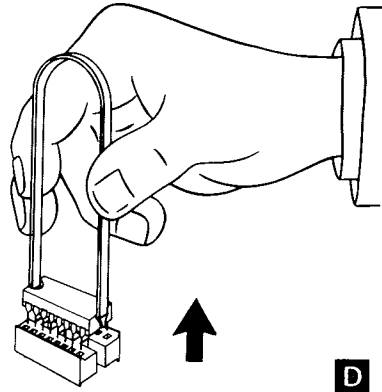
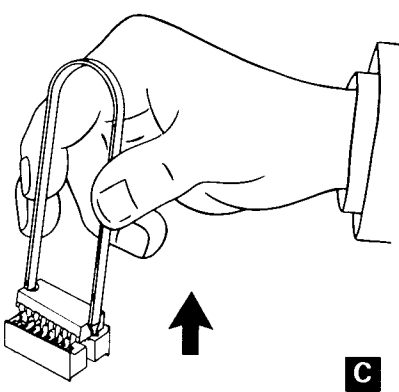
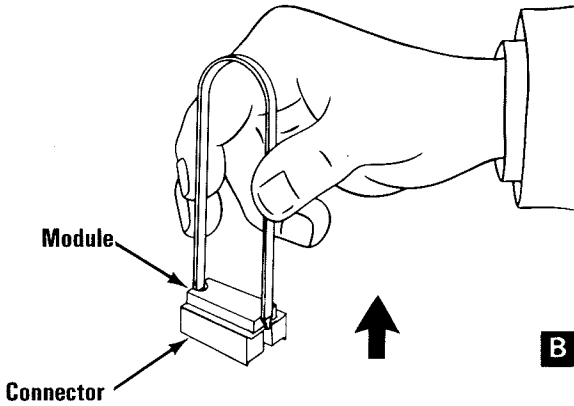
1. Position the power supply about 1/2" from the rear of the system/expansion unit back plate and slide into position.
2. Align the screw holes in the power supply with the rear frame.
3. Replace and tighten the four power supply mounting screws.
4. Reinstall the fixed disk drive if removed (expansion unit), and reconnect the fixed disk drive/diskette drive power connectors.
5. Reinstall the system/expansion board power connectors.
6. Replace fixed disk drive (5200).
7. Replace unit cover (5900).
8. Reconnect cables to the unit.



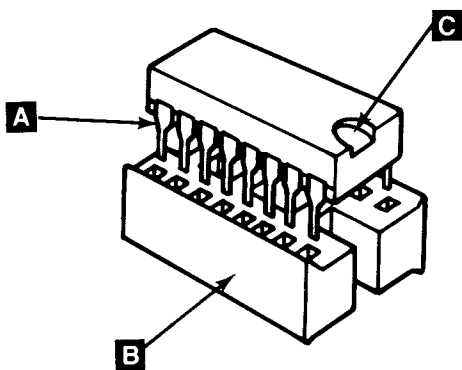
1. Set the Power switch on the system unit (and the expansion unit, if attached) to Off.
2. Set all external Power switches to off (printer, display, etc.).
3. Unplug system unit's (and expansion unit's) line cord(s) from the wall outlet.
4. Disconnect all cables from the rear of the system unit.
5. Remove the system unit cover (5900).
6. Remove all the option adapters from the system unit (5800). Make a note of the slot from which you remove each adapter.
7. Locate the module to be removed. (If you are not certain which module needs to be replaced see PIC 3-200-1, "Memory" to determine which module is failing.)



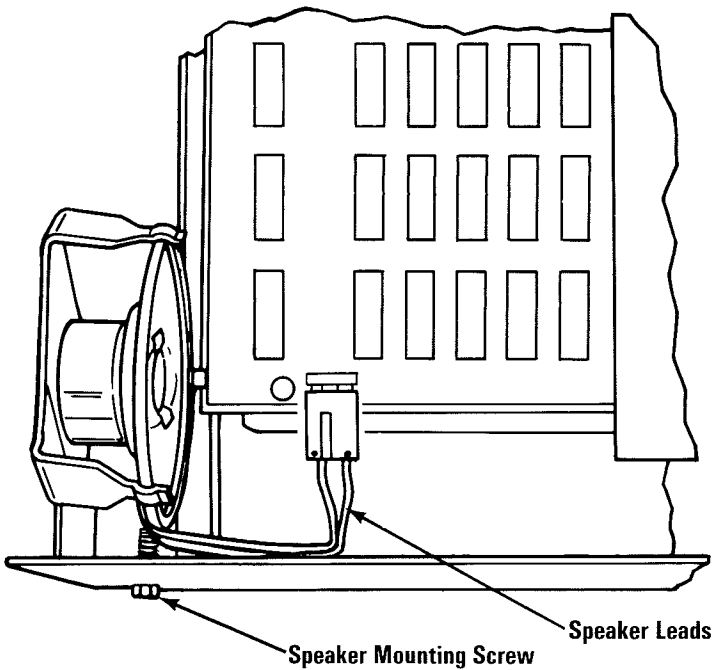
8. To separate the module from the connector, grasp the module as shown in **B** . Lift in a two step motion, as shown in **C** and **D** , to avoid bending pins.



1. Align the module pins **A** with the connector **B** and firmly press the module into place. Notch **C** on the module should be aligned with the notch in the connector.
2. Replace all option adapters (**5800**). Use the notes you made in the removal procedure to replace the option adapters in the right slots.
3. Replace the system unit cover (**5900**).
4. Recable the system.

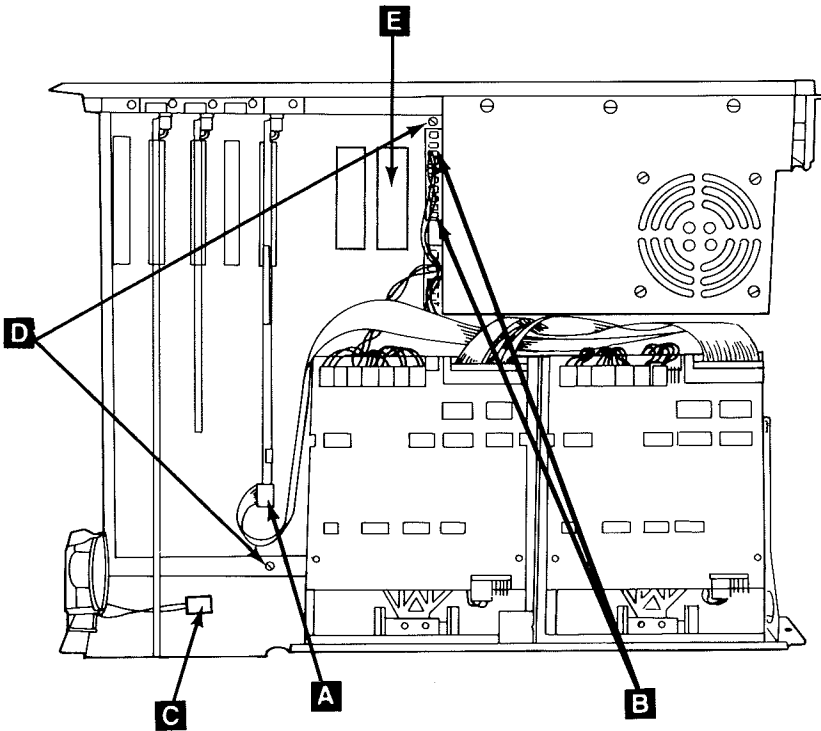


1. Set system unit Power switch to Off.
2. Remove system unit power cord from the wall outlet.
3. Remove the system unit cover (5900).
4. Disconnect the speaker leads.
5. Remove the speaker mounting screw.
6. Remove the speaker.

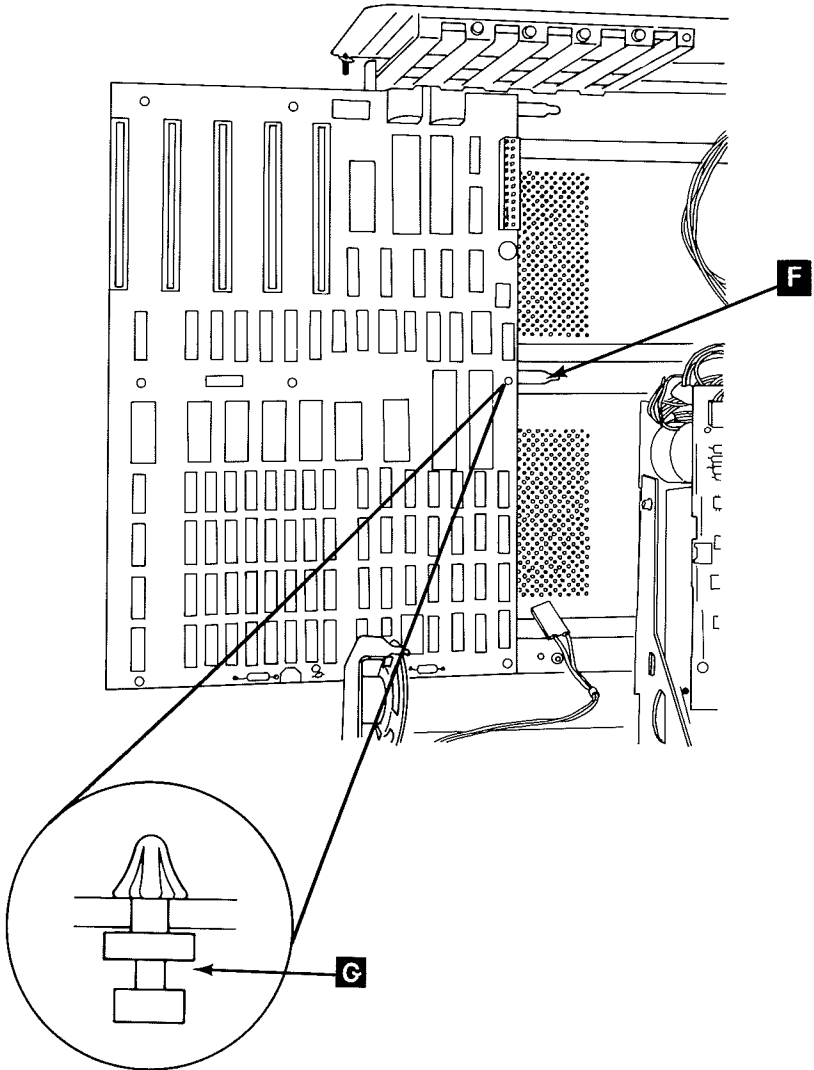


(Top View)

