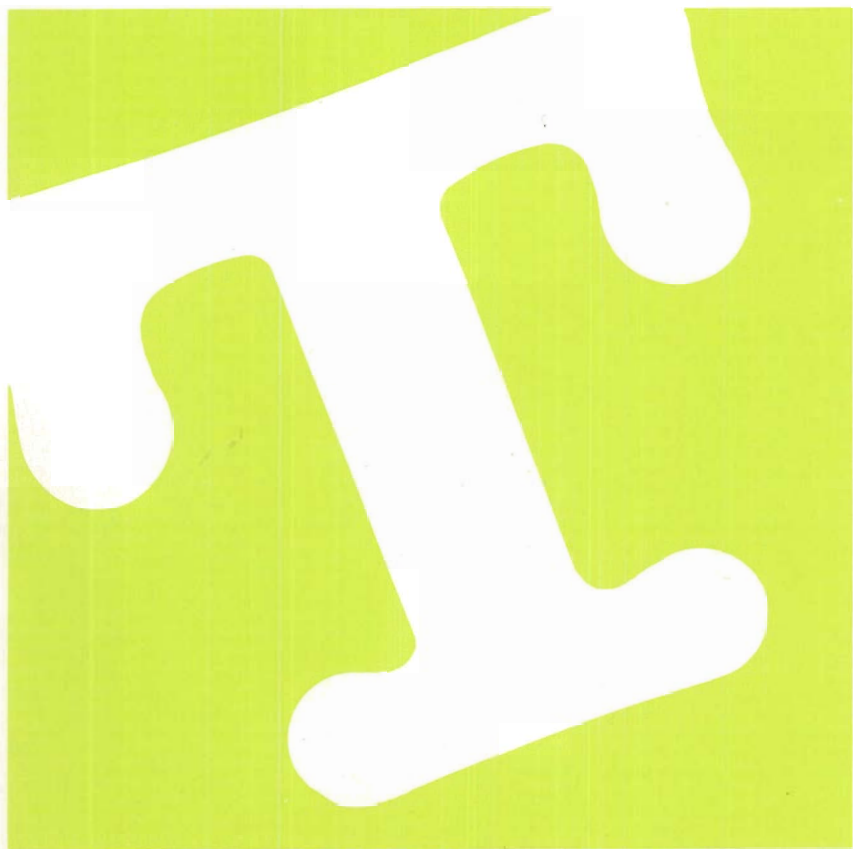


HEWLETT-PACKARD

LaserJet Printer Family

**Using the
HP 92286T Tax 1
Font Cartridge**



HP Computer Museum
www.hpmuseum.net

For research and education purposes only.



HP LaserJet Printer Family

Using the HP 92286T Tax 1 Font Cartridge



Using the HP 92286T Tax 1 Font Cartridge - Update -

Stroke Weight

The HP 92286T font cartridge contains fonts that print with different stroke weights. The escape sequence code that selects the bold stroke weight is incorrectly specified in the T font booklet.

Use the following escape sequence code to correctly specify the bold stroke weight:*

1B (1b) selects bold stroke weight

* The **1B** code is used when it ends an escape sequence. The **1b** code is used when it is within an escape sequence.

To ensure correct font selection, replace **3B (3b)** with **1B (1b)** in all escape sequences that select a bold font.

Escape sequences on pages 16, 18, 19, 20, 22, 33, 35, 36 and 37 are affected by this change.

NOTE: With the LaserJet 2000 and LaserJet series II printers, we recommend that you enter the full escape sequences to ensure correct font selection.

Replace the full escape sequences in Table D on page 33 with those listed below. (Only the affected sequences are given here.)

Helvetica 14 `^C&llO^C(0U^C(s1p14v0s1b4T`

Helvetica 12 `^C&llO^C(0U^C(s1p12v0s1b4T`

Helvetica 10 `^C&llO^C(0U^C(s1p10v0s1b4T`

Helvetica 8 `^C&llO^C(0U^C(s1p8v0s1b4T`

Linedraw `^C&llO^C(0B^C(s0p10h12v0s1b0T`

Failing to insert the correct code (**1B** or **1b** for bold) may result in the wrong font being selected.

TABLE OF CONTENTS

INTRODUCTION	1
-------------------------------	---

SECTION I The HP 92286T Character Fonts

Available Character Fonts with the HP 92286T Font Cartridge Installed	3
Font Characteristics	4
Definition of Font Characteristics.	5
Installing the Cartridge	8

SECTION II Using Escape Sequences

What Are Escape Sequences.	9
Sending Escape Sequences	11

SECTION III Using the HP 92286T Character Fonts

Introduction	13
Initial Font Selection	16
Selecting Landscape Courier.	17
Selecting Portrait Fonts	18
Using Line Draw Characters	21

TABLES

Table A	HP 92286T Font Characteristic Table	26
Table B	Roman-8 (USASCII Plus Roman Extension) Table . . .	28
Table C	USASCII Keystroke Equivalency Table	30
Table D	HP 92286T Full Escape Sequence Table	33
Table E	HP 92286T Font Selection Tables	35

INTRODUCTION

The HP 92286T font cartridge is designed for use with the Hewlett-Packard LaserJet (model number HP 2686A) Printer. This cartridge contains seven character fonts to supplement the two resident character fonts contained inside your printer (for a total of nine character fonts - with a maximum of eight different font changes per page).

By the time you finish reading these instructions, you will be familiar with the HP 92286T font cartridge, its installation and commands to access any of its character fonts.

SECTION I The HP 92286T Character Fonts

Read this section to familiarize yourself with available character fonts, their characteristics, and the installation of the cartridge to access these character fonts. If you are already familiar with the information in Section I, move to Section II.

SECTION II Using Escape Sequences

Read Section II for general information on using escape sequences. If you are not familiar with escape sequences, you will find it helpful to read this section before you proceed. If you are familiar with escape sequences, move to Section III.

