# Color StyleWriter Pro

Basics

Color StyleWriter Pro
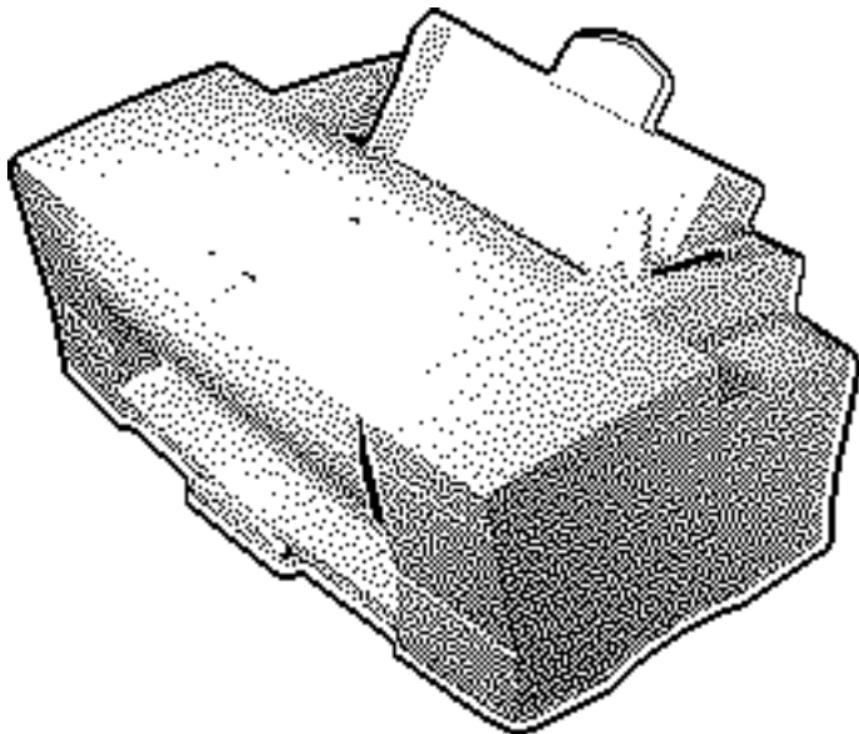
Overview

The Color StyleWriter Pro is a desktop color bubble-jet printer for personal use. It has various features such as high-speed printing, high print quality, printing on plain paper, and a cut sheet feeder.

The user can easily replace the print head (64 nozzles, four colors) and ink cartridges (each color has a separate cartridge).
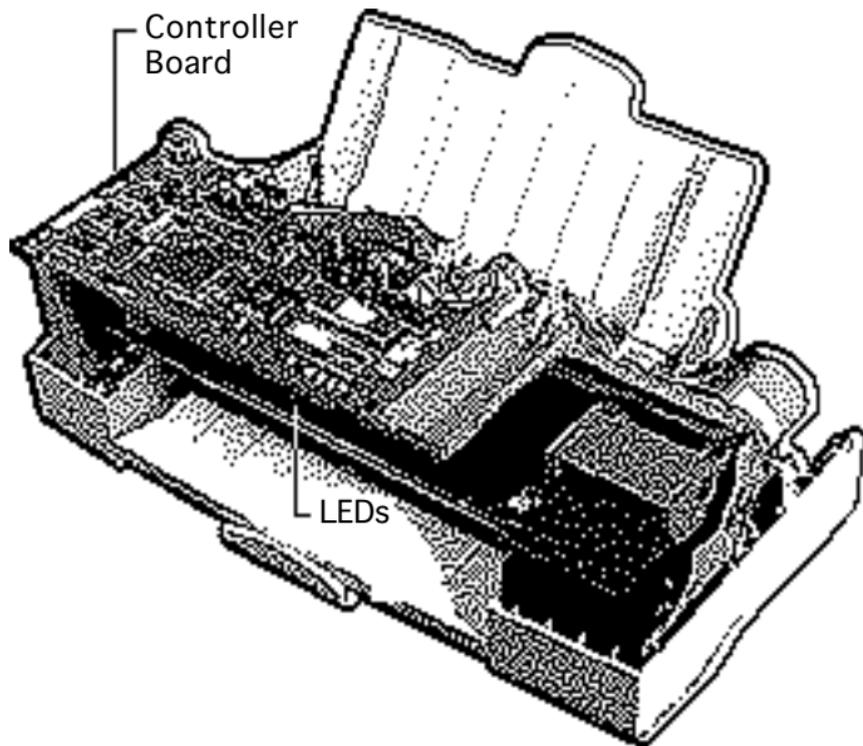
The Color StyleWriter Pro has six LEDs on the controller board which can aid in troubleshooting the printer. See the Troubleshooting chapter for more information.

Controller Board

LEDs

Controller Board
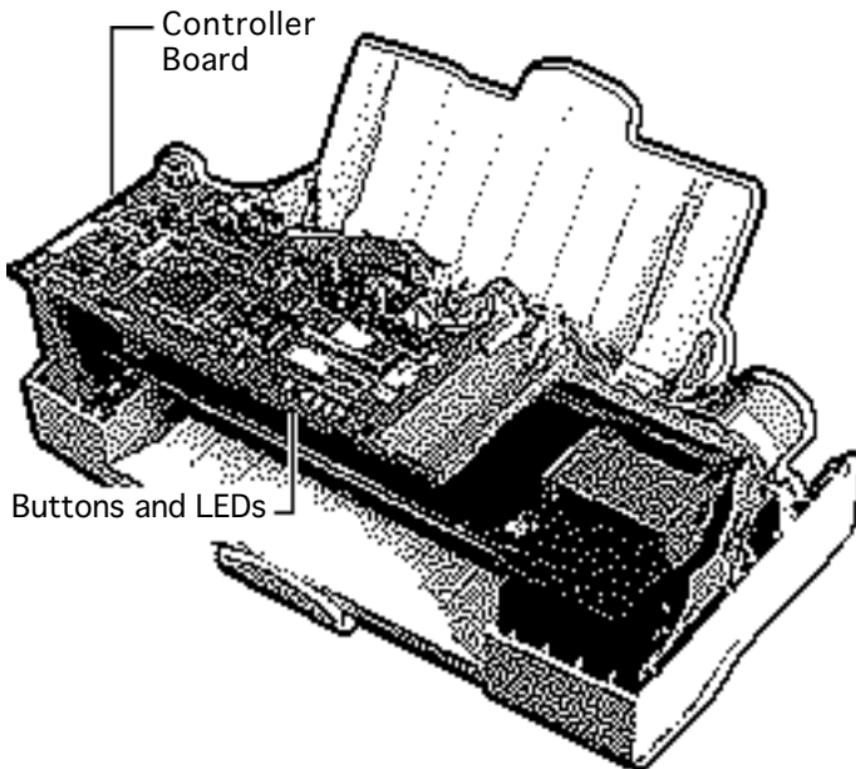
Buttons and LEDs

Service Mode

Note: This procedure uses the buttons and LEDs on the controller board to perform service functions, i.e., test pages.

Note: You must remove the top cover and the inner cover to access the controller board. See "Covers" in the Take Apart chapter.
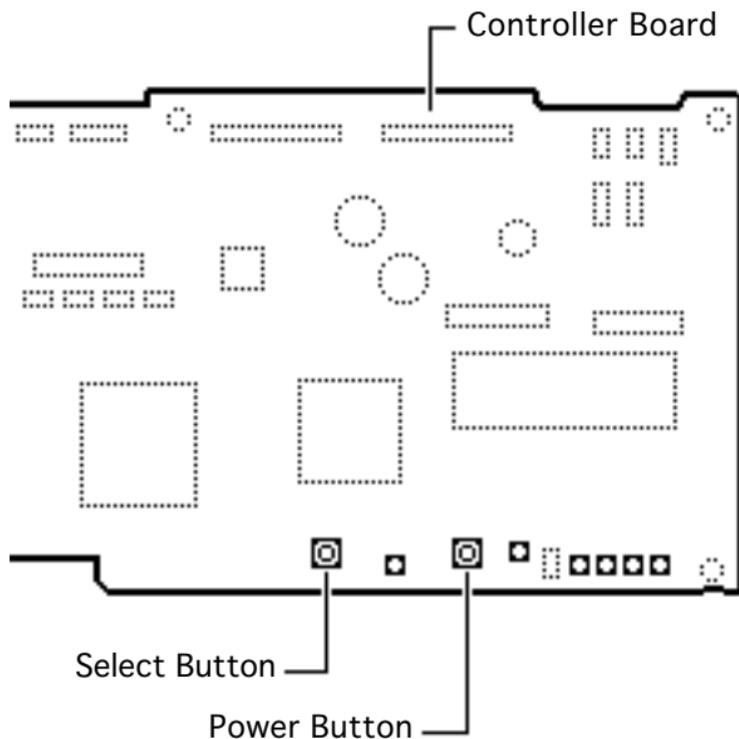
Controller Board

Select Button

Power Button

Hold down the power and select buttons and plug in the printer power cord.

Note: The printer will emit a four-tone beep indicating that it is in the service mode.

See the "Color StyleWriter Pro Utility" and "Alignment" in the Adjustments chapter for additional information.

Service Test Page

Note: This procedure explains how to print the service test page, which indicates if the print heads need to be aligned. You must be in service mode to print a service test page.

1 Place paper in the cut sheet feeder.

2 Place printer in service mode. See "Service Mode" in this chapter.

Print Heads
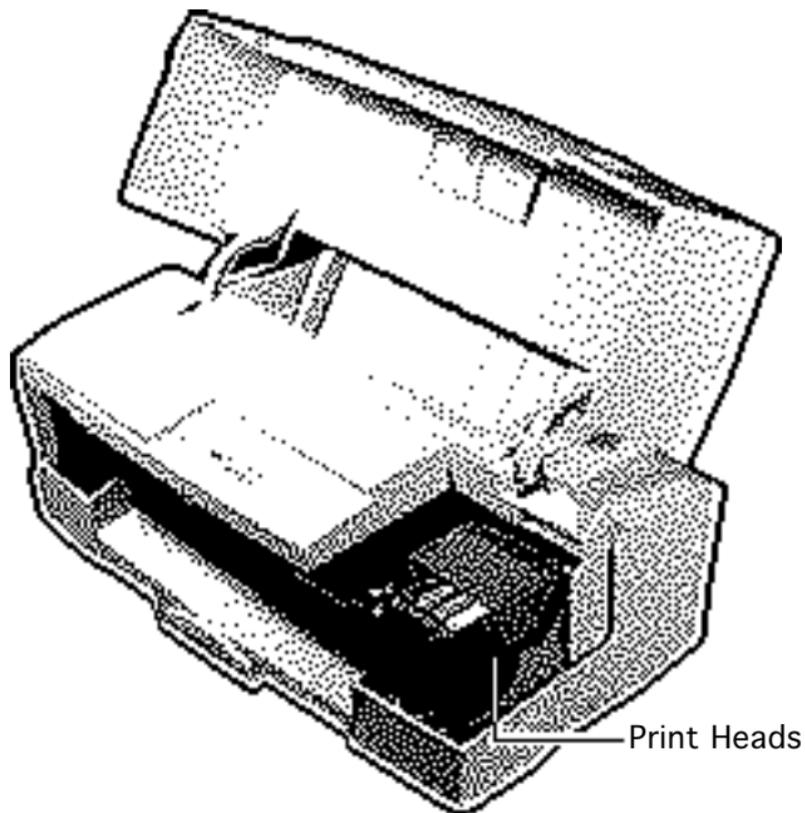
3 Press the select button
until the black (LED 5),
magenta (LED 3), and
yellow (LED 2) LEDs
light up.

Controller Board

Black LED (LED 5)

Magenta LED (LED 3)

Yellow LED (LED 2)

Select Button
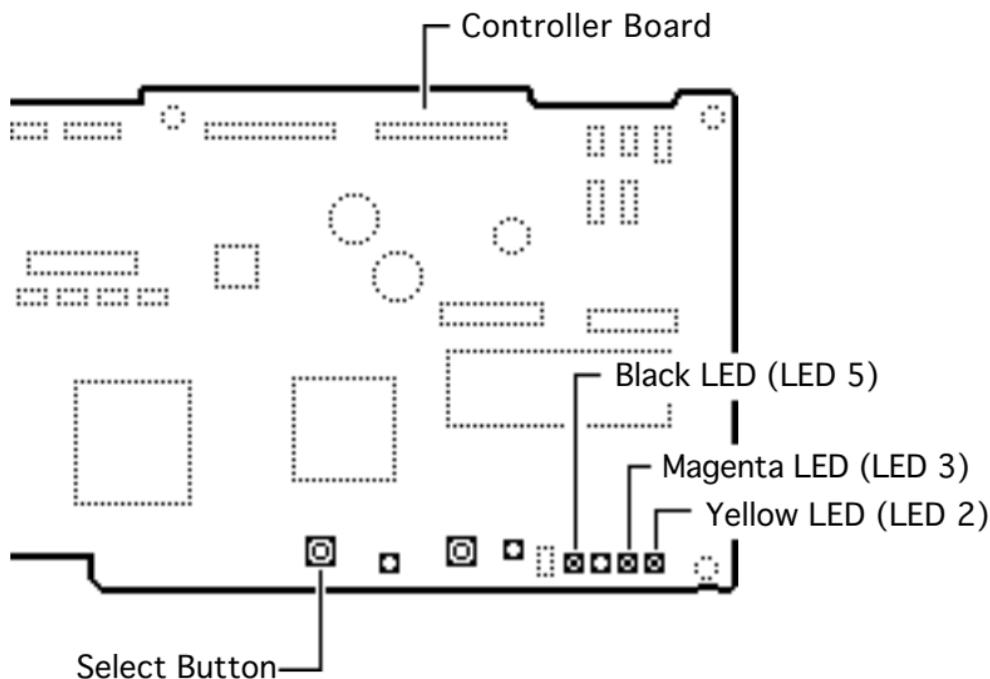
4 Press the power button.

Note: The printer will now print the test page.

Controller Board

Power Button
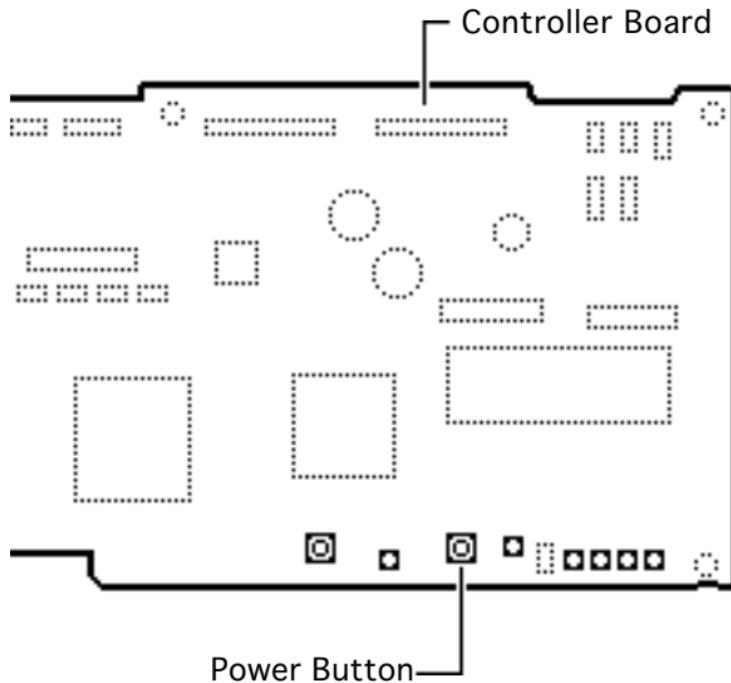
Specifications

Color StyleWriter Pro

Characteristics

Print Methods   Serial bubble jet ink-on-demand

Throughput   170 cps (10 cpi)   text/standard speed mode
                         240 cps (10 cpi)   text/high speed mode

Print Head   1 x 64 nozzles for each color

Print Head Life   Thousands of pages

Input Buffer   60 KB

Graphics

Resolution   360 dpi (best mode)
                           180 dpi (draft mode)

Paper Handling

Paper   Plain paper, coated (recommended for color picture output)

Cut Sheets   LTR, LGL, A4
U.S. Letter (LTR): 8.5 x 11 in. (215.9 mm x 279.4 mm)
U.S. Legal (LGL) : 8.5 x 14 in. (215.9 mm x 355.6 mm)
A4: 210 mm x 297 mm
Weight: 16–24 lbs.   Capacity: 100 sheets (A4, LTR)

Envelopes   Commercial number 10, monarch, and other sizes
Capacity: 15 envelopes

Transparencies   Coated transparencies, most ink jet transparencies

Back-Print Film   Letter, A4
For superior graphics and imaging results, premium paper and
back-print film are recommended

Ink Cartridges

Type   Color ink cartridges (four available)

Ink Color   Black, cyan, magenta, yellow

Ink Amount   Approx. 8 g (per cartridge)

Shelf Life   6 months (installed in printer)
                      18 months (in original package)

Cartridge Life   Text: Approx. 315 pages (A4/LTR) at 5% coverage per color

Environmental

Acoustic Noise Level   Approx. 45 dB (reference level)

Temperature   59–86°F (15–30°C)

Humidity   10–80% (no condensation)

Electrical

Electrical Requirements   120 V, 60 Hz, 1 amp
220–240 V, 50 Hz, 0.5 amp

**Power Consumption**   28 W maximum

Physical

Dimensions   Height: 7.2 in. (184 mm)
                        Width: 16.5 in. (418 mm)
                        Depth: 10.1 in. (256 mm)

Weight   Approx. 11 lbs. (5 kg)

Troubleshooting

Color StyleWriter Pro

General

The Symptom Charts included in this chapter will help you diagnose specific symptoms related to your product. Because cures are listed on the charts in the order of most likely solution, try the first cure first. Verify whether or not the product continues to exhibit the symptom. If the symptom persists, try the next cure. (Note: If you have replaced a module, reinstall the original module before you proceed to the next cure.)

If you are not sure what the problem is, or if the Symptom Charts do not resolve the problem, refer to the Flowchart for the product family.

For additional assistance, contact Apple Technical Support.

LEDs

The Color StyleWriter Pro has six LEDs on the controller board which can aid in troubleshooting the printer. The six LEDs are:

- Error LED
- Power LED
- K (black) Ink LED
- C (cyan) Ink LED
- M (magenta) Ink LED
- Y (yellow) Ink LED

Controller Board
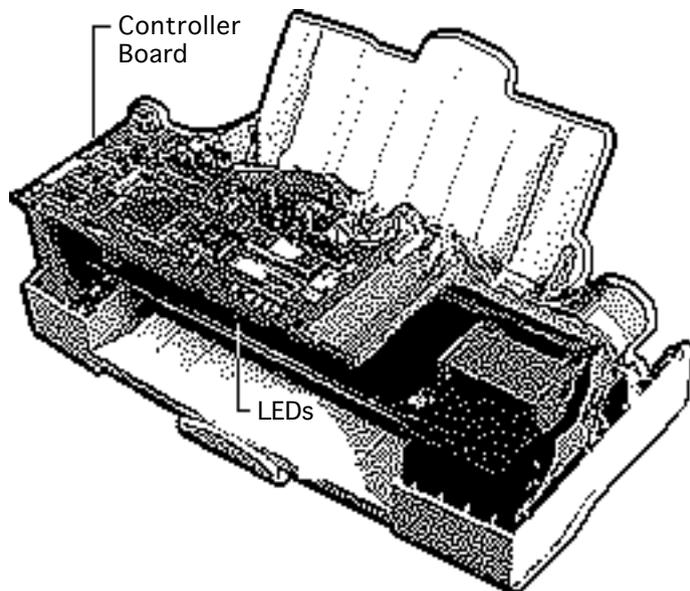
LEDs

The power button and the select button are used in service mode to choose servicing options. Pressing the select button toggles the ink LEDs and pressing the power button selects the appropriate option.

See "Service Mode" in the Basics chapter for additional information.

Controller Board

Black Ink – LED5(O)
Cyan Ink – LED4(O)
Magenta Ink – LED3(O)
Yellow Ink – LED2(O)

Power – LED1(G)
Error – LED6(O)

Power Button – SW1

Select Button – SW2
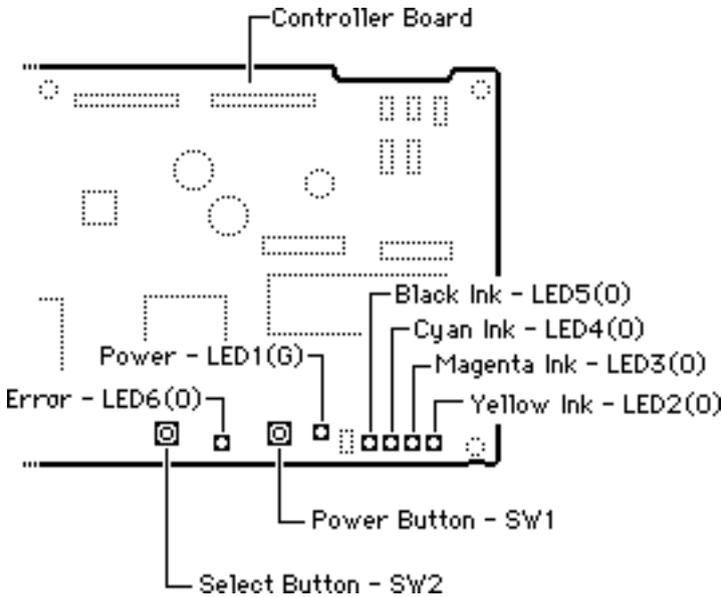
The LEDs indicate the state of the printer or whether an error has occurred (e.g., carriage control error, paper jam).

The following charts provide a summary of printer states and error codes.

Printer State LED Indication Summary **Power LED**	Error 6	Power 1	Ink 5 4 3 2	Notes
Power off	○	○	○ ○ ○ ○	
Power on	○	●	○ ○ ○ ○	
Transition of power on/off	○	☼	○ ○ ○ ○	

Printer State LED Indication Summary **Ink LED**	Error 6	Power 1	Ink 5 4 3 2	Notes
Normal condition	○	○	○ ○ ○ ○	Power on
Error in other than print head	●	○	○ ● ○ ○	Affected LED is on
Error in print head	☼	○	○ ○ ☼ ○	Affected LED blinks

Printer State Normal LED Indication **In Service Mode**	Error 6	Power 1	Ink 5 4 3 2	Notes
Entering service mode	○	○	○ ○ ○ ○	Emits four-tone chord
EEPROM download mode	○	○	○ ● ● ●	Affected LED is on
Initial cleaning	○	○	☼ ☼ ☼ ☼	Affected LED blinks
Service Test Page	○	○	● ○ ● ●	

LED Legend: ○ OFF   ● ON   ☼ BLINKING

If an error is indicated, check the following chart, then go to "Error LEDs" in the Symptom Charts.

Error Indication	LEDs Error 6	Power 1	Ink 5	4	3	2	Notes
Paper empty/jam	●	●	○	○	○	○	
Ink absorber plate error	●	●	○	○	○	●	
Ink cartridge empty	●	●	☼	○	○	○	Empty color blinks
Carriage control error	☼	○	○	○	○	○	
Recovery error	☼	●	○	○	○	●	
Home position sensor error	☼	●	○	○	●	○	Carriage sensor
Linear encoder error	☼	●	○	○	●	●	
Cleaner sensor error	☼	●	○	●	○	○	
Paper feed motor error	☼	●	○	●	○	●	
Cut sheet feeder sensor error	☼	●	○	●	●	○	
Thermistor error	☼	●	○	●	●	●	
ROM error	☼	●	●	○	○	○	
RAM error	☼	●	●	○	○	●	
Ink absorber full error	☼	●	●	○	●	○	
EEPROM error	☼	●	●	○	●	●	
Gate array error	☼	●	●	●	○	○	
Print head error	☼	●	☼	☼	☼	☼	

LED Legend: ○ OFF ● ON ☼ BLINKING

Symptom Charts

Operation

No power

1 Check power cable connections.
2 Replace power cord.
3 Replace fuse.
4 Replace power supply.

Does not print

1 Turn on printer and restart computer.
2 Check interface cable connections.
3 Replace printer driver.

Printer takes long time to initialize at first startup

Printer normally takes 5–7 minutes to prepare print head at first startup.

Paper

Paper sticks together

1 Remove excess sheets from paper tray.
2 Use specified media only.
3 Check that settings in Page Setup menu are correct.
4 Fan paper before putting in paper tray.

Paper skews

1 Remove excess sheets from paper tray.
2 Use specified media only.
3 Stack paper flush against left side of paper tray and adjust paper guide.
4 Check rollers. Clean or replace if necessary.

Paper jams during loading, before printing

Carefully remove paper by hand.

Paper (Continued)

Paper jams inside printer	Pull out paper in direction of paper output. (Do not pull paper back toward you.)
Paper jams during output, after printing	Pull out paper in direction of paper output.

Print Quality

Missing dots and/or white streaks

1 Perform "Nozzle Check" and "Print Head Cleaning". See Additional Procedures chapter.
2 Make sure ink cartridges are set firmly.
3 Use specified media only.
4 Replace print head unit.
5 Replace carriage board. Run the Color StyleWriter Pro Utility (see Adjustments chapter).
6 Replace controller board. Run the Color StyleWriter Pro Utility (see Adjustments chapter).

Blurring and/or smudging

1 Adjust print head position lever all the way down.
2 Use specified media only.
3 Make sure print head is in correct position. If necessary, perform "Alignment". See Adjustments chapter.
4 Perform "Print Head Cleaning." See Additional Procedures chapter.

Error LEDs

Paper jam/error
1 Pull out paper in direction of paper output.
2 Use specified media only.
3 Stack paper flush against left side of paper tray and adjust paper guide.
4 Check rollers. Clean or replace if necessary.
5 Check for foreign objects in paper path.
6 Replace controller board. Run the Color StyleWriter Pro Utility (see Adjustments chapter).

Ink cartridge empty
1 Replace ink cartridge.
2 Perform "Print Head Cleaning." See Additional Procedures chapter.
3 Perform "Print Head Purging." See Additional Procedures chapter
4 Replace purge unit.
5 Replace controller board. Run the Color StyleWriter Pro Utility (see Adjustments chapter).

Error LEDs **(Continued)**

Carriage control
error

1. Check carriage unit path for obstructions.
2. Replace carriage motor.
3. Replace linear encoder.
4. Replace home position sensor.
5. Replace carriage ribbon cable.
6. Replace controller board. Run the Color StyleWriter Pro Utility (see Adjustments chapter).

Carriage home
position sensor error

1. Check carriage unit path for obstructions.
2. Replace carriage motor.
3. Replace linear encoder.
4. Replace home position sensor.
5. Replace carriage ribbon cable.
6. Replace controller board. Run the Color StyleWriter Pro Utility (see Adjustments chapter).

Error LEDs (Continued)

Linear encoder error
1. Make sure linear encoder is installed in correct orientation.
2. Replace linear encoder.
3. Replace controller board. Run the Color StyleWriter Pro Utility (see Adjustments chapter).

Cleaner sensor error
1. Replace purge unit.
2. Replace carriage unit.
3. Replace controller board. Run the Color StyleWriter Pro Utility (see Adjustments chapter).

Paper feed motor error
1. Replace paper feed motor.
2. Replace controller board. Run the Color StyleWriter Pro Utility (see Adjustments chapter).

Ink absorber plate error
Replace the ink absorber plates. Run the Color StyleWriter Pro Utility (see Adjustments chapter).

Error LEDs (Continued)

Cut sheet feeder
sensor error

1 Check paper feed path for obstructions.
2 Check that scale holder and shaft spring at both sides of carriage are holding carriage assembly properly. See "Carriage Unit and Board" in Take Apart chapter.
3 Check bushing on left side of printer frame. If it is damaged or missing, replace it. The platen and roller assembly will not be seated properly without the bushing. See "Platen and Roller" in Take Apart chapter.
4 Replace cut sheet feeder.
5 Replace controller board. Run the Color StyleWriter Pro Utility (see Adjustments chapter).

Thermistor error

1 Replace carriage ribbon cable.
2 Replace carriage board. Run the Color StyleWriter Pro Utility (see Adjustments chapter).

Error LEDs (Continued)

ROM error   Replace controller board. Run the Color StyleWriter Pro Utility
                          (see Adjustments chapter).

RAM error   Replace controller board. Run the Color StyleWriter Pro Utility
                          (see Adjustments chapter).

EEPROM error   Replace controller board. Run the Color StyleWriter Pro Utility
                          (see Adjustments chapter).

Gate array error   Replace controller board. Run the Color StyleWriter Pro Utility
                          (see Adjustments chapter).

Error LEDs (Continued)

Print head error

1 Make sure the print head cover is fastened down securely.
2 Perform "Print Head Cleaning." See Additional Procedures chapter.
3 Replace print head.
4 Replace carriage ribbon cable.
5 Replace carriage board. Run the Color StyleWriter Pro Utility (see Adjustments chapter).

Ink absorber plate full error

Replace the ink absorber plates. Run the Color StyleWriter Pro Utility (see Adjustments chapter).

Recovery error

Check the paper feed clutch on the right side of the platen. Verify it is in the correct position.

Take Apart

Color StyleWriter Pro
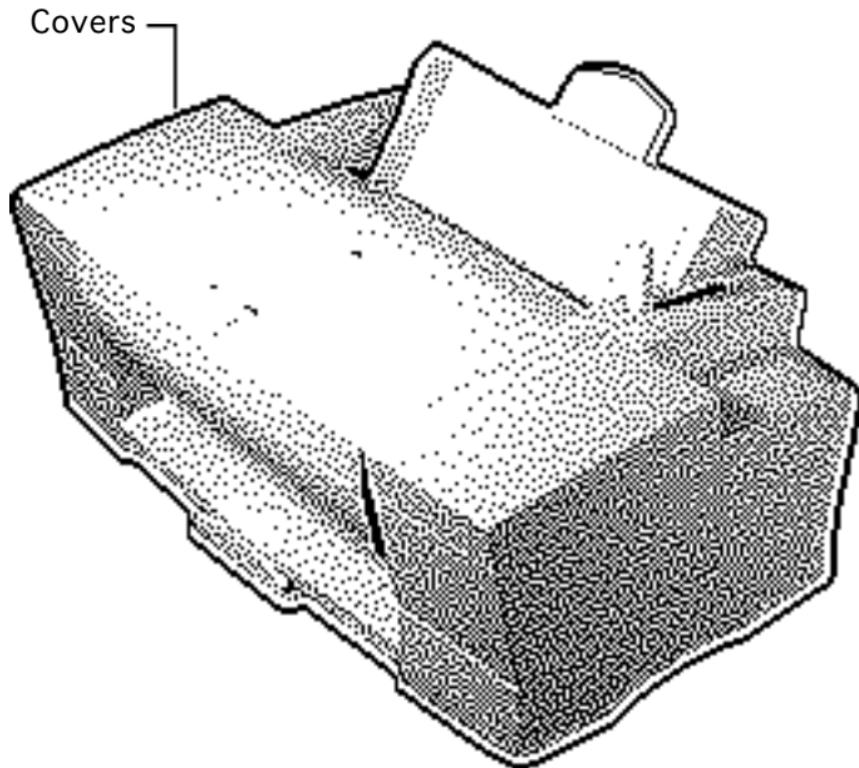
Covers

No preliminary steps are required before you begin this procedure.

Note: The Color StyleWriter Pro has three covers–outer, inner, and main. This procedure includes the removal of all covers on the printer.
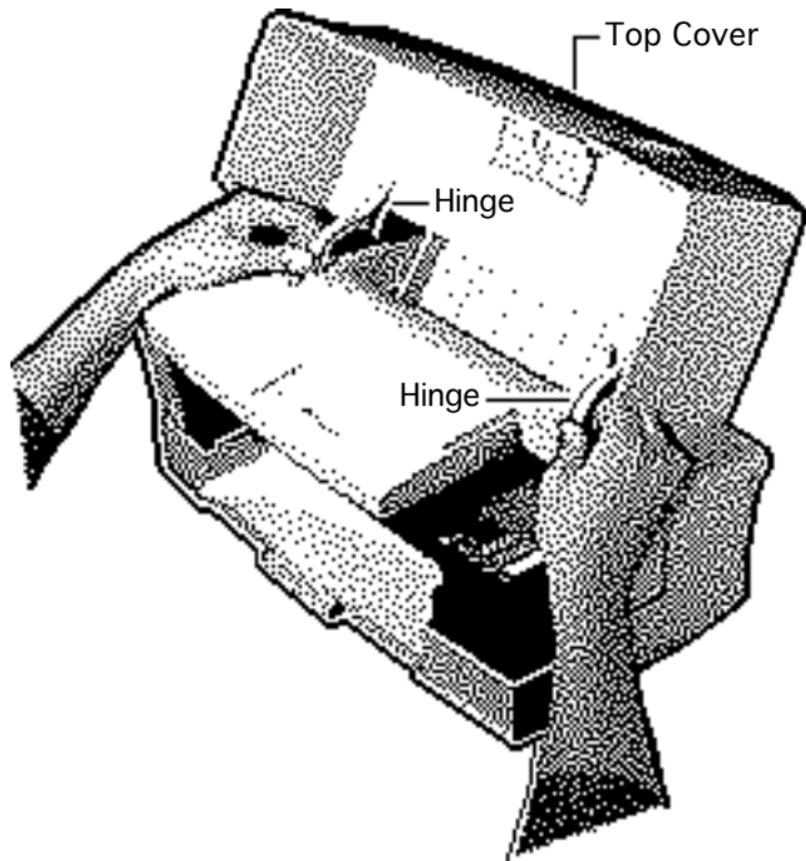
Covers

1 Raise the top cover.

2 Gently press in the two hinges and lift off the top cover.

Top Cover

Hinge

Hinge

3 Release the two front latches and remove the inner cover.
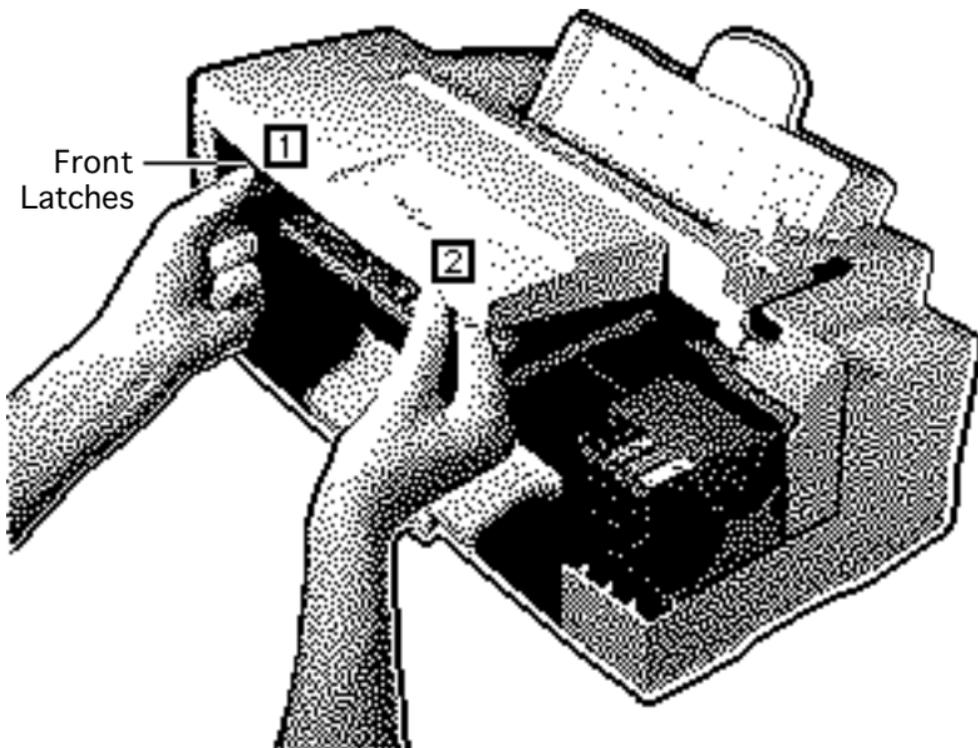
Front Latches

4 Release the mounting
   latches.
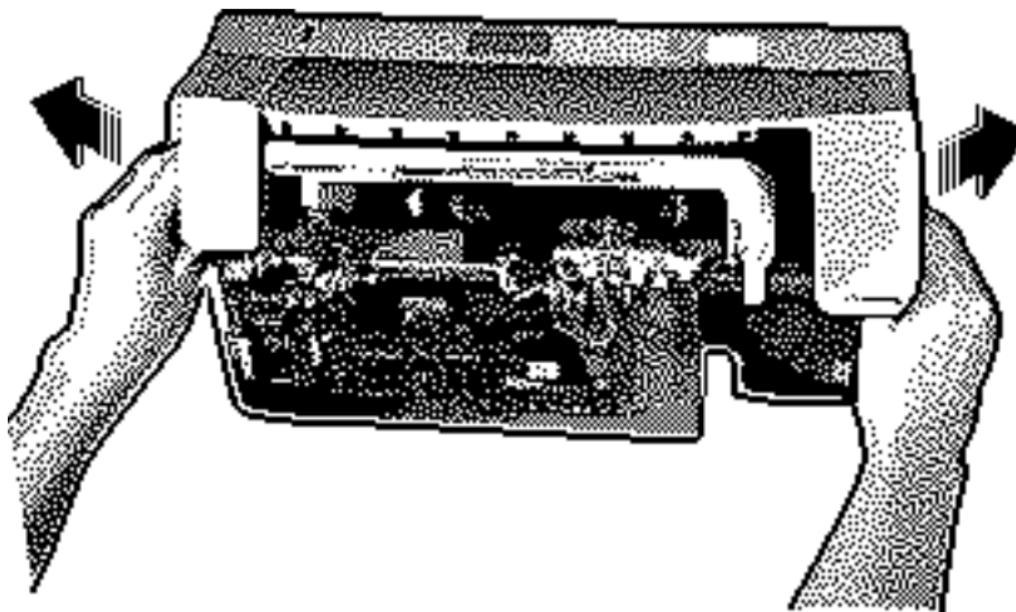
5 Lay the printer on the front side.

6 Release the rear latches and remove the main cover.

7 Stand the printer upright.

Rear Latches
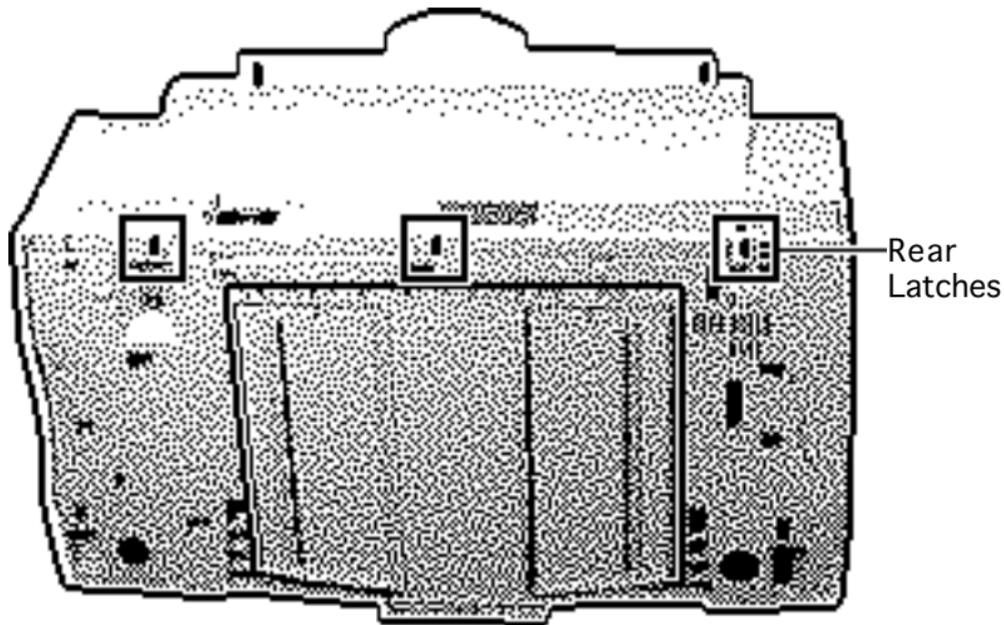
Print Head Unit

No preliminary steps are required before you begin this procedure.

