

2563A

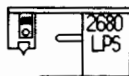
 HEWLETT
PACKARD

OPERATOR'S



HP2563A OPERATOR'S MANUAL

Manual Part No. 02563-90901
Microfiche Part No. 02563-90801



Text printed in U.S.A.
on an
HP 2680A Laser Printing System



Publication History

Changes in text to document updates subsequent to the initial release are supplied in manual update notices and/or complete revisions to the manual. The history of any changes to this edition of the manual is given below. The last update itemized reflects the machine configuration documented in the manual.

Any changed pages supplied in an update package are identified by an update number adjacent to the page number. Changed information is specifically identified by a vertical line (revision bar) on the outer margin of the page.

First Edition NOV 1983

NOTICE

The information contained in this document is subject to change without notice.

HEWLETT-PACKARD MAKES NO WARRANTY OF ANY KIND WITH REGARD TO THIS MATERIAL, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Hewlett-Packard shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

This document contains proprietary information which is protected by copyright. All rights are reserved. No part of this document may be photocopied or reproduced without the prior written consent of Hewlett-Packard Company.

Copyright 1983 by Hewlett-Packard Company

HP Computer Museum
www.hpmuseum.net

For research and education purposes only.

TABLE OF CONTENTS

SECTION I. GENERAL INFORMATION	PAGE
Introduction	1-1
Description	1-1
Options	1-1
Supplies and Accessories	1-3
Specifications	1-4
Physical	1-4
Clearance Requirements	1-4
Electrical Characteristics	1-5
Performance	1-5
Environmental	1-6
Paper	1-7
Service	1-7
Operator Safety	1-7
 SECTION II. PREPARING YOUR PRINTER FOR USE	
Introduction	2-1
Power	2-1
Installation	2-1
Ribbon Cartridge Loading and Removal	2-2
Paper Loading and Adjustment	2-4
Adjusting Forms Length	2-6
Setting Top of Form	2-7
Printer Configuration	2-7
Character Set selection	2-9
Print Density Selection	2-10
Print Pitch Selection	2-10
Vertical Line Spacing	2-10
Interface Configuration	2-10
HP-IB Address Selection	2-11
Test	2-11
Standard Self-Test	2-12
Specific Subtest Selection	2-12
Test Failure	2-13

SECTION III. HOW TO OPERATE YOUR PRINTER

Introduction	3-1
Printer Status	3-1
Operator Controls and Indicators	3-3
Power-On Parameters and Power-Fail Recovery	3-10
Reset	3-10
On-Line/Off-Line	3-10
Graphics	3-10
Standard Vertical Forms Control (VFC)	3-11
Fault Conditions	3-12

SECTION IV. OPERATOR MAINTENANCE AND TROUBLESHOOTING

Preventive Maintenance	4-1
In Case of Difficulty	4-1

LIST OF TABLES

Configuration Function Numbers	2-8
Character Set Parameters	2-9
Subtest Numbers	2-13
Self-Test Error Numbers	2-13
Status Code Table	3-2
VFC Channel Definitions	3-11
Printer Fault Conditions	3-12

OPERATOR CONTROL PANEL GUIDE (FOLDOUT)

SELF-TEST PRINTOUT

2563A

SECTION I. GENERAL INFORMATION

INTRODUCTION

The 2563A Operator's Manual contains information necessary to operate and perform preventive maintenance on the HP 2563A Line Printer. Read this manual before using your printer so that you will be familiar with all its capabilities and helpful features.

DESCRIPTION

The HP 2563A is a highly reliable, medium speed printer designed for use in many printing applications. You will find that it has several attractive features available including:

- Multiple character sets requiring no mechanical font change
- Bar code printing capability
- 16-channel vertical format control (VFC)
- Normal and compressed print pitch
- Paper jam detection
- Easy forms alignment

Restart/recovery ability following printer interrupts and power failure

OPTIONS

The HP 2563A Line Printer is available in several configurations to match your individual applications and needs. These configurations are stated as options--three-digit suffixes to the model number such as HP 2563A #001. The option numbers are marked on an identification tag which is located near the Main Power ON/OFF (1/0) switch on the back of the printer.

The standard model HP 2563A includes an HP-IB interface, 16-channel VFC, normal and compressed printing features, raster graphics capabilities, paper jam detection, a USASCII character set (Standard Roman Extension, compressed, and double-size characters), and is configured for 120 Vac, 50/60 Hz.

The standard printer comes equipped with a power cord and one ribbon cartridge.

The following table shows the available options for the HP 2563A.

OPTION #	OPTION DESCRIPTION
001	Line Draw, Math, and Block character sets
002	Standard density KATAKANA8 character set
003	High density OCR-A and OCR-B character sets
004	High density ROMAN8 character set
005	Italic, high density ROMAN8 character set

2563A

OPTION #	OPTION DESCRIPTION
006	High density KATAKANA8 character set
007	High density bar codes
015	220 Vac, 50/60 Hz operation
016	100 Vac, 50/60 Hz operation
017	240 Vac, 50/60 Hz operation
049	Includes RS-232-C interface
055	Multipoint interface for HP 3000
068	Includes three-pack ribbon starter kit
110	Includes sound abatement cover
112	Includes enclosed printer stand
115	Passive paper stacker for use with stand
210	Configured for HP 1000 M, E, and F Series subsystem
214	Configured for HP 1000 A-Series subsystem
250	Configured for HP 250 subsystem
264	Configured for HP 64000 subsystem
290	Configured for HP 9000 subsystem
333	Configured for HP 3000 Series 30/33 subsystems
340	Configured for HP 3000 Series 39/40/42 subsystems
344	Configured for HP 3000 Series 44/48 subsystems
364	Configured for HP 3000 Series 64/68 subsystems
500	Printer packaged options (001,004,005,068,110,112,115)
715	HP 2563A Service Documentation
850	Configured for HP Shared Resource Manager subsystem

2563A**SUPPLIES AND ACCESSORIES**

Supplies and accessories recommended for use with your printer and available from Hewlett-Packard are listed below.

Ribbon Cartridges

Box of three standard ribbon cartridges (92158A)

Box of three ribbon cartridges (92158M)
(for optical mark recognition with the HP 307X OMR readers)

Paper

Part No.	Description	Quantity
92157A	One-part, white, 18 lb.	2400 sheets/box
92157B	One-part, white, 15 lb., 3-hole punched	3200 sheets/box
9280-0218	One-part, green bar 15 lb., 80-column	3200 sheets/box
9280-0705	One-part, white 15 lb., 72-column	3200 sheets/box
9320-1515	One-part, blue bar 18 lb., 132-column	2400 sheets/box

**Manuals**

2563A Cond. Operator's Manual (part no. 02563-90902)

2563A Service Manual (part no. 02563-90904)

2563A Tech. Reference Manual (part no. 02563-90905)

HP-IB Interface Manual (part no. 26067-90901)

Multipoint Interface Manual (part no. 26067-90902)

Serial Interface Manual (part no. 26067-90903)

Printer Stand

Printer stand for the HP 2563A (if not ordered as an option) (Part no. 92214P)

2563A

SPECIFICATIONS

The HP 2563A Line Printer is listed by Underwriter's Laboratories, Inc. in the following categories with respective guide designations: Electronic Data Processing Equipment (EMRT) and Office Appliances and Business Equipment (QAOT).

The Canadian Standards Association has certified this printer as data processing equipment.

In addition, this printer was designed to meet most European Safety and RFI/EMC standards for Electronic Data Processing Equipment effective December 1, 1981. Any questions concerning regulatory compliance should be directed to the local Hewlett-Packard Sales Office.

Federal Communications Commission Radio Frequency Interference Statement

The Federal Communications Commission (IN 47 CFR 15.818) has specified that the following notice be brought to the attention of users of this product.

NOTE

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC rules which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

Physical

Width: 600 mm (23.62 in)
Depth: 450 mm (17.72 in)
Height: 274 mm (10.75 in)
Height (with stand): 994 mm (39.12 in)
Weight: 34 kg (75 lb)
Weight (with stand): 61 kg (135 lbs.)

Clearance Requirements

Side: 152 mm (6 inches)

2563A**Electrical Characteristics**

	Input (Vac)	Frequency (Hz)
Voltage Source:	100 (+5%, -10%)	50/60 (+10%, -5%)
	120 (+5%, -10%)	50/60 (+10%, -5%)
	220 (+5%, -10%)	50/60 (+10%, -5%)
	240 (+5%, -10%)	50/60 (+10%, -5%)
Power Cable Length:	Two metres (approximately 6.5 feet)	
Power Consumption:	200 W non-printing	
	230 W printing (typical for 132 characters/line)	
	600 VA printing (maximum)	

Performance

Dot Size: 17 mils

Dot Density: Normal and High Density (210 dots/inch)
 Compressed (200 dots/inch)
 Graphics (70 dots/inch)
 Bar Codes (110 dots/inch)

Character Matrix: Normal density

(5/13 x 7) Upper case
 (5/13 x 9) Lower case

Compressed density

(3/8 x 7) Upper case
 (3/8 x 9) Lower case

High density

(6/18 x 14) Upper case
 (6/18 x 18) Lower case

2563A

***Print Speed:**

LINES PER MINUTE	MATRIX SIZE	DENSITY
300	5 x 7	Normal (Upper case only)
233	5 x 9	Normal (Lower case)
150	6 x 14	High (Upper case only)
117	6 x 18	High (Lower case)
300	3 x 7	Compressed (Upper case only)
233	3 x 9	Compressed (Lower case)

* Print speed may vary during heavy duty-cycle applications and heavy system usage.

Paper Slew Rate: 14 inches/second

Multi-part Forms: 1 - 6 (.025 inches maximum pack thickness)

Vertical Format Control: 16 programmable channels

Ribbon Life: 30 million characters

Environmental *

Temperature

Operating (printer and ribbon): 10 to 50 degrees C (50 to 122 degrees F)

Storage (printer): -40 to 75 degrees C (-40 to 167 degrees F)

Survival (power-on): -20 to 60 degrees C (-4 to 149 degrees F)

Storage (ribbon): 10 to 50 degrees C (50 to 122 degrees F)

Relative Humidity (printer): Non-operating -- 5% to 95% non-condensing
 Operating -- 30% to 80% (recommended)

Audible Noise: 65 dBA (average sound pressure at 1 metre)
 60 dBA (average sound pressure at 1 metre with sound cover)

* This list specifies the allowable environmental operating conditions.

