



# 2225A/B/C/D TABLE OF CONTENTS

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## 1

# PRODUCT INFORMATION

## A. PRODUCT DESCRIPTION

MODEL	INTERFACE	POWER INPUT
2225A	HP-IB I/O	AC with selectable line voltage
2225B	HP-IL I/O	Battery powered
2225C	Centronics-type I/O	AC with selectable line voltage
2225C	Centronics-type I/O	AC with 120 line volts only*
2225D	RS-232-C I/O	AC with selectable line voltage

\*US only

## B. FUSE SIZES AND RATINGS

LINE VOLTAGE	COUNTRY	FUSE RATING	FUSE SIZE	CARRIER
100 volt AC	Japan	500 mA TD	3 AG	White
120 volt AC	USA	400 mA TD	3 AG	White
220 volt AC	Europe	250 mA TD	5 × 20mm	Black
240 volt AC	UK	200 mA TD	5 × 20mm	Black

## C. SPECIFICATIONS

<b>Print Speed:</b>	150 cps (normal) 75 cps (expanded) 266 cps (compressed)
<b>Print Direction:</b>	Bidirectional, optimized path
<b>Carriage Return Rate:</b>	.53 seconds (6.66 inches)
<b>Linefeed Rate:</b>	.08 seconds @ 6 lpi .06 seconds @ 8 lpi
<b>Paper Slew Rate:</b>	5.28 seconds (11" paper); 2.08 ips
<b>Print Modes:</b>	Normal Bold Underline
<b>Character Cell:</b>	11 × 12 character cell (.083" H × .125" V)
<b>Dot Spacing:</b>	96 or 192 dots per inch horizontal 96 dots per inch vertical

**C. SPECIFICATIONS (Continued)**

<b>Dot Size:</b>	.015" on Mosinee
<b>Line Length:</b>	80 (normal) 40 (expanded) 142 (compressed) 71 (expanded-compressed)
<b>Paper Type:</b>	Single sheet (ink jet recommended) Z-fold pin feed
<b>Paper Length:</b>	11" 11.6" (European A4)
<b>Paper Width:</b>	8.65" (219.71mm) to 9.05" (229.87mm)
<b>Configuration:</b>	Escape sequences (2225A) Escape sequences and device dependent commands (2225B) Escape sequences and switches (2225C and 2225D)
<b>Buffer Size:</b>	1024 bytes
<b>Print Visibility:</b>	Last line visible
<b>Graphics:</b>	2225A-raster (12 rows × 640 or 1280 col.) 2225B/C/D-raster (same as 2225A), column (8 high × 640 or 1280 wide)
<b>Character Sets:</b>	.HP Roman8 which includes 128 USASCII (upper/lower case and control) 96 Roman Extension (Supports Danish, Dutch, English, French, Finnish, German, IBM-8, Norwegian, Portuguese, Spanish, and Swedish)

**D. EQUIPMENT PROVIDED**

The 2225 Series printers are shipped with one each of the following accessories:

- Print head cartridge
- Packet of fanfold paper
- Paper separator
- ThinkJet Owner's Manual
- HP-IL interface cable (2225B only)
- Battery recharger (2225B only)
- Battery pack (2225B only)
- Power cord (2225A/C/D only)

**E. RECOMMENDED TOOLS**

The following tools are recommended for servicing the 2225 Series of printers:

- TORX Kit
- Extended T9 Bit (Fits in TORX pouch)
- DVM
- Oscilloscope
- Logic Probe

HP P/N 8710-1426  
 HP P/N 130-T9-MOU  
 HP 3425A or equivalent  
 HP 1220A or equivalent  
 HP 545A or equivalent

**F. 2225A/B/C/D GENERAL SUPPLIES AND ACCESSORIES**

PART NO.	ITEM(S)
02225-90046	Service Manual
2110-0340	Fuse—US (120V) 400mZ
2110-0489	Fuse—European (220V) 250mA
2110-0588	Fuse—UK (240V) 200mA
2110-0202	Fuse—Japan (100V) 500mA
92261A	Box of 10 print head cartridges
92261M	ThinkJet paper—500 sheets, single sheets
92261N	ThinkJet paper—2500 sheets, z-fold
92261S	Printer Stand—clear acrylic

**G. 2225A SUPPLIES AND ACCESSORIES**

PART NO.	ITEM(S)
02225-90031	Owner's Manual (Eng)
10833D	HP-IB cable—1/2 meter
10833A	HP-IB cable—1 meter
10833B	HP-IB cable—2 meter
10833C	HP-IB cable—4 meter



**H. 2225B SUPPLIES AND ACCESSORIES**

<b>PART NO.</b>	<b>ITEM(S)</b>
02225-90032	Owner's Manual (Eng)
82059D	Recharger—U.S.
82066B	Recharger—European 220V
82067B	Recharger—U.K.
Option #001	Recharger—S. African
82068B	Recharger—Australian
82069B	Recharger—European 110V
82167A	HP-IL cable—.5 meter
82167B	HP-IL cable—1 meter
82167D	HP-IL cable—5 meter
82199A	Battery pack

**I. 2225C SUPPLIES AND ACCESSORIES**

<b>PART NO.</b>	<b>ITEM(S)</b>
02225-90033	Owner's Manual (Eng)
82949A	HP Series 80 parallel printer interface
82957A	HP 86A printer cable

**J. 2225D SUPPLIES AND ACCESSORIES**

<b>PART NO.</b>	<b>ITEM(S)</b>
02225-90034	Owner's Manual (Eng)
13242G	HP 120, 125, 150, and 262X RS-232-C I/O Cable

**K. INTERFACE AND CABLE REQUIREMENTS FOR HP PRODUCTS**

SYSTEM SERIES MODEL	PRINTER MODEL	PRINTER INTERFACE	CABLE
HP 41C, CV, CX	2225B	82160A	82167A, B, or D
HP 71B	2225B	82401A	82167A, B, or D
HP 75C and D	2225B	Built-in	82167A, B, or D
HP 85*	2225A	82937A	10833A, B, C, or D
	2225B	82938A	82167A, B, or D
	2225C	82949A	—
	2225D	82939A	—
HP 86A	2225C	Built-in	82957A
HP 86B and 87	2225A	Built-in	10833A, B, C, or D
Series 100 (Touchscreen & Touchscreen Max)	2225A	Built-in	10833A, B, C, or D
	2225D	Built-in	13242G
Series 200	2225A	Built-in	10833A, B, C, or D

\*The HP 85 also requires an HP 00085-15002 Printer / Plotter ROM. The HP 85 does not require the 10833 cable if there are no other peripherals attached.

