COVER Book Cover

Miscellaneous Printers

Service Information and
Parts Catalog

Document Number SA38-0100-00

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First Edition (January 1991)

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1.0 Chapter 1. General Information

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1.1 Training and Hardware Maintenance and Service Manuals
1.2 Problem Isolation Tips - All Workstation Printers

1.1 Training and Hardware Maintenance and Service Manuals

Resistive Ribbon Technology Tips: ZR23-6831

5201 Quietwriter I and II Printers

Training: TAI CC 40553
Prereq CC 71013 (Machine type 6750)
HM&S: S544-4037

5202 Quietwriter III Printer

Training: LS/1 CC 80143 (formerly FIS/Video CC 71131)
HM&S: Z544-4113

5204 Quickwriter Printer

Training: TAI CC 40593
Prereq CC 71131 or 80143 (Machine type 5202)
HM&S: Z544-4183

Single Tray Sheet Feed Option (5201 and early 5202)

Training: TAI CC 40555
HM&S: SY20-8580

Dual Drawer ("Rocket Launcher") Sheet Feed Option (5202 and 5204)

Training: FIS/Video CC 71003
HM&S: Z544-4180

Adjustable Single Bin Sheet Feed Option (late 5202 and 5204)

Training: TAI CC 40552
HM&S: Z544-5182

1.2 Problem Isolation Tips - All Workstation Printers

The following procedures can be used to isolate a printer failure from a system failure:

1. Power system up with DOS diskette in drive A.
2. Screen print from the system is achieved by pressing the **PRTSC** key.
3. If the printer will print the screen, the printer is not the problem (possible software applications problem).
4. If the printer will not print the screen but will print the self test, then the printer is not the problem (possible cable or system problem).

2.0 Chapter 2. 5201 Quietwriter I, Quietwriter II Printers*

Subtopics

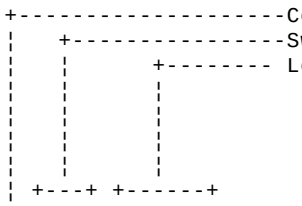
2.1 Print Test
2.2 Switch Settings (5201-001, 5201-002)
2.3 5201 Service Tips
2.4 Error Codes

2.1 Print Test

To perform the Print Test:
1. Ensure that a PC Font is in slot A.
2. Press and hold the **Stop** button while turning the Printer On.
3. Release the **Stop** button after the printer beeps the first time.

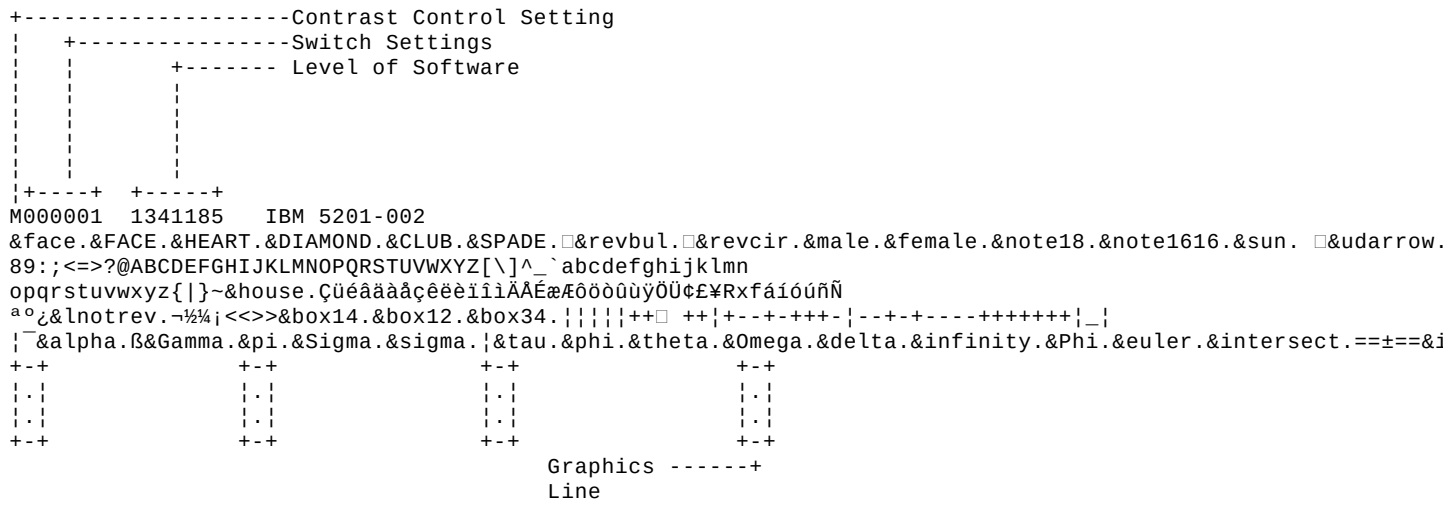
Subtopics
2.1.1 5201-001 Test Output
2.1.2 5201-002 Test Output

2.1.1 5201-001 Test Output




```
M 00001 A1341037
&face.&FACE.&HEART.&DIAMOND.&CLUB.&SPADE.□&revbul.□&revcir.&male.&female.&note18.&note1616.&sun. □&udarrow.
89:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefghijklmn
opqrstuvwxyz{|}~&house.ÇüéâäàåçêëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥Rxfáíóúñ
ªº¿&lnotrev.¬½¼¡<<>>&box14.&box12.&box34.¦¦¦¦¦++□ ++¦+--+-+++-¦--+-+----+++++++¦_¦
¦¯&alpha.ß&Gamma.&pi.&Sigma.&sigma.¦&tau.&phi.&theta.&Omega.&delta.&infinity.&Phi.&euler.&intersect.==±==&i
```

2.1.2 5201-002 Test Output



2.2 Switch Settings (5201-001, 5201-002)

Switch Number	**Function**	**Switch Off**	**Switch On**
1-1	Index after carrier return	Not active	Active
1-2	Form length	11 inches	12 inches
1-3	Line length	8 inches	13.2 inches
1-4	Code set table	Table 1	Table 2
1-5	Skipover perforation	Not active	Active
1-6 (Mod 002)	Ribbon saver mode	Active	Not active

Note: Software will override switch settings.

PICTURE 1

2.3 5201 Service Tips

If customer complains of multiple ribbon breaks, clean the platen and have the customer try a new print head. The Print Enhancement Kit (P/N 1384094) will reduce false end-of-ribbon errors.

2.4 Error Codes

The printer gave 6 beeps and the error lights are blinking. In the following tables On=blinking light.

Ready Light	**Online Light**	**Ribbon Light**	**Font Light**
1st Display:			
Off	Off	On	Off
2nd Display: (Press and hold the **Stop** button.)			
Off	On	Off	On
Action: Replace the transport motor.			

Ready Light	**Online Light**	**Ribbon Light**	**Font Light**
1st Display:			
On	On	On	On
2nd Display: (Press and hold the **Stop** button.)			
Off	On	Off	Off
Action: Replace the function board.			

Ready Light	**Online Light**	**Ribbon Light**	**Font Light**
1st Display:			
On	On	On	On
2nd Display: (Press and hold the **Stop** button.)			
Off	Off	Off	On
Action: Replace the function board.			

Ready Light	**Online Light**	**Ribbon Light**	**Font Light**
1st Display:			
On	On	Off	Off
2nd Display: (Press and hold the **Stop** button.)			
Off	On	Off	Off
Action: Replace the printer board.			

Refer to *HM&S* for other error codes (MAP 3-1200).

3.0 Chapter 3. 5202 Quietwriter III Printer

Subtopics

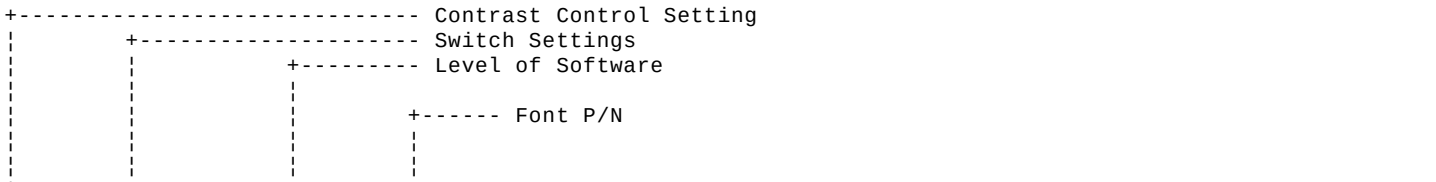
3.1 Printer Self Test
3.2 Printer Wrap Test
3.3 Setup Switches
3.4 Service Tips
3.5 5202 Print Quality Checklist
3.6 5202 Error Codes

3.1 Printer Self Test

To Perform the Printer Self Test:
1. Turn the printer On while holding the **Start/Stop** button.
2. Release the **Start/Stop** button after the printer beeps the first time.

Subtopics
3.1.1 Test Output

3.1.1 Test Output




```
M 00000000 000000 01318494 00000000
&face.&FACE.&HEART.&DIAMOND.&CLUB.&SPADE.□&revbul.□&revcir.&male.&female.&note18.&note1616.&sun. □&udarrow.
89:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefghijklmn
opqrstuvwxyz{|}~&house.ÇüéâäàåçêëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥Rxfáíóúñ
ªº¿&lnotrev.¬½¼¡<<>>&box14.&box12.&box34.¦¦¦¦¦++□ ++¦+--+-+++-¦--+-+----+++++++¦_¦
¦¯&alpha.ß&Gamma.&pi.&Sigma.&sigma.¦&tau.&phi.&theta.&Omega.&delta.&infinity.&Phi.&euler.&intersect.==±==&i
```

There are two levels of the 5202 printer. They are identified by
different serial number ranges.

Machine Type	**Serial No.**
5202-001	Below 7500000 (Level 1)
5202-001	7500001-7999999 (Level 2)

3.2 Printer Wrap Test

To perform the Printer Wrap Test:

1. Turn the printer Off.
2. Install the wrap plug in the parallel interface cable connector (P/N 1341046).
3. Press and hold the **Paper Up** button.
4. Turn the printer On.
5. Release the **Paper Up** button after the printer beeps the first time.
6. If the **Font** light comes on, press the **Start/Stop** button.
7. The test will run continuously until you reset it or turn the printer Off.
8. If the Printer Wrap Test fails (the printer beeps), the printer board is defective.

3.3 Setup Switches

PICTURE 2

PICTURE 3

Note: Software will override switch settings.

Subtopics
3.3.1 Switch Group 1 (Eight Switches)
3.3.2 Switch Group 2 (Six Switches)

3.3.1 Switch Group 1 (Eight Switches)

Switch Number	**Function**	**Switch Off**	**Switch On**
1	Character set	Set 1	Set 2
2	Command Alteration	See "Switch 2, Command Alteration" in topic 3.3	1.1
3	Skip 6 lines at perforation	Does not skip	Skips
4 and 5	Sets form/page length	See Table 1	See Table 1
6	Line feed after carrier return	Off	On
7	Sets line spacing	6 lines per inch	8 lines per inch
8	Not used		

Table 1. Form/Page Length

Switch 4	**Switch 5**	**Page Length**
Off	Off	11.00 inches
Off	On	11.69 inches
On	Off	12.00 inches
On	On	14.00 inches

Note: Software will override switch settings.

Subtopics
3.3.1.1 Switch 2, Command Alteration

3.3.1.1 Switch 2, Command Alteration

The primary function of this switch is to cause an automatic carrier return after a line feed, vertical tab, or ESC J command. Also, when switch 2 is On, the default right margin is set to 8 inches. In addition, this switch changes the number of bytes that are discarded when an ESC @ command is received (3 bytes when the switch is Off, 2 bytes when the switch is On).