2563A

Paper

The HP 2563A uses continuous fan-fold edge-perforated paper varying in width from 3.0 to 16.75 inches. Although the printer accepts paper as wide as 16.75 inches, the farthest right it can print is 14.75 inches. It will handle paper weights in the range of 15 to 100 pounds. In many cases the printer will print successfully on paper lighter than 15 pounds but the paper should be tested (prior to purchase) for satisfactory feeding and stacking ability.

Multi-part forms up to six parts may be used, with a maximum pack thickness of .025 inches. Forms should be tried at high humidity (greater than 80%) for satisfactory feeding and handling and at low humidity (less than 25%) to determine if static buildup must be eliminated for proper stacking.

SERVICE

Hewlett-Packard offers maintenance agreements, "time and material" service, and other service agreements for the HP 2563A Printer. If you have a need for service or have questions regarding servicing of your printer, contact the HP Sales and Service Office nearest you. A list of these offices is provided at the back of this manual.

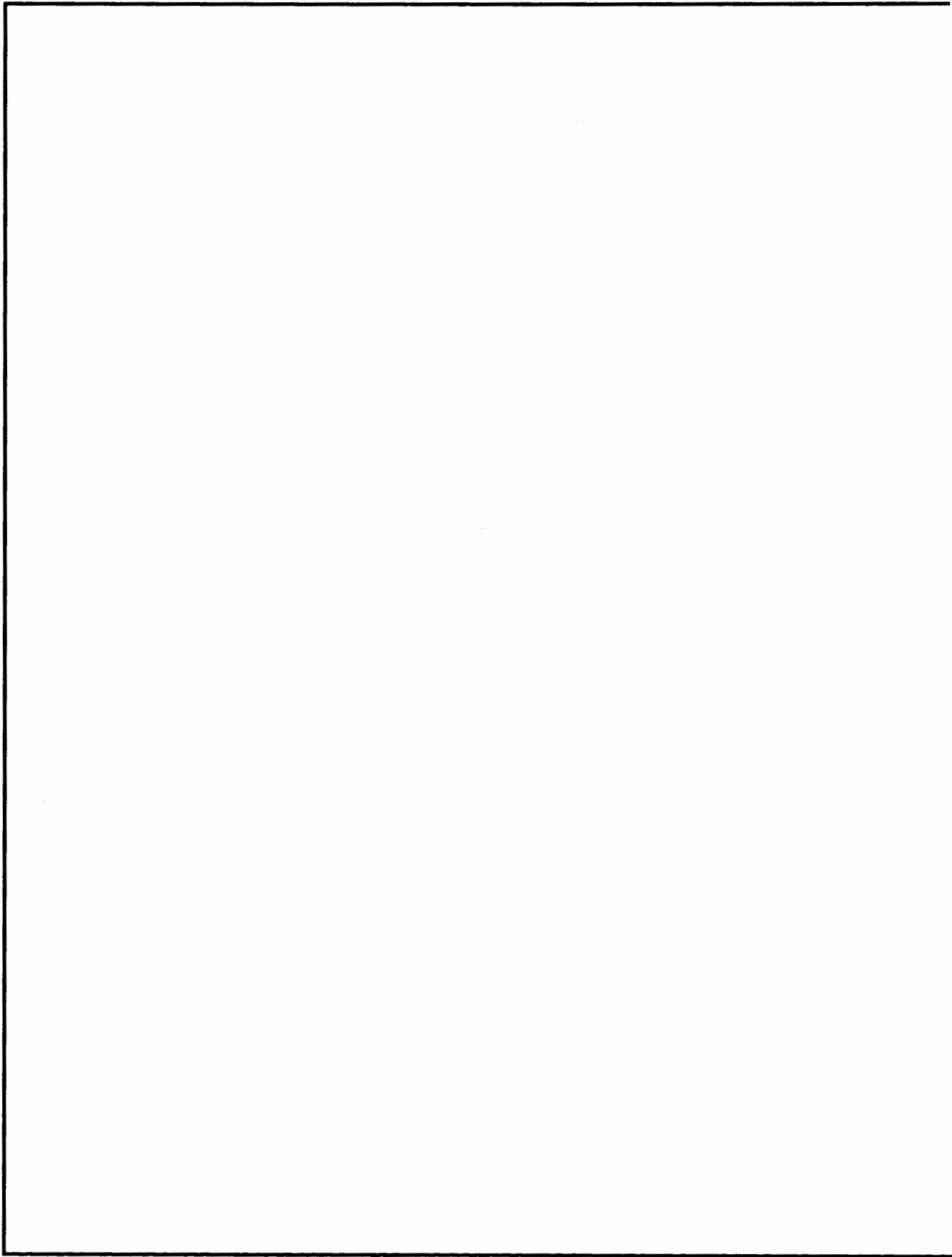
OPERATOR SAFETY

For operator safety, the access cover should be closed when the printer is powered on and during operation. Keep hands, long hair, necklaces, and articles of clothing such as long sleeves out of the printer when operating conditions exist.



OPERATOR'S

2563A



2563A

SECTION II. PREPARING YOUR PRINTER FOR USE

INTRODUCTION

The procedures in this section should be followed closely so that your printer performs with maximum efficiency.

Your printer should be located in a clean, traffic-free environment, preferably an area not subjected to excessive shocks, vibrations or wide ranges of ambient temperature. Air conditioning is not required to ensure reliable operation of the HP 2563A; however, under no circumstances should the environmental specifications be exceeded.

The location of your printer must provide adequate operator access to both the front and rear of the printer. The area around the printer should be kept clean and dust free at all times so that the air used to cool the printer will not contain a large amount of dust particles.

If the printer will be operated in either high or low humidities, check with your HP representative for options or accessories which will help optimize paper handling.

POWER

The HP 2563A has a maximum power requirement of 600 VA. One of the following power sources must be available for operating the printer: 100, 120, 220, or 240 volts ac. Your printer has been shipped to match the power source specified in your order. If it becomes necessary to change to a different power source, contact your HP service representative.

PRINTER INSTALLATION

Once your printer has been unpacked, install it as described in the following steps:

- a. Connect the interface cable from the computer system to the interface connector on the back of the printer.
- b. Connect the AC power cord to the AC power input jack on the back of the printer and plug the other end into the AC outlet.
- c. Switch the Main Power ON/OFF (1/0) switch located on the back of the printer to the ON position.
- d. Load the ribbon and paper as described in the ribbon and paper loading portions in this section of the manual.
- e. If you have an HP-IB interface, select the HP-IB address as described in the HP-IB Address Selection portion of this manual. If you have an interface other than an HP-IB, configure your interface as described in the interface manual supplied with your printer.
- f. With the printer off-line, press the TEST key on the Operator Control Panel. Then press the ENTER key. A self-test printout will be printed. Compare the printout with the self-test printout at the back of this manual*. The printer is now ready for operation if no error numbers are flashing on the display and the characters on the self-test printout are clear and well-formed.

* The self-test printout varies depending on which character set options are installed.

2563A

RIBBON CARTRIDGE LOADING AND REMOVAL

Tools are not required to install or remove the ribbon cartridge.

NOTE

An interlock prevents printing when either the ribbon cartridge is removed or the platen is open. A fault indication is displayed (the number 12 flashes on the display) during ribbon removal and installation.

Perform the following steps to install the ribbon cartridge:

- a. Push the form loading lever away from you to open the platen.
- b. Push lightly against the center of the ribbon shield with your left thumb and slide the ribbon into place between the print mechanism and the metal ribbon shield, as shown in the ribbon loading illustration.
- c. Fit the mounting lug on the lower left underside of the ribbon cartridge into the mounting slot on the metal base.
- d. Tighten the ribbon using the knurled knob on the top right side of the ribbon cartridge. Push the cartridge down and rotate the knob until the cartridge aligns on the drive shaft.

NOTE

The ribbon must be tightened before it is aligned on the drive shaft because once the ribbon is in place the knurled knob will not turn.

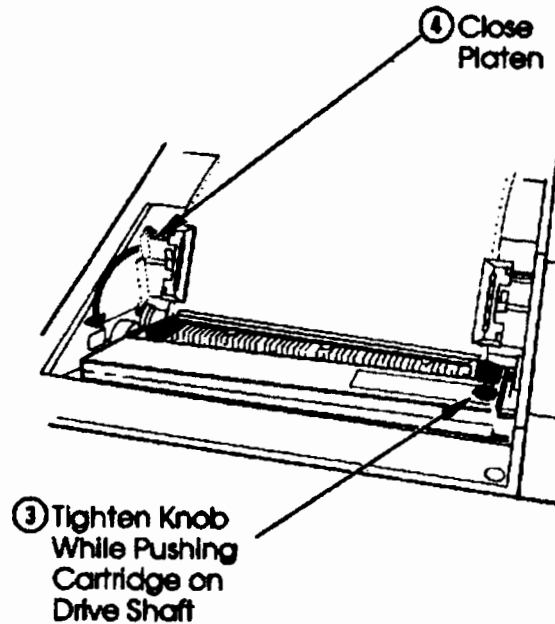
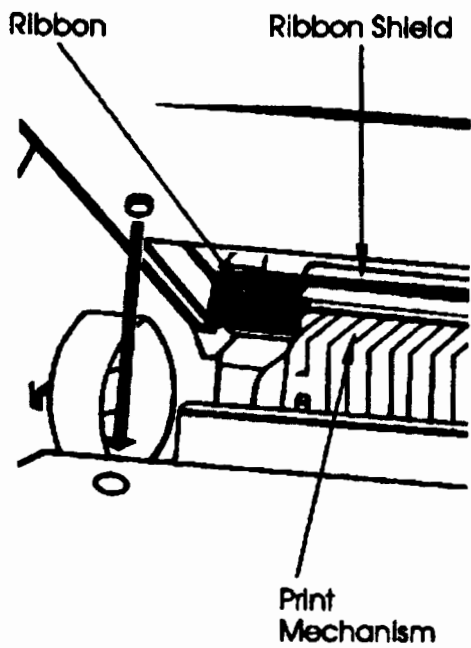
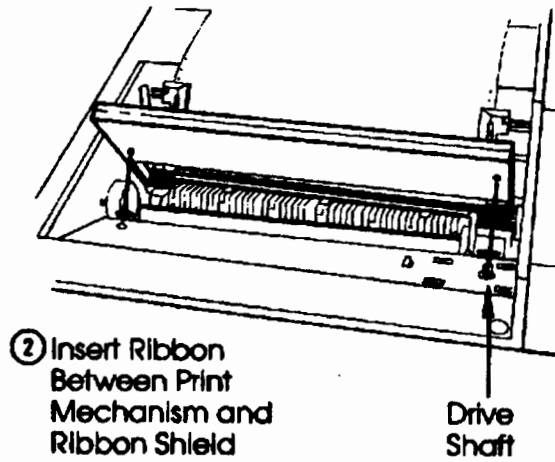
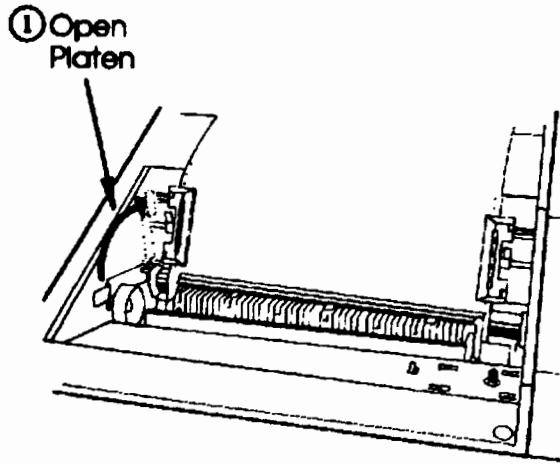
- e. Make certain the cartridge is secured on both the left and right ends, and that the ribbon is completely positioned in front of the print mechanism. The ribbon should pass around the far right side of the print mechanism and the ribbon should have no folds in it. The ribbon loading illustration shows the positioning of the ribbon when loaded properly.