**L. NON-HP INTERFACE CABLE REQUIREMENTS**

SYSTEM SERIES MODEL	PRINTER MODEL	PRINTER INTERFACE	CABLE
Apple II, II+, IIe	2225C	Grappler + or Epson 8131 or 8132	Apple Part #590-0037
	2225D	Apple Super Serial Card	
Apple IIc	2225D	Built-in	Apple Part #590-0191-A
IBM, PC, PC XT	2225C	IBM parallel printer interface	IBM parallel printer cable
	2225D	IBM Asynchronous Comm. Adaptor	HP 1342H cable
TI PC	2225C	Built-in	TI 2223106-0001





2



ENVIRONMENTAL/  
INSTALLATION/PM

A. ENVIRONMENTAL

Temperature, free space ambient:

Operating .....	10 to 40° C (50 to 104°F)
Operating Survival .....	10 to 55°C (50 to 131° F)
Non-operating .....	- 20 to 60°C (- 4 to 140° F)

Humidity:

Operating .....	10% to 90% RH @ 40° C
Nonoperating .....	90% RH @ 60° C

Acoustics:

Sound pressure level-Lwa .....	<50 dB(A) @ 1 meter bystander position
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Altitude: (limited by print head cartridge)

Operating .....	0 to 4600 meters
Nonoperating .....	0 to 15300 meters

B. PHYSICAL CHARACTERISTICS

Physical Size: .....	206mm (8.1") D × 292mm (11.5") W × 89mm (3.5") H
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Net Weight:

2225A .....	3.36kg (7.4 lbs.)
2225B .....	2.5kg (5.5 lbs.)
2225C .....	3.1kg (6.8 lbs.)
2225D .....	3.27kg (7.2 lbs.)

C. ELECTRICAL CHARACTERISTICS





Power Requirements:

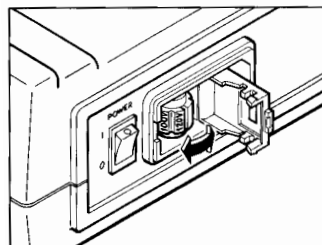
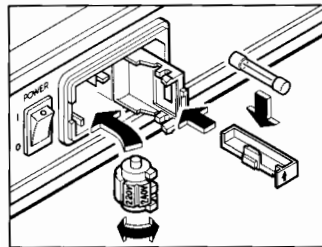
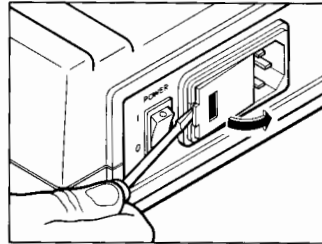
2225A .....	100, 120, 220, 240V (+5, - 10%) switch selectable
2225B .....	<6.5V (NiCad) will operate with low battery indication
	<6.2V (NiCad) unit stops operation
2225C with US Rear Panel .....	120V (+5, - 10%)
2225C with International Panel	
Rear Panel .....	100, 120, 220, 240V, (+5, - 10%) switch selectable
2225D .....	100, 120, 220, 240V (+5, - 10) switch selectable

Power Consumption: (worst case) .....	approx. 17 watts
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## D. VOLTAGE/FUSE SELECTION

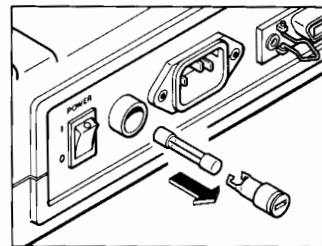
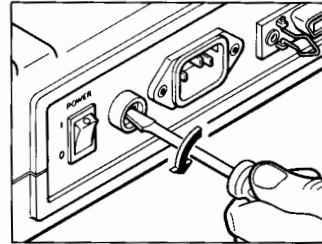
2225A/2225C (International)/2225D

		
100 volt AC	500 ma TD	
120 volt AC	400 ma TD	
220 volt AC	250 ma TD	
240 volt AC	200 ma TD	



2225C (US)

	120 volt AC / 400 ma TD
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## **E. PRODUCT SAFETY**

UL Listed  
CSA Certified  
FEI  
NEMKO  
KEMA  
TUV  
SEV  
VDE/FTZ, IEC Compliance



## **F. ELECTROMAGNETIC COMPATIBILITY**

FCC Class B Certified per FCC Rules, Part 15, subpart J, when used with a Class B computing device.

## **G. PREVENTATIVE MAINTENANCE**

There is no preventative maintenance required on the 2225A/B/C/D.

## **H. PRINT HEAD CARTRIDGE LIFE**

The disposable print head cartridge contains enough ink to print approximately 500 pages.