1. Set the Power switch on the system unit (and expansion unit, if attached) to Off.
2. Unplug system unit's (and expansion unit's if attached) power cord(s) from the wall outlet and disconnect all cables from the rear of the system unit.
3. Remove system unit cover (5900).
4. Remove all option adapters (5800) (5810).
5. Disconnect diskette drive signal cable **A** and system board power connectors **B**.
6. Remove the Math Coprocessor, if installed (5950) **E**.
7. Remove speaker connector **C**.
8. Remove system board mounting screws **D**.

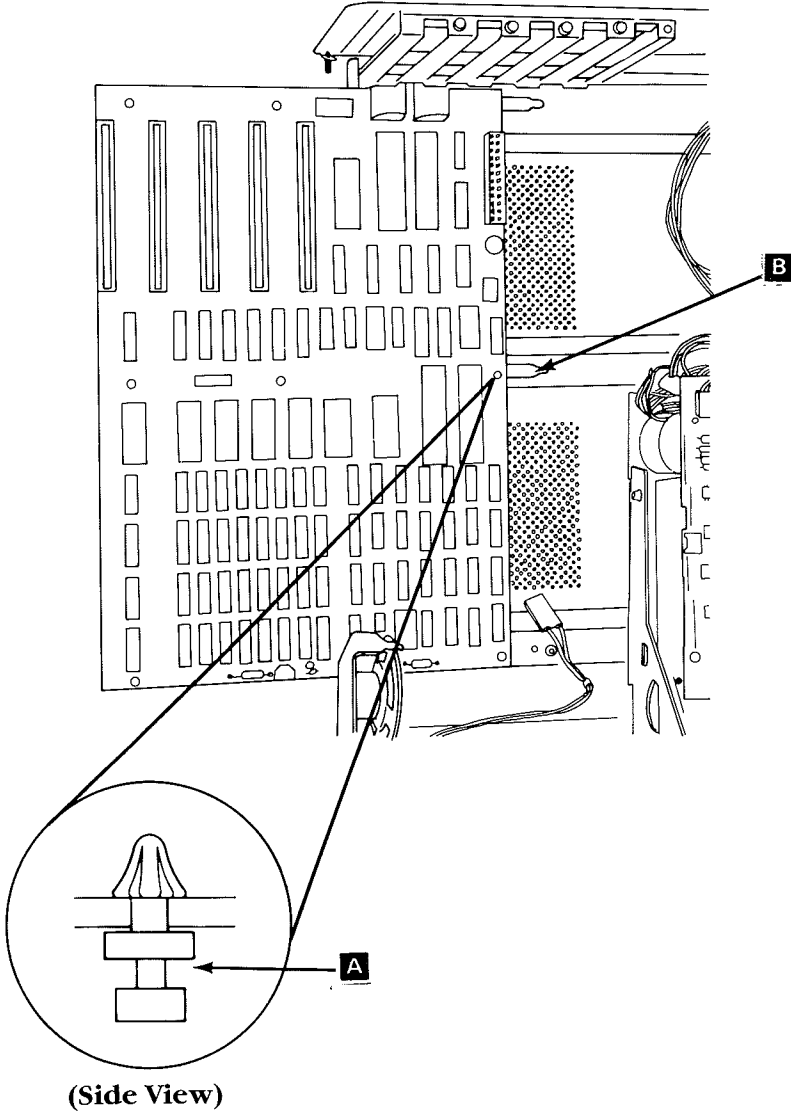


- Slide the system board away from the power supply (approximately 1/2" until stand-offs **G** can be lifted from mounting slots **F**).
- Lift the system board up and out of the system unit.

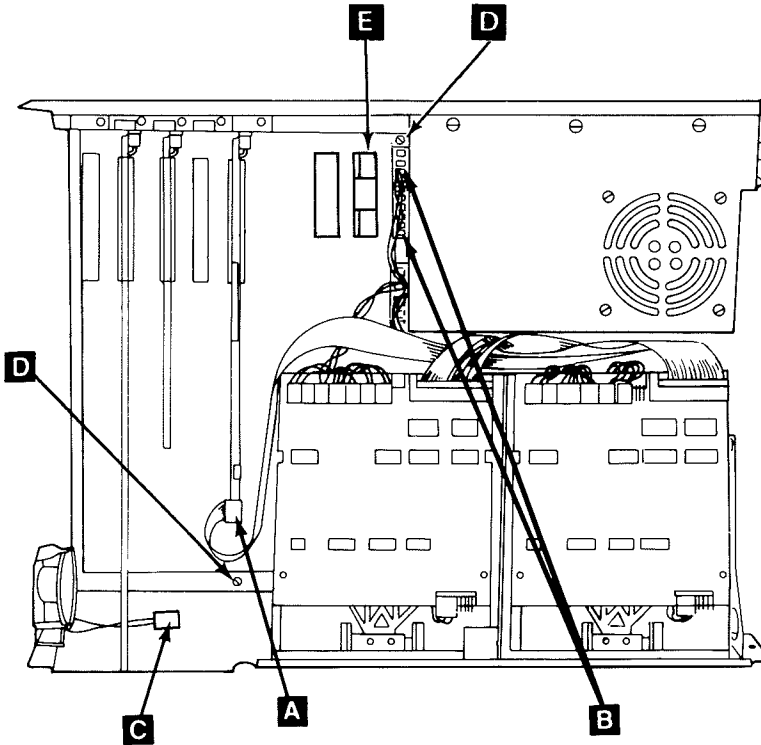


(Side View)

1. Position the stand-offs **A** on the system board into the mounting slots **B**.



2. Slide the system board toward the power supply until the holes for the two mounting screws are aligned.
3. Install the two system board mounting screws **D**.
4. Install the speaker connector **C**.
5. Install the Math Coprocessor, if removed (5950) **E**.
6. Install the system board power connectors **B**.
7. Install the option adapters (5800).
8. Install the diskette drive signal cable **A**.
9. Install the system unit cover (5900).
10. Reconnect all cables to the rear of the system unit.

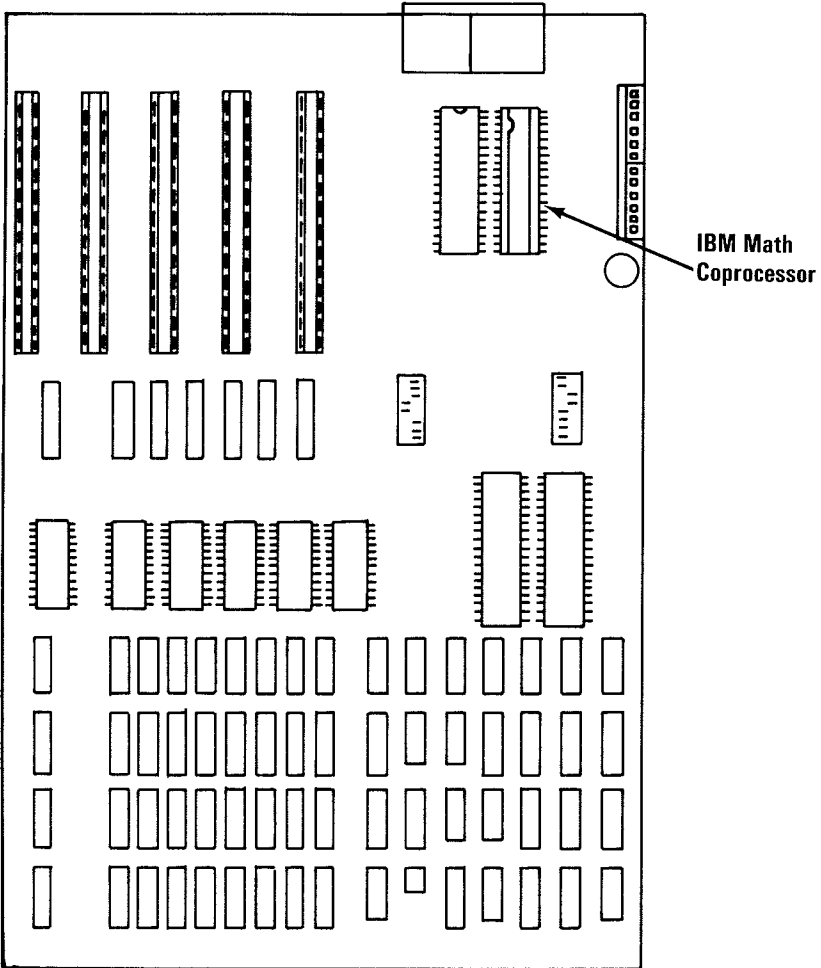


WARNING: The pins on the coprocessor are easily bent. Be careful not to bend the pins when removing the coprocessor.