SECTION III Using the HP 92286T Character Fonts

In this section you have an opportunity to practice using character fonts. You will learn about initial character font selection, and selecting portrait and landscape orientation character fonts.

TABLE A HP 92286T Font Characteristic Table

Table A lists characteristics unique to each available character font in the HP 92286T font cartridge.

TABLE B Roman-8 (USASCII Plus Roman Extension) Table

Table B will assist you in selecting the Roman-8 and USASCII symbol sets.

TABLE C USASCII Keystroke Equivalency Table

Table C will assist you in selecting the Line Draw characters contained in the HP 92286T font cartridge.

TABLE D HP 92286T Full Escape Sequence Table

Table D lists the full escape sequences that will prove helpful when setting up software, or programming. Some software packages perform the escape selection for the user, which eliminates this requirement.

TABLE E HP 92286T Font Selection Tables

Table E lists the shortest escape sequences necessary to access HP 92286T character fonts.

Please refer to your LaserJet Printer Owner's Reference Manual for detailed escape sequence instructions, and other escape sequence applications.

SECTION I

THE HP 92286T CHARACTER FONTS



AVAILABLE CHARACTER FONTS WITH THE HP 92286T FONT CARTRIDGE INSTALLED

With the HP 92286T font cartridge installed, you can print with any of the nine character fonts below. Orientations will be explained later.

FONT	ORIENTATION
Courier	Portrait
Helvbold 14	Portrait
Helvbold 12	Portrait
Helvbold 10	Portrait
Helvbold 8	Portrait
Helv 8	Portrait
Helv 6	Portrait
Linedraw	Portrait
Courier	Landscape

Each font has its own characteristics which will be described on the following pages.

FONT CHARACTERISTICS

- The HP 92286T Font Characteristic Table, on page 26, lists each character font with its specific characteristics. Characteristics are listed in a descending order of priority; orientation having the highest and typeface having the lowest.
- Each character font has specific characteristics which cannot be interchanged. For example, you cannot select Courier with 12 pitch.
- When selecting fonts, keep in mind that the printer "remembers" previous characteristics. When selecting a new font, you would normally need to compare the characteristic differences between the font you are using and the desired font, and enter (select) these differences. The HP 92286T Font Selection Tables, on pages 35,36 and 37, eliminate this selection process by providing the necessary escape sequences.
- The LaserJet printer prints a maximum of eight different fonts per page. For example, each symbol set in a certain typeface counts as a new font.

DEFINITION OF FONT CHARACTERISTICS

Symbol Set: A symbol set is a set of characters that are mapped to certain locations in the printer's memory. The USASCII and Line Draw symbol sets are contained in the HP 92286T font cartridge, and the Roman-8 symbol set is resident in the LaserJet Printer. The Roman-8 (USASCII Plus Roman Extension) Table is below:

Roman-8 Symbol Set

	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240 (MSD)	
0	NUL	DLE	SP	0	@	P	'	p				—	â	Â	Á	Þ	
1	SOH	DC1	!	1	A	Q	a	q				À	ê	î	Ã	þ	
2	STX	DC2	"	2	B	R	b	r				Â	ô	ø	ä		
3	ETX	DC3	#	3	C	S	c	s				È	°	û	Æ	Ð	
4	EOT	DC4	\$	4	D	T	d	t				Ê	Ç	á	à	đ	
5	ENQ	NAK	%	5	E	U	e	u				Ë	ç	é	í	Í	
6	ACK	SYN	&	6	F	V	f	v				Î	Ñ	ó	ø	Ì	-
7	BEL	ETB	'	7	G	W	g	w				Ï	ñ	ú	æ	Ó	¼
8	BS	CAN	(	8	H	X	h	x				ˆ	ı	à	Ä	Ò	½
9	HT	EM	)	9	I	Y	i	y				˘	ı	è	ı	Õ	¾
10	LF	SUB	*	:	J	Z	j	z				˙	ı	ò	Ö	ó	¸
11	VT	ECS	+	;	K	[	k	{				˚	ı	ù	Ü	Š	«
12	FF	FS	,	<	L	\	l	|				˛	ı	ä	É	š	■
13	CR	GS	-	=	M	]	m	}				Û	š	ë	ı	Ú	»
14	SO	RS	.	>	N	^	n	~				Û	ı	ö	ß	ÿ	±
15	SI	US	/	?	O	_	o	DEL				£	ç	ü	ô	ÿ	

USASCII
Characters

RomanExt
Characters

Orientation: The LaserJet printer prints some character fonts in portrait orientation (text printed from left-to-right across the width of the page, like a letter), and others in landscape orientation (text printed from left-to-right along the length of the page).



Portrait



Landscape

spacing: Spacing is the amount of space each character occupies horizontally on the print line. The two types of spacing are fixed (each character occupies the same space), and proportional (spacing based on the character's width - "W" occupying more space than an "I").

FIXED



PROPORTIONAL



Pitch: Pitch is the number of characters per inch. For example, 12 pitch means 12 characters/inch. Pitch is not specified with proportional character fonts since spacing is based on the width of each character.

Point size: Type sizes are designated in units called points. There are approximately 72 points to each vertical inch. The HP 92286T font cartridge contains 6, 8, 10, 12, and 14 point sizes.

Style: The HP 92286T font cartridge contains fonts with upright styles.

This is an upright style!

Stroke Weight: Stroke weight is a measure of the density of characters. The HP 92286T font cartridge contains fonts with medium and bold stroke weights.

This is medium stroke weight!

This is bold stroke weight!

Typeface: Typeface is the face of the printing type. The HP 92286T font cartridge contains a Helv typeface. The Courier typeface is resident in the LaserJet printer.

This is a Courier typeface!

This is a Helv typeface!