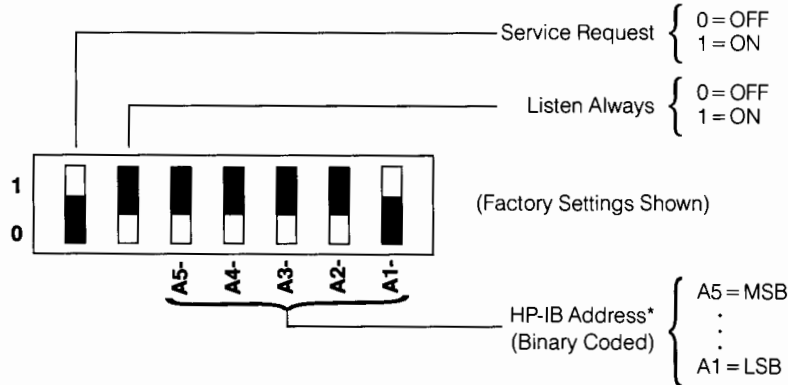
3

CONFIGURATION

A. CABLES

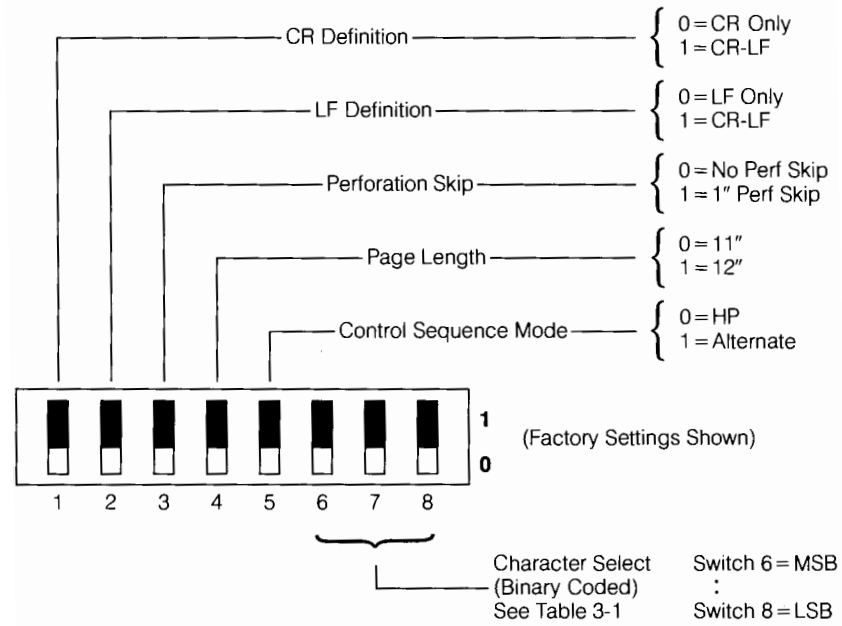
PRINTER	CABLE PART NUMBER	CABLE DESCRIPTION
2225A	10833D	HP-IB, 1/2 meter
	10833A	HP-IB, 1 meter
	10833B	HP-IB, 2 meter
	19833C	HP-IB, 4 meter
2225B	82167A	HP-IL, 1/2 meter
	82167B	HP-IL, 1 meter
	82167D	HP-IL, 5 meter
2225C	82949A	HP Series 80 Parallel Printer Interface
	82957A	HP 86A Printer Cable
2225D	13242G	HP 120, 125, 150, and 262X RS-232-C

B. 2225A ADDRESSING



NOTE

An HP-IB address of 31 (Binary Code 11111) is invalid.

**C. 2225C/D MODE SELECT DIP SWITCHES****Table 3-1. Character Set Settings.**

SWITCH SETTING			SELECTED CHARACTER SET
6	7	8	
0	0	0	Roman8
0	0	1	French
0	1	0	Swedish
0	1	1	UK
1	0	0	USASCII
1	0	1	German
1	1	0	IBM 8
1	1	1	Spanish

D. 2225D I/O CONFIGURATION SETTINGS

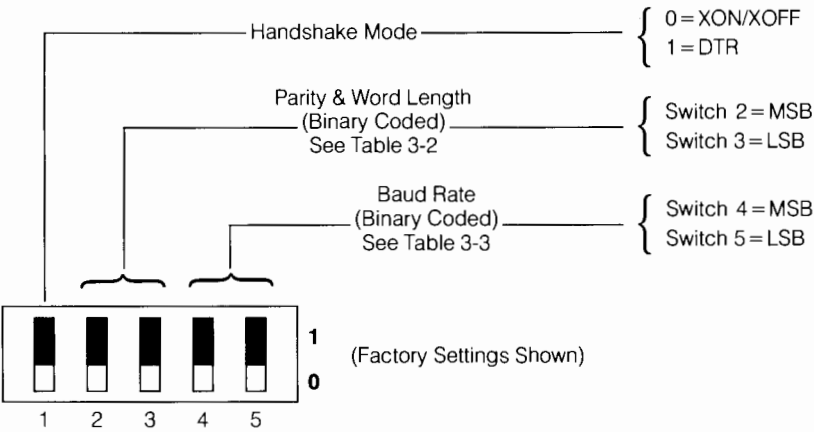


Table 3-2. Parity & Word Length

SWITCH		PARITY/WORD LENGTH
2	3	
0	0	None / 8
0	0	Zero / 7
0	1	Odd / 7
1	0	EVEN / 7
1	1	One / 7

Table 3-3. Baud Rate

SWITCH		BAUD RATE
4	5	
0	0	9600
0	1	19200
1	0	2400
1	1	1200







# 4

## TROUBLESHOOTING

### A. POWER SUPPLY VOLTAGES

Table 4-1. 2225A/B/C/D/ Power Supply Voltages.

Supply	Nominal Voltage	Voltage Range	2225A Test Pt.	2225B Test Pt.	2225C Test Pt.	2225D Test Pt.
VDRAW	11.6V	8.5 to 12.7V	U7(8)	—	U7(8)	U7(8)
—VDRAW	—11.6V	—8.5 to —12.7V	—	—	—	J1(14)
VDD	5.0V	4.75 to 5.25V	U2(5)	U6(11)	U4(20)	U4(20)
VMC	24.0V	23.04 to 24.96V	J4(5&6)*	—	J4(5&6)*	J4(5&6)*
VMP	34.7V	27.0 to 40.0V	J3(5&6)*	—	J3(5&6)*	J3(5&6)*
VHD	22.68V	22.5 to 22.86V	J2(6)	—	J2(6)	J2(6)
VIO	4.9V	4.75 to 5.25V	—	—	J1(15)	—
NRESET	4.5V	>4.5V	U1(10)	U6(19)	U1(10)	U1(10)
VBATT	8.0V	7.2 to 8.5V	—	J8(2)	—	—
PRT	HIGH	—	—	—	—	—
Vhead	HIGH during printing	—	—	U6(46)	—	—
	22.7V during printing	22.52 to 22.93V	—	CR2 cathode	—	—
LBIC	HIGH	—	—	U6(40)	—	—
LBIW	HIGH	—	—	U6(47)	—	—

\*Remove motor cable when measuring this voltage.

