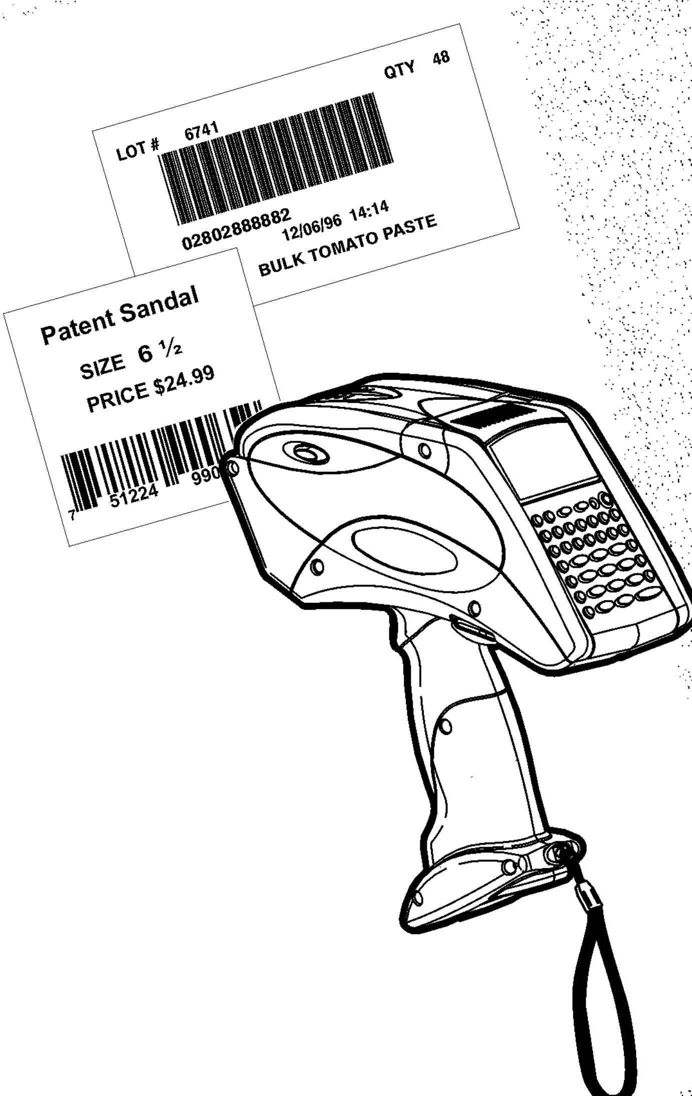
Format Configurable User Manual

Monarch® Pathfinder® Ultra® Gold Printer



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TC6037CMUM Rev. AA 2/03

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INTRODUCTION

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The Monarch® Pathfinder® Ultra® *Gold* 6037™ configurable printer lets you design custom labels to fit your needs. You can use the printer for a variety of applications.

- ♦ Print in-store merchandise marking labels to mark every item in your store with scannable bar codes for increased data accuracy.
- ♦ Print shelf labels with the product bar code number, description, and price.
- ♦ Print labels for restocking of merchandise. Just scan a bar-coded product and the printer duplicates the bar code.
- ♦ Print warehouse carton labels for easy carton sorting.

Features

The flexibility of this printer also provides you with the ability to:

- ♦ Print a variety of tags ranging from .55 to 4.0 inches in length.
- ♦ Print numeric, alphanumeric, or special characters. You can print 14 fonts: monospaced or proportionally spaced fonts.
- ♦ Use 24 different bar codes.
- ♦ Print horizontally or vertically on the label.
- ♦ Design data entry prompts for the Operator.
- ♦ Scan bar codes.
- ♦ Select different currency symbols for International use.
- ♦ Print combination fields. This feature allows the Operator to enter data once, and use it in multiple fields.

Terms to Know

Barrier bar	The horizontal bars above and below I2of5 bar codes used to ensure a clean scan and avoid partial scans.
Baseline	Bottom of the font.
Check digit	A number added to a bar code ensuring that the bar code data is read accurately.
Fixed length bar code	A bar code with a fixed character length: UPC-A, UPC-E, EAN-8, and EAN-13.
Font	The print style of text.
Format	The layout of data on a label. The format determines where and how data appears on a label.
Horizontal bar code or text	Data that prints across the width of a label.
Human Readable characters	The characters that are visible such as a text field. Bar codes embed characters.
Intercharacter gap	Default spacing between characters in monospaced fonts.
Monospaced font	Font with fixed character spacing such as Letter Gothic.
Number system code	A number added to a bar code ensuring that the bar code data is read accurately.
Overlay	The placement of one field over another such as a line on top of a price signifying a price reduction. ~~79.99~~
Pad Characters	Characters that are added to the left or right of a field allowing you to fill in empty spaces when the entered data does not fill an entire field. For example, the Operator enters "23" and the format automatically adds zeros: 2300.
Prompt	A message on the printer's screen that tells you to enter/scan data.

Proportionally spaced font	Font with variable character spacing – all characters have different widths. For example, an "i" versus a "w." Proportionally spaced fonts include CG Triumvirate, CG Triumvirate Condensed, and CG Triumvirate Bold.
Quiet Zone	An area of white space required at the beginning and end of a bar code to allow scanning. Also at the beginning/end and edges of a label. Also know as non-print zone.
Segment line type	A line type with a starting point and an end point.
Start/stop character	Distinct characters used at the beginning and end of each bar code symbol that provides initial timing references and indicates the direction of scanning.
Variable length bar code	A bar code of variable character length: I2 of 5, Code 39, Codabar, Code 128, MSI, PostNet, and Code 93.
Vector line type	A line type with a starting point, angle, and length of line.
Vertical bar code or text	Data that is rotated and prints down the length of a label.
Void	Light area on a label in a bar code or text.

Label Sizes

The printer allows you to print the following label sizes.

Supported Supply Widths:	Supported Supply Lengths:
1.20 Inches	.55 inches
1.50 Inches	.79 inches
2.00 Inches	1.1 inches
	1.5 inches
	2.0 inches
	3.0 inches
	4.0 inches

NOTE: Most of the sample formats in this manual use 2" X 2" labels unless indicated otherwise.

Call **1-800-543-6650** for more information about the various label sizes and label types available with this printer.

How this Manual is Organized

Chapter 1	*Introduction*	Provides an overview of the printer and terms to know.
Chapter 2	*Getting Started*	Provides a checklist to get you started, keypad tips, and a sample format.
Chapter 3	*Configuring the Printer*	Tells you how set defaults for your printer and select print methods.
Chapter 4	*Designing a Format*	Provides instructions on how to determine the kind of data you want on a label and where to place the data.
Chapter 5	*Defining Text Fields*	Tells you how to design a text field.
Chapter 6	*Defining Bar Code Fields*	Tells you how to design a bar code field.
Chapter 7	*Defining Constant Text Fields*	Tells you how to design a constant text field.
Chapter 8	*Defining Line Fields*	Tells you how to design lines and borders.
Chapter 9	*Defining Special Fields*	Tells you how to design time, date, and price fields.
Chapter 10	*Applying Data Edits*	Tells you how to pad data, extract data, and insert it into another field.
Chapter 11	*Editing a Format*	Tells you how to change a format.
Chapter 12	*Troubleshooting*	Provides solutions to the most common errors and provides a list of all error codes.
Appendix A	*Sample Formats*	Provides sample formats of various applications.
Appendix B	*Using Fonts*	Provides information about fonts.

GETTING STARTED

2

This chapter tells you how to start using the printer and provides a sample format to show you how easy it is to create your labels.

NOTE: Before you begin, read the *Equipment Manual* that came with your printer on the documentation CD.

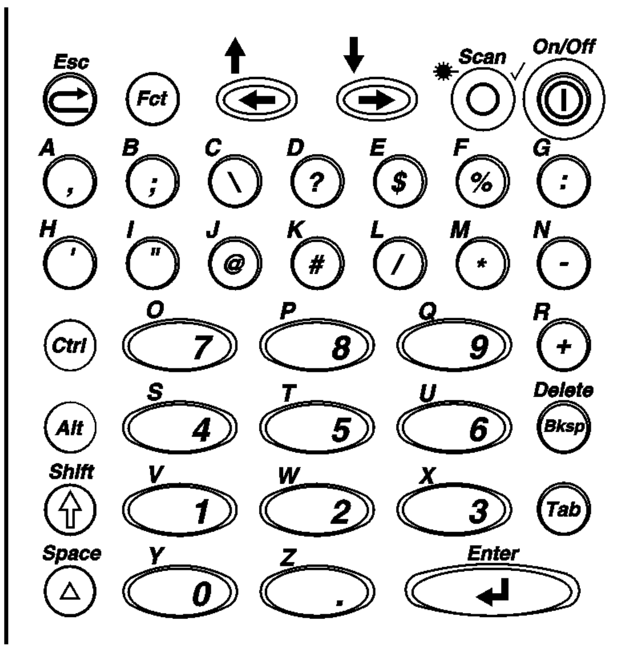
Use this checklist when creating a format.

- ✓ Load labels into the printer.
- ✓ Charge the battery handle.
- ✓ Configure the printer. Refer to Chapter 3, "Configuring the Printer."
- ✓ Create a format, which is the layout of your data on a label. Refer to Chapter 4, "Designing a Format."
- ✓ Print and test your label.
- ✓ Prepare an Operator Data Entry form for the Operator. Refer to "Using the Operator Data Entry Form" at the end of this chapter.

Using the Keypad and the Display

Your printer has an 8-line display and a 48-key keypad. This section provides tips on

- Navigating through the screens on the display
- Using the most commonly used keys.



Using the Function Keys

The key combinations on the list below make scrolling and navigating easier.

Key Combination	Description
Fct 1	Turns the backlight on the display on or off.
Fct 2	Sets the print method.
Fct 3	Select the currency symbol.
Fct 4	Battery Level Status
Fct 5	Exit
Fct 6	Set the supply type.
Fct ←	Takes you to the beginning of a list. For example, if you have 11 formats, pressing Fct ← takes you to format 1.
Fct →	Takes you to the end of a list. For example, if you have 11 formats, pressing Fct → takes you to format 11.

NOTE: See the *Equipment Manual* for information about using special characters.

The keys listed below are the most commonly used.

Key	Description
Esc	Returns you to the previous screen.
BKSP	Moves the cursor the left and deletes the character on the left.
Enter	Accepts your selection.
←, →	Moves the cursor left or right in a data entry field. ← also serves as ↑ and → also serves as ↓ when scrolling through the options in a menu.
↑, ↓	Scrolls up or down through the options in a menu. When your selection is highlighted, press Enter.
Fct ←, Fct →	When inside a data entry field, Fct ← moves the cursor to the extreme left (beginning of data) and Fct → moves the cursor to the extreme right (end of data).
Shift	Enters upper-case alpha mode. Press it a second time to enter lower-case alpha mode. Pressing it a third time returns to normal mode.

NOTE: See the *Equipment Manual* for more information.

Reading the Display

The icons listed below tell you what data entry mode you are in. No displayed icons indicate normal mode, where you can enter the characters pictured on the face of the keys.

If you see	You are in
F	Function Key Mode.
↑	Upper-case Alpha Mode.
↓	Lower-case Alpha Mode.
C	Control Key Mode.
A	Alt Key Mode.

NOTE: See the *Equipment Manual* for more information.

Entering a Sample Format

Turn on the printer. You will see the Main Menu.

```
   - = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

1. Press 1 to design your formats.

```
   - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

2. Press 1 to create a new format.

```
Enter Format Name
> _ _ _ _ _ _ _ _ _ _ _ _ _ _
      ↑
```

3. Type **SIZE**. Press Enter.

```
Enter Length of
supply (55 – 400)
(eg. 400 = 4 inches)
> _ _ _
```

4. Type **200** for a 2-inch long label. Press Enter.

```
Select Supply Width
1. 1.20 Inches
2. 1.50 Inches
3. 2.00 Inches
```

5. Press 3 for the supply width.

```
Select Type: Fld #1
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
5. Finished
```

6. Press 1 to define a text field.

```
Select Field Class
1. Simple Field
2. Price Field
3. System Date/Time
4. Combo (Merged)
```

7. Press 1 to define a simple field.

```
Numeric or
Alpha-Numeric Data?
A/N > _
      ↑
```

8. Press **A** (alpha-numeric).

```
Enter Max. Length
> _ _ _
```

9. Type **10** as the maximum number of characters in the field. Press Enter.

```
Enter Min. Length
> _ _ _
```

10. Type **1** as the minimum number of characters in the field. Press Enter.

```
Enter Field Prompt
> _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
        ↑
```

11. Type **ENTER SIZE**. Press Enter.

```
Enter Fixed Data
Press ENTER if none
> _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
        ↑
```

12. Type **/TL** for the fixed data. Press Enter.

```
Add fixed data
Before or After
entry chars?  B/A
> _
        ↑
```

13. Press **A** to print the fixed data after the entry characters.

```
Enter Row #
> _ _ _
```

14. Type **100** for the row location. Press Enter.

```
Enter Col. #
> _ _ _
```

15. Type **10** for the column location. Press Enter.

```
- = Select Font = -
1. CG Trium 6.5 1000
2. CG Trium 8 pt 1001
3. CG Trium 10p 1002
4. CG Trium 12p 1003
5. CG Trium 18 p 1004
6. CG Trium 22p 1005
7. CG TrCon 6.5 1006
8. CG TrCon 8 pt 1007
9. CG TrCon 10p 1008
10. CG TrCon 12p 1009
11. CG TrCon 18p 1010
12. CG TrCon 22p 1011
13. LetGoth 6.5 1012
14. LetGoth 9pt 1013
```

16. Select **CG Trium 8 pt 1001**. Press Enter.

```
Enter Height Mag for
this font (1-7) > _
```

17. Press 1 for the height magnification.

```
Enter Width Mag for
this font (1-7) > _
```

18. Press 1 for the width magnification.

Set Justification
1. Left (L)
2. Right (E)
3. Center (B)

19. Press 1 for the alignment of characters in the field.

Top of Field at:
1. Top of Supply
2. Left of Supply
3. Bottom of Supply
4. Right of Supply

20. Press 1 for the field rotation.

Select Edit #1
1. None
2. Make into Price
3. Pad Data Field
4. Extract Chars
5. Strip Chars
6. Extract from Mid
7. Insert Chars
8. Make Shoe Size

21. Press 1 for no data edits. See Chapter 10, “Applying Data Edits,” for more information.

Select Type:Fld#2
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
5. Finished

22. Press 5 .

Save current
format? Y/N > _

23. Press **Y** to save the format. You return to the Design Menu.

Printing the Sample Format

After designing your format, print it to see how it looks.

- = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format

1. Press Esc to exit the Design Menu.

- = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration

2. Press 2 to print your format.

Select Format
to Print

```
- = Format Menu = -
SIZE
```

3. Select **SIZE** and press Enter.

```
ENTER SIZE
_ _ _ _ _ _
```

4. Type **XLarge**. Press Enter. The label prints.

```
Printed: 1
```

5. Press the trigger to print another label or press Esc to return to the prompt and print a different label.

```
XLarge/TL
```

Using the Operator Data Entry Form

After you create a format, fill out the operator data entry form. This form can be used as an instruction sheet for your operators to follow while they print labels. Record the data entry prompts that the operator will see when using the printer.

Follow these steps to record the data entry procedures.

1. Format Name — Enter the Format Name in the upper right corner of the form.
2. Supply Type — Enter information about the supply type the Operator must use.
3. Supply Size — Enter the supply size to use.

4.	Purpose	Enter the purpose of the label on the next line. For example, you can write standard label or 25% markdowns.
5.	Print Sample	Apply a sample of the label.
6.	Prompt	Enter the first data entry prompt in the empty box at left.
7.	Response	Enter the response for the prompt. Continue entering prompts and responses until you reach the end of the format.
8.	Special Instructions	In the "Special Instructions" section at the bottom of the form, record any special instructions to the Operator. For example, you can tell them to load the labels for peel mode.

Blank forms are provided at the end of the chapter for you to copy.

Sample Operator Data Entry Form

Operator Data Entry

Format Name: 25 % Markdown

Supply Type: Red fluorescent

Supply Size: 2 x2

Purpose:
To reduce merchandise by 25 %.

Print Sample

0 32145 69874

Prompt	Response
- = Main Menu = - 1. Design Formats 2. Print Labels 3. Configuration	Press 2 to print your format.
- = Format Menu = - 1. 1 for 3 Pricing 2. 25% Markdown 3. Re-ticket	Select 25 % Markdown. Press Enter.
SCAN BAR CODE _________	Scan the bar code on the label you want to markdown.
Printed: 1	Press Enter or the trigger to print another label or press Esc to scan another bar code.

Special Instructions:

Operator Data Entry Form Page 1

Operator Data Entry

Format Name: ______________________

Supply Type: ______________________

Supply Size: ______________________

Purpose: ______________________

____

Print Sample

Prompt	Response
- = Main Menu = - 1. Design Formats 2. Print Labels 3. Configuration	
- = Format Menu = - 1.	

Special Instructions:

Operator Data Entry Form Page 2

Prompt	Response

CONFIGURING THE PRINTER 3

The printer's configuration sets both hardware and software options. For example, you can set defaults for the printer to use during format design and printing. This chapter describes the configurable options.

To get started, go to the Main Menu. When you see:

```
   -=Main Menu=-
1. Design Formats
2. Print Labels
3. Configuration
```

1. Press 3. The Configuration Main Menu appears.

```
-Config. Main Menu-
1.General Options
2.Fmt Header Optns
3.Fmt Text Options
4.Fmt Barcode Optns
```

2. Select the option you want to configure.

Selections on the Configuration Main Menu are:

General Options	Sets up the printer's backlight, print method, date, time, scan lengths for I2 of 5 bar codes, currency symbol, and supply type. It also deletes formats and turns off warning messages.
Format Header Options	Sets up how you can identify the format you are printing or editing.
Format Text Options	Sets up the default settings for text fields during Format Design.
Format Barcode Options	Sets up the default settings for bar code fields during Format Design.

NOTE: When you finish configuring the printer, press Esc until you return to the Main Menu.

General Options

To set miscellaneous options, go to the General Options Menu. When you see:

-=General Options=-
1. Toggle Backlight
2. Set Print Method
3. Set Date
4. Set Time
5. Set I2of5 ScanLen
6. Reset/Clear Fmts
7. Select Currency
8. Set Supply Type
9. Suppress Warnings

Select an option (**1-9**).

Toggle Backlight

Turn the backlight on or off. The General Options Menu remains on the screen.

Set Print Method

Select Print Method
Auto Print 1 Label
Print Strips
Print Loop –Trigger
On-Demand Printing
On-Demand w/Limit
Full Auto

Scroll to select a print method (described below) and press Enter. The General Options Menu appears. **Default:** Print Loop - Trigger.

Auto Print 1 Label	Prints one label.
Print Strips	Prints a strip of labels, prompting the operator for a quantity.
Print Loop – Trigger	Prints one label at a time, printing another at the press of any key or the trigger. Press Esc to end.
On-Demand Printing	**Peel Mode Only.** Prints labels one at a time, continuing only after you remove the previous one. Press Esc to end.
On-Demand w/Limit	**Peel Mode Only.** Prints labels one at a time, continuing only after you remove the previous one. The software prompts the operator for a quantity.
Full Auto	Prints a strip of labels at one time. Press Esc to end.

Set Date

```
Current date is Thu
 2-08-2001
Enter new date (mm-d
d-yy):
```

Enter the date (with a four-digit year), and press Enter. If the date is correct, press Enter. The General Options Menu appears.

Set Time

```
Current time is 03:0
0:34.65p
Enter new time:
```

Enter the time (including a colon to separate the hour and minute). To indicate a.m. or p.m., include an **a** or **p** at the end. For example, 5:00p. 24-hour mode also works. When finished, press Enter. If the time is already correct, press Enter. The General Options Menu appears.

Set I2 of 5 Scan Lengths

I2 of 5 bar codes are used in industrial environments and contain only numeric data. This menu option specifies the two valid data lengths (number of digits) when you scan this bar code. See Chapter 6, "Defining Bar Code Fields," for more information about I2 of 5 bar codes.

```
 Enter I2of5 Scan
    Length #1 >_ _
```

1. Enter the first length and press Enter.

```
 Enter I2of5 Scan
    Length #2 >_ _
```

2. Enter the second length and press Enter. The General Options Menu appears.

NOTE: Both lengths must be an even number.

Reset/Clear Formats

```
Delete All Formats?
Are you sure? Y/N _
```

Press **Y** to delete all formats in the printer. Press **N** to keep the formats. The General Options Menu appears.

CAUTION: You cannot undo a deletion.

Select Currency

-Select Currency- US Dollars French Francs Spanish Pesetas Belgian Francs German Marks British Pounds Euro Swedish Krona Danish Marks Austrian Schilling Japanese Yen

Scroll to select the currency symbol to use with price fields and press Enter. The General Options Menu appears. **Default:** US Dollars.

Set Supply Type

Select Supply Type 1. Paper Label/Tag 2. Fax Paper 3. Synthetic Label

Select the type of supplies (**1-3**) you are using. The General Options Menu appears. **Default:** Paper Label/Tag.

Suppress Warnings

Suppress Warnings: Disabled Change? Y/N: ↑

Specify whether to display warning messages. **Default:** Disabled.

Press **Y** to enable or disable the option. Then, press Enter to return to the General Options Menu.

Setting	Description
Enabled	Warning messages will not appear on the display.
Disabled	Warning messages will appear on the display. This value is the default.

Press **N** to cancel and return to the General Options Menu. See Chapter 4, "Designing a Format," to learn about a case where you might want to suppress warnings.

Format Header Options

Format Header Options allow operators to select the format label they want to print and allow you to edit a format you have created. When you see:

```
Format Header Optns
1. Generate MPCL Num
2. Generate Fmt Name
3. Skip Desc. Prompt
```

Press 2 to select Generate Fmt Name.