INSTALLING THE CARTRIDGE

To access the different character fonts, you must install the cartridge. Read the following directions carefully:

1. Press the **ON-LINE** key to set the printer off-line (light off).
2. Insert the cartridge (with the label facing up) into the slot in the upper right corner of the printer. **BE SURE THAT THE CARTRIDGE IS FIRMLY SEATED IN THE SLOT.**
3. Press the **ON-LINE** key to set the printer on-line (light on).
4. You are now in the printer's Courier (default) character font. To access another character font, the appropriate escape sequence must be sent to the printer.
5. To remove the font cartridge, press the **ON-LINE** key to set the printer off-line (light off), grasp the edges of the cartridge, and slowly pull it out of the slot.

This completes Section I. Section II is, *Using Escape Sequences*. If you are already familiar with escape sequences, move to Section III.

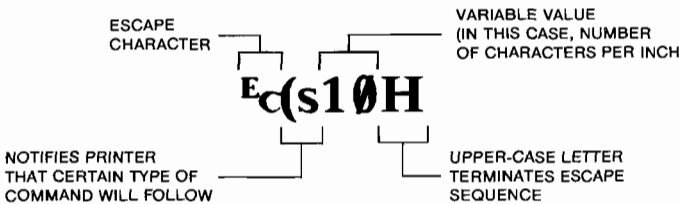
SECTION II

USING ESCAPE SEQUENCES

WHAT ARE ESCAPE SEQUENCES

Escape sequences are simply commands that are used to "talk" to the printer. They can be typed in as part of a text file, embedded in your software's initialization program, or included in a stand alone program. When the printer "sees" an escape sequence, it first decodes the command and then executes it. The printer continues printing as the escape sequence "told" it to. For example, if we send an escape sequence that tells the printer to switch orientation from portrait to landscape, it prints in landscape orientation until it is reset or instructed to print in portrait orientation.

An escape sequence looks like this:



The escape character (Esc) is always the first character in an escape sequence, followed by one or more characters which tell the printer what type of command is to be executed. Some escape sequences have a variable which can be set, depending on what value you desire for a specific function (in this case, we specified 10 as the number of characters per inch). The last character in an

escape sequence is always an upper-case letter ("H" in the example above). When the printer receives an upper-case letter following character is the end of the escape sequence.

To save keystrokes, you can combine several escape sequences into one escape sequence string. The following example illustrates entering pitch and style separately or combined:

$\text{E}_c(\text{s1}\theta\text{H}$ and $\text{E}_c(\text{s}\theta\text{S}$
or
 $\text{E}_c(\text{s1}\theta\text{h}\theta\text{S}$

The LaserJet Printer Owner's Reference Manual lists all of the escape sequences that you can use with the LaserJet printer. For a more detailed explanation of escape sequences consult your LaserJet Printer Owner's Reference Manual.

SENDING ESCAPE SEQUENCES

There are several ways to "send" escape sequences to your printer. By sending them, we mean typing them in your text file, program, or software so that the printer "sees" them when it prints. The way to send the escape character (E_c) depends on what type of keyboard you have or what software or programming language you are using.

- Some terminals have a CTRL or CNTL (control) key which can be used in combination with the left bracket ([) to send an escape character (simply press the CTRL key and hold it down while pressing the [key).
- Still other computers require you to send a number; 027 (the decimal equivalent to the escape key), or 1B (the hexadecimal equivalent to the escape key).
- Some software packages do not allow you to send escape sequences.

If you are using a software package, consult your software manuals for information about using escape sequences. If you cannot locate the information you need, call your software supplier for this information.

This completes Section II. In Section III you will have an opportunity to practice using escape sequences.

SECTION III

USING THE HP 92286T CHARACTER FONTS

Introduction

In this section you can select and use character fonts. To assist you in selecting the appropriate escape sequence, Portrait and Landscape Font Selection Tables, and examples are provided.

Before you start, read the following information carefully:

- Make sure your HP 92286T font cartridge is firmly seated in the slot (the printer should be placed **OFF-LINE** before installing the cartridge).
- When your printer is powered-up or reset, the Courier (default) character font is active.

Resetting the Printer to the Default Font

- If you cannot determine which character font you are currently printing in, **RESET** your printer to its default character font with one of the following entries:

Enter E_CE , or

Enter $\text{E}_C\&I\theta\text{O}\text{E}_C(8\text{U}\text{E}_C(s\theta p1\theta h12v\theta s\theta b3\text{T}$

NOTE

If you enter E_cE , any page layout escape sequences previously sent to the printer (margins, orientations, etc.) are reset. Entering the full escape sequence will affect the HMI (Horizontal Motion Index) if set at other than 10 characters per inch, and may affect the margins and orientation.

- If you are using multiple character fonts in your text, use the HP 92286T Font Selection Tables provided on the following pages and at the back of this document. These tables provide you with the shortest escape sequence to access another character font.
- Some character fonts are available in portrait mode (text printed from left-to-right across the width of the page, like a letter), and others in landscape (text printed from left-to-right along the length of the page). Portrait and landscape orientations cannot be printed on the same page; when changing from one orientation to another, the page you are currently printing on will be ejected. The escape sequence $\text{E}_c\&10\text{O}$ selects the portrait mode, and $\text{E}_c\&11\text{O}$ selects the landscape mode. Unless you are switching orientations, you do not need to send either escape sequence.*



Portrait
 $\text{E}_c\&10\text{O}$



Landscape
 $\text{E}_c\&11\text{O}$

*Sending either escape sequence causes the page length, top margin, text length, left and right margins, horizontal motion index (HMI), and vertical motion index (VMI) to be defaulted.

- Since slight differences between the characters can be confusing, take a moment to compare these differences.