**B. TROUBLESHOOTING HINTS****Table 4-2. Troubleshooting Hints.**

<b>SYMPTOMS</b>	<b>POSSIBLE CAUSE</b>
Power-on procedure failure (red LED did not come on).	<ol style="list-style-type: none"> <li>1. Line fuse</li> <li>2. Power module</li> <li>3. Transformer circuitry</li> <li>4. Power supply circuitry</li> <li>5. Battery back-up (2225B only)</li> </ol>
Power-on procedure failure (yellow LED blinked twice, stayed off for several seconds, then resumed blinking).	<ol style="list-style-type: none"> <li>1. Carriage motor</li> <li>2. Home switch</li> <li>3. Mechanism will not allow carriage movement</li> <li>4. Logic PCA</li> </ol>
Power-on procedure failure (yellow LED failed to blink).	<ol style="list-style-type: none"> <li>1. Keypad</li> <li>2. Logic PCA</li> <li>3. I/O PCA (2225A/C/D only)</li> <li>4. Battery (2225B only)</li> <li>5. Carriage motor</li> </ol>
Power-on procedure failure (yellow LED stays on).	<ol style="list-style-type: none"> <li>1. Paper-out switch</li> <li>2. Logic PCA</li> <li>3. I/O PCA (2225A/C/D only)</li> </ol>
Power-on procedure failure (yellow LED blinks continuously).	<ol style="list-style-type: none"> <li>1. Logic PCA</li> <li>2. I/O PCA (2225A/C/D only)</li> <li>3. I/O cable (2225A/C/D only)</li> </ol>
No paper advance.	<ol style="list-style-type: none"> <li>1. Keypad</li> <li>2. Paper motor</li> <li>3. Mechanism binding</li> <li>4. I/O PCA</li> <li>5. Logic PCA</li> <li>6. Paper path</li> <li>7. Battery (2225B only)</li> </ol>
Improper paper advance.	<ol style="list-style-type: none"> <li>1. Paper motor or connector</li> <li>2. Logic PCA</li> <li>3. I/O PCA (2225A/C/D only)</li> <li>4. Bail arm adjustment</li> <li>5. Pinwheels</li> <li>6. Paper path</li> </ol>
Carriage slams into side plate when homing.	<ol style="list-style-type: none"> <li>1. Home switch assembly</li> <li>2. Logic PCA</li> <li>3. Carriage motor or connector</li> <li>4. I/O PCA (2225A/C/D only)</li> </ol>
Carriage stalls before done homing (yellow LED flashing).	<ol style="list-style-type: none"> <li>1. Drum cap on cable assembly</li> <li>2. Gear box for carriage drive</li> <li>3. Idler pulley</li> <li>4. Wear shoe on cartridge</li> </ol>

(continued on next page)

Table 4-2. Troubleshooting Hints (continued)

SYMPTOMS	POSSIBLE CAUSE
Carriage stalls while printing.	1. Carriage motor 2. Logic PCA 3. Gear box for carriage drive 4. Carriage binding
Paper out condition indicated with paper installed.	1. Paper-out switch 2. Logic PCA 3. I/O PCA (2225A/C/D only)
Printer is noisy while printing.	1. Carriage motor 2. Gear box for carriage drive
Missing dots.	1. Print head 2. Print head flex cable/connector 3. Logic PCA
Print is too light.	1. Unspecified paper 2. Print head 3. Logic PCA
Controller indicates loop time-out or error. (2225B only)	1. Logic PCA 2. HP-IL connector assembly 3. Battery

### C. PRINT HEAD ACTIVATION

The ThinkJet print head cartridge can display signs of smudged print or missing dots. Provided the print head is not out of ink, it can be re-activated with a metal paper clip and a clean, moist tissue.

If the bladder sags, as shown in Figure 4-1, the print head is considered out of ink and it requires replacement. Replace the absorber, also.

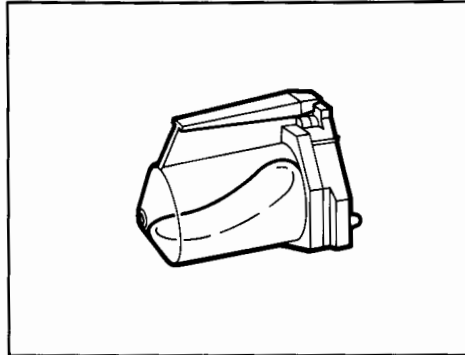


Figure 4-1. Empty Cartridge

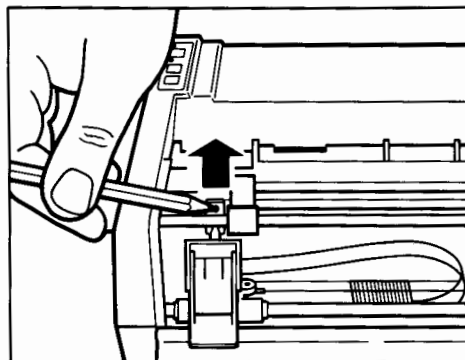
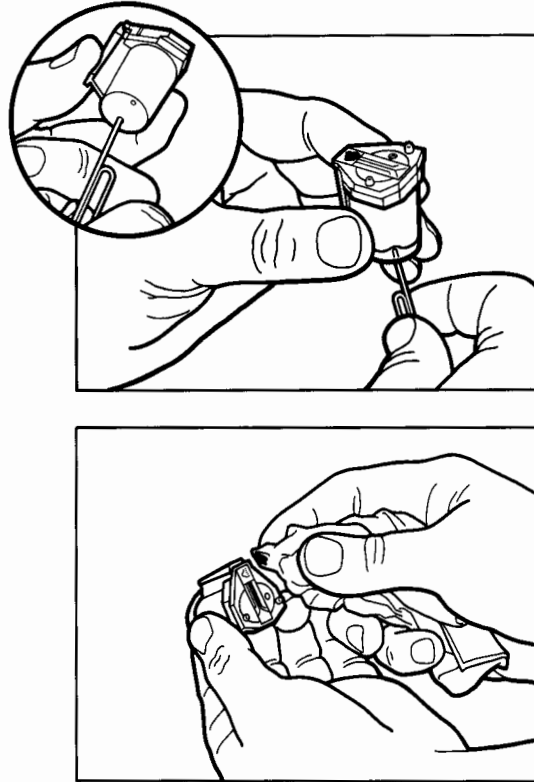


Figure 4-2. Removing the Absorber

Print head activation is accomplished by bending a metal paper clip to act as a plunger on the print head cartridge bladder. Hold the cartridge face up and insert the modified paper clip into the hole on the nose of the cartridge, see Figure 4-3. Push the paper clip up into the bladder, then wipe the face off with a clean, moist tissue. Reinstall the print head cartridge and test for proper print by powering the ThinkJet on with the LF button pressed, then release the LF button.