NOTE: Generate MPCL Num and Skip Desc. Prompt are for future use.

Generate Fmt Name

```
Auto-Assign Format
Name for Menu? N
(Default = N)
```

Press **Y** for the software to automatically assign format names, or press **N** to prompt the operator for a name. The Format Header Options Menu appears. **Default:** N.

When you assign a name, we recommend that you use a meaningful name that the operator can easily identify, such as "20% Sale."

Format Text Options

To set options for text fields, you must go to the Format Text Options Menu. When you see:

```
-Format Text Optns-
1. Use Default Gap
2. Use Default Color
3. Set Default Color
4. Use Dflt Char Rot
```

Select an option (**1-4**).

NOTE: See Chapter 5, "Defining Text Fields", for more information on these options.

Use Default Gap

```
Use Default Gap
Value (0) in Text
Fields? Y
(Default = Y)
```

The gap is the number of dots (basic units of print) between characters. Press **Y** to use the default gap value of 0 in the formats, or press **N** to prompt the operator for a value. The Format Text Options Menu appears. **Default:** Y.

Use Default Color

Use Default Color (0) in Text Fields? Y (Default = Y) ↑

Press **Y** to use the default color for text fields, or press **N** to prompt the operator for a value. The Format Text Options Menu appears. **Default:** Y.

NOTE: You set the default color with the next menu selection—Set Default Color.

Set Default Color

Sel. Default Color 1. Black –Opaque 2. White –Opaque 3. Black –Transpar. 4. White –Transpar.

Select the color (**1-4**) you want to use. The Format Text Options Menu appears. For more information about font colors, see Chapter 5, “Defining Text Fields.” **Default:** Black -Transpar.

Use Default Character Rotation

Use Default Char. Rotation (0) in Text Fields? Y (Default = Y) ↑

Press **Y** to use the default character rotation (0) in text fields, or press **N** to prompt the operator for a value. The Format Text Options Menu appears. For more information about character rotation, see Chapter 5, “Defining Text Fields.” **Default:** Y.

Format Bar Code Options

To set options for bar code fields, go to the Format Bar Code Options Menu. These options affect a format during format creation/editing only. For example, you cannot change the default appearance, and then print a format, expecting the new appearance to be used. You must create/edit a format after setting the options here. Only then are these values used. When you see:

```
-Fmt Barcode Optns-
1. Use Dflt UPC Appr
2. Set Dflt UPC Appr
3. Use Default Align
```

Select an option (**1-3**).

NOTE: See Chapter 6, “Defining Bar Code Fields”, for more information on these options.

Use Default UPC Appearance

```
Use Default
Appearance (8) for
UPC/EAN Barcodes? Y
(Default = Y)
```

Press **Y** to use the default bar code appearance in UPC and EAN bar code fields (others use non-human readable only), or press **N** to prompt the operator during field definition. The Format Bar Code Options Menu appears. **Default:** Y.

NOTE: You set the default appearance with the next menu selection—Set Default UPC Appearance.

Set Default UPC Appearance

```
Sel Dflt Appearance
1. No C/D or Num Sys
2. Number Sys. Only
3. Check Digit Only
4. Chk Dig & Num Sys
5. No Human Readable
```

Select a bar code appearance for UPC and EAN bar code fields. The Format Bar Code Options Menu appears. See Chapter 6, “Defining Bar Code Fields,” for more information about bar code appearances. **Default:** No Human Readable.

Use Default Alignment

Use Default Alignment (L) in Barcode Fields? Y (Default = Y) ↑

Press **Y** to use the default alignment (L = left justification) in bar code fields, or press **N** to prompt the operator for the justification. The Format Bar Code Options Menu appears. **Default:** Y.

DESIGNING A FORMAT

4

This chapter describes how to

- determine what kind of information to use in your format.
- draw a rough sketch of your label or tag using the Supply Layout Grid before you create the format.
- categorize data into field types (text, bar code, price, etc.).
- select fonts to use in your format.

Design Overview

Before you create a format, you must design your label.

1. Decide which fields should appear on your label. See "Determining Format Data" for more information.
2. Determine your label size. Labels are available from Paxar in a wide variety of sizes. Your application and the amount of data you need to print determines the supply size. Contact Paxar for more information.
3. Draw a rough sketch of your label. You may want to draw several variations to see what works best. See "Drawing Rough Sketches" for more information.
4. Identify the field types that appear on your label. See "Considering Field Types" for more information.
5. Decide which fonts you want to use. See "Using Fonts" for more information.

Determining Format Data

Before you lay out your format, you need to make a few decisions. What data do you want to print on your label? For example:

- How large is your supply?
- Which fonts do you want to use?
- Do you want to include a bar code?

Determining the Print Area

The print area varies, depending on the size of your supply. Below are the maximum and minimum print areas. Notice that the top edge of the supply exits the printer first.

Unit of Measure	Maximum Supply Size	Maximum Print Area	Minimum Supply Size	Minimum Print Area
English (1/100")	205 x 400	189 x 398	50 x 37.5	37.5 x 37.5

NOTE: You receive a “field off tag” error if you try to place a field in the quiet zone (non-printable area).

Supported Supply Lengths: .55 inches, .79 inches, 1.1 inches, 1.5 inches, 2.0 inches, 3.0 inches, and 4.0 inches

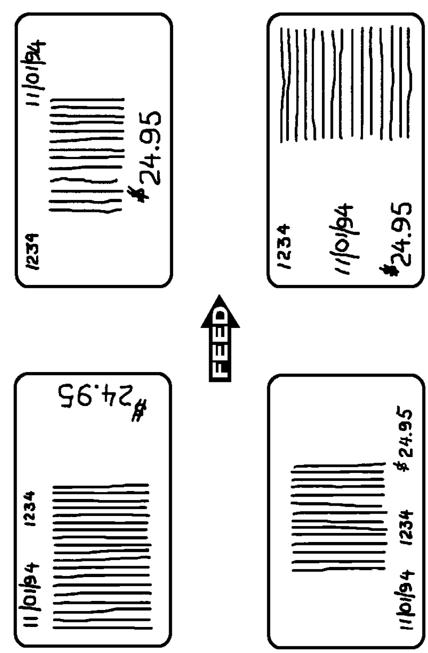
Supported Supply Widths: 1.20 inches, 1.50 inches, and 2.0 inches

Drawing Rough Sketches

As you sketch your design, you should:

- Identify the items you want on the label, such as a price and bar code.
- Select a label size.
- Determine the direction of printing.
- Place items on the label roughly where you would like them to appear in the finished design.
- Mark any areas that are preprinted on the label, such as a logo.

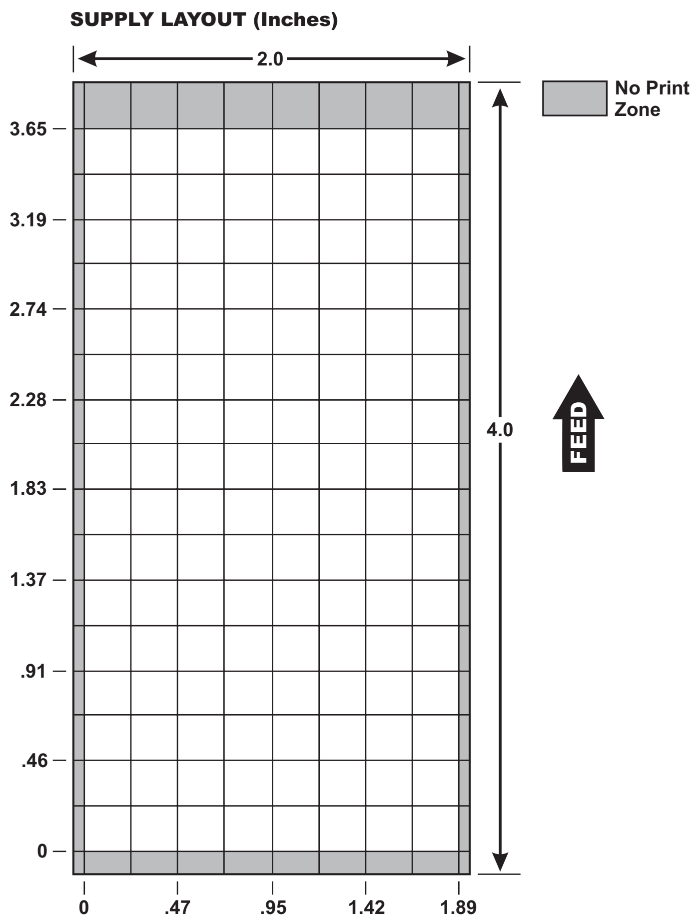
As soon as you know what information to include on the label, and you have a rough sketch, you can use a supply layout grid to help you layout and size your label.



Using Supply Layout Grids

A supply layout grid contains measurement markers. These markers help you accurately position information on your label.

If you want to use supply layout grids, a copy is shown on this page. Make copies of this page for each of your formats.



Considering Field Types

After you select a supply size, the next step in designing a format is to decide what information you want to print on the label. For example, you may want to print your company name, price of an item, and a bar code that combines information from other places. Everything you want to print falls into one of the following categories.

Field Type	Field Class	Description	Examples
Text	Simple Price Date/Time Combo	Contains letters, numbers, or symbols you want to print.	Item number, item description, department number, price, date
Bar Code	Simple Price Date/Time Combo	Used for printing bar codes that can be scanned.	Item or serial numbers, zip codes, information you do not want to have visible to customers
Constant Text	N/A	Prints fixed characters that print without changing.	Company name or company address
Line	N/A	Highlights or separates items.	Line marking out the regular price

For each field type, keep the following in mind:

Maximum field length The maximum number of characters in the field. The number of characters depends on the font size, label size, whether you are using a check digit, or if the field is printed horizontally or vertically. If your data is a price, remember to include the currency symbol (dollars, francs, etc.) in the length of your field. See Chapter 3, “Configuring the Printer” for more information about setting a currency symbol. The range is **0 – 40**.

Font and Font Size

When working with fonts, you have three considerations:

- ♦ font appearance
- ♦ font size
- ♦ font spacing (monospaced or proportional)

See Appendix B, "Using Fonts," for more information.

Rotation

The rotation of your field or individual characters. Fields and characters can be rotated 0, 90, 180, or 270 degrees.

Row

The horizontal line where printing begins. The number of rows available depends on the label size you use. You can begin a field at any row. However, towards the top and bottom of the label, you must make sure there are enough rows to print the font size or bar code selected.

Column

The vertical line where printing begins. You can begin a field at any column. However, on the edges of the label, you must make sure there are enough columns to print all the characters in a field. Bar codes require a “quiet zone” (non-printing zone) on each side of the bars for scanning. The quiet zone is .10 inches per side. Fore more information about bar codes, see Chapter 6, “Defining Bar Code Fields.”

NOTE: All samples shown in the “Defining Fields” chapters are created using 2.0-inch long by 2.0-inch wide supplies.

Starting the Design Process

Turn on the printer. You will see the Main Menu.

```
   - = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

1. From the Main Menu, press 1 to design your formats.

```
   - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

2. Press 1 to create a new format.

```
Enter Format Name
> ______________
      ↑
```

3. Type **UPCA** for the format name. Press Enter.

```
Enter Length of
supply (55 – 400)
(eg. 400 = 4 inches)
> ___
```

4. Type **200**. Press Enter.

```
Select Supply Width
1. 1.20 Inches
2. 1.50 Inches
3. 2.00 Inches
```

5. Press 3 for your supply width.

```
Select Type: Fld #1
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
5. Finished
```

6. Select a field type (**1-5**) for field 1.

♦ To define text fields, see Chapter 5, "Defining Text Fields."

♦ To define bar code fields, see Chapter 6, "Defining Bar Code Fields."

♦ To define constant text fields, see Chapter 7, "Defining Constant Text Fields."

♦ To define line fields, see Chapter 8, "Defining Line Fields."

♦ Select 5 when finished designing your format (after all fields are defined).

```
Save current
format? Y/N > _
      ↑
```

7. Press **Y** to save the format or press **N** to exit without saving the format. You return to the Design Menu.

Placing Fields on a Format

You must be careful where you place a field on a format to ensure it does not go off the format. There are two ways this can occur. You have placed the field

- on the format, but based on its maximum length, it may go off the edge.

  This way causes the software to display a warning, which you can ignore. See Chapter 3, "Configuring the Printer," to learn how to suppress the display of warnings if you prefer to do so.

- completely off the format.

  This way causes an error. You must redefine the field.

NOTE: Remember that the field can go off the format on any of the four sides (top, bottom, left, right).

See Chapter 12, "Troubleshooting," to learn about this error and warning.

DEFINING TEXT FIELDS

5

Create a separate definition for each text field. There are two types of text fields:

Simple	Contains data entered specifically for that field.
Combo (combination)	Contains data pulled from up to 10 other fields.

NOTE: If text falls on two lines, each line of text requires a separate definition.

All samples shown in this chapter are created using 2.0-inch long by 2.0-inch wide supplies.

About Text Fields

Read the following information to become familiar with the prompts for text fields. Valid ranges for the prompts are listed as well as information about using text fields.

Format Name	Depending on your printer's configuration, enter a name for the format. For more information about your printer's configuration, see Chapter 3, "Configuring the Printer." The maximum number of characters for the format name is 16.
Format Number	Reserved for future use. (Depending on your printer's configuration, enter a number for the format. The format number range is **1 – 99**.)
Format Description	Reserved for future use. (Depending on your printer's configuration, enter a description for the format.)
Supply Length	The length of your loaded supply. Measure from the top of one black mark to the top of the next black mark. The standard supply lengths are: **55, 79, 110, 150, 200, 300,** or **400** inches.

Supply Width The width of your loaded supply. Choices include 1.20, 1.50, or 2.00 inches.

Field Type Choices include text, bar code, constant text, and line.

Field Class Choices include simple, price, system date/time, and combo. Price and system date/time fields are explained in Chapter 9, "Defining Special Fields." Combo (combination) fields are explained later in this chapter. Simple fields are the most commonly used.

Type of Data Choices include alphanumeric and numeric. Decide if you need letters or letters and numbers in your field. When selecting a font for your data, keep in mind that point sizes greater than 12 include only the following characters: **0123456789#$%&(),./@DFKLMPS\kprö¢£¥**

Maximum Length The maximum number of characters in the field. The number of characters depends on the font size, label size, whether you are using a check digit, or if the field is printed horizontally or vertically. If your data is a price, remember to include the currency symbol (dollar sign, cent sign, etc.) in the length of your field. The range is **0 – 40**.

Minimum Length The minimum number of characters in the field. The range is **0 – 40**.

Field Prompt Contains the prompt displayed during data entry. The maximum number of characters is **40**.

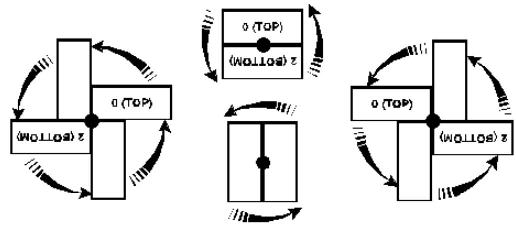
Fixed Data In situations where the same data appears on all labels, you can enter the repetitive data as fixed data. The operator does not enter the data. The maximum number of characters is 40; however, each field has a maximum length defined, so the fixed data must be below that maximum.

Fixed data is stored with the format and automatically displayed with the prompt during data entry. Fixed data can also be added **before** or **after** entry characters.

An example of fixed data is the manufacturer's code in a UPCA bar code.

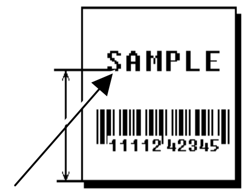
Row

The horizontal line where printing begins. For monospaced fonts, distance from the bottom of print area to the pivot point. The pivot point varies depending on how text is justified.



Left/Center/Right-Justified   Balanced   End-Justified

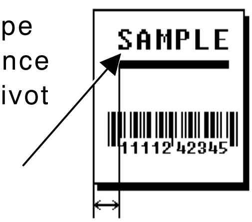
For proportionally spaced fonts, distance from the bottom of print area to baseline of characters in field. The range is **0 – 365**.



Baseline

Column

The vertical line where printing begins. Type the column position for the field. The distance from the left edge of the print area to the pivot point is the column location. The range is **0 – 183**.



Baseline

Gap

Depending on your printer's configuration, enter the number of dots between characters. For more information about your printer's configuration, see Chapter 3, "Configuring the Printer."

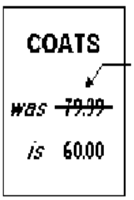
The gap range is **0 – 9**. For mono-spaced fonts, the additional spacing is added to the existing inter-character gap. This is also true for proportionally spaced fonts, but the inter-character gap varies with character combinations. Any number other than 0 affects your field width. Default spacing:
Letter Gothic Bold 6pt 1 dot
Letter Gothic Bold 9pt 2 dots
All other fonts vary with each letter
Use the default unless you want to create a special effect, such as P R I C E (additional character spacing) in a field.

Font The style of font for your format. Choices include CG Triumvirate Bold 6.5, 8, 10, 12, 18, or 22 point; CG Triumvirate Bold Condensed 6.5, 8, 10, 12, 18, and 22 point; and Letter Gothic 6.5 and 9 point.

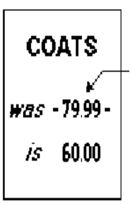
Height Magnification Height magnifier for the selected font. Use a magnifier of 1 with proportionally spaced fonts, because characters lose smoothness at higher magnifications. The range is **1 – 7**.

Width Magnification Width magnifier for the selected font. Proportionally spaced fonts do not have a set width. The range is **1 – 7**.

Font Color Depending on your printer's configuration, enter the color of the selected font. For more information about your printer's configuration, see Chapter 3, "Configuring the Printer."



Line field not blocked out by transparent field using attribute O



Line field blocked out by opaque field using attribute B

Solid black print should not exceed 30% on a given square inch of the label, or printhead life may be decreased. There are two types of field color overlay attributes:

Transparent The overlay field (text or constant text) does not block out or "erase" existing fields.

Opaque The overlay field blocks out or "erases" existing fields.

Field placement is an important consideration when using field color attributes. If a line field is defined before the overlay (text or constant text) field, the line field is blocked out by the overlay field, depending on the overlay field's color attribute. If a line field is defined after the overlay field, the line field is not blocked out by the overlay field, regardless of the overlay field's color attribute.

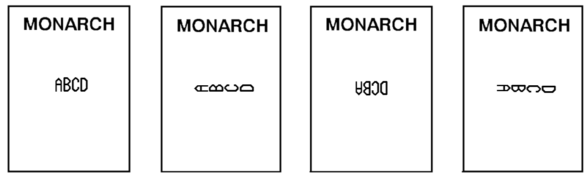
Choices include Black Opaque, White Opaque, Black Transparent and White Transparent.

Justification Alignment of the text within the field. Choices include Left (L), Right (E), and Center (B). Fonts 1012 and 1013 (Letter Gothic 6.5 and 9 pt) default to L (left), regardless of selection.

Character Rotation

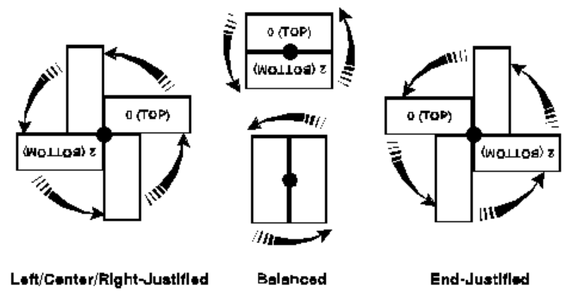
Depending on your printer's configuration, enter the character rotation of the selected field. For more information about your printer's configuration, see Chapter 3, "Configuring the Printer." Choices include Top of Field, Left of Field, Bottom of Field, and Right of Field.

The field or supply does not rotate, only the characters do. See "ABCD" in the example below.



Field Rotation

Rotation of the selected field. Choices include: Top of Supply, Left of Supply, Bottom of Supply, and Right of Supply.

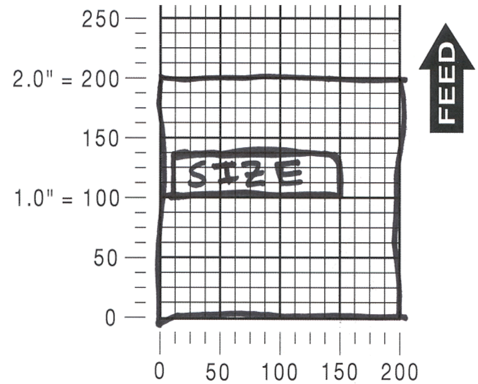


Data Edits

Data edits are used on text and bar code (simple and combo) fields only. For more information about data edits, see Chapter 10, "Applying Data Edits," for more information. Choices include: none, Make into Price, Pad Data Field, Extract Characters, Extract from Middle, Insert Characters, and Make Shoe Size.
Only two data edits are allowed per field. Shoe size and price edits are not allowed for bar code fields.

Entering a Sample Text Field

We will create a sample format, **SIZE** (2.0-inch long by 2.0-inch wide) and a sample text field, **TEXT**.



NOTE: This sample uses the printer's factory-set defaults. For more information about your printer's configuration, see Chapter 3, "Configuring the Printer."

```
    - = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

1. Press 1 to design your formats.