3.3.2 Switch Group 2 (Six Switches)

Subtopics

3.3.2.1 Switch 1, Internal/External Default Font Selection
3.3.2.2 Switches 2 and 3, Specific Font Selection
3.3.2.3 Switch 4 - Font Emulation
3.3.2.4 Switches 5 and 6 - Print Mode

3.3.2.1 Switch 1, Internal/External Default Font Selection

Set switch 1 *On* to print from the external (pluggable) fonts.

To choose a particular font from either the internal or external fonts, you must set switches 2 and 3.

3.3.2.2 Switches 2 and 3, Specific Font Selection

Embedded Fonts: Your printer has four embedded fonts. Use the chart below to set switches 2 and 3 to select an embedded font.

When	**Font selected is**
Both switches are Off	Font 1 (Courier 10 pitch)
2 is Off, 3 is On	Font 2 (Courier 12 pitch)
2 is On, 3 is Off	Font 3 (Courier 17 pitch)
Both switches are On	Font 4 (Boldface-proportional space)

3.3.2.3 Switch 4 - Font Emulation

On	Emulates 5201
Off	Native 5202

3.3.2.4 Switches 5 and 6 - Print Mode

When	**Print mode is**
Both switches are Off	Quality
5 is Off, 6 is On	Draft
5 is On, 6 is Off	Enhanced
Both switches are On	Quality

Note: Software will override switch settings.

3.4 Service Tips

If the symptom is random POR, replace the power supply (P/N 1384700) under SC33, ECA018. See TDR H046205.

Subtopics
3.4.1 Printer Board Failure Quick Reference

3.4.1 Printer Board Failure Quick Reference

The following symptoms may occur **during or immediately following** the power-on self test (POST). Check this list for your *identical* symptom. If you find your *identical* symptom, replace the printer board.

- Carrier:
  - Drives into the left or right side-frame.
  - Stops during the POST.
  - Does not move and different lights turn On each time you turn the printer on.
  - Does not move, everything else in the POST is OK.
  - Does not move and no micro index during the POST.
  - Moves to the left and no micro index during the POST.
  - Movement OK, no lights, and buttons do not work.
  - Movement OK, no lights, no beeps, and buttons do not work.
- Continuous or no beep after printer is On.
- Continuous tone.
- All lights:
  - On solid.
  - On solid and continuous beep.
  - Turn On solid and nothing else happens.
  - Turn On solid or the light pattern changes each time you turn the printer On.
- Light pattern changes and beeper beeps On and Off continuously each time you turn on the printer.
- **Font** light blinking or On solid without font cartridge installed.
- Print head solenoid is energized all the time during the POST.
- Ribbon:
  - Light On solid, ribbon feed motor runs all the time.
  - Feed motor runs all the time during the POST.
- Paper feed motor runs all the time during the POST.
- Paper feed motor indexes about 5 lines, then the **Paper** light comes On.

3.5 5202 Print Quality Checklist

- ☐ Cardholder to platen set to .004" - .006".
- ☐ Platen latched down, clean, and smooth.
- ☐ Check printhead height adjustment.
- ☐ Check printhead solenoid adjustment.
- ☐ Check for binding/sticky ribbon rollers.
- ☐ Use 20 - 24 lb smooth paper.
- ☐ Use the ENHANCED PRINT MODE.

Note: Software will override printer settings.

- ☐ Install new printhead and gimbal pad.
- ☐ Install a new ribbon.

3.6 5202 Error Codes

All lights blink; beeps continuously 6 seconds.

Press and hold **Print Mode** button and observe the 7 lights:

Ready Light	**Draft Light**	**Quality Light**	**En-hanced Light**	**Paper Light**	**Ribbon Light**	**Font Light**
On	On	On	On	On	On	On
Action: Replace the printer board.						

Ready Light	**Draft Light**	**Quality Light**	**En-hanced Light**	**Paper Light**	**Ribbon Light**	**Font Light**
Off	Off	On	Off	Off	Off	On
Action: Replace the printer board.						

Ready Light	**Draft Light**	**Quality Light**	**En-hanced Light**	**Paper Light**	**Ribbon Light**	**Font Light**
Off	On	Off	On	Off	Off	On
Action: Replace the printer board.						

Ready Light	**Draft Light**	**Quality Light**	**En-hanced Light**	**Paper Light**	**Ribbon Light**	**Font Light**
On	On	Off	On	Off	Off	On
Action: Replace the printer board.						

Ready Light	**Draft Light**	**Quality Light**	**En-hanced Light**	**Paper Light**	**Ribbon Light**	**Font Light**
On	Off	On	Off	Off	Off	On
Action: Replace the printer board.						

Ready Light	**Draft Light**	**Quality Light**	**En-hanced Light**	**Paper Light**	**Ribbon Light**	**Font Light**
On	Off	Off	Off	Off	Off	On
Action: Replace the printer board.						

4.0 Chapter 4. 5204 Quickwriter Printer*

Subtopics

4.1 Printer Self Test
4.2 Printer Wrap Test
4.3 Error Codes
4.4 Setup Switches

4.1 Printer Self Test

To Perform the Printer Self Test:

1. Turn Off the printer.
2. Press and hold the **Start/Stop** button.
3. Turn On the printer while holding the **Start/Stop** button. You can release the **Start/Stop** button after the printer beeps the first time.
   - To interrupt printing, press the **Start/Stop** button.
   - To restart this test, press the **Start/Stop** button.
   - To exit this test, press and hold the **Start/Stop** button, then press **Reset** or turn Off the printer.
4. Load a sheet of paper.
5. The printer runs the following test:

Subtopics

4.1.1 Test Output

4.1.1 Test Output

```
+------------------------- 32K Buffer Letter (N or B)
¦ +----------------------- Printhead Temperature (C or H)
¦ ¦        +-------------- Switch Settings
¦ ¦        ¦
¦ ¦        ¦                       +-- Level of Microcode
¦ ¦        ¦                       ¦        Font P/N-+
¦ ¦        ¦                       +-------+         ¦
¦ ¦ +------------------------+ +------+ +-------+ +------+
N C 00000000 00000000 00000000 01318394 00000000 00000000
&face.&FACE.&HEART.&DIAMOND.&CLUB.&SPADE.□&revbul.□&revcir.&male.&female.&note18.&note1616.&sun. □&udarrow.
89:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefghijklmn
opqrstuvwxyz{|}~&house.ÇüéâäàåçêëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥Rxfáíóúñ
ªº¿&lnotrev.¬½¼¡<<>>&box14.&box12.&box34.¦¦¦¦¦++□ ++¦+--+-+++-¦--+-+----+++++++¦_¦
¦¯&alpha.ß&Gamma.&pi.&Sigma.&sigma.¦&tau.&phi.&theta.&Omega.&delta.&infinity.&Phi.&euler.&intersect.==±==&i
```

Note: Print head Temperature-C=cold H=hot. A zero indicates the switch is Off and a one indicates the switch is On.

4.2 Printer Wrap Test

To perform the Printer Wrap Test:

1. Turn Off the printer.
2. Install the wrap plug in the interface cable connector (P/N 1319128).

PICTURE 4

3. Press and hold the **Paper Up** button.
4. Turn On the printer.
5. Release the **Paper Up** button after the printer beeps the first time.
6. If the **Font** light comes On, press the **Start/Stop** button.
7. If the printer beeps, it has failed a test. The printer board is defective.
8. To exit this test, press and hold the **Start/Stop** button, then press **Reset** or turn Off the printer.

4.3 Error Codes

All lights flash and 6 beeps.

Note: If a sheet feed is installed, there should be a gray margin stop and one of the following margin adjusters:
- Adjustable single bin sheet feed-Green
- Dual drawer ("rocket launcher") sheet feed-Blue.

The wrong combination, or presence of a black margin stop, will cause errors.

Press the **Print Mode** button to display the second error code.

Ready Light	**Draft Light**	**Quality Light**	**Quiet Light**	**Paper Light**	**Ribbon Light**	**Font Light**
On	Off	Off	On	Off	Off	Off
Action: Ensure printhead is not shorted. (Replace printhead if less than 100&Omega. resistance between case and any of pins 5, 6, 7, 8, 10, 11, 12, 13 with printhead removed.) Replace printer board.						

Ready Light	**Draft Light**	**Quality Light**	**Quiet Light**	**Paper Light**	**Ribbon Light**	**Font Light**
On	Off	Off	Off	On	On	Off
Action: Replace the printer board.						

If ready, draft, and quality lights flash, problem is transport-related. See HM&S (Map 200). Otherwise, refer to *HM&S* for other error codes (MAP 0120).

4.4 Setup Switches

PICTURE 5

Subtopics
4.4.1 Switch Group A
4.4.2 Switch Group B
4.4.3 Switch Group C

4.4.1 Switch Group A

Switch Number	**Function**	**Switch Off**	**Switch On**
A1	Selects character set	Set 1	Set 2
A2	Command Alteration	No automatic carrier return	Automatic carrier return
A3	Skip perforation: automatically skips 1 inch for perforations in paper	Does not skip	Skips
A4 and A5	Sets form/page length	See Table 2	See Table 2
A6	Line feed: paper automatically feeds one line after carrier return	No line feed after return	Paper advances with each return
A7	Sets line spacing	6 lines per inch	8 lines per inch
A8	Adjustable single bin sheetfeed	Not installed	Installed

Note: Software will override switch settings.

Table 2. Form/Page Length

Switch 4	**Switch 5**	**Page Length**
Off	Off	11.00 inches
Off	On	11.625 inches
On	Off	12.00 inches
On	On	14.00 inches

4.4.2 Switch Group B

Switch Number	Function	Switch Off	Switch On
B1	Selects default font	Embedded (Internal font	Pluggable (External font

Note: Software will override switch settings.

These settings apply when B1 is Off:

Switch B2	Switch B3	Switch B4	Embedded Font Selected	Code Page
Off	Off	Off	Font 1 (Courier 10)	437
Off	Off	On	Font 2 (Courier 12)	437
Off	On	Off	Font 3 (Gothic 17)	437
Off	On	On	Font 4 (Boldface-proportional spacing)	437
On	Off	Off	Font 5 (Courier 10)	850
On	Off	On	Font 6 (Courier 12)	850
On	On	Off	Font 7 (Gothic 17)	850
On	On	On	Font 8 (Boldface-proportional spacing)	850

These settings apply when B1 is On:

Switch B2	Switch B3	Switch B4	Pluggable Font Selected
Off	Off	Off	Font 1
Off	Off	On	Font 2
Off	On	Off	Font 3
Off	On	On	Font 4
On	Off	Off	Font 5
On	Off	On	Font 6
On	On	Off	Font 7
On	On	On	Font 8

These settings apply when B1 is either On or Off:

Switch Number	Function	Switch Off	Switch On
B5	Sets Print Mode	Quality mode	Draft mode
B6	Positions the Print head adjustment lever for default drawer (dual drawer sheetfeed)	Print head adjustment lever set at position 1	Print head adjustment lever set at position 1.5

Note: Software will override switch settings.

If you have a Dual Drawer Sheetfeed with an envelope option attached, the printhead adjustment lever automatically moves when an envelope is fed. The position of the printhead adjustment lever moves depending on how setup switches B7, B8, and A8 are set. See the following chart to set the

switches.