- f. Close the platen.

Perform the following steps to remove the ribbon cartridge:

- a. Push the form loading lever away from you to open the platen.
- b. Lift the back side of the ribbon cartridge until you have removed it from the drive shaft and the mounting slot in the metal base.
- c. Use the knurled knob on the top right side of the cartridge to maintain tension on the ribbon and remove the ribbon from the print mechanism by pushing it slightly forward and then lifting it upward and out of the printer.
- d. Discard the used ribbon cartridge.
- e. Close the platen and clean any paper, dust or residue from the area under the ribbon cartridge.

2563A



Ribbon Loading

2563A

PAPER LOADING AND ADJUSTMENT

Paper loading and adjustment involves adjusting the forms length and setting the Top of Form in addition to the loading of paper. Paper may be loaded through the slot in the bottom of the printer or through the slot in the front of the printer as shown in the Paper Loading and Paper Path illustration.

NOTE

When the printer runs out of paper, it completes the last page and goes off-line. At this point, the paper is at the Top of Form position.

Perform the following steps to load paper into the HP 2563A:

- a. If the printer is mounted on a stand, position the paper supply underneath the printer so that the paper can easily feed into the slot under the printer. If the printer is sitting on a table top, position the paper so that it can feed easily into the front paper slot.

NOTE

If the printer is not mounted on a stand, remove the foam plug from the front paper slot so that the paper may be fed into the slot.

- b. Open the access cover.
- c. Push the form loading lever away from you to open the platen.

NOTE

An interlock prevents printing when the platen is open. A fault indication is displayed (the number 12 flashes on the display) during paper loading and adjustment.

If the printer has run out of paper, a number 11 will flash on the display.

- d. Open both tractors. If a different form or horizontal position is required, unclamp both tractors so they may be adjusted to a different width.
- e. Insert the paper into the printer until it appears above the print mechanism; then pull the paper up until the holes can be matched to the tractor lugs. Make certain the paper is not skewed to either side. Close the tractors. Pull the form loading lever toward you to close the platen. If the forms thickness has been changed, use the platen adjust knob to adjust the gap for optimum print quality.
- f. Clamp the tractors in place on the tractor guide shaft if previously released.

2563A

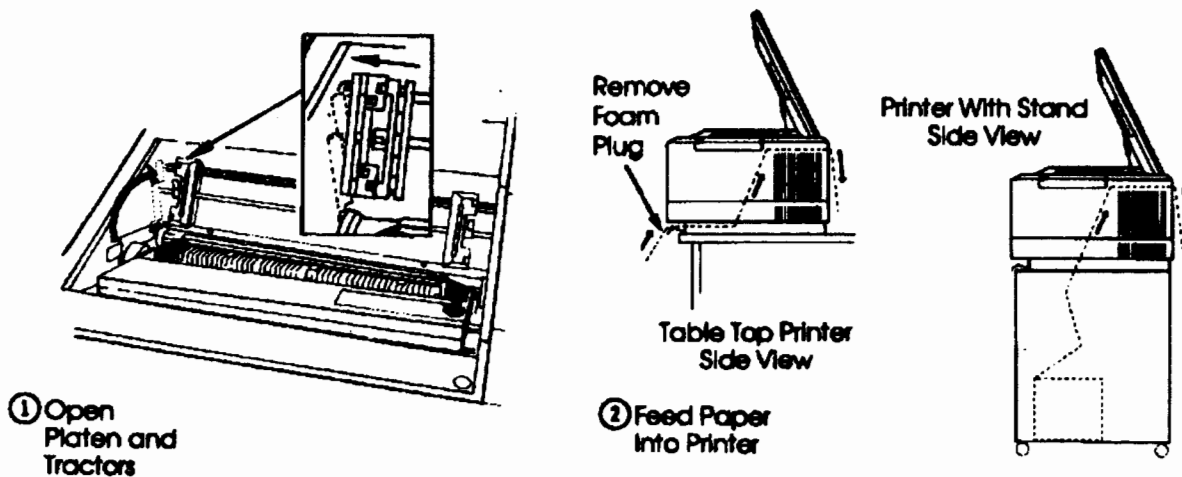
NOTE

Pressing the TEST key and then pressing the PRINT 1 LINE key prints an alignment pattern that shows how far left on the page your text will be printed. Should you desire to adjust the left margin, unclamp the tractors and move them until pressing the PRINT 1 LINE key gives you the left margin you desire.

If the perforations of the new paper are lined up with the perforations of the sheet last

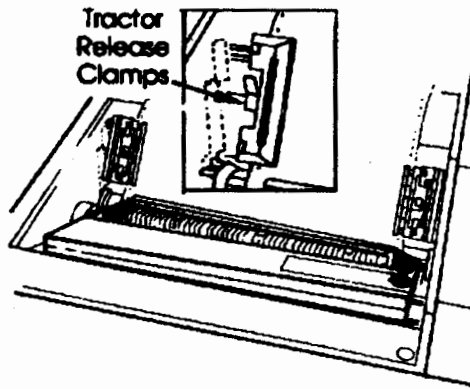
printed, the Top of Form position of both pages will coincide. In this case, the Top of Form need not be set unless the form length has been changed or a different Top of Form is desired. Press the ON LINE key to clear the flashing number 11 from the display.

- g. If the forms length has changed, or if a new Top of Form position is desired, proceed to the following sections. Otherwise, press the FORM FEED key to reach the next Top of Form and press the ON LINE key to resume normal printing.

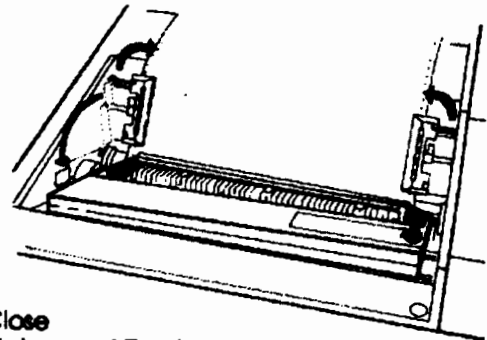


Paper Loading and Paper Path
(Illustration continued on next page)

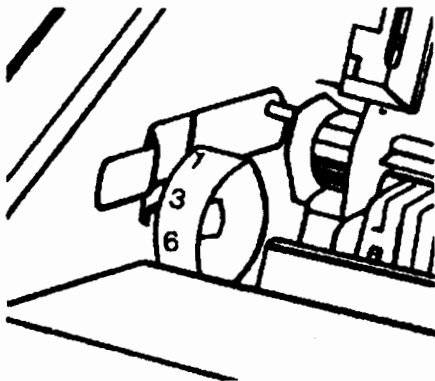
2563A



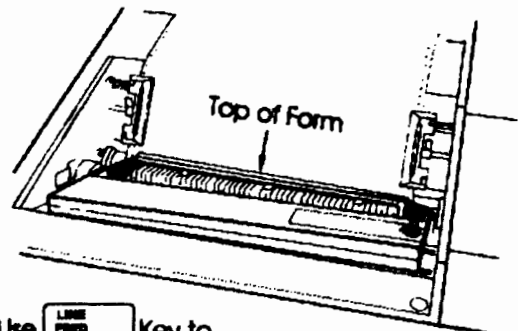
③ Adjust Tractors for Paper Width



④ Close Platen and Tractors



⑤ Set Platen Adjust Knob For Form Thickness



⑥ Use **LINE FEED** Key to Align Top of Form With Top of Ribbon Shield and Press **SET T.O.F.** and **ENTER** keys

Press **ON LINE** to Resume Printing

Paper Loading and Paper Path (continued)

ADJUSTING FORMS LENGTH

If the length of the currently loaded paper differs from that which was previously used, the form length must be set to match the new paper size. The form length can be set in 1/2 inch increments from 2 to 16.0 inches.

Proceed as follows to set the forms length:

- a. Press down on the **PAGE LENGTH ADJUST** key. The page length that was previously set will be displayed in inches.
- b. Increment or decrement the displayed page length using the **FINE ADJUST** keys until the desired page length is displayed.

2563A

- c. Press the ENTER key to set the displayed page length. The printer returns to the STATUS mode after the ENTER key is pressed, indicating that the desired page length was entered.

NOTE

To "exit" this mode without changing the page length, press the PAGE L. ADJ. key or the ON LINE key.


**SETTING TOP OF FORM**

The Top of Form (TOF) position is an arbitrary indicator of the first line of printing. Once the Top of Form is set, any succeeding FORM FEED advances paper one page length until the same relative position on the next page is reached. This enables the operator to move swiftly to the first print line on the succeeding page without performing single line feeds.

Perform the following steps to set the Top of Form position:

- a. Press the SET T.O.F key to enter the SET T.O.F. mode. All three decimal points on the display will illuminate to indicate this mode.
- b. Adjust the paper using the LINE FEED or FINE ADJUST keys so that the top of the ribbon shield is at the desired position; that is, the top of the ribbon shield corresponds to the bottom of the first print line desired on the page.

NOTE

The  FINE ADJUST key causes the printer to retract paper; however, if the platen is not open, you must tension the

paper below the printer (or open the platen) to allow it to move in the reverse direction.

- c. Press the ENTER key. The paper advances to the next form with the hammers aligned exactly at the desired Top of Form. If a paper-out error was in effect before the SET T.O.F. key was pressed, setting the Top of Form clears the error.