Caution: Review the ESD precautions in Bulletins/Safety.

Caution: Do not get the printer's ink on your hands or clothes. Although the ink is water soluble, it contains dyes that will stain.

Print Head Unit
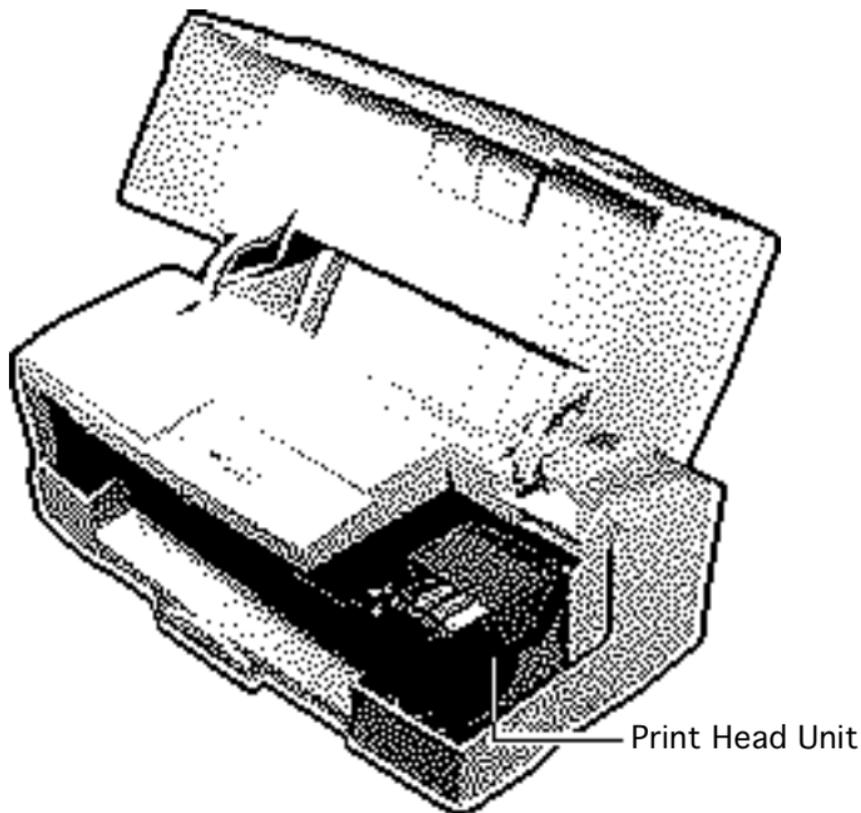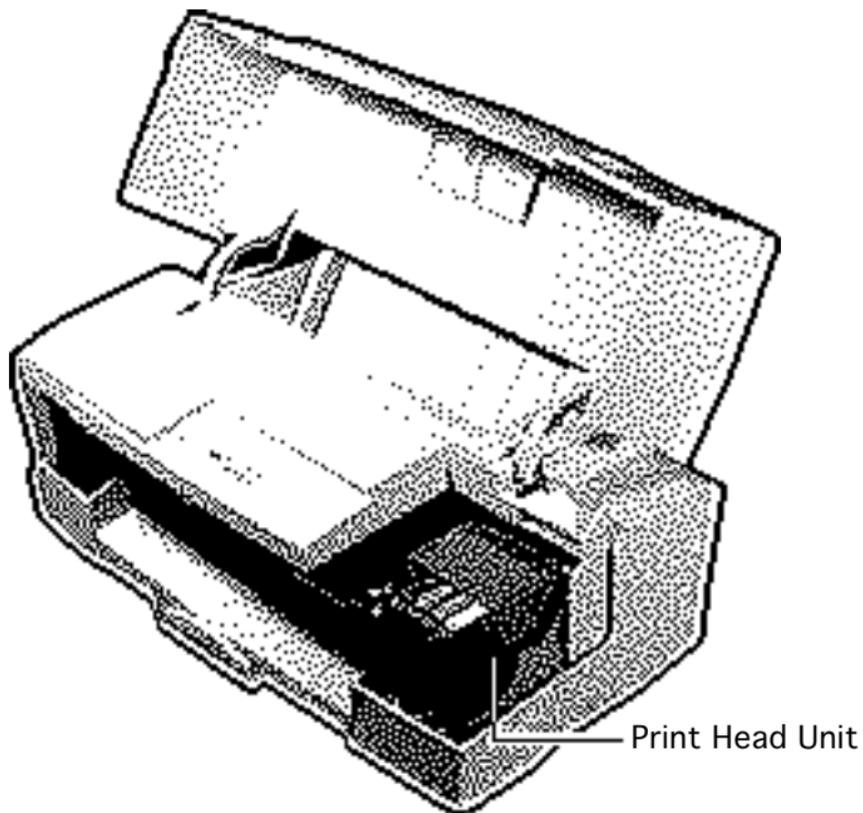
Print Head Unit

Caution: To prevent the print nozzles from clogging, do not touch or wipe them when removing the print head.

Caution: Do not leave the print heads uncapped for more than 12 hours or they will dry out.

1 Open the top cover.

Top Cover
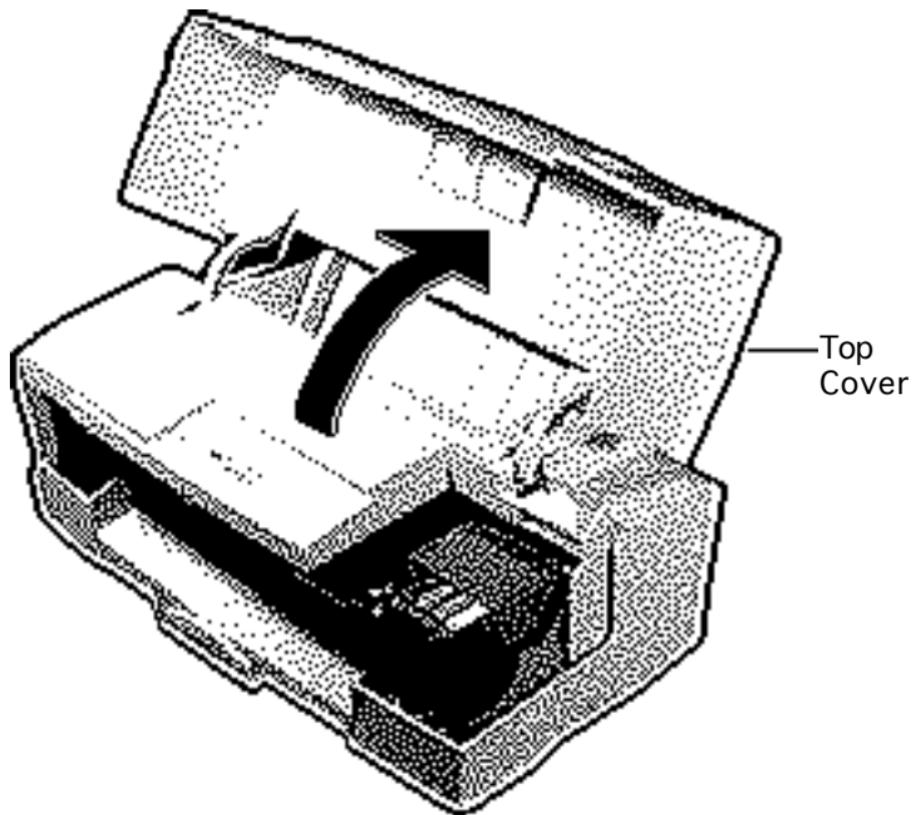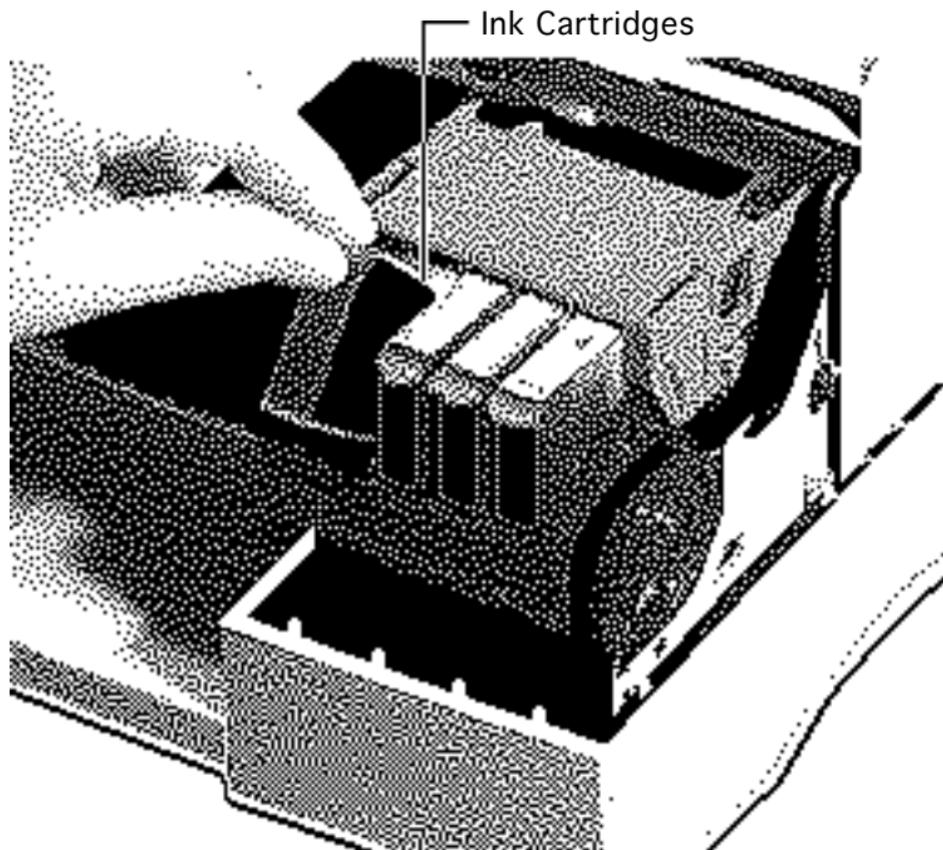
Ink Cartridges

2 **Note:** After removing the ink cartridges from the printer, place each ink cartridge on a piece of paper. Keep them in the order removed; it will make replacement easier.

Grasp the top edge and gently lift up and pull out the ink cartridge.

3 Repeat for each of the three remaining cartridges.
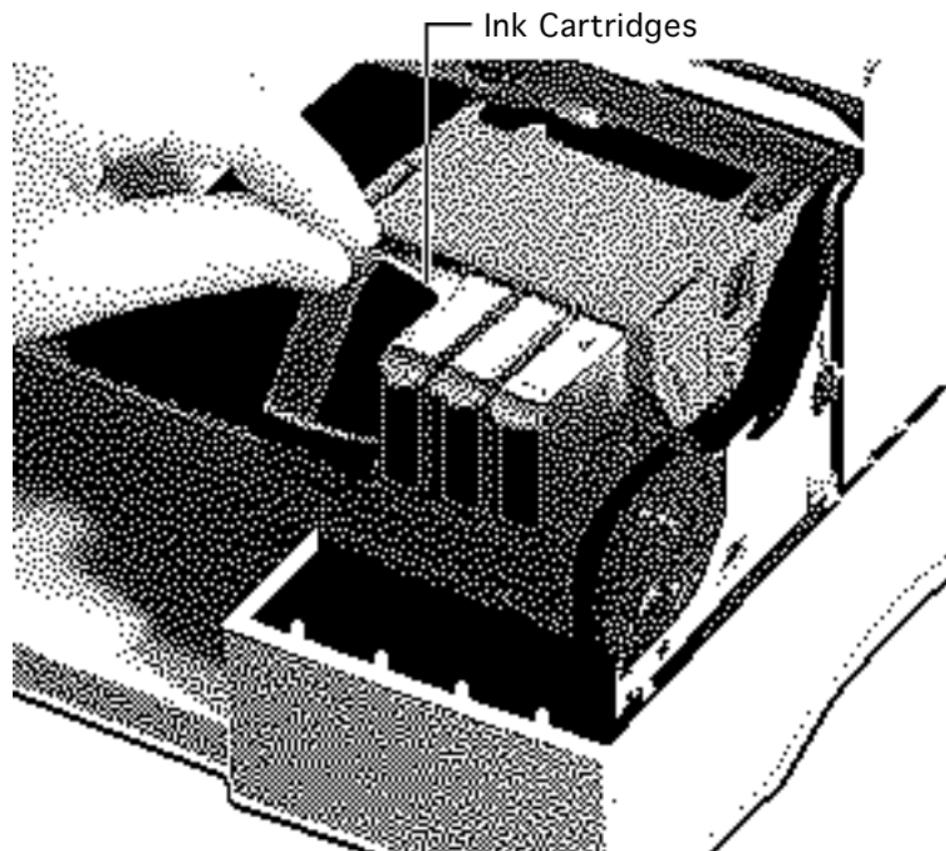
Ink Cartridges

4 **Replacement Note:** Do not shake the ink cartridges or the ink may leak.
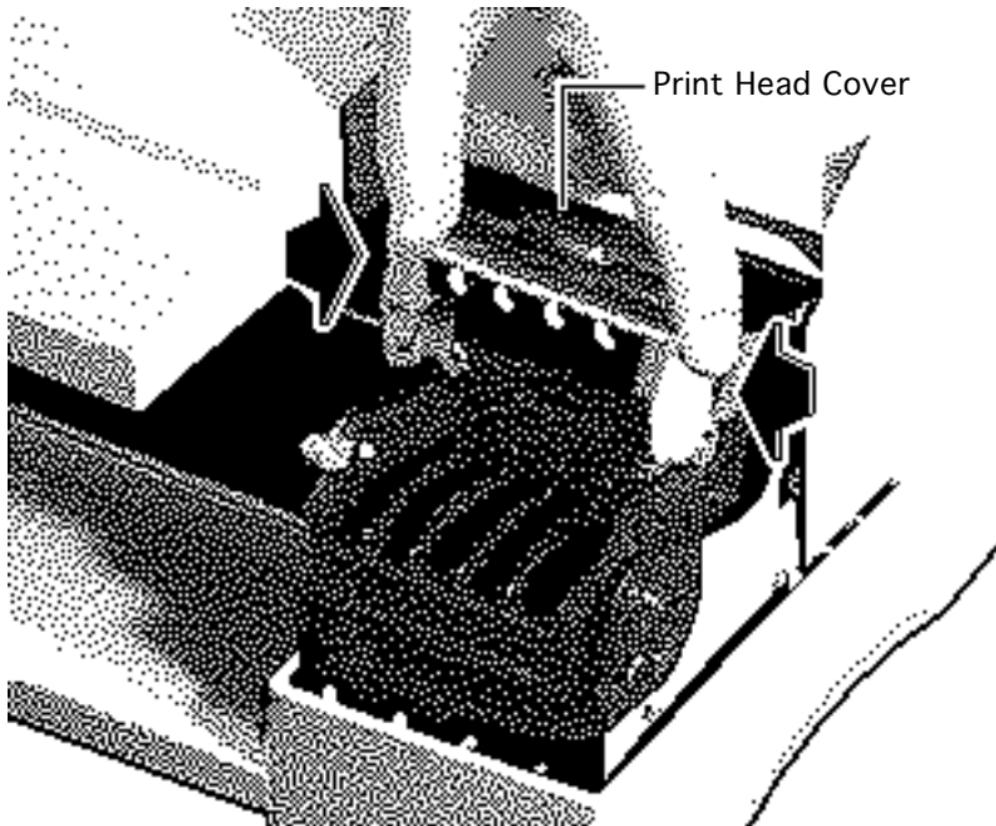
Print Head Cover

5 Push in both latches and open the print head cover.

Replacement Note:
When closing the print head cover, press firmly until you hear two clicks and the cover will not go down further. The cover should be completely horizontal. Failure to close the print head cover properly will cause print head failure.

Print Head

Print Nozzles

6 **Note:** To prevent the print nozzles from clogging, do not touch or wipe them.

Grasp the print head and gently remove it from the printer.

7 Place the print head on a piece of paper.

**Replacement Note:** Before installing a new print head, remove the tape that covers the print nozzles.
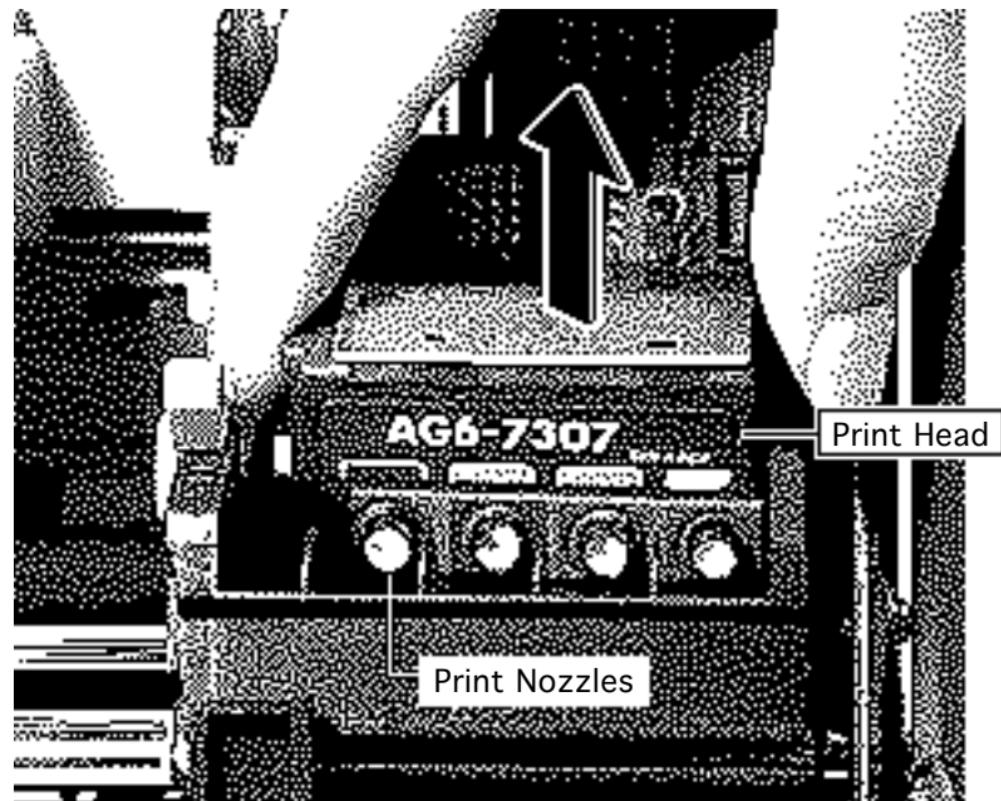
Controller Board

Before you begin, remove the covers.

Controller Board

**Caution:** Review the ESD precautions in Bulletins/Safety.

Note: After replacing the controller board, it is necessary to run the Color StyleWriter Pro Utility. See "Color StyleWriter Pro Utility" in the Adjustments chapter.
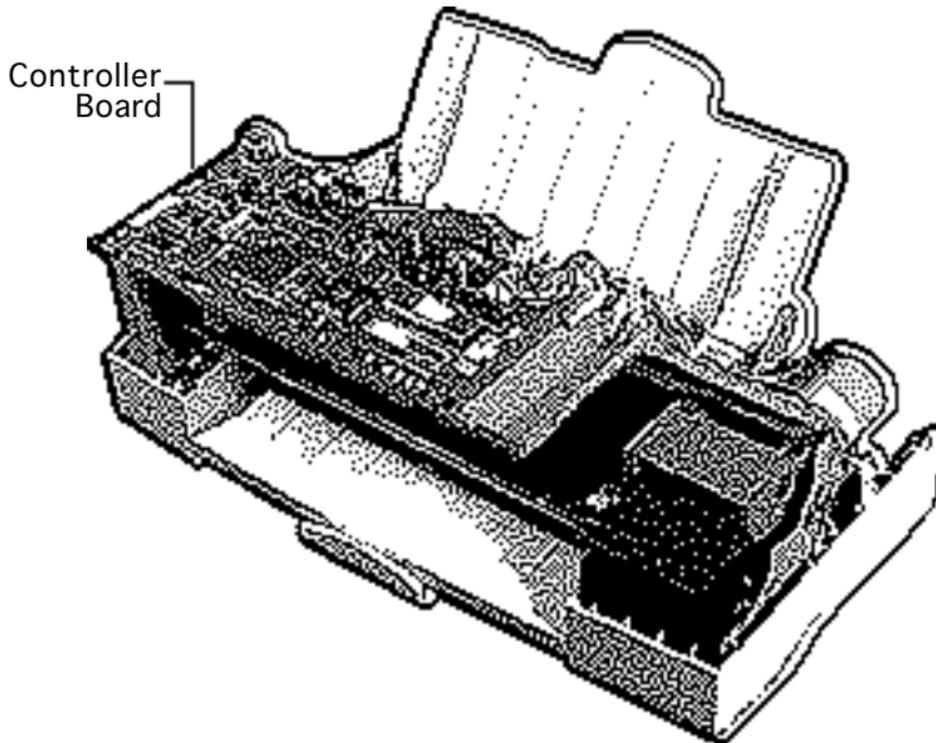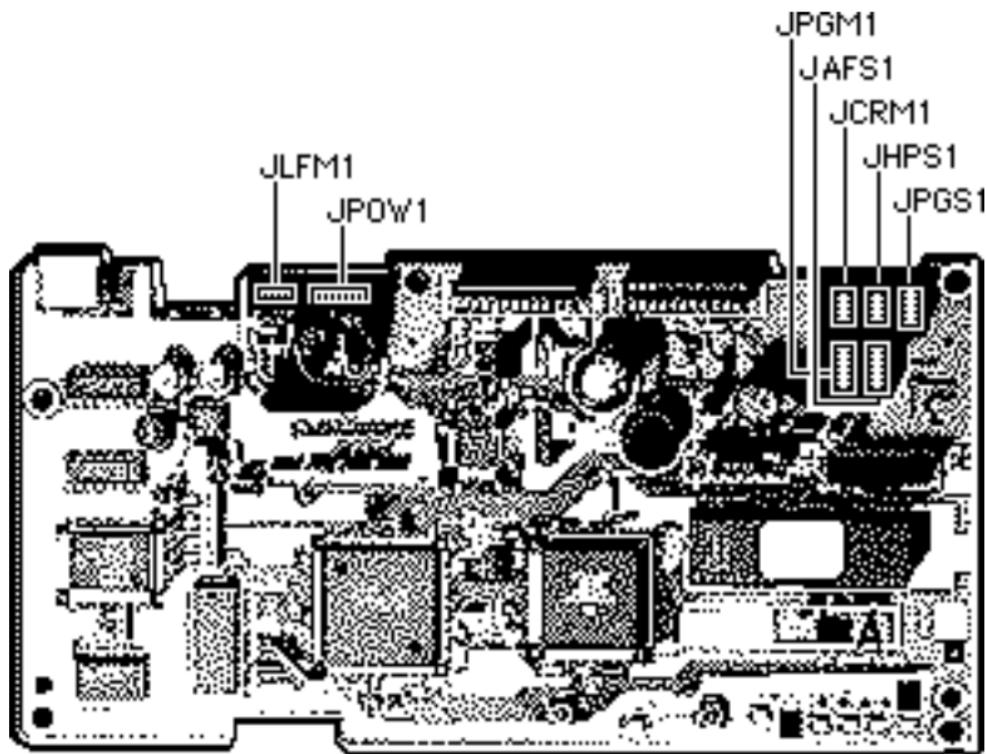
1   Disconnect the following connectors from the controller board:
   • LFM1
   • JPOW1
   • JCRM1
   • JHPS1
   • JPGS1
   • JPGM1
   • JAFS1

JCR1   JCR2

2   Disconnect the following
    ribbon cables from the
    controller board:
    • JCR1
    • JCR2
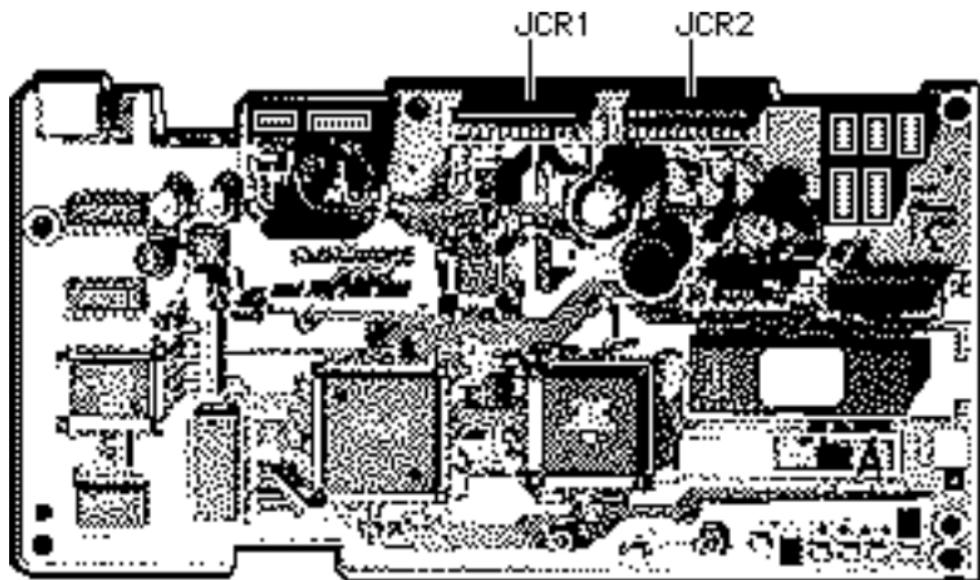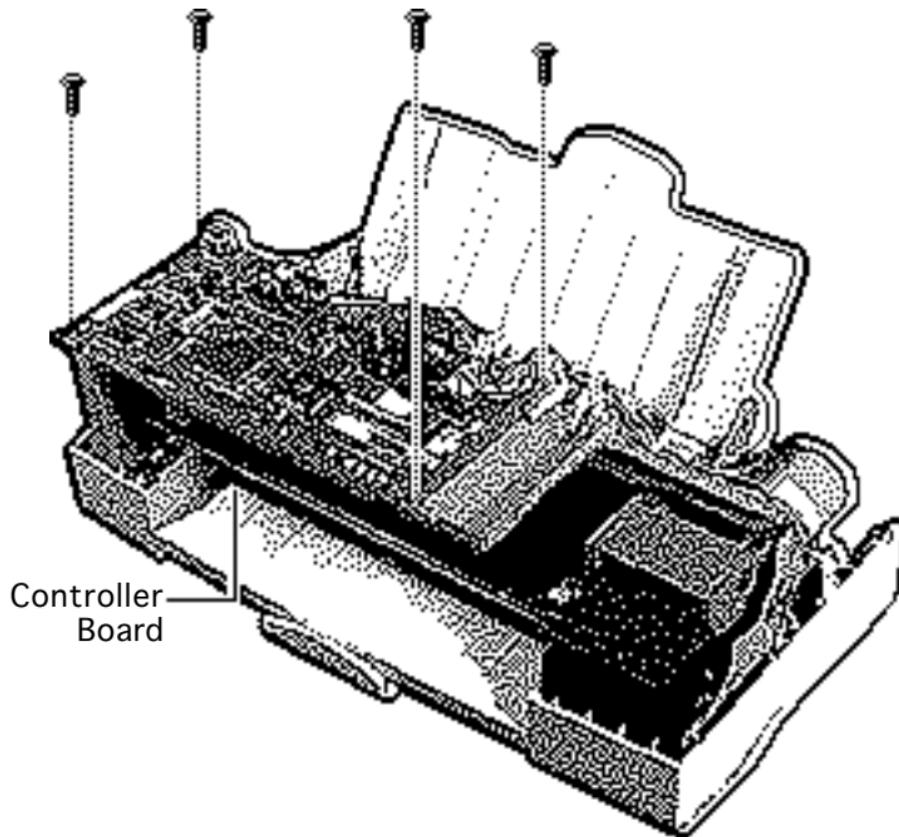
Controller
Board

3 Using a Phillips
   screwdriver, remove
   the four mounting
   screws.

4 Remove the controller
   board.

Cut Sheet Feeder

Cut Sheet Feeder

Before you begin, remove the covers.

Caution: Review the ESD precautions in Bulletins/ Safety.
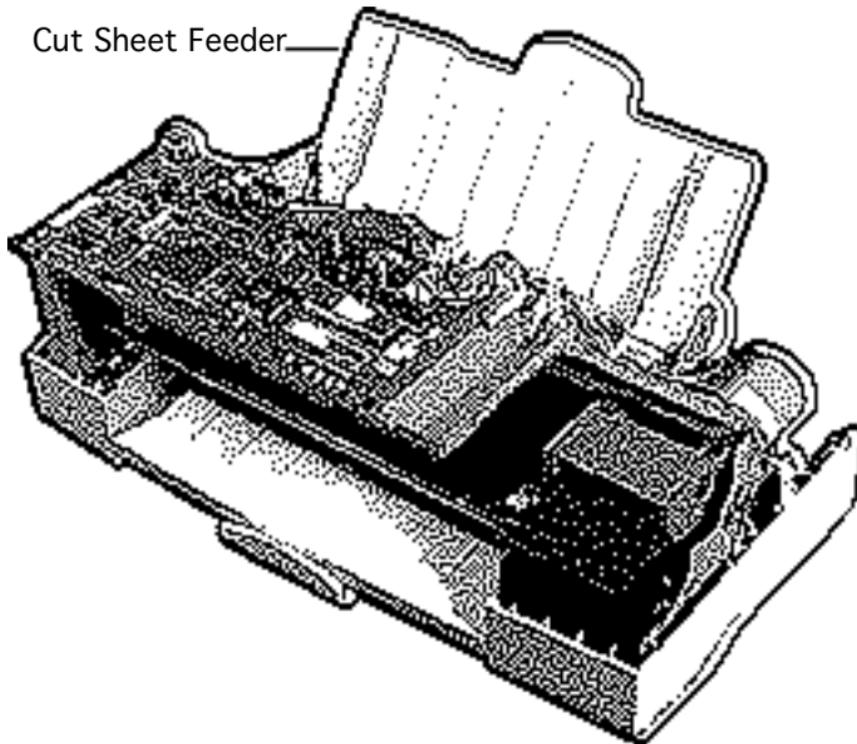
1 Using a Phillips
    screwdriver, remove
    the two mounting
    screws.
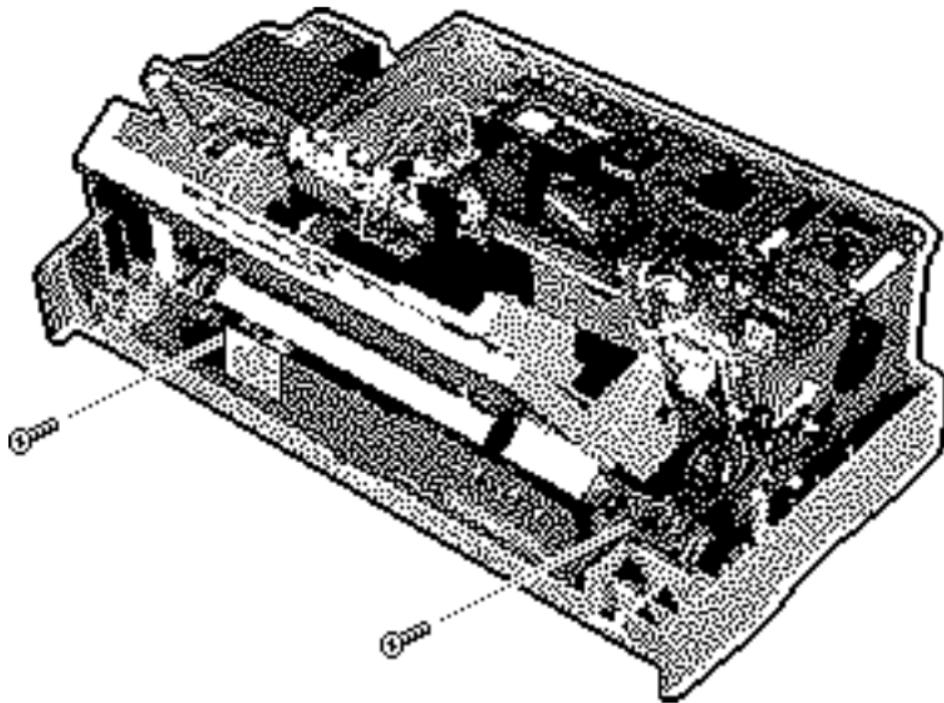
Catch

2 Remove the wires from the catch.
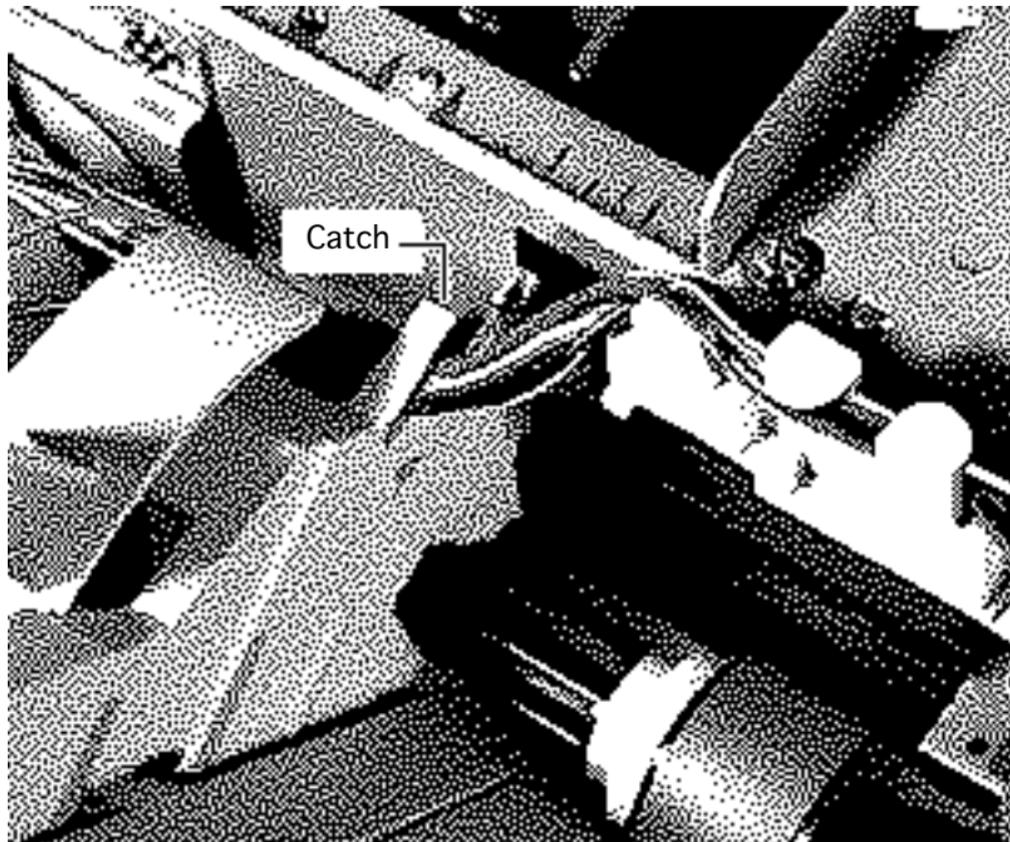
3 Press in the two latches
and remove the sheet
feeder from the printer.