**Figure 4-3. Activating the Print Head.**



## D. BATTERY PACK TROUBLESHOOTING

Insert the battery pack into a printer and observe the indicator lights. They should behave in one of the following ways:

1. No Lights on.

The battery pack has extremely low voltage.

2. Red light flashes while the 2225B is idle. The light goes out completely in the process of printing or paper movement.

This is a warning that the battery level is low and needs charging. If the battery level drops below the cutoff state, the service request flag is set and the printer will cease printing in order to conserve power.

3. The yellow indicator light flashes twice, and the red light stays off and the printer does not "seek and home".

This indicates that the battery is only partially charged. The printer can perform its internal self test but does not have enough power for normal operation.

4. The yellow light flashes continuously, but the red indicator light stays off.

This indicates that the battery has enough voltage to start the printer but cannot maintain this voltage during the attempt to accelerate the motor.

# 5

## DIAGNOSTICS/ SELF-TEST

### NOTE

All troubleshooting must be done with paper installed.

### A. NON-PRINTING SELF-TEST

The non-printing self-test is invoked when power is turned on or as the first part of the printing self-test. The non-printing self-test checks the following components:

- CPU
- Timers
- Internal and External RAM
- Internal and External ROM

Successful completion of the non-printing self-test is indicated by the yellow attention light blinking twice, then staying off. If the printer fails the non-printing self-test the yellow attention light provides the following information valuable to board level repair:

Yellow LED always on—Paper sense circuitry

Yellow LED continues blinking—CPU, Timer, ROM, or RAM Failure.

Yellow LED blinks twice, then resumes blinking—

- A. Logic PCA not driving the carriage motor.
- B. Carriage Motor
- C. Home switch circuitry not sending signals to the processor.
- D. Mechanism will not allow the carriage to move.



**B. PRINTING SELF-TEST**

The printing self-test first performs the non-printing self-test. If the printer passes the non-printing self-test, it advances to the next top-of-form position and performs a printing self-test pattern shown in Figure 5-1.

Two methods can be used to invoke the printing self-test:

1. ESC z.

All data in the buffer is printed prior to the self-test and the self-test does not change any of the user-defined features.

2. Pressing the LF (linefeed) or FF (formfeed) button while turning the printer on.

The test begins when the button is released. Early 2225 units repeat the printing portion of the self-test until one of the following conditions occur:

- the test fails because the carriage position is not known.
- a device clear command is received, in which case printing stops immediately and a device clear is executed, or
- the power is turned off.

The printing self-test is suspended if the printer is out of paper, or, in the 2225B, the battery voltage is too low to run the motors. When either of these conditions are fixed the self-test will resume.

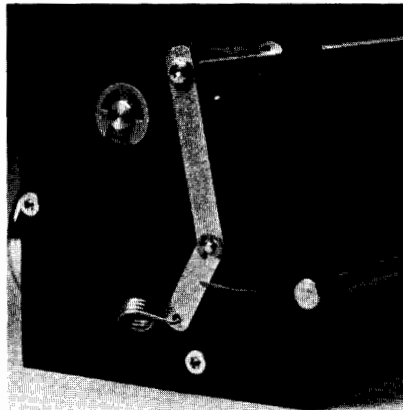
The self-test-failed bit in the printer status byte is set only when the non-printing portion of the self-test fails. (If the test failed because the carriage position cannot be determined, the carriage motion disabled bit is set. If the test is suspended because the printer is out of paper, the out of paper bit is set. If the test is suspended because the battery voltage is too low, the low battery bit is set.) The self-test failed bit can be cleared by pulling pin 42 (FF) of the processor to ground.

# 6

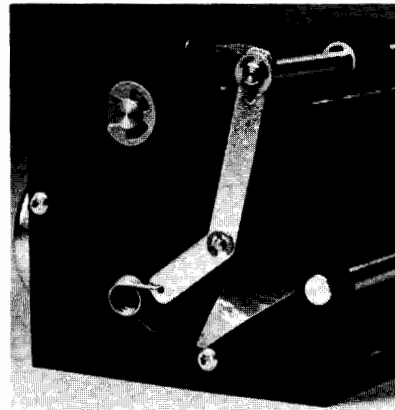
## ADJUSTMENT

### A. BAIL ARM ADJUSTMENT (early version ThinkJets, only)

The following bail arm adjustment is performed on early version ThinkJet printers, only. If you don't have an early version printer, no bail arm adjustment is necessary. To determine if you have an early version ThinkJet printer, remove the top cover and look at the left side of your Bail Arm Assembly. If the ThinkJet bail is connected to the left bail arm with a screw, the following Bail Arm adjustment applies. Disregard the bail arm adjustment procedure if your ThinkJet printer bail is attached to the left bail arm with a retaining ring. See Figure 6-1.



Early Version



Later Version

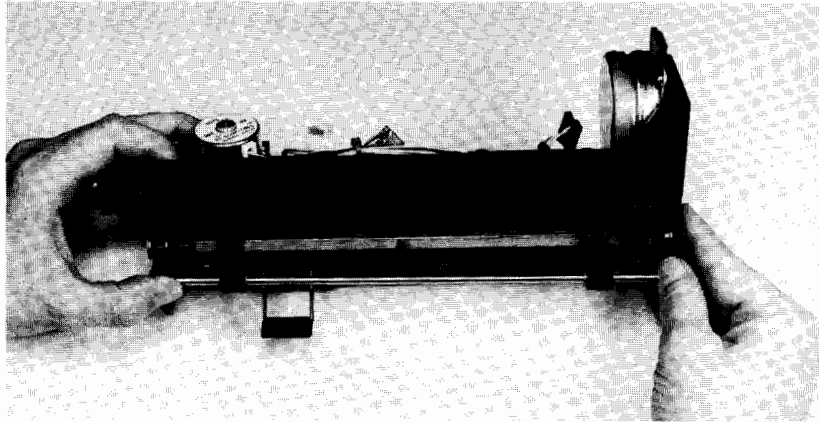
Figure 6-1. Bail Assembly Identification