NOTE

The ribbon shield is the Top of Form indicator. After the paper advances to the next Top of Form position, the ribbon shield will not line up with the Top of Form. The hammers however, located about 1 and 1/4 inches below the top of the ribbon shield, will be ready to print at the correct position.

If the actual length of the form is not equal to the forms length stored in memory, the printer will not advance paper to the correct Top of Form.

- d. Check to ensure that the platen is closed and then press the ON LINE key to resume normal printing.

PRINTER CONFIGURATION

The HP 2563A is configurable from the Operator Control Panel. The following table lists the configurable printer functions and their associated numbers. Each function has two or more possible parameters which can be altered as desired. Some of the functions can be set remotely via ESC sequences. See the HP 2563A Technical Reference Manual (P/N 02563-90905) for information concerning remote configuration.

2563A

To configure a function from the Operator Control Panel, perform the following steps:

- a. While off-line, press the CONFIG. and one of the FINE ADJ. keys simultaneously. Both decimal points will illuminate, indicating that the printer is in the CONFIGURATION mode.
- b. While continuing to press the CONFIG. key, increment or decrement the function number by pressing the FINE ADJUST (UP or DOWN) key until the desired function number is displayed.
- c. Release the CONFIG. key. The display now shows the current parameter value for the function you desire to change.
- d. Using the FINE ADJUST keys, increment or decrement the parameter number until the desired number is displayed.
- e. Press the ENTER key. The new parameter will be entered and the printer will return to the STATUS mode.

NOTE

To avoid entering the new parameter value, press the CONFIG. or ON LINE key before pressing the ENTER key. This retains the original configuration for that function. This may be helpful when you want to keep the original parameter for a particular function but do not remember the parameter value.

CONFIGURATION FUNCTION NUMBERS

FUNCTION NUMBER AND MEANING	PARAMETER RANGE	DEFAULT VALUE
1 Select primary character set	0-25	
2 Select secondary character set	0-25	
3 Select print density	0,1	0
4 Select print pitch	10.0,16.7	0
20 Configure Interface	00-FF	
21 Configure Interface	00-FF	
22 Configure Interface	00-FF	
23 Configure Interface	00-FF	
24 Configure Interface	00-FF	
*25 Configure Interface	00-FF	
*26 Configure Interface	00-FF	
*27 Configure Interface	00-FF	
*28 Configure Interface	00-FF	
*29 Configure Interface	00-FF	
50 Disconnect Modem	0,1	

* Functions 20 through 29 are I/O-dependant and functions 25 through 29 can only be configured by your HP Service Representative.

2563A

Character Set Selection

To be compatible with both 7-bit and 8-bit terminals, your HP 2563A has 7-bit and 8-bit character sets. The character set in the standard HP 2563A is a 128 USASCII character set. The printer may contain up to a maximum of 16 character sets. Your printer contains the sets which were specified in your purchase order. Two character sets (primary and secondary) may be selected at any one time and are selected either through the **CONFIGURATION** mode from the Operator Control Panel or remotely via escape sequences.

SETTING THE PRIMARY CHARACTER SET FROM THE OPERATOR CONTROL PANEL

Set the primary character set by accessing function 1 of the **CONFIGURATION** mode and selecting the parameter number associated with the desired primary character set. The character sets and their associated parameter numbers are listed in the following table. For an explanation of the **CONFIGURATION** mode, see the **PRINTER CONFIGURATION** section of this manual.

SETTING THE SECONDARY CHARACTER SET FROM THE OPERATOR CONTROL PANEL

Set the secondary character set by accessing function 2 of the **CONFIGURATION** mode and entering the parameter number associated with the desired secondary character set. The character sets and their associated parameter numbers are listed in the following table.

NOTE

The self-test printout shows which character sets are installed in your printer and gives their associated parameter numbers.

CHARACTER SET PARAMETERS

7-BIT CHARACTER SETS

Character Set	Parameter Number
USASCII	0
Katakana	3
Draw	4
Block	5
Math	6
French	8
German	9
Swedish/Finnish	10
Danish/Norwegian	11
Spanish	12
British	13
JASCII	14
Roman Extension	15
OCR-A	24
OCR-B	25

8-BIT CHARACTER SETS

Roman 8	20
Katakana 8	21

The parameters in the above table may also be commanded remotely if character set selection is to be performed under program control. Character set selection commands override the Operator Control Panel configuration setting. When taken off-line, the printer remains in the character set last commanded. See the 2563A Technical Reference Manual (part no. 02563-90905) for information on remote character set selection.

Standard ASCII shift-in and shift-out codes may be used to select primary and secondary character sets. Shift-out selects the secondary language and shift-in returns the printer to the primary set. Any number of character sets may

2563A

be used within one print line if they are the same pitch.

Print Density Selection

The HP 2563A has both standard and high density print. The default is standard density but high density print can be selected by entering the **CONFIGURATION** mode (function 3). Entering the 0 parameter selects standard print and entering the 1 parameter selects high density print. Selecting standard or high density affects both the primary and secondary character sets.

Standard and high density print can also be selected using escape (ESC) sequences. Setting the print density remotely will override the Operator Control Panel except under power-on or reset conditions.

Print Pitch Selection

Two print pitches are available with the HP 2563A printer--standard (10 characters per inch) and compressed (16.7 characters per inch). Print pitch is selected by setting function 4 of the **CONFIGURATION** mode to parameter 0 for standard print and 1 for compressed print. Print pitch can also be selected using escape sequences.

Vertical Line Spacing

Vertical line spacing (6 or 8 lines per inch) is selected via the **LPI ADJUST** key on the Operator Control Panel or by program control (ESC sequences). Programmatically setting the line spacing overrides the Operator Control Panel setting except under power-on or reset conditions.

INTERFACE CONFIGURATION

All of the interface options, including the standard HP-IB interface, are configured from the Operator Control Panel. Each interface has its own set of configuration parameters which are set by accessing functions 20 through 24 in the **CONFIGURATION** mode and using the **ENTER** key to select the proper code numbers. Once your printer has been configured properly mark the configuration parameter numbers on the label located underneath the access cover (see the Configuration Parameter List on the next page). Thereafter, if you must configure the interface again, the parameters will be easily accessible and you can avoid a service call.

NOTE

If your printer is equipped with an HP-IB interface, only the HP-IB address number must be configured. See the following portion of this manual to select the HP-IB address.

Perform the following steps to configure your interface:

- a. Press the **CONFIG.** and **FINE ADJ.** key simultaneously and select function 20 by using the **FINE ADJUST** keys.
- b. Release the **CONFIGURE** key and look up the configuration parameter for function 20 indicated on the operator information label (under the access cover).
- c. Select the desired configuration parameter by pressing the **FINE ADJUST** keys (**UP** or **DOWN**) until the desired number is displayed.

2563A

- d. Press the ENTER key. This step saves the configuration parameter.
- e. Repeat steps a. through d. until all the configuration parameters for functions 20 through 24 have been entered. Functions 25 through 29 can only be changed by your HP Service Representative although the values may be checked.

I/O CONFIGURATION (see Operator's Manual)			
FUNCTION	PARAMETERS	FUNCTION	PARAMETERS
20		*25	
21		*26	
22		*27	
23		*28	
24		*29	

*Configurable by HP service representative only

Configuration Parameter List (on label under access cover)

CAUTION

The HP-IB cable loading is set at the factory to match the cable shipped with your HP 2563A. If you install an HP-IB cable of a different length, the HP-IB cable loading must match the cable length. To match the HP-IB loading to your cable, call your HP Service Representative.

HP-IB ADDRESS SELECTION

To select an HP-IB address, the same procedure is followed as that for configuring other printer features such as print density and character set selection. To select an HP-IB address, perform the following steps:

- With the printer off-line (on-line indicator extinguished), press and hold the CONFIG. key and press the FINE ADJ. key simultaneously.
- Select function number 20 by pressing the FINE ADJ. key (up or down) until the number 20 appears on the display.
- Release the FINE ADJ. and CONFIG. keys. Releasing these keys displays the current

HP-IB address (parameter) number in the display.

- Select the desired address number (0 - 7) by pressing the FINE ADJ. key (up or down) until the desired number is displayed.
- Press the ENTER key. This step finalizes the configuration and returns the printer to normal operation. If the ENTER key is not pressed, the new address selection is not saved.

TEST

The printer self-test is used to verify the printer's operational status. This self-test function can be run from the Operator Control

2563A

Panel or can also be run under program control using the ESC z sequence. The standard self-test can be run or specific subtests can be performed and run continuously if desired (individual subtests can be executed from the Operator Control Panel only).

The printer must be off-line to execute a self-test from the Operator Control Panel. If a paper-out or platen/ribbon fault condition exists (error numbers 11 and 12), none of the printing subtests will execute.

Standard Self-Test

To perform the standard self-test function (excluding I/O tests), depress the TEST key once to enter the test mode and then press the ENTER key to begin test execution. To run a continuous standard self-test, depress the TEST key for more than five seconds (until a number 4 appears on the display) and then press the ENTER key. Self-test can be exited any time by pressing either the TEST or ON LINE keys momentarily.

NOTE

After you have pressed the TEST key to initiate a self-test, there is a delay of a few seconds before the printer starts to print a test printout. **While self test is active, the right-most decimal point blinks.**

During the standard self-test, a two-page printout is completed as shown in the Test Printout Illustration located in the back of this manual (directly preceding the HP Sales and Service Offices). The printout lists some of the installed printed circuit assemblies, all of the installed character sets, and prints graphics and various characters for checking print quality.

When the test has been completed and there are no errors, the printer returns to the status mode.

If an error occurs during test execution, an error number flashes on the display. Refer to the section on Test Failure for more information on this subject.

Specific Subtest Selection

When executing the printer test from the Operator Control Panel, individual subtests can be selected by pressing the TEST key once. This action causes a subtest number to be displayed and the right decimal to illuminate indicating the printer is in the TEST mode. The subtest number can be incremented or decremented using the FINE ADJUST keys until the desired number is displayed. Once the number is displayed, press the ENTER key to execute the displayed subtest.

To run a continuous subtest, press the TEST key and hold it down for more than five seconds until the display changes from a 5 to a 4. This sets the printer up so that when the ENTER key is pressed (after using the FINE ADJ. keys to select a subtest number) the displayed subtest runs continuously. Exit the continuous subtest by pressing the TEST or ON LINE key momentarily.

For example, to perform the "high density ripple" subtest continuously, you would do the following

- a. With the printer off-line, press the TEST key and hold it down for more than five seconds until the displayed number 5 will change to a 4. Release the TEST key.
- b. Press one of the FINE ADJUST keys until the number 4 is displayed.
- c. Press the ENTER key.
- d. Unless an error occurs, subtest number 4 will run continuously. Press the TEST key to stop the subtest.