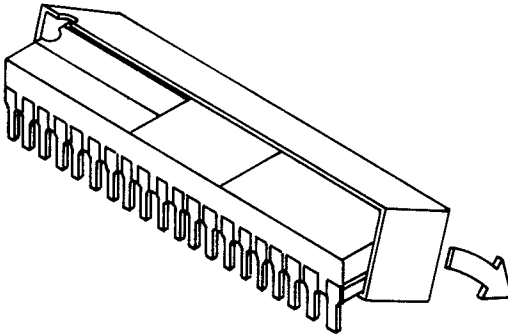
The coprocessor is static sensitive. Maintain personal grounding by touching the system unit frame with one hand while removing the coprocessor.

1. Set the Power switch on the system unit (and the expansion unit, if attached) to Off.
2. Set all external Power switches to off (printer, TV, etc).
3. Unplug the system unit's (and expansion unit's) power cord(s) from the wall outlet.
4. Disconnect all cables from the rear of the system unit.
5. Remove the system unit cover (**5900**).

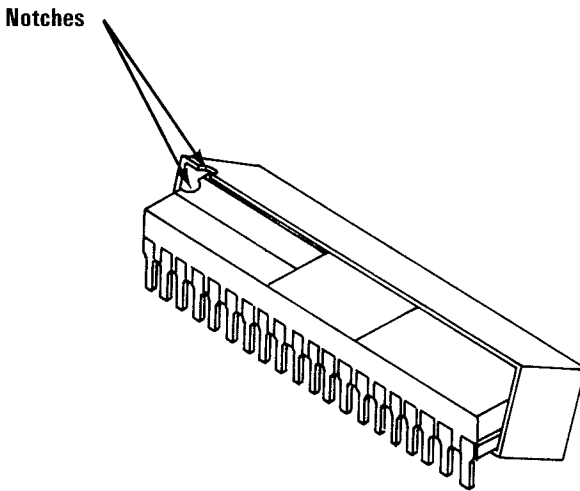
6. Unplug the power supply connectors from the system board and position them out of the way.
7. Locate the Math Coprocessor on the system board shown below.



- 8. Using a module puller, carefully remove the coprocessor.
- 9. Remove the safety protector.

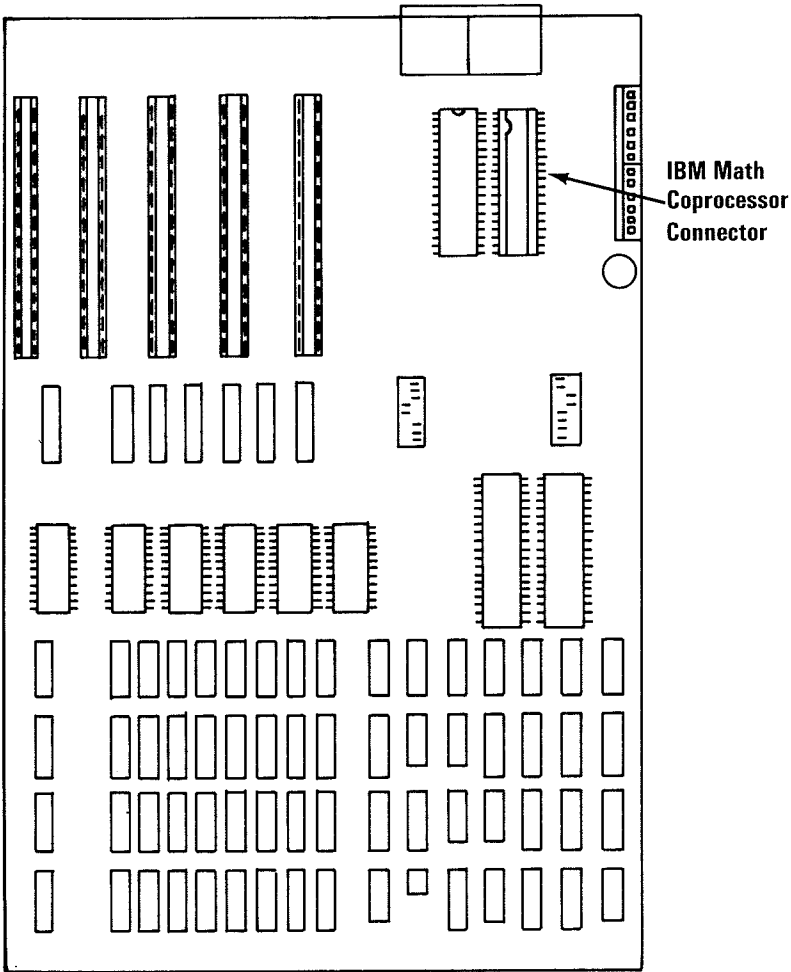


1. Install the safety protector on the coprocessor. Make sure the notches in the safety protector are on the same end as the notch in the coprocessor. The overlapped portions of the safety protector should be on the bottom or pin side of the coprocessor (5970).



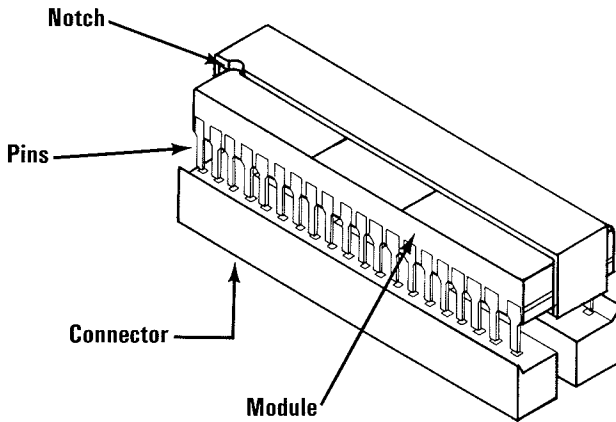
Math Coprocessor Replacement (cont.) 5950

2. Locate the Math Coprocessor connector on the system board shown below.



Math Coprocessor Replacement (cont.) 5950

3. Carefully align the pins on the coprocessor with its connector and firmly press the coprocessor in place. Be sure the notch on the safety protector is facing toward the 8088 processor.
4. Check to be sure the switch block 1 switch 2 on the system board, is in the OFF position.



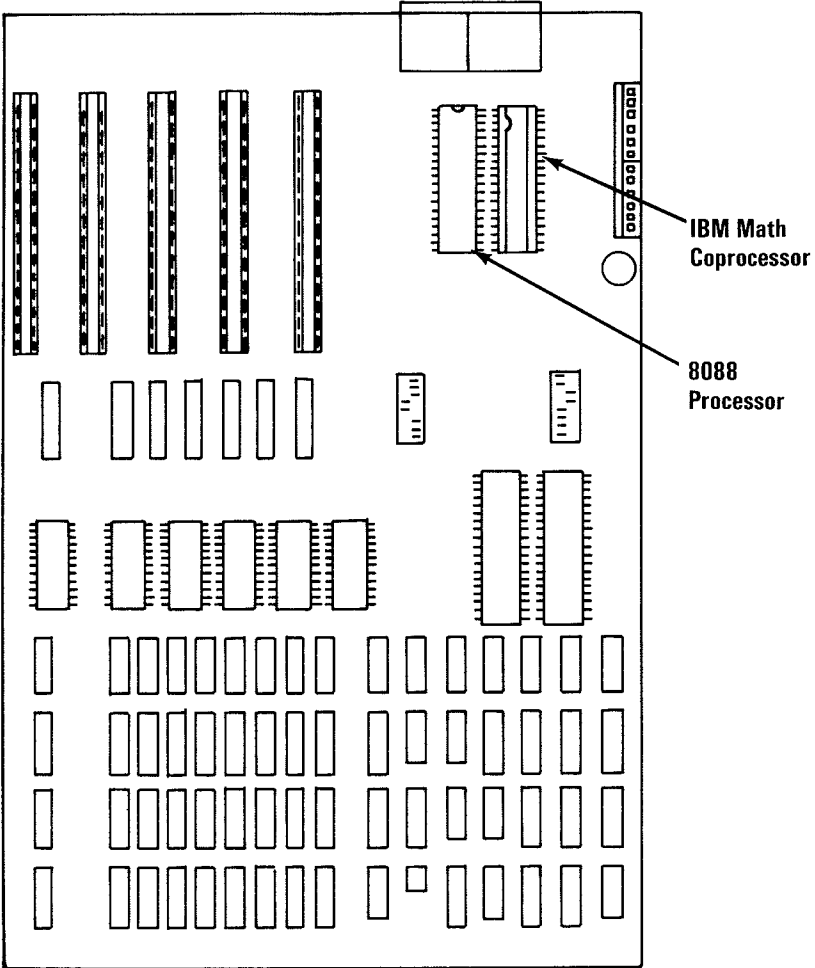
5. Reconnect the power supply connectors.
6. Replace the system unit cover (5900).
7. Reconnect all cables.

Warning: The pins on the processor module are easily bent. Be careful not to bend the pins when removing the processor.