Latch

Latch
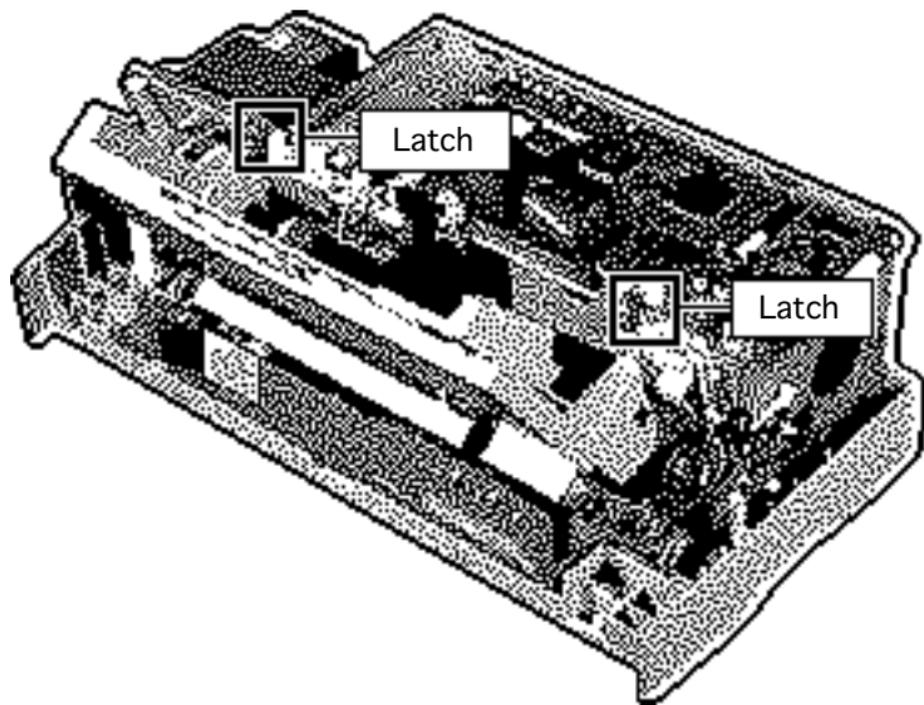
Power Supply

Power Supply

Before you begin, remove the following:

- Covers
- Cut sheet feeder

Caution: Review the ESD precautions in Bulletins/ Safety.

Note: After replacing the power supply, it is necessary to run the Color StyleWriter Pro Utility. See "Color StyleWriter Pro Utility" in the Adjustments chapter.
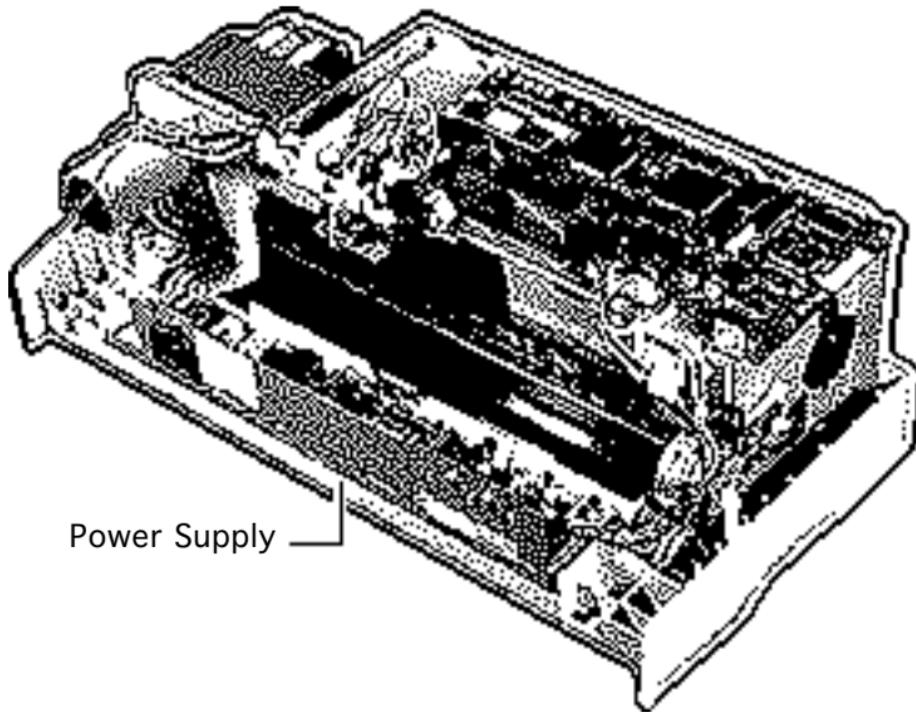
JPOW1

Holding Tabs

1 Disconnect connector JPOW1 from the controller board.

2 Release the wires from the holding tabs.
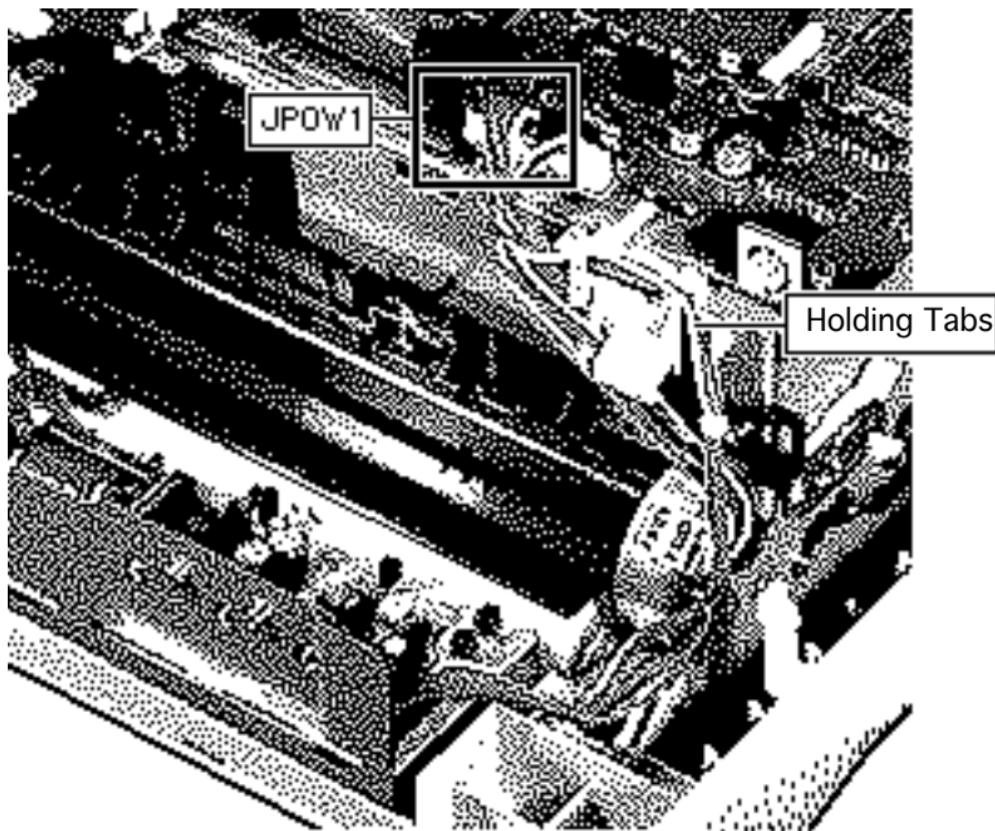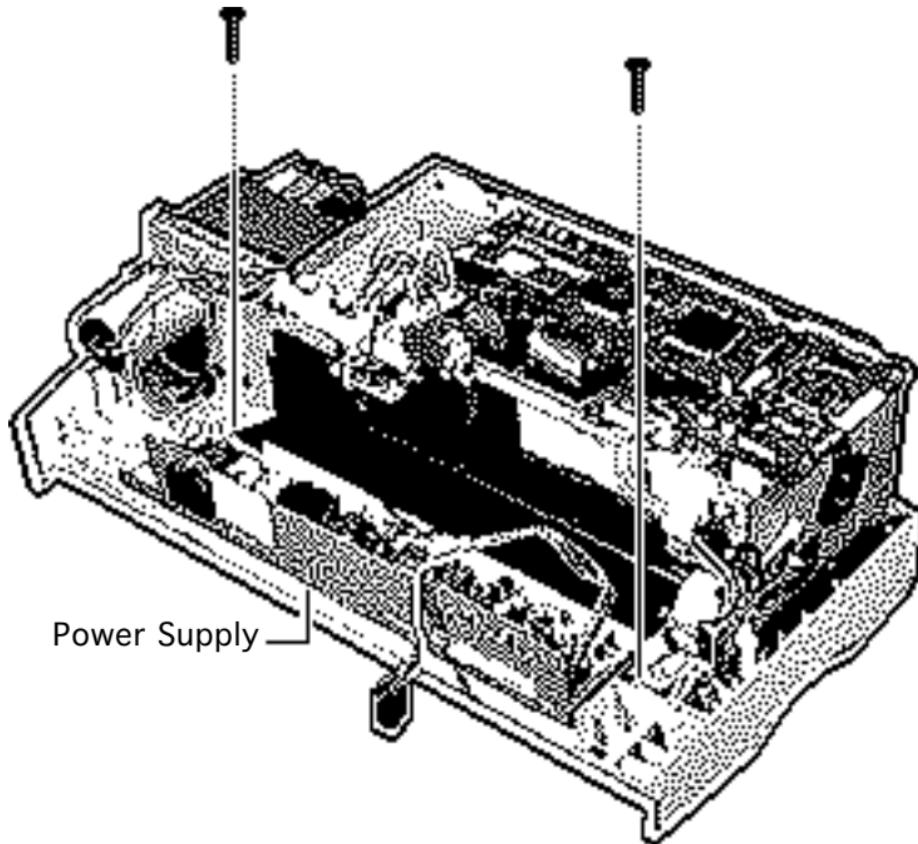
3 Using a Phillips screwdriver, loosen the two mounting screws and remove the power supply.

Power Supply

Sensor Board

Before you begin, remove the following:

- Covers
- Cut sheet feeder

Caution: Review the ESD precautions in Bulletins/Safety.
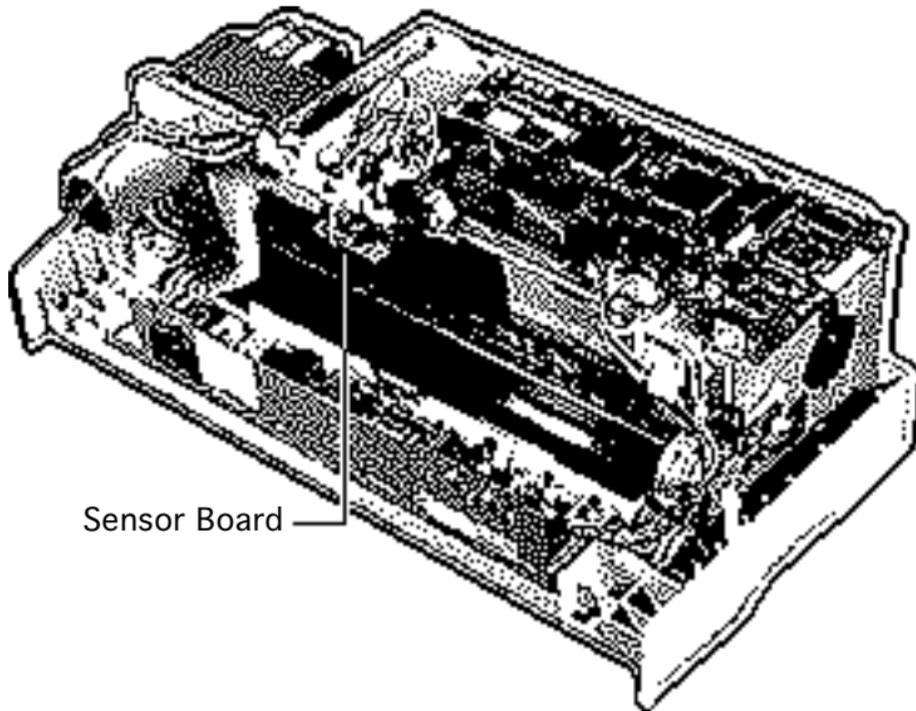
Sensor Board

1   Disconnect connector
    JASF1 from the
    controller board.

JASF1

Latch
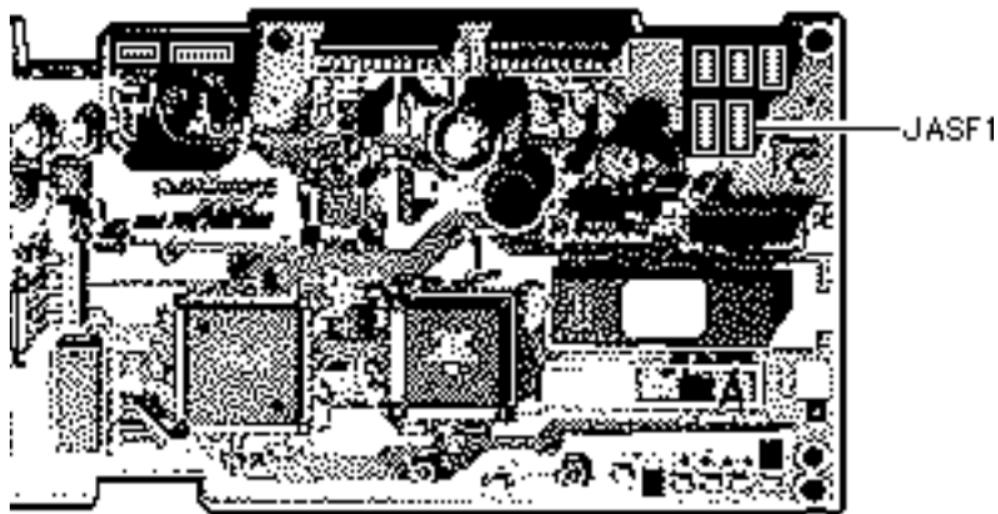
Latch

Sensor Board

2 Push out the two mounting latches and remove the sensor board.

Carriage Unit and Board
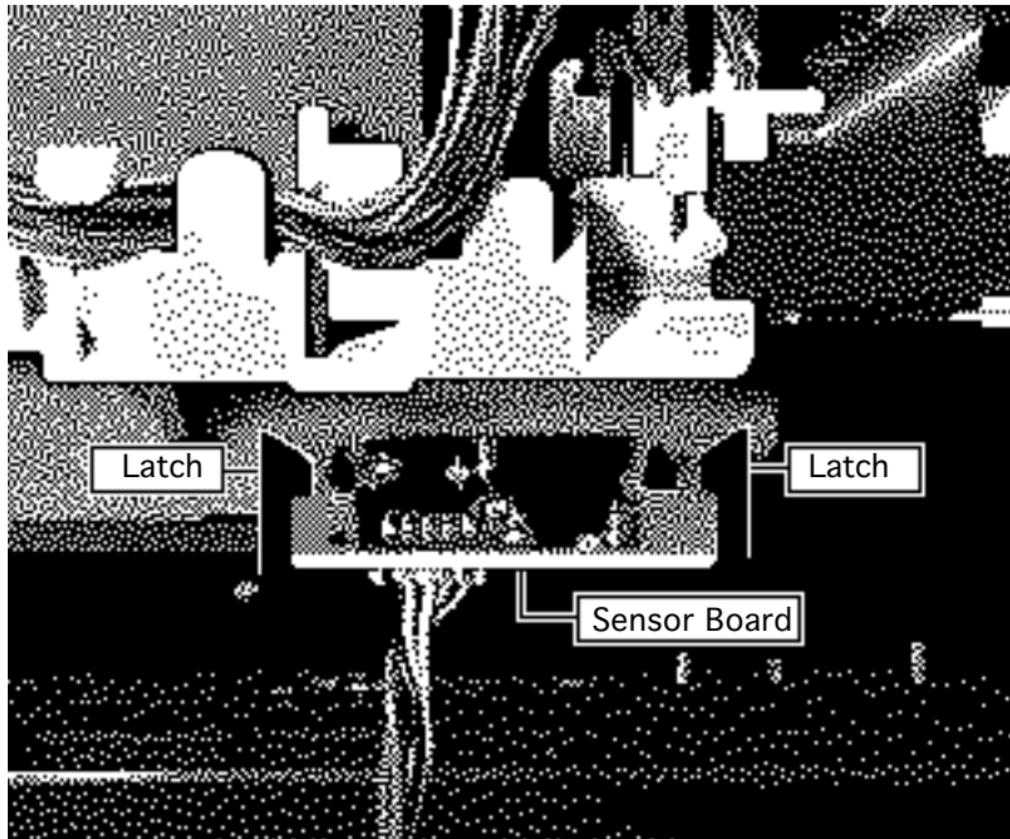
Carriage Unit and Board

Before you begin, remove the following:

- Covers
- Controller board

Caution: Review the ESD precautions in Bulletins/Safety.

Caution: Do not use a magnetized screwdriver near the encoder. A magnetized screwdriver will damage the encoder.

Carriage Unit and Board
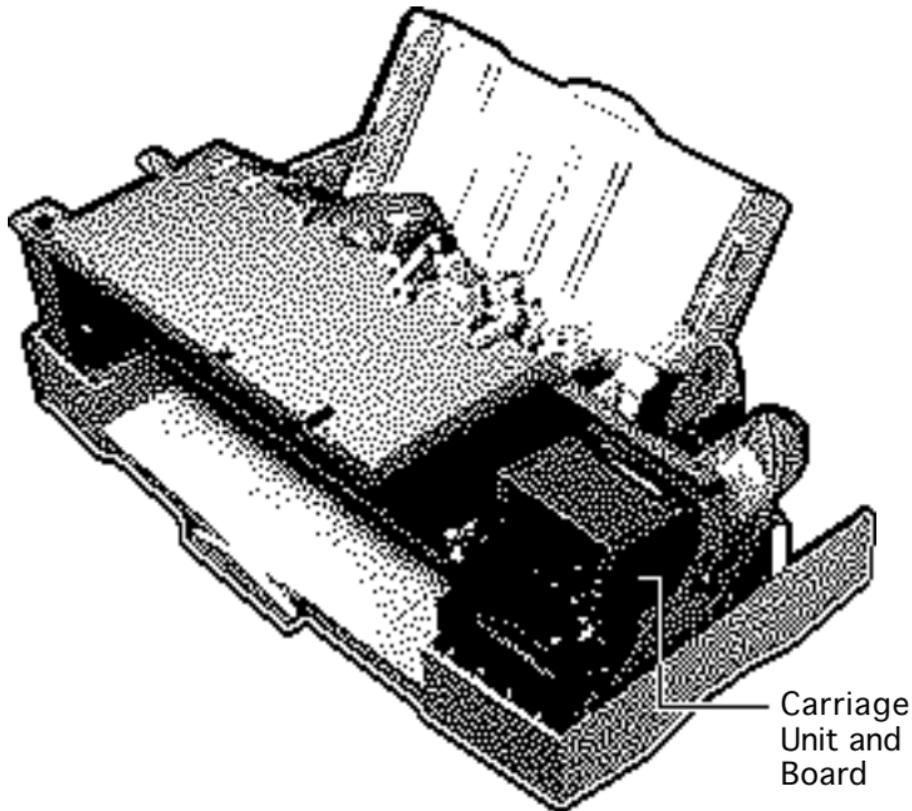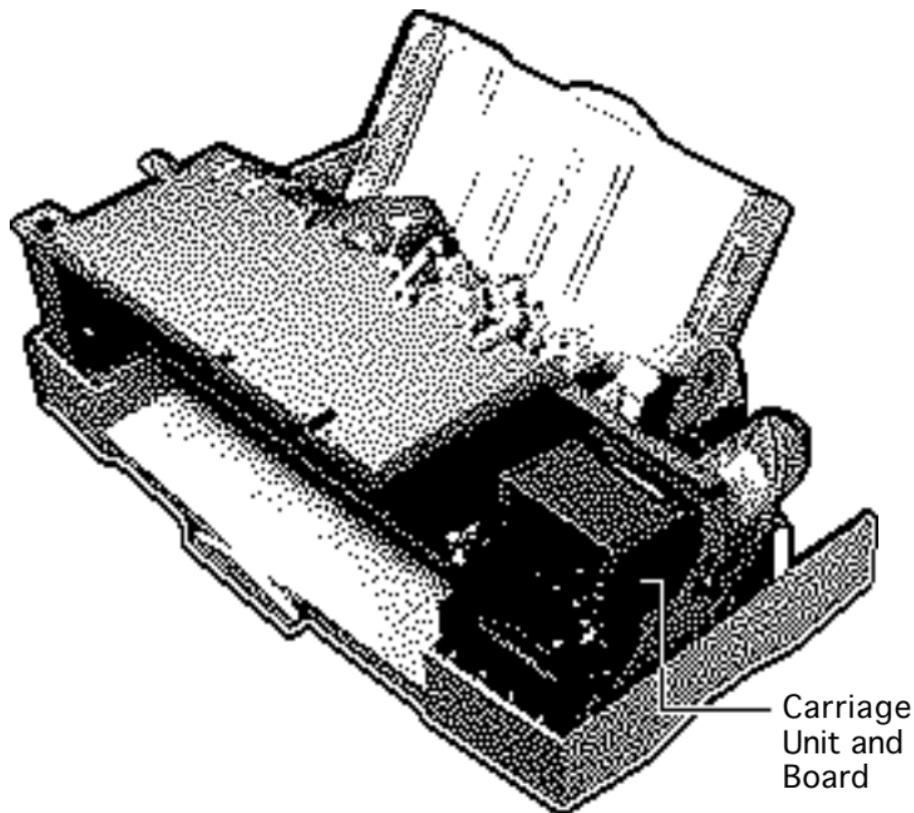
Note: After replacing the carriage board, it is necessary to run the Color StyleWriter Pro Utility. See "Color StyleWriter Pro Utility" in the Adjustments chapter.

Carriage Unit

1 Advance the locking gear and disengage the carriage.

Carriage Unit
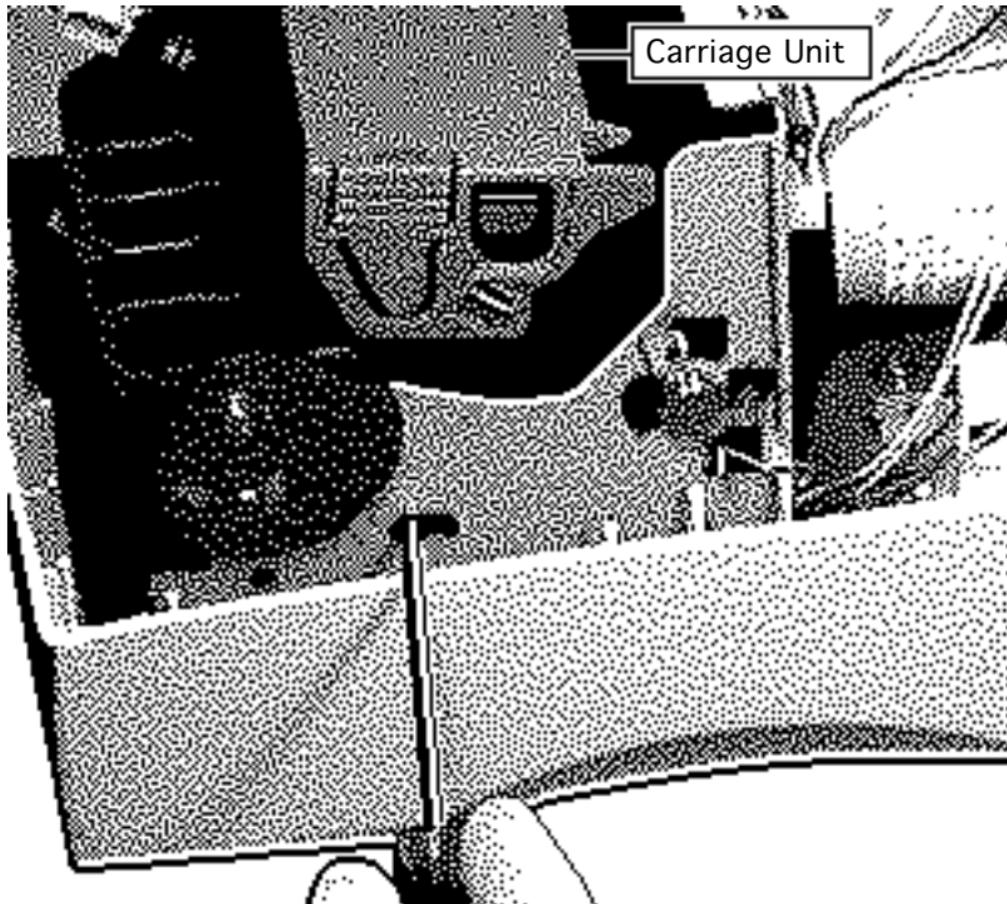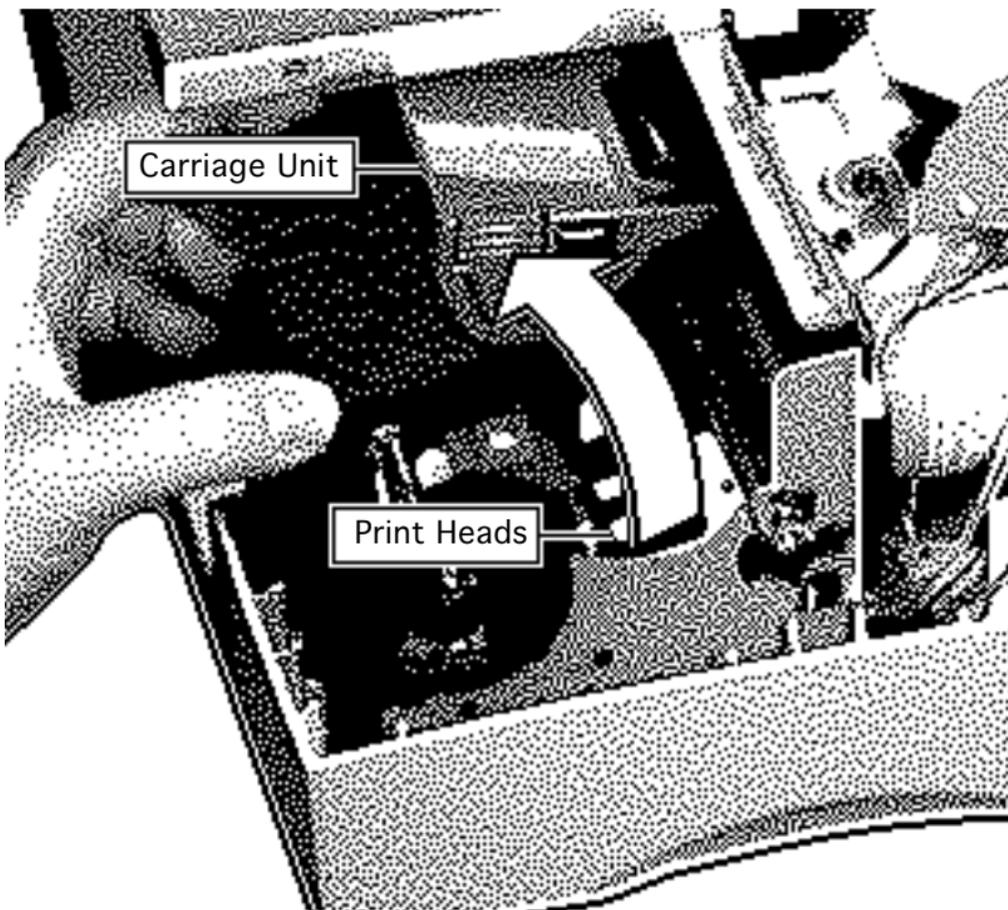
Print Heads

2 Move the carriage out of the home position.

Caution: The print heads are now uncapped. Do not leave them uncapped for more than 12 hours or they will dry out.

Caution: Do not get the printer's ink on your hands or clothes. Although the ink is water soluble, it contains dyes that will stain.

Carriage Belt
Tensioner

3　Using a Phillips
screwdriver, loosen the
screw and push in the
carriage belt tensioner.

4 Remove the carriage belt.
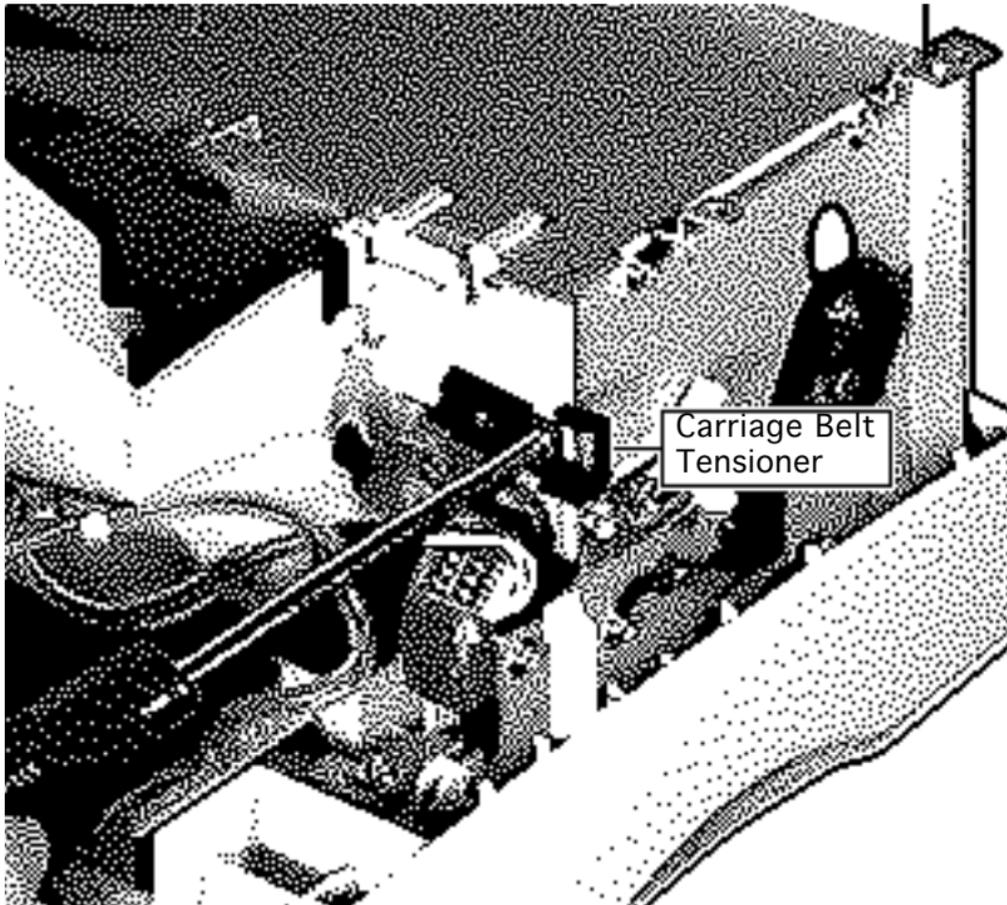
Carriage Belt
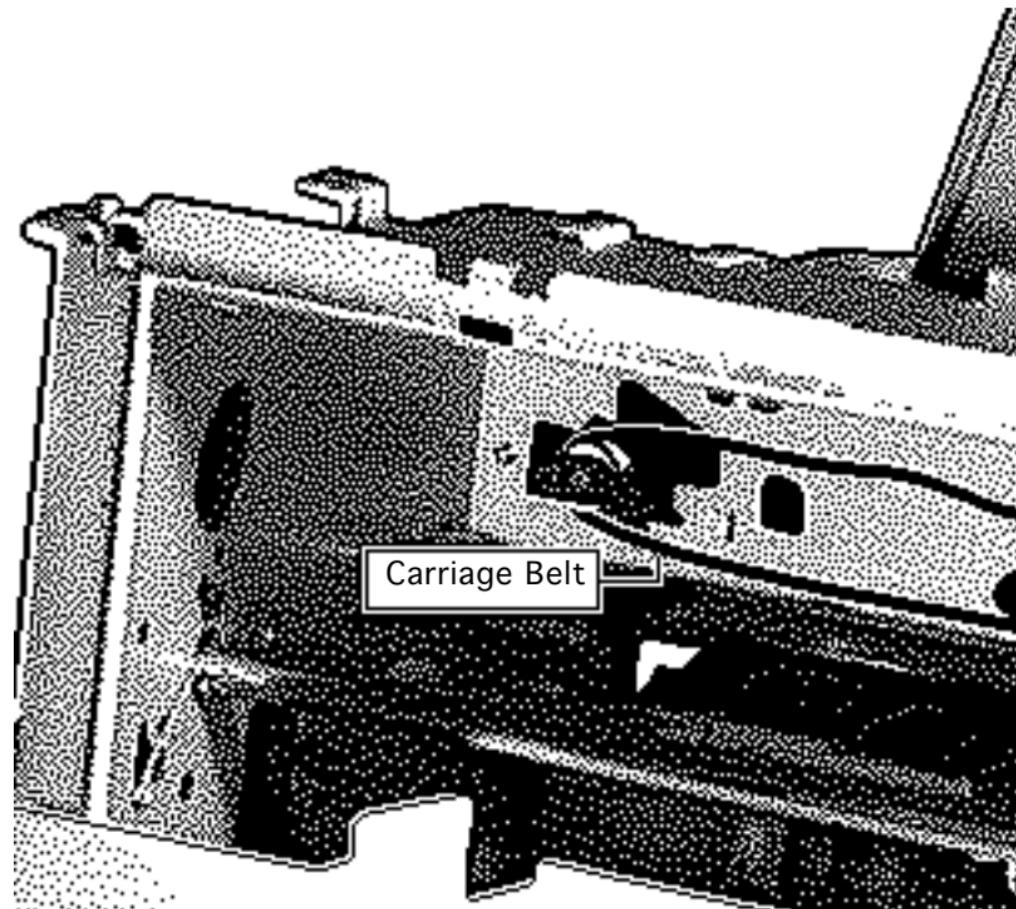
Ferrite Core