2563A**NOTE**

Pressing the ON LINE key also aborts the self-test and puts the printer on-line.

SUBTEST NUMBERS

SUBTEST	SUBTEST NUMBERS
Standard Self-Test	0
Standard Ripple	1
Double Size Ripple	2
Compressed Ripple	3
High Density Ripple (optional)	4
Raster Graphics	5
I/O Tests	30-39

Test Failure

If a detectable problem exists within the printer, a failure code number will flash on the display. These numbers indicate a general failure area within the printer as shown in the following table.

SELF TEST ERROR NUMBERS

NUMBER	FAILURE
20	Power-on
21	Static Encoder
22	Corebar Motor
28	Active Encoder
29	Configuration Print Out
30	Standard Ripple Print
31	Double Size Ripple Print
32	Compressed Ripple Print
33	High Density Ripple Print
34	Raster Graphics
36	Black Out Print
40	DGL ROM
41	Digital Test
42	Corebar Hammer
50-59	I/O Errors
51	Multipoint I/O Errors
60-69	Graphics Errors

If the test routine fails, perform a reset (FORM FEED and LPI ADJUST keys pressed simultaneously) and try the test again. If the test fails the second time, report the test error number to your HP service representative.

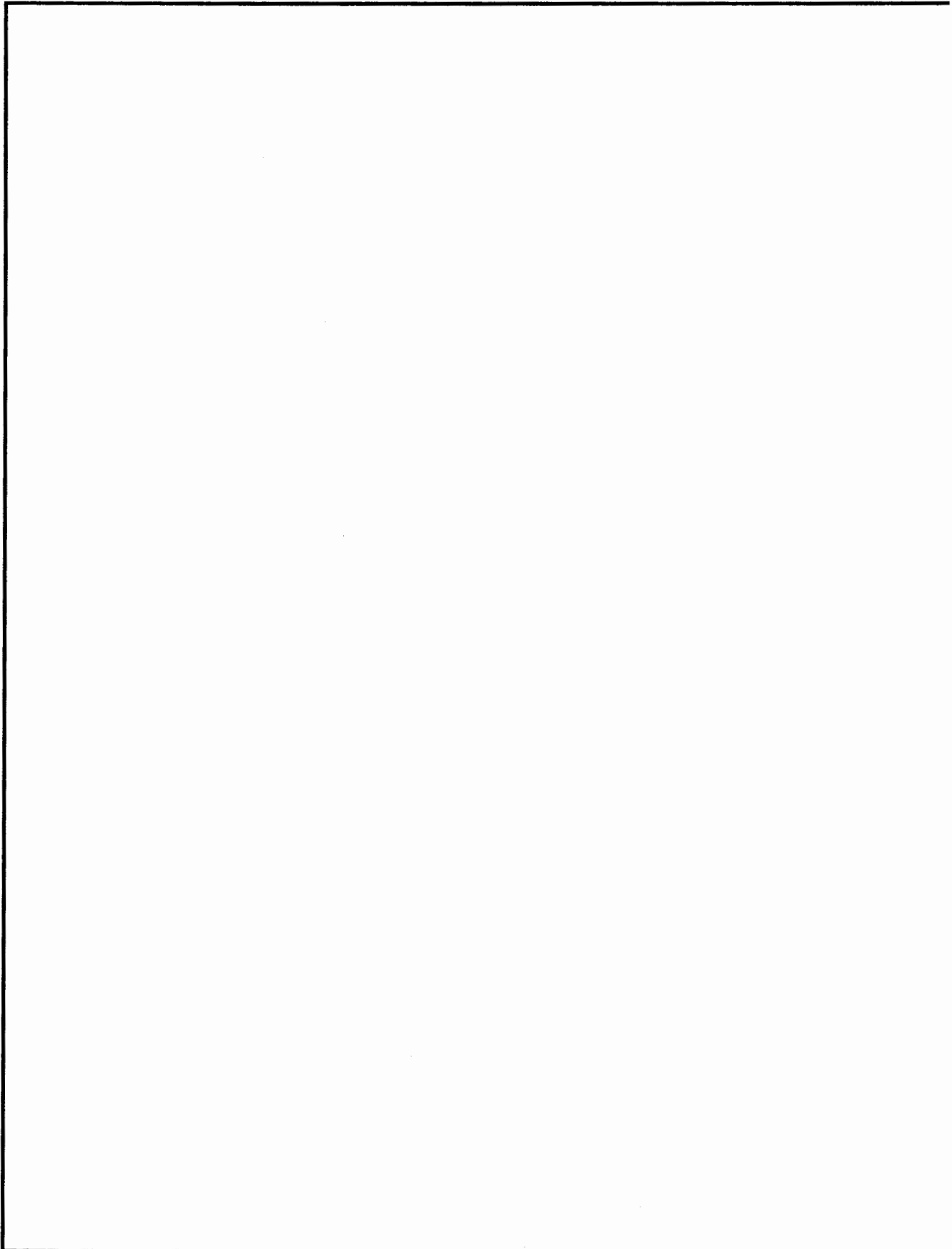
NOTE

Refer to the HP 2563A Service Manual (02563-90904) for a more detailed test error description.



OPERATOR'S

2563A



2563A

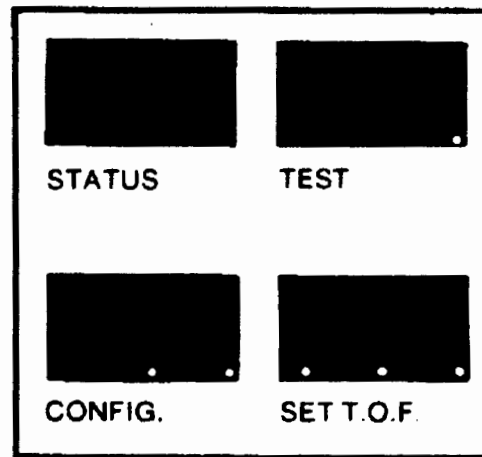
SECTION III. HOW TO OPERATE YOUR PRINTER

INTRODUCTION

This section discusses the printer status and the controls, indicators, and other features of your printer. Using your printer efficiently requires that you understand these easy-to-use features.

The printer is controlled using the Operator Control Panel and/or control codes (such as ESCape sequences). The Operator Control Panel operation is detailed in this section and the control codes are explained in the HP 2563A Technical Reference Manual (02563-90905).

The decimal points on the Operator Control Panel display indicate which mode the HP 2563A is in. When no decimal points are illuminated, the printer is in the **STATUS** mode. When the rightmost decimal point is illuminated, the printer is in the **TEST** mode. When the middle and rightmost decimals are illuminated, the printer is in the **CONFIGURATION** mode and when all three decimals are illuminated, the printer is in the **SET T.O.F.** mode. The numbers displayed in each of these conditions are listed in the **PRINTER STATUS**, **PRINTER CONFIGURATION**, and **TEST** sections of this manual.



PRINTER STATUS

Under most conditions, the printer is in the **STATUS** mode and displays its current status via the Operator Control Panel display. When in the **STATUS** mode, none of the decimal points on the display are illuminated and a status number is displayed. This number corresponds to a specific status as shown in the following table.

NOTE

When the printer is in the **SET T.O.F.** mode, printer status is displayed but all three decimal points are illuminated.

2563A**STATUS CODE TABLE**

Operational Codes

Status Code	Description
0	Printer ready (also modem connected for multipoint interface)
1	Printer ready but multipoint interface is installed with modem disconnected
4	Performing a subtest in continuous mode
5	Standard self-test/subtest active
6	Print One Line (file data) activated
7	Print One Line (test pattern) activated

Operator Correctable Problems

11	Printer out of paper
12	Platen open or ribbon not installed
13	Paper jam

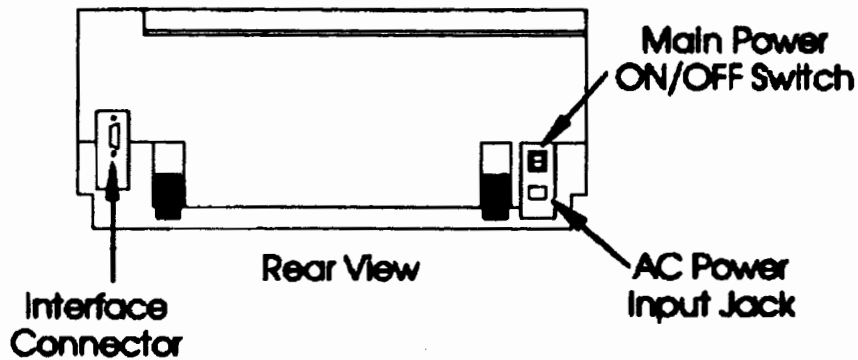
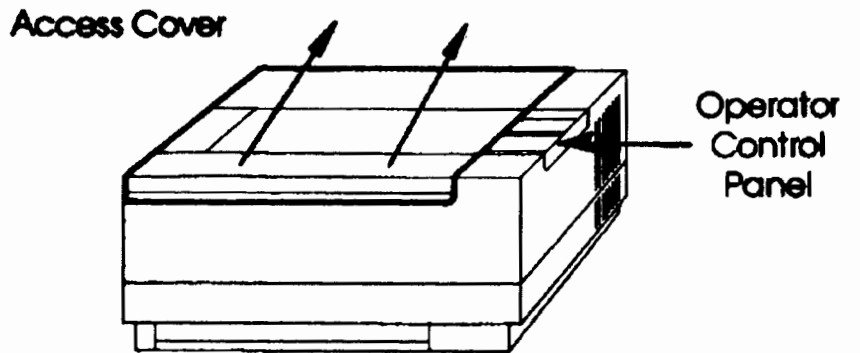
Run-Time Errors

14	Print mechanism problem
15	Graphics run-time fail
16	I/O run-time fail
17	Printer time out
19	Remove CE strap
80	Power-On problem
81-82	Slave self-test error
83	Internal firmware problem
84	Problem receiving configuration information from encoder
85	Problem sending configuration information to encoder
86	Modem connect malfunction
90	I/O slave time-out
91	Graphics slave time-out

2563A

OPERATOR CONTROLS AND INDICATORS

The following descriptions explain the location and function of the printer controls and indicators. To assist in the operation of the various printer functions, an Operator Control Panel Guide (foldout) is also provided in the back of this manual.