```
    - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

2. Press 1 to create a new format.

```
Enter Format Name
> ______________
      ↑
```

3. Type **SIZE** for the format name. Press Enter.

```
Enter Length of
supply (55 – 400)
(eg. 400 = 4 inches)
> ___
```

4. Type **200** for the length of your supply. Press Enter.

```
Select Supply Width
1. 1.20 Inches
2. 1.50 Inches
3. 2.00 Inches
```

5. Press 3 for the supply width.

```
Select Type: Fld #1
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
5. Finished
```

6. Press 1 to define a text field.

```
Select Field Class
1. Simple Field
2. Price Field
3. System Date/Time
4. Combo (Merged)
```

7. Press 1 to define a simple field.

```
Numeric or
Alpha-Numeric Data?
A/N > _

↑
```

8. Press **A** (alpha-numeric).

```
Enter Max. Length
> _ _ _
```

9. Type **10** as the maximum number of characters in the field. Press Enter.

```
Enter Min. Length
> _ _ _
```

10. Type **1** as the minimum number of characters in the field. Press Enter.

```
Enter Field Prompt
> _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

↑
```

11. Type **ENTER SIZE**. Press Enter.

```
Enter Fixed Data
Press ENTER if none
> _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

↑
```

12. Type /**TL** for the fixed data. Press Enter.

```
Add fixed data
Before or After
entry chars?  B/A
> _

↑
```

13. Press **A** to print the fixed data after the entry characters.

```
Enter Row #
> _ _ _
```

14. Type **100** for the row location. Press Enter.

```
Enter Col. #
> _ _ _
```

15. Type **10** for the column location. Press Enter.

```
- = Select Font = -
1. CG Trium 6.5 1000
2. CG Trium 8 pt 1001
3. CG Trium 10p 1002
4. CG Trium 12p 1003
5. CG Trium 18 p 1004
6. CG Trium 22p 1005
7. CG TrCon 6.5 1006
8. CG TrCon 8 pt 1007
9. CG TrCon 10p 1008
10. CG TrCon 12p 1009
11. CG TrCon 18p 1010
12. CG TrCon 22p 1011
13. LetGoth 6.5 1012
14. LetGoth 9pt 1013
```

16. Select **CG Trium 8 pt 1001**. Press Enter.

```
Enter Height Mag for
this font (1-7) > _
```

17. Press 1 for the height magnification.

```
Enter Width Mag for
this font (1-7) > _
```

18. Press 1 for the width magnification.

```
Set Justification
1. Left (L)
2. Right (E)
3. Center (B)
```

19. Press 1 for left alignment of characters in the field.

```
Top of Field at:
1. Top of Supply
2. Left of Supply
3. Bottom of Supply
4. Right of Supply
```

20. Press 1 for top of supply field rotation.

```
Select Edit #1
1. None
2. Make into Price
3. Pad Data Field
4. Extract Chars
5. Strip Chars
6. Extract from Mid
7. Insert Chars
8. Make Shoe Size
```

21. Press 1 for no data edits.

Select Type:Fld#2
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
5. Finished

22. Press (5).

Save current
format? Y/N > _

23. Press **Y** to save the format. You return to the Design Menu.

- To print the format, see “Printing the Sample Text Format.”
- To define a combo (combination) text field, see “Using a Combo Text Field.”
- To define bar code fields, see Chapter 6, “Defining Bar Code Fields.”
- To define constant text fields, see Chapter 7, “Defining Constant Text Fields.”
- To define line fields, see Chapter 8, “Defining Line Fields.”

Printing the Sample Text Format

After designing your format, print it to see how it looks.

- = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format

1. Press (Esc) to exit the Design Menu.

- = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration

2. Press (2) to print your format.

Select Format
to Print

3. Select **SIZE** and press Enter.

- = Format Menu = -

SIZE

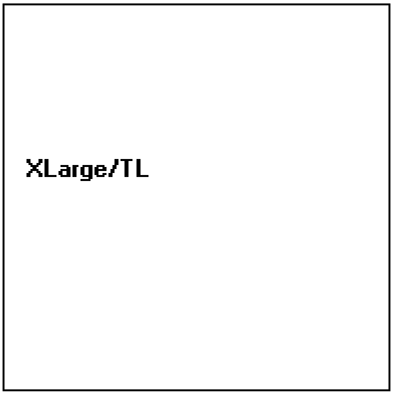
ENTER SIZE
_ _ _ _ _ _

4. Type **XLarge**. Press Enter. The label prints.

Printed: 1

5. Press the trigger to print another label or press Esc to return to the prompt and print a different label.

This sample prints the following label.



Using a Combo Text Field

Combo (combination) fields pull data from other fields (text or bar code), eliminating the data from being entered by an operator more than once. These are also known as merged fields. Each combo field can pull data from up to 10 different fields. Combo fields have three parameters:

Field Number
Field number from which data is copied.
For example, 3 is field #3.

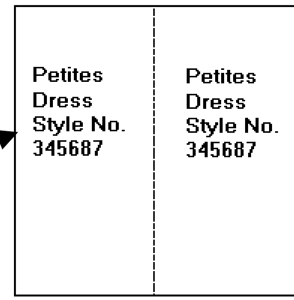
Starting Position
Position number in the source field of the first character to be copied. Character positions are numbered **1** to **99**, starting from the left. For example, 1 is the character in the first position to be copied.

Number of Digits to use
Number of characters to copy. The range is **1** to **99**. For example, 3 copies three characters.
In cases where the source field is shorter than the combo field, you have the option of filling (padding) data from the left or right or none. You are also prompted for the fill character.

Fill Direction Specifies whether to fill a short source field from the left, right, or not fill the field. For example, if the source field only contains 5 characters, but the combo field contains 10, you can fill the field from the left or right with zeroes or another character.

Fill Character Specifies which character to use for filling a field.

An example of using text fields to create a combo text field can be seen in multi-part tags. If you need a two-part identical tag, use combo text fields to mirror the data. The operator only has to answer the prompts one time for both tags.



Use combo fields to copy data from one part of tag to the other.

NOTE: When creating your combo field, remember that lines and constant text fields do not count as fields, even though they appear in the list as fields when editing a format.

For example, the constant text field, “Pretzels,” does not count as field 01, the bar code field is field 01, if the fields were defined in this order: pretzels, bar code, combo field (for human readable), and price field.

NOTE: You will receive an error or unexpected data may print in the combo field if you use the wrong field number.

Entering a Sample Combo Text Field

To use a combo field, you must already have created the field(s) you want to copy or use data from.

We will create a sample format **COMBO** (2.0-inch long by 2.0-inch wide) that includes a text field (**SIZE**), and then create a combo text field (**COPY**) that copies the data from **SIZE**.

NOTE: This sample uses the printer's factory-set defaults. For more information about your printer's configuration, see Chapter 3, "Configuring the Printer."

```
   - = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

1. Press 1 to design your formats.

```
   - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

2. Press 1 to create a new format.

```
Enter Format Name
> _ _ _ _ _ _ _ _ _ _ _ _ _ _
```

3. Type **COMBO** for the format name. Press Enter.

```
Enter Length of
supply (55 – 400)
(eg. 400 = 4 inches)
> _ _ _
```

4. Type **200** for the length of your supply. Press Enter.

```
Select Supply Width
1. 1.20 Inches
2. 1.50 Inches
3. 2.00 Inches
```

5. Press 3 for the supply width.

```
Select Type: Fld #1
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
5. Finished
```

6. Press 1 to define a text field.

```
Select Field Class
1. Simple Field
2. Price Field
3. System Date/Time
4. Combo (Merged)
```

7. Press 1 to define a simple field.

```
Numeric or
Alpha-Numeric Data?
A/N > _
```

8. Press **A** (alpha-numeric).

```
Enter Max. Length
> ___
```

9. Type **10** as the maximum number of characters in the field. Press Enter.

```
Enter Min. Length
> ___
```

10. Type **1** as the minimum number of characters in the field. Press Enter.

```
Enter Field Prompt
> ________________
```

11. Type **ENTER SIZE**. Press Enter.

```
Enter Fixed Data
Press ENTER if none
> ________________
```

12. Press Enter for no fixed data.

```
Enter Row #
> ___
```

13. Type **100** for the row location. Press Enter.

```
Enter Col. #
> ___
```

14. Type **10** for the column location. Press Enter.

```
- = Select Font = -
1. CG Trium 6.5 1000
2. CG Trium 8 pt 1001
3. CG Trium 10p 1002
4. CG Trium 12p 1003
5. CG Trium 18 p 1004
6. CG Trium 22p 1005
7. CG TrCon 6.5 1006
8. CG TrCon 8 pt 1007
9. CG TrCon 10p 1008
10. CG TrCon 12p 1009
11. CG TrCon 18p 1010
12. CG TrCon 22p 1011
13. LetGoth 6.5 1012
14. LetGoth 9pt 1013
```

15. Select **CG Trium 8 pt 1001**. Press Enter.

```
Enter Height Mag for
this font (1-7) > _
```

16. Press 1 for the height magnification.

```
Enter Width Mag for
this font (1-7) > _
```

17. Press 1 for the width magnification.

```
Set Justification
1. Left (L)
2. Right (E)
3. Center (B)
```

18. Press 1 for left alignment of characters in the field.

```
Top of Field at:
1. Top of Supply
2. Left of Supply
3. Bottom of Supply
4. Right of Supply
```

19. Press 1 for field rotation to the top of the supply.

```
Select Edit #1
1. None
2. Make into Price
3. Pad Data Field
4. Extract Chars
5. Strip Chars
6. Extract from Mid
7. Insert Chars
```

```
8. Make Shoe Size
```

20. Press 1 for no data edits.

```
Select Type:Fld#2
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
5. Finished
```

21. Press 1 to define your other text field.

```
Select Field Class
1. Simple Field
2. Price Field
3. System Date/Time
4. Combo (Merged)
```

22. Press 4 to define a combo field.

```
Enter Max. Length
> _ _ _
```

23. Type **10** as the maximum number of characters in the field. Press Enter.

```
Enter Min. Length
> _ _ _
```

24. Type **1** as the minimum number of characters in the field. Press Enter.

```
For Combo Fields
Enter up to 10
User Field sources.
(Press key) _
```

25. Press any key to continue.

```
Enter Field#
(First is Fld One)
(ENTER when done)
> _ _
```

26. Type **1**. Press Enter. Note that field numbering begins with 1, not 0.

```
Enter Start Position
(First is One)
> _ _ _
```

27. Type **1**. Press Enter. Note that position numbering begins with 1, not 0.

```
Enter # of Chars
> _ _ _
```

28. Type **6**. Press Enter.

```
Enter Field#
(First is Fld One)
(ENTER when done)
> _ _
```

29. Press Enter to continue. Note that field numbering begins with 1, not 0.

```
Enter Fill Direction
for short
Source Fields:
1 Fill from Left
2 Fill from Right
3 Do not Fill
```

30. Press 1 to fill the field from the left.

```
Enter Fill
Character for
source fields: _
```

31. Type a dash (-).

```
Enter Fixed Data
Press ENTER if none
> _________________
```

32. Press Enter for no fixed data.

```
Enter Row #
> ___
```

33. Type **100** for the row location. Press Enter.

```
Enter Col. #
> ___
```

34. Type **90** for the column location. Press Enter.

```
- = Select Font = -
1. CG Trium 6.5 1000
2. CG Trium 8 pt 1001
3. CG Trium 10p 1002
4. CG Trium 12p 1003
5. CG Trium 18 p 1004
6. CG Trium 22p 1005
7. CG TrCon 6.5 1006
8. CG TrCon 8 pt 1007
9. CG TrCon 10p 1008
10. CG TrCon 12p 1009
11. CG TrCon 18p 1010
12. CG TrCon 22p 1011
13. LetGoth 6.5 1012
14. LetGoth 9pt 1013
```

35. Select **CG Trium 8 pt 1001**. Press Enter.

```
Enter Height Mag for
this font (1-7) > _
```

36. Press 1 for the height magnification.

```
Enter Width Mag for
this font (1-7) > _
```

37. Press 1 for the width magnification.

```
Set Justification
1. Left (L)
2. Right (E)
3. Center (B)
```

38. Press 1 for the alignment of characters in the field.

```
Top of Field at:
1. Top of Supply
2. Left of Supply
3. Bottom of Supply
4. Right of Supply
```

39. Press 1 for the field rotation.

```
Select Edit #1
1. None
2. Make into Price
3. Pad Data Field
4. Extract Chars
5. Strip Chars
6. Extract from Mid
7. Insert Chars
8. Make Shoe Size
```

40. Press 1 for no data edits.

```
Select Type:Fld#3
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
5. Finished
```

41. Press 5.

```
Save current
format? Y/N > _
```

42. Press **Y** to save the format. You return to the Design Menu.

Printing the Sample Combo Format

After designing your format, print it to see how it looks.

```
   - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

1. Press Esc to exit the Design Menu.

```
   - = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

2. Press 2 to print your format.

```
Select Format
to Print
```

3. Select **COMBO** and press Enter.

```
   - = Format Menu = -

COMBO
SIZE
```

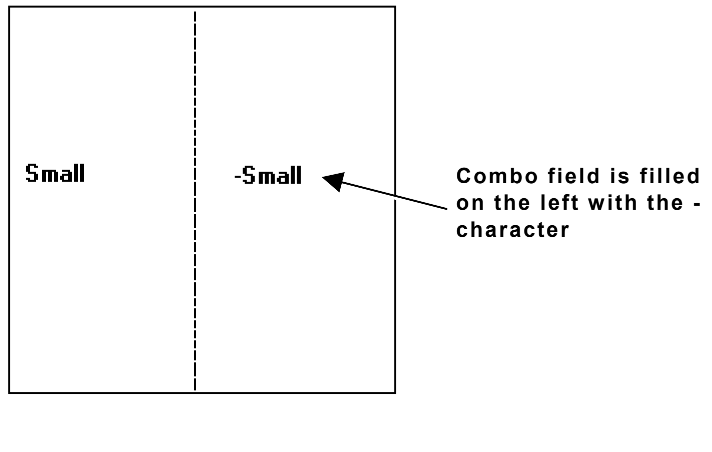
```
ENTER SIZE
______
```

4. Type **Small**. Press Enter. The label prints.

```
   Printed:  1
```

5. Press the trigger to print another label or press Esc to return to the prompt and print a different label.

This sample prints the following label.



DEFINING BAR CODE FIELDS 6

Create a separate definition for each bar code field. There are two types of bar code fields:

Simple	Contains data entered specifically for that field.
Combo (combination)	Contains data pulled from up to 10 other fields.

See "Bar Code Specifications" for information about each bar code that can be used with these bar code field types.

About Bar Code Fields

Read the following information to become familiar with the prompts for bar code fields. Ranges for the prompts are listed as well as more information about using bar code fields.

Format Name	Depending on your printer's configuration, enter a name for the format. For more information about your printer's configuration, see Chapter 3, "Configuring the Printer." The maximum number of characters for the format name is 16.
Format Number	Reserved for future use. (Depending on your printer's configuration, enter a number for the format. The format number range is **1 – 99**.)
Format Description	Reserved for future use. (Depending on your printer's configuration, enter a description for the format.)
Supply Length	The length of your loaded supply. Measure from the top of one black mark to the top of the next black mark. The standard supply lengths are: **55, 79, 110, 150, 200, 300,** or **400** inches.
Supply Width	The width of your loaded supply. Choices include 1.20 inches, 1.50 inches, and 2.00 inches.
Field Type	Choices include: text, bar code, constant, and line.

Bar Code Type Choices include: UPC-A, UPC-E, Interleaved 2 of 5, Code 39 (with no check digit), Codabar, EAN-8, EAN-13, Code 128, MSI, UPC-A +2, UPC-A +5, UPC-E +2, UPC-E +5, EAN-8 +2, EAN-8 +5, EAN-13 +2, EAN-13 +5, Code 93, Code 39-Mod 43, UPC-A & Price CD, EAN-13 & Price CD, and I2 of 5 with Barrier Bar.

Field Class Choices include simple, price, system date/time, and combo. For bar codes, select either simple or combo. Combo (combination) fields are explained later in this chapter. Simple fields are the most commonly used.

Field Prompt Contains the prompt displayed during data entry. The maximum number of characters is 20.

Using Fixed Data In situations where the same data appears on all labels, you can enter the repetitive data as fixed data. The operator does not enter the data. The maximum number of characters is 40; however, each field has a maximum length defined, so the fixed data must be below that maximum.

Fixed data is stored with the format and automatically displayed with the prompt during data entry. Fixed data can also be added **before** or **after** entry characters.

An example of fixed data is the manufacturer's code in a UPC-A bar code.

Row

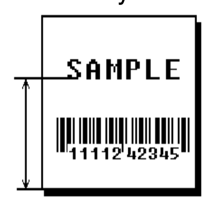
Distance from the bottom of print area to the pivot point of the field. The pivot point varies, depending on how the field is justified. Pivot points:

Left/Center/Right-Justified Fields

Balanced Fields

End-Justified Fields

Remember to include text or numbers that may appear with the bar code for the row measurement.



Column

The vertical line where printing begins. Type the column position for the field. The distance from the left edge of the print area to the pivot point is the column location. The range is **0 – 183**.

Allow a minimum of **1**/**10** inch between the scan edge of bar code and label edges or other data.

Density

The density of the bar code. The possible values vary by the bar code selected.

Bar Height Height of the bar code in 1/100 inches. For example, 100 = 1 inch. The value is dependent on the length of the label used. The minimum value is **1**.

Appearance Depending on your printer's configuration, enter the appearance of the bar code (UPC and EAN family only). For more information about your printer's configuration, see Chapter 3, "Configuring the Printer." See "Setting the Appearance" for information about the appearance choices.

Justification Depending on your printer's configuration, enter an alignment for the field. For more information about your printer's configuration, see Chapter 3, "Configuring the Printer." Choices include Left (L), Right (E), and Center (B).

Field Rotation Rotation of the selected field. Choices include: Top of Supply, Left of Supply, Bottom of Supply, and Right of Supply.

Left/Center/Right-Justified Fields

Balanced Fields

End-Justified Fields

Data Edits Only two data edits are allowed per field. Data edits are used on text and bar code (simple and combo) fields only. For more information about data edits, see Chapter 10, "Applying Data Edits," for more information. Choices include: none, Make into Price, Pad Data Field, Extract Characters, Extract from Middle, Insert Characters, and Make Shoe Size.

NOTE: Make Shoe size and Make into Price are not allowed for bar code fields.

Setting the Appearance

UPC and EAN bar codes only. The appearance of the bar code is the combination of number system and/or check digits shown with the bar code. You are prompted for the appearance during format creation, unless the configuration specifies to use the default. The number system appears on the left and the check digit appears on the right.

NOTE: The appearance that prints does not change unless you redefine the field. You cannot change only the configuration and have the printing change.

Number System → 1 93652 58545 9 ← **Check Digit**

Following are the appearance options.

No C/D or Num Sys 93652 58545

Number Sys Only 1 93652 58545

Check Digit Only 93652 58545 9

Complete HR Text (human-readable) 1 93652 58545 9

No Human Readable

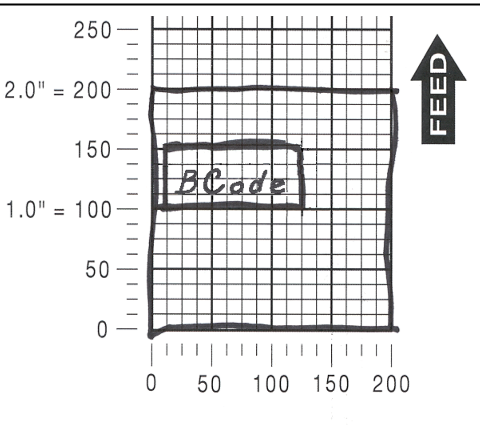
Setting the Density

The density is the amount of data per unit length in a bar code. Generally, you measure the density in characters per inch or as percentages of the nominal size. Density values vary by bar code. The following table lists these values.

Bar Code	Density Values
UPC and EAN	80% and 120%
Interleaved 2 of 5	1.0, 2.0, 3.0, 4.0, 5.3, 6.0, 7.1, 8.3, 9.1, 10.6, 12.0, and 13.7
Code 39 – no c/d	1.3, 1.7, 2.8, 3.3, 3.7, 4.0, 6.0, 6.6, and 12.0.
Codabar	2.0, 2.9, 4.3, 4.7, 7.7, 8.4, and 9.6
Code 128	3.5/7.0, 4.4/8.7, 5.8/11.7, and 8.7/17.5
MSI	4.0, 5.3, and 6.9
Code 93	3.6, 4.3, 5.3, 7.1, and 10.7
Code 39 – Mod43	1.3, 1.7, 2.8, 3.3, 3.7, 4.0, 6.0, 6.6, and 12.0
I2of5 – Barrier Bar	1.0, 2.0, 3.0, 4.0, 5.3, 6.0, 7.1, 8.3, 9.1, 10.6, 12.0 and 13.7

Entering Simple Bar Code Fields

Follow the steps to create sample bar code fields.



Sample 1: Simple Fixed Bar Code

The following procedure creates a UPC-A bar code on a 2.0-inch long by 2.0-inch wide supply.