Lower case L = l

Number one = 1

Portrait = $\text{\textcircled{L}}$

Landscape = $\text{\textcircled{1}}$

Upper case O = O

Number 0 = 0

Roman-8 = $\text{\textcircled{8}}$

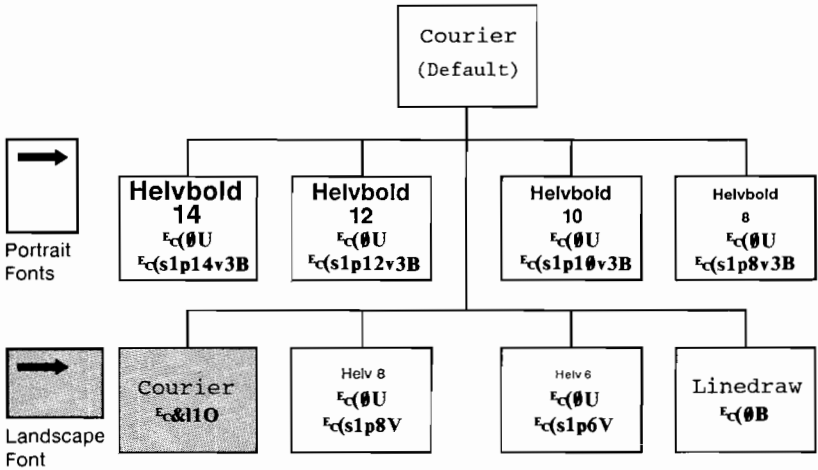
USASCII = $\text{\textcircled{U}}$

Line Draw = $\text{\textcircled{B}}$

On the following pages, you will either be selecting character fonts from the default font, other portrait character fonts, or landscape character fonts. Try these examples on your LaserJet printer.

INITIAL FONT SELECTION

If you only want to access one other character font after powering-up or resetting your printer to the default character font, use the following table.



EXAMPLE:

To switch from Courier (default) to Helvbold 12, enter the following escape sequence:

Switching From: Courier (default)

To: Helvbold 12

Enter: Esc(0UEsc(s1p12v3B The LASERJET Printer

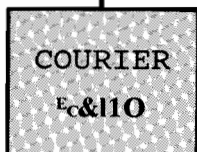
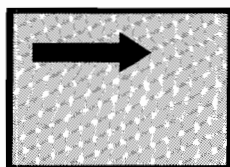
The LASERJET Printer

SELECTING LANDSCAPE COURIER

To switch from portrait orientation to landscape orientation,

Enter: **Ⓒ&110**

To
Print
Landscape



SELECTING PORTRAIT FONTS

To use the Portrait Font Selection Table, find the character font you are currently using in the left hand column, move across the table until you reach your new character font selection, and enter the escape sequence.

From \ To	Courier	Helvbold 14	Helvbold 12
Courier		$\text{E}_c(0U$ $\text{E}_c(s1p14v3B$	$\text{E}_c(0U$ $\text{E}_c(s1p12v3B$
Helvbold 14	$\text{E}_c(8U$ $\text{E}_c(s0p10h0B$		$\text{E}_c(s12V$
Helvbold 12	$\text{E}_c(8U$ $\text{E}_c(s0p10h0B$	$\text{E}_c(s14V$	
Helvbold 10	$\text{E}_c(8U$ $\text{E}_c(s0p10h0B$	$\text{E}_c(s14V$	$\text{E}_c(s12V$
Helvbold 8	$\text{E}_c(8U$ $\text{E}_c(s0p10h0B$	$\text{E}_c(s14V$	$\text{E}_c(s12V$
Helv 8	$\text{E}_c(8U$ $\text{E}_c(s0p10H$	$\text{E}_c(s14v3B$	$\text{E}_c(s12v3B$
Helv 6	$\text{E}_c(8U$ $\text{E}_c(s0p10H$	$\text{E}_c(s14v3B$	$\text{E}_c(s12v3B$



Helvbold 10	Helvbold 8	Helv 8	Helv 6
E_c(0U E_c(s1p10v3B	E_c(0U E_c(s1p8v3B	E_c(0U E_c(s1p8V	E_c(0U E_c(s1p6V
E_c(s10V	E_c(s8V	E_c(s8v0B	E_c(s6v0B
E_c(s10V	E_c(s8V	E_c(s8v0B	E_c(s6v0B
	E_c(s8V	E_c(s8v0B	E_c(s6v0B
E_c(s10V		E_c(s8v0B	E_c(s6v0B
E_c(s10v3B	E_c(s3B		E_c(s6V
E_c(s10v3B	E_c(s8v3B	E_c(s8V	

EXAMPLES:

You were using the Helvbold 12 character font, and now want Helvbold 8. Look on your table for Helvbold 12 (down the left column), move across the table until you reach Helvbold 8, and enter the escape sequence.

Switching From: Helvbold 12

To: Helvbold 8

Enter: $\text{E}_c(\text{s8V}$ The LASERJET Printer

The LASERJET Printer

To switch from Helvbold 8 to Helv 6, look on your table for Helvbold 8 (down the left column), move across the table until you reach Helv 6, and enter the escape sequence.

Switching From: Helvbold 8

To: Helv 6

Enter: $\text{E}_c(\text{s6v}\mathbf{0B}$ The LASERJET Printer

The LASERJET Printer

Try combining Helvbold 8 and Helv 6:

The $\text{E}_c(\text{s8v3B}$ LASERJET $\text{E}_c(\text{s6v}\mathbf{0B}$ Printer

The LASERJET Printer

USING LINE DRAW CHARACTERS

The HP 92286T Line Draw character font makes it possible to draw a variety of vertical and horizontal lines by converting USASCII keystrokes into Line Draw characters (use Table C, on pages 30-32). Some of the more common uses for Line Draw characters are creating simple lined forms, boxes for emphasis, borders, organization charts, and special tax programs.