5 Remove the ferrite core.
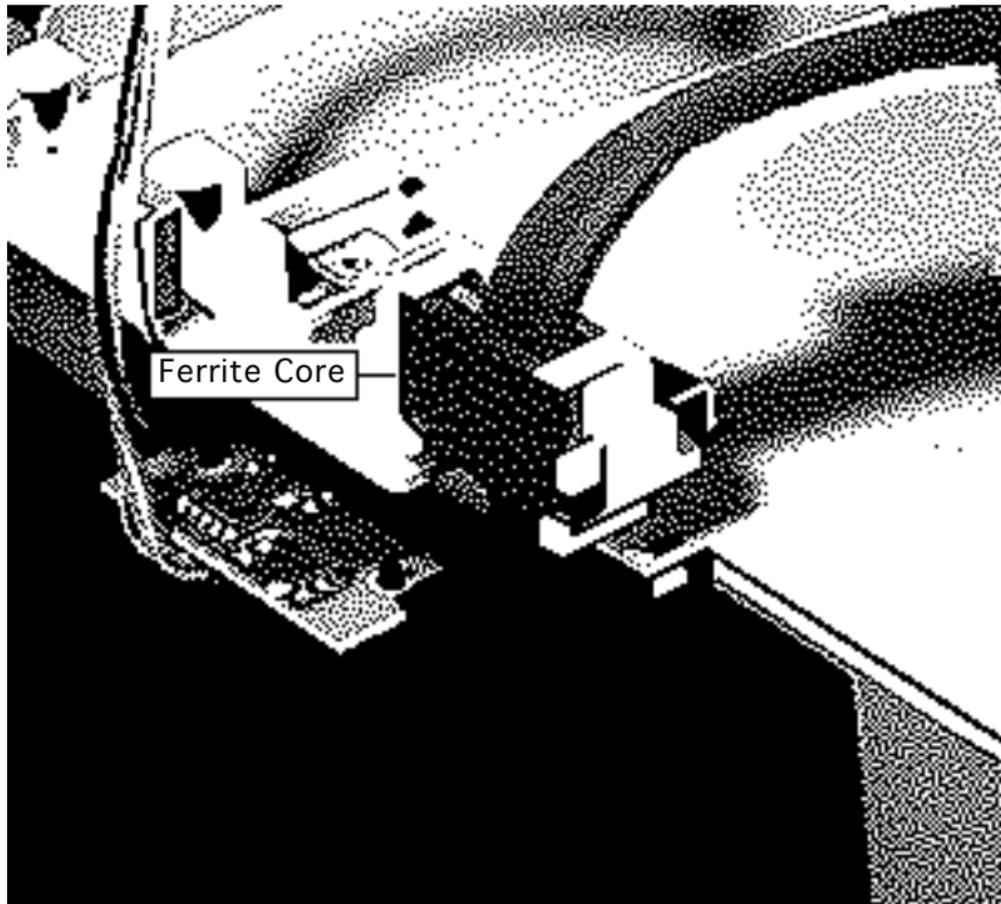
Mounting
Bracket

6 Remove the plastic
   mounting bracket.
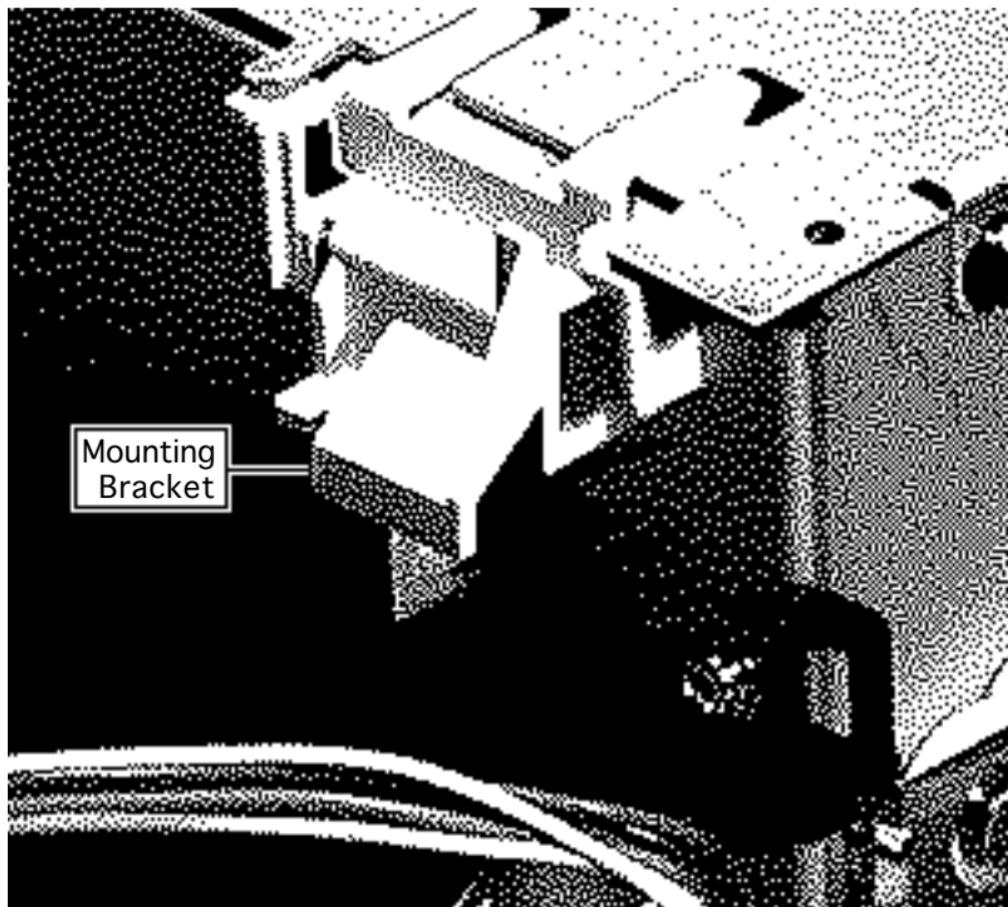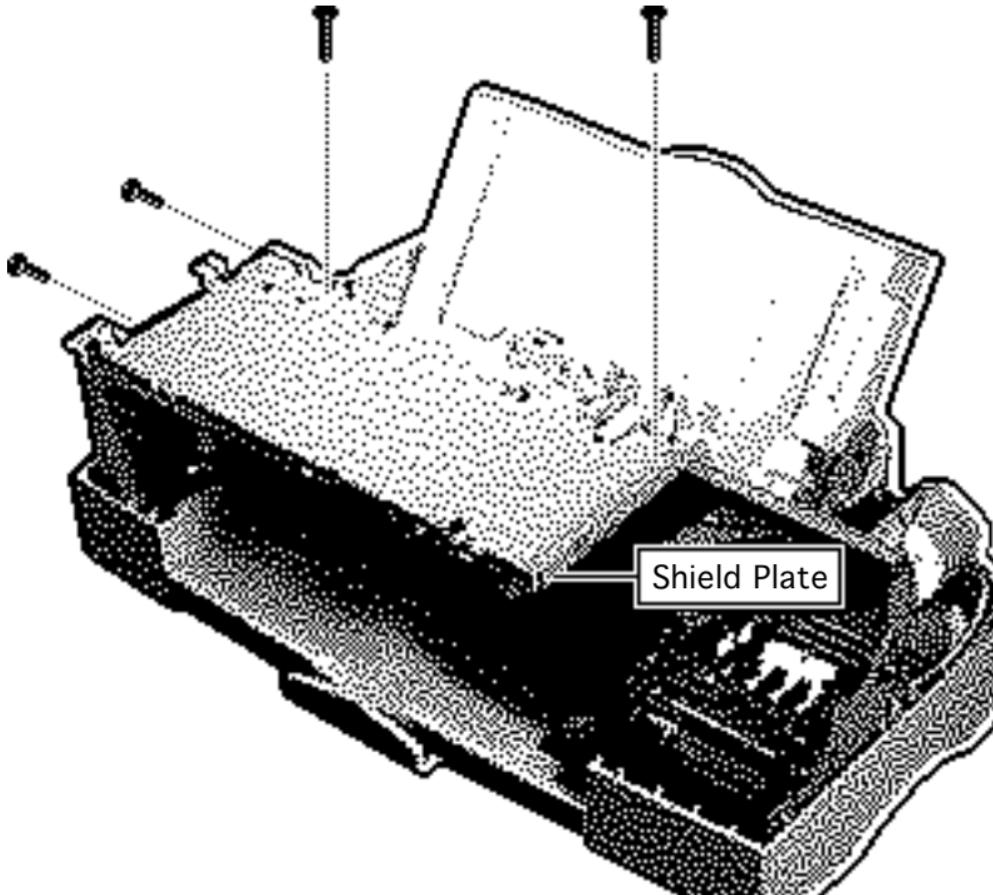
Shield Plate

7 Using a Phillips screwdriver, remove the shield plate mounting screws.

8 Remove the shield plate.

Carriage Unit
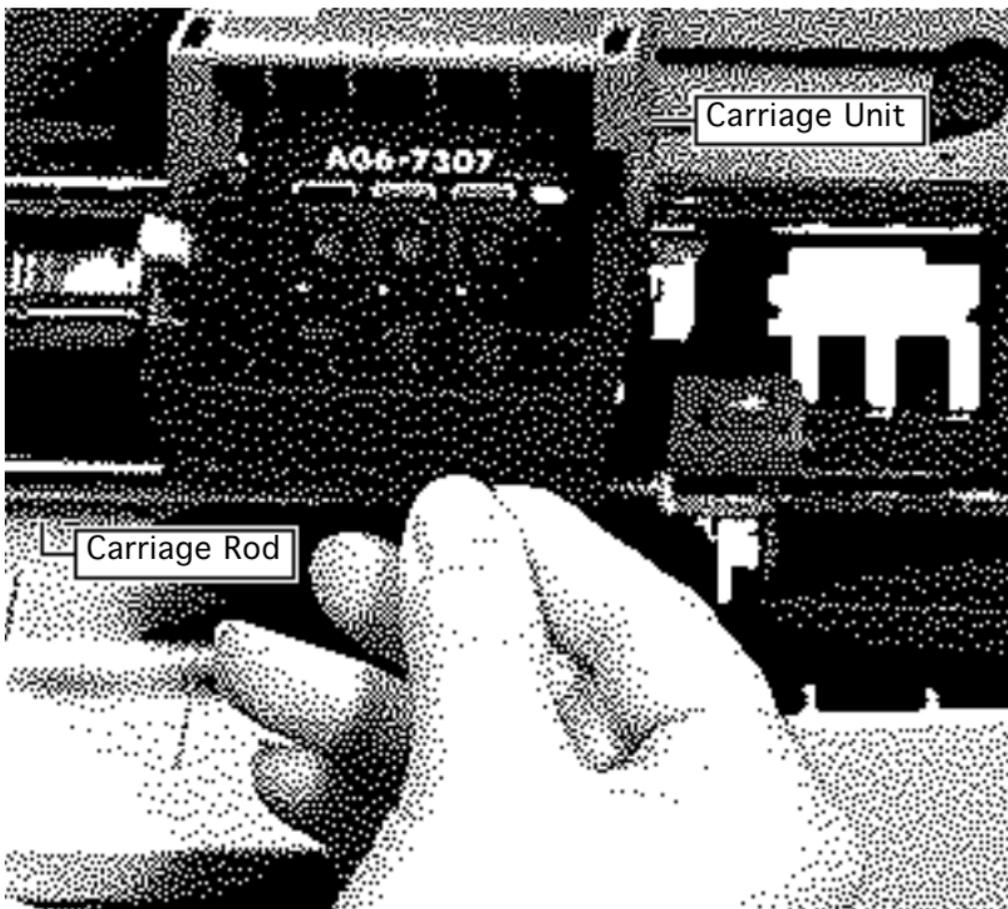
Carriage Rod

9 Pull up the front of the carriage unit and release it from the front carriage rod.

Scale Spring

10 Remove the scale spring.
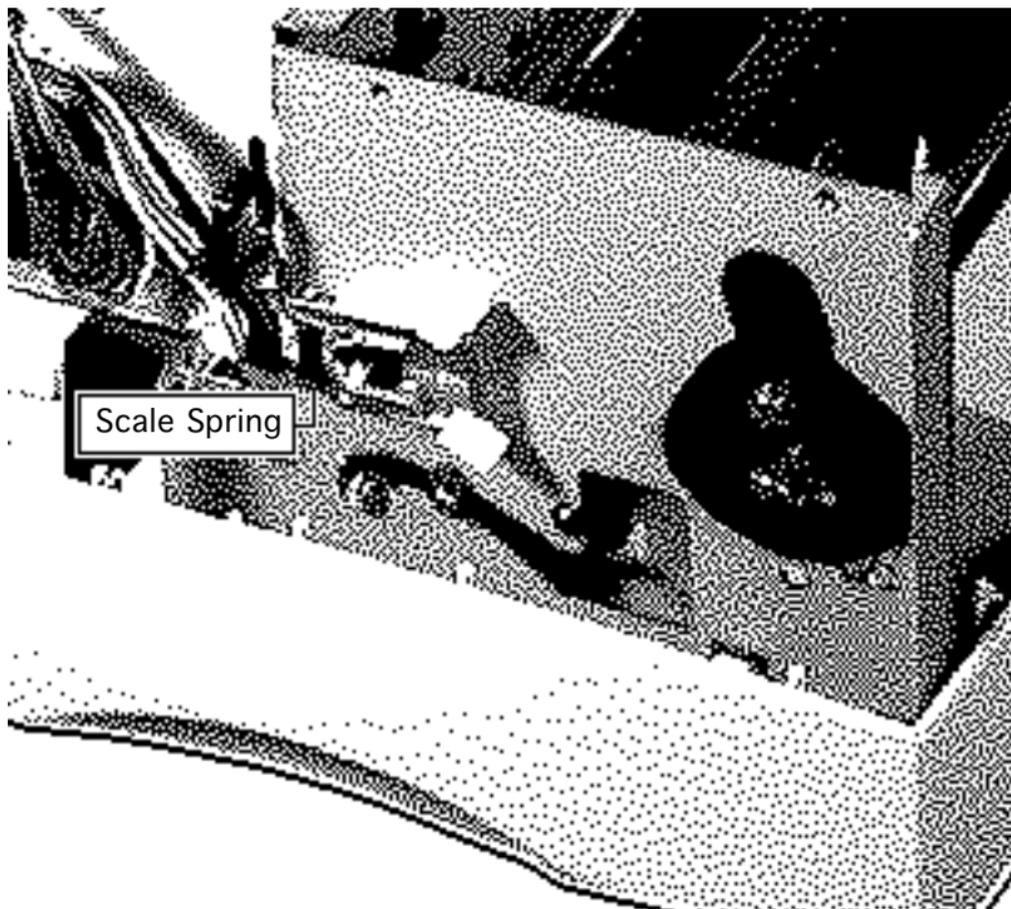
Scale Holder

11 Press in the latches and remove the scale holder from the printer.
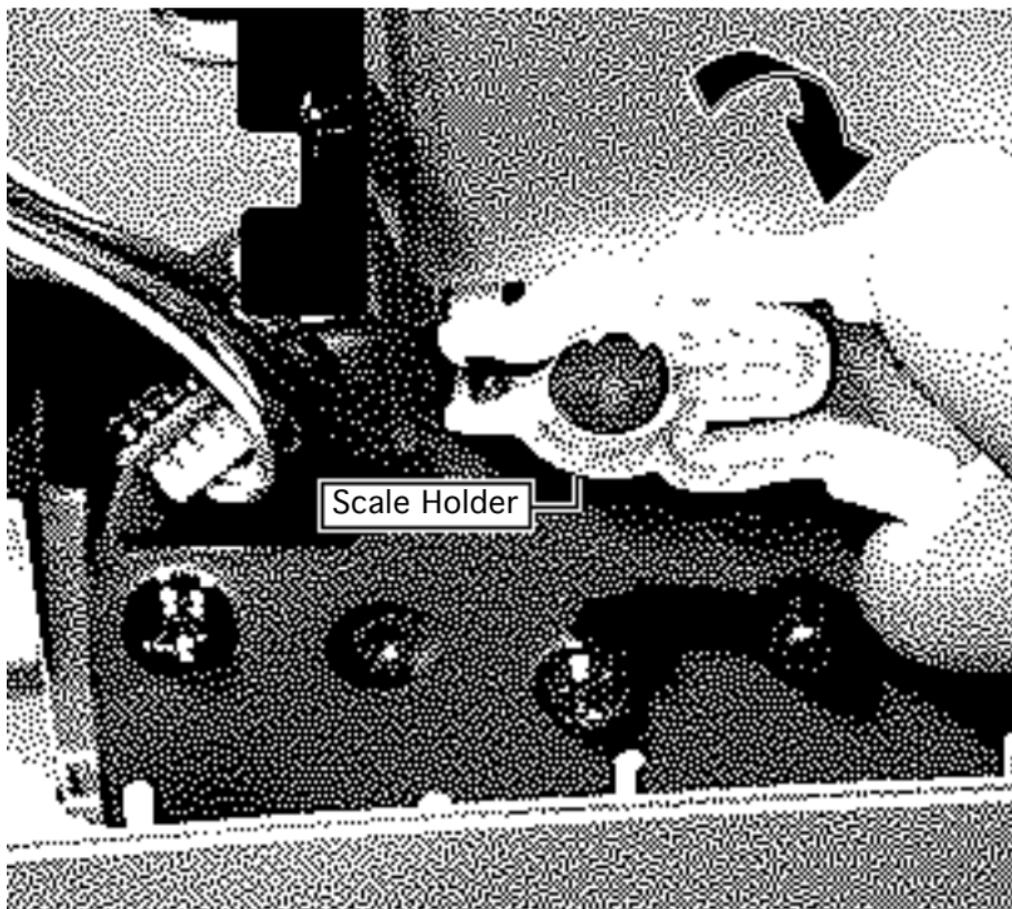
12 Remove the shaft spring from the carriage rod.

Shaft Spring

Carriage Rod
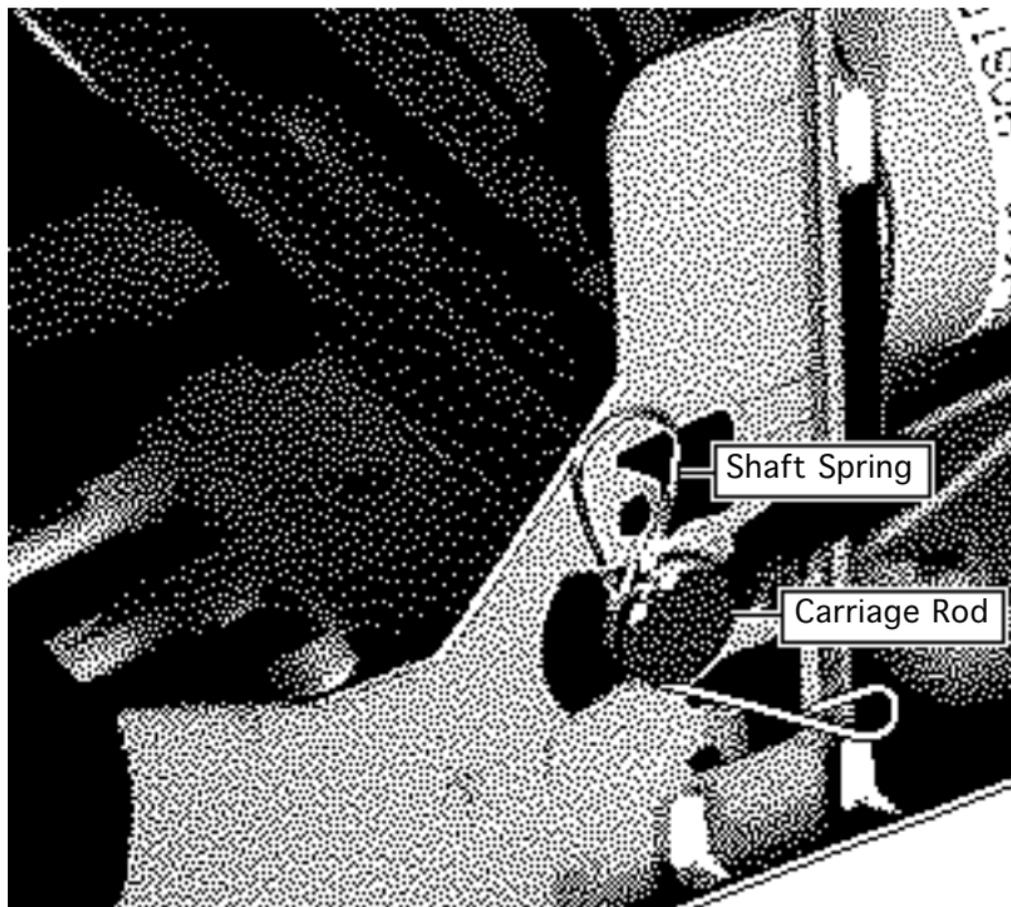
Carriage Unit

13 Pull the carriage to the right and carefully remove the carriage rod from the chassis.
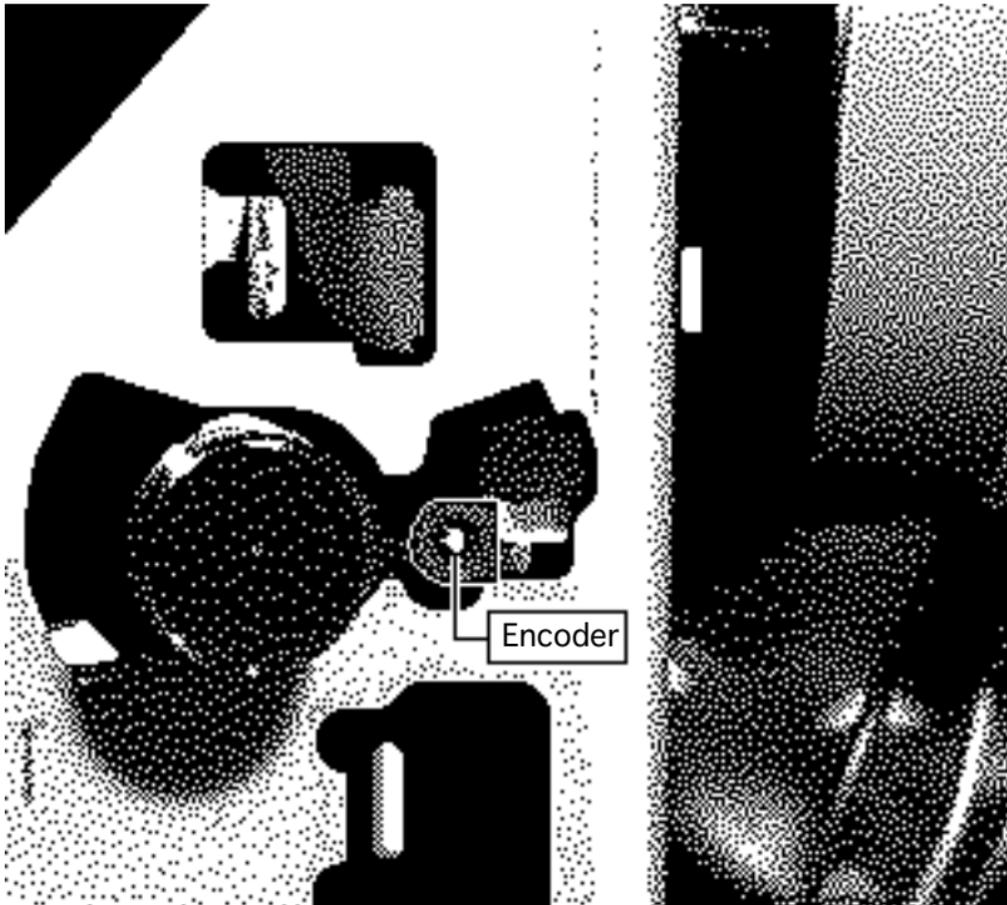
Encoder

14 **Caution:** Be careful not to bend the encoder when removing it from the chassis.

Carefully remove the encoder and carriage unit from the printer.

**Replacement Note:** Make sure the encoder is installed in the proper orientation in the scale holder. Failure to do so will cause an encoder error to develop.

Encoder
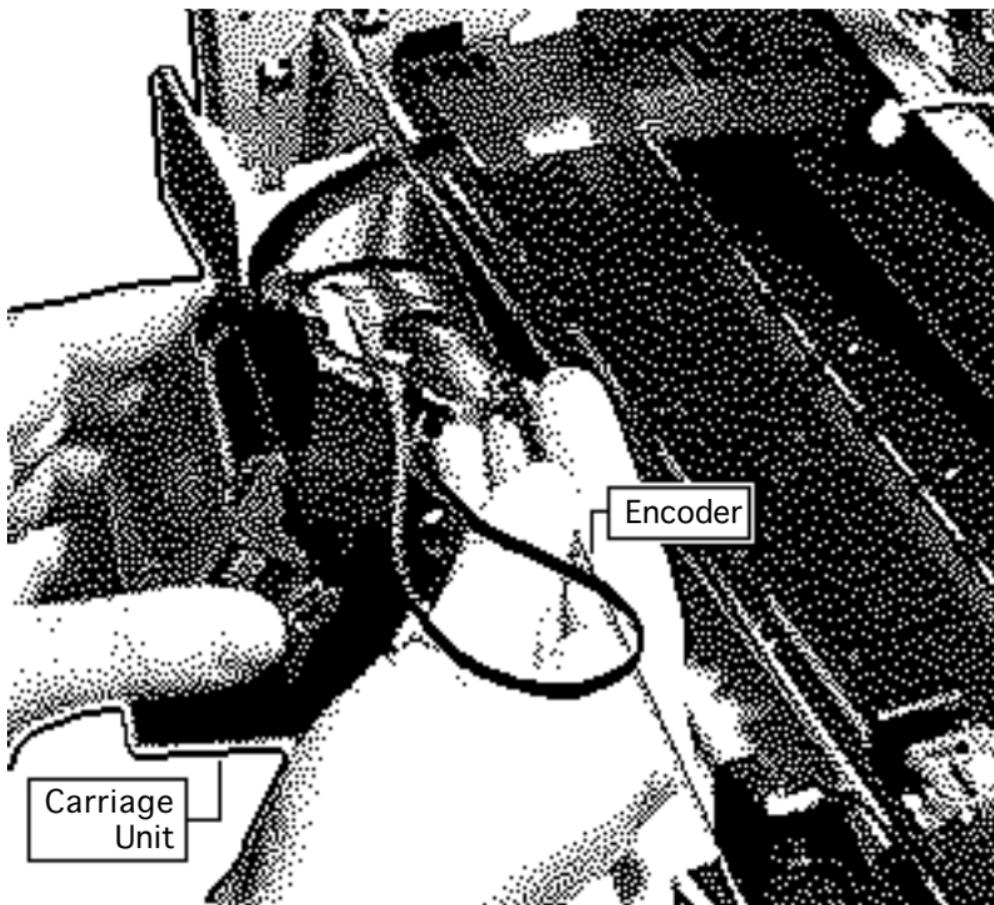
Carriage
Unit

15 **Caution:** Be careful not to bend the encoder.

Carefully place the carriage unit in front of the printer.

Flexible Cable
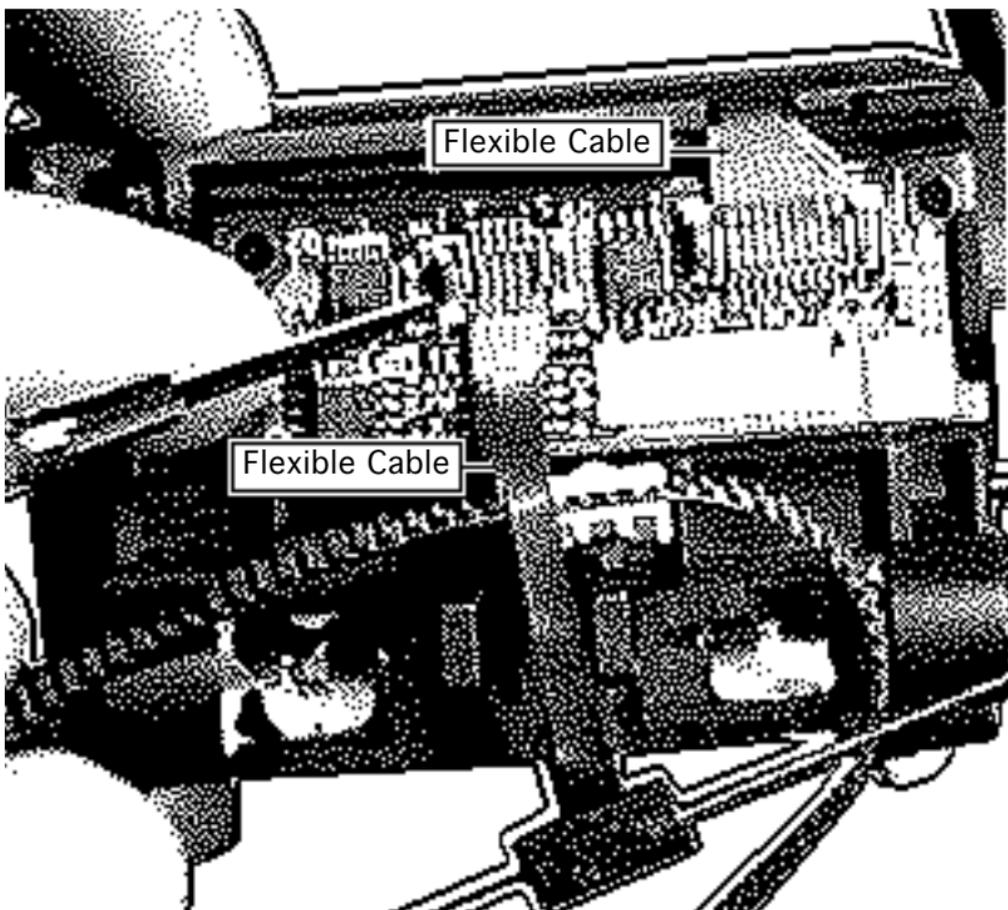
Flexible Cable

16 Remove the flexible cables from the connectors on the carriage board.

Latch

Carriage Board
and Shield

17 Release the latch and
remove the carriage
board and shield.

Carriage Belt Holder
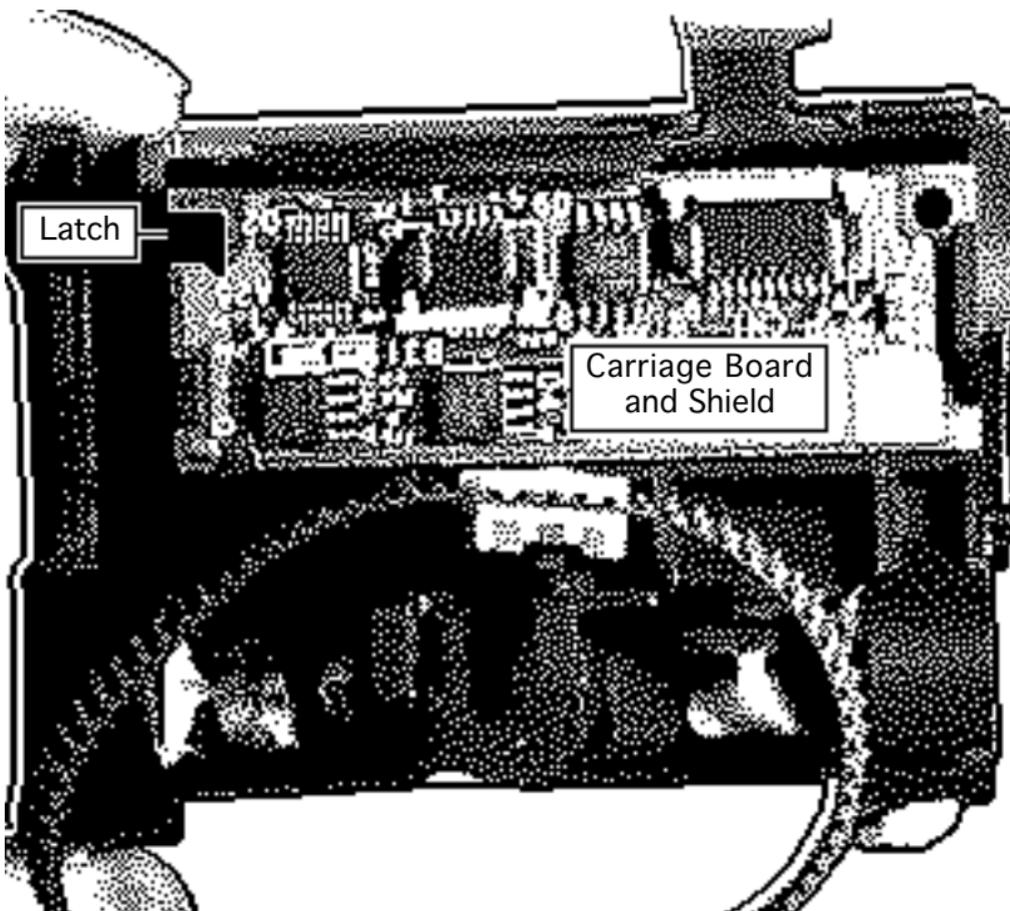
Carriage Belt

18 Remove the carriage belt holder and belt.

Ribbon Cable

Ribbon Cable Holder
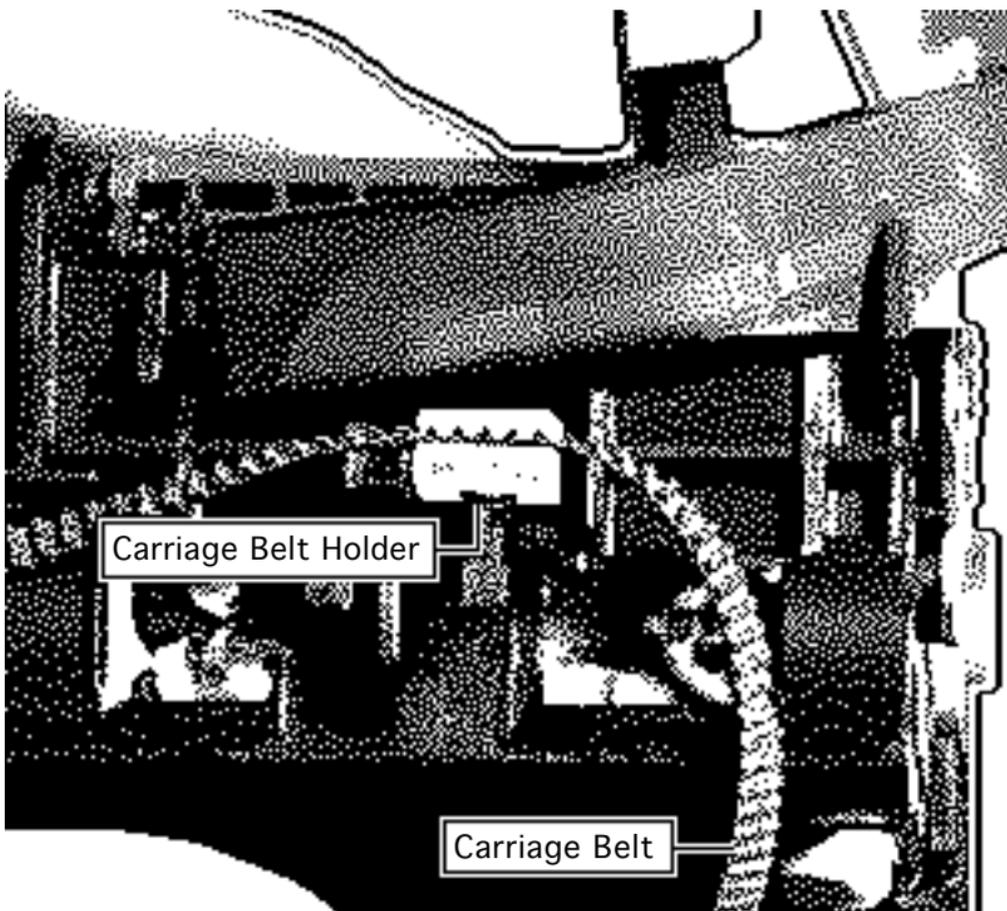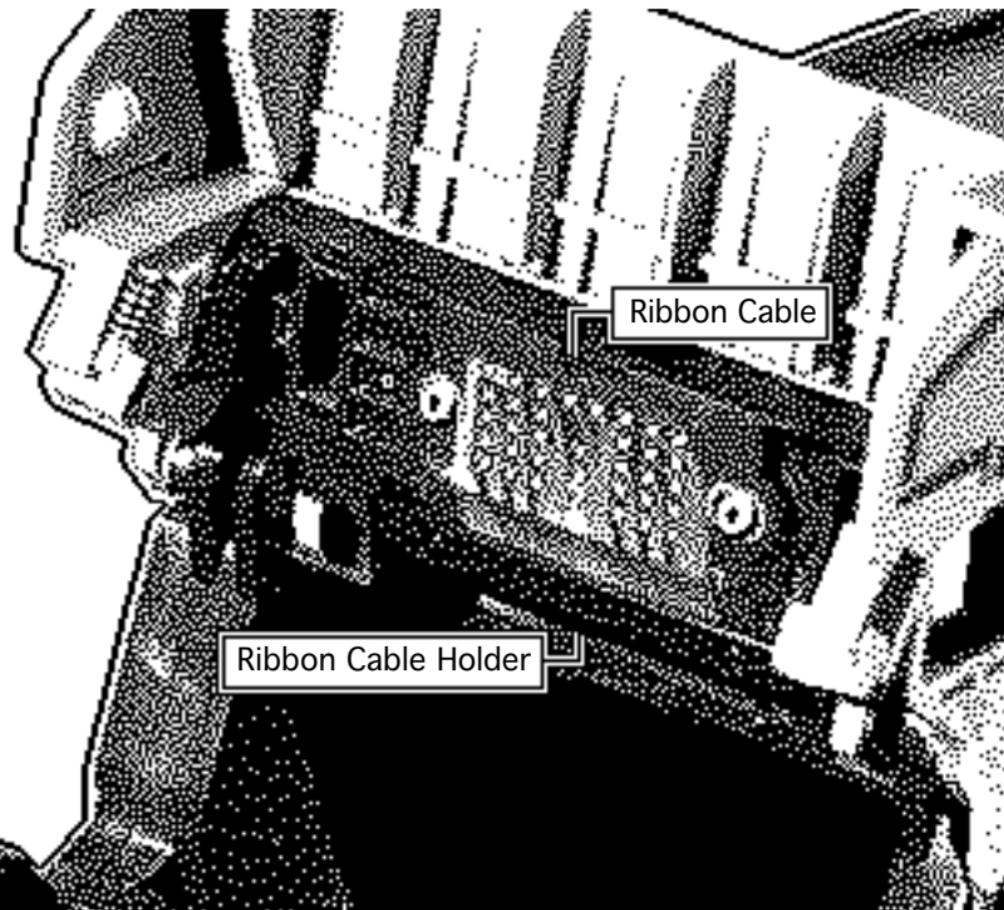
19 Open the carriage unit.

20 Remove the ribbon cable holder and ribbon cable.

Carriage Motor

Carriage Motor

Before you begin, remove the covers.

Caution: Review the ESD precautions in Bulletins/ Safety.