Switch A8	Switch B7	Switch B8	Printhead Adjustment Lever Position
On	Off	Off	1.5
On	Off	On	2
Off	On	On	2.5
Off	Off	Off	3
Off	Off	On	3.5
Off	On	Off	4
On	On	Off	4.5
On	On	On	5

4.4.3 Switch Group C

Switch C1	**Switch C2**	**Switch C3**	**Baud Rate**
On	Off	On	300 bps
On	Off	Off	600 bps
Off	On	On	1200 bps
Off	On	Off	2400 bps
Off	Off	On	4800 bps
On	On	Off	9600 bps
On	On	On	19200 bps
Off	Off	Off	Parallel

Note: Software will override switch settings.

Switch 4	**Switch 5**	**Parity**
Off	Off	No parity
Off	On	Ignore parity
On	Off	Odd parity
On	On	Even parity

Switch Number	**Function**	**Switch Off**	**Switch On**
C6	Handshake protocol	XON/XOFF	DTR pacing
C7	Data bits per frame	8 bits	7 bits
C8	Graphics registration	Prints unidirectional	Prints bidirectional

5.0 Chapter 5. 3852-002 Color Jetprinter

Subtopics
5.1 Power-On Self Test
5.2 Printer Self Test

5.1 Power-On Self Test

Each time you turn the Color Jetprinter On, it performs an internal test. If no hardware failure is detected, the printer will either go online (**Ready** and **Power** lights On) or offline (**Check** and **Power** lights On) indicating a correctable error.

5.2 Printer Self Test

The Printer Self Test exercises the printer independent of the attached system. It can be used to check:

- Carriage movement
- Paper feed
- Print quality.

To perform the Printer Self Test:

1. Put paper into the printer. IBM* paper will produce optimum print quality.
2. Turn On the printer while pressing the **Line Feed** switch. You will hear a beep when the power is turned On.
3. The printer will start printing. The first page printed will be a special page showing the various print modes and colors the IBM Color Jetprinter can produce. The printer will continue to print a different pattern after the first page until you terminate the test by turning the printer Off.

6.0 Chapter 6. 5152 Graphics Printer

Note: Early level 5152 (Matrix Printer) does not have graphics capability.

Subtopics

6.1 5152 Printer Self Test
6.2 5152 Printer Switch Settings

6.1 5152 Printer Self Test

To Perform the Printer Self Test:
1. Turn Off the printer.
2. Press and hold the **Line Feed** button, power printer On.
3. Release **Line Feed** button when printing starts.
4. The self test will execute until the printer is turned Off.

6.2 5152 Printer Switch Settings

PICTURE 6

Figure 1. 5152 Graphics Printer DIP Switches Location

Before replacing the control circuit card, check the printer DIP switch settings. Be sure the problem is not caused by an improper DIP switch setting.

Note: The graphics printer switch 1-7 must be set for local requirement. This switch selects Table 1 or 2 and is factory-set to Off for American English-speaking countries.

Subtopics
6.2.1 DIP Switch 1
6.2.2 DIP Switch 2

6.2.1 DIP Switch 1

Table 3. Functions and Conditions of DIP Switch No. 1, Graphics Printer

Switch Number	**Function**	**Switch On**	**Switch Off**	**Factory Set**
1-1	Not applicable			On
1-2	CR	Print only	Print and Line Feed	On
1-3	Buffer full	Print only	Print and Line Feed	Off
1-4	Cancel code	Not valid	Valid	Off
1-5	Not applicable			On
1-6	Error buzzer	Sound	Does not sound	On
1-7	Character generator	Table 2	Table 1	Off
1-8	Select In signal	Fixed internally	Not fixed internally	On

Note: Software will override switch settings.

6.2.2 DIP Switch 2

Table 4. Functions and Conditions of DIP Switch No. 2, Graphics Printer

Switch Number	**Function**	**Switch On**	**Switch Off**	**Factory Set**
2-1	Form length	304.8 mm (12 inch)	279.4 mm (11 inch)	Off
2-2	Line spacing	3.175 mm (1/8 inch)	4.23 mm (1/6 inch)	Off
2-3	Auto feed XT signal	Fixed internally	Not fixed internally	Off
2-4	1 inch skip over perforation	Valid	Not valid	Off

7.0 Chapter 7. 5182 Color Printer

Subtopics

7.1 5182 Color Printer Self Test
7.2 Diagnostic Information
7.3 5182 Color Printer On-Site Exchange Checklist
7.4 5182 Printer Switch Settings

7.1 5182 Color Printer Self Test

To Perform the Printer Self Test:

1. Turn the printer Off.
2. Disconnect the printer cable from the printer.
3. Install paper at least 8.5 inches wide in your printer with the left side of the paper at the left side of your printer.
4. Open the access cover and note the setting of all of the DIP switches.
5. Turn all of the DIP switches Off.
6. Close the access cover.
7. Turn the printer On.
8. Press the **Ready** button to set your printer to the not-ready mode (the **Ready** light Off).

   Warning: Do not run the self test or any other printing without proper size paper installed. You will cause premature wear and/or damage to the print head and platen.

9. Press the **Test Mode** button.

   Your printer prints a pattern of all of the printable characters. The ribbon band automatically changes every 1 inch of printing down the page. You must let the test run for 4 inches down the page to test all four ribbon bands.
10. To stop the test, press the **Test Mode** button again.

7.2 Diagnostic Information

Subtopics
7.2.1 New 5182 Ribbon Take-Up Idler
7.2.2 Larger Fuse Approved for F3 on 5182 Color Printer Controller Card

7.2.1 New 5182 Ribbon Take-Up Idler

An improved ribbon take-up idler can be ordered under P/N 6323487. The idler is spring-loaded into the ribbon take-up drive gear on the left side of the ribbon assembly. All 5182 printer ribbon idlers should be inspected when the printer is serviced and replaced if cracked. Very close inspection is necessary as the cracks are sometimes very slight at first.

7.2.2 Larger Fuse Approved for F3 on 5182 Color Printer Controller Card

If fuse F3 is found to be blown for no apparent reason (replacement of F3 fuse fixes the printer), a 3.2 amp Slo-Blo fuse (P/N 5393558) should be substituted for the original 2.8 amp fuse. Only fuse F3 is affected by this service tip; fuses F1 and F2 must remain at 2.8 amps.

Fuses F1 through F3 are located in the center of the controller card, with fuse F3 next to the large heat sink.

7.3 5182 Color Printer On-Site Exchange Checklist

The purpose of this checklist is to provide information to the on-site servicer in order to avoid unnecessary replacement of the 5182 Personal Computer Color Printer.

Check each of the following items:

- ☐ Ribbon installation/operation
- ☐ Print quality
- ☐ Software compatibility
- ☐ Switch settings
- ☐ Control panel indicators
- ☐ Field replaceable parts
- ☐ Removals/replacements (cover).

Subtopics

7.3.1 Ribbon Installation/Operation
7.3.2 Print Quality
7.3.3 Software Compatibility
7.3.4 Field Replaceable Units (FRUs)
7.3.5 Printer Cover Removal

7.3.1 Ribbon Installation/Operation

- Check ribbon for proper installation.
- Check color adjustment.

PICTURE 7

Figure 2. 5182 Ribbon Installation/Operation

If the tops of the characters are the wrong color, turn the ribbon-color knob clockwise a small amount.

If the bottoms of the characters are the wrong color, turn the ribbon-color knob counterclockwise a small amount.

- Check new ribbons for bind (from supply side).
- Check switches for ribbon type (switch 7).

7.3.2 Print Quality

Forms-Thickness Control Lever: The forms-thickness control lever adjusts the position of the print head to allow room for single sheets or multiple copyforms.

This lever can affect print quality. If the print is too light, move the lever toward the rear of the printer. If the print is too dark or smeared, move the lever toward the front of the printer. Operating the printer with the lever too far toward the rear for extra dark print or to compensate for a worn ribbon can cause premature wear of the print head and platen.

PICTURE 8

Figure 3. Forms-Thickness Control Lever

7.3.3 Software Compatibility

Incorrect graphics print line spacing (venetian blind effect) may be caused by software incompatibility. Some software programs are incompatible with the 5182 when graphics applications are utilized. See Figure 4 for more information.

PICTURE 9

Figure 4. Software Venetian Blind Effect

Generally, this is not a hardware problem, and the printer should not be exchanged.

To print graphics in DOS versions prior to Level 3.0 with the print screen function, the Print Screen Utility Program (6042186) is required. This utility supplies the necessary support for the color printer to perform correctly. In DOS versions of 3.0 and higher, the Graphics/COM program will set the correct defaults as described in the DOS manual.

7.3.4 Field Replaceable Units (FRUs)

The following FRUs may be replaced on-site to avoid exchanging the entire printer. Replacing these FRUs as opposed to exchanging the printer is at the discretion of local management.

Subtopics
7.3.4.1 Covers

7.3.4.1 Covers

Part No.	Ref No.	Description
8286060	1	Access Cover
8286067	2	Main Cover
8286065	3	Kit C
8286066	4	Kit E

PICTURE 10

Figure 5. 5182 Color Printer Field Replaceable Units

7.3.5 Printer Cover Removal

1. Set the printer power switch to Off and unplug the power cord from the wall outlet.
2. Remove the power cord from the rear of the printer.
3. Remove the signal cable from the rear of the printer.
4. Remove all the paper from the printer and close the access cover.
5. Set the printer on its back, then on its top, and remove the four cover mounting screws A from the bottom of its base.

   Warning: The printer base is no longer attached to the cover. Both must be supported as the printer is placed on its base.

6. Carefully set the printer on its base.
7. Lift the cover straight up from the base.

PICTURE 11

Figure 6. 5182 Color Printer Cover Removal

7.4 5182 Printer Switch Settings

PICTURE 12

Figure 7. 5182 Color Printer DIP Switches

Set the switches by pushing the lever with the point of a ballpoint pen. To set a switch to Off, push the lever to the rear. To set a switch to On, push the lever to the front.

The printer DIP switches are used to set certain printer functions and to select line spacing, character set, form length, and printing quality. The setting of the DIP switches determines the values that will automatically be set each time the printer is switched On.

Any values set by the DIP switches, except the printer self test setting (switches 9 and 10 Off) and the audio alarm setting (switch 8), can be changed by software printer control codes.

New settings of the DIP switches do not take effect until the printer is set to the power-on defaults. This is done by setting printer power Off and then On, initializing the printer from the system with the initialize function set On, or pressing the **Initialize** button in the test mode before the test printout begins printing.

Table 5. 5182 DIP Switch Settings Chart

Switch Number	**Function**	**Switch Off**	**Switch On**
1	Selects character set	Set 1	Set 2
2	Sets line spacing	6 lines per inch	8 lines per inch
3	Sets automatic perforation skip	No automatic perforation skip	1 inch automatic perforation skip
4	Sets automatic line feed on carriage return	No automatic line feed on carriage return	Automatic line feed on carriage return
5	Sets print line length	8 inches	13.2 inches
6	Sets page length	11 inches	12 inches
7	Sets automatic ribbon-band shift	No automatic ribbon-band shift (use with color ribbon)	Automatic ribbon-band shift (use with all-black ribbon)
8	Sets audible alarm	Allows audible alarm to sound	Does not allow audible alarm to sound
9 and 10	Quality and spacing set	See Table 6	See Table 6

Note: DIP switches 1 through 9 are set to Off at the factory. DIP switch 10 is set to On.

Some programs use the control codes in character set 1 that have ASCII decimal values above 128. These control codes are not in character set 2. The use of character set 2, therefore, may not give the desired results with some programs.