HP 2563A Printer

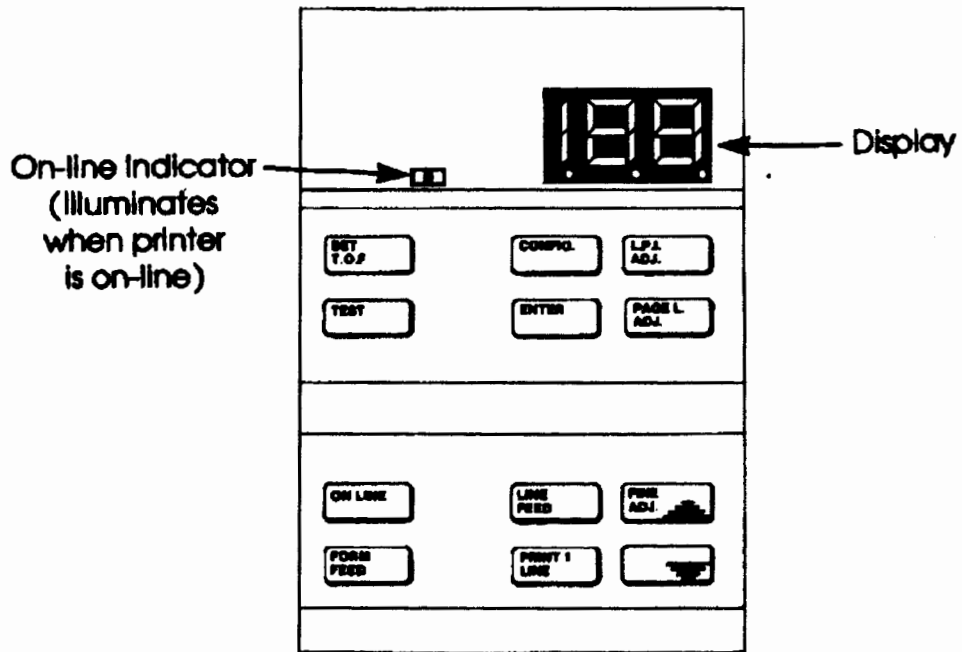
2563A

CONTROL/INDICATOR

DESCRIPTION

MAIN POWER ON/OFF SWITCH

This rocker switch is located on the back of the printer, and is used to power-up or power-down the printer.



Operator Control Panel

ON LINE INDICATOR



This yellow LED (Light-Emitting Diode) illuminates when the printer is on-line. When on-line, printing is enabled, all Operator Control Panel keys are disabled, and the printer is controlled by the controlling device (computer system).

DISPLAY INDICATOR



The display consists of three seven-segment LEDs and is located on the top portion of the Operator Control Panel. The displayed numbers are used to convey information in four different modes: a) STATUS, b) TEST, c) CONFIGURATION, and d) SET TOP OF FORM. The decimal points indicate which mode the printer is in: no decimals illuminate when in the STATUS mode, the right-most decimal illuminates when in the TEST mode, the middle and right decimals illuminate when in the

2563A

CONFIGURATION mode, and all three decimals illuminate when in the SET T.O.F mode.

Usually the printer is in the STATUS mode and displays a number indicating the present status of the printer. This number corresponds to a specific status listed in the PRINTER STATUS section of this manual.

When in the TEST mode, the display indicates a number corresponding to the particular subtest that is to be performed. When a test is executing, the right decimal point blinks. See the TEST section of this manual for more information on the TEST mode.

When in the CONFIGURE mode, the function number to be configured is displayed while the CONFIGURATION key is held down and its corresponding parameter is displayed when the CONFIGURATION key is released.

In the TEST and CONFIGURE modes, the displayed numbers can be incremented or decremented by using the FINE ADJ. keys.

SET T.O.F. KEY



This key, in conjunction with the ENTER key, is used to set the Top of Form (TOF). When this key is pressed, all three decimal points on the display are illuminated to indicate that the SET T.O.F. mode has been entered. Once the mode has been entered, pressing the ENTER key identifies the new Top of Form and advances paper to the new TOF position. This mode can be exited by pressing the SET T.O.F. or ON LINE key. If error conditions such as paper-out have occurred, pressing this key will clear the error and display a zero; however, the error will be displayed again if the condition is not corrected when the mode is exited. A new Top of Form must be set to clear a paper jam. See the SETTING TOP OF FORM section of this manual for more information about Top of Form.

CONFIGURATION KEY



This key, in conjunction with the FINE ADJ. keys, is used to enter the CONFIGURATION mode. Pressing the CONFIG. key alone has no result. When the CONFIG. key and one of the FINE ADJ. keys are pressed simultaneously, the printer enters

2563A

the CONFIGURATION mode. The middle and right decimal points are illuminated to indicate that the printer has entered the CONFIGURATION mode. When the CONFIG. key is held down, a function number is displayed. This function number can be changed by using the FINE ADJ. keys until the desired function number is displayed. When the CONFIG. key is released, the parameter associated with the function just displayed appears on the display. Pressing the FINE ADJ. key changes the displayed parameter so that a new value can be selected. The displayed parameter is stored and the CONFIGURATION mode exited by pressing the ENTER key. This mode can be aborted and the original parameters saved by pressing the CONFIG. key (assuming the ENTER key has not been pressed). Pressing the ON LINE key also exits the CONFIGURATION mode and additionally puts the printer on-line. For more information on printer configuration, see the PRINTED CONFIGURATION portion of this manual.

LPI ADJUST KEY

L.P.I.
ADJ.

Pressing this key causes the current LPI (vertical lines per inch) setting (6 or 8) to be displayed. Both decimal points are illuminated to indicate that CONFIGURATION mode has been entered. At this point, the FINE ADJUST keys can be used to change the LPI setting. When the desired setting is displayed, pressing the ENTER key selects the displayed setting as the current LPI value and returns the printer to the STATUS mode. This mode can be aborted by pressing the LPI ADJ. or ON LINE key (assuming the ENTER key has not been pressed).

TEST KEY

TEST

This key is used to test the printer to determine if it is in proper operating condition. A complete test or specific subtests can be executed using this key. Test failure is indicated by a flashing error number on the Operator Control Panel display. A detailed description of the test function is presented in the TEST section of this manual.

2563A**ENTER KEY**

 A rectangular button with the word "ENTER" inside.

When in the CONFIGURATION mode, pressing the ENTER key causes the selected parameter to be set. When in the TEST mode, pressing the ENTER key causes the printer to start execution of the selected test. When in the SET T.O.F. mode, pressing the ENTER key sets the new Top of Form. The printer is returned to STATUS mode after the ENTER key is pressed.

PAGE LENGTH ADJUST KEY

 A rectangular button with the text "PAGE L. ADJ." inside.

Pressing this key causes the physical page length to be displayed. Although the printer is in the CONFIGURATION mode, only one decimal point is lit (for example, 11.5 for 11 1/2 inches). The displayed page length can be adjusted using the FINE ADJUST keys. After the desired page length is displayed, pressing the ENTER key sets the page length to the displayed value and the printer returns to STATUS mode.

ON LINE KEY

 A rectangular button with the text "ON LINE" inside.


This key is used to give control of the printer to the operator (off-line) or to the computer system (on-line). The ON LINE indicator illuminates when the printer is on-line. The printer must be off-line to respond to any of the other keys on the Operator Control Panel. This key can also be used to abort from the CONFIGURATION, TEST, and SET T.O.F. modes; this action places the printer on-line, saves the previously active configuration and Top of Form, and aborts self-test if self-test is active. The printer will not go on-line if there is an error condition present.

LINE FEED KEY

 A rectangular button with the text "LINE FEED" inside.

This key is used to advance paper to the next print line using the line spacing increment which has been set by either the LPI ADJ. key or via program control. If the LINE FEED key is pressed and held down, the printer will pause momentarily and then advance paper at an increased rate. This action will continue as long as the key remains depressed. The LINE FEED key functions only when the printer is off-line and not in the test mode.

2563A

FORM FEED KEY



This key is used to advance the paper to the next Top of Form position. If pressed momentarily, the printer performs one form feed. If the key is held down, the printer performs successive form feeds until pressure is released from the key. This key functions only when the printer is off-line and not in the test mode.

PRINT 1 LINE KEY



This key is used to print one line of data on the installed form at the current line position. If the key remains in the down position, successive lines of data will be printed until pressure is released from the key.

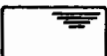
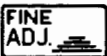
NOTE

If a single line is printed, use the line feed key to advance the paper so that the line is visible above the ribbon shield. This is not necessary when printing multiple lines.

Two kinds of data may be printed using this key: the type printed depending on which mode the printer is currently in.

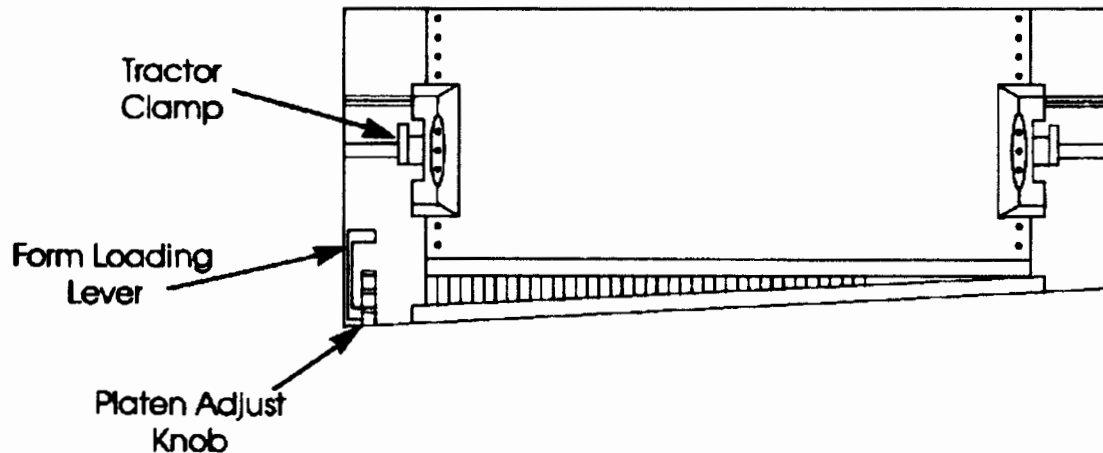
If the printer is in the TEST mode (accessed by pressing the TEST key), a test pattern is printed to aid forms alignment. If the printer is not in the TEST mode, the printer goes on-line, prints one line of data, and then returns off-line. If no data is available within 1.5 seconds, the printer returns off-line without printing.

FINE ADJUST (UP/DOWN) KEYS



The two FINE ADJUST keys are used to move the paper up and down in small increments; this action is repeated if either key is held down. The FINE ADJUST keys are also used to increment (UP) and decrement (DOWN) the display when in the TEST or CONFIGURATION modes.