Carriage Belt
Tensioner

1   Using a Phillips
    screwdriver, loosen the
    screw and push in the
   carriage belt tensioner.

Mounting
Bracket

JCRM1
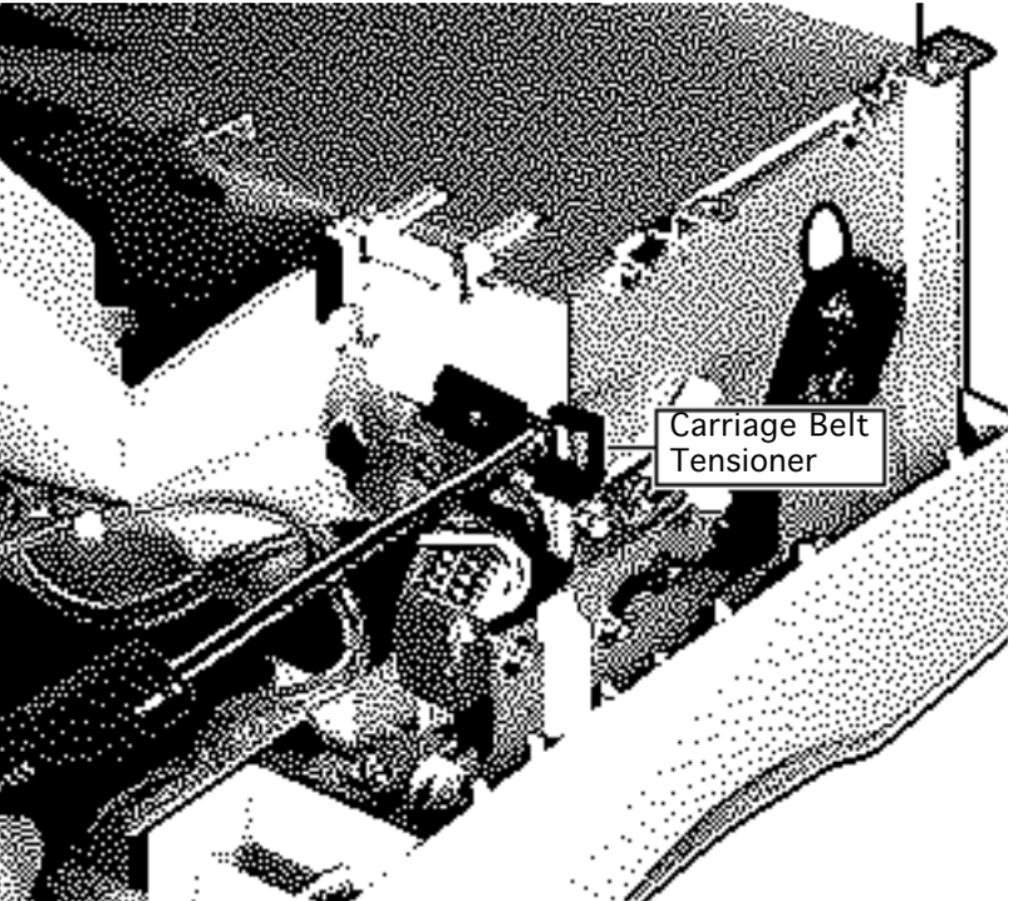
2 Disconnect connector
  JCRM1 from the
 controller board.

3 Remove the wires from
  the mounting bracket.
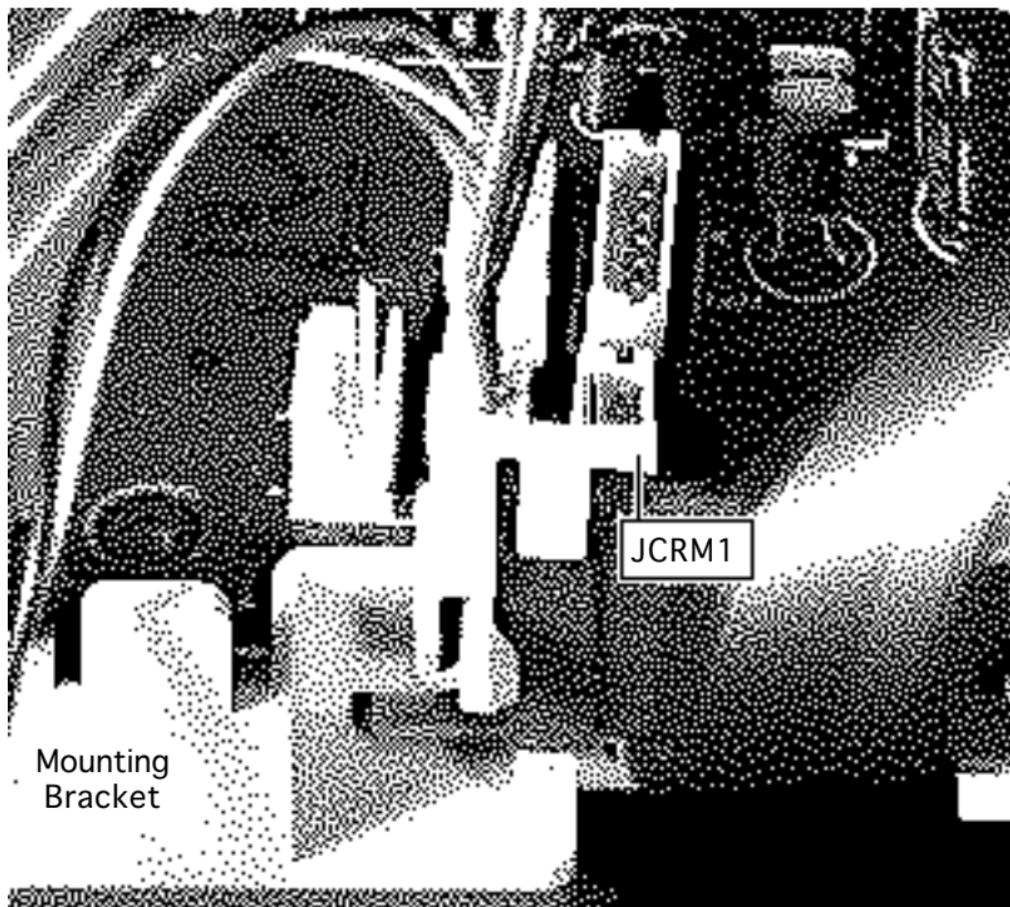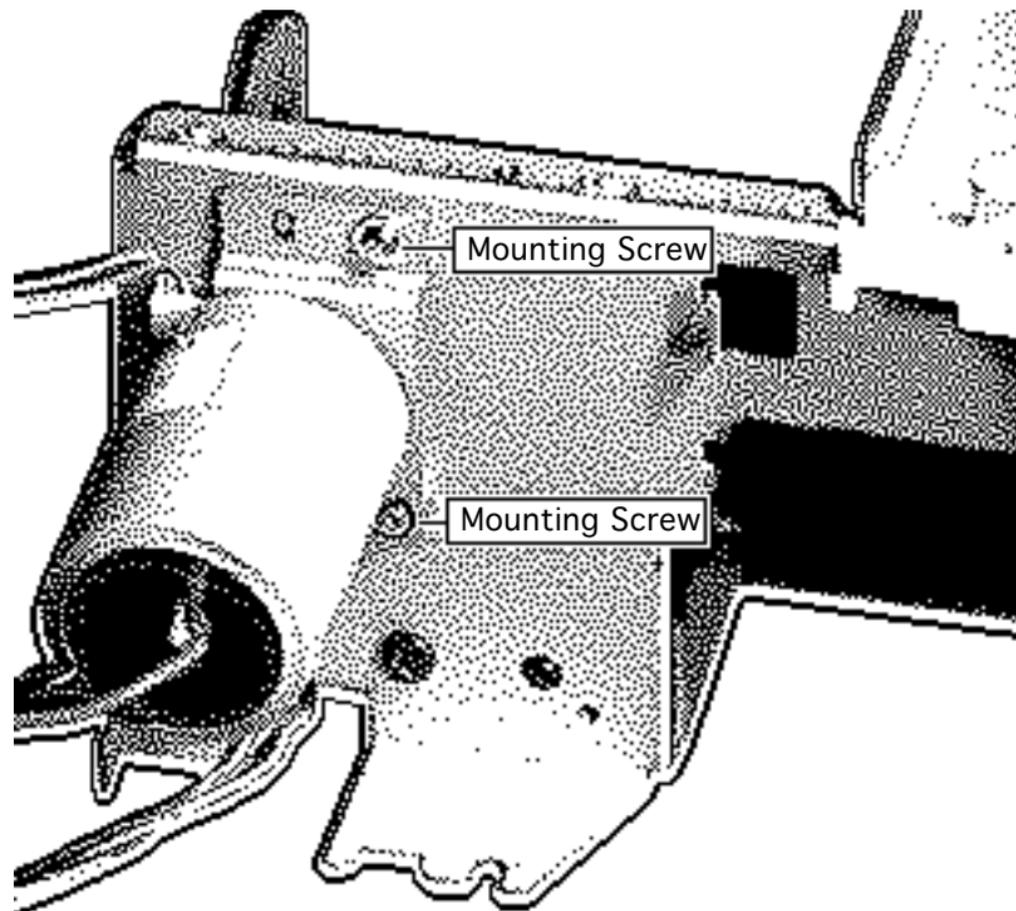
4 Using a Phillips screwdriver, remove the two mounting screws.

5 Remove the motor.

Mounting Screw

Mounting Screw

—Printer Frame

Printer Frame

Before you begin, remove the following:

- Covers
- Cut sheet feeder
- Power supply

**Caution:** Review the ESD precautions in Bulletins/ Safety.
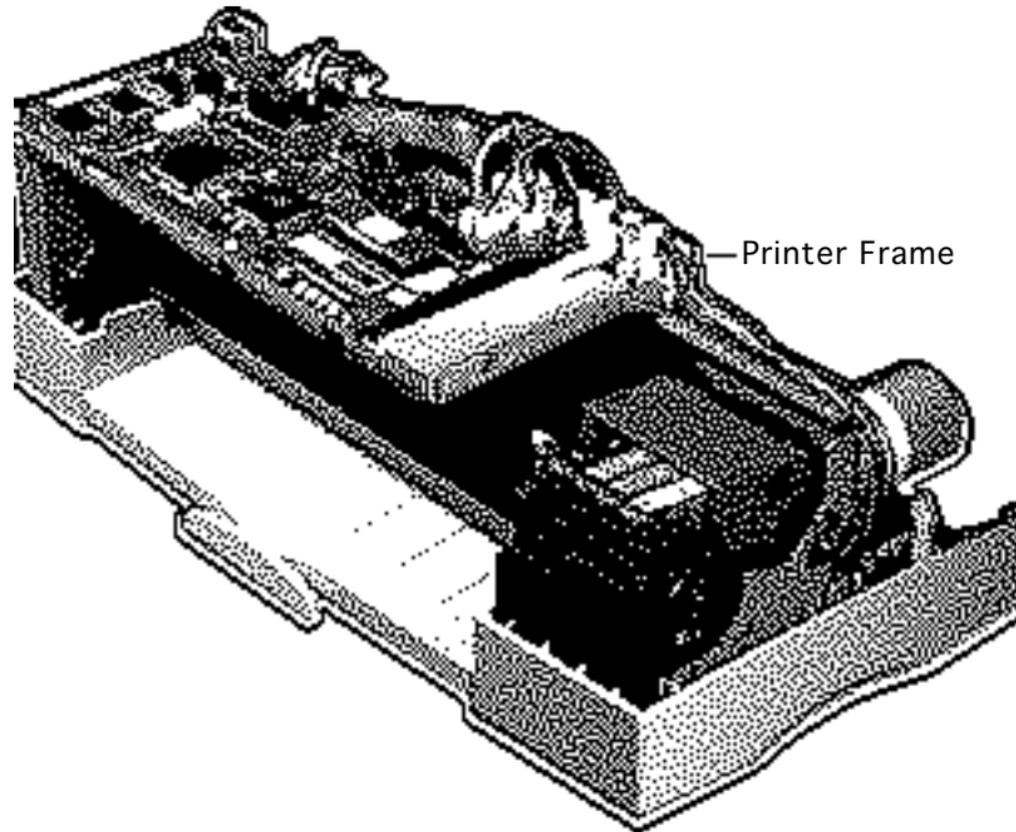
Right Latch

1　Release the right latch and lift up on the printer.
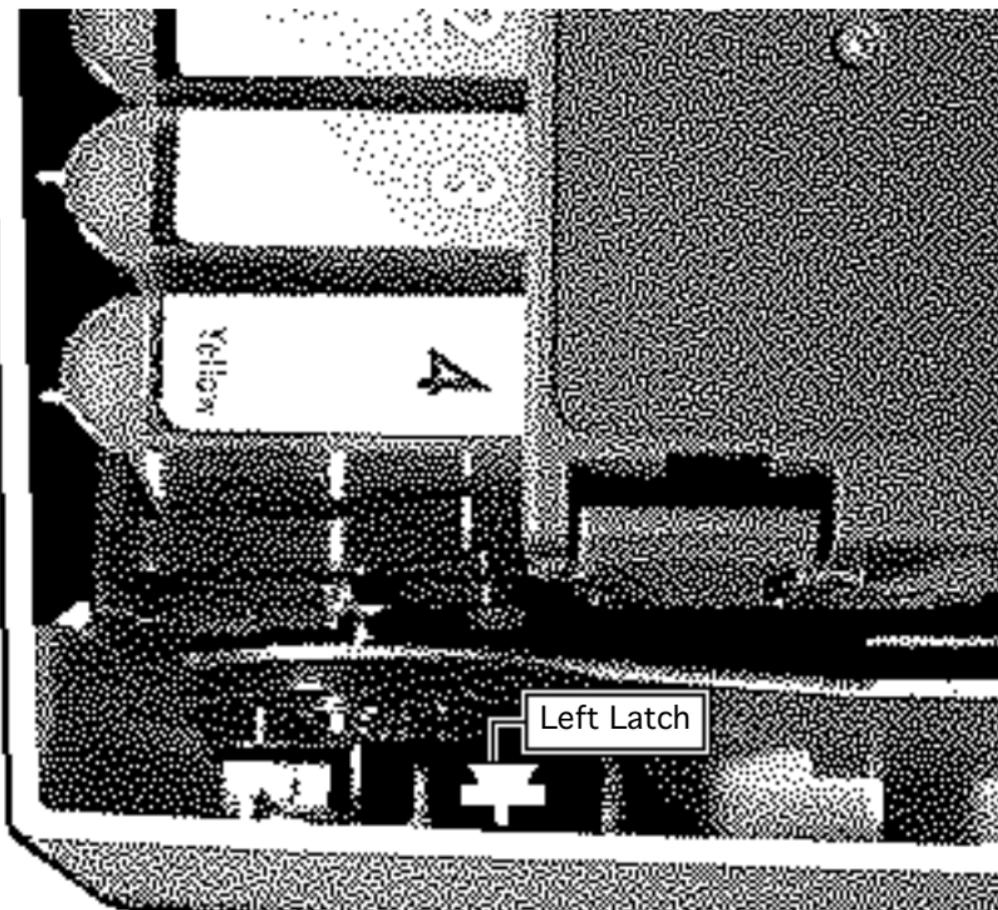
Left Latch

2 Release the left latch and remove the printer frame from the printer.

# Ink Absorber Elements
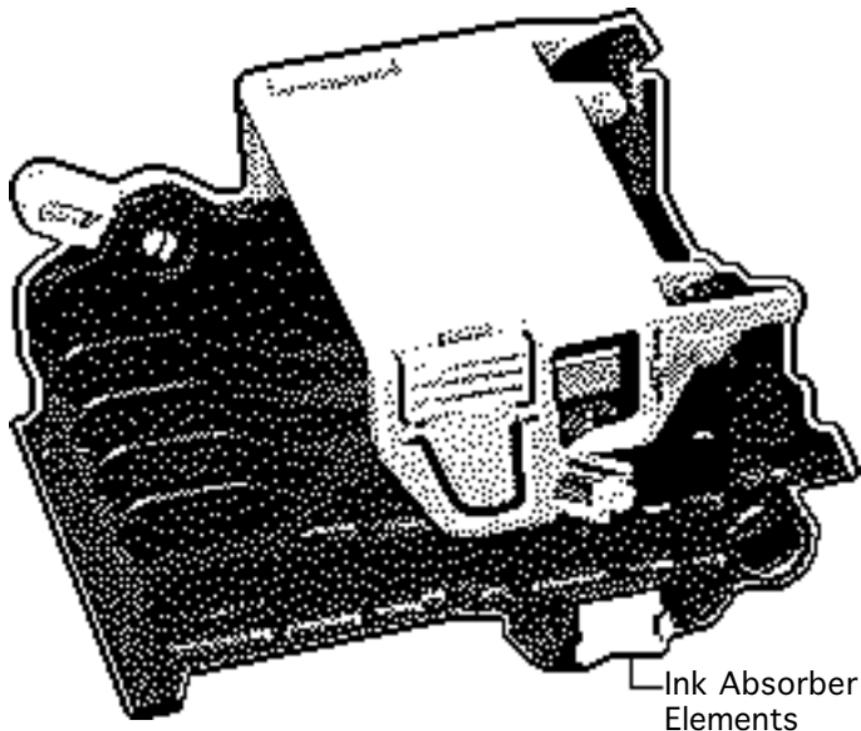
Before you begin, remove the following:

- Covers
- Controller board
- Carriage unit

Caution: Review the ESD precautions in Bulletins/Safety.

Caution: Do not get the printer's ink on your hands or clothes. Although the ink is water soluble, it contains dyes that will stain.

Ink Absorber Elements

Sub Absorber Element

Main Absorber Element

1 Turn over the carriage unit.

2 Using a small flat-blade screwdriver, gently release the two latches and remove the main absorber element.

3 Gently release the remaining two latches and remove the sub absorber element.

Ink Absorber Plates
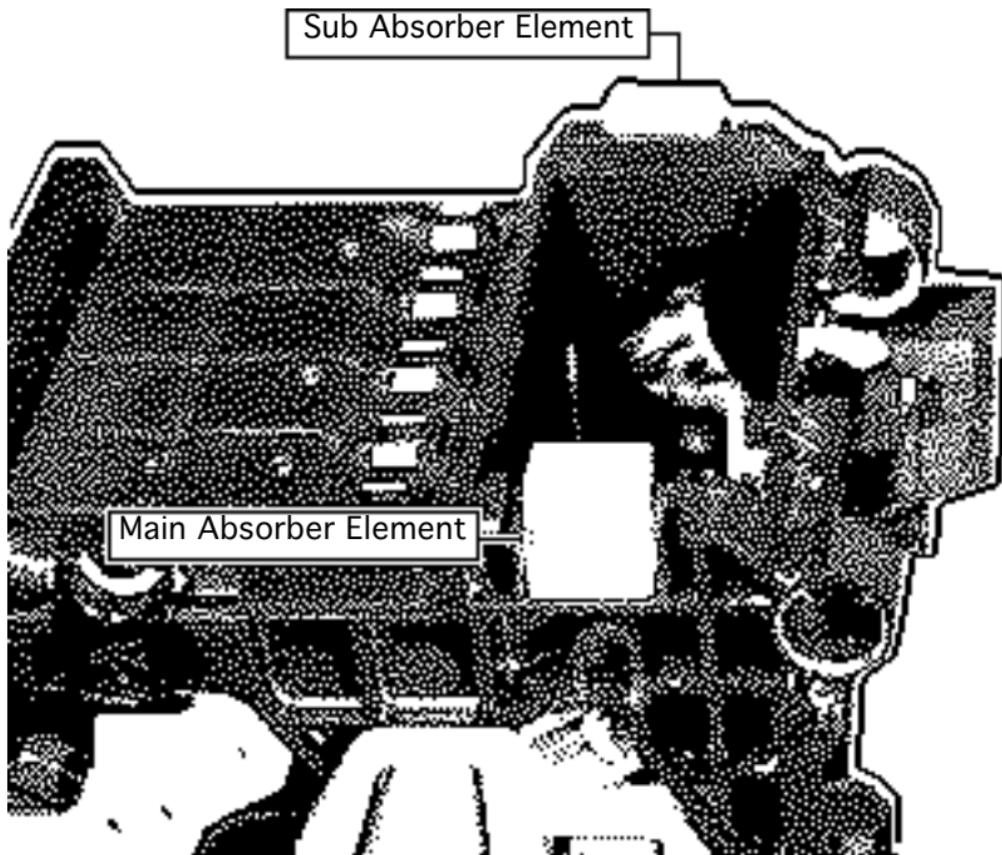
Ink Absorber Plates
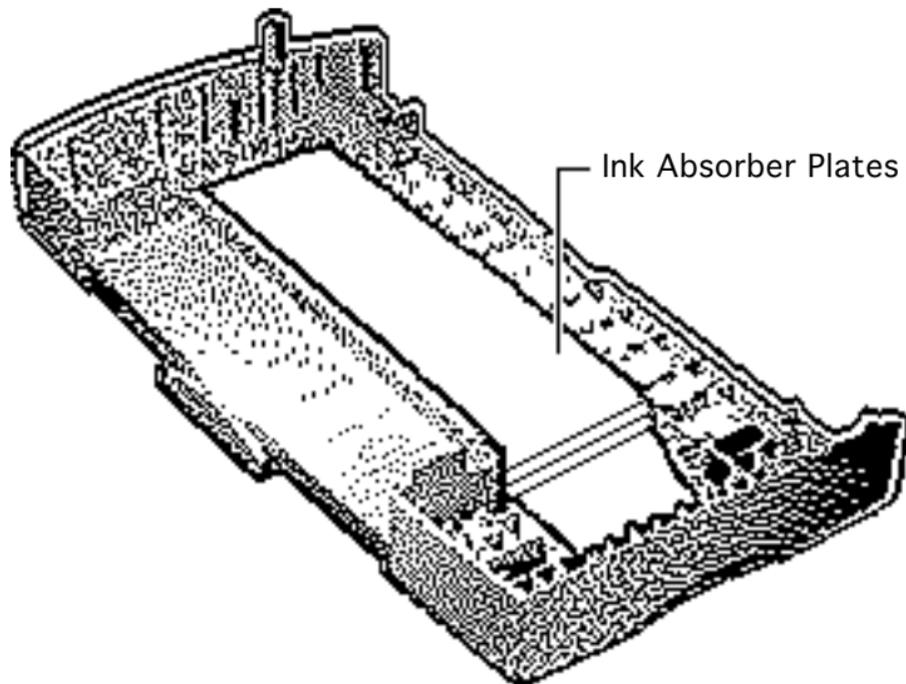
Before you begin, remove the following:

- Covers
- Sheet feeder
- Printer frame

Caution" Review the ESD precautions in Bulletins/Safety.

Caution: Do not get the printer's ink on your hands or clothes. Although the ink is water soluble, it contains dyes that will stain.

Ink Absorber Plates
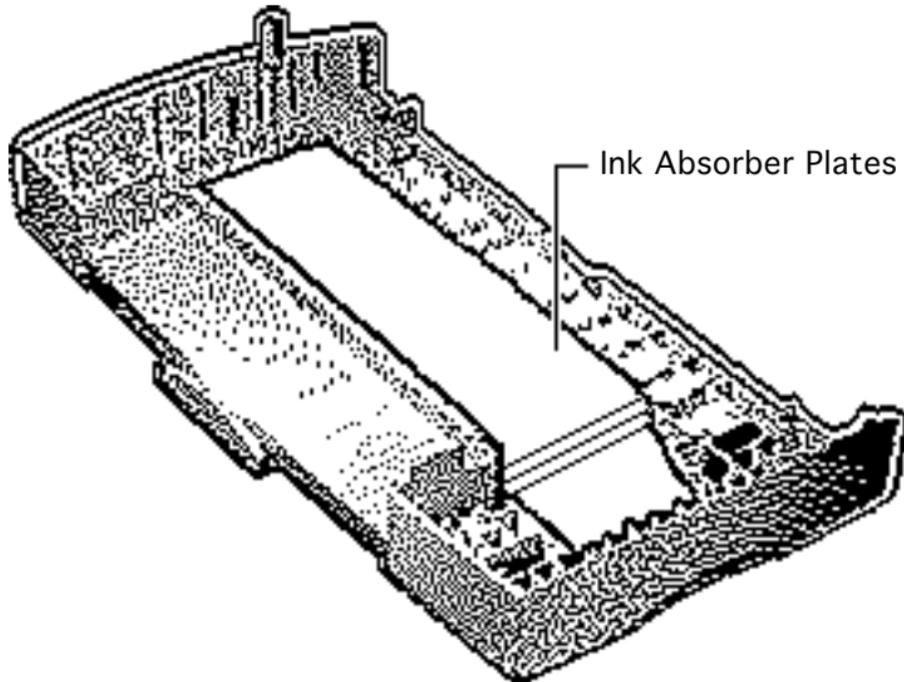
Note: After replacing the ink absorber plates, it is necessary to run the Color StyleWriter Pro Utility. See "Color StyleWriter Pro Utility" in the Adjustments chapter.
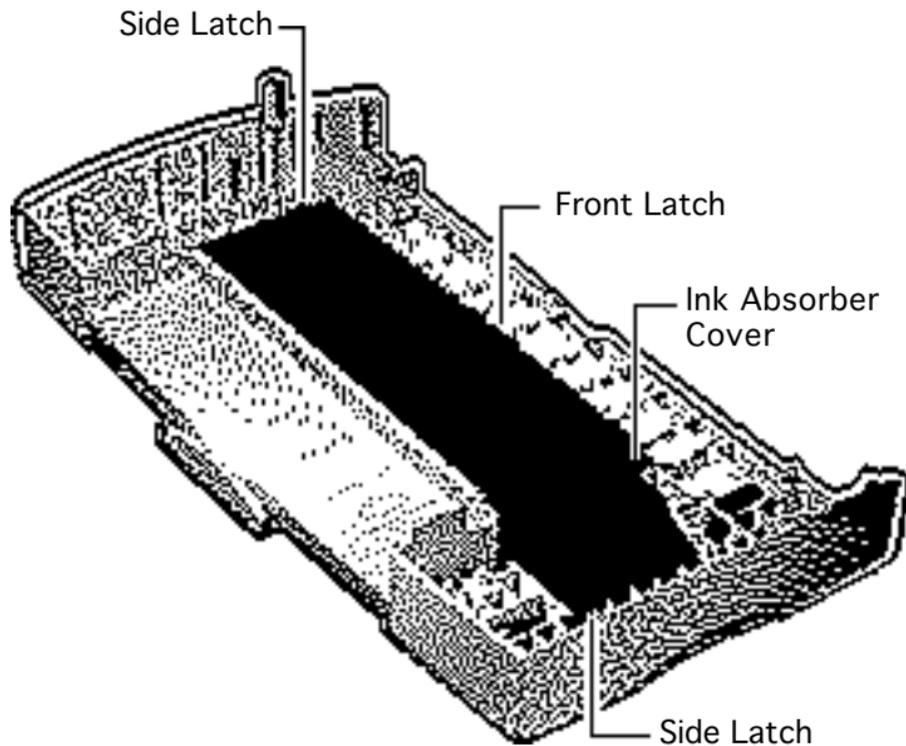
1   Release the front latch.

2   Release the two side latches and remove the ink absorber cover.

Side Latch

Front Latch

Ink Absorber Cover

Side Latch

Ink Absorber
Plates

3 Remove the three ink
   absorber plates.
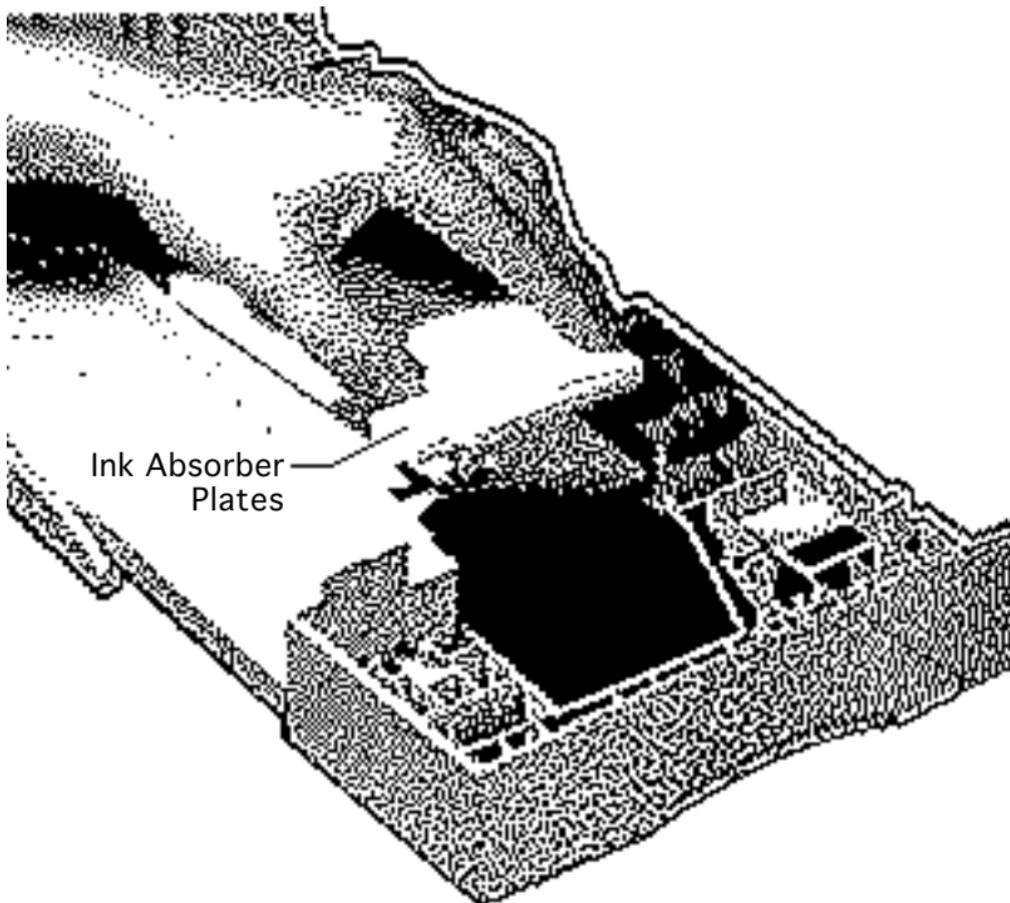
Paper Feed Motor

Paper Feed Motor

Before you begin, remove the following:

- Covers
- Cut sheet feeder
- Power supply
- Printer frame

Caution: Review the ESD precautions in Bulletins/Safety.
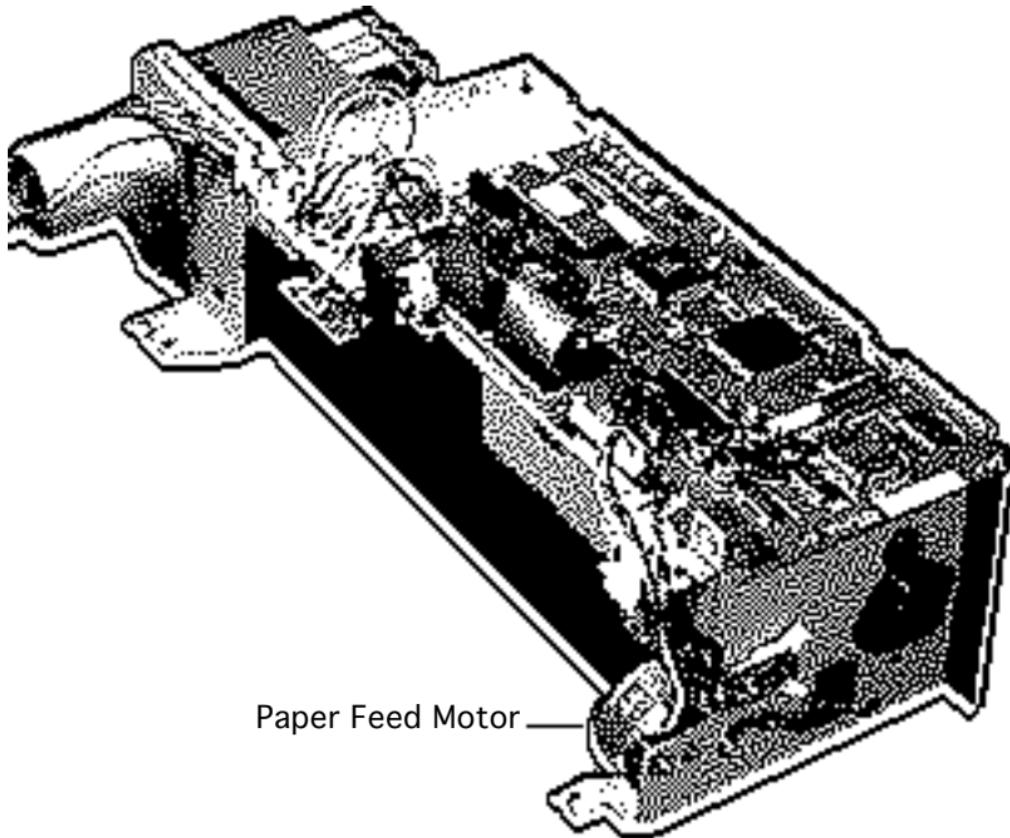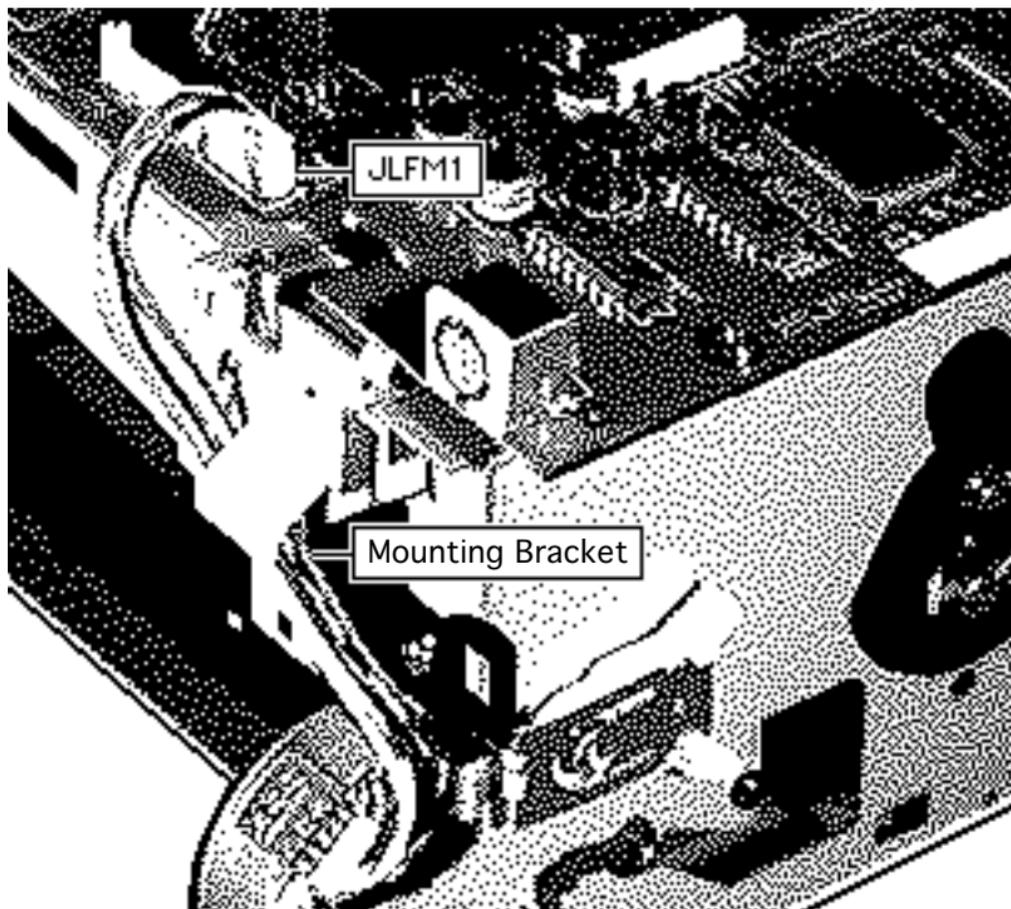
1 Disconnect connector JLFM1 from the controller board.

2 Release the wires from the mounting bracket.

Paper Feed Motor

Gear

3 **Note:** Remove the paper feed motor carefully to avoid losing the gear.