Switches 9 and 10 select the printing quality and character spacing.

Table 6. 5182 Quality and Space Settings

Switch 9	**Switch 10**	**Quality and Spacing Setting**
Off	Off	Data processing quality, 12 characters per inch
Off	On	Data processing quality, 10 characters per inch

On	Off	Text quality, 10 characters per inch
On	On	Near letter quality, 10 characters per inch
Note: When switches 9 and 10 are off, the printer prints with a 1-inch page length with no perforation skip. Switches 3 and 6 are overridden. This is the self test setup.		

Note: Software will override switch settings.

8.0 Chapter 8. 5216 Wheelprinter

Subtopics

8.1 Power-On Self Test
8.2 Printer Self Test
8.3 5216 Interface Switch Settings
8.4 5216 Attachment Tests
8.5 5216 Attachment Wrap Tests

8.1 Power-On Self Test

The Power-On Self Test sequence is run when printer power is turned On.
The Power-On Self Test sequence does the following:

1. Turns On all operator panel lights.
2. Moves the carrier to the left edge of the printer.
3. Moves the printwheel to petal position 1.
4. Tightens the ribbon.
5. Drops the ribbon.
6. Moves the carrier to the center, approximately 100 mm (4 inches) from the left.
7. Turns Off all operator panel lights except **Power**.
8. If a system attachment is installed, the **Ready** light may come On again, the carrier may move to the left, and the alarm may sound.

8.2 Printer Self Test

The purpose of the Printer Self Test is to print all 96 petals of the installed printwheel in 10 pitch (selection test), print M, W, and _ (ribbon test), and index four times. The result should be the print pattern shown in Figure 8, using a U.S. Courier 10 ASCII printwheel.

```
 _____________________________________________________
 MWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMW
 H<Z>B}F{U!G?-"V',=k:f_1;hxdqsvczmwrjn.ayebogtuip
 3XK192W0/5,4Y6.8M7(*O$J#A%I^E+D`T@CQN&S]L[R\)¦P~
```

Figure 8. Sample of Print Pattern

All characters are printed using the correct impression level for a US Courier 10 ASCII printwheel. To run the Printer Self Test:

1. Set the impression control to the mid-range setting.
2. The Printer Self Test prints on the platen if no paper is present. The paper can be loaded manually or automatically. If paper is automatically loaded:
   a. A sheet is ejected (tractor paper is not ejected).
   b. A sheet of paper is fed from the input tray.
   c. The Printer Self Test continues until the **Stop** button is pressed.
   d. An eject is performed to clear the paper from the printer and from the paper exit path of the paper handler.
3. To start the Printer Self Test, hold the **Stop** button down and press the **Start** button.
4. Press **Stop** to stop printing.
5. Compare the printed example with the example in Figure 8.
6. If the printed example is similar to the reference example, the printer is working correctly.

The Printer Self Test places the printer in the **Ready** state during the test.

Any error sensed during the Printer Self Test is handled as if it were in the regular print mode (the error is not communicated to the using system) and the Printer Self Test is stopped.

If print quality is unacceptable, do the following:

1. Check the impression control switch setting.
2. Check the ribbon feed switch setting.
3. Check that the ribbon is tight; rotate the ribbon advance knob to tighten it.
4. Exchange the ribbon.
5. Exchange the printwheel.
6. After checking the last items, try the Printer Self Test and check the print quality again.

8.3 5216 Interface Switch Settings

PICTURE 13

Note: For Paper Feed Toggle switch setting see page 8.3.3.

Switch Number	**Option**
1	Attachment Print Test
2	Reserved
3	Force printer select
4, 5, 6	Country select
7, 8	Pitch (default 10 pitch)
9	Auto Line Feed (LF) after Carrier Return (CR)
10	Allow audible alarm
11, 12	Printer Diagnostic Wrap Test

These switches are all set On as a default. This provides normal U.S. printer operation.

PICTURE 14

Note: For Paper Feed Toggle switch setting see page 8.3.3.

Subtopics
8.3.1 Bank A Switches
8.3.2 Bank B Switches
8.3.3 Paper Feed Toggle Switch Setting, Serial/Parallel Attachment

8.3.1 Bank A Switches

Switch Number	Function	Switch Off	Switch On
1, 2, 3	Defines baud rate	See Table 7	See Table 7
4, 5	Defines parity	See Table 8	See Table 8
6	Data bits per frame	Data bits per frame	8 data bits per frame
7	Defines XON/OFF or DIR	XON/OFF	DIR
8	Not used		
9	Defines Attachment Print Test or normal operation	Run Attachment Print Test	Normal operation
10, 11, 12	Defines RS-232C Serial Port Wrap setting or normal operation	See Table 9	See Table 9

Table 7. Baud Rate

Switch 1	Switch 2	Switch 3	Baud Rate
Off	Off	Off	300 bps
Off	Off	On	600 bps
Off	On	Off	1200 bps
Off	On	On	1200 bps
On	Off	Off	1200 bps
On	Off	On	2400 bps
On	On	Off	4800 bps
On	On	On	9600 bps

Table 8. Parity

Switch 4	Switch 5	Parity
Off	Off	None
Off	On	Ignore
On	Off	Odd
On	On	Even

Table 9. RS-232C Serial Port Wrap Setting, Normal Operation, and Settings Not Valid

Switch 10	Switch 11	Switch 12	Setting
Off	Off	Off	RS-232C Serial Port Wrap Setting
On	On	On	Normal Operation
Off	Off	On	Not valid
Off	On	Off	Not valid

Bank A Switches

Off	On	On	Not valid
On	Off	Off	Not valid
On	Off	On	Not valid
On	On	Off	Not valid

8.3.2 Bank B Switches

Switch Number	Function	Switch Off	Switch On
1	Selects page length	Selects 297 mm (11.69 inch) page length if the toggle switch is set to 2 or 3	Selects 279 mm (11 inch) page length
2, 3, 4	Selects country	See Table 10	See Table 10
5, 6	Selects proportional space mode (PSM) or pitch	See Table 11	See Table 11
7	Select LF or no LF after CR	LF inserted after CR	No LF inserted after CR (system must send LF in the data stream)
8	Audible alarm disable	Disabled	
9, 10	Must be On for normal printer operation		Normal printer operation

Table 10. Country

Switch 2	Switch 3	Switch 4	Country
Off	Off	Off	U.S.
Off	Off	On	Spain
Off	On	Off	France
Off	On	On	Germany
On	Off	Off	Italy
On	Off	On	United Kingdom
On	On	Off	U.S.
On	On	On	U.S.

Table 11. Proportional Space Mode or Pitch

Switch 5	Switch 6	Selection
Off	Off	PSM
Off	On	15 Pitch
On	Off	12 Pitch
On	On	10 Pitch

8.3.3 Paper Feed Toggle Switch Setting, Serial/Parallel Attachment

Toggle Position	**Setting**
1	Continuous forms
2	Manual cut sheet feed
3	Automatic cut sheet feed

8.4 5216 Attachment Tests

Subtopics
8.4.1 Parallel and Serial System Attachments Print Tests

8.4.1 Parallel and Serial System Attachments Print Tests

The print tests for the Parallel and Serial system attachments let you check the communications between the system attachments and the printer, and the switch settings on the system attachments.

1. Load the automatic sheet feed.
2. Switch the power Off.
3. Set the toggle switch to position 3.
4. Set the attachment switches:
   - Parallel - set switch 1 to Off.
   - Serial - set bank A switches 9, 10, 11, and 12 to Off and remove the system cable from the attachment end.
5. Switch the power On. The alarm sounds.

   For the Parallel attachment, the first two lines are an all-character print test. The next two lines show the switch settings read by the printer.

```
  !"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNO
  PQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{¦}~

  1 2   3   4 5 6   7 8   9   10   11 12    1-2-3
  0 1   1   1 1 1   1 1   1    1    -  -        3
```

   For the Serial attachment, the first two lines are the base ASCII 94 characters printed in ascending order by ASCII code point. The third line is the position numbers of the DIP switches and toggle switch. The fourth line is the setting of the DIP switches. The fifth line is for the RS-232C Serial Port Wrap test.

```
  !"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNO
  PQRSTUVWXYZ[\]^_`abcdefghijklmnopqrstuvwxyz{¦}~

  A    123456789012    1234567890    B      1-2-3
       111111110---    11111111--               3

  ++++++++++++++++++
```

6. Switch the power Off.
7. Do the following to continue normal operation:
   - Parallel - set switch 1 to On.
   - Serial - set bank A switches 9, 10, 11, and 12 to On and reconnect the Serial attachment cable.

8.5 5216 Attachment Wrap Tests

Subtopics
8.5.1 Printer Wrap Test

8.5.1 Printer Wrap Test

The Wrap Test determines if the printer is causing communications problems. The Wrap Test can be run with or without the system attachment installed.

Subtopics
8.5.1.1 Base Printer Wrap Test
8.5.1.2 System Attachment Wrap Test

8.5.1.1 Base Printer Wrap Test

To check printer communications without the system attachment installed, do the following:

1. Switch printer power Off.
2. Install the wrap plug into the connector labeled P on the rear of the printer (P/N 6372867).
3. Switch printer power On.

If the **Ready** light flashes once per second, the Wrap Test is successful. If it does not flash or flashes at an irregular rate, the Wrap Test failed and the communications problem is in the printer.

8.5.1.2 System Attachment Wrap Test

To check printer communications with the system attachment installed, do the following:

1. Switch printer power Off.
2. Set the attachment switches.
   - Parallel - set switches 11 and 12 to Off.
   - Serial - set bank B, switches 9 and 10 to Off.
3. Switch printer power On.

If the **Ready** light flashes once per second, the Wrap Test is successful. If it does not flash or flashes at an irregular rate, the Wrap Test failed and the communications problem is in the printer.

When you finish running the Wrap Test, do the following:

- Remove the wrap plug.
- For the Parallel attachment, put the switches back to their normal positions.
- For the Serial attachment, set bank B switches 9 and 10 to On.

9.0 Chapter 9. 5223 Wheelprinter E

Subtopics

9.1 Power-On Self Test
9.2 Printer Self Test
9.3 Printer Diagnostic Test
9.4 Switch Settings

9.1 Power-On Self Test

Each time you power-On the IBM Wheelprinter E, it performs a Power-On Self Test as follows:

- The printer beeps once.
- All lights come On.

If no hardware failure is detected, the printer goes online (**Ready** and **Online** lights On) or offline (**Ready**, **Ribbon**, **Wheel**, or **Paper** light On and 3 beeps) indicating an operator correctable error.

9.2 Printer Self Test

1. Position the **Power** switch On.
2. Insert a piece of paper lengthwise in the printer, left edge aligned with the 0 mark on the paper table.