NOTE: This sample uses the printer's factory-set defaults. For more information about your printer's configuration, see Chapter 3, "Configuring the Printer."

```
    -=Main Menu=-
1. Design Formats
2. Print Labels
3. Configuration
```

1. From the Main Menu, press 1.

```
   -=Design Menu=-
1.Create New Format
2.Edit Old Format
3.Copy Format
4.Delete Format
```

2. Press 1 to create a new format.

```
Enter Format Name
>_______________
        ↑
```

3. Type **UPCA** for the format name. Press Enter.

```
   Enter Length of
   Supply (55-400)
(eg.400 = 4 inches)
>___
```

4. Type **200** for the length of your supply. Press Enter.

```
Select Supply Width
1.    1.20 Inches
2.    1.50 Inches
3.    2.00 Inches
```

5. Press 3 for a 2-inch the supply width.

```
Select Type: Fld #1
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
5. Finished
```

6. Press 2 to define a bar code field.

```
 -=Select Bar Code=-
1. UPC-A
2. UPC-E
3. Interleaved2of5
4. Code 39 –no c/d
5. Codabar
6. EAN-8
7. EAN-13
```

7. Press 1 for UPC-A.

```
Select Field Class
1. Simple Field
2. Price Field
3. System Date/Time
4. Combo    (Merged)
```

8. Press 1 to define a simple field.

```
Enter Field Prompt
_ _ _ _ _ _ _ _ _ _ _
        ↑
```

9. Type “SCAN UPC#.” Press Enter.

```
  Enter Fixed Data
Press ENTER if none
> _ _ _ _ _ _ _ _ _ _ _ _
        ↑
```

10. Press Enter for no fixed data.

```
        Enter Row #
> _ _ _
```

11. Type **80** for the row location. Press Enter.

```
        Enter Col. #
> _ _ _
```

12. Type **15** for the column location. Press Enter.

```
     Enter Density
   1. 80/ 2. 120
    >_
```

13. Press 1 for the density (80%).

```
 Enter Bar Height
 (Units = Inch/100)
> _ _ _
```

14. Type **40** for the bar code height (.4”). Press Enter.

```
  Top of Field at:
1. Top of Supply
2. Left of Supply
3. Bottom of Supply
4. Right of Supply
```

15. Type 1 for a top of supply field rotation.

```
   Select Edit #1
1. (None)
2. Make into Price
3. Pad Data Field
4. Extract Chars
5. Strip Chars
6. Extract from Mid
7. Insert Chars
8. Make Shoe Size
```

16. Press Enter for no edits.

```
Select Type:Fld #2
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
5. Finished
```

17. Press (5).

```
Save current
format? Y/N > _
```

18. Press **Y** to save the format. You return to the Design Menu.

- To print the format, see ”Printing the Simple Fixed Bar Code Format.”
- To define a combo (combination) bar code field, see “Entering a Sample Combo Bar Code Field.”
- To define text fields, see Chapter 5, “Defining Text Fields.”
- To define constant text fields, see Chapter 7, “Defining Constant Text Fields.”
- To define line fields, see Chapter 8, “Defining Line Fields.”

Printing the Simple Fixed Bar Code Format

After designing your format, print it to see how it looks.

```
-=Design Menu=-
1.Create New Format
2.Edit Old Format
3.Copy Format
4.Delete Format
```

1. Press (Esc) to exit the Design Menu.

```
-=Main Menu=-
1. Design Formats
2. Print Labels
3. Configuration
```

2. Press (2) to print your format.

```
Select Format
to Print
```

3. Select **UPCA**. Press Enter.

```
- = Format Menu = -

UPCA
```

```
SCAN UPC#
_ _ _ _ _ _ _ _ _ _ _ _
```

4. Type **028028796302**. Press Enter. The label prints.

```
Printed : 1
```

5. Press the trigger to print another label or press Esc to return to the prompt and print another label.

This sample prints the following label.

Sample 2: Simple Variable Bar Code

The following procedure creates a Code 128 bar code on a 2.0-inch long by 2.0-inch wide supply.

NOTE: This sample uses the printer's factory-set defaults. For more information about your printer's configuration, see Chapter 3, "Configuring the Printer."

```
 -=Main Menu=-
1. Design Formats
2. Print Labels
3. Configuration
```

1. From the Main Menu, press 1.

```
 -=Design Menu=-
1.Create New Format
2.Edit Old Format
3.Copy Format
4.Delete Format
```

2. Press 1 to create a new format.

```
Enter Format Name
>_______________
     ↑
```

3. Type **CODE128** for the format name. Press Enter.

```
 Enter Length of
 Supply (55-400)
(eg.400 = 4 inches)
>___
```

4. Type **200** for the length of your supply. Press Enter.

```
Select Supply Width
1.   1.20 Inches
2.   1.50 Inches
3.   2.00 Inches
```

5. Press 3 for the supply width.

```
Select Type: Fld #1
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
5. Finished
```

6. Press 2 to define a bar code field.

```
 -=Select Bar Code=-
1. UPC-A
2. UPC-E
3. Interleaved2of5
4. Code 39 –no c/d
5. Codabar
6. EAN-8
7. EAN-13
8. Code 128
9. MSI
10. UPC-A +2
11. UPC-A +5
12. UPC-E +2
13. UPC-E +5
14. EAN-8 +2
15. EAN-8 +5
16. EAN-13 +2
17. EAN-13 +5
23. Code 93
40. Code 39 –Mod 43
41. UPCA&Price CD
44. EAN-13 & PriceCD
50. I2of5 – Barr. Bar
```

7. Press 8 for Code 128.

```
Select Field Class
1. Simple Field
2. Price Field
3. System Date/Time
4. Combo    (Merged)
```

8. Press 1 to define a simple field.

```
      Numeric or
Alpha-Numeric Data?
      A/N >_
       ↑
```

9. Press **N** to specify numeric data.

```
 Enter Max. Length
>___
```

10. Type **10** as the maximum number of characters in the field. Press Enter.

```
Enter Min. Length
>___
```

11. Type **10** as the minimum number of characters in the field. Press Enter.

```
Enter Field Prompt
____________
```

12. Type "SCAN DATA." Press Enter.

```
Enter Fixed Data
Press ENTER if none
> _____________
```

13. Press Enter for no fixed data.

```
Enter Row #
> ___
```

14. Type **80** for the row location. Press Enter.

```
Enter Col. #
> ___
```

15. Type **15** for the column location. Press Enter.

```
-=Select Density=-
3.5/7.0 CPI    5 dots
4.4/8.7 CPI    4 dots
5.8/11.7 CPI   3 dots
8.7/17.5 CPI   2 dots
```

16. Select **8.7/17.5** characters per inch.

```
Enter Bar Height
(Units = Inch/100)
> ___
```

17. Type **40** for the bar code height (.4"). Press Enter.

```
Top of Field at:
1. Top of Supply
2. Left of Supply
3. Bottom of Supply
4. Right of Supply
```

18. Type 1 for top of supply field rotation.

```
Select Edit #1
1. (None)
2. Make into Price
3. Pad Data Field
4. Extract Chars
5. Strip Chars
6. Extract from Mid
7. Insert Chars
8. Make Shoe Size
```

19. Press Enter for no edits.

Select Type:Fld #2
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
5. Finished

20. Press (5).

Save current
format? Y/N > _

21. Press **Y** to save the format. You return to the Design Menu.

- To print the format, see ”Printing the Simple Variable Bar Code Format.”
- To define a combo (combination) bar code field, see “Entering a Sample Combo Bar Code Field.”
- To define text fields, see Chapter 5, “Defining Text Fields.”
- To define constant text fields, see Chapter 7, “Defining Constant Text Fields.”
- To define line fields, see Chapter 8, “Defining Line Fields.”

Printing the Simple Variable Bar Code Format

After designing your format, print it to see how it looks.

-=Design Menu=-
1.Create New Format
2.Edit Old Format
3.Copy Format
4.Delete Format

1. Press (Esc) to exit the Design Menu.

-=Main Menu=-
1. Design Formats
2. Print Labels
3. Configuration

2. Press (2) to print your format.

Select Format
to Print

3. Select **CODE128**. Press Enter.

- = Format Menu = -

CODE128
UPCA

SCAN DATA
_ _ _ _ _ _ _ _ _ _ _ _

4. Type **8520147963**. Press Enter. The label prints.

Printed : 1

5. Press the trigger to print another label or press Esc to return to the prompt and print another label.

This sample prints the following label.

About Combo Bar Code Fields

Combo bar code fields pull data from other fields, eliminating the data from being entered by the operator more than once. Combo fields have three parameters:

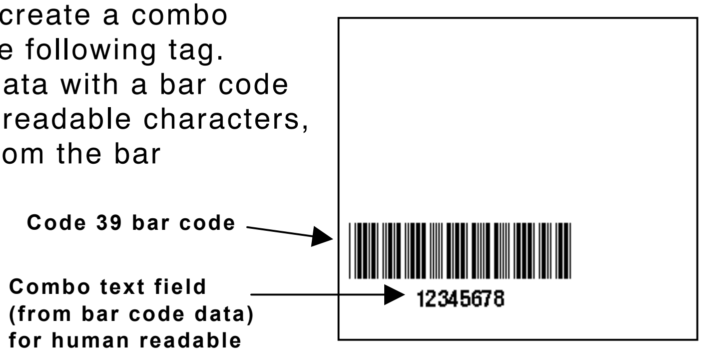
Field Number (two digits) Field number from which data is copied. For example, 3 is field #3.

Starting Position (two digits) Position number in the source field of the first character to be copied. Character positions are numbered **1** to **99**, starting from the left. For example, 1 is the character in the first position to be copied.

Number of Digits to use (two digits) Number of characters to copy. The range is **1** to **99**. For example, 3 copies three characters.

In cases where the source field is shorter than the combo field, you have the option of filling (padding) data from the left or right or none. You are also prompted for the fill character.

Each combo field pulls data from up to 10 different text or bar code fields. An example of using bar code fields to create a combo text field can be seen in the following tag. To show human readable data with a bar code that does not allow human readable characters, create a combo text field from the bar code data field.



Entering a Sample Combo Bar Code Field

Follow the steps for entering combo bar code fields on 2.0-inch long by 2.0-inch wide supplies.

NOTE: This sample uses the printer's factory-set defaults. For more information about your printer's configuration, see Chapter 3, "Configuring the Printer."

```
   -=Main Menu=-
1. Design Formats
2. Print Labels
3. Configuration
```

1. From the Main Menu, press 1.

```
   -=Design Menu=-
1.Create New Format
2.Edit Old Format
3.Copy Format
4.Delete Format
```

2. Press 1 to create a new format.

```
Enter Format Name
>_______________
```

3. Type **COMBOBC** for the format name. Press Enter.

```
  Enter Length of
  Supply (55-400)
(eg.400 = 4 inches)
>___
```

4. Enter **200** for the length of your supply. Press Enter.

```
Select Supply Width
1.   1.20 Inches
2.   1.50 Inches
3.   2.00 Inches
```

5. Press 3 for the supply width.

```
Select Type: Fld #1
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
5. Finished
```

6. Press 1 to define a text field.

```
Select Field Class
1. Simple Field
2. Price Field
3. System Date/Time
4. Combo (Merged)
```

7. Press 1 to define a simple field.

```
Numeric or
Alpha-Numeric Data?
A/N > _
      ↑
```

8. Press **N** (alpha-numeric).

```
Enter Max. Length
> _ _ _
```

9. Type **6** as the maximum number of characters in the field. Press Enter.

```
Enter Min. Length
> _ _ _
```

10. Type **6** as the minimum number of characters in the field. Press Enter.

```
Enter Field Prompt
> _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
      ↑
```

11. Type **ENTER DATA 1**. Press Enter.

```
Enter Fixed Data
Press ENTER if none
> _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
      ↑
```

12. Press Enter, for no fixed data.

```
     Enter Row #
> _ _ _
```

13. Type **10** for the row location. Press Enter.

```
     Enter Col. #
> _ _ _
```

14. Type **10** for the column location. Press Enter.

```
- = Select Font = -
1. CG Trium 6.5 1000
2. CG Trium 8 pt 1001
3. CG Trium 10p 1002
4. CG Trium 12p 1003
5. CG Trium 18 p 1004
6. CG Trium 22p 1005
7. CG TrCon 6.5 1006
8. CG TrCon 8 pt 1007
9. CG TrCon 10p 1008
10. CG TrCon 12p 1009
11. CG TrCon 18p 1010
12. CG TrCon 22p 1011
13. LetGoth 6.5 1012
14. LetGoth 9pt 1013
```

15. Select **CG Trium 8 pt 1001** font.

```
Enter Height Mag for
this font (1-7) > _
```

16. Press 1 for the height magnification.

```
Enter Width Mag for
this font (1-7) > _
```

17. Press 1 for the width magnification.

```
Set Justification
1. Left (L)
2. Right (E)
3. Center (B)
```

18. Press 1 for left alignment of characters in the field.

```
Top of Field at:
1. Top of Supply
2. Left of Supply
3. Bottom of Supply
4. Right of Supply
```

19. Press 1 for top of supply field rotation.

```
Select Edit #1
1. None
2. Make into Price
3. Pad Data Field
4. Extract Chars
5. Strip Chars
6. Extract from Mid
7. Insert Chars
8. Make Shoe Size
```

20. Press 1 for no data edits.

```
Select Type: Fld #2
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
5. Finished
```

21. Press 1 to define a text field.

```
Select Field Class
1. Simple Field
2. Price Field
3. System Date/Time
4. Combo (Merged)
```

22. Press 1 to define a simple field.

```
Numeric or
Alpha-Numeric Data?
A/N > _
```

23. Press **N** (alpha-numeric).

```
Enter Max. Length
> _ _ _
```

24. Type **6** as the maximum number of characters in the field. Press Enter.

```
Enter Min. Length
> _ _ _
```

25. Type **6** as the minimum number of characters in the field. Press Enter.

```
Enter Field Prompt
> _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
```

26. Type **ENTER DATA 2**. Press Enter.

```
Enter Fixed Data
Press ENTER if none
> _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
```

27. Press Enter, for no fixed data.

```
Enter Row #
> _ _ _
```

28. Type **50** for the row location. Press Enter.

```
Enter Col. #
> _ _ _
```

29. Type **10** for the column location. Press Enter.

```
- = Select Font = -
1. CG Trium 6.5 1000
2. CG Trium 8 pt 1001
3. CG Trium 10p 1002
4. CG Trium 12p 1003
5. CG Trium 18p 1004
6. CG Trium 22p 1005
7. CG TrCon 6.5 1006
8. CG TrCon 8 pt 1007
9. CG TrCon 10p 1008
10. CG TrCon 12p 1009
11. CG TrCon 18p 1010
12. CG TrCon 22p 1011
13. LetGoth 6.5 1012
14. LetGoth 9pt 1013
```

30. Select **CG Trium 8 pt 1001** font.

Enter Height Mag for this font (1-7) > _	**31.** Press 1 for the height magnification.
Enter Width Mag for this font (1-7) > _	**32.** Press 1 for the width magnification.
Set Justification 1. Left (L) 2. Right (E) 3. Center (B)	**33.** Press 1 for left alignment of characters in the field.
Top of Field at: 1. Top of Supply 2. Left of Supply 3. Bottom of Supply 4. Right of Supply	**34.** Press 1 for top of supply field rotation.
Select Edit #1 1. None 2. Make into Price 3. Pad Data Field 4. Extract Chars 5. Strip Chars 6. Extract from Mid 7. Insert Chars 8. Make Shoe Size	**35.** Press 1 for no data edits.
Select Type: Fld #3 1. Text Field 2. Bar Code Field 3. Constant Text 4. Line 5. Finished	**36.** Press 2 to define a bar code field.
- = Select Bar Code = - 1. UPC-A 2. UPC-E 3. Interleaved2of5 4. Code 39 –no c/d 5. Codabar 6. EAN-8 7. EAN-13	**37.** Press Enter for UPC-A.
Select Field Class 1. Simple Field 2. Price Field 3. System Date/Time 4. Combo (Merged)	**38.** Press 4 to define a combo field.
For Combo Fields Enter up to 10 User Field sources. (Press key) _	**39.** Press any key to continue.

```
Enter Field #
(First is Fld One)
( ENTER when done )
> _ _
```

40. Type **1** and press Enter for source field 1.

```
Enter Start Position
   (First is One)
> _ _
```

41. Type **1** and press Enter for copy start position 1.

```
Enter # of Chars
> _ _
```

42. Type **6** and press Enter for 6 characters to copy.

```
Enter Field #
(First is Fld One)
( ENTER when done )
> _ _
```

43. Type **2** and press Enter for source field 2.

```
Enter Start Position
(First is One)
> _ _
```

44. Type **1** and press Enter for copy start position 1.

```
Enter # of Chars
> _ _
```

45. Type **6** and press Enter for 6 characters to copy.

```
Enter Field #
(First is Fld One)
( ENTER when done )
> _ _
```

46. Press Enter to continue.

```
Enter Fill-Direction
        for short
    Source Fields:
1 Fill from Left
2 Fill from Right
3 Do not Fill
```

47. Press 3 to not fill the field.

```
      Enter Fixed Data
    Press ENTER if none
   > _ _ _ _ _ _ _ _ _ _ _ _
```

48. Press Enter for no fixed data.

```
        Enter Row #
> _ _ _
```

49. Type **100** for the row location. Press Enter.

```
        Enter Col. #
> _ _ _
```

50. Type **10** for the column location. Press Enter.

```
    Enter Density
   1. 80/ 2. 120
  >_
```

51. Press 1 for the density (80%).

```
Enter Bar Height
(Units = Inch/100)
> _ _ _
```

52. Type **40** for the bar code height (.4”). Press Enter.

```
Top of Field at:
1. Top of Supply
2. Left of Supply
3. Bottom of Supply
4. Right of Supply
```

53. Type 1 for top of supply field rotation.

```
Select Edit #1
1. (None)
2. Make into Price
3. Pad Data Field
4. Extract Chars
5. Strip Chars
6. Extract from Mid
7. Insert Chars
8. Make Shoe Size
```

54. Press Enter for no edits.

```
Select Type:Fld #4
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
5. Finished
```

55. Press 5.

```
Save current
format? Y/N > _
```

56. Press **Y** to save the format. You return to the Design Menu.

- ♦ To print the format, see ”Printing the Sample Combo Bar Code Format.”
- ♦ To define text fields, see Chapter 5, “Defining Text Fields.”
- ♦ To define constant text fields, see Chapter 7, “Defining Constant Text Fields.”
- ♦ To define line fields, see Chapter 8, “Defining Line Fields.”

Printing the Sample Combo Bar Code Format

After designing your format, print it to see how it looks.

```
   -=Design Menu=-
1.Create New Format
2.Edit Old Format
3.Copy Format
4.Delete Format
```

1. Press Esc to exit the Design Menu.

```
    -=Main Menu=-
1. Design Formats
2. Print Labels
3. Configuration
```

2. Press 2 to print your format.

```
Select Format
to Print
```

3. Select **COMBOBC**. Press Enter.

```
   - = Format Menu = -

CODE128
COMBOBC
UPCA
```

```
ENTER DATA 1
_ _ _ _ _ _ _ _ _ _ _ _
```

4. Type **028028**. Press Enter.

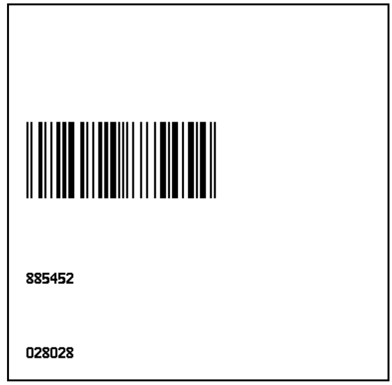
```
ENTER TEXT2
_ _ _ _ _ _ _ _ _ _ _ _
```

5. Type **885452**. Press Enter. The label prints.

```
        Printed : 1
```

6. Press the trigger to print another label or press Esc to return to the prompt and print another label.

This sample prints the following label.



Bar Code Specifications

This section contains information specific to the various bar codes you can select. This information helps you correctly enter the information to create a bar code field for your format.

UPC Bar Codes

- Retailers use UPC (Universal Product Code) bar codes to identify merchandise.
- Maximum and minimum lengths for +2 and +5 bar codes must be equal.

Bar Code	Length (in characters)
UPC-A	12
UPC-A +2	14
UPC-A +5	17
UPC-A & Price CD	12
UPC-E	7
UPC-E +2	9
UPC-E +5	12

UPCA

UPCE

EAN Bar Codes

- Some retailers use EAN (European Article Number) bar codes to identify merchandise.
- Maximum and minimum lengths for +2 and +5 bar codes must be equal.

Bar Code	Length (in characters)
EAN-8	8
EAN-8 +2	10
EAN-8 +5	13
EAN-13	13
EAN-13 +2	15
EAN-13 +5	18
EAN-13 & Price CD	13

EAN-8

EAN-13

Code 128 Bar Codes

- Length:**0 – 2710** characters
- Characters are alphanumeric, including any ASCII characters.

MSI

MSI is a Modified Plessey bar code.

- Length: **0 – 14** characters
- Uses only numeric data.
- Can use a second optional check digit.

Interleaved 2 of 5 Bar Codes

Interleaved 2 of 5 is an industrial bar code. You can use it with or without a barrier bar.

- Length: **0 – 2710** characters (must be numeric)
- The length must be even. If not, the software adds a zero at the end.

Interleaved 2 of 5

Interleaved 2 of 5 with the Barrier Bar

Code 39 Bar Codes

Code 39 is an industrial bar code. You can use Code 39 with no check digit and Code 39 – Mod 43.

- Uses alphanumeric data, certain symbols, and start/stop characters.
- Length: **0 – 2710** characters

Codabar Bar Codes

Codabar is an industrial bar code with numeric printing and special start/stop characters. You can use the start/stop characters to join multiple bar codes when scanning.

- To join two bar codes, the last character of one bar code and the first character of the other bar code must be **d**.
- Other start and stop characters can be **a**, **b**, and **c**.
- Length: **0 – 26** characters

Code 93

- Uses data from the 128 character ASCII set.
- Uses two check digits.
- Length: **0 - 2710** characters

DEFINING CONSTANT TEXT FIELDS

7

A constant text field is a set of fixed characters that prints on all labels. Define each constant text field separately. Use constant text fields for data that is the same, so the operator does not have to enter the repetitive data for each label. For example, a store number should be in a constant text field, whereas the department number should be in a text field. The store number is the same for each label. The department number varies per label.

NOTE: The constant text field is not assigned a field number, but is counted as a field (keep this in mind, as the printer allows a maximum of **50** fields per format). Data edits do not apply to constant text fields.

Constant text fields are very similar to text fields.

NOTE: All samples shown in this chapter are created using 2.0-inch long by 2.0-inch wide supplies.

About Constant Text Fields

Read the following information to become familiar with the prompts for constant text fields. Valid ranges for the prompts are listed as well as information about using constant text fields.

Format Name Depending on your printer's configuration, enter a name for the format. For more information about your printer's configuration, see Chapter 3, "Configuring the Printer." The maximum number of characters for the format name is 16.

Format Number Reserved for future use. (Depending on your printer's configuration, enter a number for the format. The format number range is **1 – 99**.)

Format Description Reserved for future use. (Depending on your printer's configuration, enter a description for the format.)