Before you start, read the following information carefully:

- The Line Draw character font will connect vertical symbols at 6 lines per inch (12 point size).
- To access Line Draw enter one of the following escape sequences:

$\text{E}_c(\text{0B}$ (From any portrait font)

$\text{E}_c\&100\text{E}_c(\text{0B}$ (From any landscape font)

- When switching from the Line Draw character font to another character font, the printer "remembers" the font selected immediately BEFORE Line Draw. Make a note of your previous selection and use the Font Selection Tables to make a new selection (a new symbol set must always be entered to cancel out the Line Draw symbol set).

The following example illustrates how to use the Line Draw characters by switching back and forth between Line Draw and other character fonts. You will be switching from Line Draw, to Helvbold 14, to Line Draw, and finally to Helvbold 10.

Reset your printer to Courier (default) (see page 34 for directions).

E_c(0B

Q;;;;;;;;;;;;;;W
:

E_c(0U^c(s1p14v3B

MEETING TIME:

7:00 P.M. TO 10:00 P.M.

IN ROOM 713

E_c(0B

A;;;;;;;;;;;;;;S
:

E_c(0U^c(s10V The LASERJET Printer

- Print (refer to the your computer or software manual for "print" command) . . .

- and you get this:

MEETING TIME:

7:00 P.M. TO 10:00 P.M.

IN ROOM 713

The LASERJET Printer

The following program will produce the top portion of the U.S. Individual Income Tax Return, Form 1040. The program includes specific directions for entering text, and using Line Draw and escape. Basic CHR\$(27), characters.


```

1760 WIDTH LPRINT 255
1770 REM
1780 LPRINT CHR$(27)+"&a4.5r5C"; Move to row 4.5 column 5 to begin printing text
1790 REM
1800 LPRINT CHR$(27)+"(OU"+CHR$(27)+"(slp6v0s0b4T"; Select HELV Medium 6 pt proportional
1810 REM
1820 LPRINT CHR$(27)+"&k6.5H"; Change HMI so the spaces between words are
1830 LPRINT "For the year Jan 1-Dec 31, 1984, or other tax year beginning "; more (so the words will fill between the lines)
1840 LPRINT " ,1984,ending ,19 ."
1850 LPRINT " Move back up to previous row and out to col 116
1860 REM
1870 LPRINT CHR$(27)+"&a-lr+116C";
1880 LPRINT "OMB No. 1545-0074"
1890 LPRINT " Your First name and initial (if joint return, also give ";
1900 LPRINT "spouses's name and initial) Last name"
1910 REM
1920 LPRINT CHR$(27)+"&a-lr+107C"; Move back up to previous row and over 107 cols
1930 LPRINT "Your Social Security Number"
1940 LPRINT
1950 LPRINT " Present home address (Number and street, including apart";
1960 LPRINT "ment number, or rural route)"
1970 LPRINT CHR$(27)+"&a-lr+107C";
1980 LPRINT "Spouse's Soc. Sec. Number"
1990 LPRINT
2000 LPRINT " City, town or post office, State, and ZIP code"
2010 LPRINT CHR$(27)+"&a-lr+85C";
2020 LPRINT "Your occupation"
2030 LPRINT CHR$(27)+"&a+85C";
2040 LPRINT "Spouse's occupation"
2050 LPRINT " Do you want $1 to go to this fund";
2060 LPRINT "? Yes No"
2070 LPRINT CHR$(27)+"&k5.7H";
2080 LPRINT " If joint return, does your s";
2090 LPRINT "pouse want $1 to go to this fund? Yes No"
2100 REM
2110 REM
2120 LPRINT CHR$(27)+"(OU"+CHR$(27)+"(slp8v0s0b4T"; Select HELV Medium 8 pt proportional
2130 REM
2140 LPRINT CHR$(27)+"&a1053h340V"; Move to absolute position on page
2150 LPRINT "Department of the Treasury--Internal Revenue Service"
2160 REM
2170 LPRINT CHR$(27)+"&a15L" Re-set Left Margin
2180 REM
2190 LPRINT CHR$(27)+"&l8D"; Select 8 lines per inch vertical spacing
2200 LPRINT CHR$(27)+"&a725V";
2210 LPRINT "Use"
2220 LPRINT "IRS"
2230 LPRINT "label."
2240 LPRINT "Other-"
2250 LPRINT "wise,"
2260 LPRINT "please"
2270 LPRINT "print"
2280 LPRINT "or type."
2290 REM
2300 REM
2310 LPRINT CHR$(27)+"(OU"+CHR$(27)+"(slp10v0s1b4T"; Select HELV Bold 10 pt proportional
2320 REM
2330 LPRINT CHR$(27)+"&l6D"; Select 6 lines per inch vertical spacing
2340 LPRINT CHR$(27)+"&a10.5R"
2350 LPRINT "Presidential"
2360 LPRINT "Election Campaign"
2370 REM
2380 REM
2390 LPRINT CHR$(27)+"(OU"+CHR$(27)+"(slp14v0s1b4T"; Select HELV Bold 14 pt proportional
2400 LPRINT CHR$(27)+"&a2R"
2410 LPRINT "1040 1984"
2420 LPRINT CHR$(27)+"&a-.5R";
2430 LPRINT " U.S. Individual Income Tax Return"
2440 REM
2450 REM
2460 LPRINT CHR$(27)+"E" Perform a Hard Reset to eject paper and
reset all LaserJet parameters

```


• Print (refer to the your computer or software manual for "print" command) . . .