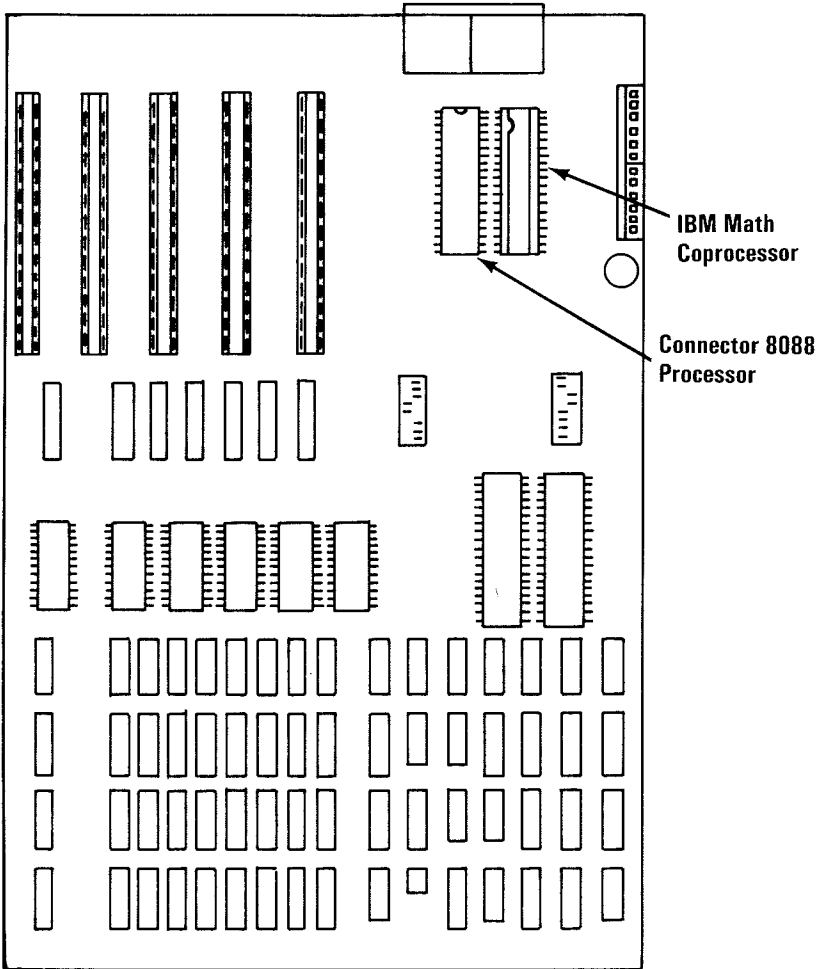
The processor is static sensitive. Maintain personal grounding, by touching the system unit frame with one hand, while removing the processor.

1. Set the Power switch on the system unit (and the expansion unit, if attached) to Off.
2. Set all external Power switches to off (printer, TV, etc.).
3. Unplug the system unit's (and expansion unit's) power cord(s) from the wall outlet.
4. Remove the system unit cover (**5900**).

- 5. Unplug the power supply connectors from the system board and position them out of the way.
- 6. Locate the processor on the system board shown below.
- 7. Using a module puller, carefully remove the processor.



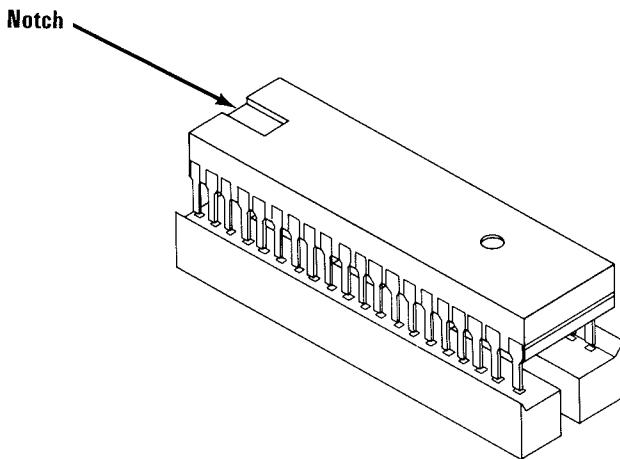
1. Locate the 8088 processor connector on the system board shown below.



Warning: The pins on the processor module are easily bent. Be careful not to bend the pins when installing the processor.

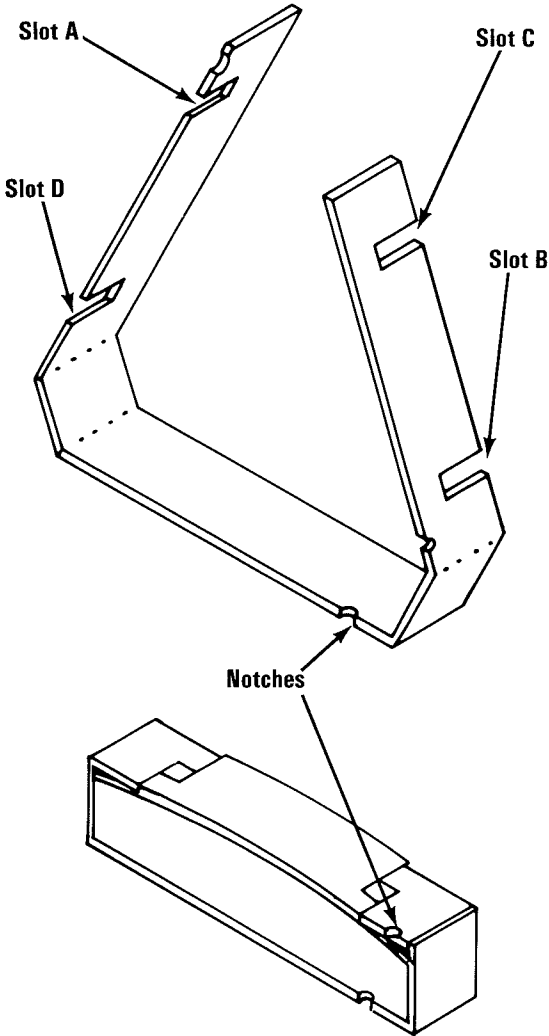
The processor is also static sensitive. Maintain personal grounding, by touching the system frame with one hand, while installing the processor.

2. Carefully align the pins on the processor with its connector and firmly press the processor in place. Be sure the notch on the 8088 processor is facing the rear of the system board.



3. Replace the system unit cover (5900).
4. Reconnect all cables.

1. Assemble the safety protector as shown in the figure below.
2. Insert slot A into B then insert C into slot D.



SECTION 6. SWITCH SETTINGS

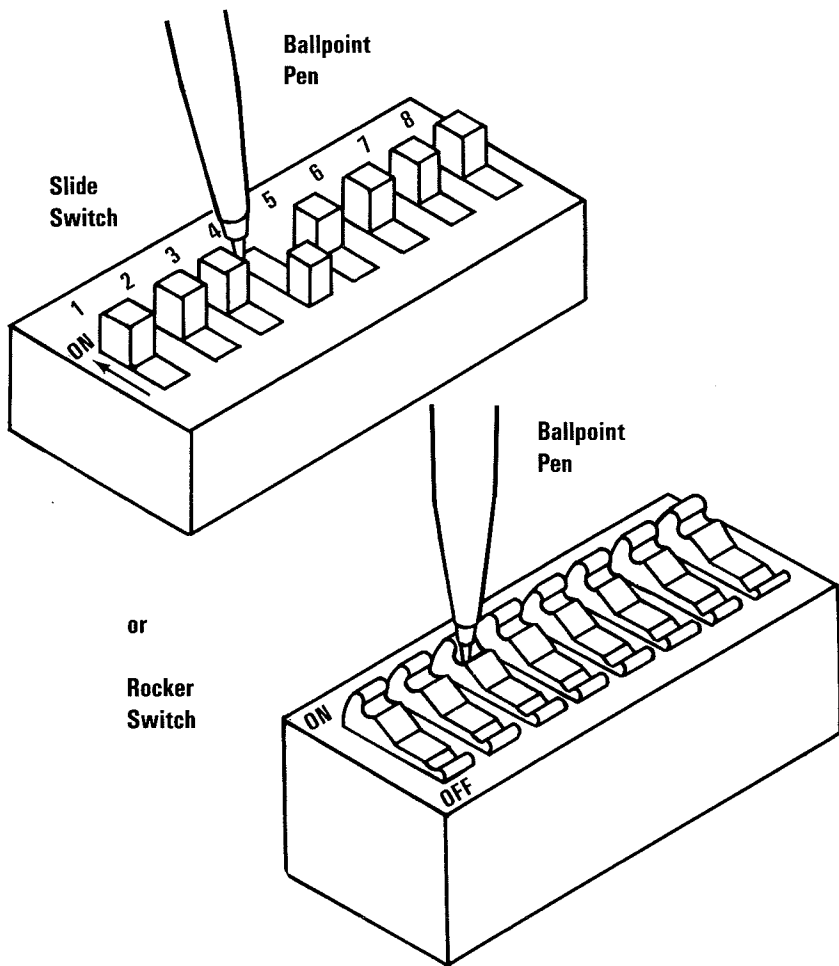
System Board Switch Settings	6-3
System Board Switches	6-3
Monitor Type Switch Settings	6-4
5 1/4" Diskette Drive Switch Setting	6-4
Extender Card Switch Settings	6-5
Memory Option Switch Settings	6-6
(16KB-64KB CPU) System Board	6-6
(64KB-256KB CPU) System Board	6-25

Note: The system board type (16KB-64KB CPU or 64KB-256KB CPU) is printed on the left edge of the system board. See Section 4, "Locations."