Supply Length The length of your loaded supply. Measure from the top of one black mark to the top of the next black mark. The standard supply lengths are: **55, 79, 110, 150, 200, 300,** or **400** inches.

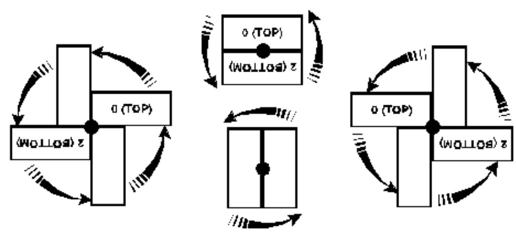
Supply Width The width of your loaded supply. Choices include 1.20, 1.50, or 2.00 inches.

Field Type Choices include text, bar code, constant text, and line.

Fixed Data In situations where the same data appears on all labels, you can enter the repetitive data as fixed data. The operator does not enter the data. The maximum number of characters is 40; however, each field has a maximum length defined, so the fixed data must be below that maximum.

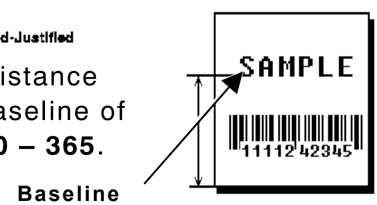
Fixed data is stored with the format and automatically displayed with the prompt during data entry.

Row The horizontal line where printing begins. For monospaced fonts, distance from the bottom of print area to the pivot point. The pivot point varies depending on how text is justified.

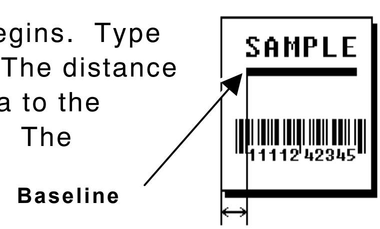


Left/Center/Right-Justified Balanced End-Justified

For proportionally spaced fonts, distance from the bottom of print area to baseline of characters in field. The range is **0 – 365**.

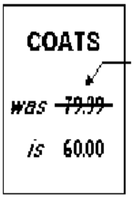


Column The vertical line where printing begins. Type the column position for the field. The distance from the left edge of the print area to the pivot point is the column location. The range is **0 – 183**.

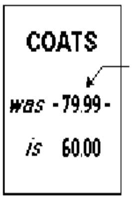


Gap	Depending on your printer's configuration, enter the number of dots between characters. For more information about your printer's configuration, see Chapter 3, "Configuring the Printer." The gap range is **0 – 9**. For mono-spaced fonts, the additional spacing is added to the existing inter-character gap. This is also true for proportionally spaced fonts, but the inter-character gap varies with character combinations. Any number other than 0 affects your field width. Default spacing: Letter Gothic Bold 6pt 1 dot Letter Gothic Bold 9pt 2 dots All other fonts vary with each letter Use the default unless you want to create a special effect, such as P R I C E (additional character spacing) in a field.
Font	The style of font for your format. Choices include CG Triumvirate Bold 6.5, 8, 10, 12, 18, or 22 point; CG Triumvirate Bold Condensed 6.5, 8, 10, 12, 18, and 22 point; and Letter Gothic 6.5 and 9 point.
Height Magnification	Height magnifier for the selected font. Use a magnifier of 1 with proportionally spaced fonts, because characters lose smoothness at higher magnifications. The range is **1 – 7**.
Width Magnification	Width magnifier for the selected font. Proportionally spaced fonts do not have a set width. The range is **1 – 7**.

Font Color



Line field not blocked out by transparent field using attribute O



Line field blocked out by opaque field using attribute B

Depending on your printer's configuration, enter the color of the selected font. For more information about your printer's configuration, see Chapter 3, "Configuring the Printer."

Solid black print should not exceed 30% on a given square inch of the label, or printhead life may be decreased. There are two types of field color overlay attributes:

Transparent The overlay field (text or constant text) does not block out or "erase" existing fields.

Opaque The overlay field blocks out or "erases" existing fields.

Field placement is an important consideration when using field color attributes. If a line field is defined before the overlay (text or constant text) field, the line field is blocked out by the overlay field, depending on the overlay field's color attribute. If a line field is defined after the overlay field, the line field is not blocked out by the overlay field, regardless of the overlay field's color attribute.

Choices include Black Opaque, White Opaque, Black Transparent and White Transparent.

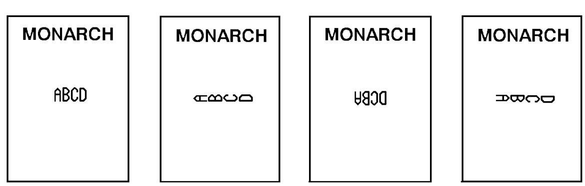
Justification

Alignment of the text within the field. Choices include Left (L), Right (E), and Center (B). Fonts 1012 and 1013 (Letter Gothic 6.5 and 9 pt) default to L (left).

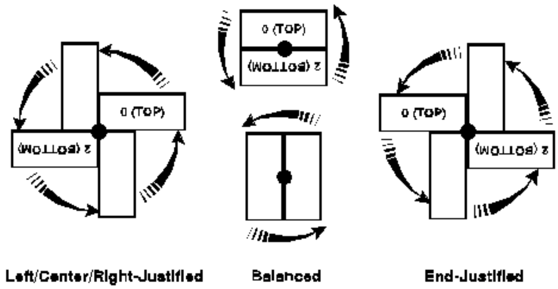
Character Rotation

Depending on your printer's configuration, enter the character rotation of the selected field. For more information about your printer's configuration, see Chapter 3, "Configuring the Printer." Choices include Top of Field, Left of Field, Bottom of Field, and Right of Field.

The field or supply does not rotate, only the characters do. See "ABCD" in the example below.

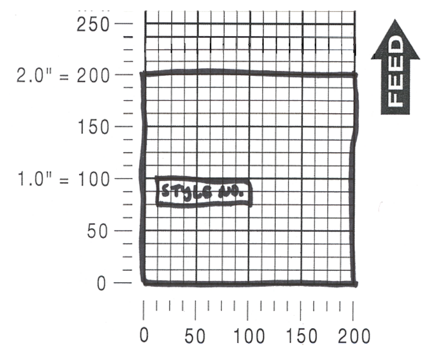


Field Rotation Rotation of the selected field. Choices include: Top of Supply, Left of Supply, Bottom of Supply, and Right of Supply.



Entering a Sample Constant Text Field

We will create a sample format, **CONSTANT** (2.0-inch long by 2.0-inch wide) and a sample constant text field.



- = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration

1. Press 1 to design your formats.

- = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format

2. Press 1 to create a new format.

Enter Format Name
> _ _ _ _ _ _ _ _ _ _ _ _ _ _

↑

3. Type **CONSTANT**. Press Enter.

Enter Length of
supply (55 – 400)
(eg. 400 = 4 inches)
> _ _ _

4. Type **200** for the length of your supply. Press Enter.

Select Supply Width
1. 1.20 Inches
2. 1.50 Inches
3. 2.00 Inches

5. Press 3 for the supply width.

Select Type: Fld #1
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
5. Finished

6. Press (3) to define a constant text field.

Enter Fixed Data
Press ENTER if none
> _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

7. Type **STYLE NO**. and press Enter.

Enter Row #
> _ _ _

8. Type **70** for the row location. Press Enter.

Enter Col. #
> _ _ _

9. Type **10** for the column location. Press Enter.

- = Select Font = -
1. CG Trium 6.5 1000
2. CG Trium 8 pt 1001
3. CG Trium 10p 1002
4. CG Trium 12p 1003
5. CG Trium 18 p 1004
6. CG Trium 22p 1005
7. CG TrCon 6.5 1006
8. CG TrCon 8 pt 1007
9. CG TrCon 10p 1008
10. CG TrCon 12p 1009
11. CG TrCon 18p 1010
12. CG TrCon 22p 1011
13. LetGoth 6.5 1012
14. LetGoth 9pt 1013

10. Select **CG Trium 8 pt 1001**. Press Enter.

Enter Height Mag for
this font (1-7) > _

11. Press (1) for the height magnification.

Enter Width Mag for
this font (1-7) > _

12. Press (1) for the width magnification.

Set Justification
1. Left (L)
2. Right (E)
3. Center (B)

13. Press (1) for left alignment of characters in the field.

Top of Field at:
1. Top of Supply
2. Left of Supply
3. Bottom of Supply
4. Right of Supply

14. Press (1) for top of supply field rotation.

Select Type:Fld#2
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
5. Finished

15. Press (5).

Save current
format? Y/N > _

16. Press **Y** to save the format. You return to the Design Menu.

- To print the format, see "Printing the Sample Constant Text Format."
- To define text fields, see Chapter 5, "Defining Text Fields."
- To define bar code fields, see Chapter 6, "Defining Bar Code Fields."
- To define line fields, see Chapter 8, "Defining Line Fields."

Printing the Sample Constant Text Format

After designing your format, print it to see how it looks.

- = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format

1. Press (Esc) to exit the Design Menu.

- = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration

2. Press (2) to print your format.

Select Format
to Print

- = Format Menu = -

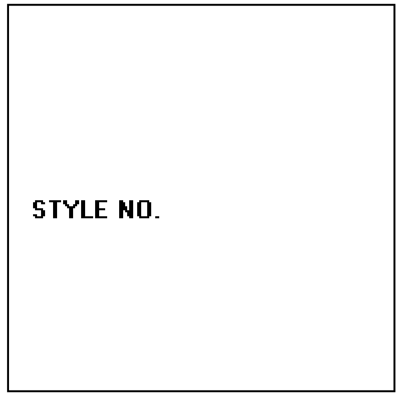
COMBO
CONSTANT
SIZE

3. Select **CONSTANT** and press Enter. The label prints.

Printed: 1

4. Press the trigger to print another label or press (Esc) until you return to the Format Menu.

This sample prints the following label.



DEFINING LINE FIELDS

8

Use lines to form borders or mark out original prices. Define each line separately.

NOTE: This field is not assigned a field number, but is counted as a field (keep this in mind, as the printer allows a maximum of 50 fields per format).

You can define any line length and a thickness up to **10** dots, as long as the solid black print does not exceed 30% of any given square inch of the label. Data edits do not apply to line fields.

NOTE: All samples shown in this chapter are created using 2.0-inch long by 2.0-inch wide supplies.

About Line Fields

Read the following information to become familiar with the prompts for line fields. Valid ranges for the prompts are listed as well as information about using line fields.

Format Name Depending on your printer's configuration, enter a name for the format. For more information about your printer's configuration, see Chapter 3, "Configuring the Printer." The maximum number of characters for the format name is 16.

Format Number Reserved for future use. (Depending on your printer's configuration, enter a number for the format. The format number range is **1 – 99**.)

Format Description Reserved for future use. (Depending on your printer's configuration, enter a description for the format.)

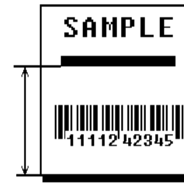
Supply Length The length of your loaded supply. Measure from the top of one black mark to the top of the next black mark. The standard supply lengths are: **55, 79, 110, 150, 200, 300,** or **400** inches.

Supply Width The width of your loaded supply. Choices include 1.20, 1.50, or 2.00 inches.

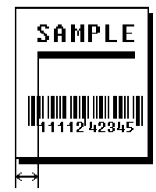
Field Type Choices include text, bar code, constant text, and line.

Line Type Choices include segment or vector. With segments, you choose the starting point and ending point. With vectors, you choose the starting point, the angle, and the length of the line.

Start Row The horizontal line where printing begins. The range is **0 – 365**.



Start Column The vertical line where printing begins. The range is **0 – 183**.



End Row For segment lines only, the horizontal ending point for the line. The range is **0 – 365**. On horizontal lines, this value **must match** the value for *row*.

End Column For segment lines only, the vertical ending point for the line. The range is **0 – 183**. On vertical lines, this value **must match** the value for *column*.

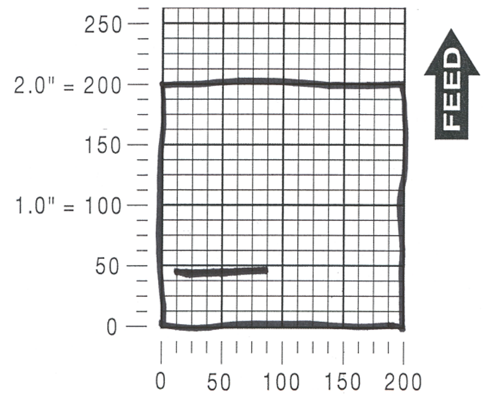
Line Angle For vector lines only, choices include rotating the line 0, 90, 180, or 270 degrees to the left.

Line Length For vector lines only, specifies how long the line is. The range depends on the length and/or width of your supply and the non-print zone.

Thickness The thickness of the line. The range is **1 – 10**. As thickness increases, the line fills upward on horizontal lines or to the right on vertical lines.

Entering a Sample Line Field (Segments)

We will create a sample format, **LINE** (2.0-inch long by 2.0-inch wide) and a sample segment line field.




```
  - = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

1. Press 1 to design your formats.

```
  - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

2. Press 1 to create a new format.

```
Enter Format Name
> ______________
```

3. Type **LINE** for the format name. Press Enter.

```
Enter Length of
supply (55 – 400)
(eg. 400 = 4 inches)
> ___
```

4. Type **200** for the length of your supply. Press Enter.

```
Select Supply Width
1. 1.20 Inches
2. 1.50 Inches
3. 2.00 Inches
```

5. Press 3 for the supply width.

Select Type: Fld #1 1. Text Field 2. Bar Code Field 3. Constant Text 4. Line 5. Finished	**6.** Press 4 to define a line field.
Is line Segment or Vector? S/V >	**7.** Press **S** (for Segment).
Enter Row # for First Point > _ _ _	**8.** Type **48** for the row location. Press Enter.
Enter Col. # for First Point > _ _ _	**9.** Type **10** for the column location. Press Enter.
Enter Row # for Last Point > _ _ _	**10.** Type **48** for the end row location. Press Enter.
Enter Col. # for Last Point > _ _ _	**11.** Type **80** for the end column location. Press Enter.
Enter Thickness (2 = 0.01 inch) > _ _	**12.** Type **3** and press Enter.
Select Type:Fld#2 1. Text Field 2. Bar Code Field 3. Constant Text 4. Line 5. Finished	**13.** Press 5.
Save current format? Y/N > _	**14.** Press **Y** to save the format. You return to the Design Menu.

- To print the format, see “Printing the Sample Line (Segment) Format.”
- To define a text field, see Chapter 5, “Defining a Text Field,” for more information.
- To define bar code fields, see Chapter 6, “Defining Bar Code Fields.”
- To define constant text fields, see Chapter 7, “Defining Constant Text Fields.”

Printing the Sample Line (Segment) Format

After designing your format, print it to see how it looks.

```
   - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

1. Press Esc to exit the Design Menu.

```
   - = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

2. Press 2 to print your format.

```
Select Format
to Print
```

3. Select **LINE** and press Enter. The label prints.

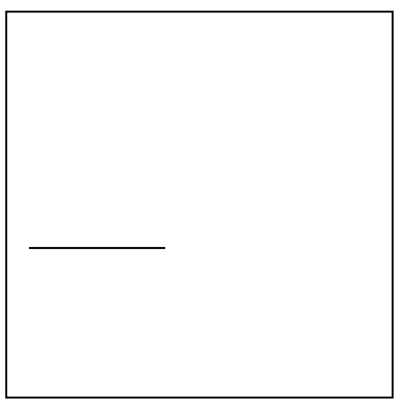
```
   - = Format Menu = -

COMBO
CONSTANT
LINE
SIZE
```

```
   Printed:  1
```

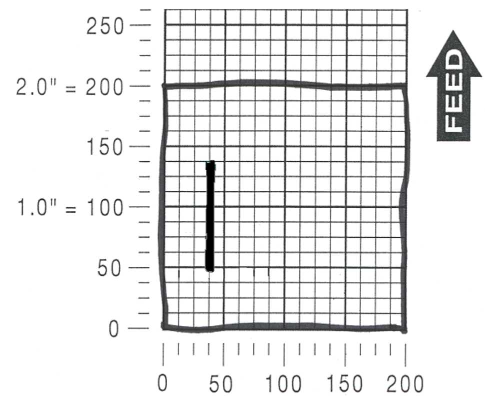
4. Press the trigger to print another label or press Esc until you return to the Format Menu.

This sample prints the following label.



Entering a Sample Line Field (Vectors)

We will create a sample format, **LINE** (2.0-inch long by 2.0-inch wide) and a sample vector line field.



- = Main Menu = - 1. Design Formats 2. Print Labels 3. Configuration	**1.** Press (1) to design your formats.
- = Design Menu = - 1. Create New Format 2. Edit Old Format 3. Copy Format 4. Delete Format	**2.** Press (1) to create a new format.
Enter Format Name > _ _ _ _ _ _ _ _ _ _ _ _ _ _ ↑	**3.** Type **LINE2** for the format name. Press Enter.
Enter Length of supply (55 – 400) (eg. 400 = 4 inches) > _ _ _	**4.** Type **200** for the length of your supply. Press Enter.
Select Supply Width 1. 1.20 Inches 2. 1.50 Inches 3. 2.00 Inches	**5.** Press (3) for the supply width.
Select Type: Fld #1 1. Text Field 2. Bar Code Field 3. Constant Text 4. Line 5. Finished	**6.** Press (4) to define a line field.

Display	Step
Is line Segment or Vector? S/V > _	**7.** Press **V**.
Enter Row # for First Point > _ _ _	**8.** Type **48** for the row position. Press Enter.
Enter Col. # for First Point > _ _ _	**9.** Type **50** for the column position. Press Enter.
Select Line Angle: 1. 0 Degree 2. 90 Degrees Left 3. 180 Degrees Left 4. 270 Degrees Left	**10.** Press 2 to rotate the line 90 degrees to the left.
Enter Line Length > _ _ _	**11.** Type **70**. Press Enter
Enter Thickness (2 = 0.01 inch) > _ _	**12.** Type **3.** Press Enter.
Select Type:Fld#2 1. Text Field 2. Bar Code Field 3. Constant Text 4. Line 5. Finished	**13.** Press 5 .
Save current format? Y/N > _	**14.** Press **Y** to save the format. You return to the Design Menu.

- ♦ To print the format, see “Printing the Sample Line (Vector) Format.”
- ♦ To define a text field, see Chapter 5, “Defining a Text Field,” for more information.
- ♦ To define bar code fields, see Chapter 6, “Defining Bar Code Fields.”
- ♦ To define constant text fields, see Chapter 7, “Defining Constant Text Fields.”

Printing the Sample Line (Vector) Format

After designing your format, print it to see how it looks.

```
    - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

1. Press Esc to exit the Design Menu.

```
    - = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

2. Press 2 to print your format.

```
Select Format
to Print
```

3. Select **LINE2** and press Enter. The line prints.

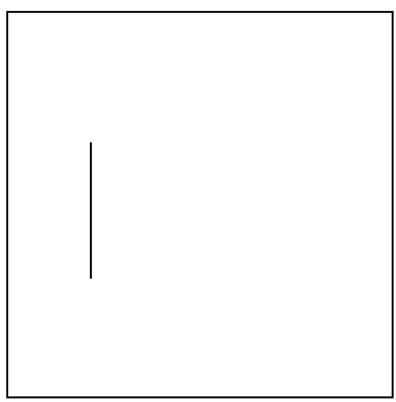
```
    - = Format Menu = -

COMBO
CONSTANT
LINE
LINE2
SIZE
```

```
    Printed:  1
```

4. Press the trigger to print another label or press Esc until you return to the Format Menu.

This sample prints the following label.



DEFINING SPECIAL FIELDS 9

This chapter includes information about creating price and system/date time fields. Create a separate definition for each price and date/time field.

For *price fields*, you define the way your price appears in the printed format, for example £98.00. You can configure the printer to print using: US Dollars, French Francs, Spanish Pesetas, Belgian Francs, German Marks, British Pounds, Euro-Dollars, Swedish Krona, Danish Marka, Austrian Schilling, and Japanese Yen. See Chapter 3, “Configuring the Printer” for more information. For *date/time fields*, you define the way the system date and time appear in the printed format, for example 10-15-01 4:00 PM.

NOTE: All samples shown in this chapter are created using 2.0-inch long by 2.0-inch wide supplies.

About Price and System Date/Time Fields

Read the following information to become familiar with the prompts for price and date/time fields. Valid ranges for the prompts are listed as well as information about using price and date/time fields.

Format Name Depending on your printer’s configuration, enter a name for the format. For more information about your printer’s configuration, see Chapter 3, “Configuring the Printer.” The maximum number of characters for the format name is 16.

Format Number Reserved for future use. (Depending on your printer’s configuration, enter a number for the format. The format number range is **1 – 99**.)

Format Description Reserved for future use. (Depending on your printer’s configuration, enter a description for the format.)

Supply Length The length of your loaded supply. Measure from the top of one black mark to the top of the next black mark. The standard supply lengths are: **55, 79, 110, 150, 200, 300,** or **400**.

Supply Width The width of your loaded supply. Choices include 1.20, 1.50, or 2.00 inches.

Field Type Choices include text, bar code, constant text, and line.

Field Class Choices include simple, price, system date/time, and combo. *For price fields*, you can specify a different monetary symbol ($ or £) by selecting a different configuration option. See Chapter 3, "Configuring the Printer" for more information. The price is automatically formatted in your selected currency.

For date/time fields, the operator is allowed to format the appearance of date/time fields. However, the system date and time are set when configuring the printer. See Chapter 3, "Configuring the Printer" for more information.

Maximum Length The maximum number of characters in the field. The number of characters depends on the font size, label size, whether you are using a check digit, or if the field is printed horizontally or vertically. *For price fields*, remember to include the currency symbol (dollar sign, decimal point, etc.) in the length of your field. *For date/time fields*, remember to include any dashes, slashes, colons, etc. in the length of your field. The range is **0 – 40**.