• and you get this:

Department of the Treasury--Internal Revenue Service 1040 U.S. Individual Income Tax Return 1984		OMB No. 1545-0074
For the year Jan 1--Dec 31, 1984, or other tax year beginning _____, 1984, ending _____		.19
Use IRS label.	Your First name and initial (if joint return, also give spouses's name and initial)	Last name
Other- wise, please print or type.	Present home address (Number and street, including apartment number, or rural route)	Spouse's Soc. Sec. Number
	City, town or post office, State, and ZIP code	Your occupation
		Spouse's occupation
Presidential Election Campaign		
Do you want \$1 to go to this fund?		Yes <input type="checkbox"/> No <input type="checkbox"/>
If joint return, does your spouse want \$1 to go to this fund?		Yes <input type="checkbox"/> No <input type="checkbox"/>

TABLE A HP 92286T FONT CHARACTERISTIC TABLE

Font Characteristics	Courier* |	Helvbold 14	Helvbold 12	Helvbold 10	Helvbold 8
Orientation	Portrait	Portrait	Portrait	Portrait	Portrait
Symbol Set	ROMAN-8	USASCII	USASCII	USASCII	USASCII
Spacing	Fixed	Prop.	Prop.	Prop.	Prop.
Pitch	10				
Point Size	12	14	12	10	8
Style	Upright	Upright	Upright	Upright	Upright
Stroke Weight	Medium	Bold	Bold	Bold	Bold
Typeface	Courier	Helv	Helv	Helv	Helv

Font Characteristics	Helv 8	Helv 6	Line Draw	Courier |
Orientation	Portrait	Portrait	Portrait	Landscape
Symbol Set	USASCII	USASCII	Line Draw	ROMAN-8
Spacing	Prop.	Prop.	Fixed	Fixed
Pitch			10	10
Point Size	8	6	12	12
Style	Upright	Upright	Upright	Upright
Stroke Weight	Medium	Medium	Bold	Medium
Typeface	Helv	Helv	Line Draw	Courier

The font characteristics are listed in order of priority, from top to bottom.

* With the HP 92286T font cartridge installed, the printer's default character font is Courier (Portrait, ROMAN-8, fixed spacing, 10 pitch, 12 point, Upright, Medium, Courier typeface). This font is printed when you reset or power on your printer without choosing another character font.

| Courier, Portrait (Roman-8) and Courier, Landscape (Roman-8) are the LaserJet Printer's resident character fonts.

USING TABLE B

The standard terminal keyboard identifies the characters associated with the USASCII symbol set. USASCII keystrokes are shown on the left side of Table B. The coordinates for the table are listed in decimal. For example, the decimal equivalent for the USASCII character "A" is "65" ($64 + 1 = 65$).

Using Escape Sequences to Print Characters

To print a character from the left half of the table using escape sequences, select the USASCII symbol set using the associated escape sequence, $\text{ESC}(\text{OU}$. For example, you can select the USASCII character "A" by entering, $\text{ESC}(\text{OU}$ and typing a capital "A" at your keyboard.

Using Decimal Equivalents to Print Characters

To determine the decimal equivalent of an USASCII character, locate the character's associated decimal number across the top of the table. Next, locate its associated decimal number down the left side of the table and add the two numbers. For example, the decimal equivalent of the letter "P" is **80** ($80 + 0 = 80$).

To print a character using the decimal equivalent, you must enter the decimal position number in your programming command. For example, to print the USASCII character "P" from the Roman-8 symbol set using BASIC, you would enter the following command:

```
LPRINT CHR$(27);" $\underbrace{(\text{8U})$ ";CHR$( $\underbrace{80}$ )
```

Selects	Prints
Roman-8	Character
Symbol Set	"P"

TABLE B

ROMAN-8 (USASCII PLUS ROMAN EXTENSION)

Roman-8 Symbol Set

	Roman-8 Symbol Set																
	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240	(MSD)
0	NUL	DLE	SP	0	@	P	'	p				¯	á	À	Á	Þ	
1	SOH	DC1	!	1	A	Q	a	q				À	é	í	Ã	þ	
2	STX	DC2	"	2	B	R	b	r				Â	ô	ø	ä		
3	ETX	DC3	#	3	C	S	c	s				È	°	ú	Æ	Ð	
4	EOT	DC4	\$	4	D	T	d	t				Ê	Ç	á	â	đ	
5	ENQ	NAK	%	5	E	U	e	u				Ë	ç	é	í	Í	
6	ACK	SYN	&	6	F	V	f	v				Î	Ñ	ó	ø	Ï	-
7	BEL	ETB	'	7	G	W	g	w				Ï	ñ	ú	æ	Ó	¼
8	BS	CAN	(	8	H	X	h	x				´	í	à	Ä	Ò	½
9	HT	EM	)	9	I	Y	i	y				`	ı	è	ı	Õ	¾
10	LF	SUB	*	:	J	Z	j	z				^	ı	ò	Ö	ø	¸
11	VT	ECS	+	;	K	[	k	{				¨	ı	ù	Û	Š	«
12	FF	FS	,	<	L	\	l	|				˘	ı	ä	É	š	■
13	CR	GS	-	=	M	]	m	}				Û	Ş	ë	ı	Ú	»
14	SO	RS	.	>	N	^	n	~				Û	f	ö	ß	ÿ	±
15	SI	US	/	?	O	_	o	DEL				ı	ç	ü	Ô	ÿ	

USASCII
Characters

RomanExt
Characters

USING TABLE C

Table C shows the USASCII keystroke equivalents for symbol sets and the decimal numbers associated with each character.

- Table C may be used in place of Table B or specifically to select Linedraw characters.
- To use Table C, you must enter the associated symbol set for the character font you are selecting. See Table D on page 33 for full font selection escape sequences, or Table E on pages 35, 36 and 37 for the shortest font selection escape sequences. Once the symbol set sequence is entered, hitting the corresponding USASCII keystroke or entering the associated decimal number will print the character you have selected.