Switches in your system are set to reflect the addition of memory and other installed options. Switches are located on the system board, extender card, and memory expansion options.

The switches are dual inline pin (dip) switches that can be easily set with a ballpoint pen. Refer to the diagrams below to familiarize yourself with the different types of switches that may be used in your system.

Refer to the charts on the following pages to determine the correct switch setting for your system.

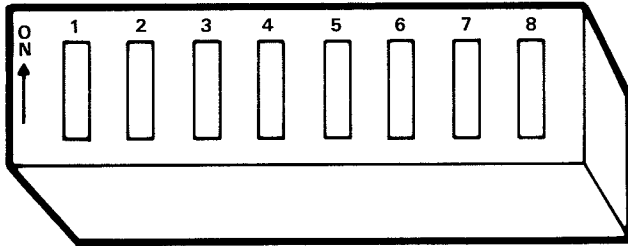


Note: Set a rocker switch by pressing down the rocker to the desired position.

System Board Switch Settings

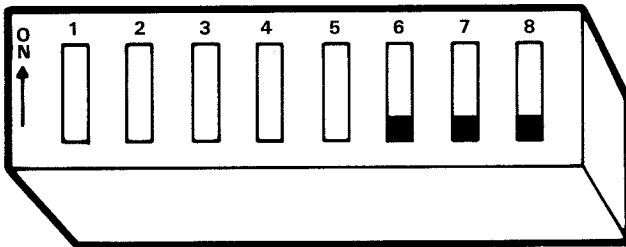
The switches on the system board are set as shown in the following figure. These settings are necessary for the system to address the attached components, and to specify the amount of memory installed on the system board.

Switch Block 1



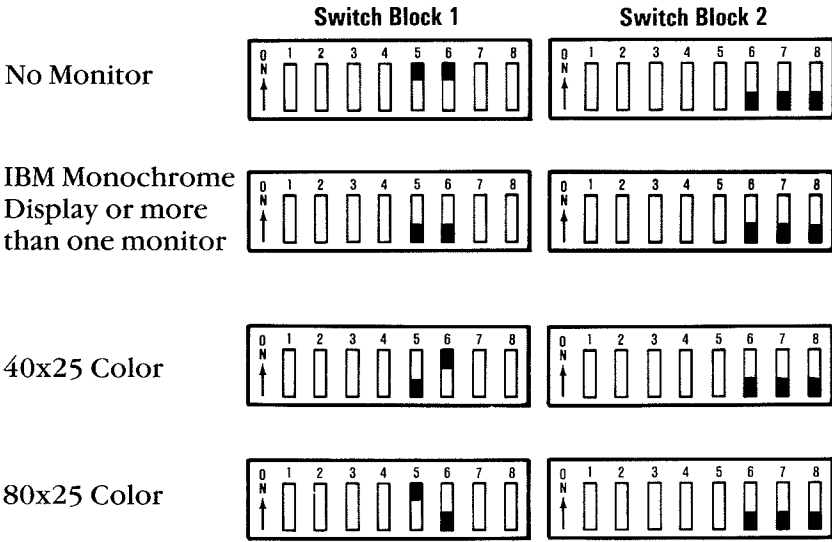
Position	Function
1-7-8	Number of 5 1/4" Diskette Drives Installed
2	Math Coprocessor: ON if coprocessor is installed (must be OFF is coprocessor is not installed)
3-4	Amount of memory on the system board
5-6	Type(s) of display adapter(s) installed

Switch Block 2



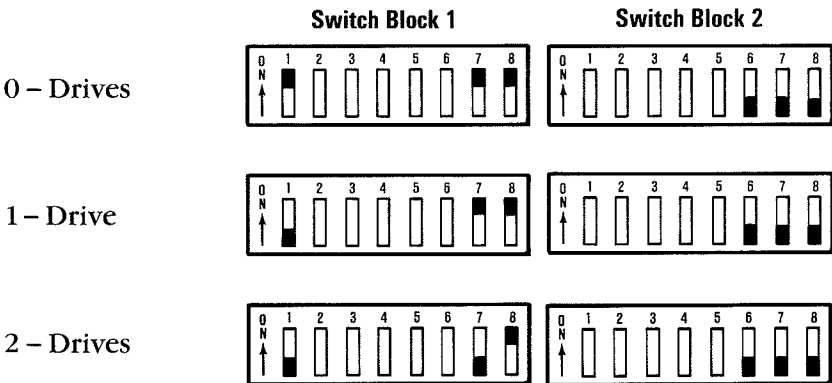
Position	Function
1-2-3-4-5	Amount of memory options installed
6-7-8	Always in the OFF position

Monitor Type Switch Settings






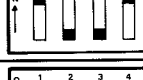
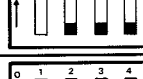
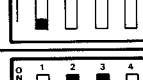




Note: The 80x25 color setting, when used with home television and various monitors, can cause loss of character/quality.

5 1/4" Diskette Drive Switch Settings

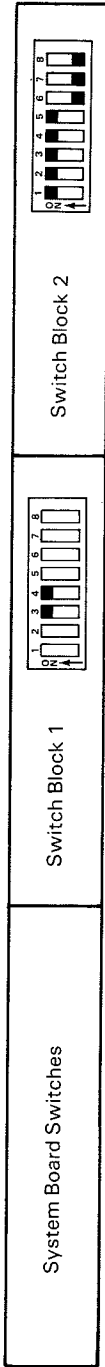


Extender Card Switch Settings

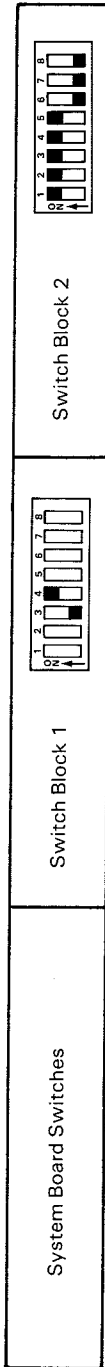
System Memory	Extender Card Switch Block	Memory Segment
16K to 64K		1
96K to 128K		2
160K to 192K		3
224K to 256K		4
288K to 320K		5
352K to 384K		6
416K to 448K		7
480K to 512K		8
544K to 576K		9
608K to 640K		A

Memory Switch Settings (16KB-64KB CPU) System Board

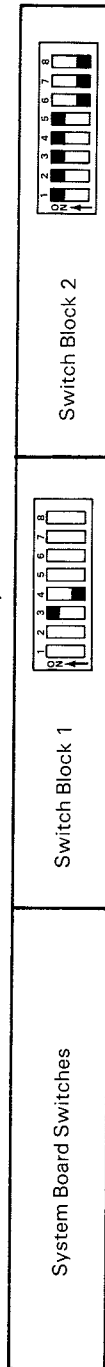
16K Total Memory



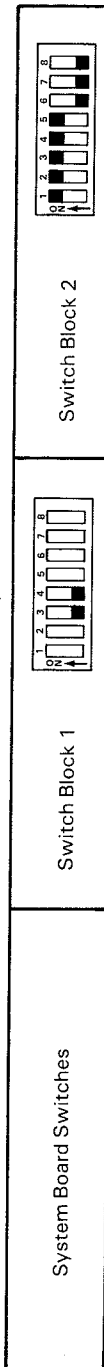
32K Total Memory



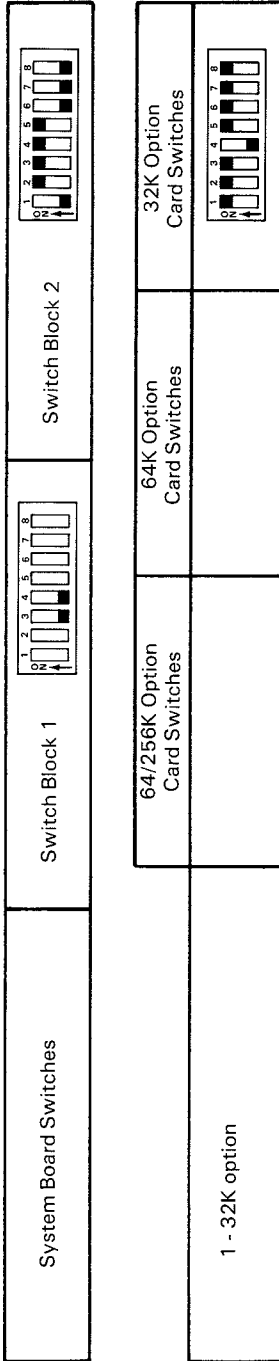
48K Total Memory




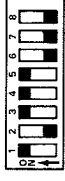


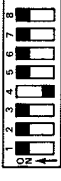

64K Total Memory



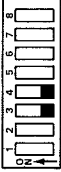



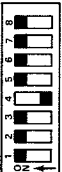




**96K Total Memory
32K + (64K on System Board)**




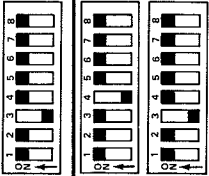


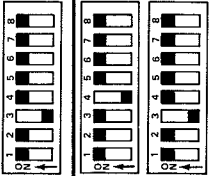

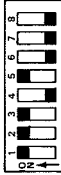
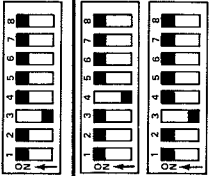
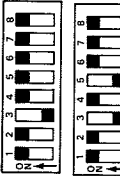
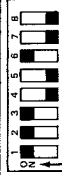
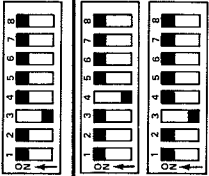
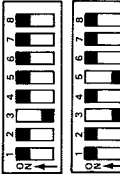
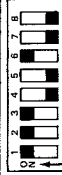
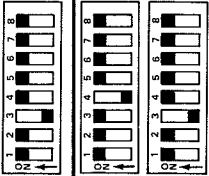
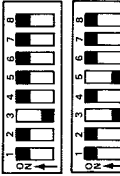
**128K Total Memory
64K + (64K on System Board)**