Using a Phillips screwdriver, remove the two mounting screws and remove the paper feed motor.
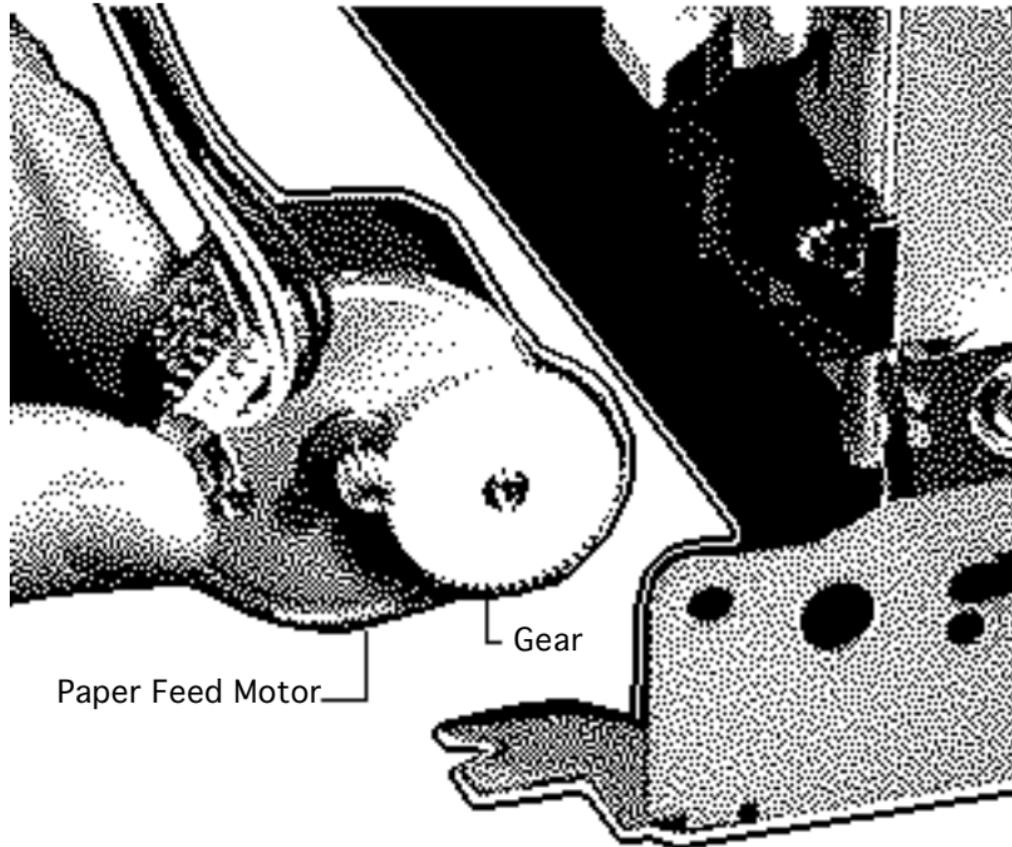
Paper Guide

Before you begin, remove the following:

- Covers
- Cut sheet feeder
- Power supply
- Printer frame

Caution: Review the ESD precautions in Bulletins/ Safety.
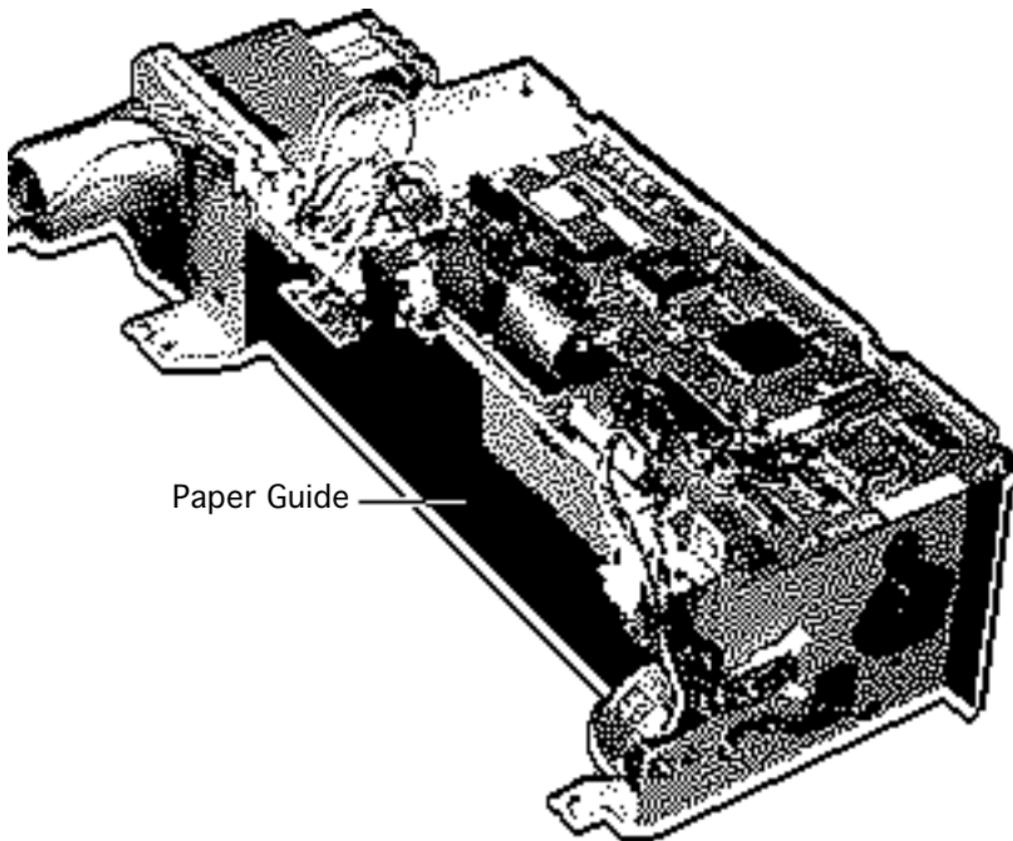
Paper Guide

1 Disconnect ribbon cables JCR1 and JCR2 from the controller board.
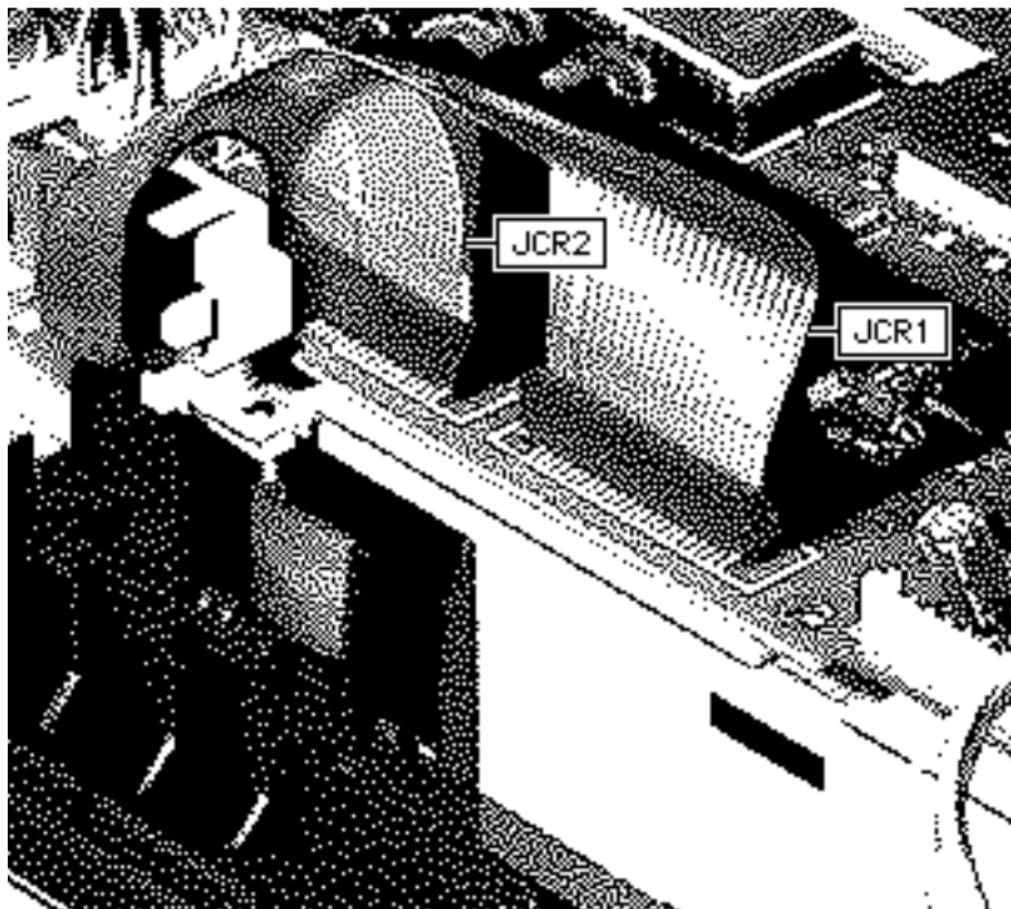
Ferrite Core

2 Release the latches on the ferrite core and remove the core and the ribbon cables.
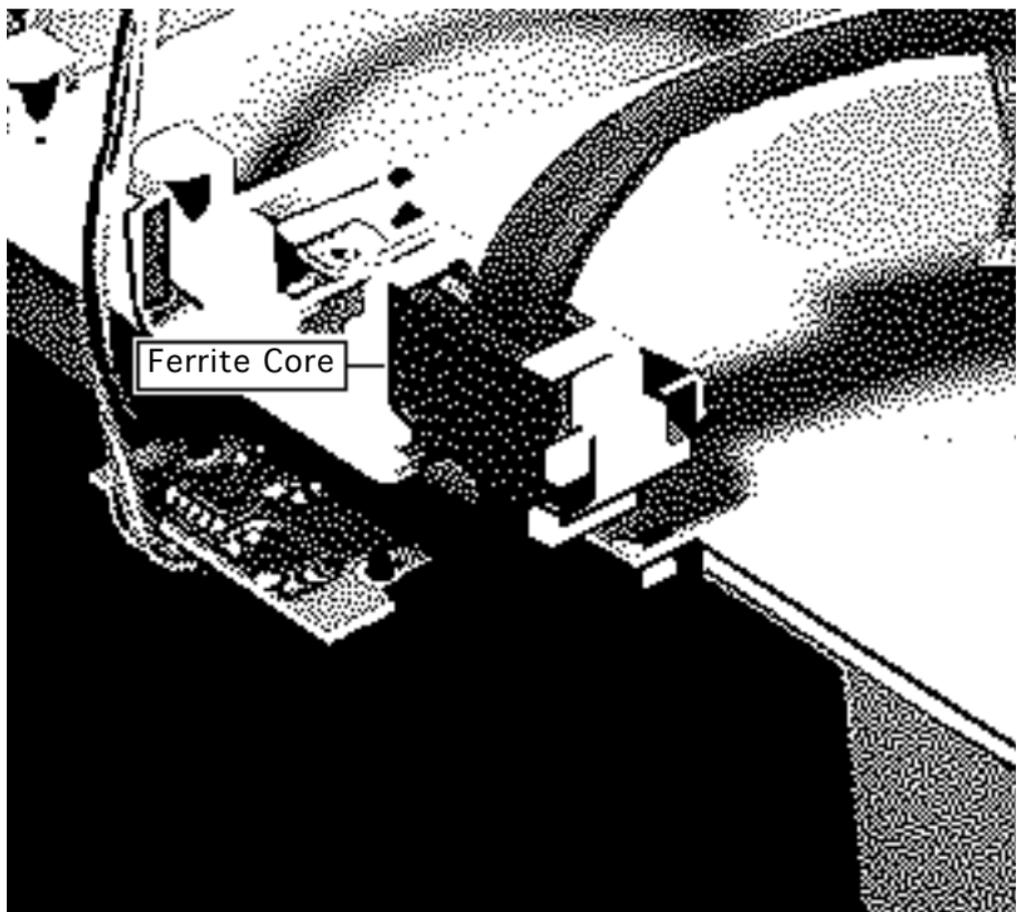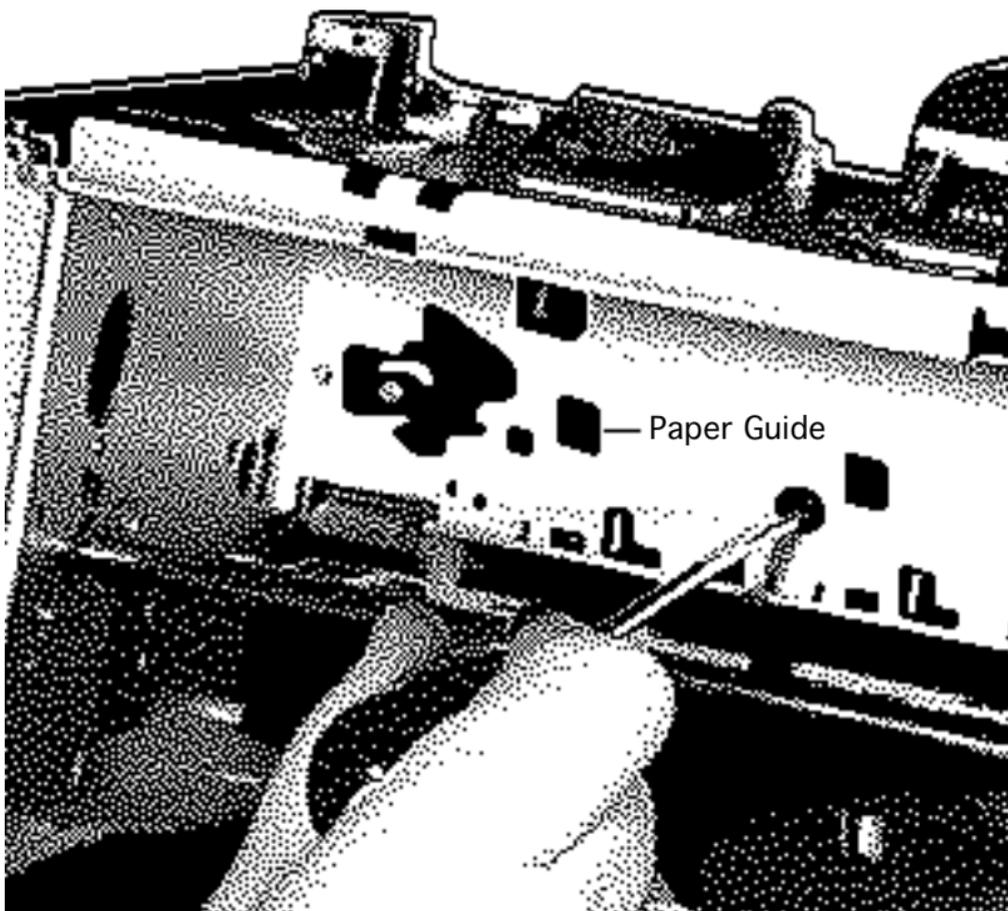
Paper Guide

3 Push in the catch on the left side and push down on the paper guide.

4 Repeat for the right side and remove the paper guide.

Platen and Roller

Platen and Roller

Before you begin, remove the following:

- Covers
- Cut sheet feeder
- Power supply
- Printer frame

Caution: Review the ESD precautions in Bulletins/Safety.
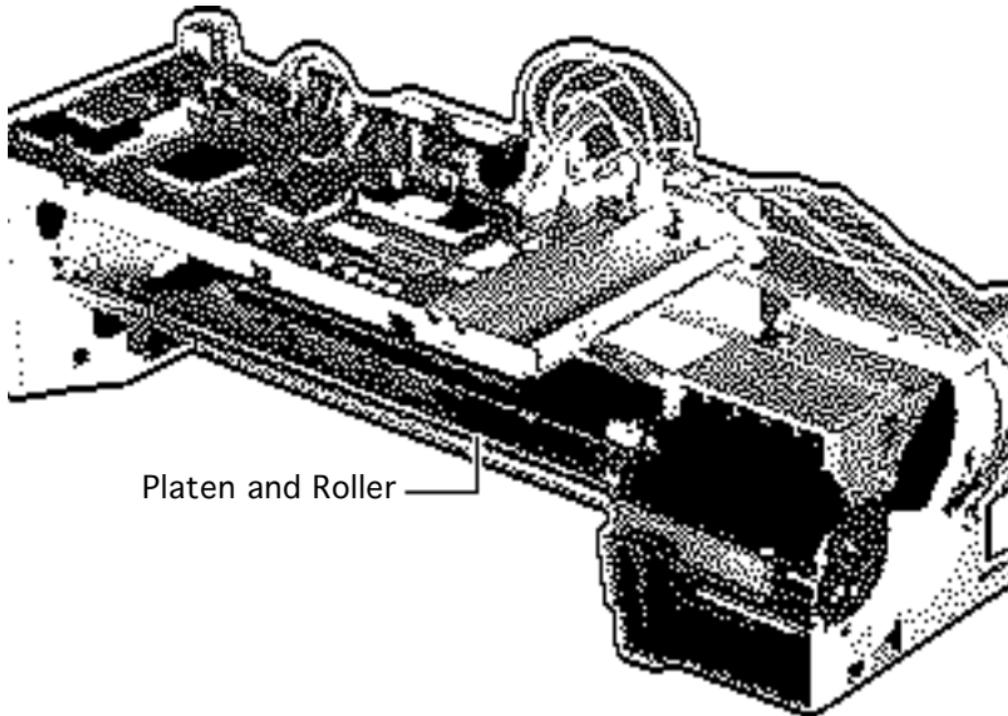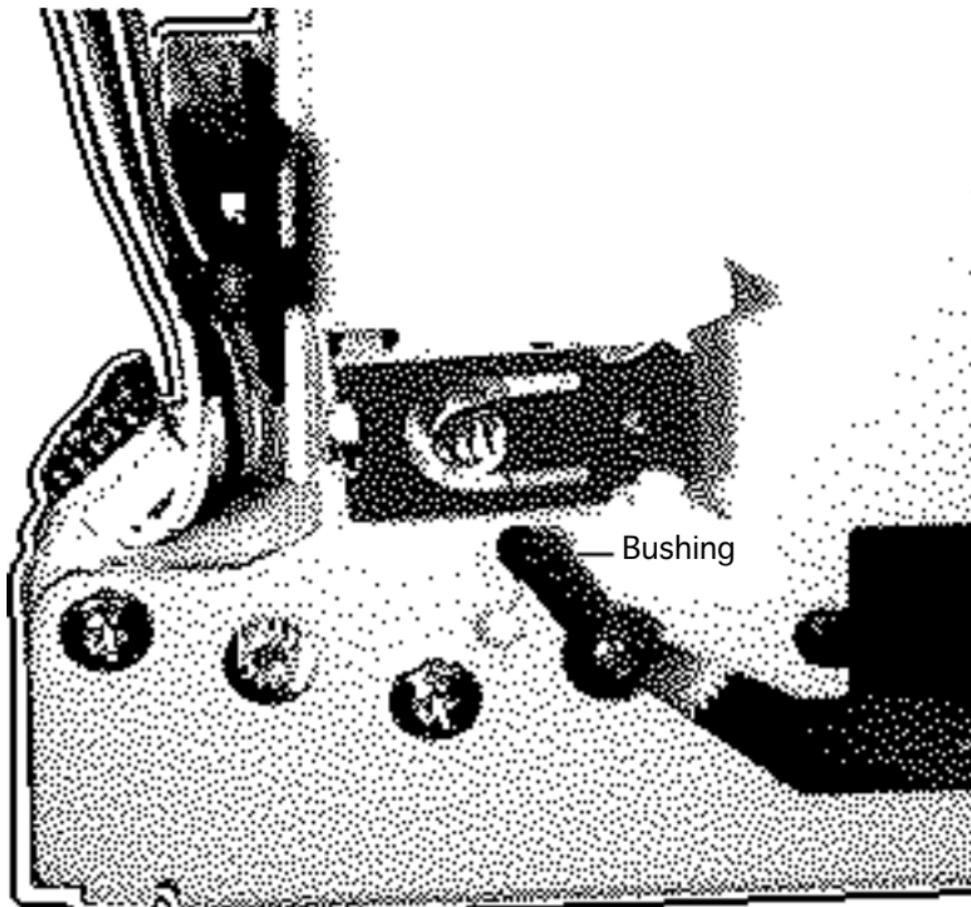
Bushing

1 **Replacement Note:** You will need a bushing kit to complete this procedure.

   Break off the bushing and slide the platen assembly forward.

2 Carefully remove the washer and spring and remove the platen assembly.

Roller and Spring Assembly

Latch

3 Release the two latches and remove the roller and spring assembly.
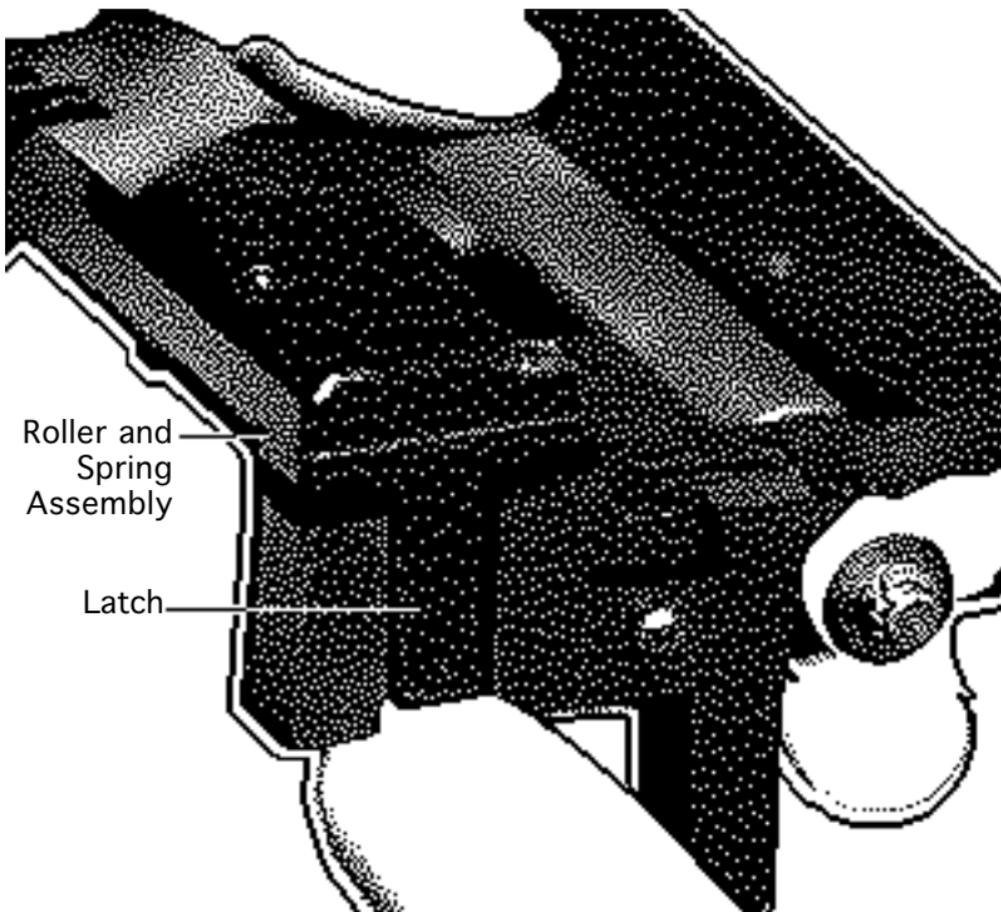
4 Gently grasp the spur holder unit and remove it from the roller and spring assembly.
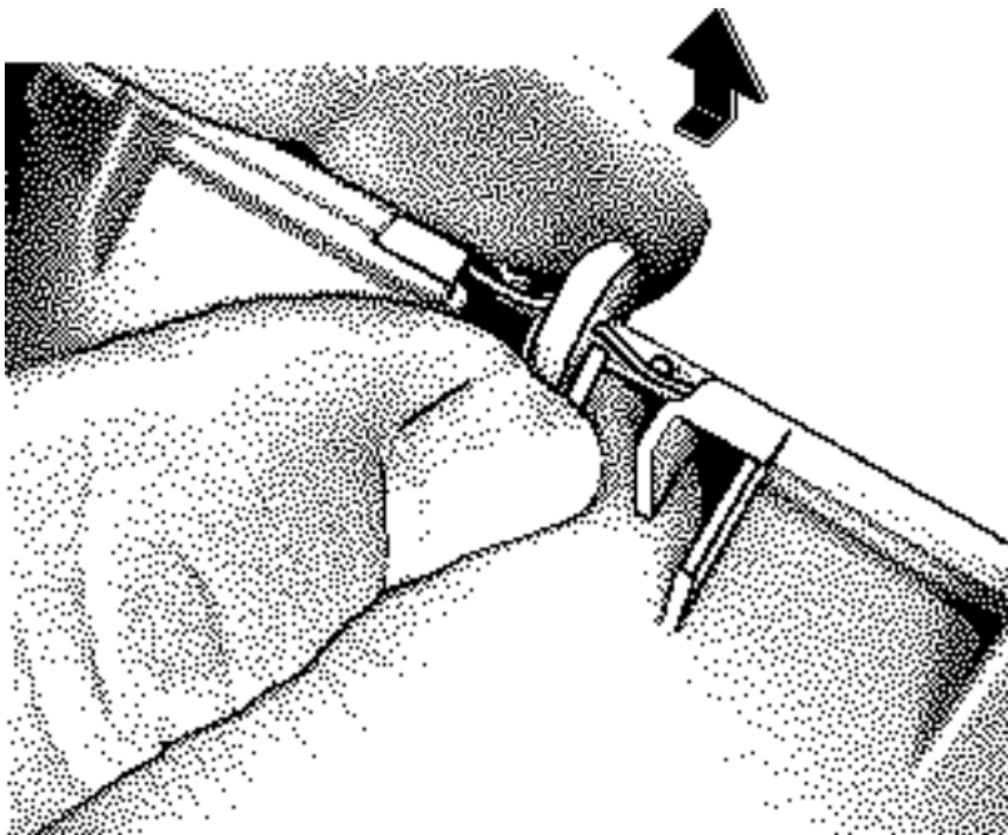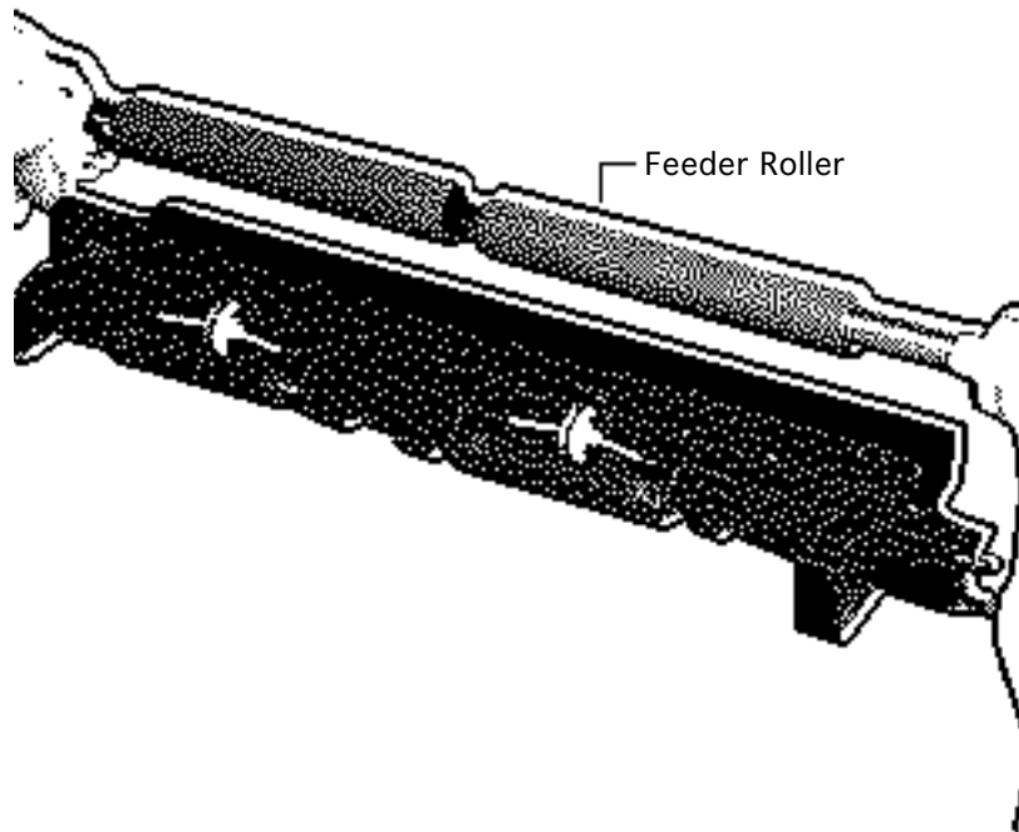
Feeder Roller

5 Turn over the platen assembly.

6 Pull up and remove the feeder roller.

Photo Interrupter

Photo Interrupter

Before you begin, remove the following:

- Covers
- Cut sheet feeder
- Carriage motor
- Power supply
- Printer frame

Caution: Review the ESD precautions in Bulletins/Safety.
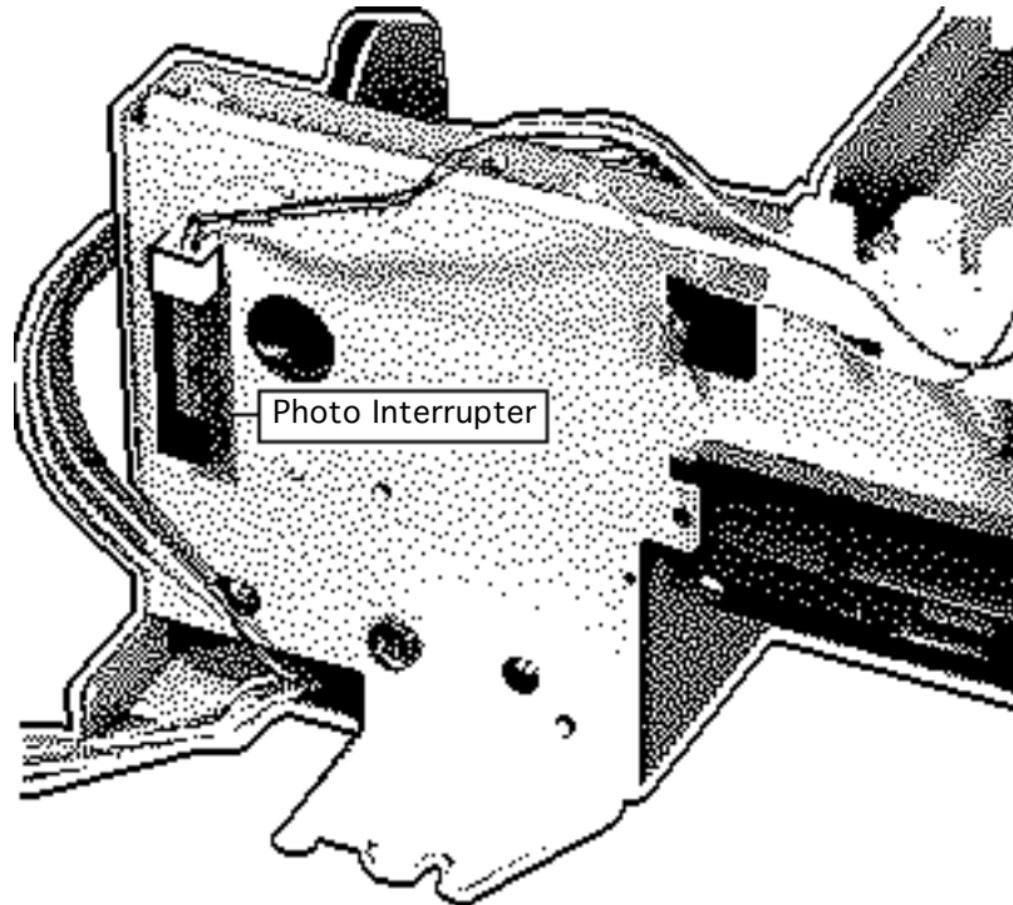
1   Disconnect the home position cable connector JHPS1 from the controller board.

— Home Position Cable
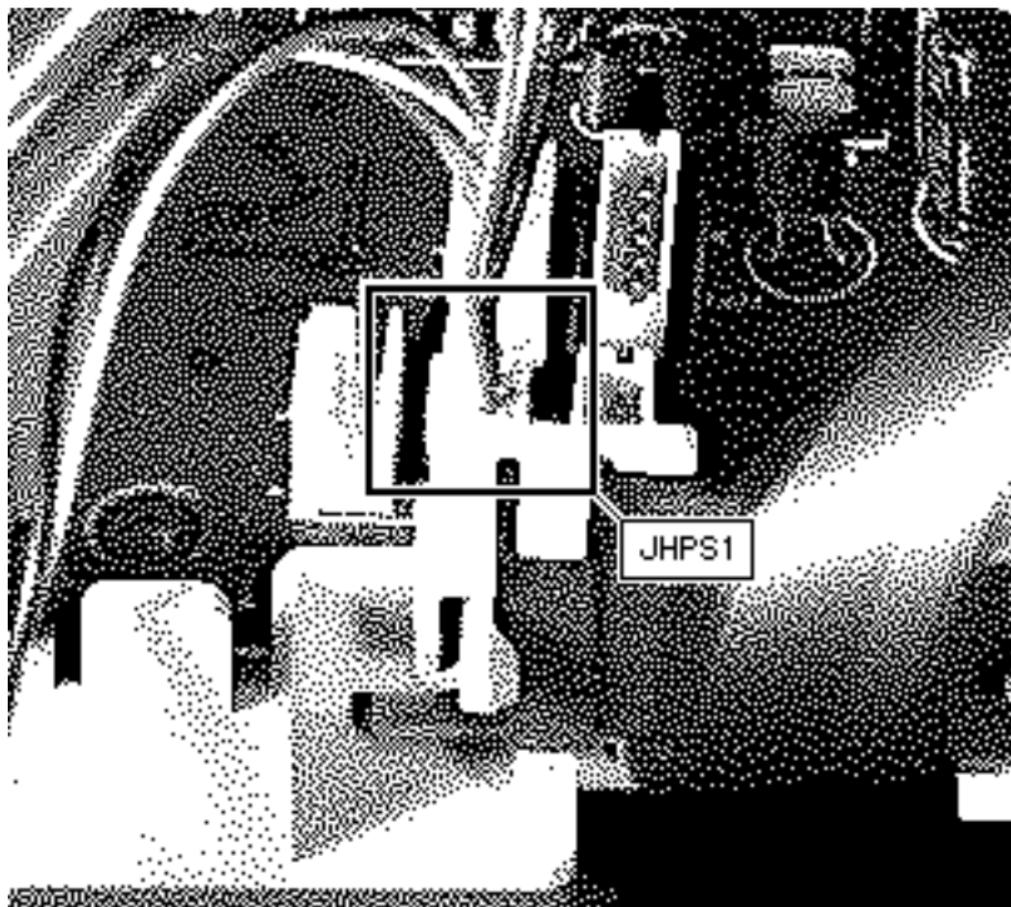
2 Disconnect the home position cable from the photo interrupter.
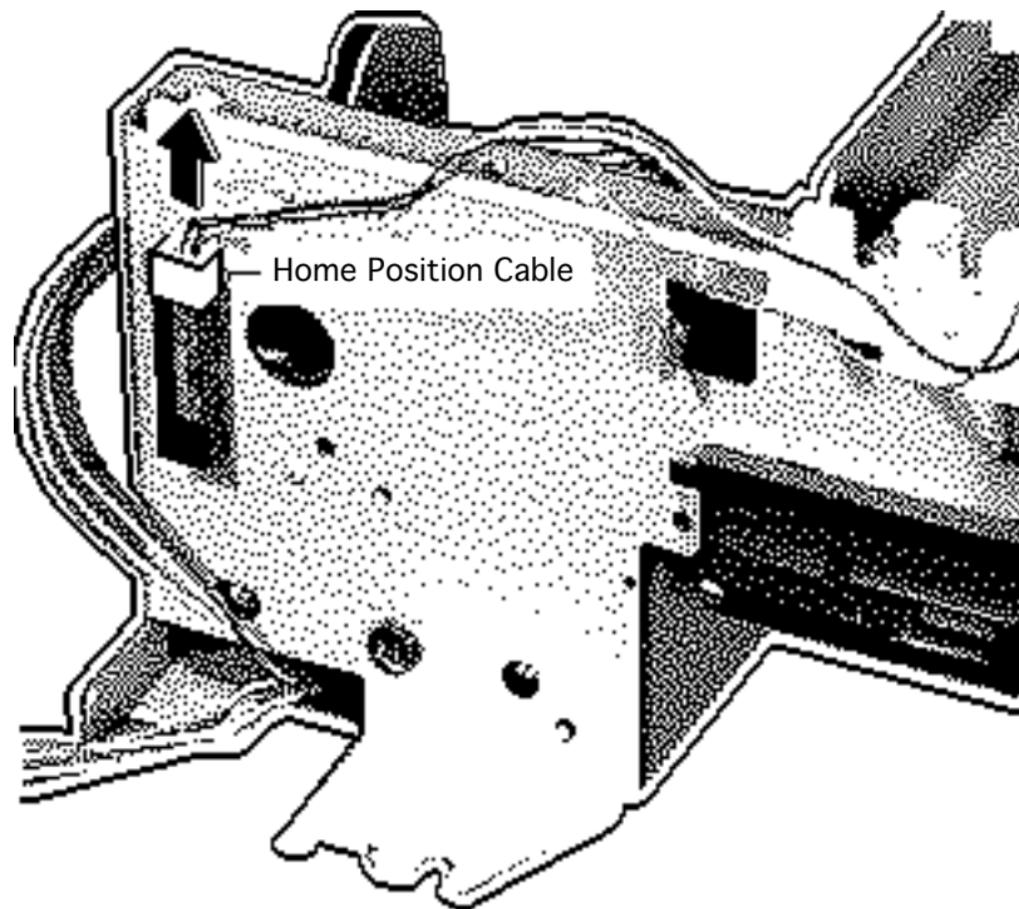
Top Latches

Bottom Latches

3 Press in the two bottom latches and pull back on the photo interrupter.

4 Press in the top latches and remove the photo interrupter.

Purge Unit

Purge Unit

Before you begin, remove the following:

- Covers
- Cut sheet feeder
- Power supply
- Printer frame

Caution: Review the ESD precautions in Bulletins/Safety.
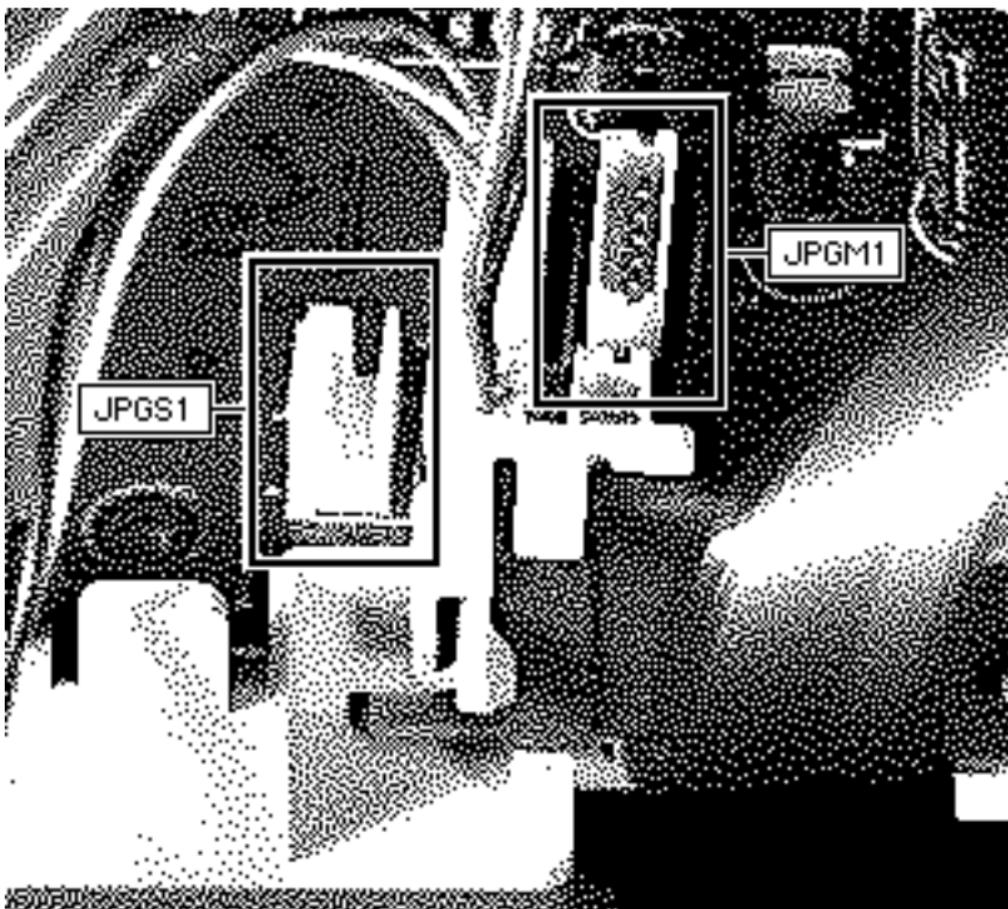
1. Disconnect connectors JPGS1 and JPGM1 from the controller board.