PICTURE 15

3. Position the **Power** switch Off.
4. Press and hold the **Stop** button and position the **Power** switch On.
5. When printing begins, release the **Stop** button. The printer runs the following test:

```
  0000000000 01279855
  anrmcsdhlfk,V-GUFBZHP)RLSNCTDEIAJO(M.Y,/W9K3X12054687
  nrmcsdhlfk,V-GUFBZHP)RLSNCTDEIAJO(M.Y,/W9K3X12054687*
  rmcsdhlfk,V-GUFBZHP)RLSNCTDEIAJO(M.Y,/W9K3X12054687*$
  mcsdhlfk,V-GUFBZHP)RLSNCTDEIAJO(M.Y,/W9K3X12054687*$#
  csdhlfk,V-GUFBZHP)RLSNCTDEIAJO(M.Y,/W9K3X12054687*$#%
  sdhlfk,V-GUFBZHP)RLSNCTDEIAJO(M.Y,/W9K3X12054687*$#%&
  dhlfk,V-GUFBZHP)RLSNCTDEIAJO(M.Y,/W9K3X12054687*$#%&^
  hlfk,V-GUFBZHP)RLSNCTDEIAJO(M.Y,/W9K3X12054687*$#%&^+
  lfk,V-GUFBZHP)RLSNCTDEIAJO(M.Y,/W9K3X12054687*$#%&^+`
  fk,V-GUFBZHP)RLSNCTDEIAJO(M.Y,/W9K3X12054687*$#%&^+`@
```

Note: Zeros (0) or ones (1) print in the first 10 positions, representing the setup switch settings on the Function Board. A zero indicates the switch is Off and a one indicates the switch is On.

Next, an eight-digit code prints. This code is the level of the microcode in your machine.

The next lines show the characters on your printwheel. If the printer cable is connected, the switch settings in the printout may be incorrect.

6. To exit this test, position the **Power** switch Off.

9.3 Printer Diagnostic Test

The Printer Diagnostic Test is used to isolate problems with the feature connector and the end-of-ribbon sensor.

To perform the Printer Diagnostic Test:

1. Press and hold the **Paper Down** button and position the **Power** switch On.
2. When the printer beeps, release the **Paper Down** button.
   - The printer performs a Power-On Self Test, and the carrier moves to the center.
   - The **Ready** light blinks.
3. Remove the ribbon cartridge from the printer.
4. Check the status of the following lights, and verify that the conditions are correct:

Online light On	Sheetfeeder installed
Online light Off	Sheetfeeder not installed
Ribbon light On	End-of-ribbon sensor unblocked
Ribbon light Off	End-of-Ribbon sensor blocked
Wheel light On	Pinwheel forms feeder installed
Wheel light Off	Pinwheel forms feeder not installed
Paper light On	No paper in the pinwheel forms feeder, the bail is down
Paper light Off	Paper in the pinwheel forms feeder, the bail is up

5. To exit this test, position the **Power** switch Off.

9.4 Switch Settings

Always position the **Power** switch Off before changing a switch setting.

Switch Number	**Function**	**Switch On**	**Switch Off**
1	The paper indexes after receiving a carrier return	Active	Not active
2	Form length	12 inches	11 inches
3	Skipover perforation	Active	Not active
4, 5, 6	Country select	See Table 12	See Table 12
7	Audible alarm	Not active	Active
8	Line spacing	8 lines per inch	6 lines per inch
9	Line length	13.2 inches	8 inches
10	Hex dump	Active	Not active

Note: These switches are set Off at the factory.

Table 12. Country Select

Switch 4	**Switch 5**	**Switch 6**	**Country Select**
Off	Off	Off	US operation

Note: Other switch settings indicate a different country operation. Refer to *GTO* for details.

10.0 Chapter 10. Sheetfeed Options

Subtopics

10.1 Dual Drawer Sheetfeed Models 5202 and 5204
10.2 Adjustable Single Bin Sheetfeed Models 5202 and 5204
10.3 Single Drawer Sheetfeed Models 5201 and 5202

10.1 Dual Drawer Sheetfeed Models 5202 and 5204

Subtopics

10.1.1 General Information
10.1.2 Sheetfeed Diagnostic Test
10.1.3 Envelope Feed Diagnostic Test
10.1.4 Service Tips
10.1.5 Dual Drawer Sheetfeed Adjustments

10.1.1 General Information

If a sheetfeed device is installed, the correct combination of margin stop and adjuster must be used. If the correct margin adjuster is not used, the machine will indicate a transport error.

Subtopics
10.1.1.1 Installation Guide for Margin Stop and Adjuster

10.1.1.1 Installation Guide for Margin Stop and Adjuster

- For a Model 5202, use a black margin stop and a blue margin adjuster.
- For a Model 5204, use a gray margin stop and a blue margin adjuster.

Note: The gray margin stop is factory installed.

CAUTION:
Clean rollers with isopropyl alcohol.

10.1.2 Sheetfeed Diagnostic Test

The printer default paper source is the upper paper tray. Multiple depressions of the **Code** plus **Set Top of Form** buttons cause the printer to rotate its paper source selection from the upper paper tray to the lower paper tray to the envelope feeder.

If the **Paper** light comes On during any of the following feed tests, a feed failure has occurred.

Subtopics
10.1.2.1 Upper Paper Tray
10.1.2.2 Lower Paper Tray

10.1.2.1 Upper Paper Tray

1. Press and release the **Start/Stop** button. The **Ready** light goes Off.
2. Press the **Form Feed** button to test the sheetfeed. The paper feeds from the top tray to the first writing line.
3. Press the **Form Feed** button again. The paper feeds into the output tray.

10.1.2.2 Lower Paper Tray

1. Press and release the **Start/Stop** button as necessary to turn Off the **Ready** light.
2. To select the lower tray, press and hold the **Code** button while you press and release the **Set Top of Form** button. The printer beeps each time the **Set Top of Form** button is pushed.
3. Release the **Code** button.
4. Press the **Form Feed** button to test the sheetfeed. The paper feeds from the lower paper tray to the first writing line.
5. Press the **Form Feed** button again. The paper feeds into the output tray.

10.1.3 Envelope Feed Diagnostic Test

To perform the Envelope Diagnostic Test:

1. Press and release the **Start/Stop** button as necessary to turn Off the **Ready** light.
2. To select the envelope feeder, press and hold the **Code** button while you press and release the **Set Top of Form** button. The printer beeps each time the **Set Top of Form** button is pushed.

   Note: If you wish to skip from the default paper source directly to the envelope feeder test, perform Step 2 a second time.
3. Press the **Form Feed** button to test the envelope feeder. The envelope feeds from the envelope hopper to the first writing line.

   Note: The printer will attempt to feed even if no envelope module is installed on the sheetfeed.
4. Press the **Form Feed** button again. The envelope feeds into the output tray.

10.1.4 Service Tips

Subtopics
10.1.4.1 Sheetfeed Magnets Energized All the Time (5202, 5204)
10.1.4.2 Paper Feed Problems

10.1.4.1 Sheetfeed Magnets Energized All the Time (5202, 5204)

If a Dual Drawer Sheetfeed has one or more of the magnets picked all the time, replace the sheetfeed cable assembly (P/N 1479523) before replacing the printer board in the printer.

Use normal ESD precautions when handling the sheetfeed cable, as the cable connector contains electronic components.

10.1.4.2 Paper Feed Problems

If you are experiencing paper feed problems (skew, jams, misfeeds) with a 5202 or 5204 printer with the attached Dual Drawer Sheetfeeder and/or the Envelope Hopper option, the cause may be easier to find by running the machine in slow motion. This is done by removing the left side cover and releasing the armature for the feed drawer you want to observe. Next, push the **INCR (UP)** button on the printer. This will run the paper or envelope one step at a time. This is especially helpful for envelope skew problems.

10.1.5 Dual Drawer Sheetfeed Adjustments

Subtopics
10.1.5.1 Sheetfeed Magnet
10.1.5.2 Bail Clutch Magnet
10.1.5.3 Bail Lift Link
10.1.5.4 Envelope Magnet Assembly
10.1.5.5 Attachment Gear
10.1.5.6 D-Roller Home Position
10.1.5.7 Envelope Restraint Spring

10.1.5.1 Sheetfeed Magnet

1. Hold the armature in the closed (coil active) position.
2. Loosen the mounting screw and rotate the magnet assembly so the armature clears the clutch by 0.80 to 1.20 mm (.032-.047 inch). Adjust the outer armature only.

PICTURE 16

10.1.5.2 Bail Clutch Magnet

1. Remove the right attachment plate.
2. Unlatch the bail clutch magnet and rotate the gear train until the actuator A is latched in the position shown.

PICTURE 17

3. Hold the armature in the closed (coil active) position with enough pressure to make the armature B touch the pole piece C. Make sure the rubber on the bottom of the armature B is completely compressed.
4. Loosen the mounting screw and rotate the magnet assembly so the armature clears the bail cam surface by 0.25 to 0.50 mm (.010-.020 inch).

PICTURE 18

10.1.5.3 Bail Lift Link

1. Remove the sheetfeed left cover.
2. Rotate the bail lift actuator clockwise as far as you can.
3. Rotate the bail lift bellcrank clockwise as far as you can.
4. Adjust the clevis so the bail lift link just spans the distance between the actuator and bellcrank. You should have 0.25-0.50 mm (.010-.020 inch) between the bail lift bellcrank and the paper bail after you make this adjustment.

PICTURE 19

10.1.5.4 Envelope Magnet Assembly

1. Hold the armature in the closed (coil active) position.
2. Loosen the mounting screw and rotate the magnet assembly so the armature clears the clutch gear by 0.80 to 1.20 mm (.032-.047 inch).

PICTURE 20

10.1.5.5 Attachment Gear

1. Adjust the gear mesh between sheetfeed drive gear and the attachment gear for a maximum backlash of 0.10 mm (.004 inch). However, at the tightest point of rotation, the backlash should be greater than zero backlash.
2. Loosen the adjustment screw and rotate the plastic bracket.

PICTURE 21

10.1.5.6 D-Roller Home Position

1. Latch the sheetfeed clutch gear.
2. The flat surfaces of both D-rollers must be set as close as possible to be parallel to surface A.

   Note: Frequent removal and installation of the gears may require replacement of the gears because of wear on the snap fit.
3. Remove the D-roller drive gear by pulling on the gear while pushing on the shaft.
4. Rotate the D-roller shaft until the flat on the roller is parallel to the surface A.
5. While you hold the D-roller in the adjusted position, align the flat on the gear to the flat on the shaft.
6. Press the D-roller drive gear on the shaft until it snaps in place.

PICTURE 22

10.1.5.7 Envelope Restraint Spring

1. Loosen the screw A.
2. Position the spring B so it clears the separator roller C by 0.5-1.0 mm (.020-0.040 inch)
3. Tighten the screw A.

PICTURE 23

10.2 Adjustable Single Bin Sheetfeed Models 5202 and 5204

Subtopics
10.2.1 General Information
10.2.2 Sheetfeed Diagnostic Test
10.2.3 Single Bin Sheetfeed Adjustments

10.2.1 General Information

If a sheetfeed device is installed, the correct combination of margin stop and adjuster must be used. If the correct margin adjuster is not used, the machine will indicate a transport error.

Subtopics
10.2.1.1 Installation Guide for Margin Stop and Adjuster

10.2.1.1 Installation Guide for Margin Stop and Adjuster

- For a Model 5202, use a black margin stop and a green margin adjuster.
- For a Model 5204, use a gray margin stop and a green margin adjuster.

Note: The gray margin stop is factory installed.

Move setup switch in switch group A (5204), or switch group 1 (5202) to the On position.

10.2.2 Sheetfeed Diagnostic Test

1. Press and release the **Start/Stop** button to turn the **Ready** light Off. You may have to press and release the **Start/Stop** button two times.
2. Press the **Form Feed** button. The paper feeds from the supply tray to the first writing line.
3. Press the **Form Feed** button again. The paper feeds into the output tray.

10.2.3 Single Bin Sheetfeed Adjustments

Subtopics
10.2.3.1 Clutch
10.2.3.2 Sheetfeed Timing

10.2.3.1 Clutch

1. Remove the clutch.
2. Position the spring clutch extension A in one of the slots so the unlatching extension B is above the center line C.
3. Rotate the arbor D counterclockwise one revolution to seat it, then check the adjustment.
4. Install the clutch.