## 6-2 Adjustment 2225A/B/C/D

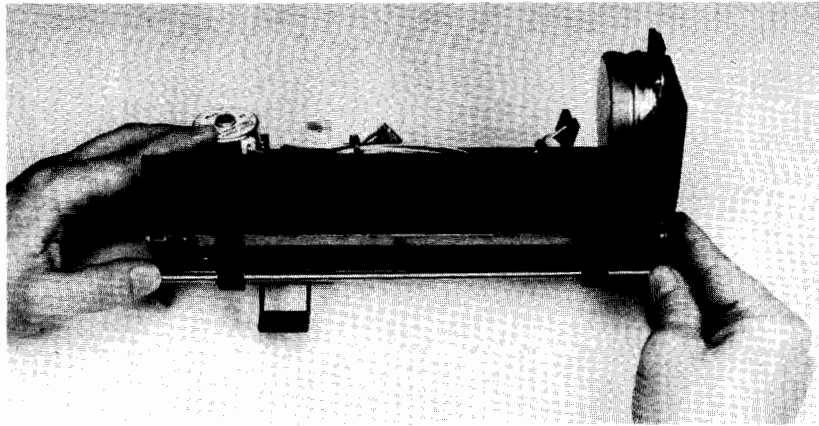
The bail arm must be adjusted correctly to allow the pinch rollers to apply pressure evenly to the paper. If the pressures are uneven, the paper will skew as it moves through the mechanism. The following procedure provides bail arm pressure check or adjustment.

1. Apply downward pressure on the left side of the bail arm assembly while lifting the right side of the bail, as shown in Figure 6-2. The right pinch roller should lift a short distance (approximately 1/8 to 1/4 inch) off the grit wheel before meeting heavy resistance.
  - A. If there is no "play" in the right side, apply more outward pressure until the right side of the shaft loosens up.
  - B. If there is too much play, i.e., the right bail arm easily goes backward and hits the stop on the print frame, the screw on the left of the bail shaft is too loose.



**Figure 6-2. Bail Arm Adjustment, Right Side**

2. Once the right side is adjusted properly, apply downward pressure on the right side of the bail arm assembly and lift the left side of the bail, as shown in Figure 6-3. The left pinch roller should have the same amount of play. If not, use the same technique outlined above to make the proper adjustment.



**Figure 6-3. Bail Arm Adjustment, Left Side**

3. Once both sides are set correctly, rotate the platen shaft either by hand or with the FF key and ensure that both pinch rollers are driven by the grit wheels.

## **B. POWER SUPPLY ADJUSTMENT—2225A/C/D**

The power supply for the print head is specified as  $22.682V \pm 0.18V$ . It is adjusted into this range by removing combinations of resistors R14, R15, and R16. A new board is loaded with all resistors in place. In this condition, the voltage should be between 20.51 and 22.86 volts. If it is out of this range, one of the 6 components that determine this voltage is bad. Clipping the resistors will increase the voltage to bring it into range. See Table 6-1 for appropriate action to the power supply voltage.

**Table 6-1. 2225A/C Power Supply Adjustment.**

Initial Voltage	Action
<20.51	Defective part
20.51 to 20.65	Remove R14, R15, R16
20.66 to 20.95	Remove R15, R16
20.96 to 21.27	Remove R14, R16
21.28 to 21.58	Remove R16
21.59 to 21.89	Remove R14, R15
21.90 to 22.21	Remove R15
22.22 to 22.51	Remove R14
22.52 to 22.86	In Spec-no change required.
>22.86	Defective part



7

# **PERIPHERALS**

DOES NOT APPLY





# 8

## REPLACEMENT PARTS

Table 8-1. Overall Parts List.

DESCRIPTION	HP P/N	QTY
Screw, Top Cover	0624-0616	4
Fuse, 400mA	2110-0340	1
Fuse, 250mA	2110-0489	1
Fuse, 200mA	2110-0588	1
Fuse, 100mA	2110-0202	1
Fuseholder, US	2110-0686	1
Fuseholder, EUR	2110-0687	1
Switch, on-off	3101-2443	1
Cent I/O PCA	5061-4316	1
Cent Logic PCA	5061-4320	1
Cable, Cent I/O-16 pin	8120-4434	1
Cable, HP-IB I/O-7 pin	8120-4435	1
Power Receptacle, 100-240V	9135-0238	1
Line Module-115V	9135-0176	1
Transformer-115/230V	9100-4384	1
Transformer-115V	9100-4385	1
Foot	02225-00010	4
Plate, Gnd-2225B	02225-00011	1
Plate, Gnd-2225A/C/D	02225-00015	1
Shield, Magnetic	02225-00016	1
Window	02225-40025	1
Case, Bottom	02225-40027	1
Case, Top	02225-40028	1
Separator, Paper	02225-40032	1
Stand Off-2225B	02225-40039	2
HP-IL Logic PCA	02225-60001	1
Battery Pack	02225-60005	1
HP-IB Logic PCA	02225-60010	1
HP-IB I/O PCA	02225-60011	1
HP-IL Back Pnl Ay	02225-60012	1
HP-IB Back Pnl Ay	02225-60013	1
Cent Back Pnl Ay-115/230V	02225-60014	1
Cent Back Pnl Ay-115V	02225-60015	1
RS-232-C Logic PCA	02225-60018	1
RS-232-C I/O PCA	02225-60019	1
RS-232-C Back Pnl Ay	02225-60020	1
Service Mechanism Ay*	02225-60901	1
Print Structure Ay*	02225-60902	N/A

(continued on next page)



Table 8-1. Overall Parts List (continued)

DESCRIPTION	HP P/N	QTY
Keypad Switch Ay	02225-60904	1
Lbl, Window (2225B)	02225-80003	1
Lbl, Window (2225 A/C/D)	02225-80038	1
Overlay, Switch	02225-80007	1
Lbl, Base 2225B	02225-80022	1
Lbl, Base-2225A	02225-80065	1
Lbl, Btm, (USA)-2225C	02225-80024	1
Lbl, Btm, (EUR)-2225C	02225-80059	1
Lbl, Btm, 2225D	02225-80053	1

**NOTE**

The Service Mechanism Assembly includes all mechanism parts in Figure 8-2, with the exception of the motors.