Minimum Length The minimum number of characters in the field. The range is **0 – 40**.

Field Prompt Contains the prompt displayed during data entry. The maximum number of characters is **40**.

Using Fixed Data

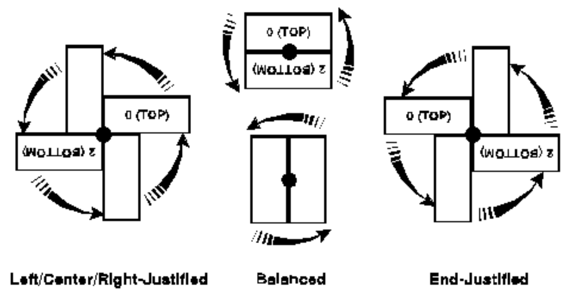
In situations where the same data appears on all labels, you can enter the repetitive data as fixed data. The operator does not enter the data. The maximum number of characters is 40; however, each field has a maximum length defined, so the fixed data must be below that maximum.

Fixed data is stored with the format and automatically displayed with the prompt during data entry. Fixed data can also be added **before** or **after** entry characters.

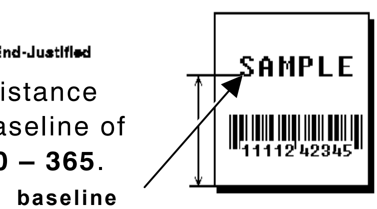
An example of fixed data is the manufacturer's code in a UPCA bar code.

Row

The horizontal line where printing begins. For monospaced fonts, distance from the bottom of print area to the pivot point. The pivot point varies depending on how text is justified.

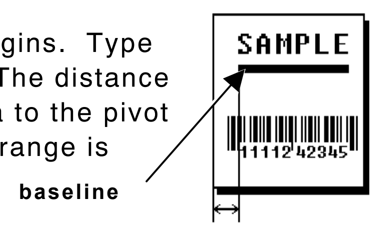


For proportionally spaced fonts, distance from the bottom of print area to baseline of characters in field. The range is **0 – 365**.



Column

The vertical line where printing begins. Type the column position for the field. The distance from the left edge of the print area to the pivot point is the column location. The range is **0 – 183**.



Gap

Depending on your printer's configuration, enter the number of dots between characters. For more information about your printer's configuration, see Chapter 3, "Configuring the Printer."

The gap range is **0 – 9**. For mono-spaced fonts, the additional spacing is added to the existing inter-character gap. This is also true for proportionally spaced fonts, but the inter-character gap varies with character combinations. Any number other than 0 affects your field width. Default spacing:
Letter Gothic Bold 6pt 1 dot
Letter Gothic Bold 9pt 2 dots
All other fonts vary with each letter
Use the default unless you want to create a special effect, such as P R I C E (additional character spacing) in a field.

Font

The style of font for your format. Choices include CG Triumvirate Bold 6.5, 8, 10, 12, 18, or 22 point; CG Triumvirate Bold Condensed 6.5, 8, 10, 12, 18, and 22 point; and Letter Gothic 6.5 and 9 point.

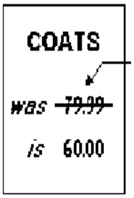
Height Magnification

Height magnifier for the selected font. Use a magnifier of 1 with proportionally spaced fonts, because characters lose smoothness at higher magnifications. The range is **1 – 7**.

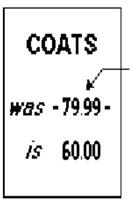
Width Magnification

Width magnifier for the selected font. Proportionally spaced fonts do not have a set width. The range is **1 – 7**.

Font Color



Line field not blocked out by trans-parent field using attribute O



Line field blocked out by opaque field using attribute B

Depending on your printer’s configuration, enter the color of the selected font. For more information about your printer’s configuration, see Chapter 3, “Configuring the Printer.”

Solid black print should not exceed 30% on a given square inch of the label, or printhead life may be decreased. There are two types of field color overlay attributes:

Transparent The overlay field (text or constant text) does not block out or “erase” existing fields.

Opaque The overlay field blocks out or “erases” existing fields.

Field placement is an important consideration when using field color attributes. If a line field is defined before the overlay (text or constant text) field, the line field is blocked out by the overlay field, depending on the overlay field's color attribute. If a line field is defined after the overlay field, the line field is not blocked out by the overlay field, regardless of the overlay field's color attribute.

Choices include Black Opaque, White Opaque, Black Transparent and White Transparent.

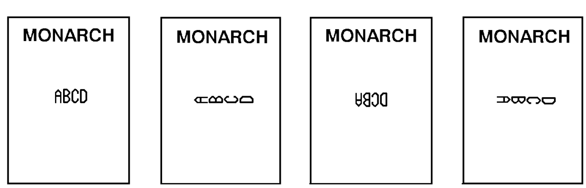
Justification

Alignment of the text within the field. Choices include Left (L), Right (E), and Center (B). Fonts 1012 and 1013 (Letter Gothic 6.5 and 9 pt) default to L (left), regardless of selection.

Character Rotation

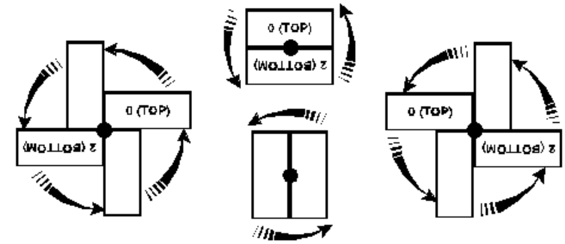
Depending on your printer’s configuration, enter the character rotation of the selected field. For more information about your printer’s configuration, see Chapter 3, “Configuring the Printer.” Choices include Top of Field, Left of Field, Bottom of Field, and Right of Field.

The field or supply does not rotate, only the characters do. See “ABCD” in the example below.



Field Rotation

Rotation of the selected field. Choices include: Top of Supply, Left of Supply, Bottom of Supply, and Right of Supply.



Left/Center/Right-Justified   Balanced   End-Justified

Entering a Sample Price Field

We will create a sample format, **PRICE** (2.0-inch long by 2.0-inch wide) and a sample price field.

```
    - = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

1. Press 1 to design your formats.

```
    - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

2. Press 1 to create a new format.

```
Enter Format Name
> ______________
      ↑
```

3. Type **PRICE** for the format name. Press Enter.

```
Enter Length of
Supply (55 – 400)
(eg. 400 = 4 inches)
> ___
```

4. Type **200** for the length of your supply. Press Enter.

```
Select Supply Width
1. 1.20 Inches
2. 1.50 Inches
3. 2.00 Inches
```

5. Press 3 for the supply width.

```
Select Type: Fld #1
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
5. Finished
```

6. Press 1 to define a text field.

```
Select Field Class
1. Simple Field
2. Price Field
3. System Date/Time
4. Combo (Merged)
```

7. Press 2 to define a price field.

```
Enter Max. Length
> _ _ _
```

8. Type **8** as the maximum number of characters in the field. Press Enter.

```
Enter Min. Length
> _ _ _
```

9. Type **1** as the minimum number of characters in the field. Press Enter.

```
Enter Field Prompt
> _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

      ↑
```

10. Type **KEY IN PRICE**. Press Enter.

```
Enter Fixed Data
Press ENTER if none
> _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

      ↑
```

11. Press Enter for no fixed data.

```
Enter Row #
> _ _ _
```

12. Type **25** for the row location. Press Enter.

```
Enter Col. #
> _ _ _
```

13. Type **10** for the column location. Press Enter.

```
- = Select Font = -
1. CG Trium 6.5 1000
2. CG Trium 8 pt 1001
3. CG Trium 10p 1002
4. CG Trium 12p 1003
5. CG Trium 18 p 1004
6. CG Trium 22p 1005
7. CG TrCon 6.5 1006
8. CG TrCon 8 pt 1007
9. CG TrCon 10p 1008
10. CG TrCon 12p 1009
11. CG TrCon 18p 1010
12. CG TrCon 22p 1011
13. LetGoth 6.5 1012
14. LetGoth 9pt 1013
```

14. Select **CG Trium 8 pt 1001**. Press Enter.

```
Enter Height Mag for
this font (1-7) > _
```

15. Press 1 for the height magnification.

```
Enter Width Mag for
this font (1-7) > _
```

16. Press 1 for the width magnification.

```
Set Justification
1. Left (L)
2. Right (E)
3. Center (B)
```

17. Press 1 for left alignment of characters in the field.

```
Top of Field at:
1. Top of Supply
2. Left of Supply
3. Bottom of Supply
4. Right of Supply
```

18. Press 1 for top of supply field rotation.

```
Select Type:Fld#2
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
5. Finished
```

19. Press 5.

```
Save current
format? Y/N > _
```

20. Press **Y** to save the format. You return to the Design Menu.

- ♦ To print the format, see “Printing the Sample Price Format.”
- ♦ To define a text field, see Chapter 1, “Defining a Text Field.”
- ♦ To define bar code fields, see Chapter 6, “Defining Bar Code Fields.”
- ♦ To define constant text fields, see Chapter 7, “Defining Constant Text Fields.”
- ♦ To define line fields, see Chapter 8, “Defining Line Fields.”

Printing the Sample Price Format

After designing your format, print it to see how it looks.

```
- = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

1. Press Esc to exit the Design Menu.

```
- = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

2. Press 2 to print your format.

Select Format
to Print

- = Format Menu = -

COMBO
CONSTANT
LINE
LINE2
PRICE
SIZE

3. Select **PRICE** and press Enter.

KEY IN PRICE
$.00

4. Type **2999** and press Enter. The label prints.

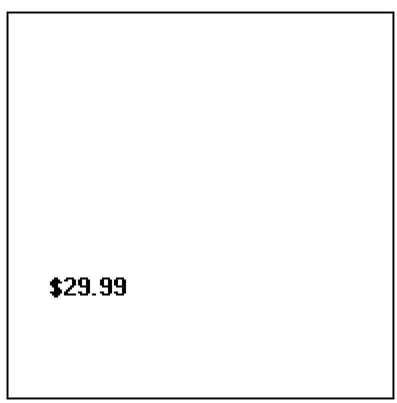
The price field varies depending on the number of characters entered. For example,

2 prints as	$.02
29 prints as	$.29
299 prints as	$2.99
2999 prints as	$29.99

Printed: 1

5. Press the trigger to print another label or press (Esc) to return to the prompt and print a different label.

This sample prints the following label.



Entering a Sample Date/Time Field

We will create a sample format, **DATE/TIME** (2.0-inch long by 2.0-inch wide) and a sample system date/time field.

- = Main Menu = - 1. Design Formats 2. Print Labels 3. Configuration	**1.** Press 1 to design your formats.
- = Design Menu = - 1. Create New Format 2. Edit Old Format 3. Copy Format 4. Delete Format	**2.** Press 1 to create a new format.
Enter Format Name > _ _ _ _ _ _ _ _ _ _ _ _ _ _ ↑	**3.** Type **DATE/TIME** for the format name. Press Enter.
Enter Length of supply (55 – 400) (eg. 400 = 4 inches) > _ _ _	**4.** Type **200** for the length of your supply. Press Enter.
Select Supply Width 1. 1.20 Inches 2. 1.50 Inches 3. 2.00 Inches	**5.** Press 3 for the supply width.
Select Type: Fld #1 1. Text Field 2. Bar Code Field 3. Constant Text 4. Line 5. Finished	**6.** Press 1 to define a text field.
Select Field Class 1. Simple Field 2. Price Field 3. System Date/Time 4. Combo (Merged)	**7.** Press 3 to define a system date/time field.
Define Time Stamp Build Template with Menu Selections Press any key	**8.** Press Enter.

```
- Select Component -
(Done)
Slash (/)
Dash (-)
Colon (:)
Blank Space
4 Digit Year
2 Digit Year
Numeric Month
3-Char. Alpha Month
2 Digit Day
Julian Day of Year
Hour (Base 24)
Hour (Base 12)
Minutes
Seconds
AM/PM Indicator
```

9. Build your date/time stamp by selecting items from the component list. For example, to create a date/time stamp in the format **HH:MM**:

Select **Hour (Base 24)**. Press Enter.

Select **Colon (:)**. Press Enter.

Select **Minutes**. Press Enter.

Select **(Done)** and press Enter when you finish.

```
- > HH:MM
(Done)
Slash (/)
Dash (-)
Colon (:)
Blank Space
4 Digit Year
2 Digit Year
```

The date/time stamp appears on the top line while you are creating it. If you make a mistake while entering the date/time stamp, press Fct 1 to backup one position.

```
Enter Fixed Data
Press ENTER if none
> _________________
```

10. Press Enter for no fixed data.

```
Enter Row #
> ___
```

11. Type **40** for the row location. Press Enter.

```
Enter Col. #
> ___
```

12. Type **10** for the column location. Press Enter.

```
- = Select Font = -
1. CG Trium 6.5 1000
2. CG Trium 8 pt 1001
3. CG Trium 10p 1002
4. CG Trium 12p 1003
5. CG Trium 18 p 1004
6. CG Trium 22p 1005
7. CG TrCon 6.5 1006
8. CG TrCon 8 pt 1007
9. CG TrCon 10p 1008
10. CG TrCon 12p 1009
11. CG TrCon 18p 1010
12. CG TrCon 22p 1011
13. LetGoth 6.5 1012
14. LetGoth 9pt 1013
```

13. Select **CG Trium 6.5 1000**. Press Enter.

```
Enter Height Mag for
this font (1-7) > _
```

14. Press 1 for the height magnification.

```
Enter Width Mag for
this font (1-7) > _
```

15. Press 1 for the width magnification.

```
Set Justification
1. Left (L)
2. Right (E)
3. Center (B)
```

16. Press 1 for left alignment of characters in the field.

```
Top of Field at:
1. Top of Supply
2. Left of Supply
3. Bottom of Supply
4. Right of Supply
```

17. Press 1 for top of supply field rotation.

```
Select Type:Fld#2
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
5. Finished
```

18. Press 5.

```
Save current
format? Y/N > _
```

19. Press **Y** to save the format. You return to the Design Menu.

Printing the Sample Date/Time Format

After designing your format, print it to see how it looks.

```
    - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

1. Press Esc to exit the Design Menu.

```
    - = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

2. Press 2 to print your format.

```
Select Format
to Print
```

3. Select **DATE/TIME** and press Enter. The label prints.

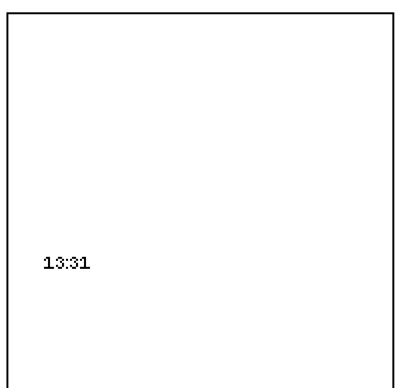
```
    - = Format Menu = -

COMBO
CONSTANT
DATE/TIME
PRICE
SIZE
```

```
          Printed:  1
```

4. Press the trigger to print another label or press Esc to return to the prompt and print a different label.

This sample prints the following label.



APPLYING DATA EDITS

10

Data edits are available for both **text** and **bar code fields** (simple and combo). You can define two edits per field. For example, use the strip characters to remove the cents from a price field ($12.50 becomes $12) and then pad data on the right with nines ($12.99).

You can use data edits on fields where fixed data is defined.

NOTE: Fixed data can be added before or after performing the data edit. You will be prompted, “perform data edit before or after including fixed data?” Unexpected results may occur if you perform the data edit before including fixed data or vice versa.

You can select from the following data edits:

Make into price	Reformats the data as a price by adding the currency symbol (selected at the Configuration menu) and decimal point (decimal point, comma, etc.). **NOTE:** Use on text fields only.
Pad data field	Adds pad characters to fill in the specified field. Use this data edit to add leading or trailing zeros in bar code or price fields. For example, the operator enters 1 and the price prints as .01.
Extract Characters	Extracts the specified number of characters from the left or right side of the current field. The remaining characters are discarded.
Strip Characters	Removes the specified number of characters from the left or right side of the current field. The remaining characters are printed.
Extract Characters from Middle	Extracts the specified number of characters from the specified position. The remaining characters are discarded.
Insert Character	Inserts one character at the specified position in the current field.

Make Into Shoe Size Removes the last character in the specified field and if the character was a five (5), prints ½ at the end of the field. If the last character was a zero (0), the last character is removed and not printed. For example,
90 prints as 9
65 prints as 6½
NOTE: Use on text fields only.

Using Data Edits

Data edits are defined as the last step in text and bar code fields. We will create a new format, **AUTOPART** (4.0 long x 2.0 wide), which contains **two**

- ♦ constant text fields.
- ♦ Code 39 bar code fields.
- ♦ combo text fields to print the human readable bar code characters.

Then, we will apply some data edits to manipulate the format. Use the following information to create the two constant text fields. See Chapter 5, “Defining Text Fields” or Chapter 7, “Defining Constant Text Fields” for more information.

Prompts	Constant Text Field 1	Constant Text Field 2
Fixed data	PART#	SERIAL#
Row	315	180
Column	15	15
Font	4. CG Trium 12p 1003	4. CG Trium 12p 1003
Height Magnification	1	1
Width Magnification	1	1
Justification	1	1
Field Rotation	1	1

Use the following information to create the two bar code fields. See Chapter 6, "Defining Bar Code Fields" for more information.

Prompts	**Bar Code Field 1**	**Bar Code Field 2**
Bar Code	4. Code 39 –no c/d	4. Code 39 –no c/d
Field Class	1. Simple	1. Simple
Data Type	Alphanumeric	Alphanumeric
Maximum Length	10	10
Minimum Length	1	1
Field Prompt	KEY PART#	SCAN SERIAL#
Fixed Data	None	None
Row	255	120
Column	15	15
Density	12.0cpi 1:3.0 1 dot	12.0cpi 1:3.0 1 dot
Bar Height	50	50
Field Rotation	1	1
Data Edit	None	None

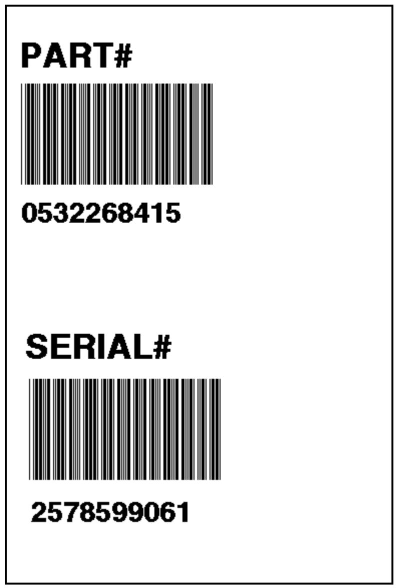
Use the following information to create the two combo text fields. See Chapter 5, “Defining Text Fields” for more information about creating combination text fields.

Prompts	Combo Field 1	Combo Field 2
Field Class	4. Combo (Merged)	4. Combo (Merged)
Maximum Length	10	10
Minimum Length	1	1
	Press Enter (start entering fields)	Press Enter (start entering fields)
Field Number	1	2
Start Position	1	1
Number of Characters	10	10
	Press Enter (no more fields)	Press Enter (no more fields)
Fill Direction	3 Do not fill	3 Do not fill
Fixed Data	None	None
Row	240	105
Column	15	15
Font	3. CG Trium 10p 1002	3. CG Trium 10p 1002
Height Magnification	1	1
Width Magnification	1	1
Justification	1	1
Field Rotation	1	1
Data Edit	None	None

Printing the Format

From the Main Menu, select **Print Labels**, and the **AUTOPART** format. Follow the field prompts as necessary.

Depending on the data you enter for the bar code fields, this sample prints the following label.



Padding Data

In our **AUTOPART** sample, we will pad data in the PART# bar code field.

```
- = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

1. Press 1 to design your formats.

```
- = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

2. Press 2 to edit an existing format.

```
Select Format
for Editing
```

3. Select **AUTOPART**. Press Enter.

```
- = Format Menu = -

AUTOPART
PRICE
UPCA
```

```
- = Edit Menu = -
1. Edit Header Info
2. Edit a Field
3. Add a Field
4. Delete a Field
5. Quit Edit
```

4. Press 2.

```
Select Edit Field
Fld:  1 Constant
Fld:  2 Constant
Fld:  3 Ufld: 1 Smpl
Fld:  4 Ufld: 2 Smpl
Fld:  5 Ufld: 3 Cmbo
Fld:  6 Ufld: 4 Cmbo
```

5. Select **Fld: 3 Ufld 1 Smpl** to edit the PART# bar code field. Press Enter.

```
Select Type:Fld #3
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
```

6. Press Enter.

Screen	Step
- = Select Bar Code = - 4. Code 39 –no c/d 5. Codabar 6. EAN-8 7. EAN-13 8. Code 128 9. MSI	**7.** Press Enter to keep Code 39 as the bar code.
Select Field Class 1. Simple Field 2. Price Field 3. System Date/Time 4. Combo (Merged)	**8.** Press Enter to keep the field defined as simple.
Numeric or Alpha-Numeric Data? A/N > A _	**9.** Press Enter to keep Alphanumeric as the data type.
Enter Max. Length > 10 _	**10.** Press BKSP. Type **2** (so the maximum length for the field is 12). Press Enter.
Enter Min. Length > 1 _	**11.** Press Enter to keep the current minimum length.
Enter Field Prompt KEY PART# _ _ _ _ _ _ _ _ _ _	**12.** Press Enter to keep the current field prompt.
Edit Fixed Data Press ENTER to retain > _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _	**13.** Press Enter for no fixed data.
Enter Row # > 255 _	**14.** Press Enter to keep the current row location.
Enter Col. # > 15 _	**15.** Press Enter to keep the current column location.
- = Select Density = - 3.3 cpi 1:2.5 4 dots 4.0 cpi 1:3.0 3 dots 6.0 cpi 1:3.0 2 dots 6.6 cpi 1:2.5 2 dots 3.7 cpi 1:2.0 4 dots 12.0cpi 1:3.0 1 dot 2.8 cpi 1:2.2 5 dots	**16.** Press Enter to keep the current density.