PICTURE 24

10.2.3.2 Sheetfeed Timing

1. Rotate the D-roller gear to its latched position.
2. Remove the D-roller trip gear.
3. Align the mark on the D-roller trip gear with the mark on the D-roller gear, then install the D-roller trip gear.

Note: After you make this adjustment, the first sheet of paper may not feed correctly. If this happens, clear the paper and try it again. The paper should feed correctly the second try.

PICTURE 25

10.3 Single Drawer Sheetfeed Models 5201 and 5202

Subtopics
10.3.1 Entry and Exit Roller Adjustment

10.3.1 Entry and Exit Roller Adjustment

1. Unplug the sheetfeed attachment cable from the printer.
2. Remove the sheetfeed from the printer.
3. Remove the paper deflector from the sheetfeed.
4. Remove the left and right side covers. Gently remove the electronics card shield if necessary to gain access to the right side cover attachment screws.
5. Place the sheetfeed face down on a work surface with the paper sensor toward you on the right facing upward.

PICTURE 26

Figure 9. Entry and Exit Roller Fixed Shaft

6. Locate the entry roller fixed shaft (Figure 9).

PICTURE 27

Figure 10. Entry and Exit Roller Screw Adjustment

PICTURE 28

Figure 11. Entry and Exit Roller Shaft Adjustment

7. Loosen the entry roller screw (Figure 10). Using a screwdriver, rotate the entry roller shaft (Figure 11) until you detect minimum drag between the plastic and rubber rollers. (There may not be any clearance between the rollers at this point.)
8. Rotate the entry roller shaft (Figure 11) counterclockwise 1/4 turn and tighten the entry roller screw (Figure 10).
9. Insert a sheet of 20-pound bond paper between the entry rollers by rotating the large gear (Figure 10) nearest you, clockwise. Roll the paper in about half its length.

PICTURE 29

Figure 12. Entry and Exit Roller Slip Force Adjustment

10. Attach a spring force gage (P/N 0460870) to the edge of the paper nearest you in line with the entry rollers, using a bent paper clip and tape (Figure 12).
11. Prevent the gears on the left from turning and slowly pull the paper toward you with the spring gage, observing the force at which the paper slips between the entry rollers.
12. The slip force should be between 3/4 pound and 1 pound, with 1 pound being ideal. If the reading in step 11 is less than 3/4 pound, loosen the entry roller screw (Figure 10) and rotate the entry roller shaft (Figure 11) a little further counterclockwise, tighten the entry roller screw (Figure 10), and check the slip force. If the reading was above 1 pound, loosen the entry roller screw (Figure 10), rotate the entry roller shaft (Figure 11) slightly clockwise, tighten the entry roller screw (Figure 11), and check the slip force. Repeat until the required reading is obtained.
13. Reposition the sheetfeed on the work surface so it is still face down, with the paper sensor away from you on the left facing upward.
14. Repeat steps 6 through 12 to adjust the exit roller.

11.0 Chapter 11. Parts Catalog

This chapter contains illustrations and exploded views of the Serial Printers and sheet feeds described in this book. Corresponding lists of part numbers and descriptions help you identify and order the part or assembly you need.

Subtopics

11.1 Assemblies

11.1 Assemblies

Adjustable Single Bin Sheet Feed Assembly (1 of 2) 11.1.25
Adjustable Single Bin Sheet Feed Assembly (2 of 2) 11.1.26
Dual Drawer S. F. Block Assembly 11.1.23
Dual Drawer S. F. Cover Assembly 11.1.19
Dual Drawer S. F. Envelope Feed Assembly 11.1.24
Dual Drawer S. F. Frame 11.1.21
Dual Drawer S. F. Side Plates Assembly 11.1.22
Dual Drawer S. F. Tray Assembly 11.1.20
Single Drawer Sheet Feed (5201, 5223, 6902, 6903, Early 5202 Printers) 11.1.18
5201 Carrier Assembly 11.1.5
5201 Cover and Frame Assembly 11.1.1
5201 Electronics 11.1.4
5201 Paper Feed Assembly 11.1.2
5201 Transport Assembly 11.1.3
5202 Carrier Assembly (1 of 3) 11.1.10
5202 Carrier Assembly (2 of 3) 11.1.11
5202 Carrier Assembly (3 of 3) 11.1.12
5202 Cover Assembly 11.1.6
5202 Electronics 11.1.9
5202 Paper Feed and Pinfeed Assembly 11.1.7
5202 Transport Assembly 11.1.8
5204 Carrier Assembly 11.1.17
5204 Cover Assembly 11.1.13
5204 Electronics 11.1.16
5204 Paper Feed Assembly 11.1.14
5204 Transport Assembly 11.1.15

Subtopics

11.1.1 Assembly 1: 5201 Cover and Frame Assembly
11.1.2 Assembly 2: 5201 Paper Feed Assembly
11.1.3 Assembly 3: 5201 Transport Assembly
11.1.4 Assembly 4: 5201 Electronics
11.1.5 Assembly 5: 5201 Carrier Assembly
11.1.6 Assembly 6: 5202 Cover Assembly
11.1.7 Assembly 7: 5202 Paper Feed and Pinfeed Assembly
11.1.8 Assembly 8: 5202 Transport Assembly
11.1.9 Assembly 9: 5202 Electronics
11.1.10 Assembly 10: 5202 Carrier Assembly (1 of 3)
11.1.11 Assembly 11: 5202 Carrier Assembly (2 of 3)
11.1.12 Assembly 12: 5202 Carrier Assembly (3 of 3)
11.1.13 Assembly 13: 5204 Cover Assembly
11.1.14 Assembly 14: 5204 Paper Feed Assembly
11.1.15 Assembly 15: 5204 Transport Assembly
11.1.16 Assembly 16: 5204 Electronics
11.1.17 Assembly 17: 5204 Carrier Assembly
11.1.18 Assembly 18: Single Drawer Sheet Feed (5201, 5223, 6902, 6903, Early 5202 Printers)
11.1.19 Assembly 19: Dual Drawer S. F. Cover Assembly
11.1.20 Assembly 20: Dual Drawer S. F. Tray Assembly
11.1.21 Assembly 21: Dual Drawer S. F. Frame
11.1.22 Assembly 22: Dual Drawer S. F. Side Plates Assembly
11.1.23 Assembly 23: Dual Drawer S. F. Block Assembly
11.1.24 Assembly 24: Dual Drawer S. F. Envelope Feed Assembly
11.1.25 Assembly 25: Adjustable Single Bin Sheet Feed Assembly (1 of 2)
11.1.26 Assembly 26: Adjustable Single Bin Sheet Feed Assembly (2 of 2)
11.1.27 Assembly 27: Element Exchange Printers

11.1.1 Assembly 1: 5201 Cover and Frame Assembly

PICTURE 30

Asm-Index	Part Number	Units	Description
1-1	1341078	1	Paper Table
-2	1341062	1	Cover, Top and Center
-3	1342140	1	□ Door, Options Access
-4	1337667	2	□ Hinge, Cover Replace both hinges
-5	1384251	1	Frame Assembly, Machine Also order P/N 1384044 and 1384047
-6	1341178	1	Label, Electrical Requirements
-7	1341165	1	Label, FCC
-8	1341081	1	Cover, Bottom Also order P/N 1341178, 1341165, and 1384017
-9	1337587	4	□ Latch, Frame Replace all 4
-10	1341046	1	Plug, Wrap
-11	1341074	1	Holder, Wrap Plug
-12	1384017	1	Label, Serial Number
-13	1341068	1	Panel Assembly, Front Cover
-14	1341202	1	Logo, Top
-15	1342274	1	Label, Qualification
-16	1342151	NS	Logo, Center Rear (Made in U.S.)
-17	1384496	NS	Screw Pack
-18	1384497	NS	Spring Pack
-19	1384498	NS	Screw Pack
-20	1384499	NS	Retainer Pack

11.1.2 Assembly 2: 5201 Paper Feed Assembly

PICTURE 31

Asm-Index	Part Number	Units	Description
2-1	1384043	1	Motor, Paper Feed
-2	1337033	1	□ Gear, Paper Feed Intermediate
-3	1384499	AR	Retainers, 520X
-4	1384145	1	Roller Assembly, Paper Feed-Left
-5	1384146	1	Roller Assembly, Paper Feed-Right
-6	1341069	2	Clip-Platen Ground
-7	1384411	1	Platen
-8	NP	2	□ Latch, Platen
-9	1339237	1	Deflector, Paper Feed
-10	1384047	1	Lever, Paper Release Also contains P/N 1384499 and 1384497
-11	1384498	AR	Screws, 520X
-12	1384497	AR	Springs, 520X
-13	1384496	AR	Screws and Washers, 5201 Carrier
-14	1337061	1	Lever (SAPI)
-15	1317925	1	Switch (SAPI)
-16	1384044	1	Paper Bail Assembly
-17	1317976	2	Clip, Paper Feed Roller Assembly Retainer
-18	1337884	1	Shaft, Paper Feed Cam Also order P/N 1384047
-19	1384412	AR	First Writing Line Knock Off
-20	1341091	AR	Form Feeder, Pin Wheel
-21	1341086	2	□ Paper Insertion Clip
-22	1341112	1	□ Belt, Drive
-23	1341176	2	□ Spring, Pin Wheel Cover
-24	1341174	2	□ Cover, Pin Wheel
-25	1341138	1	□ Switch and Cable
-26	1341128	AR	□ Pad

11.1.3 Assembly 3: 5201 Transport Assembly

PICTURE 32

Asm-Index	Part Number	Units	Description
3-1	1384264	1	Transport Motor
-2	1384261	1	Transport Assembly
-3	1337651	1	□ Belt, Transport
-4	1339140	1	□ Bracket, Transport Mounting
-5	1337014	1	□ Bracket, Motor
-6	1339152	1	□ Bracket, Pulley
-7	1339146	1	□ Pulley

11.1.4 Assembly 4: 5201 Electronics

PICTURE 33

Asm-Index	Part Number	Units	Description
4-1	1384211	1	Printer Board
-2	1337087	1	Cable Assembly, Encoder, Transport Motor
-3	1337688	1	Lid Assembly, Power Supply
-4	1337235	1	Print Head Driver Regulator Assembly
-5	1337240	1	Cover Assembly, Power Supply
-6	1341043	1	IO Cable/Feature Cable
-7	4423373	1	□ Screw, Thumb
-8	1317758	2	Cable, Bottom Cover Ground
-9	1339037	1	Cable (SAPI)
-10	1342652	1	Cover, Function Board
-11	1337880	2	Support Function Board
-12	1384421	1	Function Board, 5201-001 Includes Shield
-12	1384569	1	Function Board, 5201-002 Includes Shield
-13	1337204	1	Housing, Font
-14	1337026	1	Cable Assembly, System
-15	1337598	1	Cable Carrier
-16	1384271	1	Power Supply
-17	1342514	NS	Line Cord
-18	1342608	1	Switch
-19	0855253	1	Fuse, 1 A
-20	0511063	1	Fuse, 10 A