TABLE C
USASCII Keystroke Equivalency Table

Keystroke	!	"	#	\$	%	&	'	()	*	+	,	
Line Draw	†	‡	†	†	‡	‡	†	±	||	†	†	-	
Decimal Value	32	33	34	35	36	37	38	39	40	41	42	43	44
Keystroke	-	.	/	0	1	2	3	4	5	6	7	8	9
Line Draw	L	|	+	†	†	†	†	†	†	†	†	†	=
Decimal Value	45	46	47	48	49	50	51	52	53	54	55	56	57
Keystroke	:	;	<	=	>	?	@	A	B	C	D	E	F
Line Draw	|	-	‡	†	†	#	†	†	†	■	■	|	L
Decimal Value	58	59	60	61	62	63	64	65	66	67	68	69	70

Keystroke	G	H	I	J	K	L	M	N	O	P	Q	R	S
Line Draw	J	┆	┆	L	J	|	+	+	-	J	F	F	J
Decimal Value	71	72	73	74	75	76	77	78	79	80	81	82	83
Keystroke	T	U	V	W	X	Y	Z	[\]	^	_	'
Line Draw	┆	F	+	┆	■	┆	■	┆	--	μ	-	π	T
Decimal Value	84	85	86	87	88	89	90	91	92	93	94	95	96
Keystroke	a	b	c	d	e	f	g	h	i	j	k	l	m
Line Draw	↓	J	┆	┆	┆	┆	□	□	┆	┆	▲	▲	┆
Decimal Value	97	98	99	100	101	102	103	104	105	106	107	108	109

TABLE C
USASCII Keystroke Equivalency Table

Keystroke	n	o	p	q	r	s	t	u	v	w	x	y	z
Line Draw	-	T	└	↑	-	←	-	┐	└	→	|	†	|
Decimal Value	110	111	112	113	114	115	116	117	118	119	120	121	122
Keystroke	{	|	}	~	*								
Line Draw	≡	•	≡	└									
Decimal Value	123	124	125	126	127								

*** IMPORTANT:** The above Line Draw character sets are compatible with standard USASCII with the following exceptions: none of the sets contain ASCII character #124 (⓪) or character #126 (~).

To access Line Draw:

Enter $\text{F}_c(\text{0B})$ (from any portrait font).

Enter $\text{F}_c\&10\text{0F}_c(\text{0B})$ (from any landscape font).

USING TABLE D

Table D lists the full escape sequences for each character font on the HP 92286T cartridge. Each font characteristic is specified in the escape sequences. Although it is not necessary, it is recommended that full escape sequences be used (to ensure character font selection) when developing software. Refer to your LaserJet Printer Owner's Reference Manual for a detailed explanation of these escape sequences.

Table D
HP 92286T Full Escape Sequence Table

Courier	$E_c \& l \theta O^{E_c} (8 U^{E_c} (s \theta p 1 \theta h 1 2 v \theta s \theta b 3 T$
Helvbold 14	$E_c \& l \theta O^{E_c} (\theta U^{E_c} (s 1 p 1 4 v \theta s 3 b 4 T$
Helvbold 12	$E_c \& l \theta O^{E_c} (\theta U^{E_c} (s 1 p 1 2 v \theta s 3 b 4 T$
Helvbold 10	$E_c \& l \theta O^{E_c} (\theta U^{E_c} (s 1 p 1 \theta v \theta s 3 b 4 T$
Helvbold 8	$E_c \& l \theta O^{E_c} (\theta U^{E_c} (s 1 p 8 v \theta s 3 b 4 T$
Helv 8	$E_c \& l \theta O^{E_c} (\theta U^{E_c} (s 1 p 8 v \theta s \theta b 4 T$
Helv 6	$E_c \& l \theta O^{E_c} (\theta U^{E_c} (s 1 p 6 v \theta s \theta b 4 T$
Linedraw	$E_c \& l \theta O^{E_c} (\theta B^{E_c} (s \theta p 1 \theta h 1 2 v \theta s 3 b \theta T$
Courier	$E_c \& l 1 O^{E_c} (8 U^{E_c} (s \theta p 1 \theta h 1 2 v \theta s \theta b 3 T$

USING TABLE E

- Use Table E for entering escape sequences with the HP 92286T font cartridge only. Use Table D for developing software.
- To use Table E find the character font you are currently using in the left hand column, move across the table until you reach your new character font selection, and enter the escape sequence.
- Since slight differences between the characters can be confusing, take a moment to compare these differences:

Lower case L = l
Number one = 1

Upper case O = O
Number 0 = 0

Portrait = $\text{^E}_C\&10O$
Landscape = $\text{^E}_C\&11O$

Roman-8 = ^E_C8U
USASCII = $\text{^E}_C\theta U$
Line Draw = $\text{^E}_C\theta B$

Resetting the Printer to the Default Font

- If you cannot determine which character font you are currently printing in, or want to switch orientations, RESET your printer to its default character font with one of the following entries:

Enter ^E_CE , or

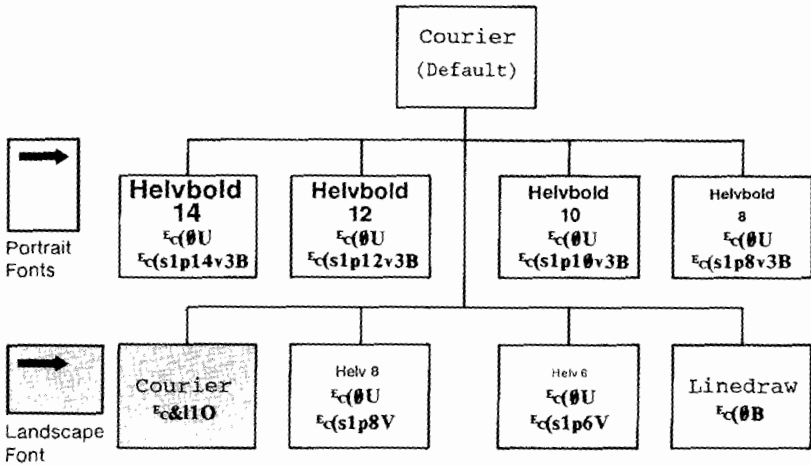
Enter $\text{^E}_C\&10O\text{^E}_C(8U\text{^E}_C(s\theta p1\theta h12v\theta s\theta b3T$

- Refer to your LaserJet Printer Owner's Reference Manual for detailed escape sequence instructions, and other escape sequence applications.