System Board Switches	Switch Block 1 	Switch Block 2 
	64/256K Option Card Switches 	64K Option Card Switches
1 - 64/256K option with 64K installed		32K Option Card Switches 
1 - 64K option		
2 - 32K options		


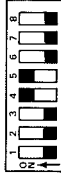




**160K Total Memory
96K + (64K on System Board)**

System Board Switches	Switch Block 1 	Switch Block 2 
1 - 64/256K option with 64K installed 1 - 32K option	64/256K Option Card Switches 	32K Option Card Switches 
1 - 64K option 1 - 32K option	64K Option Card Switches 	32K Option Card Switches 
3 - 32K options		32K Option Card Switches   


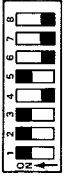

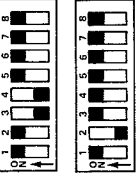
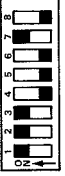




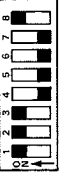
**192K Total Memory
128K + (64K on System Board)**

System Board Switches	Switch Block 1	Switch Block 2	
<p>1 - 64/256K option with 64K option installed 1 - 64K option</p>		<p>64K Option Card Switches</p> 	<p>32K Option Card Switches</p> 
<p>2 - 64K options</p>		<p>64K Option Card Switches</p> 	<p>32K Option Card Switches</p> 
<p>1 - 64/256K option with 64K installed 2 - 32K options</p>		<p>64K Option Card Switches</p> 	<p>32K Option Card Switches</p> 
<p>1 - 64K option 2 - 32K options</p>		<p>64K Option Card Switches</p> 	<p>32K Option Card Switches</p> 
<p>1 - 64/256K option with 128K installed</p>		<p>64K Option Card Switches</p> 	<p>32K Option Card Switches</p> 



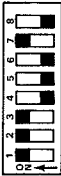



**288K Total Memory
224K + (64K on System Board)**

System Board Switches	 <p align="center">Switch Block 1</p>	 <p align="center">Switch Block 2</p>
<p>1 - 64/256K option with 192K installed 1 - 32K option</p>	<p align="center">64/256K Option Card Switches</p> 	<p align="center">64K Option Card Switches</p> 
<p>1 - 64/256K option with 128K installed 1 - 64K option 1 - 32K option</p>		<p align="center">32K Option Card Switches</p> 


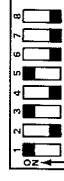

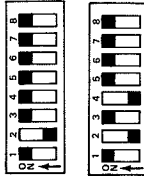
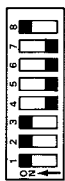
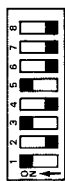
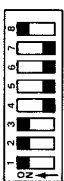

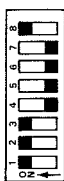


**320K Total Memory
256K + (64K on System Board)**

System Board Switches	Switch Block 1 	Switch Block 2 
<p>1 - 64/256K option with 128K installed 2 - 64K options</p>	<p>64/256K Option Card Switches </p>	<p>64K Option Card Switches </p>
<p>1 - 64/256K option with 192K installed 1 - 64K option</p>	<p>64/256K Option Card Switches </p>	<p>64K Option Card Switches </p>
<p>1 - 64/256K option with 192K installed 2 - 32K options</p>	<p>64/256K Option Card Switches </p>	<p>32K Option Card Switches  </p>
<p>1 - 64/256K option with 256K installed</p>	<p>64/256K Option Card Switches </p>	

**352K Total Memory
288K + (64K on System Board)**

System Board Switches	Switch Block 1	Switch Block 2
		
<p>1 - 64/256K option with 192K installed 1 - 64K option 1 - 32K option</p>	<p>64/256K Option Card Switches</p> 	<p>64K Option Card Switches</p> 
<p>1 - 64/256K option with 256K installed 1 - 32K option</p>	<p>64/256K Option Card Switches</p> 	<p>32K Option Card Switches</p> 

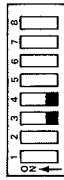
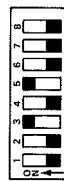
**384K Total Memory
320K + (64K on System Board)**

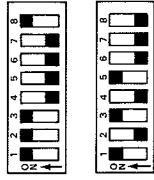
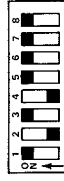

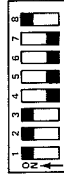
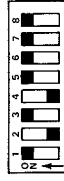

System Board Switches	Switch Block 1 	Switch Block 2 	
1 - 64/256K option with 192K installed 2 - 64K options	64/256K Option Card Switches 	64K Option Card Switches 	32K Option Card Switches
1 - 64/256K option with 256K installed 1 - 64/256K option with 64K installed	64/256K Option Card Switches  		
1 - 64/256K option with 256K installed 1 - 64K option	64/256K Option Card Switches 	64K Option Card Switches 	
1 - 64/256K option with 256K installed 2 - 32K options	64/256K Option Card Switches 		32K Option Card Switches  

256
128

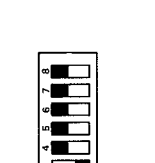
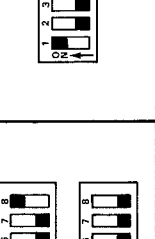
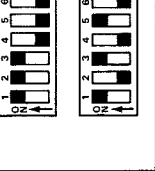
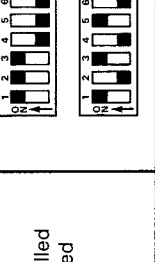
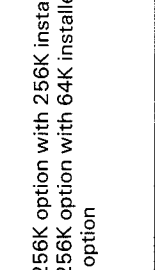
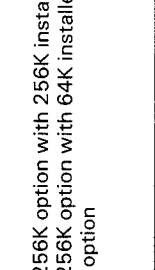
384

**416K Total Memory
352K + (64K on System Board)**

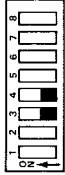
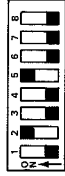
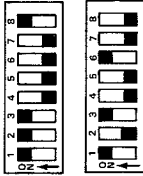
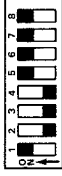
System Board Switches	 <p>Switch Block 1</p>	 <p>Switch Block 2</p>
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<p>1 - 64/256K option with 256K installed 1 - 64/256K option with 64K installed 1 - 32K option</p>	<p>64/256K Option Card Switches</p> 	<p>64K Option Card Switches</p> 	<p>32K Option Card Switches</p> 
<p>1 - 64/256K options with 256K installed 1 - 64K option 1 - 32K option</p>	<p>64/256K Option Card Switches</p> 	<p>64K Option Card Switches</p> 	<p>32K Option Card Switches</p> 

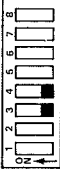
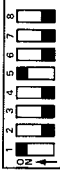
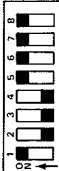


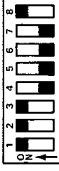
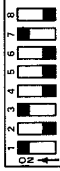
**448K Total Memory
384K + 164K on System Board**

System Board Switches	Switch Block 1	Switch Block 2	
<p>1 - 64/256K option with 256K installed 1 - 64/256K option with 64K installed 1 - 64K option</p>	<p>64/256K Option Card Switches</p> 	<p>64K Option Card Switches</p> 	<p>32K Option Card Switches</p> 
<p>1 - 64/256K option with 256K installed 2 - 64K options</p>	<p>64/256K Option Card Switches</p> 	<p>64K Option Card Switches</p> 	<p>32K Option Card Switches</p>
<p>1 - 64/256K option with 256K installed 1 - 64/256K option with 128K installed</p>	<p>64/256K Option Card Switches</p> 	<p>64K Option Card Switches</p>	<p>32K Option Card Switches</p>

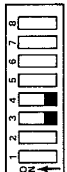

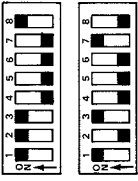
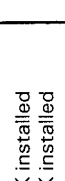
**480K Total Memory
416K + (64K on System Board)**

System Board Switches	 <p align="center">Switch Block 1</p>	 <p align="center">Switch Block 2</p>
<p>1 - 64/256K option with 256K installed 1 - 64/256K option with 128K installed 1 - 32K option</p>	<p align="center">64/256K Option Card Switches</p> 	<p align="center">64K Option Card Switches</p>
		<p align="center">32K Option Card Switches</p> 