2563A



Forms Loading Controls

TRACTOR CLAMP

This lever is located on the outward side of both tractors and if pulled forward it allows the tractor to slide left and right. Pushing the lever up locks the tractor into position after adjustment.

FORM LOADING LEVER

This lever is located on the left side of the print mechanism and is used to open and close the platen so that paper and ribbon may be loaded or removed. Paper should not be pulled down through the platen gap when being removed. Tear paper off below the paper loading slot and then eject the remaining paper by using the FORM FEED key.

PLATEN ADJUST KNOB

This rotary control is used to adjust the platen-to-hammer gap for the best print quality with different forms or thicknesses. The numbers on the knob roughly correspond with the number of parts in a multi-part form, but fine adjustments of the knob must be made to maximize print quality.

2563A

POWER-ON PARAMETERS AND POWER-FAIL RECOVERY

When the Main Power ON/OFF switch (back of printer) is toggled OFF and ON or a loss of power to the printer occurs, the printer is set to a known state as follows:

On/off-line in the same state as prior to removing power

Primary and secondary character sets selected as configured from the Operator Control Panel

Vertical line spacing (6/8 LPI) as selected from the Operator Control Panel

Paper moves to the next Top of Form position

Standard or compressed print mode as selected from the Operator Control Panel

Standard or high density print as selected from the Operator Control Panel

Print buffer cleared

Standard VFC channel assignments selected

Left margin offset at zero

Form length remains at the same value as before power loss

The recoverability of the HP 2563A following a system power failure is dependent upon which system the printer is connected to. Refer to the appropriate system manual for more information on this subject. If only the printer loses power, the power-on parameters will be set as indicated above.

NOTE

The HP 2563A has no power fail indicator.

RESET

The reset operation causes the printer to default to the power-on parameters as explained in the section on POWER-ON PARAMETERS AND POWER FAIL RECOVERY. Therefore, a reset is intended to be used only in the case of a self test error or by a Hewlett-Packard Service Representative.

Reset is performed by pressing the FORM FEED and LPI ADJUST keys simultaneously. When reset, the printer moves paper to the Top of Form, reverts to the power-on parameters, and stays off-line. A programmable reset can also be performed. The programmable reset affects the printer similarly except that the printer remains on-line.

ON-LINE/OFF-LINE

When the printer is on-line, data and commands can be transmitted to it from a controlling device (computer system). When it is off-line, data and commands are ignored by the printer. The printer must be off-line in order to use any of the keys on the Operator Control Panel.

The printer is placed on/off-line by using the ON LINE key on the Operator Control Panel. Fault conditions such as paper out, platen open, ribbon out, etc. cause the printer to be set off-line. When this happens, the printer will not return on-line until the error has been corrected and the ON LINE key is pressed.

GRAPHICS

The HP 2563A graphics printing capability is escape sequence driven. Consult the 2563A Technical Reference Manual (02563-90905) for graphics printing information.

2563A

STANDARD VERTICAL FORMS CONTROL (VFC)

The HP 2563A printer is equipped with a standard and a programmable Vertical Forms Control. The standard VFC is defaulted to whenever the printer is powered-up or reset.

Vertical Forms Control allows the user to skip to a predefined line on a page of print with typically one or two commands instead of using a number of line feeds; this capability can greatly increase the speed of a print job.

The standard VFC contained in the HP 2563A is a "computed VFC" meaning that the VFC automatically adjusts its skip lengths when the form length is changed.

The standard VFC channel definitions are listed in the following table. The terms Top of Form and Bottom of Form refer to the top and bottom of text on the page. More information about the programmable VFC is contained in the HP 2563A Technical Reference Manual (02563-90905).

VFC CHANNEL DEFINITIONS

VFC Channel	Channel Definition
0	Conditional Top of Physical Page Page
1	Top of Form (line 1)
2	Bottom of Form (BOF(last line of text))
3	Single space (lines 1,2,3,4,...)
4	Double space (lines 1,3,5,7,...)
5	Triple space (lines 1,4,7,10,...)
6	Half Form (lines 1, $(BOF + 1)/2 + 1$)
7	Quarter Form (lines 1, $(BOF + 3)/4 + 1$, $(BOF + 1)/2 + 1$, $3(BOF + 1)/4 + 1$)
8	Tenth space (lines 1,11,21,31,...)
9	Bottom of Form
10	BOF - one line ($BOF - 1$)
11	TOF - one line ($TOF - 1$)
12	Top of Form
13	Seven space (lines 1,8,15,...)
14	Six space (lines 1,7,13,...)
15	Five space (lines 1,6,11,...)
16	Four space (lines 1,5,9,...)



2563A**FAULT CONDITIONS**

All fault conditions are signified by flashing of the display on the Operator Control Panel. The error conditions in the following table cause the corresponding error number to be displayed. These error indications are provided to help you

locate and possibly correct problems which prevent normal operations of the printer. When any fault condition exists, the printer automatically goes off-line and cannot be put on-line again until the fault is corrected.

PRINTER FAULT CONDITIONS

ERROR NUMBER	PROBLEM
11	Printer out of paper
12	Platen open or ribbon not installed
13	Paper jam
14	Print mechanism problem
15	Graphics run-time fail
16	I/O run-time fail
17	Printer time-out
20 (or greater)	Consult TEST section of this manual

Error No. 11

This error number indicates that the printer is out of paper. The paper-out condition is detected by the absence of paper in print column 15. When paper-out is detected, the printer finishes printing the current page, slews to Top of Form, and goes off-line until paper is reloaded. The paper-out error is cleared when either the ON LINE or SET TOP OF FORM key is depressed following paper reloading. No data is lost when paper-out occurs. Refer to the PAPER LOADING AND ADJUSTMENT section of this manual for paper loading instructions.

REMOVAL section of this manual for instructions to correct this fault.

Error No. 13

This error number indicates that paper is not passing normally through the tractors. After the paper jam is corrected, press the SET T.O.F. key align the new Top of Form with the ribbon shield, and press the ENTER key. This procedure clears the error from the display and gets the printer ready so that it can be placed on-line and normal operation resumed.

Error No. 12

When this number is flashing on the display either a ribbon cartridge has not been loaded or the platen is open (form loading lever has not been returned to the vertical position). Refer to the RIBBON CARTRIDGE LOADING AND

Errors No. 14 through 91

These error numbers indicate problems which should be referred to your HP service representative.

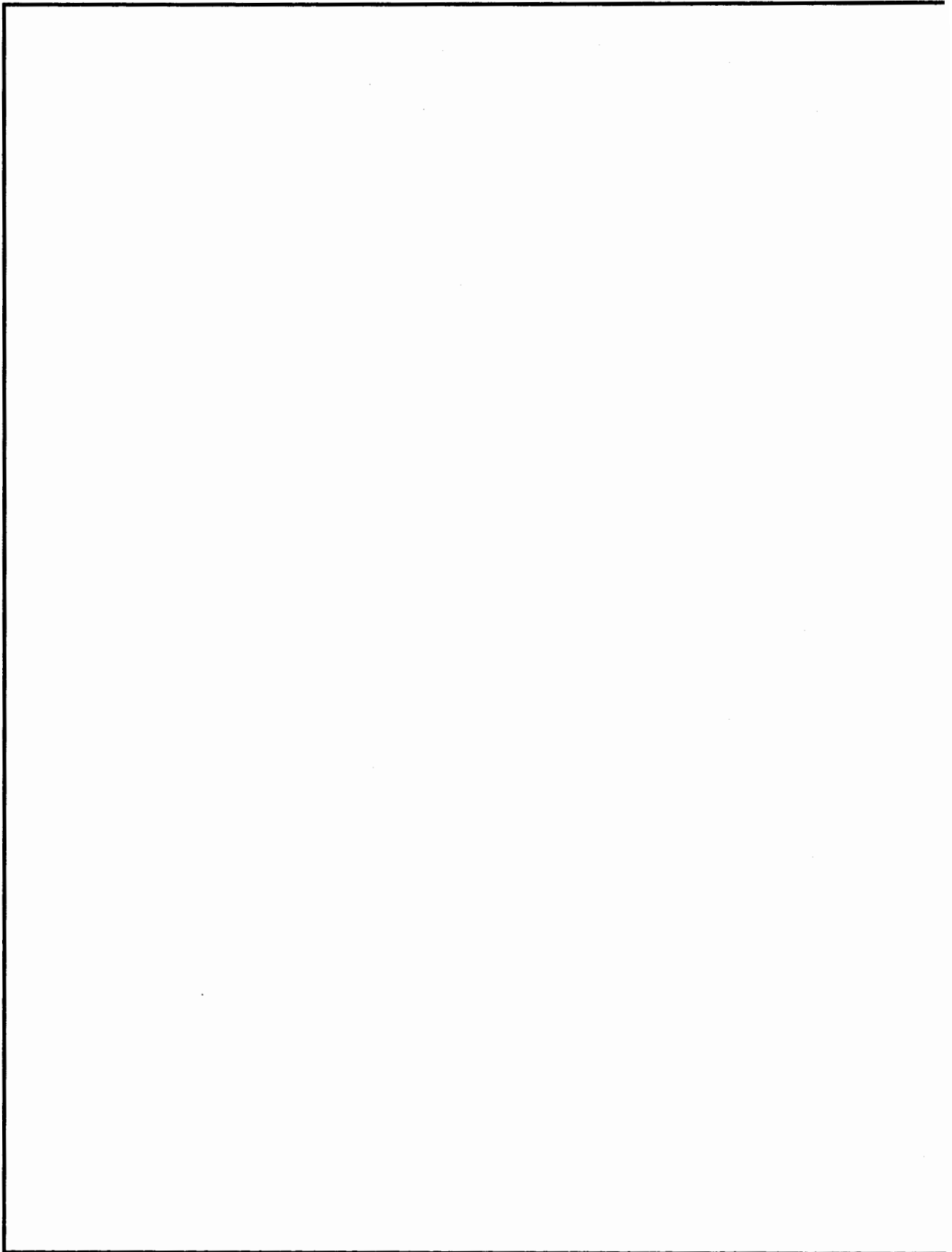
2563A

While in the **TEST** mode, any test error will cause a flashing test error number to be displayed. Any number greater than 19 indicates that the printer has failed its **TEST** routine.

Consult the **TEST** section of this manual for more information concerning test error numbers.

OPERATOR'S

2563A



2563A**SECTION IV.
OPERATOR MAINTENANCE
AND TROUBLESHOOTING****PREVENTIVE MAINTENANCE**

Maintain the printer in a state of general cleanliness. Accumulated dust, bits of paper, and lint can lead to serious problems.