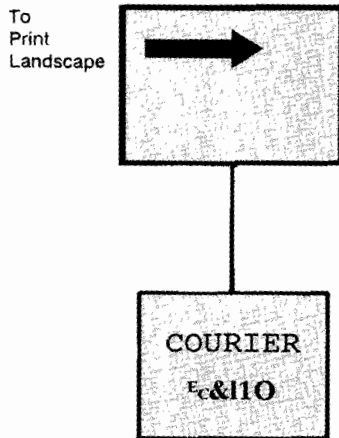
TABLE E

HP 92286T FONT SELECTION TABLES

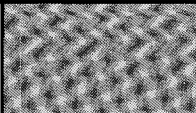
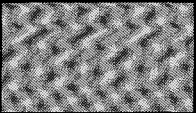
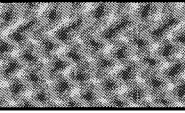
INITIAL FONT SELECTION

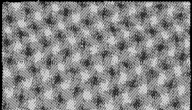
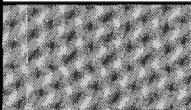
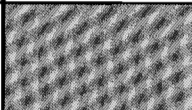
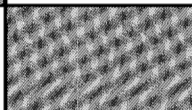


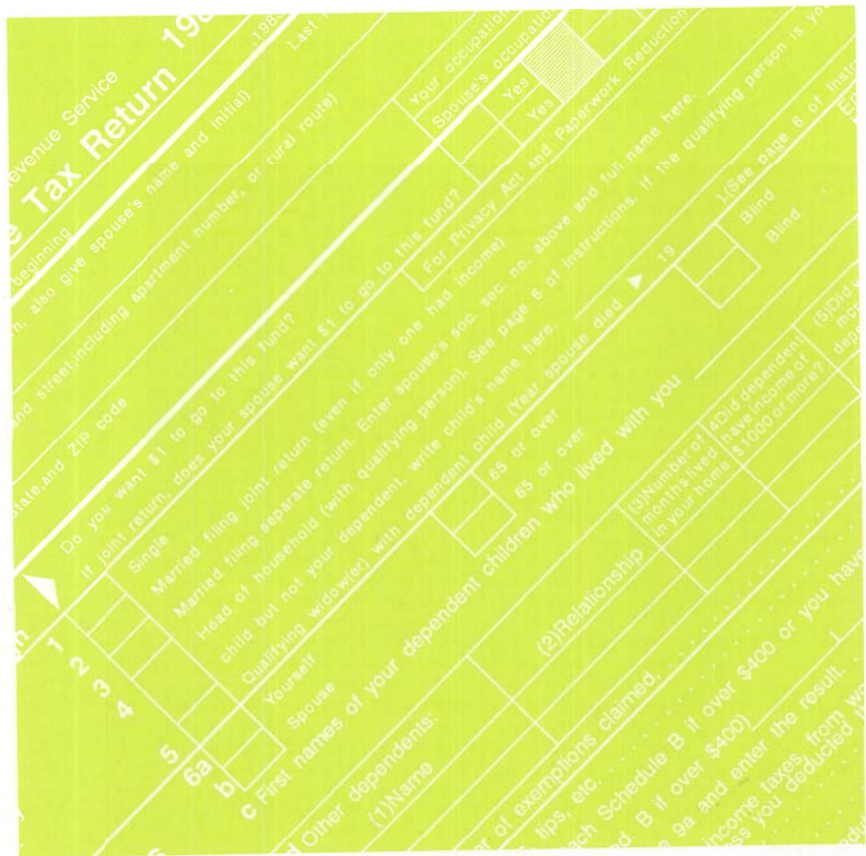
LANDSCAPE FONT SELECTION



PORTRAIT FONT SELECTION

From \ To	Courier	Helvbold 14	Helvbold 12
Courier		$E_c(8U$ $E_c(s1p14v3B$	$E_c(8U$ $E_c(s1p12v3B$
Helvbold 14	$E_c(8U$ $E_c(s0p10h0B$		$E_c(s12V$
Helvbold 12	$E_c(8U$ $E_c(s0p10h0B$	$E_c(s14V$	
Helvbold 10	$E_c(8U$ $E_c(s0p10h0B$	$E_c(s14V$	$E_c(s12V$
Helvbold 8	$E_c(8U$ $E_c(s0p10h0B$	$E_c(s14V$	$E_c(s12V$
Helv 8	$E_c(8U$ $E_c(s0p10H$	$E_c(s14v3B$	$E_c(s12v3B$
Helv 6	$E_c(8U$ $E_c(s0p10H$	$E_c(s14v3B$	$E_c(s12v3B$

Helvbold 10	Helvbold 8	Helv 8	Helv 6
$E_c(\theta U)$ $E_c(s1p1\theta v3B)$	$E_c(\theta U)$ $E_c(s1p8 v3B)$	$E_c(\theta U)$ $E_c(s1p8V)$	$E_c(\theta U)$ $E_c(s1p6 V)$
$E_c(s1\theta V)$	$E_c(s8V)$	$E_c(s8 v\theta B)$	$E_c(s6 v\theta B)$
$E_c(s1\theta V)$	$E_c(s8V)$	$E_c(s8 v\theta B)$	$E_c(s6 v\theta B)$
	$E_c(s8V)$	$E_c(s8 v\theta B)$	$E_c(s6 v\theta B)$
$E_c(s1\theta V)$		$E_c(s8 v\theta B)$	$E_c(s6 v\theta B)$
$E_c(s1\theta v3B)$	$E_c(s3B)$		$E_c(s6 V)$
$E_c(s1\theta v3B)$	$E_c(s8 v3B)$	$E_c(s8V)$	



**HEWLETT
PACKARD**

Instruction Guide Part No.

5951-8971