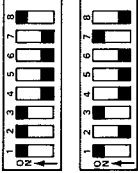

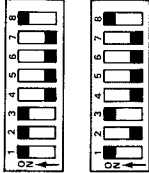

**512K Total Memory
448K + (64K on System Board)**

System Board Switches	Switch Block 1	Switch Block 2	
			<p align="center">64K Option Card Switches</p> 
<p>1 - 64/256K option with 256K installed 1 - 64/256K option with 128K installed 1 - 64K option</p>	<p align="center">64/256K Option Card Switches</p>  		<p align="center">32K Option Card Switches</p>
<p>1 - 64/256K option with 256K installed 1 - 64/256K option with 192K installed</p>	 		


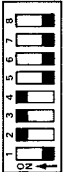
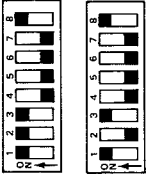

**544K Total Memory
480K + (64K on System Board)**

<p align="center">System Board Switches</p>	<p align="center">Switch Block 1</p> 	<p align="center">Switch Block 2</p> 
<p>1 - 64/256K option with 256K installed 1 - 64/256K option with 192K installed 1 - 32K option</p>	<p align="center">64/256K Option Card Switches</p> 	<p align="center">64K Option Card Switches</p>
		<p align="center">32K Option Card Switches</p> 

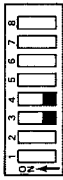

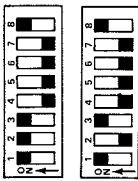

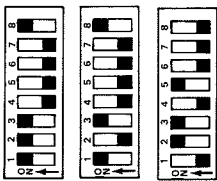
**576K Total Memory
512K + (64K on System Board)**

System Board Switches	Switch Block 1 	Switch Block 2 
<p>1 - 64/256K option with 256K installed 1 - 64/256K option with 192K installed 1 - 64K option</p>	<p>64/256K Option Card Switches</p> 	<p>64K Option Card Switches</p> 
<p>2 - 64/256K option with 256K installed</p>	<p>64/256K Option Card Switches</p> 	<p>32K Option Card Switches</p> 

**608K Total Memory
544K + (64K on System Board)**

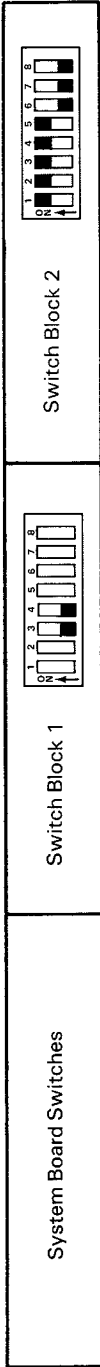
<p align="center">System Board Switches</p>	<p align="center">Switch Block 1</p> 	<p align="center">Switch Block 2</p> 
<p>2 - 64/256K option with 256K installed 1 - 32K option</p>	<p align="center">64/256K Option Card Switches</p> 	<p align="center">64K Option Card Switches</p>
<p align="center">32K Option Card Switches</p> 		

**640K Total Memory
576K + (64K on System Board)**

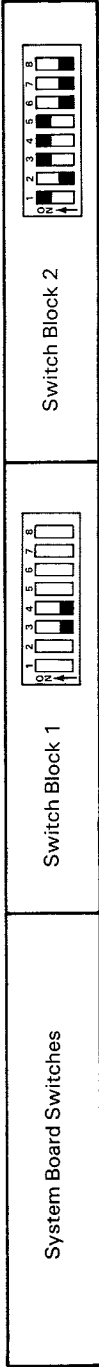
System Board Switches	Switch Block 1 	Switch Block 2 
<p>2 - 64/256K option with 256K installed 1 - 64K option</p>	<p style="text-align: center;">64/256K Option Card Switches</p> 	<p style="text-align: center;">64K Option Card Switches</p> 
<p>2 - 64/256K option with 256K installed 1 - 64/256K option with 64K installed</p>	<p style="text-align: center;">64/256K Option Card Switches</p> 	<p style="text-align: center;">32K Option Card Switches</p>

Memory Switch Settings (64KB-256KB CPU) System Board

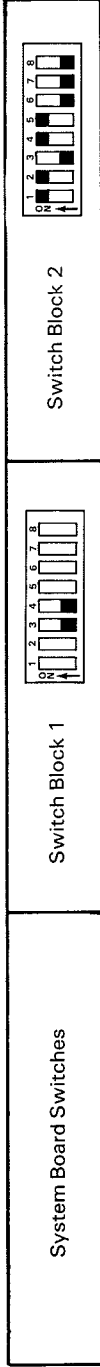
64K Total Memory



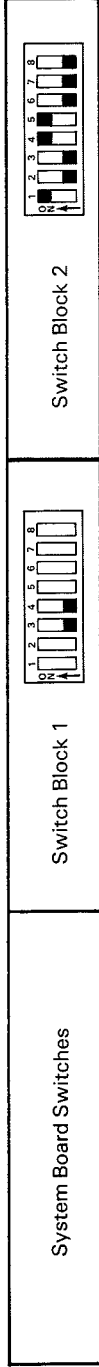
128K Total Memory





192K Total Memory








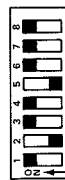
256K Total Memory




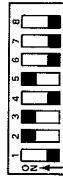


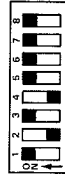



**288K Total Memory
32K + (256K on System Board)**

System Board Switches	 <p align="center">Switch Block 1</p>	 <p align="center">Switch Block 2</p>	
1 - 32K option	64/256K Option Card Switches	64K Option Card Switches	32K Option Card Switches

**320K Total Memory
64K + (256K on System Board)**

System Board Switches	Switch Block 1 	Switch Block 2 
1 - 64/256K option with 64K installed	64/256K Option Card Switches 	64K Option Card Switches
1 - 64K option		
2 - 32K options		 



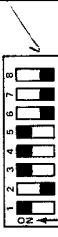
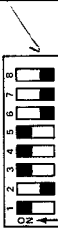
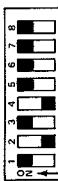
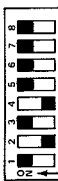
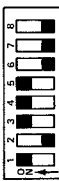
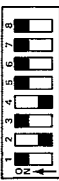
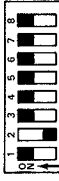


**352K Total Memory
96K + (256K on System Board)**

System Board Switches	Switch Block 1 	Switch Block 2 	
	64/256K Option Card Switches 	64K Option Card Switches 	32K Option Card Switches 
1 - 64/256K option with 64K installed 1 - 32K option			
1 - 64K option 1 - 32K option			
3 - 32K options			

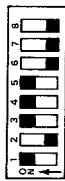

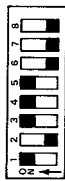



384K Total Memory
128K + (256K on System Board)

memory 32K


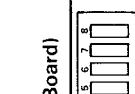

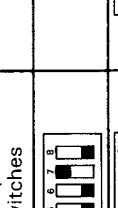


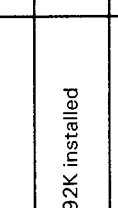
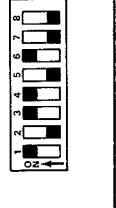

0
12345678
26 0 00

System Board Switches	Switch Block 1	Switch Block 2	
1 - 64/256K option with 64K installed 1 - 64K option			<p>64/256K Option Card Switches</p> 
2 - 64K options			<p>64K Option Card Switches</p> 
1 - 64/256K option with 64K installed 2 - 32K options			<p>32K Option Card Switches</p> 
1 - 64K option 2 - 32K options			
1 - 64/256K option with 128K installed			


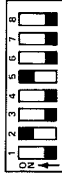
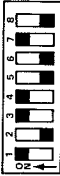
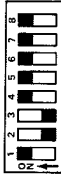


**4-16K Total Memory
160K + (256K on System Board)**

System Board Switches	Switch Block 1	Switch Block 2
1 - 64/256K option with 64K installed 1 - 64K option 1 - 32K option	64/256K Option Card Switches 	64K Option Card Switches 
2 - 64K options 1 - 32K option	64/256K Option Card Switches 	32K Option Card Switches 
1 - 64/256K option with 128K installed 1 - 32K option	64/256K Option Card Switches 	32K Option Card Switches 





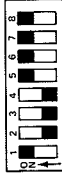
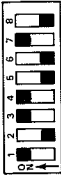



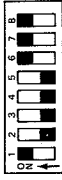

**448K Total Memory
192K + (256K on System Board)**

System Board Switches	Switch Block 1	Switch Block 2
1 - 64/256K option with 192K installed		
1 - 64/256K option with 128K installed 1 - 64K option		
1 - 64/256K option with 64K installed 2 - 64K options		
3 - 64K options		
1 - 64/256K option with 128K installed 2 - 32K options		


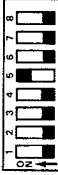

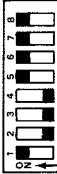

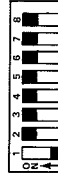
**480K Total Memory
224K + (256K on System Board)**

System Board Switches	 <p align="center">Switch Block 1</p>	 <p align="center">Switch Block 2</p>
1 - 64/256K option with 192K installed 1 - 32K option	64/256K Option Card Switches 	64K Option Card Switches 
1 - 64/256K option with 128K installed 1 - 64K option 1 - 32K option		32K Option Card Switches 





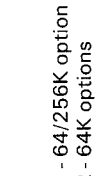


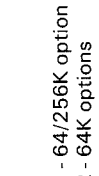


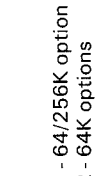


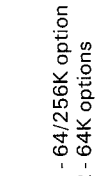


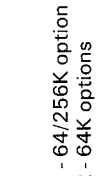
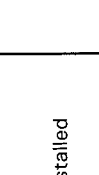
**512K Total Memory
256K + (256K on System Board)**