The Print Structure Assembly, shown in Figure 8-1, is essentially a frame with gear box and cable.

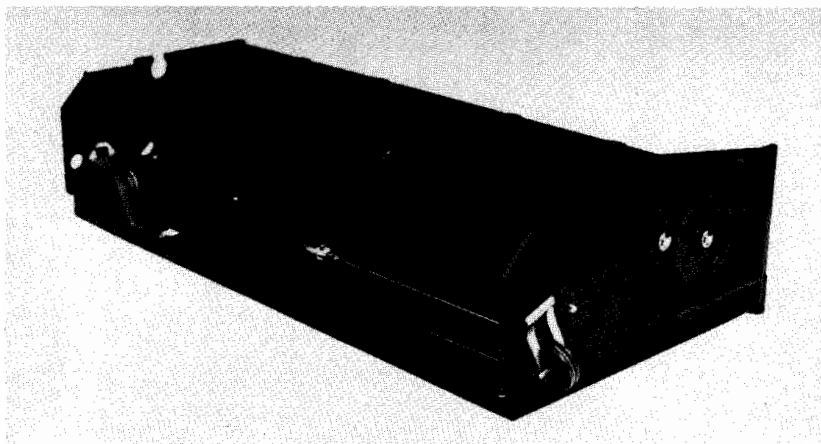


Figure 8-1. Print Structure Assembly, 02225-60902.

Table 8-2. Mechanism Parts List 02225-60901 (See Figure 8-2).

FIG. & INDEX #	DESCRIPTION	HP P/N	QTY
8-2-1	Retainer, E-Ring	0510-0952	2
8-2-2	Arm, Left Bail (early version, only)	02225-00005	1
8-2-3	Screw, M3.0x.5x8.0 (early version, only)	0515-1068	1
8-2-4	Shaft, Carriage	02225-20006	1
8-2-5	Spring, Left Side	02225-20011	1
8-2-6	Retainer, E-Ring	0510-0083	4
8-2-7	Bearing, Sleeve	1410-0251	2
8-2-8	Screw, 2-28x.250	0624-0614	2
8-2-9	Support, Absorber	02225-00012	1
8-2-10	Wheel, Pin	02225-40010	2
8-2-11	Wheel, Grit	02225-40030	2
8-2-12	Guide	02225-40009	2
8-2-13	Frame, Platen	02225-40018	1
8-2-14	Home Switch Ay	5061-4313	1
8-2-15	Screw w/washer, Home Switch	0624-0623	1
8-2-16	Shaft, Platen	02225-20009	1
8-2-17	Motor, Paper-2225A/C/D	3140-0788	1
8-2-17	Motor, Paper-2225B	3140-0787	1
8-2-18	Screw, 4-20x.375	0624-0621	2
8-2-19	Motor, Carriage-2225A/C/D	3140-0786	1
8-2-19	Motor, Carriage-2225B	3140-0785	1
8-2-20	Switch, Reed	0490-1424	1
8-2-21	Screw w/washer, SEM 2-28x.250	0624-0611	2
8-2-22	Screw, 6-19x.50	N/A	1
8-2-23	Washer, Star #6-2225A/C/D	2190-0065	1
8-2-24	Wire-2225A/C/D	02225-80036	1
8-2-25	Shield, Magnetic	02225-00016	1
8-2-26	Wire-2225A/C	02225-80037	1
8-2-27	Washer, Star #8-2225A/C/D	2190-0009	1
8-2-28	Screw, 4x.7x10mm	0515-1879	2
8-2-29	Retainer, E-Ring	0510-0015	2
8-2-30	Gear, Idler	02225-40022	1
8-2-31	Gear, Cluster	02225-40021	1
8-2-32	Gear, Output P.D.	02225-40023	1
8-2-33	Dowel	02225-20017	1
8-2-34	Spring, Right Side	02225-20008	1
8-2-35	Retainer, E-Ring	0510-0045	5
8-2-36	Arm, Right Bail	02225-00004	1
8-2-37	Dowel, Bail Shaft	02225-20018	1
8-2-38	Roller, Pinch	02225-20001	2
8-2-39	Carriage Ay	02225-60903	1
8-2-40	Clip, Flex Circuit	02225-40005	1
8-2-41	Shaft, Bail (early version, only)	02225-20007	1
	Shaft, Bail	02225-20023	1
8-2-42	Print Structure Ay	02225-60902	1