11.1.5 Assembly 5: 5201 Carrier Assembly

PICTURE 34

Asm-Index	Part Number	Units	Description
5-2	1337634	1	Cable, Print Head
-3	1337071	1	Shaft, Carrier
-4	1384242	1	Brake Assembly
-5	1337171	1	Cardholder
-6	1342209	1	Cardholder Bracket-Left
-7	1342208	1	Cardholder Bracket-Right
-8	1622170	2	Screw
			Part of Parts Packet 1384498
-9	1342746	1	Clutch, Ribbon Feed
-10	1342224	1	Spring-Ribbon Feed Cable
-11	1337492	2	Bearing-Carrier
-12	1337301	1	Retainer-Carrier Bearing
-13	1337211	1	Bearing-Carrier Base
-14	1337562	1	Spacer, Print Head Cable Ground
-15	1622536	4	Screw
			Part of Parts Packet 1384496
-16	1342287	1	Ribbon Takeup Gear Assembly
-17	1337300	1	Handle-Load Lever
-18	1342282	1	Flag
-19	1342278	1	Shockarm Takeup
-20	1339710	1	Carriage Position Indicator
-21	1342460	1	Ground Brush
-22	1337294	1	Pinch Roller
-23	1384415	1	Carrier Assembly

11.1.6 Assembly 6: 5202 Cover Assembly

PICTURE 35

Asm-Index	Part Number	Units	Description
6-1	1318116	1	Logo, Top
-2	1318106	1	Shield, Clear
-3	1318117	1	Logo, Rear
-4	1318204	1	Cover, Top and Center
-5	1318107	1	Plunger, Cover Interlock
-6	1318114	1	Connector Cover
-7	1341014	1	Thumbscrew, Ground Cable
-8	1318207	1	Panel Assembly, Control
-9	1318188	1	□ Overlay, Control Panel, English
-10	1314017	1	Label, Serial Number
-11	1318320	1	Label, FCC
-12	1318316	1	Label, Electrical Requirements
-13	1318209	1	Cover, Bottom
-14	1318112	4	□ Latch, Frame Replace all 4
-15	1384710	NS	Parts Pack, 5202

11.1.7 Assembly 7: 5202 Paper Feed and Pinfeed Assembly

PICTURE 36

Asm-Index	Part Number	Units	Description
7-1	1384709	1	Motor Assembly, Paper Feed Level 1
-2	1384995	1	Motor Assembly, Paper Feed Level 2
-3	6486501	1	Gear, Intermediate Also order P/N 1384705
-4	1384705	1	Platen Also order P/N 6486501
-5		2	□ Latch, Platen
-6	1339237	1	Deflector
-7	1384145	1	Roller Assembly Paper Feed LH Also order P/N 1384146
-8	1384146	1	Roller Assembly Paper Feed RH Also order P/N 1384145
-9	1337884	1	Shaft, Paper Feed Cam Also order P/N 1317976
-10	1317976	2	Clip, Retainer
-11	1384047	1	Lever, Paper Release Includes P/N 1337884
-12	1384810	1	Switch (SAPI)
-13	1337061	1	Lever (SAPI)
-14	1384921	1	Paper Bail Assembly
-15	1362388	1	Bail Arm, Left
-16	1430498	1	Bail Arm, Right
-17	1318473	1	Clip, Platen Ground
-18	1318214	1	Pinfeed Assembly
-19	1341174	2	□ Cover, Pinwheel Assembly
-21	1318361	NS	□ Standoff, Single Sheet Feed
-22	1318401	NS	□ Adapter, Single Sheet Feed Connector
-23	1384704	1	□ Knockoff Assembly

11.1.8 Assembly 8: 5202 Transport Assembly

PICTURE 37

Asm-Index	Part Number	Units	Description
8-1	1384706	1	Motor, Transport (Level 1)
-2	1384999	1	Motor, Transport (Level 2)
-3	1384707	1	Transport Drive Assembly
-3A	1339152	1	□ Bracket
-3B	1339146	1	□ Pulley
-4	1318295	1	□ Belt, Intermed.
-5	1621197	AR	Screw
-6	1623642	AR	Screw Also part of Parts Packet 1384710
-7	1337651	1	Belt, Transport
-8	1339140	1	Bracket, Transport Meeting
-9	1384712	1	Frame Assembly Also order P/N 1384044

11.1.9 Assembly 9: 5202 Electronics

PICTURE 38

Asm-Index	Part Number	Units	Description
9-1	1384700	1	Power Supply Assembly
-2	1035036	2	□ On/Off Switch
-3	855253	2	□ Fuse, 1 A
-4	1035073	2	□ Fuse, 5 A
-5	1318175	1	Cable, Index
-6	1318115	1	Cover, Printer Board Level 1
-6	1319560	1	Cover Level 2
-7	1384701	1	Board, Printer Level 1
-7	1384781	1	Board, Printer Level 2
-8	1384713	1	Regulator Assembly Level 1
-8	1384782	1	Regulator Assembly Level 2
-9	1318354	1	Cable (SAPI) Level 1
-9	1319520	1	Cable Level 2
-10	1246807	1	Cable, Ground
-11	6952301	1	Line Cord

11.1.10 Assembly 10: 5202 Carrier Assembly (1 of 3)

PICTURE 39

Asm-Index	Part Number	Units	Description
10-1		1	Print Head (Customer Item)
-1A	1337071	1	Shaft, Carrier
-2	1384702	1	Carrier Assembly L1
-2	1384997	1	Carrier Assembly L2
-3	1317862	1	□ Pad, Print Head
-4	1318240	1	□ Clip, Cover
-5	1318288	1	□ Pad, Gimbal
-5	1318287	1	□ Bracket, Pad
-6	1318449	1	□ Roller
-7	1318230	1	□ Bracket, Brake
-8	1318286	1	□ Latch, Cartridge
-9	1318199	1	□ Cardholder
-10	1318217	1	□ Sensor, Paper
-11	1318219	1	□ Bracket, Head Actuator

11.1.11 Assembly 11: 5202 Carrier Assembly (2 of 3)

PICTURE 40

Asm-Index	Part Number	Units	Description
11-1	1384702	1	Carrier Assembly
-2	1384796	NP	□ Motor, Feed
-3	1318233	1	□ Load Lever Release Arm
-4	1318249	1	□ Solenoid, Print Head
-5	1384708	1	□ Board, Carrier Level 1
-5	1384996		□ Board, Level 2
-6	1318194	1	□ Front Carrier Shoe
-7	1318276	1	□ Mount, Board
-8	1318193	1	□ Hub Assembly
-9	1318229	1	□ Load Lever Assembly
-10	1317894	1	□ Collar, Takeup
-11	1318284	1	□ Motor, Takeup
-12	1318277	1	□ Cable, Carrier

11.1.12 Assembly 12: 5202 Carrier Assembly (3 of 3)

PICTURE 41

Asm-Index	Part Number	Units	Description
12-1	1384702	1	Carrier Assembly
-2	1337449	1	□ Roller
-3	1318349	1	□ Roller, Ground
-4	1318236	1	□ Pivot Plate, Ground
-5	1318285	1	□ Link, Ground
-6	1318347	1	□ Sensor Assembly
-7	1318198	1	□ Arm, Sector
-8	1342278	1	□ Takeup Arm Assembly
-9	1342298	1	□ Stud, Takeup Arm Assembly
-10	1337116	1	□ Roller

11.1.13 Assembly 13: 5204 Cover Assembly

PICTURE 42

Asm-Index	Part Number	Units	Description
13-1	1319494	1	Logo, Top
-2	1319211	1	Dust Cover
-3	1319016	1	Sound Hood
-4	1318644	1	Logo, Rear
-5	1319004	1	Cover, Top and Center
-6	1319207	1	Plunger, Cover Interlock
-7	1318114	1	Connector Cover
-8	1341014	1	Thumbscrew, Ground Cable
-9	1319008	1	Panel Assembly, Control
-10	1319243	1	□ Overlay, Control Panel, English
-11	1319400	1	Label, Machine ID
-12	1319139	1	Cover, Bottom
-13	1318112	4	□ Latch Frame
-14	1319032	1	Air Duct
-15	1319392	1	Air Deflector

11.1.14 Assembly 14: 5204 Paper Feed Assembly

PICTURE 43

Asm-Index	Part Number	Units	Description
14-1	1384974	1	Motor Assembly, Paper Feed
-2	1319186	1	Gear, Intermediate
-3	1384975	1	Platen
-4	1339074	2	□ Latch, Platen
-5	1319177	1	□ Bushing, Platen Ground
-6	1319172	1	□ Clip, Platen Ground
-7	1339237	1	Deflector
-8	1384145	1	Roller Assembly Paper Feed LH Includes Ref 19 and 20
-9	1384146	1	Roller Assembly Paper Feed RH Includes Ref 19 and 20
-10	1337884	1	Shaft, Paper Feed Cam Also order P/N 1317976
-11	1317976	8	Clip, Paper Feed Roller Assembly Retainer
-12	1384047	1	Lever, Paper Release Assembly Includes P/N 1337884
-13	1430489	1	Switch, (SAPI)
-14	1430492	1	Lever, (SAPI)
-15	1384985	1	Paper Bail Assembly
-16	1362388	1	Bail Arm, Left
-17	1430498	1	Bail Arm, Right
-18	1384704	1	Knockoff Assembly
-19	1432603	2	Front Feed Roll
-20	1432606	2	Rear Feed Roll
-21	1319036	2	Wedge, Platen
-22	1319226	1	Pinfeed Assembly
-23	1341174	2	Cover, Pinwheel Assembly
-24	1319017	1	Sound Hood, Pinfeed
-25	1319212	2	Brackets Pinfeed
-26	1384978	NS	Miscellaneous 5204 Carrier Parts
-27	1339099	1	Screw
-28	1384988	NS	Miscellaneous 5204 Parts

11.1.15 Assembly 15: 5204 Transport Assembly

PICTURE 44

Asm-Index	Part Number	Units	Description
15-1	1384977	1	Transport Drive Assembly
-2	1384976	1	Motor, Transport
-3	1337014	1	□ Bracket
-4	1319216	1	□ Gear Assembly
-5	1319157	1	Bracket
-5A	1319164	1	Pulley
-6	1319011	1	Belt, Transport
-7	1339140	1	Bracket, Transport Meeting
-8	1384028	1	Frame Assembly
			Also order P/N 1384985

11.1.16 Assembly 16: 5204 Electronics

PICTURE 45

Asm-Index	Part Number	Units	Description
16-1	1384965	1	Power Supply Assembly
-2	1035036	2	□ On/Off Switch
-3	1318746	1	□ Ground Wire
-4	1319022	1	Cable, Index
-5	1319209	1	Printer Board Cover Includes door
-6	1319108	1	Cable Clamp
-7	1384983	1	Printer Board
-8	1430118	1	Cable (SAPI)
-9	1246807	1	Cable, Ground
-10	1319133	1	Cable, Ground
-11	1342514	1	Line Cord
-12	1319391	1	Print Buffer Option

11.1.17 Assembly 17: 5204 Carrier Assembly

PICTURE 46

Asm-Index	Part Number	Units	Description
17-1	09F1496	1	Print Head
-2	1384982	1	Carrier Assembly
-3	1318720	AR	□ Retainer
-4	1318217	AR	□ Paper Sensor
-5	1319070	1	□ Cardholder
-6	1319024	1	□ Oil Wick
-7	1319019	2	□ Ribbon Latch
-8	1319095	1	□ Plate
-9	1319037	1	□ Plate
-10	1319062	1	□ Carrier Shoe Screw
-11	1319089	1	□ Adjusting Nut
-12	1319096	1	□ Plate
-13	1384981	1	□ Ribbon Motor
-14	1319068	1	□ Spring
-15	1319127	1	□ Cable Clamp
-16	1318277	1	□ Carrier Cable
-17	1383331	1	□ Carrier Board
-18	1319102	1	□ Ribbon Sensor
-19	1319174	1	Carrier Shaft
-20	1319170	1	Bushing, Left
-21	1319201	1	Bushing, Right
-22	1319178	1	Adjusting Plate