System Board Switches	Switch Block 1 	Switch Block 2 
<p>1 - 64/256K option with 128K installed 2 - 64K options</p>	<p>64/256K Option Card Switches </p>	<p>64K Option Card Switches  </p>
<p>1 - 64/256K option with 192K installed 1 - 64K option</p>	<p>64/256K Option Card Switches </p>	<p>64K Option Card Switches </p>
<p>1 - 64/256K option with 192K installed 2 - 32K options</p>	<p>64/256K Option Card Switches </p>	<p>32K Option Card Switches  </p>
<p>1 - 64/256K option with 256K installed</p>	<p>64/256K Option Card Switches </p>	

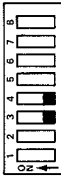
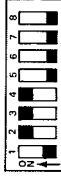

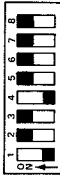
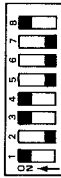
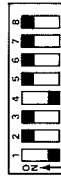
**544K Total Memory
288K + (256K on System Board)**

System Board Switches	 <p align="center">Switch Block 1</p>	 <p align="center">Switch Block 2</p>
<p>1 - 64/256K option with 192K installed 1 - 64K option 1 - 32K option</p>	<p align="center">64/256K Option Card Switches</p> 	<p align="center">64K Option Card Switches</p> 
<p>1 - 64/256K option with 256K installed 1 - 32K option</p>	<p align="center">64/256K Option Card Switches</p> 	<p align="center">32K Option Card Switches</p> 

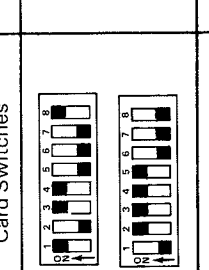

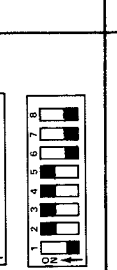
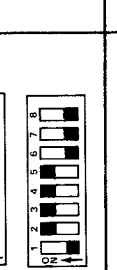
**576K Total Memory
320K + (256K on System Board)**

System Board Switches	Switch Block 1 	Switch Block 2 
64/256K Option Card Switches	64K Option Card Switches  	32K Option Card Switches 
1 - 64/256K option with 192K installed 2 - 64K options	 	
1 - 64/256K option with 256K installed 1 - 64/256K option with 64K installed	 	
1 - 64/256K option with 256K installed 1 - 64K option	 	
1 - 64/256K option with 256K installed 2 - 32K options	 	 

**608K Total Memory
352K + (256K on System Board)**

System Board Switches	Switch Block 1 	Switch Block 2 
<ul style="list-style-type: none"> 1 - 64/256K option with 256K installed 1 - 64/256K option with 64K installed 1 - 32K option 	<p align="center">64/256K Option Card Switches</p> 	<p align="center">64K Option Card Switches</p> 
<ul style="list-style-type: none"> 1 - 64/256K option with 256K installed 1 - 64K option 1 - 32K option 		<p align="center">32K Option Card Switches</p> 

**640K Total Memory
384K + (256K on System Board)**

System Board Switches	Switch Block 1	Switch Block 2	
<p>1 - 64/256K option with 256K installed 1 - 64/256K option with 64K installed 1 - 64K option</p>	<p>64/256K Option Card Switches</p> 	<p>64K Option Card Switches</p> 	<p>32K Option Card Switches</p>
<p>1 - 64/256K option with 256K installed 2 - 64K options</p>	<p>64/256K Option Card Switches</p> 	<p>64K Option Card Switches</p>	
<p>1 - 64/256K option with 256K installed 1 - 64/256K option with 128K installed</p>	<p>64/256K Option Card Switches</p> 		

Notes:

SECTION 7. PARTS CATALOG

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Color Display	7-14
Diskette Drive	7-16
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Keyboard	7-26
Matrix/Graphics Printer	7-28

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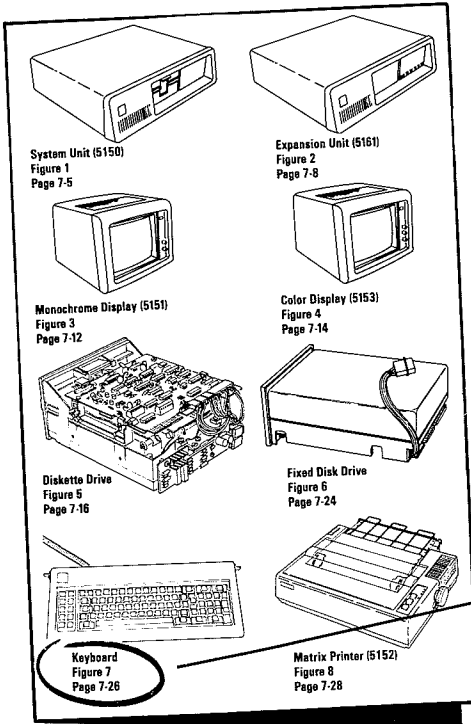
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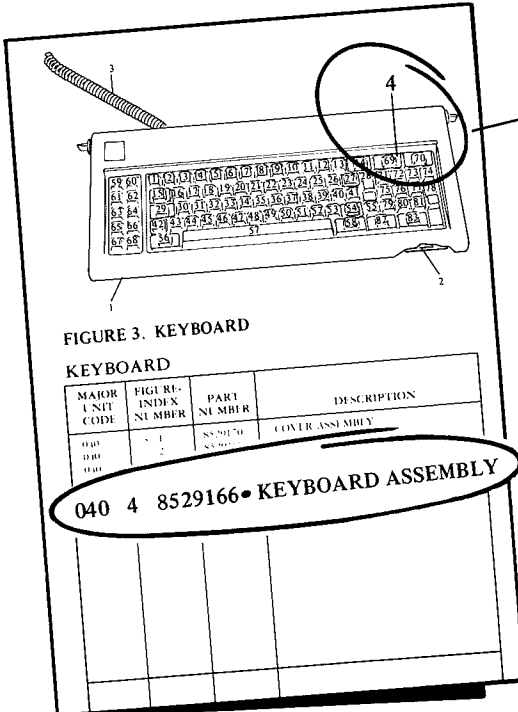
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How To Use This Parts Catalog

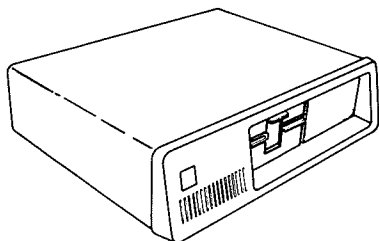


1
Turn to the visual index then locate, by illustration, the assembly containing the part.



2
Turn to the page for that assembly. Then locate the part visually.

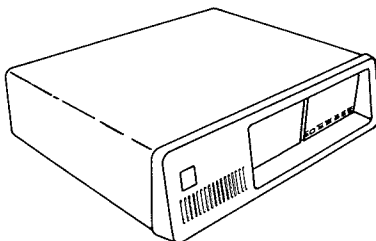
3
Using the index number shown with the part, refer to the accompanying listing to obtain major unit code, part number and description



System Unit (5150)

Figure 1

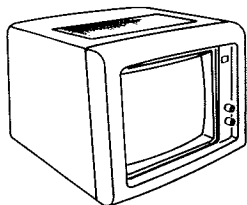
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Expansion Unit (5161)

Figure 2

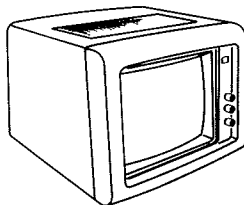
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Monochrome Display (5151)

Figure 3

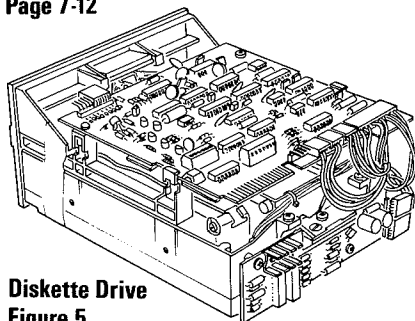
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Color Display (5153)

Figure 4

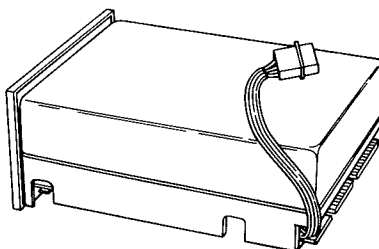
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Diskette Drive

Figure 5

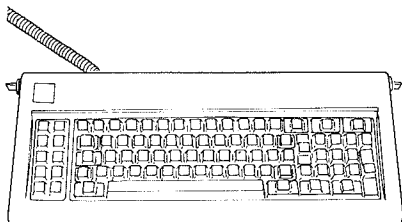
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Fixed Disk Drive

Figure 6

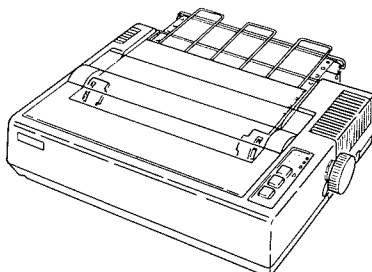
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Keyboard

Figure 7

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Matrix Printer (5152)

Figure 8

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Visual Index