Display	Step
Enter Bar Height (Units = Inch/100) > 50 _	**17.** Press Enter to keep the current bar code height.
Top of Field at: 1. Top of Supply 2. Left of Supply 3. Bottom of Supply 4. Right of Supply	**18.** Press Enter to keep the current field rotation.
Select Edit #1 1. (None) 2. Make into Price 3. Pad Data Field 4. Extract Chars 5. Strip Chars 6. Extract from Mid 7. Insert Chars 8. Make Shoe Size	**19.** Select **Pad Data Field**. Press Enter.
Pad Characters on Left or Right? L/R _ ↑	**20.** Press **L** to pad characters on the left.
Enter Pad character: _	**21.** Type **0** for the pad character.
Select Edit #2 1. (None) 2. Make into Price 3. Pad Data Field 4. Extract Chars 5. Strip Chars 6. Extract from Mid 7. Insert Chars 8. Make Shoe Size	**22.** Press Enter for no additional data edits.
- = Edit Menu = - 1. Edit Header Info 2. Edit a Field 3. Add a Field 4. Delete a Field 5. Quit Edit	**23.** Press 5.
Save changes? Y/N > _ ↑	**24.** Press **Y**. You return to the Format Menu. Press Esc until you return to the Main Menu.

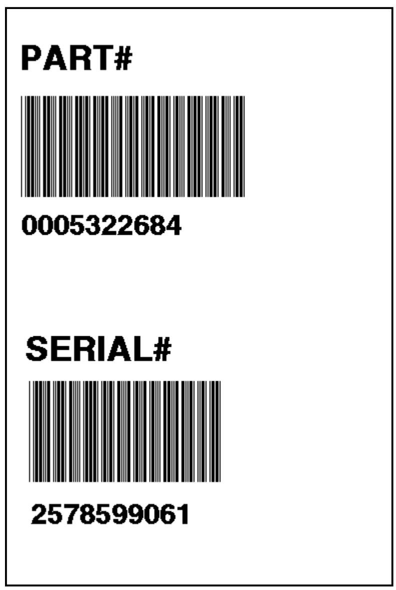
Printing the Format

From the Main Menu, select **Print Labels**, and the **AUTOPART** format. Follow the field prompts as necessary.

Depending on the data you enter for the bar code fields, this sample prints the following label.

This graphic shows the padded PART# bar code field and the copied data for the human readable combo text field.

Notice that the combo text field only contains 10 characters, not 12, because the combo field was set up for a maximum of 10 characters. It includes the two zero pad characters and the next eight characters of the bar code (entered by the user).



Extracting Characters

In our **AUTOPART** sample, we will extract five characters from the PART# bar code field and only these five extracted characters will print.

```
   - = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

1. Press 1 to design your formats.

```
   - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

2. Press 2 to edit an existing format.

```
Select Format
for Editing
```

3. Select **AUTOPART**. Press Enter.

```
   - = Format Menu = -

AUTOPART
COMBO
PRICE
SIZE
```

```
   - = Edit Menu = -
1. Edit Header Info
2. Edit a Field
3. Add a Field
4. Delete a Field
5. Quit Edit
```

4. Press 2 to edit the PART# bar code field.

```
Select Edit Field
Fld:  1 Constant
Fld:  2 Constant
Fld:  3 Ufld: 1 Smpl
Fld:  4 Ufld: 2 Smpl
Fld:  5 Ufld: 3 Cmbo
Fld:  6 Ufld: 4 Cmbo
```

5. Select **Fld: 3 Ufld 1 Smpl**. Press Enter.

```
Select Type:Fld #3
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
```

6. Press Enter.

```
- = Select Bar Code = -
4. Code 39 –no c/d
5. Codabar
6. EAN-8
7. EAN-13
8. Code 128
9. MSI
```

7. Press Enter to keep Code 39 as the bar code.

```
Select Field Class
1. Simple Field
2. Price Field
3. System Date/Time
4. Combo (Merged)
```

8. Press Enter to keep the field defined as simple.

```
Numeric or
Alpha-Numeric Data?
A/N > A _
```

9. Press Enter to keep Alphanumeric as the data type.

```
Enter Max. Length
> 12 _
```

10. Press BKSP. Type **0** (so the maximum length for the field is 10). Press Enter.

```
Enter Min. Length
> 1 _
```

11. Press Enter to keep the current minimum length.

```
Enter Field Prompt
KEY PART# _ _ _ _ _ _ _ _ _
```

12. Press Enter to keep the current field prompt.

```
Edit Fixed Data
Press ENTER to
retain
> _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
```

13. Press Enter for no fixed data.

```
Enter Row #
> 255 _
```

14. Press Enter to keep the current row location.

```
Enter Col. #
> 15 _
```

15. Press Enter to keep the current column location.

```
- = Select Density = -
3.3 cpi  1:2.5  4 dots
4.0 cpi  1:3.0  3 dots
6.0 cpi  1:3.0  2 dots
6.6 cpi  1:2.5  2 dots
3.7 cpi  1:2.0  4 dots
12.0cpi 1:3.0  1 dot
2.8 cpi  1:2.2  5 dots
```

16. Press Enter to keep the current density.

Enter Bar Height (Units = Inch/100) > 50 _	**17.** Press Enter to keep the current bar code height.
Top of Field at: 1. Top of Supply 2. Left of Supply 3. Bottom of Supply 4. Right of Supply	**18.** Press Enter to keep the current field rotation.
Select Edit #1 1. (None) 2. Make into Price 3. Pad Data Field 4. Extract Chars 5. Strip Chars 6. Extract from Mid 7. Insert Chars 8. Make Shoe Size	**19.** Select **Extract Chars**. Press Enter.
Extract chars from Left or Right? L/R _ ↑	**20.** Press **R** to extract characters from the right.
Enter number of characters: _ _	**21.** Type **5**. Press Enter.
Select Edit #2 1. (None) 2. Make into Price 3. Pad Data Field 4. Extract Chars 5. Strip Chars 6. Extract from Mid 7. Insert Chars 8. Make Shoe Size	**22.** Press Enter for no additional data edits.
- = Edit Menu = - 1. Edit Header Info 2. Edit a Field 3. Add a Field 4. Delete a Field 5. Quit Edit	**23.** Press (5).
Save changes? Y/N > _ ↑	**24.** Press **Y**. You return to the Format Menu. Press (Esc) until you return to the Main Menu.

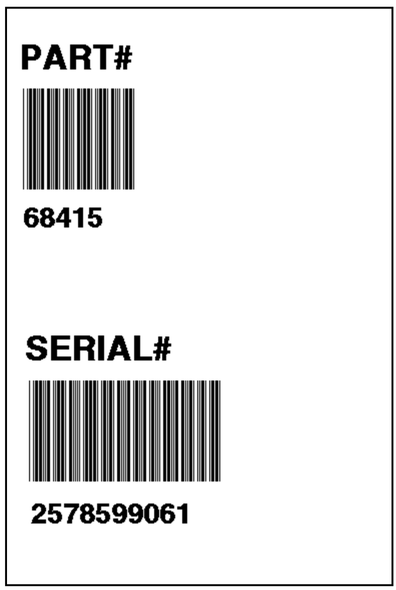
Printing the Format

From the Main Menu, select **Print Labels**, and the **AUTOPART** format. Follow the field prompts as necessary.

Depending on the data you enter for the bar code fields, this sample prints the following label.

This graphic shows the five extracted characters from the PART# bar code field and the copied data for the human readable combo text field.

Notice that the bar code field contains the last five characters entered, since we extracted characters from the right. The combo text field also contains those five characters.



Stripping Characters

In our **AUTOPART** sample, we will strip three characters from the PART# bar code field and only the remaining characters will print.

```
   - = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

1. Press 1 to design your formats.

```
   - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

2. Press 2 to edit an existing format.

```
Select Format
for Editing
```

3. Select **AUTOPART**. Press Enter.

```
   - = Format Menu = -

AUTOPART
PRICE
SIZE
```

```
   - = Edit Menu = -
1. Edit Header Info
2. Edit a Field
3. Add a Field
4. Delete a Field
5. Quit Edit
```

4. Press 2 to edit the PART# bar code field.

```
Select Edit Field
Fld:  1 Constant
Fld:  2 Constant
Fld:  3 Ufld: 1 Smpl
Fld:  4 Ufld: 2 Smpl
Fld:  5 Ufld: 3 Cmbo
Fld:  6 Ufld: 4 Cmbo
```

5. Select **Fld: 3 Ufld 1 Smpl**. Press Enter.

```
Select Type:Fld #3
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
```

6. Press Enter.

```
- = Select Bar Code = -
4. Code 39 –no c/d
5. Codabar
6. EAN-8
7. EAN-13
8. Code 128
9. MSI
```

7. Press Enter to keep Code 39 as the bar code.

```
Select Field Class
1. Simple Field
2. Price Field
3. System Date/Time
4. Combo (Merged)
```

8. Press Enter to keep the field defined as simple.

```
Numeric or
Alpha-Numeric Data?
A/N > A _
```

9. Press Enter to keep Alphanumeric as the data type.

```
Enter Max. Length
> 10 _
```

10. Press Enter to keep the current maximum length.

```
Enter Min. Length
> 1 _
```

11. Press Enter to keep the current minimum length.

```
Enter Field Prompt
KEY PART# _ _ _ _ _ _ _ _ _
```

12. Press Enter to keep the current field prompt.

```
Edit Fixed Data
Press ENTER to
retain
> _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
```

13. Press Enter for no fixed data.

```
Enter Row #
> 255 _
```

14. Press Enter to keep the current row location.

```
Enter Col. #
> 15 _
```

15. Press Enter to keep the current column location.

```
- = Select Density = -
3.3 cpi  1:2.5  4 dots
4.0 cpi  1:3.0  3 dots
6.0 cpi  1:3.0  2 dots
6.6 cpi  1:2.5  2 dots
3.7 cpi  1:2.0  4 dots
12.0cpi 1:3.0  1 dot
2.8 cpi  1:2.2  5 dots
```

16. Press Enter to keep the current density.

```
Enter Bar Height
(Units = Inch/100)
> 50 _
```

17. Press Enter to keep the current bar code height.

```
Top of Field at:
1. Top of Supply
2. Left of Supply
3. Bottom of Supply
4. Right of Supply
```

18. Press Enter to keep the current field rotation.

```
Select Edit #1
1. (None)
2. Make into Price
3. Pad Data Field
4. Extract Chars
5. Strip Chars
6. Extract from Mid
7. Insert Chars
```

```
8. Make Shoe Size
```

19. Select **Strip Chars**. Press Enter.

```
Strip chars from
Left or Right? L/R _
        ↑
```

20. Press **L** to remove characters from the left.

```
Enter number
of characters: _ _
```

21. Type **3**. Press Enter.

```
Select Edit #2
1. (None)
2. Make into Price
3. Pad Data Field
4. Extract Chars
5. Strip Chars
6. Extract from Mid
7. Insert Chars
8. Make Shoe Size
```

22. Press Enter for no additional data edits.

```
   - = Edit Menu = -
1. Edit Header Info
2. Edit a Field
3. Add a Field
4. Delete a Field
5. Quit Edit
```

23. Press 5.

```
Save changes? Y/N > _
        ↑
```

24. Press **Y**. You return to the Format Menu. Press Esc until you return to the Main Menu.

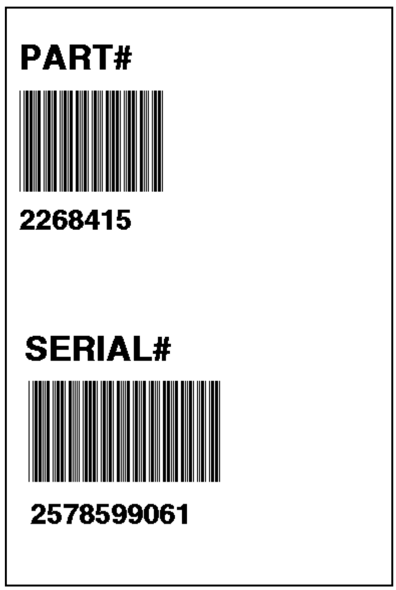
Printing the Format

From the Main Menu, select **Print Labels**, and the **AUTOPART** format. Follow the field prompts as necessary.

Depending on the data you enter for the bar code fields, this sample prints the following label.

This graphic shows the seven remaining characters in the PART# bar code field, after the first three characters were stripped.

Notice that the bar code field contains the last seven characters entered, since we stripped the first three characters entered (from the left). The combo text field also contains the remaining seven characters.



Extracting Characters from the Middle

In our **AUTOPART** sample, we will extract four characters from the PART# bar code field and only these four extracted characters will print.

```
   - = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

1. Press 1 to design your formats.

```
   - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

2. Press 2 to edit an existing format.

```
Select Format
for Editing
```

3. Select **AUTOPART**. Press Enter.

```
   - = Format Menu = -

AUTOPART
COMBO
CONSTANT
SIZE
```

```
   - = Edit Menu = -
1. Edit Header Info
2. Edit a Field
3. Add a Field
4. Delete a Field
5. Quit Edit
```

4. Press 2 .

```
Select Edit Field
Fld:  1 Constant
Fld:  2 Constant
Fld:  3 Ufld: 1 Smpl
Fld:  4 Ufld: 2 Smpl
Fld:  5 Ufld: 3 Cmbo
Fld:  6 Ufld: 4 Cmbo
```

5. Select **Fld: 3 Ufld 1 Smpl** to edit the PART# bar code field. Press Enter.

```
Select Type:Fld #3
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
```

6. Press Enter.

```
- = Select Bar Code = -
4. Code 39 –no c/d
5. Codabar
6. EAN-8
7. EAN-13
8. Code 128
9. MSI
```

7. Press Enter to keep Code 39 as the bar code.

```
Select Field Class
1. Simple Field
2. Price Field
3. System Date/Time
4. Combo (Merged)
```

8. Press Enter to keep the field defined as simple.

```
Numeric or
Alpha-Numeric Data?
A/N > A _
```

9. Press Enter to keep Alphanumeric as the data type.

```
Enter Max. Length
> 10 _
```

10. Press Enter to keep the current maximum length.

```
Enter Min. Length
> 1 _
```

11. Press Enter to keep the current minimum length.

```
Enter Field Prompt
KEY PART# _ _ _ _ _ _ _ _ _
```

12. Press Enter to keep the current field prompt.

```
Edit Fixed Data
Press ENTER to
retain
> _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
```

13. Press Enter for no fixed data.

```
Enter Row #
> 255 _
```

14. Press Enter to keep the current row location.

```
Enter Col. #
> 15 _
```

15. Press Enter to keep the current column location.

```
- = Select Density = -
3.3 cpi  1:2.5  4 dots
4.0 cpi  1:3.0  3 dots
6.0 cpi  1:3.0  2 dots
6.6 cpi  1:2.5  2 dots
3.7 cpi  1:2.0  4 dots
12.0cpi 1:3.0  1 dot
2.8 cpi  1:2.2  5 dots
```

16. Press Enter to keep the current density.

Enter Bar Height (Units = Inch/100) > 50 _	**17.** Press Enter to keep the current bar code height.
Top of Field at: 1. Top of Supply 2. Left of Supply 3. Bottom of Supply 4. Right of Supply	**18.** Press Enter to keep the current field rotation.
Select Edit #1 1. (None) 2. Make into Price 3. Pad Data Field 4. Extract Chars 5. Strip Chars 6. Extract from Mid 7. Insert Chars 8. Make Shoe Size	**19.** Select **Extract from Mid**. Press Enter.
Enter character Position: _ _	**20.** Type **4**. Press Enter.
Enter number of characters: _ _	**21.** Type **4**. Press Enter.
Select Edit #2 1. (None) 2. Make into Price 3. Pad Data Field 4. Extract Chars 5. Strip Chars 6. Extract from Mid 7. Insert Chars 8. Make Shoe Size	**22.** Press Enter for no additional data edits.
- = Edit Menu = - 1. Edit Header Info 2. Edit a Field 3. Add a Field 4. Delete a Field 5. Quit Edit	**23.** Press 5.
Save changes? Y/N > _	**24.** Press **Y**. You return to the Format Menu. Press Esc until you return to the Main Menu.

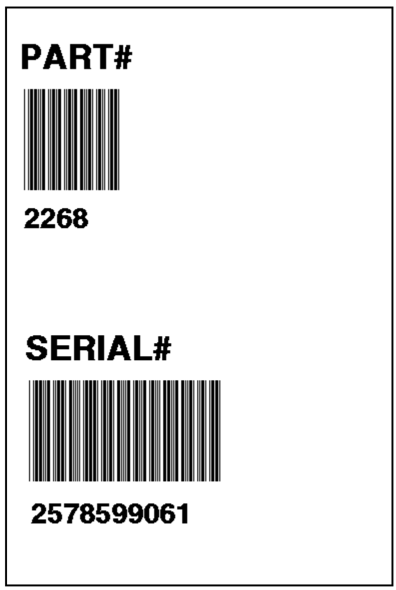
Printing the Format

From the Main Menu, select **Print Labels**, and the **AUTOPART** format. Follow the field prompts as necessary.

Depending on the data you enter for the bar code fields, this sample prints the following label.

This graphic shows the four extracted characters from the PART# bar code field. The first three and last three characters were stripped.

Notice that the bar code field contains the four middle characters entered, since we extracted four characters starting with the fourth position. The combo text field also contains the four extracted characters.



Inserting Characters

In our **AUTOPART** sample, we will insert one character at the beginning of the PART# bar code field, but not print that character in the combo text field.

- = Main Menu = - 1. Design Formats 2. Print Labels 3. Configuration	**1.** Press (1) to design your formats.
- = Design Menu = - 1. Create New Format 2. Edit Old Format 3. Copy Format 4. Delete Format	**2.** Press (2) to edit an existing format.
Select Format for Editing	**3.** Select **AUTOPART**. Press Enter.
- = Format Menu = - AUTOPART PRICE SIZE	
- = Edit Menu = - 1. Edit Header Info 2. Edit a Field 3. Add a Field 4. Delete a Field 5. Quit Edit	**4.** Press (2).
Select Edit Field Fld: 1 Constant Fld: 2 Constant Fld: 3 Ufld: 1 Smpl Fld: 4 Ufld: 2 Smpl Fld: 5 Ufld: 3 Cmbo Fld: 6 Ufld: 4 Cmbo	**5.** Select **Fld: 3 Ufld 1 Smpl** to edit the PART# bar code field. Press Enter.
Select Type:Fld #3 1. Text Field 2. Bar Code Field 3. Constant Text 4. Line	**6.** Press Enter.

```
- = Select Bar Code = -
4. Code 39 –no c/d
5. Codabar
6. EAN-8
7. EAN-13
8. Code 128
9. MSI
```

7. Press Enter to keep **Code 39 –no c/d** as the bar code.

```
Select Field Class
1. Simple Field
2. Price Field
3. System Date/Time
4. Combo (Merged)
```

8. Press Enter to keep the field defined as simple.

```
Numeric or
Alpha-Numeric Data?
A/N > A _
```

9. Press Enter to keep Alphanumeric as the data type.

```
Enter Max. Length
> 10 _
```

10. Press Enter to keep the current maximum length.

```
Enter Min. Length
> 1 _
```

11. Press Enter to keep the current minimum length.

```
Enter Field Prompt
KEY PART# _ _ _ _ _ _ _ _ _ _
```

12. Press Enter to keep the current field prompt.

```
Edit Fixed Data
Press ENTER to
retain
> _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
```

13. Press Enter for no fixed data.

```
Enter Row #
> 255 _
```

14. Press Enter to keep the current row location.

```
Enter Col. #
> 15 _
```

15. Press Enter to keep the current column location.

```
- = Select Density = -
3.3 cpi  1:2.5  4 dots
4.0 cpi  1:3.0  3 dots
6.0 cpi  1:3.0  2 dots
6.6 cpi  1:2.5  2 dots
3.7 cpi  1:2.0  4 dots
12.0cpi 1:3.0  1 dot
2.8 cpi  1:2.2  5 dots
```

16. Press Enter to keep the current density.

```
Enter Bar Height
(Units = Inch/100)
> 50 _
```

17. Press Enter to keep the current bar code height.

```
Top of Field at:
1. Top of Supply
2. Left of Supply
3. Bottom of Supply
4. Right of Supply
```

18. Press Enter to keep the current field rotation.

```
Select Edit #1
2. Make into Price
3. Pad Data Field
4. Extract Chars
5. Strip Chars
6. Extract from Mid
7. Insert Chars
8. Make Shoe Size
```

19. Select **Insert Chars**. Press Enter.

```
Enter character
to Insert: _
```

20. Type **P**.

```
Enter character
Position: _ _
```

21. Type **1**. Press Enter.

```
Select Edit #2
1. (None)
2. Make into Price
3. Pad Data Field
4. Extract Chars
5. Strip Chars
6. Extract from Mid
7. Insert Chars
8. Make Shoe Size
```

22. Press Enter for no additional data edits.

```
   - = Edit Menu = -
1. Edit Header Info
2. Edit a Field
3. Add a Field
4. Delete a Field
5. Quit Edit
```

23. Press 2.

```
Select Edit Field
Fld:  1 Constant
Fld:  2 Constant
Fld:  3 Ufld: 1 Smpl
Fld:  4 Ufld: 2 Smpl
Fld:  5 Ufld: 3 Cmbo
Fld:  6 Ufld: 4 Cmbo
```

24. Select **Fld: 5 Ufld 3 Cmbo** to edit the combo text field containing the human readable characters for the PART# bar code. Press Enter.