Watch for indications of physical damage and report problems or potential problems to your HP service representative.

IN CASE OF DIFFICULTY

You should not attempt to perform any maintenance of this printer except routine operator maintenance and limited maintenance of the print mechanism. However, if the printer fails to function properly, review the following chart for a possible solution before contacting the HP service representative.

Trouble**Cause(s)****PRINTER WILL NOT POWER ON**

Power cord is not plugged in. Current is not coming from the power outlet. Fuse is blown. MAIN POWER ON/OFF switch is not in the ON (1) position (refer to the POWER section of this manual).

PAPER DOES NOT ADVANCE

Paper is not properly loaded. Check tractors, paper alignment, and platen gap setting. Holes in paper are damaged. Paper is caught in the paper box. Paper folds do not match horizontal perforations. Check the paper and remove the damaged sheets. Reload paper (see PAPER LOADING AND ADJUSTMENT section of this manual).

**PAPER TEARING OR
SEPARATING OF
MULTI-PART FORMS**

Tension on paper is not correct. Check platen gap setting and tractors. Check paper for binding or dragging. Reload if necessary.

**PRINT QUALITY BECOMES
ERRATIC VERY LIGHT,
OR SMUDGED**

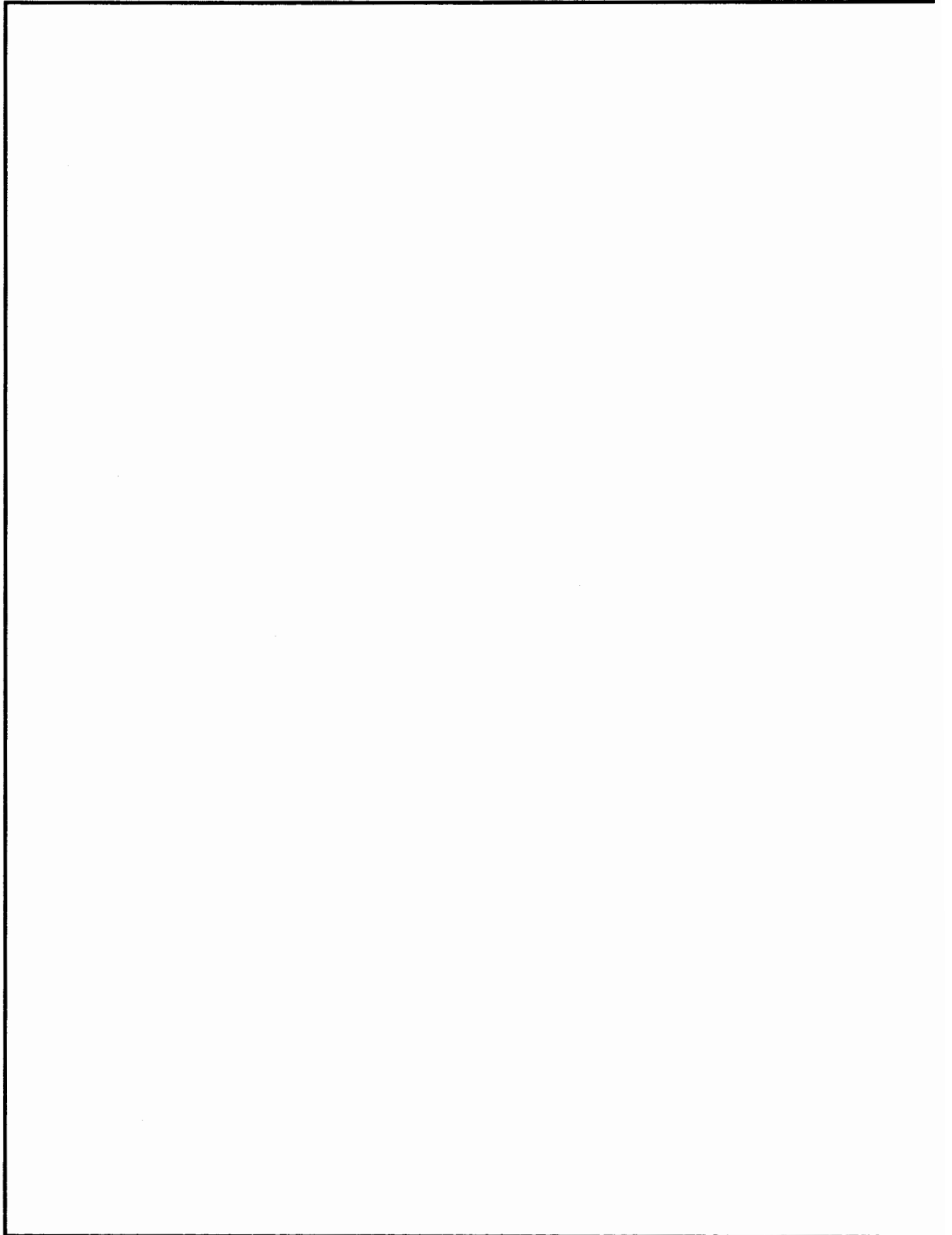
Adjust platen gap. Replace ribbon cartridge (see RIBBON CARTRIDGE LOADING AND REMOVAL section of this manual).
















WILL NOT PRINT

Check HP-IB address configuration. Ensure that the printer is on-line.

OPERATOR'S

2563A



	PRESS	PRINTER DISPLAYS		PRINTER DISPLAYS		UNTIL PRINTER DISPLAYS	PRESS	
	ENTER	 Current status	Operation complete					
	ENTER	 Current status	Operation complete					
ted,		 Current status	Operation complete					
plete								
ps, mber rror rvice								
ps, mber rror rvice								
	ENTER	 Test status — right decimal flashes	Printer should perform subtest and return to ready status	 Status or flashing error code	If display flashes, check error number and repeat. If error repeats, call service representative			
	ENTER	 Test status — right decimal flashes	If no errors occur subtest will continue to run until test key is pressed	 Status or flashing error code	If display flashes, check error number and repeat. If error repeats, call service representative			
		 Current parameter	CONFIG. Press to exit config. mode	 Current status	Operation complete			
		 Current parameter	To select another parameter, press		 or 	 Desired parameter	ENTER	 Current status Operation complete



CONFIGURATION FUNCTION NUMBERS

	*FUNCTIONS	PARAMETERS
0		
1	1 Select primary character set	0-25
2	2 Select secondary character set	0-25
3	3 Select print density	0,1
4	4 Select print pitch	100,16.7
5	20 Configure interface	00-FF
	21 Configure interface	00-FF
	22 Configure interface	00-FF
	23 Configure interface	00-FF
	24 Configure interface	00-FF
	* 25 Configure interface	00-FF
	* 26 Configure interface	00-FF
	* 27 Configure interface	00-FF
	* 28 Configure interface	00-FF
	* 29 Configure interface	00-FF

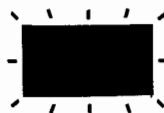
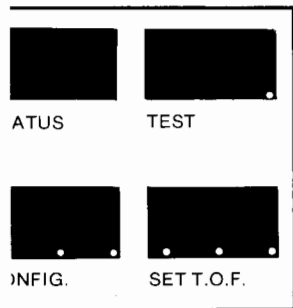
I/O CONFIGURATION INFORMATION

FUNCTION #	CONFIGURATION NUMBER
20
21
22
23
24
* 25
* 26
* 27
* 28
* 29

*Configurable by HP Service Representative only.

DESIRED OPERATION **	PRESS	PRINTER DISPLAYS		PRESS		PRINTER DISPLAYS	
SET PAGE LENGTH		 Current page length setting	To change page length	or	Until	 Desired page length setting	Then
SET L.P.I. (LINES PER INCH)		 Current LPI setting	To change LPI	or	Until	 Desired LPI setting	Then
PRINT 1 LINE (TEST PATTERN)		 Previous function number			Hold Key down to repeat	 Print 1 line status (internal)	When line printer returns to status mode
PRINT 1 LINE (FILE DATA)		 Print 1 line status (external)	When line prints, display returns to ready status. If no data is available, printer will not print anything.		Hold key down to repeat	 Current status	Operation complete
SINGLE SELF-TEST		 Test status		 Right decimal will flash to indicate test is active	Printer should print test printout and return to ready status if no error occurs	 Status or flashing error code	If display flashes check error number and repeat. If error repeats, call service representative.
CONTINUOUS SELF-TEST	 Press and hold for 5 seconds	 Test mode status	Release Test key	 To begin test	 Press test to stop	 Status or flashing error code	If display flashes check error number and repeat. If error repeats, call service representative.
SINGLE SUBTEST		 Previous subtest number	To select subtest desired	or	Until	 Desired subtest	Then
CONTINUOUS SUBTEST	 Press and hold for 5 seconds — Release TEST key.	 Previous subtest number	To select subtest desired	or	Until	 Desired subtest	Then
DISPLAY CONFIGURATION	and Hold keys down	★ Previous function number	To select another function number, hold config. key down and	or	Until	★ Desired function number	Release
CHANGE CONFIGURATION	and Hold keys down	★ Previous function number	To select another function number, hold config. key down and	or	Until	★ Desired function number	Release

FUNCTIONAL POINTS INDICATE MODE†



ERROR CONDITION

- 11 Printer out of paper
- 12 Platen open/ribbon out
- 13 Paper jam
- 14 Print mechanism problem
- 15 Graphics run-time fail
- 16 I/O run-time fail
- 17 Printer time-out
- 19 Unable to go on-line. Remove CE strap
- 20+Test error (see Operator's Manual)



SUBTEST NUMBERS

- Standard self-test
- Normal ripple
- Double-size ripple
- Compressed ripple
- High density ripple (opt.)
- Raster graphics



STATUS CODES

- 0 Printer ready (multipoint modem connected)
- 1 Printer ready (multipoint modem disconnected)
- 4 Continuous subtest/self-test
- 5 Standard self-test/non-continuous subtest
- 6 Print 1 line (data)
- 7 Print 1 line (test pattern)

Flashing display indicates error condition

Line indicator must be off to perform any of these operations

HP 2563A READER'S COMMENT SHEET

Please give us your comments concerning this manual. Your constructive criticism will help us create better manuals in the future. Be as specific as possible, giving section and page references where appropriate. Comments on the writing, graphics, binding, size, printing method, etc. are helpful in making our manuals more useful and friendly.

If you would like a reply, be sure to include your name and address with your response. Thank you for your feedback.



No postage is required if mailed in the U.S.A.



HEWLETT
PACKARD

Printed in U.S.A.
02563-9