2. Remove the wires from the mounting plate.
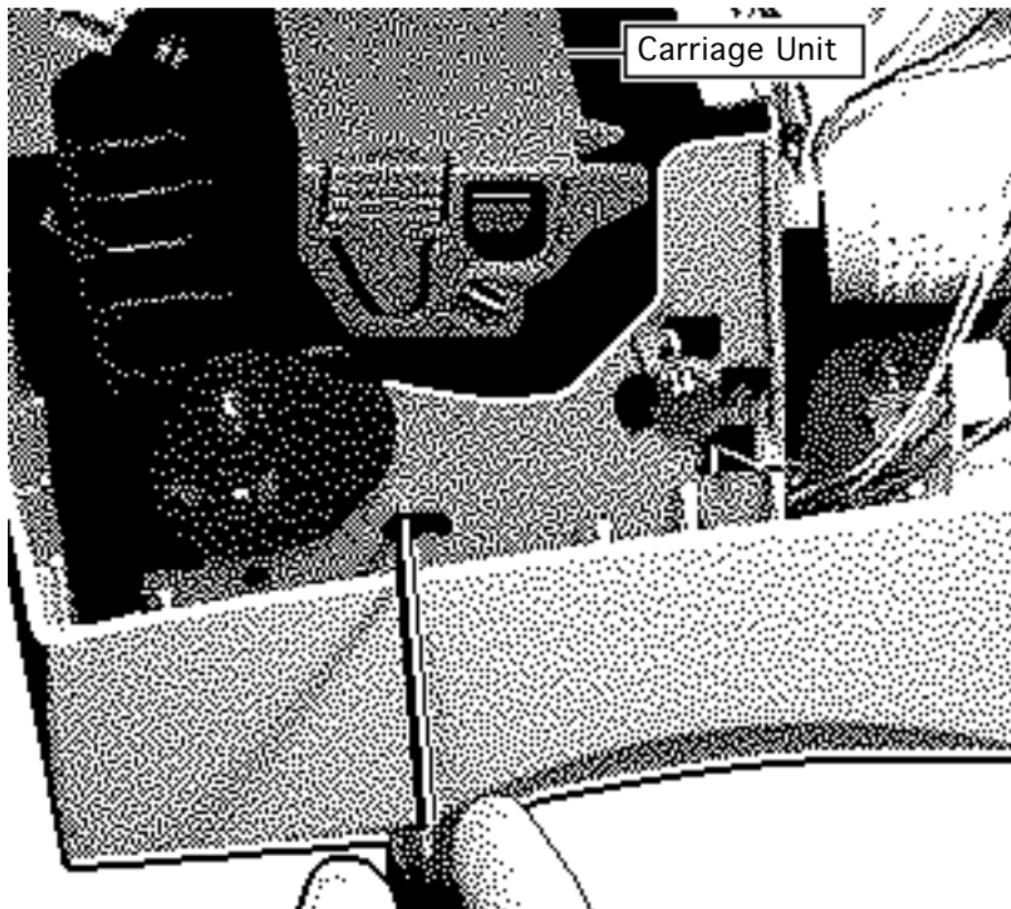
Carriage Unit

3 Advance the locking gear and disengage the carriage.

4 Move the carriage out of home position.

   Caution: The print heads are now uncapped. Do not leave them uncapped for more than 12 hours or they will dry out.

White Lever
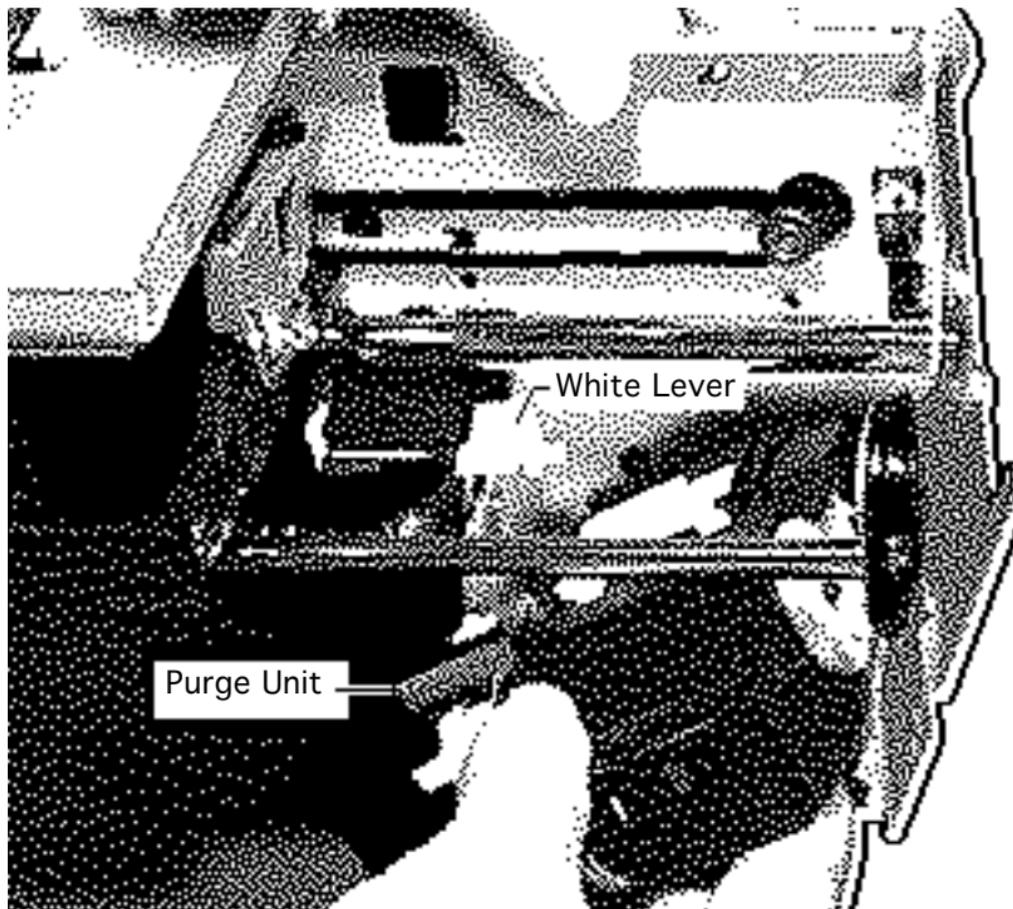
Purge Unit

5 Using a Phillips screwdriver, remove the mounting screw.

6 Remove the purge unit.

Replacement Note: Make sure the white lever from the platen assembly is in the position shown.
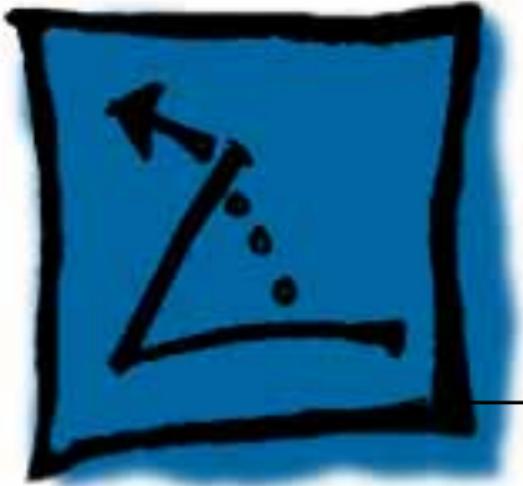
Additional Procedures

Color StyleWriter Pro

Printer Cover

Platen

Printer Cleaning

No preliminary steps are required before you begin this procedure.

Caution: Do not get the printer's ink on your hands or clothes. Although the ink is water soluble, it contains dyes that will stain.

Using a damp cloth, wipe the ink mist off the printer cover and platen.
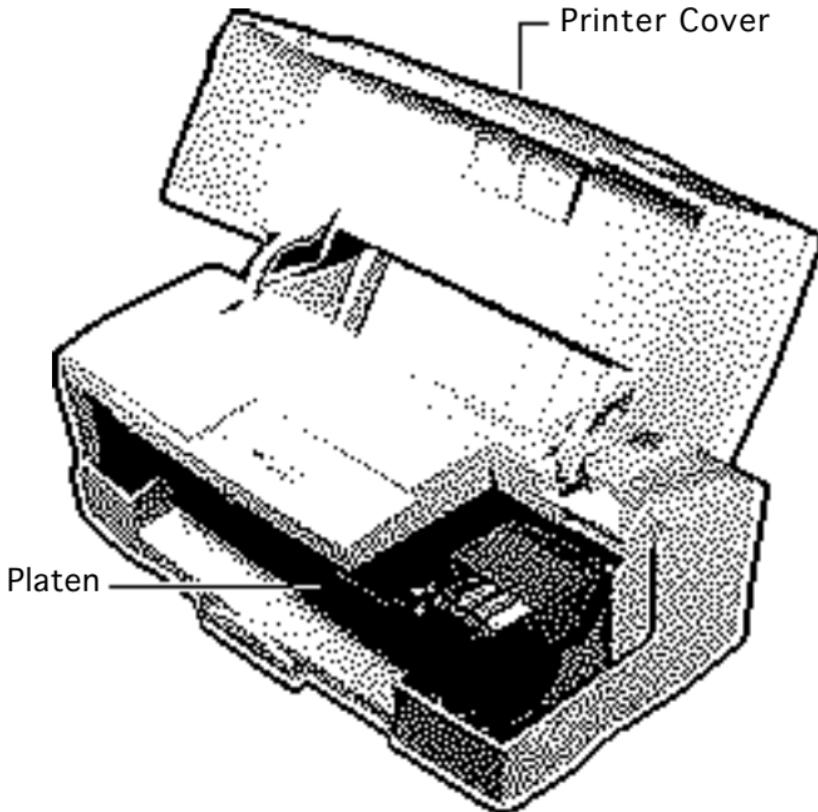
Ink Cartridges

Ink Cartridge Replacement

No preliminary steps are required before you begin this procedure.

Caution: Do not get the printer's ink on your hands or clothes. Although the ink is water soluble, it contains dyes that will stain.

Ink Cartridges
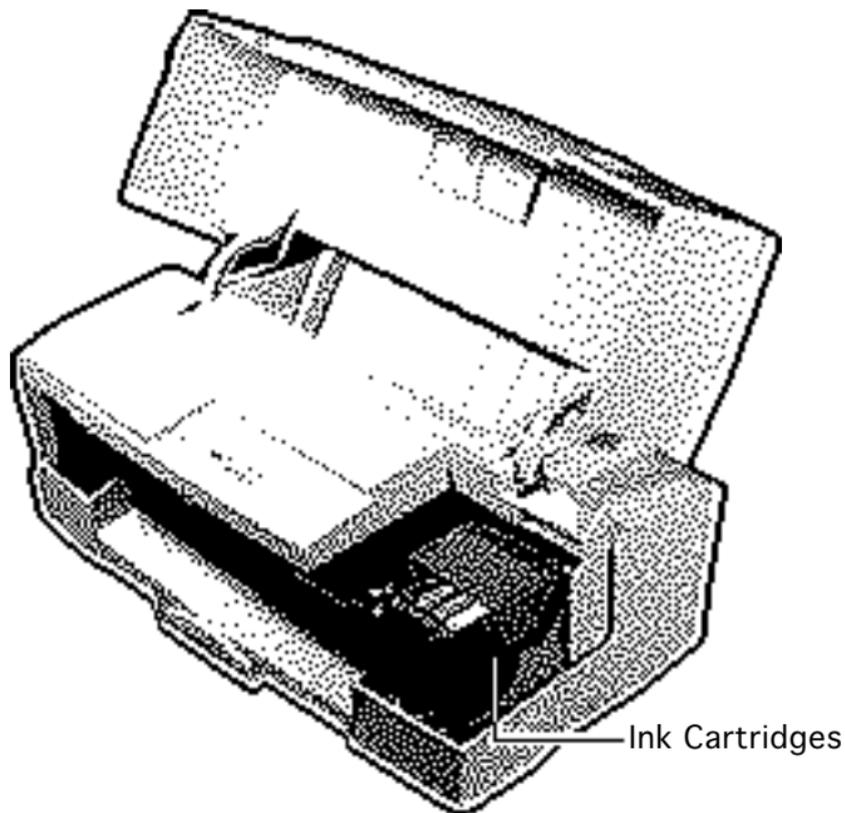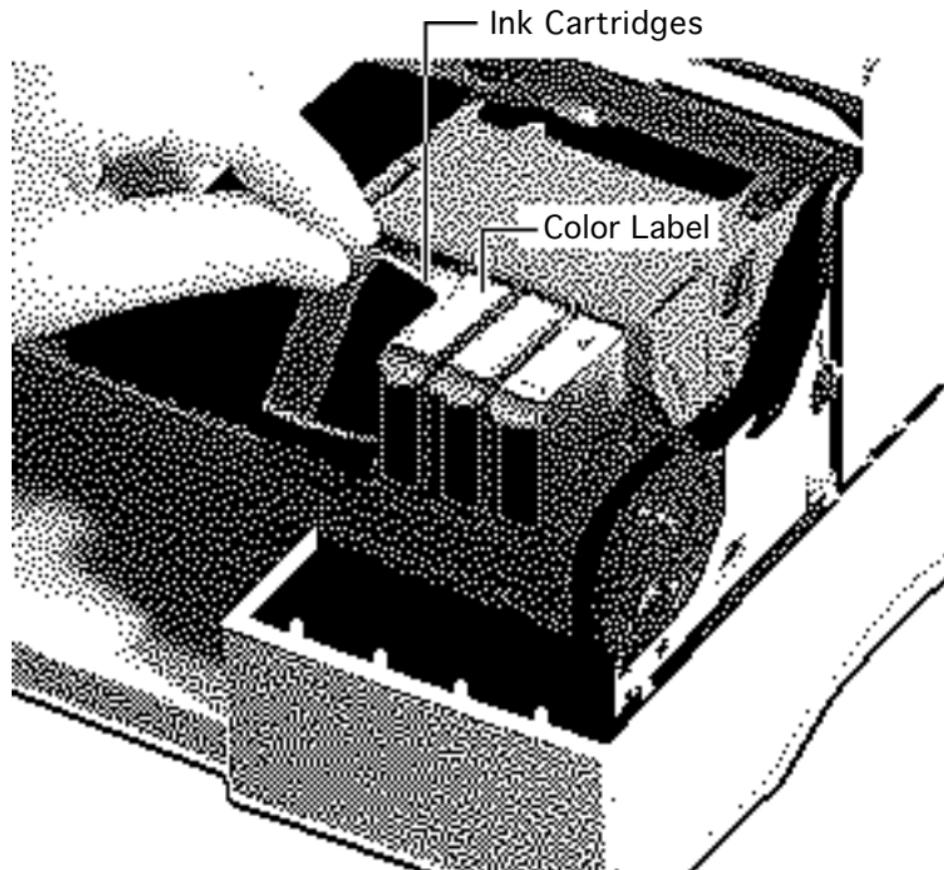
Color Label

Note: Do not shake the ink cartridge or the ink may leak.

1 Grasp the top edge of the used ink cartridge and gently lift up and pull out the cartridge.

2 Repeat for any other used cartridges.

3 With the color label on top, insert the new cartridge gently into the appropriate slot. Press down until you hear a click.

Print Head

Nozzle Check

No preliminary steps are required before you begin this procedure.

Caution: Do not get the printer's ink on your hands or clothes. Although the ink is water soluble, it contains dyes that will stain.

Note: This procedure explains how to run the nozzle check test page, which indicates if the print heads need to be cleaned.

Cut Sheet Feeder
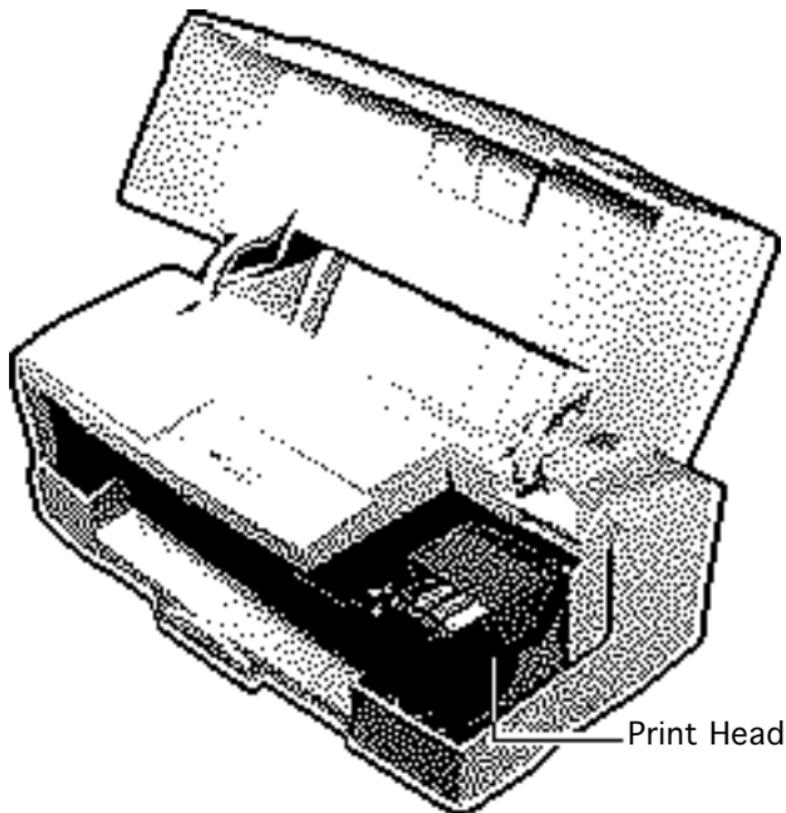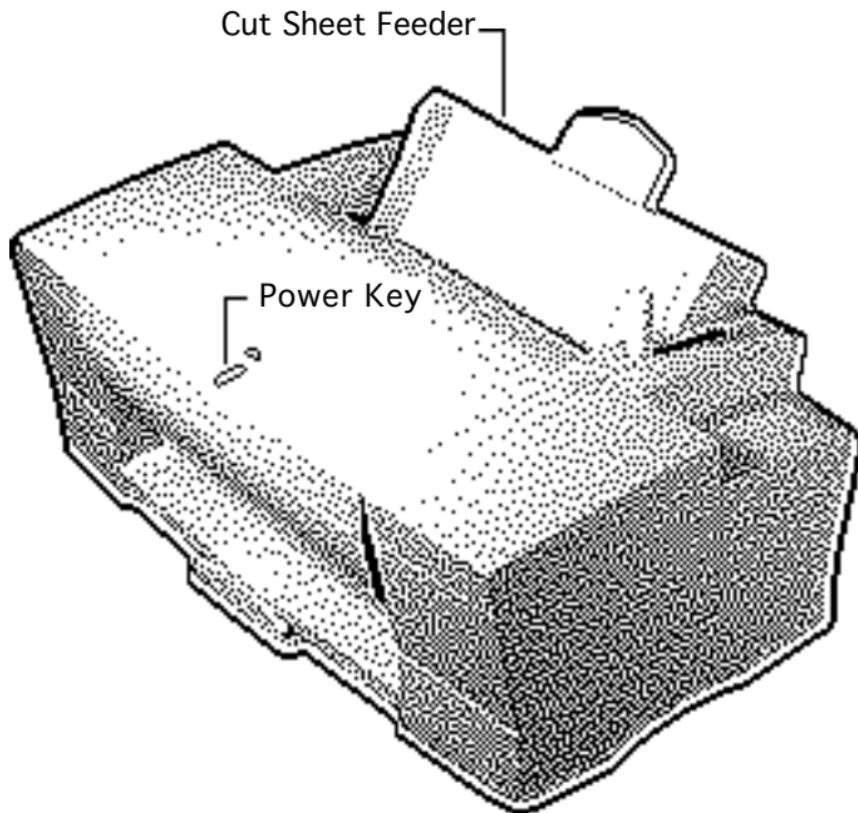
Power Key

Important: Make sure the printer is off.

1 Load paper into the cut sheet feeder.

2 Hold down the power key until the printer prints the start-up test page.

Nozzle Status OK

	Black
	Cyan
	Magenta
	Yellow

Clean Nozzles

	Black
	Cyan
	Magenta
	Yellow

3 Examine the bottom of the printed page to determine print head status.

   If the horizontal lines in the test pattern are missing, one or more ink nozzles are clogged. To clear the nozzles, perform one of the print head cleaning procedures described in this chapter.

Print Head

Print Head Cleaning

No preliminary steps are required before you begin this procedure.

Caution: Do not get the printer's ink on your hands or clothes. Although the ink is water soluble, it contains dyes that will stain.

Caution: To prevent the print nozzles from clogging, do not touch or wipe them.

Print Head
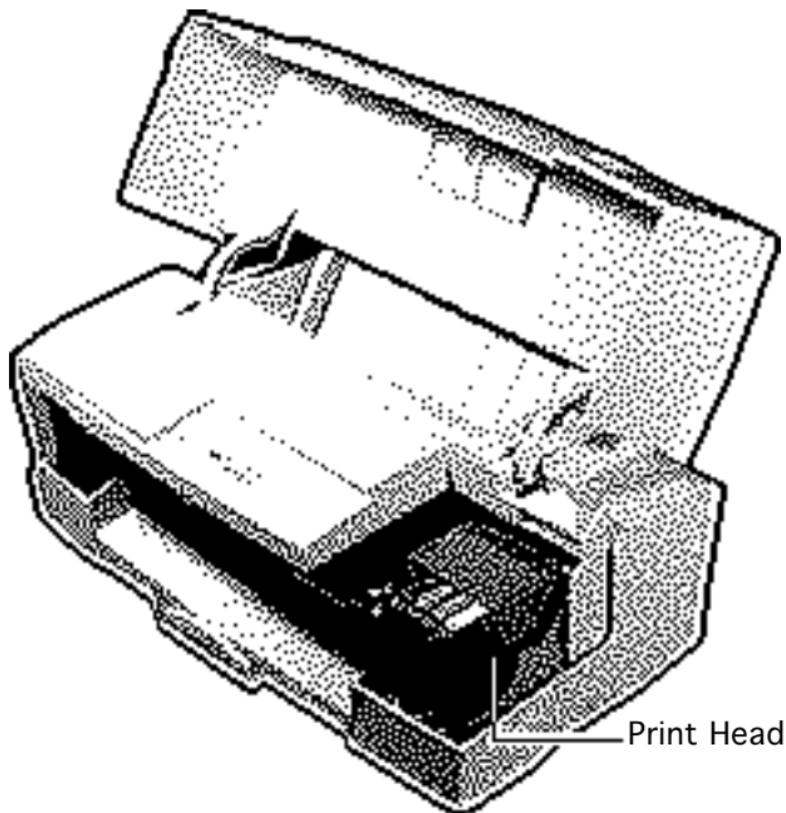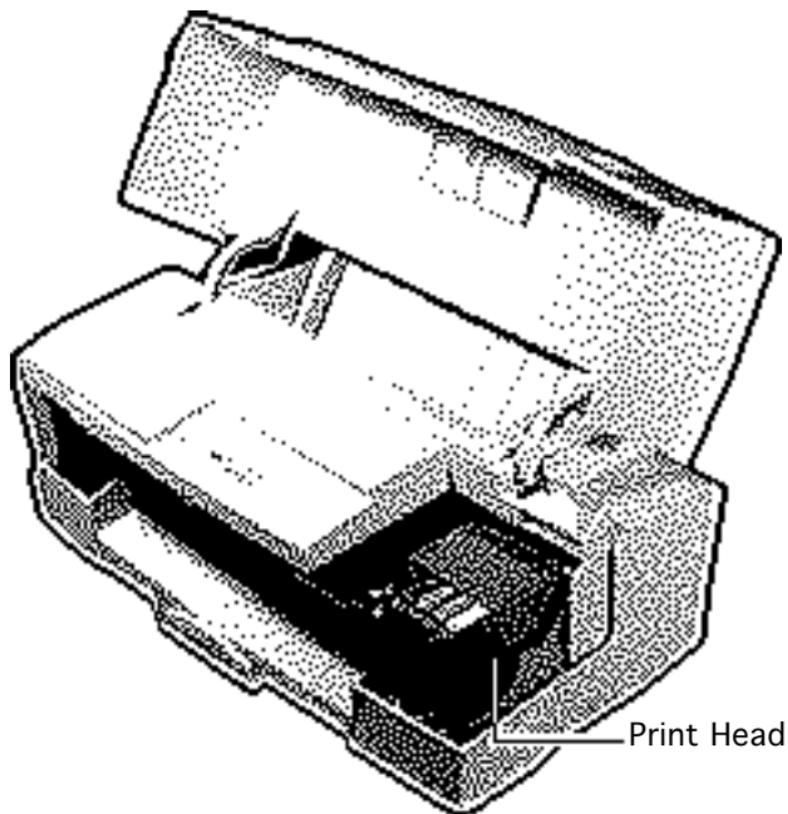
Note: Use the Cleaning option to correct blurred characters, horizontal white streaks, and missing dots caused by clogged ink nozzles. Use the Super Cleaning option when print quality does not improve after you have performed the Cleaning option two or three times.

Important: Do not use the Super Cleaning option except when absolutely necessary, since the procedure uses great amounts of ink.
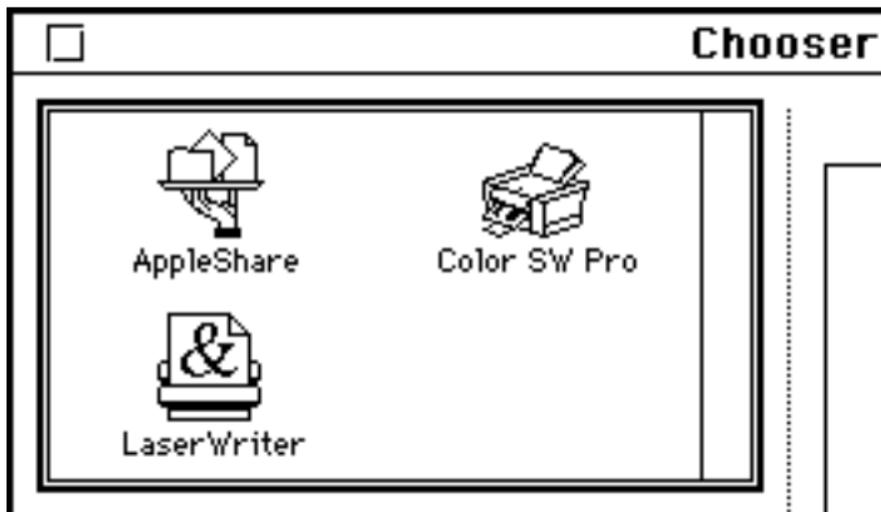
1   Make sure the Color
    StyleWriter Pro
    printing software is
    installed.

2   Using the Chooser, select
    Color StyleWriter Pro.

```
┌─────────────────────────────────────────┐
│ □                              Chooser   │
├─────────────────────────────────────────┤
│ ┌─────────────────────────────────────┐ │
│                                           │
│     AppleShare      Color SW Pro          │
│                                           │
│     LaserWriter                           │
│ └─────────────────────────────────────┘ │
└─────────────────────────────────────────┘
```

3   Open any document and
    select the print option or
    choose Print Window
    from the File menu.

4   Click the Utilities button
    in the Print dialog box

Color StyleWriter Pro

Copies: | 1 | Pag

Print Quality: ◯ B

Paper Type: | Pl

Image: | Color |

Notification
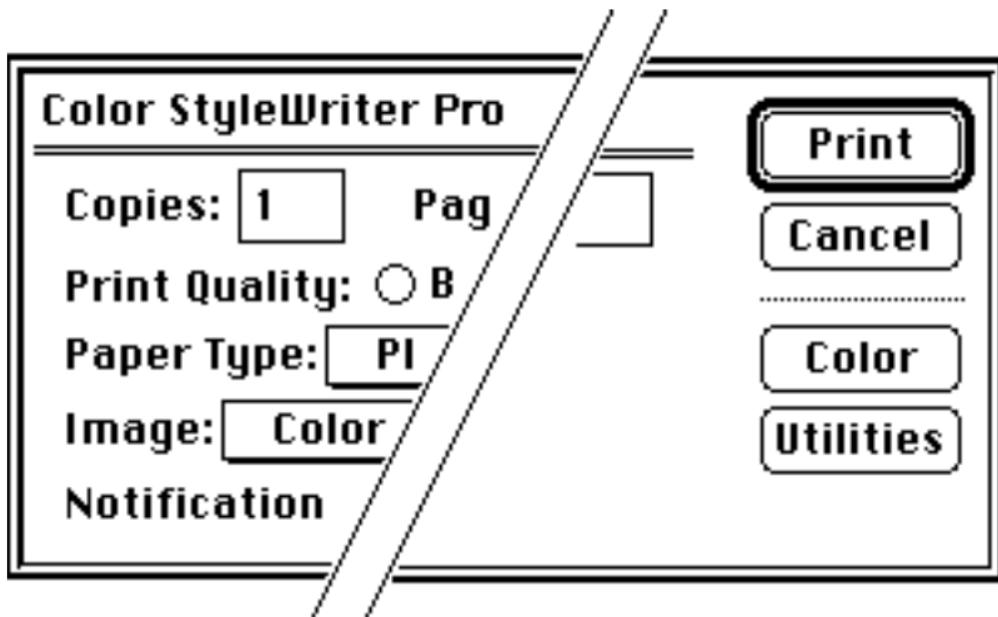
| **Print** |

| Cancel |

| Color |

| Utilities |

5   Select the "Clean the print head before printing" option.

6   Select one of the cleaning options and click the OK button.

Color StyleWriter Pro Utilities

☒ **Clean the print head before printing**
   ○ **Black Only**
   ● **All Colors**
   ○ **Super Clean (Use only as a last reso**
☐ **Prepare new print head before printing**
☐ **Check alignment before printing**

Controller Board

Buttons and LEDs

Print Head

Print Head Purging

Before you begin, remove the covers.

Note: This procedure uses the buttons and LEDs on the controller board to perform an extensive purging of the print head without having to connect the printer to a computer.

Use this procedure if you suspect the print head ink is clogged.
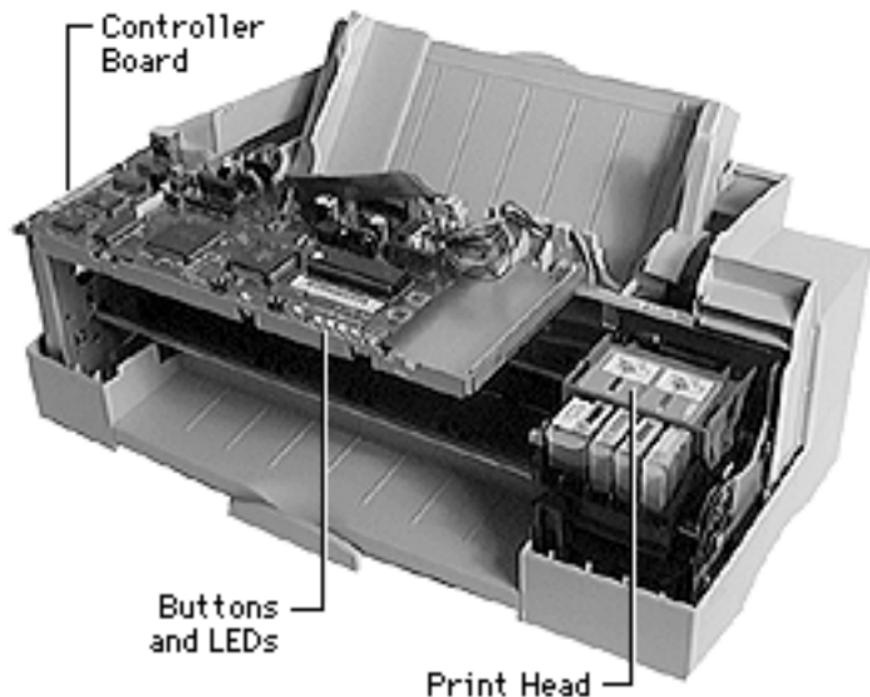
Caution: Do not get the printer's ink on your hands or clothes. Although the ink is water soluble, it contains dyes that will stain.

Caution: To prevent the print nozzles from clogging, do not touch or wipe them.

Controller Board

Select Button
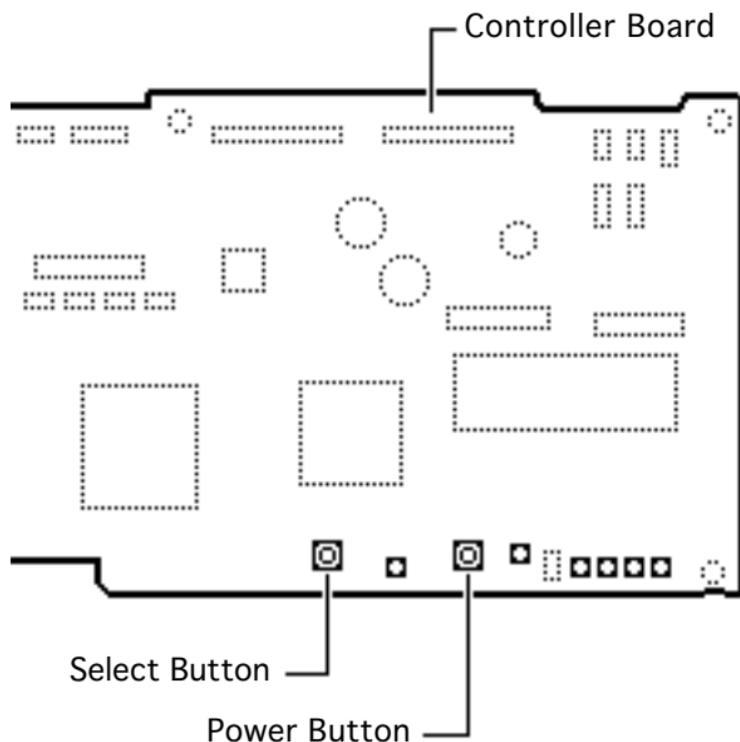
Power Button

1   Hold down the power
    button and the select
    button and plug in the
    printer power cord.

    Note: The printer will
    emit a four-tone beep
    indicating that it is in
    service mode.