11.1.18 Assembly 18: Single Drawer Sheet Feed (5201, 5223, 6902, 6903, Early 5202 Printers)

PICTURE 47

Asm-Index	Part Number	Units	Description
18-1	6373092	1	Cover, Left Side
-2	6373091	1	Cover, Right Side
-3	6373090	1	Cover, Center
-4	6373135	NS	Kit, Fastener
-5	6373097	1	Frame Assembly
-6	6373075	2	□ Sensor
-7	1159913	1	□ Tie, Cable
-8	6373073	1	□ Motor, Stepper
-9	6373049	2	□ Pulley
-10	6373061	1	□ "D" Roller Assembly
-11	6373113	1	□ Weight
-12	6373066	2	□ Latch, Platen
-13	6373062	1	□ Opener, Bail, Right
-14	6373063	1	□ Opener, Bail, Left
-15	6373076	1	□ Deflector, Paper
-16	6373139	NS	□ Kit, Gear
-17	8655073	1	Tray, Paper, U.S.
-18	6373083	NS	Box, Packing
-19	6373080	NS	Cushion, Packing, Right
-20	6373081	NS	Cushion, Packing, Left
-21	6373094	1	Card, Electronics
-22	6373095	1	Cable, Attachment
-23	6373136	1	Shield, Card

11.1.19 Assembly 19: Dual Drawer S. F. Cover Assembly

PICTURE 48

Asm-Index	Part Number	Units	Description
19-1	1479605	1	Cover, LH End
-2	1479691	1	Door, LH End Cover
-3	6487481	1	Foam, LH End Cover
-4	1479552	1	Cover, Back
-5	1479523	1	Cable Assembly
-6	1479606	1	Cover, RH End
-7	6487482	1	Foam, RH End Cover
-9	1479695	1	Mounting Brackets
-10	1384804	1	Paper Deflector
-11	1318711	1	Margin Adjuster, Blue
-12	2684095	NS	Logo, IBM
-13	1204624	NS	Label (Made in U.S.)
-14	6487459		Miscellaneous Parts, Dual Sheet Feed
-15	1318710		Margin Stop, Black 5202
-15	1319106		Margin Stop, Gray 5204

11.1.20 Assembly 20: Dual Drawer S. F. Tray Assembly

PICTURE 49

Asm-Index	Part Number	Units	Description
20-1	6487467	1	Tray Assembly, Supply
-2	1479591	1	□ Latch, Paper Loading
-3	1479588	1	□ Spring, Paper Lift
-4	1479590	1	□ Tab, Corner
-5	6487448	1	□ Plate Assembly, Supply Tray
-6	1479589	1	□ Restraint, RH
-7	6487468	1	□ Base, Supply Tray
-8	1479592	1	□ Restraint, Buckler
-9	4466773	1	Labels
-10	1383304	1	Tray Assembly, Output

11.1.21 Assembly 21: Dual Drawer S. F. Frame

PICTURE 50

Asm-Index	Part Number	Units	Description
21-1	6487464	1	Frame
-2	1479600	1	Guide, Upper
-3	1479599	1	Guide, Lower
-4	1479551	1	Bearing, Output Shaft
-5	6487411	1	Brush, Static Discharge
-6	1479604	1	Guide, Single Insert
-7	1058066	1	Output Shaft
-8	1479544	1	D-Roller, Upper
-9	1479546	1	D-Roller, Lower
-10	1479573	1	Gear, Output Shaft
-11	1479557	1	Gear, Idler
-12	1479574	2	Gear, D-Roller
-13	6487484	2	Foam, Frame

11.1.22 Assembly 22: Dual Drawer S. F. Side Plates Assembly

PICTURE 51

Asm-Index	Part Number	Units	Description
22-1	6487457	1	Plate Assembly, LH Attachment
-2	1479608	1	□ Plate, LH Attachment
-3	6487447	1	□ Latch
-4	1479601	1	□ Plate, Idler Gear
-5	1479598	1	□ Gear, Attachment Plate 23T
-6	1479597	1	□ Gear, Attachment Plate 20/31T
-7	6487416	1	□ Pin, Attachment Gear
-8	81X8580	1	Stud
-9	81X8581	1	Left Bail Lift Bellcrank
-10	81X8582	1	Link
-11	1127727	1	Clevis
-12	81X8586	1	Bellcrank
-13	81X8584	1	Transfer Shaft
-14	81X8585	1	LH Bail Cam Follower
-15	6487458	1	Plate Assembly RH Attachment
-16	1058056	1	□ LH Bail Cam
-17	1058055	1	□ Cam, Bail
-18	1479610	1	□ Plate, RH Attachment
-19	1479562	1	□ Gear, Bail Clutch 20T
-20	1479561	1	□ Gear, Bail 20T
-21	1479617	3	□ Gear, Bail Idler 29T
-22	6487422	1	□ Gear, Idler 29T
-23	4466604	1	□ Lever, Bail
-24	6487454	1	□ Tab, Bail Lever
-25	1058053	1	□ Bellcrank, Bail
-26	6487421	1	□ Spring, Bail Clutch
-27	1058062	1	□ Magnet Assembly, Bail Clutch
-27	1058065	1	□ Field B/M Includes P/N 1058056, 1058055, 1058053, 1058062, and installation instructions

11.1.23 Assembly 23: Dual Drawer S. F. Block Assembly

PICTURE 52

Asm-Index	Part Number	Units	Description
23-1	1383305	1	Block Assembly, Paper Feed
-2	1479595	3	□ Roller, Cone
-3	1479559	4	□ Roller, Cone Backup
-4	1479573	3	□ Gear, Drive 19T
-5	6487412	2	□ Gear, Idler 19T
-6	1479558	1	□ Gear, Envelope Drive 16T
-7	1479560	1	□ Gear
-8	1479583	1	□ Gear
-9	1479584	2	□ Gear, Clutch/Cam 68T
-10	1058092	1	□ Magnet Assembly, Sheet Feed
-11	1479576	1	□ Spring, Clutch Trip
-12	1479575	2	□ Gear, Clutch/Cam 68T
-13	1058071	1	□ Output Roller Also order P/N 1058083
-14	1058083	1	□ Backup Roller

11.1.24 Assembly 24: Dual Drawer S. F. Envelope Feed Assembly

PICTURE 53

Asm-Index	Part Number	Units	Description
24-1	6487469	1	Envelope Feed Asm
-2	1479652	1	□ Restraint
-3	1479649	1	□ Spring
-4	1479643	1	□ Magnet, Envelope
-5	1479635	1	□ Arm
-6	1479624	1	□ Roller
-7	81X8572	6	□ Bushing
-8	81X8577	5	□ Roll Pin
-9	1479632	1	□ Shaft
-10	81X8575	1	□ Roller Assembly
-11	1479623	1	□ Gear
-12	1479621	1	□ Gear
-13	1479629	1	□ Gear
-14	1479631	1	□ Shaft
-15	1479638	1	□ Roller
-16	1479622	1	□ Gear
-17	1479637	1	□ Roller
-18	1479626	1	□ Shaft
-19	1479628	1	□ Gear
-20	1479650	1	□ Floor
-21	1479642	1	□ Spring
-22	1479640	2	□ Roller
-23	1479646	1	□ Shaft
-24	1479639	2	□ Roller
-25	1479634	1	□ Shaft
-26	1479641	1	□ Gear
-27	1479630	1	□ Aligner
-28	81X8573	1	□ Spring
-29	1479627	1	□ Frame
-30	81X8570	1	□ Roller
-31	1479636	1	□ Weight
-32	1204624	NS	Label (Made in U.S.)
-33	1479648	1	Cover, RH
-34	6487419	1	Cover, LH

11.1.25 Assembly 25: Adjustable Single Bin Sheet Feed Assembly (1 of 2)

PICTURE 54

Asm-Index	Part Number	Units	Description
25-1	1204624	1	Label (Made in U.S.)
-2	6486933	1	Deflector Paper Entry
-3	1058616	1	Label, Quick Reference
-4	1058626	1	Support, Paper
-5	6486936	1	End of Paper Guide
-6	6486930	1	Guide
-7	6819561	1	Spring, Paper Guide
-8	6486931	1	Pivot, Paper Guide
-9	6486932	1	Rail, Paper Guide
-10	6486926	1	Plate Assembly, Lift
-11	6486938	1	Pad
-12	6486937	1	Lever, Loading
-13	1058664	1	Arm, Roller
-14	1058663	1	Roller
-15	6486929	1	Spring, Lift Plate
-16	6486943	1	Spring, Corner Tab
-17	6486927	1	Tab, Corner
-18	1058615	1	Shaft Bail Cam
-19	1058614	1	Bail Cam
-20	6486925	1	Frame
-21	6486960	1	D-Roller Assembly
-22	1058618	1	Label, Information
-23	1058680	1	Deflector, Paper Exit
-24	6486965	1	Roller, Exit
-25	1058652	1	Static Eliminator
-26	1058656	1	Cover, Output
-27	6486941	1	Exit tray
-28	6486992	1	Cover, Left
-29	1058624	1	Cover, Right
-30	1058660	1	Margin Adjuster, Green
-31	1384992	AR	Miscellaneous Parts
-32	1318710	1	Margin Stop, Black 5202
-32	1319106	1	Margin Stop, Gray 5204

11.1.26 Assembly 26: Adjustable Single Bin Sheet Feed Assembly (2 of 2)

PICTURE 55

Asm-Index	Part Number	Units	Description
26-1	1058603	1	Plate Assembly, Left Side
-2	6486974	1	□ Latch, Sheet Feed
-3	6486985	1	□ Spring, D-Roller Actuating
-4	1058658	1	□ Intermediate Bail Operating Arm
-5	6486976	1	□ Bail Operating Arm
-6	1058606	1	□ Gear, Bail Trip
-7	1058607	1	Gear, Bail Cam
-8	6486984	1	Gear, D-Roller
-9	6486923	2	Gear, Exit Roller
-10	1058604	1	Plate Assembly, Right Side
-11	6486974	2	□ Latch, Sheet Feed
-12	1058605	1	□ Idler Gear
-13	6486921	1	□ Gear, Clutch
-14	6486983	1	□ Spring, Clutch
-15	6486934	1	□ Lever, Trip
-16	6486981	1	□ Lever, Clutch Latch
-17	1058608	1	□ Gear, Sheet Feed Drive
-18	6486922	1	□ Gear, Idler 20 and 26 Tooth
-19	6486976	1	□ Bail Operating Arm
-20	1058658	1	□ Intermediate Bail Operating Arm
-21	6486920	1	Gear, D-Roller Latch
-22	1058657	1	D-Roller Latch Spring
-33	1058610	1	Bearing
-34	1341099	1	Bearing
-35	1058611	1	Bearing

11.1.27 Assembly 27: Element Exchange Printers

Machine Type	**Part Number**	**Description**
3852-001	1348520	Colorprinter (3270-PC, /G, /GX only)
3852-002	1686264	Color Jetprinter (PC, XT, AT attach)
5152-002	8529246	Graphics Printer (Replaces 5152-001 Matrix Printer)
5182-001	6323469	Color Printer
5216-001 -002	6082120	Wheelprinter Only - order attach card as required
	6082180	5216 Parallel Attach Card (for model 001)
	6082250	5216 Serial Attach Card (for model 002)
5223-001	1279850	Wheelprinter E

BACK_1 Part Number Index