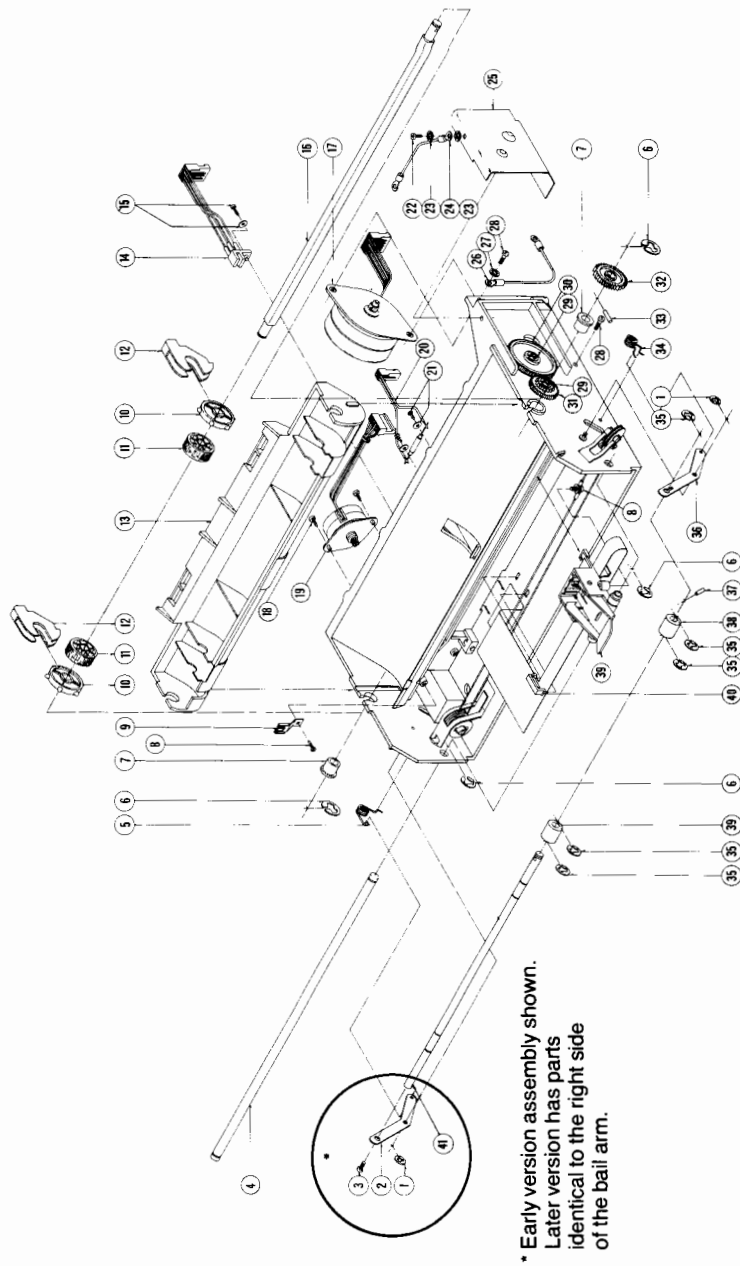
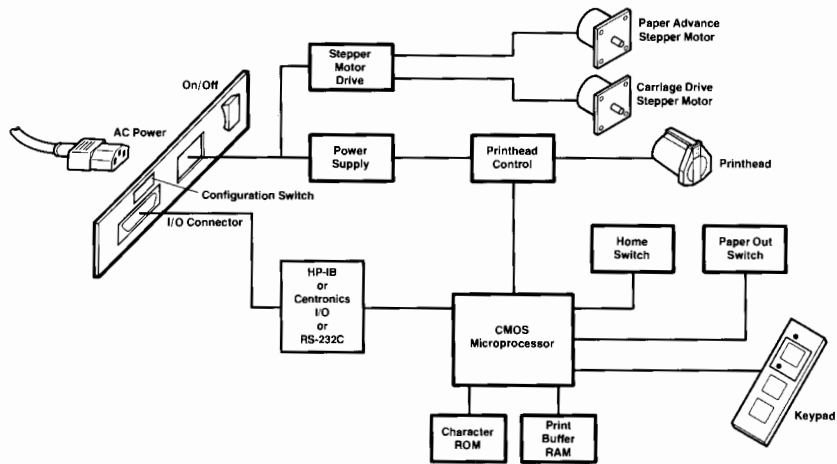


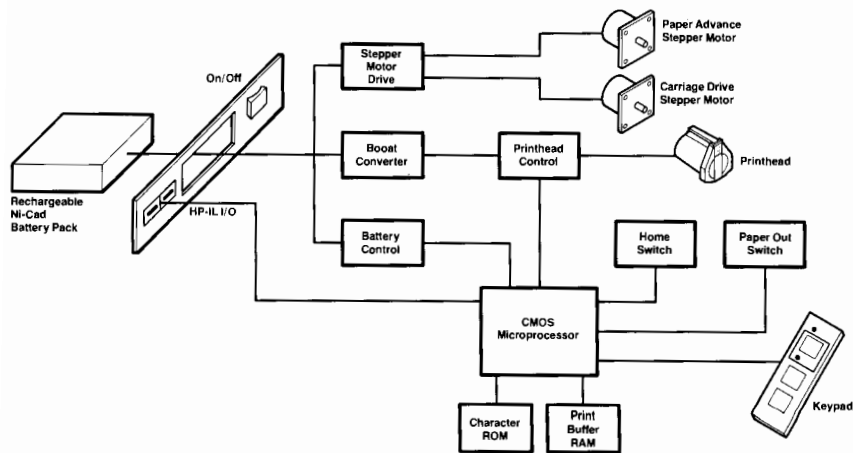
Figure 8-2. Service Mechanism Assembly and Motors.

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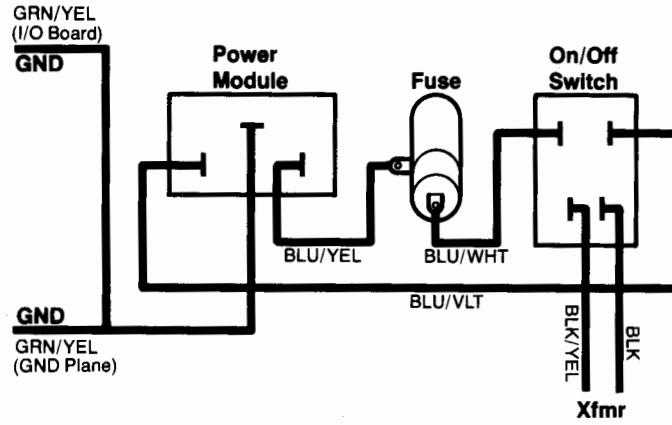
## DIAGRAMS



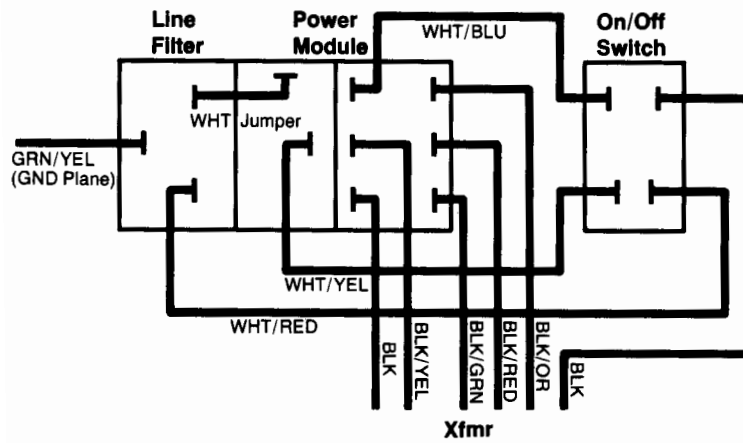
2225 A/C/D Block Diagram



2225B Block Diagram



2225C with U.S. Rear Panel



2225A/2225C with International Rear Panel/2225D

**10**

**REFERENCE**



# 11

## SERVICE NOTES/ IOSMs