Controller Board

Black LED 5
Cyan LED 4
Yellow LED 2

Select Button

Power Button

2 Press the select button until the black, cyan, and yellow LEDs light up; then press the power button.

An extensive purging mode begins where the print head is continuously purged for each of the colors until you turn off the power.
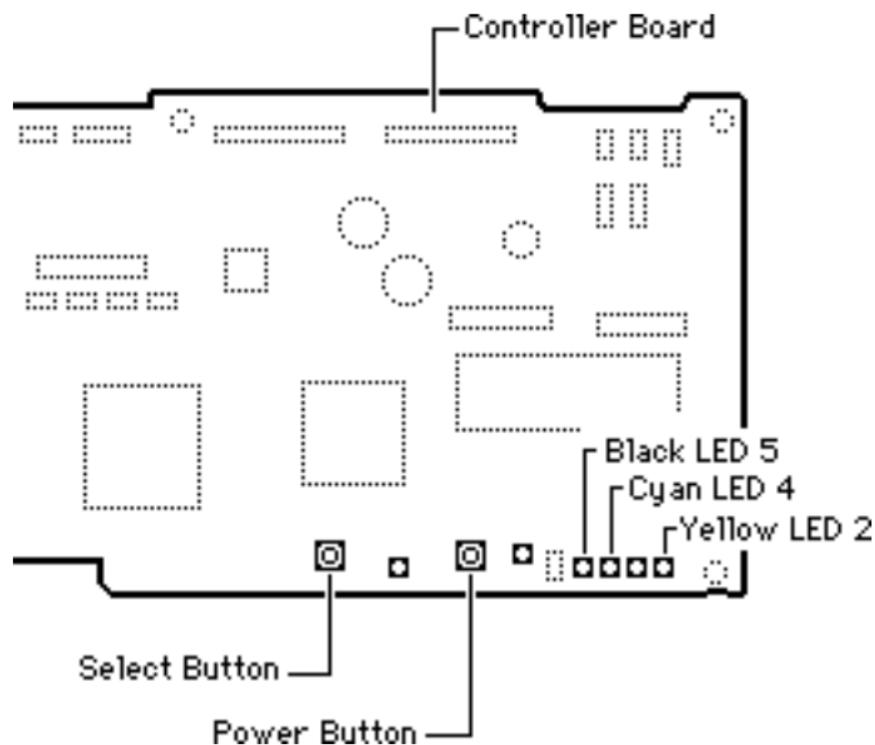
Fuse

Fuse Replacement

Before you begin, remove the following:

- Covers
- Cut sheet feeder

Caution: Review the ESD precautions in Bulletins/ Safety.
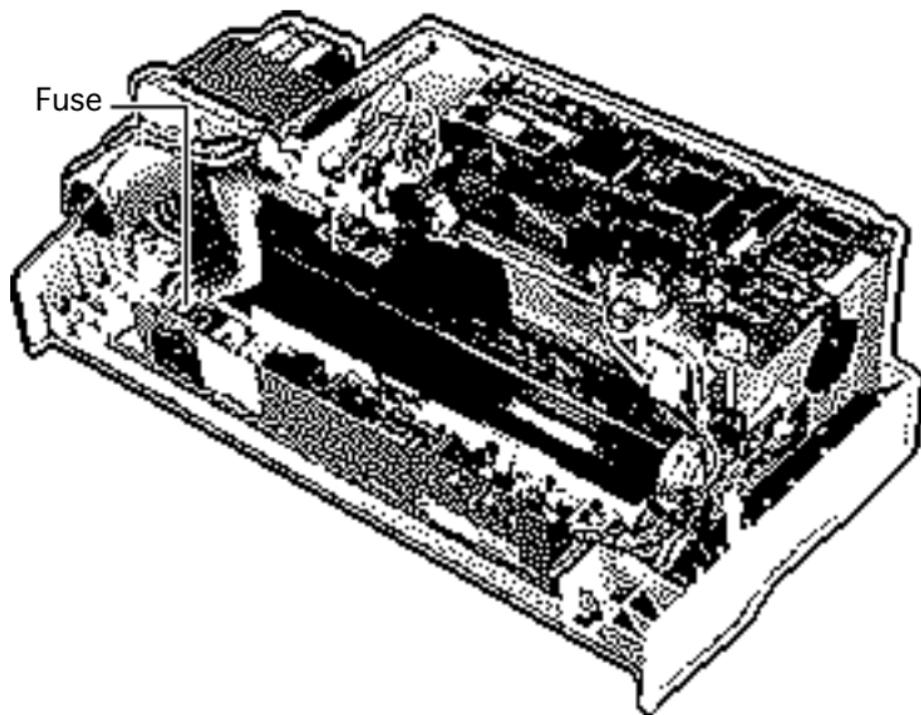
1 Remove the fuse cover.
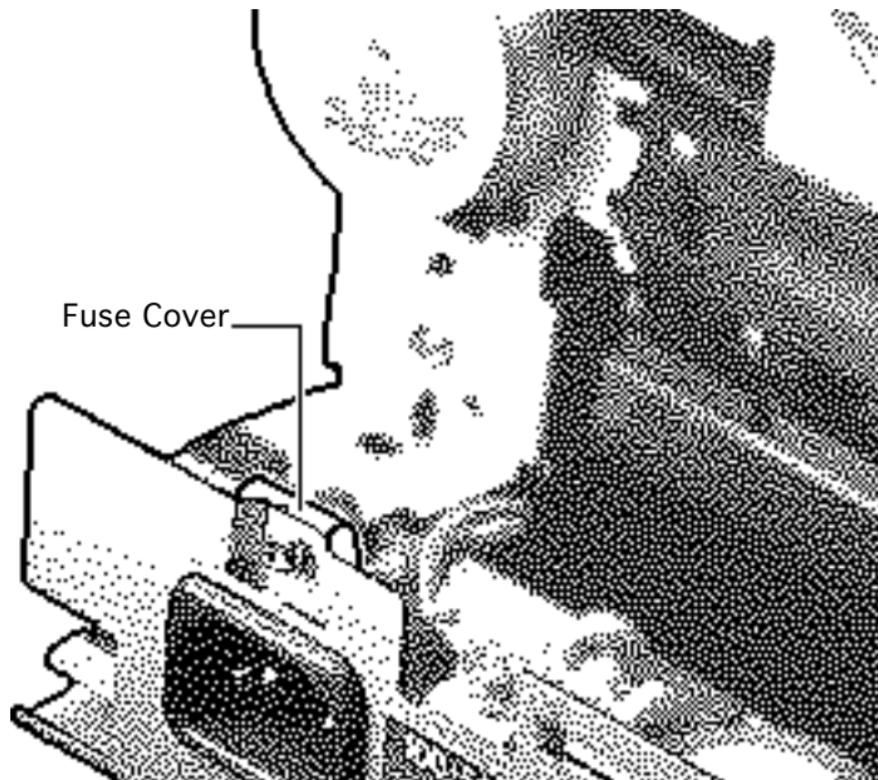
Fuse Cover

2 Remove the fuse.
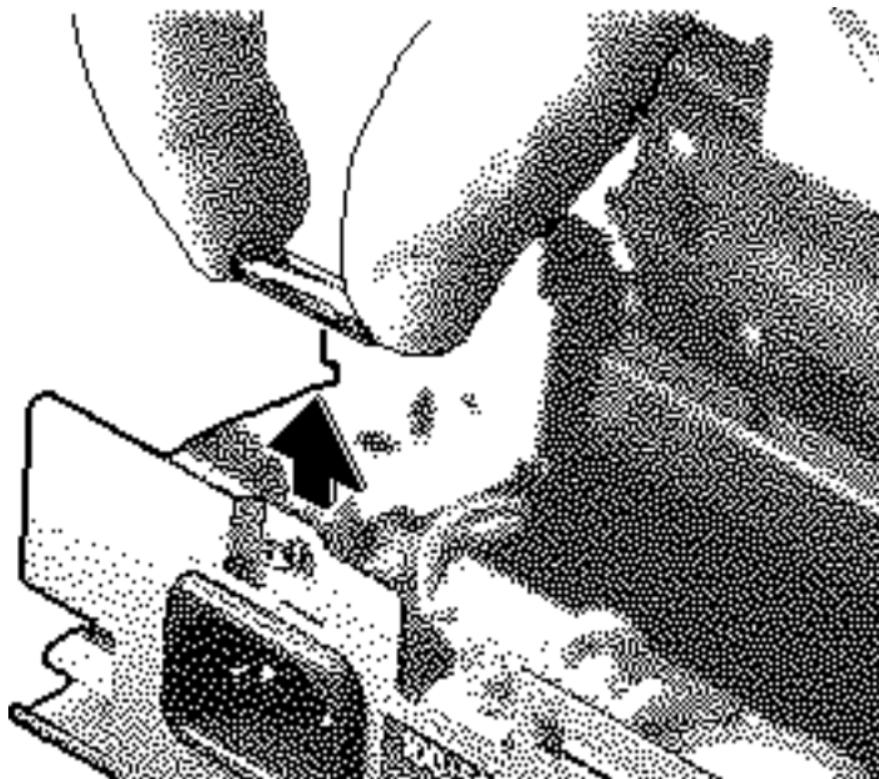
Adjustments

Color StyleWriter Pro

Power Supply

Controller Board

Carriage Board

Color SW Pro Utility

Before you begin, remove the covers.

Note: The Color StyleWriter Pro Utility must be run after replacing the controller board, power supply, the carriage board, or the ink absorber plates. The Utility downloads new parameters to the EEPROM on the controller board.

Power Supply

Controller Board

Carriage Board
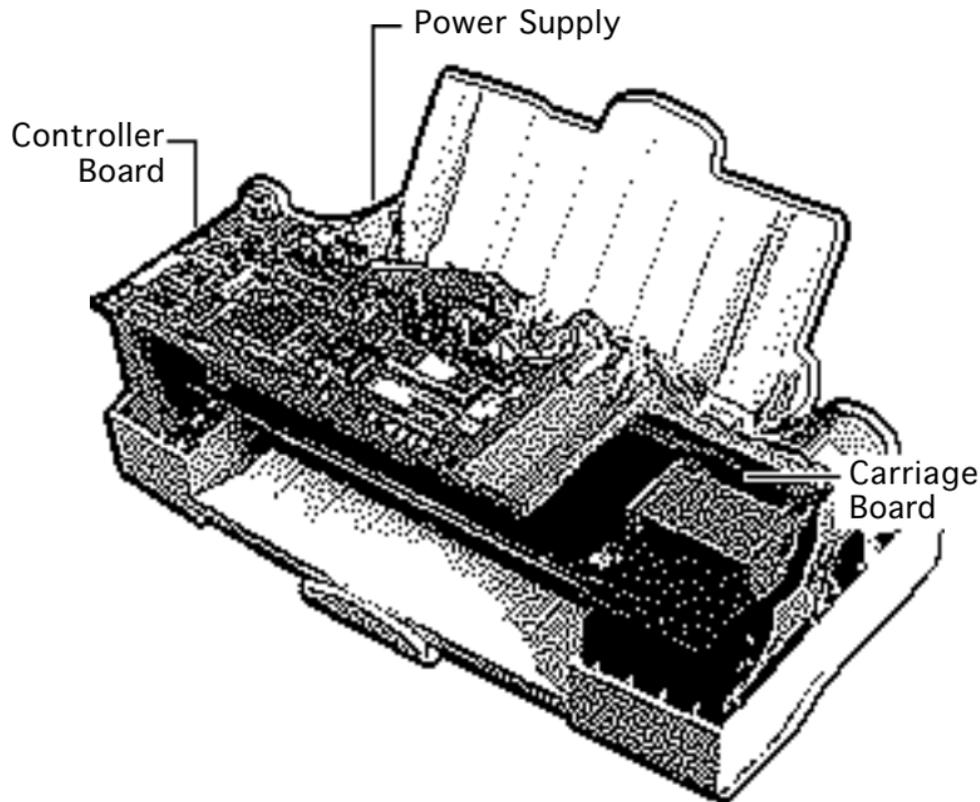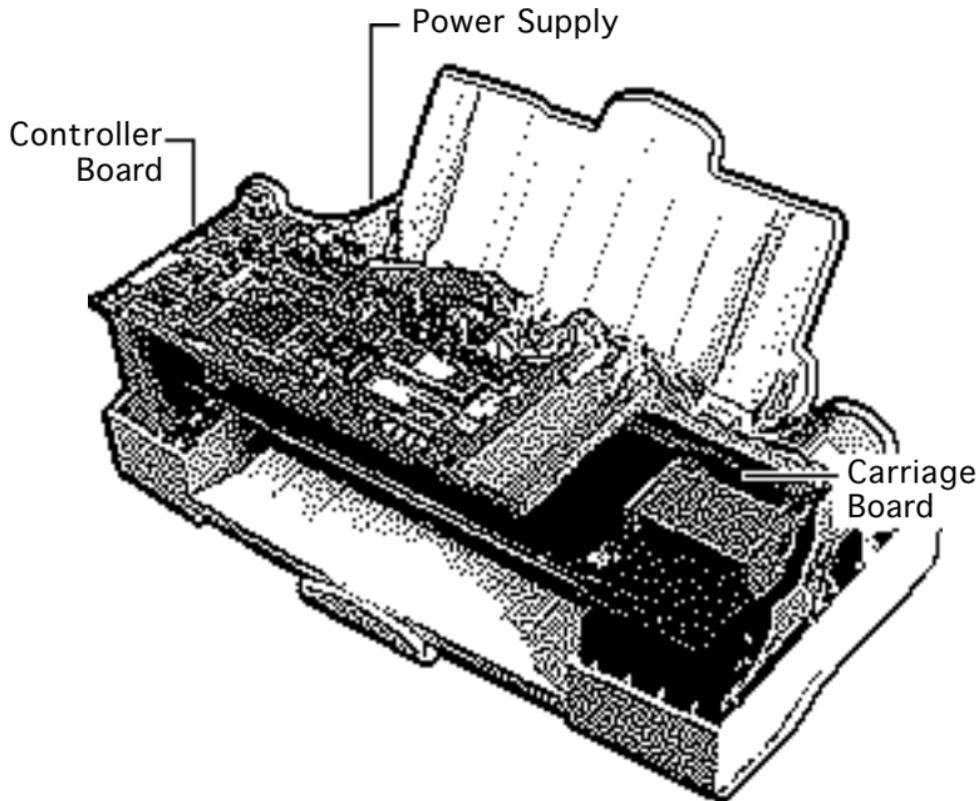
Before running the utility, you must first enter into service mode and then into the EEPROM download mode (accomplished in this procedure). The utility can then connect to the printer and download the new parameters.

1 Connect the printer to a Macintosh and make sure the printer's power cord is unplugged.

Pin 22

Pin 35
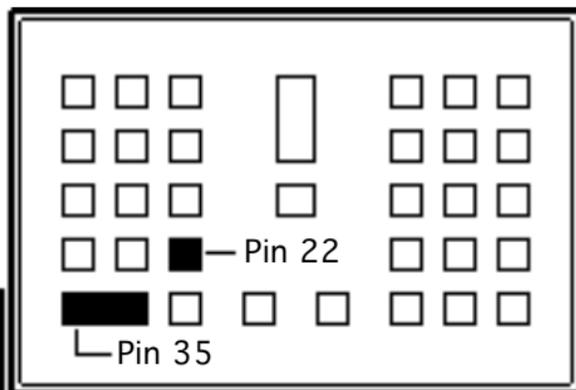
Print Head Unit

2 **Note:** If the controller board or power supply has been replaced, you will need to measure the print head resistance.

Using a multimeter, measure the resistance between pins 22 and 35 on the top of the print head unit.

3 Note the measurement. It will need to be entered later.

Pin 22

Pin 35

Print Head Unit

AG6-7307
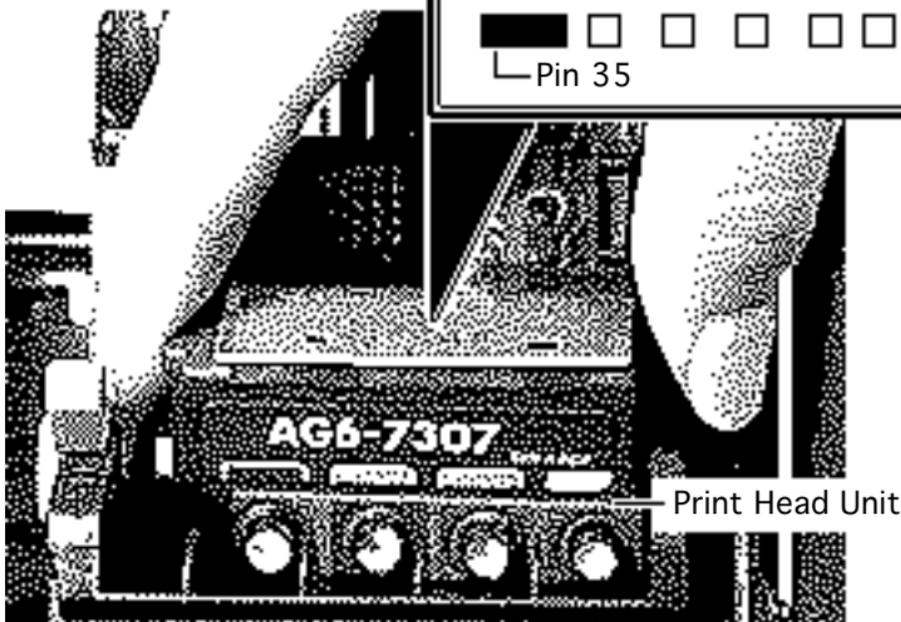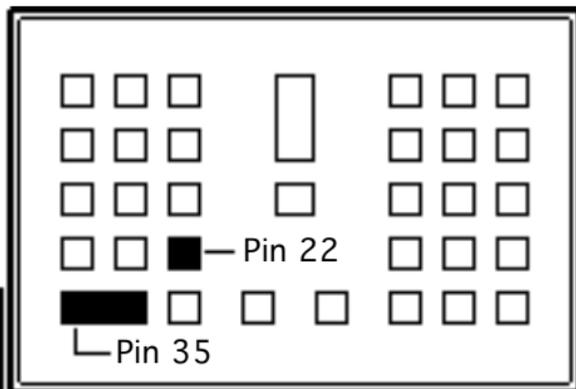
4 The reading should be within the range of 225–327 ohms. If the reading does not fall in this range, replace the print head unit.

5 Connect the printer to a Macintosh and make sure the printer's power cord is unplugged.

Controller Board

Select Button
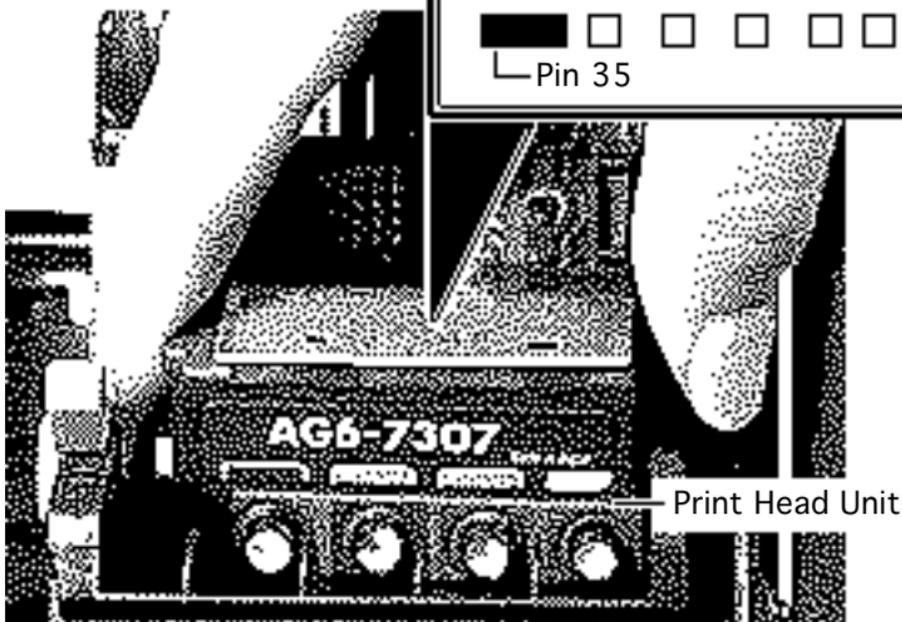
Power Button

Service Mode

1 Hold down the power and select buttons and plug in the printer power cord.

Note: The printer will emit a four-tone beep indicating that it is in the service mode.

Controller Board

Cyan Ink (LED 4)
Magenta Ink (LED 3)
Yellow Ink (LED 2)
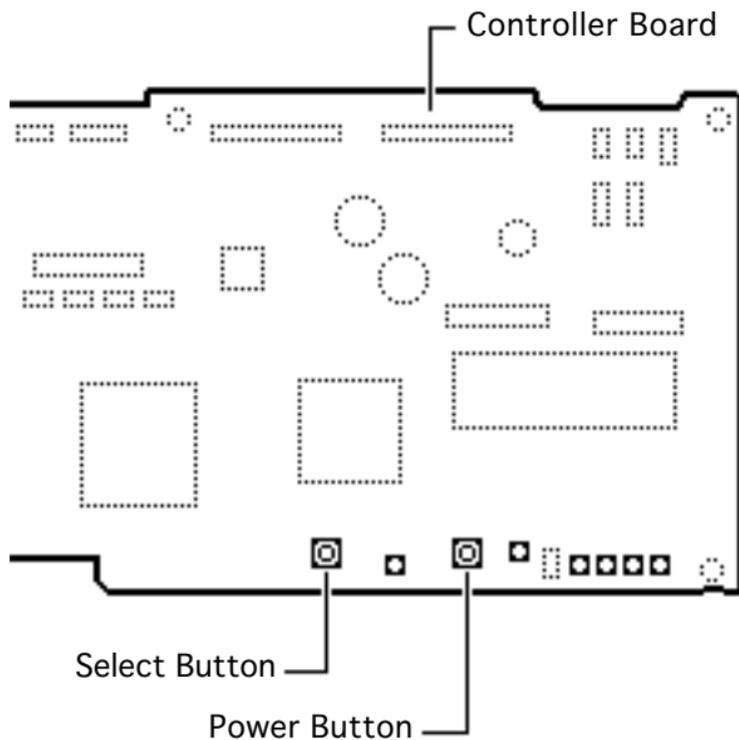
Select Button

EEPROM Download Mode

Press the select button until the cyan (LED4), magenta (LED3), and yellow (LED2) LEDs light up.

Controller Board
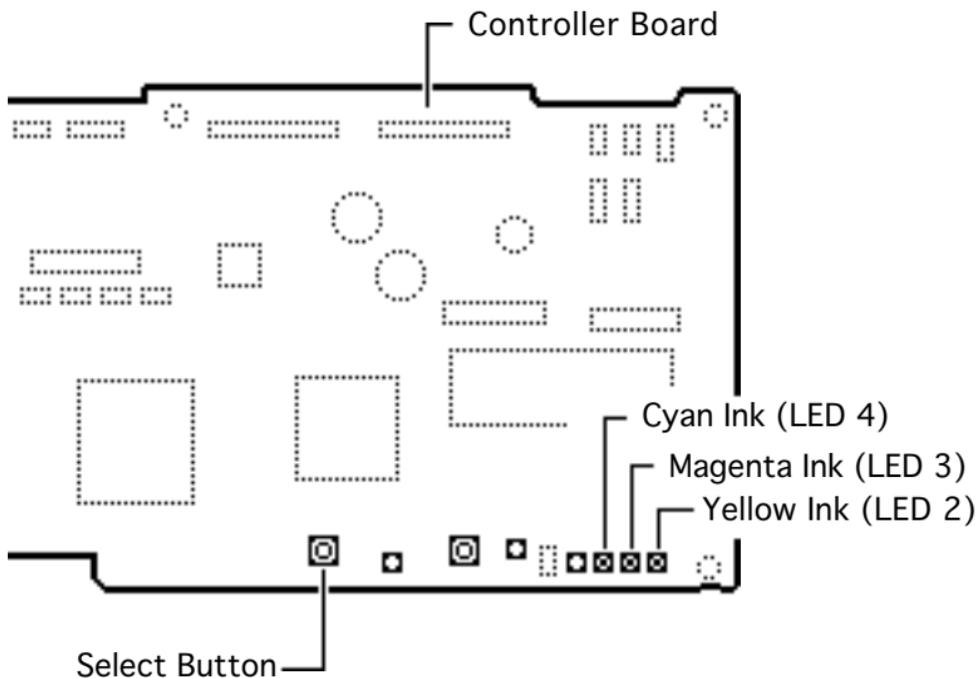
Power Button

Using the Utility

Launch the utility program and press the power button.

Note: The utility is on the Service Source CD in the Diagnostics folder and on AppleLink in the Service/ Training folder.
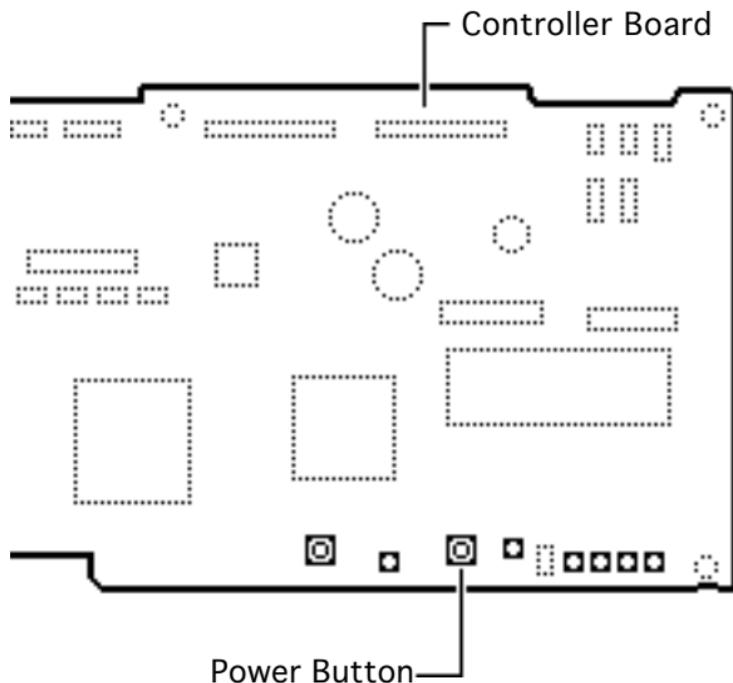
Apple Color StyleWriter Pro Setup Utility

Serial Port:

Module which was replaced:

⦿ Controller PCB   ◯ Power Supply|

◯ Carriage PCB   ◯ Ink Absorber Plates

Please Enter the Following Parameters:

Room Temperature (°C or °F): | 25.0 |

Print Head Resistance (Ω): | 270.0 |

Years Since Wast Ink Last Emptied: | 0.0 |

(**Send to Printer**)   [Cancel]

Note: Make sure AppleTalk is inactive when using the printer port.

Note: If the CPU has an internal modem, use the Control Panel to turn off the modem.

Apple Color StyleWriter Pro Setup Utility

Serial Port:

Module which was replaced:

⦿ Controller PCB   ○ Power Supply¦

○ Carriage PCB   ○ Ink Absorber Plates

Please Enter the Following Parameters:

Room Temperature (°C or °F): `25.0`

Print Head Resistance (Ω): `270.0`

Years Since Wast Ink Last Emptied: `0.0`

(**Send to Printer**)   [Cancel]

1. When the utility setup dialog appears, select the serial port the printer is plugged into.

2. Select the module that was replaced.

3. Enter the appropriate values and click "Send to printer."

   Note: The printer will emit two four-tone chords when the parameters have been received.

Controller Board

Power Button

4 Press the power button to turn the printer off. Unplug the printer.
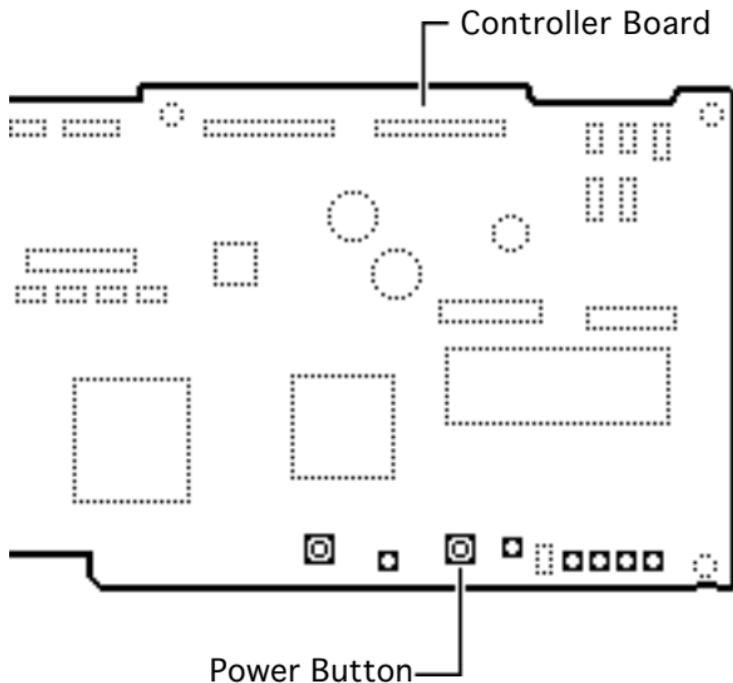
Print Head

Alignment

No preliminary steps are required before you begin this procedure.

Note: This procedure is a bidirectional registration of the print head. Perform this procedure after you replace the carriage or if you notice any blurring of printed characters.

Chooser

AppleShare

Color SW Pro

LaserWriter
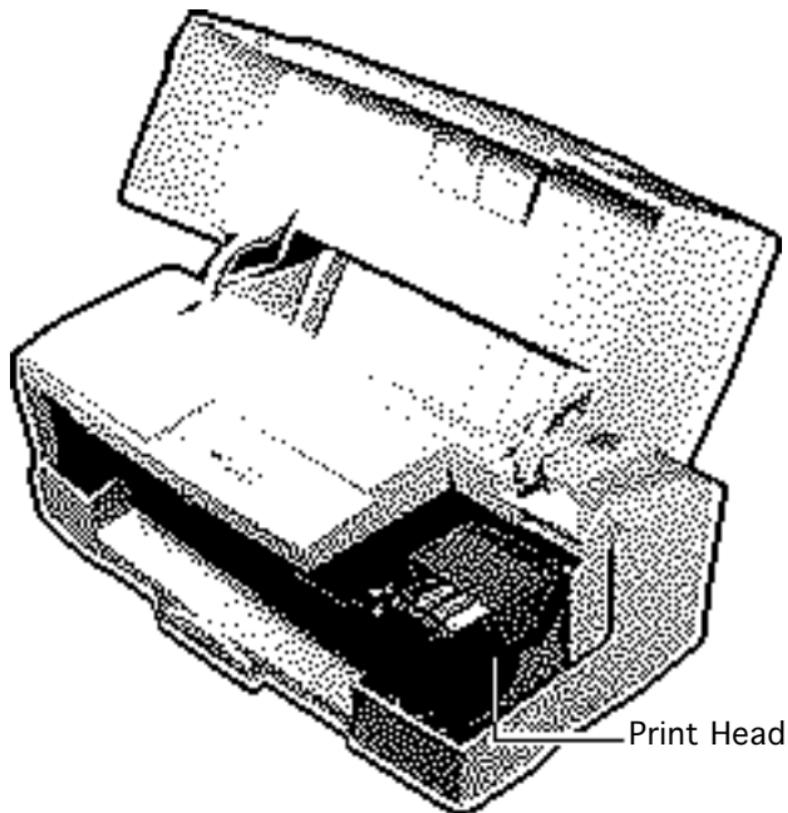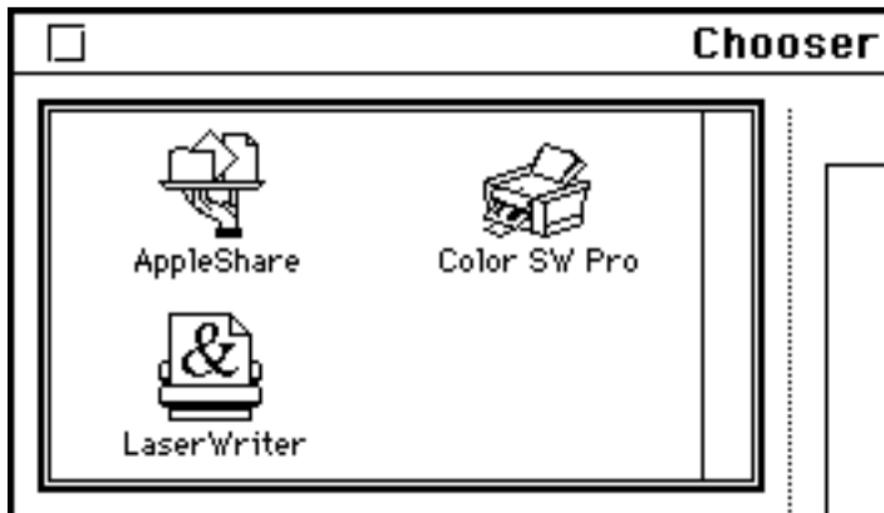
1 Connect the printer to a Macintosh and make sure the Color StyleWriter Pro printing software is installed.

2 Using the Chooser, select the Color StyleWriter Pro.

3 Open any document and select the print option or choose Print Window from the File menu.

4   Click the Utilities button
     in the Print dialog box

Color StyleWriter Pro

Copies: [1]   Pag

Print Quality: ○ B

Paper Type: [Pl

Image: [Color

Notification

[Print]

[Cancel]

[Color]

[Utilities]

◀ ||||▶
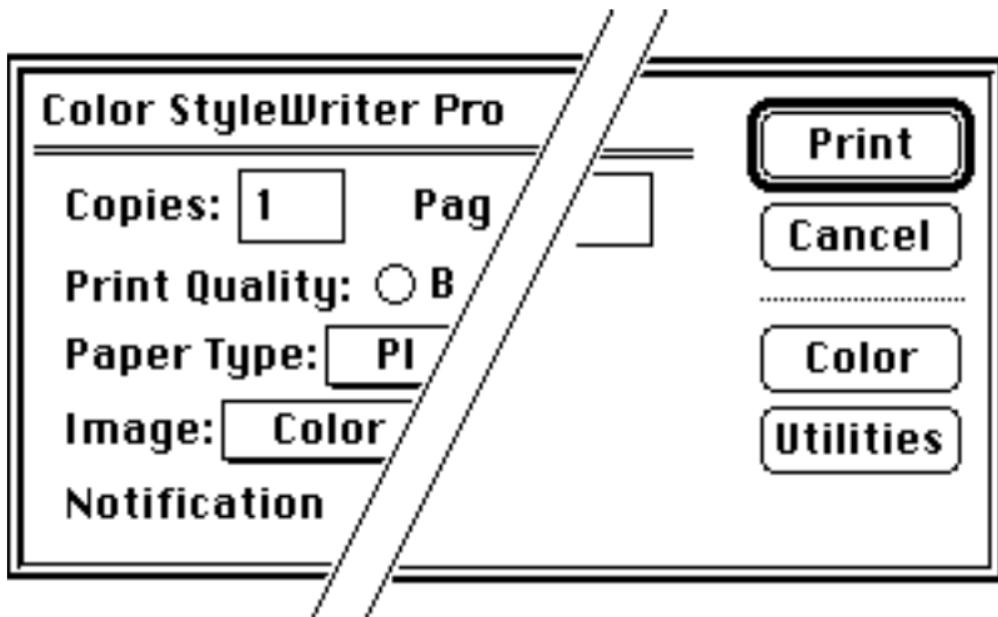
5   Select the "Check
    alignment before
    printing" option.

Color StyleWriter Pro Utilities

☐ **Clean the print head before printing**
   ○ **Black Only**
   ○ **All Colors**
   ○ **Super Clean (Use only as a last reso**
☐ **Prepare new print head before printing**
☒ **Check alignment before printing**

Alignment Example

Numbered Bars

Nozzle Check Pattern
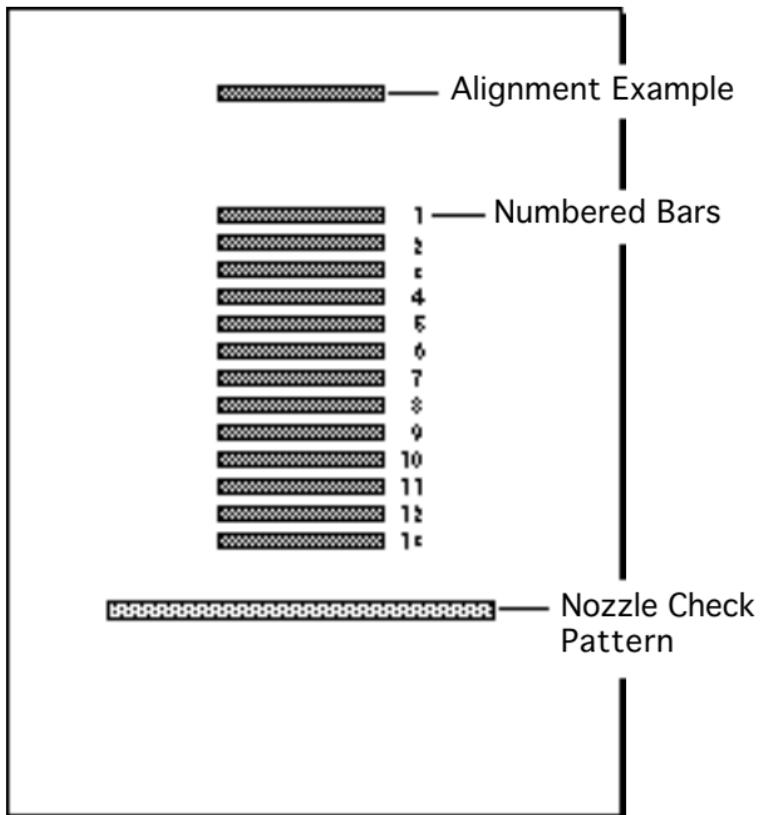
6 **Note:** The printer will produce a test page before it prints the document or window you selected.

Examine the printed test page to determine the numbered bar that matches the alignment example.

Note: After the test page has been printed a dialog box for the alignment will appear.

7 Type the number in the dialog box.

8 Click the OK button.

Note: The printer will now print the document or window you selected.

Color StyleWriter Pro Alignment

Look at the test page and decide which numbered bar looks most like the black at the top of the page. Type the number the most similar test bar in this box.

7

Cancel   OK
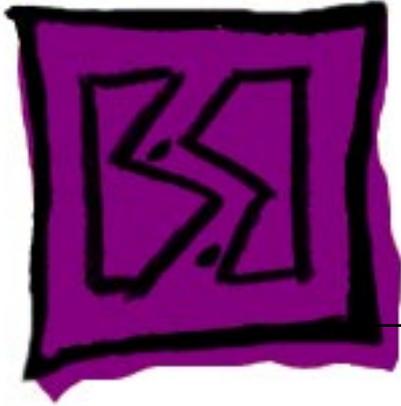
Exploded View

Color StyleWriter Pro

Cover, Top
922-0890

Ink Cartridges

Cover,
Inner
922-0889

Printhead
922-0662

Kit, Carriage
Assy
076-0463

Encoder
922-0669

Controller
Board
661-0876

Belt,
Carriage
922-0689

Motor,
Paper Feed
922-0668

Sensor
Board
922-0663

Bushing/
Spring Kit
076-0134

Kit, Platen
076-0138

Clip, Shaft
922-0196

Kit, Paper
Guide
076-0136

Spur
Holder
Unit
922-0682

Frame

Motor,
Carriage
922-0667

Roller, Eject
922-0191

Cable
Home
Position
922-0683

Idler
Rollers

Photo
Interrupter
922-0670

Kit, Feeder
Roller
076-0137

Purge Unit
922-0665

Cut Sheet
Feeder
922-0819

Kit, Plate
Ink Absorber
076-0149

Fuse
125V 922-0180
250V 922-0181

Power Supply
110V 661-0877
220V 661-0878