Select Type:Fld #5 1. Text Field 2. Bar Code Field 3. Constant Text 4. Line	**25.** Press Enter.
Select Field Class 1. Simple Field 2. Price Field 3. System Date/Time 4. Combo (Merged)	**26.** Press Enter to keep the field defined as Combo.
Enter Max. Length > 10 _	**27.** Press Bksp twice and type **9** to change the maximum length to 9.
Enter Min. Length > 1 _	**28.** Press Enter to keep the current minimum length.
ReEnter up to 10 User Field sources for Combo Field (Press key)	**29.** Press Enter to continue.
Enter Field # (First is Fld One) (ENTER when done) >_ _	**30.** Type **1** and press Enter.
Enter Start Position (First is One) >_ _	**31.** Type **02** (does not copy the inserted "P" character) and press Enter.
Enter # of Chars >_ _	**32.** Type **9** and press Enter.
Enter Field # (First is Fld One) (ENTER when done) >_ _	**33.** Press Enter to continue.
Enter Fill-Direction for short Source Fields: 1 Fill from Left 2 Fill from Right 3 Do not Fill	**34.** Type 3 to not fill the field if it is short.

```
Edit Fixed Data
Press ENTER to
retain
> _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
```

35. Press Enter for no fixed data.

```
Enter Row #
> 240
```

36. Press Enter to keep the current row location.

```
Enter Col. #
> 15 _
```

37. Press Enter to keep the current column location.

```
- = Select Font = -
1. CG Trium 6.5 1000
2. CG Trium 8 pt 1001
3. CG Trium 10p 1002
4. CG Trium 12p 1003
5. CG Trium 18 p 1004
6. CG Trium 22p 1005
7. CG TrCon 6.5 1006
8. CG TrCon 8 pt 1007
9. CG TrCon 10p 1008
10. CG TrCon 12p 1009
11. CG TrCon 18p 1010
12. CG TrCon 22p 1011
13. LetGoth 6.5 1012
14. LetGoth 9pt 1013
```

38. Press Enter to keep the current font.

```
Enter Height Mag for
this font(1-7) >1_
```

39. Press Enter to keep the current height magnification.

```
Enter Width Mag. for
this font (1-7) >1_
```

40. Press Enter to keep the current width magnification.

```
Set Justification
1. Left          (L)
2. Right         (E)
3. Center        (B)
```

41. Press Enter to keep the current justification.

```
Top of Field at:
1. Top of Supply
2. Left of Supply
3. Bottom of Supply
4. Right of Supply
```

42. Press Enter to keep the current top of field orientation.

```
Select Edit #1
1. (None)
2. Make into Price
3. Pad Data Field
4. Extract Chars
5. Strip Chars
6. Extract from Mid
7. Insert Chars
8. Make Shoe Size
```

43. Press Enter for no edits.

```
   - = Edit Menu = -
1. Edit Header Info
2. Edit a Field
3. Add a Field
4. Delete a Field
5. Quit Edit
```

44. Press 5 .

```
Save changes? Y/N > _
```

45. Press **Y**. You return to the Format Menu. Press Esc until you return to the Main Menu.

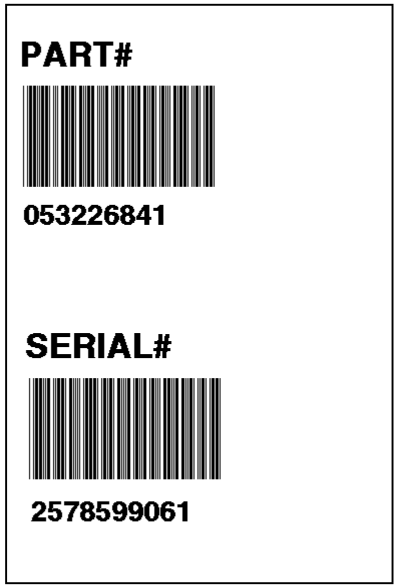
Printing the Format

From the Main Menu, select **Print Labels**, and the **AUTOPART** format. Follow the field prompts as necessary.

Depending on the data you enter for the bar code fields, this sample prints the following label.

This graphic shows the PART# bar code field, with a “P” as the first character.

Notice that the bar code field contains the maximum number of 10 characters, while the combo field contains a maximum of 9 characters. The combo field does not display the “P.”



Make Into Price

We will create a new format, **SHOE-PRICE** (2.0 long x 2.0 wide) that contains three text fields and apply the “make into price” edit on the second text field.

NOTE: Use this edit only on text fields.

Use the following information to create the text field. See Chapters 5, “Defining Text Fields,” and Chapter 7, “Defining Constant Text Fields” for more information.

Prompts	Text Field 1	Constant Text Field	Text Field 2
Field Class	Simple	N/A	Simple
Data Type	Alpha-numeric	N/A	Numeric
Max. Length	16	N/A	6
Min. Length	1	N/A	1
Field Prompt	ENTER ITEM	N/A	KEY PRICE
Fixed data	None	PRICE	None
Row	130	75	75
Column	10	30	75
Font	3. CG Trium 10p 1002	2. CG Trium 8pt 1001	2. CG Trium 8pt 1001
Height Mag.	1	1	1
Width Mag.	1	1	1
Justif.	1	1	1
Field Rot.	1	1	1
Data Edit	None	N/A	2. Make into Price

Printing the Format

From the Main Menu, select **Print Labels**, and the **SHOE-PRICE** format. Follow the field prompts as necessary.

Depending on the data you enter for the bar code fields, this sample prints the following label.

This graphic shows the second text field automatically formatted to include the selected currency (set through Configuration menu) symbols. See Chapter 3, “Configuring the Printer,” for more information.

Make Into Shoe Size

In our **SHOE-PRICE** sample, we will add one more text field, containing the fixed data “SIZE” and apply the “make into shoe size” edit on that text field. This example also shows how to apply a data edit to a field that includes fixed data.

This edit transforms a size that ends in **5** into a “1/2” size when printed on a label. Enter one more digit than the length of the size you want. For example, for a single digit size, enter two digits (because of the possible 5 at the end for half sizes). If you are not entering a half size, enter any digit other than 5 at the end. For example, to enter size 15, enter 150. Entering 15 by itself results in 1 ½.

NOTE: Use this edit only on text fields.

```
   - = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

1. Press 1 to design your formats.

```
   - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

2. Press 2 to edit an existing format.

```
Select Format
for Editing
```

3. Select **SHOE-PRICE**. Press Enter.

```
   - = Format Menu = -

AUTOPART
COMBO
CONSTANT
SIZE
```

```
   - = Edit Menu = -
1. Edit Header Info
2. Edit a Field
3. Add a Field
4. Delete a Field
5. Quit Edit
```

4. Press 3 to add a field.

```
New Field Location
Fld: 1 Ufld:  1 Smpl
Fld: 2 Constant
Fld: 3 Ufld:  2 Smpl
```

5. Select **Fld: 3 Ufld: 2 Smpl.** Press Enter.

Add new field 1. Before or 2. After selected field? > _	**6.** Press 2 (After selected field).
Select Type: Fld #4 1. Text Field 2. Bar Code Field 3. Constant Text 4. Line 5. Finished	**7.** Press 1 to define a text field.
Select Field Class 1. Simple Field 2. Price Field 3. System Date/Time 4. Complex (Merged)	**8.** Press 1 to define a simple field.
Numeric or Alpha-Numeric Data? A/N > _ ↑	**9.** Press **A** (alpha-numeric).
Enter Max. Length > _ _ _	**10.** Type **12** as the maximum number of characters in the field. Press Enter.
Enter Min. Length > _ _ _	**11.** Type **1** as the minimum number of characters in the field. Press Enter.
Enter Field Prompt > _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ ↑	**12.** Type **ENTER SIZE**. Press Enter.
Enter Fixed Data Press ENTER if none > _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ ↑	**13.** Type **SIZE**, then press **Space** for the fixed data. Press Enter.
Add fixed data Before or After entry chars? B/A > _ ↑	**14.** Press **B** to print the fixed data before the entry characters.
Enter Row # > _ _ _	**15.** Type **95** for the row location. Press Enter.

```
Enter Col. #
> _ _ _
```

16. Type **30** for the column location. Press Enter.

```
- = Select Font = -
1. CG Trium 6.5 1000
2. CG Trium 8 pt 1001
3. CG Trium 10p 1002
4. CG Trium 12p 1003
5. CG Trium 18 p 1004
6. CG Trium 22p 1005
7. CG TrCon 6.5 1006
8. CG TrCon 8 pt 1007
9. CG TrCon 10p 1008
10. CG TrCon 12p 1009
11. CG TrCon 18p 1010
12. CG TrCon 22p 1011
13. LetGoth 6.5 1012
14. LetGoth 9pt 1013
```

17. Select **CG Trium 8 pt 1001**. Press Enter.

```
Enter Height Mag for
this font (1-7) > _
```

18. Press 1 for the height magnification.

```
Enter Width Mag for
this font (1-7) > _
```

19. Press 1 for the width magnification.

```
Set Justification
1. Left (L)
2. Right (E)
3. Center (B)
```

20. Press 1 for the alignment of characters in the field.

```
Top of Field at:
1. Top of Supply
2. Left of Supply
3. Bottom of Supply
4. Right of Supply
```

21. Press 1 for the field rotation.

```
Select Edit #1
1. None
2. Make into Price
3. Pad Data Field
4. Extract Chars
5. Strip Chars
6. Extract from Mid
7. Insert Chars
8. Make Shoe Size
```

22. Select **Make Shoe Size**. Press Enter.

```
Select Edit #2
1. None
2. Make into Price
3. Pad Data Field
4. Extract Chars
5. Strip Chars
6. Extract from Mid
7. Insert Chars
8. Make Shoe Size
```

23. Press Enter for no additional data edits.

```
Perform Edits
Before or After
including Fixed
Data? (B/A) > _
```

24. Press **A**.

```
    - = Edit Menu = -
1. Edit Header Info
2. Edit a Field
3. Add a Field
4. Delete a Field
5. Quit Edit
```

25. Press 5.

```
Save current
format? Y/N > _
```

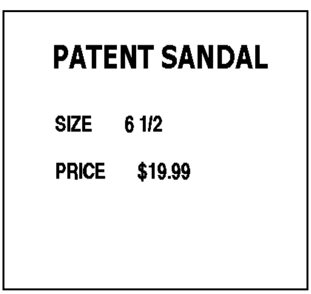
26. Press **Y** to save the format. You return to the Format Menu. Press Esc until you return to the Main Menu.

Printing the Format

From the Main Menu, select **Print Labels**, and the **SHOE-PRICE** format. Follow the field prompts as necessary.

Depending on the data you enter for the bar code fields, this sample prints the following label.

These graphics show the SIZE text field automatically formatted to include the “1/2” shoe size designation, if necessary.



EDITING A FORMAT

11

This chapter includes information about editing a format, copying a format, and deleting a format. Depending on the size of your memory card, you can store up to 80 formats in your printer.

When editing a format, you can modify the header information (format name, supply length and width), add a field, delete a field, or edit an existing field.

We will copy our **SHOE-PRICE** format, add a line field, and delete the text field formatted as price field.

Copying a Format

We will copy our **SHOE-PRICE** format and name the new format **SHOE-SIZE**.

```
   - = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

1. Press 1 to design your formats.

```
   - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

2. Press 3 to copy an existing format.

```
Select Format
to Copy _
```

3. Select **SHOE-PRICE**. Press Enter.

```
   - = Format Menu = -

AUTOPART
PRICE
SHOE-PRICE
SIZE
```

```
Enter Format Name
> _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
       ↑
```

4. Type **SHOE-SIZE** and press Enter.

```
Format Copied!
```

5. The format is copied and you return to the Design menu.

```
   - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

Editing a Field

When you edit a field, you can add, delete, or modify existing fields as well as change the format name, supply length, or supply width.

Adding a Field

In our new **SHOE-SIZE** format, we will add a line field.

```
   - = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

1. Press (1) to design your formats.

```
   - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

2. Press (2) to edit an existing format.

```
Select Format
for Editing _
```

3. Select **SHOE-SIZE**. Press Enter.

```
   - = Format Menu = -

AUTOPART
PRICE
SHOE-PRICE
SHOE-SIZE
```

```
 - = Edit Menu = -
1. Edit Header Info
2. Edit a Field
3. Add a Field
4. Delete a Field
5. Quit Edit
```

4. Press 3 to add a field.

```
New Field Location
Fld: 1 Ufld: 1 Smpl
Fld: 2 Constant
Fld: 3 Ufld: 2 Smpl
Fld: 4 Ufld: 3 Smpl
```

5. Select **Fld: 4 Ufld: 3 Smpl**. Press Enter.

```
Add new field
1. Before or
2. After
selected field? > _
```

6. Press 2 (After selected field).

```
Select Type: Fld #5
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
```

7. Press 4 for a line field.

```
Is line Segment or
Vector? S/V > _
```

8. Press **S**.

```
Enter Row #
for First Point
> _ _ _
```

9. Type **122** for the row location. Press Enter.

```
Enter Col. #
for First Point
> _ _ _
```

10. Type **10** for the column location. Press Enter.

```
Enter Row #
for Last Point
> _ _ _
```

11. Type **122** for the end row location. Press Enter.

```
Enter Col. #
for Last Point
> _ _ _
```

12. Type **130** for the end column location. Press Enter.

```
Enter Thickness
(2 = 0.01 inch)
> _ _
```

13. Type **3** and press Enter.

```
    - = Edit Menu = -
1. Edit Header Info
2. Edit a Field
3. Add a Field
4. Delete a Field
5. Quit Edit
```

14. Press 5 to exit the Edit menu.

```
Save changes? Y/N > _
```

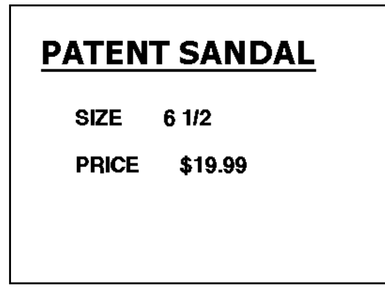
15. Press **Y**. You return to the Format menu.

Printing the Format

From the Main Menu, select **Print Labels**, and the **SHOE-SIZE** format. Follow the field prompts as necessary.

Depending on the data you enter for the bar code fields, this sample prints the following label.

This graphic shows the copied **SHOE-SIZE** format with the line field added.



Deleting a Field

In our **SHOE-SIZE** format, we will delete the text field formatted as a price field.

```
    - = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

1. Press 1 to design your formats.

```
    - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

2. Press 2 to edit an existing format.

```
Select Format
for Editing _
```

3. Select **SHOE-SIZE**. Press Enter.

```
    - = Format Menu = -

PRICE
SHOE-PRICE
SHOE-SIZE
```

```
  - = Edit Menu = -
1. Edit Header Info
2. Edit a Field
3. Add a Field
4. Delete a Field
5. Quit Edit
```

4. Press 4 to delete a field.

```
Select Fld to Erase
Fld: 1 Ufld: 1 Smpl
Fld: 2 Constant
Fld: 3 Ufld: 2 Smpl
Fld: 4 Ufld: 3 Smpl
Fld: 5 Line
```

5. Select **Fld: 3 Ufld: 2 Smpl** to erase the text field formatted as a price field. Press Enter.

```
  - = Edit Menu = -
1. Edit Header Info
2. Edit a Field
3. Add a Field
4. Delete a Field
5. Quit Edit
```

6. Press 4.

```
Select Fld to Erase
Fld: 1 Ufld: 1 Smpl
Fld: 2 Constant
Fld: 3 Ufld: 3 Smpl
Fld: 4 Line
```

7. Select **Fld: 2 Constant** to delete the constant text field containing “PRICE.” Press Enter.

```
  - = Edit Menu = -
1. Edit Header Info
2. Edit a Field
3. Add a Field
4. Delete a Field
5. Quit Edit
```

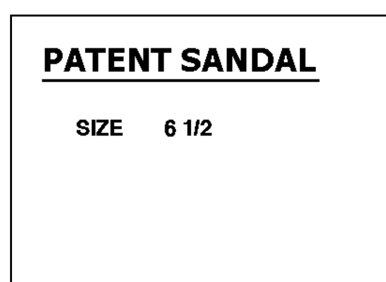
8. Press 5 to exit the Edit menu.

```
Save changes? Y/N > _
```

9. Press **Y**. You return to the Format menu.

Printing the Format

From the Main Menu, select **Print Labels**, and the **SHOE-SIZE** format. Follow the field prompts as necessary. Depending on the data you enter for the bar code fields, this sample prints the following label.



This graphic shows the **SHOE-SIZE** format with the text field formatted as a price field and the constant text field “PRICE” deleted.

Modifying an Existing Field

In our **SHOE-SIZE** format, we will modify the text field.

```
  - = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

1. Press 1 to design your formats.

```
  - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

2. Press 2 to edit an existing format.

```
Select Format
for Editing _
```

3. Select **SHOE-SIZE**. Press Enter.

```
  - = Format Menu = -

AUTOPART
SHOE-PRICE
SHOE-SIZE
```

```
  - = Edit Menu = -
1. Edit Header Info
2. Edit a Field
3. Add a Field
4. Delete a Field
5. Quit Edit
```

4. Press 2 to edit an existing field.

```
Select Edit Field
Fld: 1 Ufld: 1 Smpl
Fld: 2 Ufld: 2 Smpl
Fld: 3 Line
```

5. Select **Fld: 1 Ufld: 1 Smpl**. Press Enter.

```
Select Type:Fld #1
1. Text Field
2. Bar Code Field
3. Constant Text
4. Line
```

6. Press Enter.

```
Select Field Class
1. Simple Field
2. Price Field
3. System Date/Time
4. Combo (Merged)
```

7. Press Enter to keep the field defined as simple.

```
Numeric or
Alpha-Numeric Data?
A/N > A_

    ↑
```

8. Press Enter to keep Alphanumeric as the data type.

```
Enter Max. Length
> 16 _
```

9. Press Enter to keep the current maximum length.

```
Enter Min. Length
> 1 _ _
```

10. Press Enter to keep the current minimum length.

```
ENTER FIELD PROMPT
> ENTER ITEM  _ _ _ _ _ _ _ _
        ↑
```

11. Press Enter to keep the current field prompt.

```
Enter Fixed Data
Press ENTER if none
> _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
        ↑
```

12. Press Enter for no fixed data.

```
Enter Row #
> 130
```

13. Press Enter to keep the current row location.

```
Enter Col. #
> 10 _
```

14. Press BKSP twice and type **5** to change the column location. Press Enter.

```
- = Select Font = -
2. CG Trium 8 pt 1001
3. CG Trium 10p 1002
4. CG Trium 12p 1003
5. CG Trium 18 p 1004
6. CG Trium 22p 1005
7. CG TrCon 6.5 1006
8. CG TrCon 8 pt 1007
9. CG TrCon 10p 1008
10. CG TrCon 12p 1009
11. CG TrCon 18p 1010
12. CG TrCon 22p 1011
13. LetGoth 6.5 1012
14. LetGoth 9pt 1013
```

15. Select **CG TrCon 10p 1008**. Press Enter.

```
Enter Height Mag for
this font (1-7) > 1_
```

16. Press Enter to keep the current height magnification.

```
Enter Width Mag for
this font (1-7) > 1_
```

17. Press Enter to keep the current width magnification.

```
Set Justification
1. Left (L)
2. Right (E)
3. Center (B)
```

18. Press Enter to keep the current alignment of characters in the field.

Top of Field at:
1. Top of Supply
2. Left of Supply
3. Bottom of Supply
4. Right of Supply

19. Press Enter to keep the current field rotation.

Select Edit #1
1. None
2. Make into Price
3. Pad Data Field
4. Extract Chars
5. Strip Chars
6. Extract from Mid
7. Insert Chars
8. Make Shoe Size

20. Press Enter for no additional data edits.

- = Edit Menu = -
1. Edit Header Info
2. Edit a Field
3. Add a Field
4. Delete a Field
5. Quit Edit

21. Press 5 to exit the Edit menu.

Save changes? Y/N > _

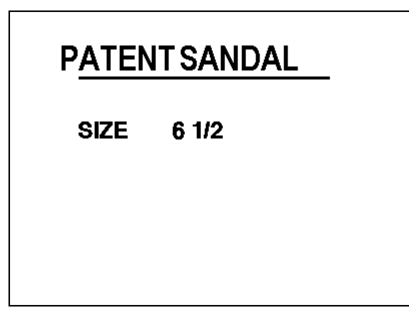
22. Press **Y**. You return to the Format menu.

Printing the Format

From the Main Menu, select **Print Labels**, and the **SHOE-SIZE** format. Follow the field prompts as necessary.

Depending on the data you enter for the text fields, this sample prints the following label.

This graphic shows the **SHOE-SIZE** format with the new column location and font in the text field.



Changing Header Information

When editing a format, you can change the header information: format name, supply length, and supply width.

In our **SHOE-SIZE** format, we will change the format name, supply length, and supply width.

NOTE: Before you change the supply length or width, make sure the supply loaded in the printer matches the supply sizes specified in the header information.

```
    - = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

1. Press 1 to design your formats.

```
    - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

2. Press 2 to edit an existing format.

```
Select Format
for Editing _
```

3. Select **SHOE-SIZE.** Press Enter.

```
    - = Format Menu = -

AUTOPART
SHOE-PRICE
SHOE-SIZE
```

```
    - = Edit Menu = -
1. Edit Header Info
2. Edit a Field
3. Add a Field
4. Delete a Field
5. Quit Edit
```

4. Press 1 to edit the header information.

```
      – Edit Header Menu –
1. Change Menu Name
2. Edit MPCL Number
3. Edit Description
4. Change Length
5. Change Width
```

5. Select **Change Menu Name**. Press Enter.

```
Edit Format Name
>SHOE-SIZE __________

       ↑
```

6. Press BKSP four times and type **TAG**. Press Enter. The format name has been changed to SHOE-TAG. You return to the Edit Header menu.
NOTE: Duplicate names are not allowed.

```
 - Edit Header Menu -
1. Change Menu Name
2. Edit MPCL Number
3. Edit Description
4. Change Length
5. Change Width
```

7. Press 4 to change the supply length.

```
Edit Length of
Supply (55 – 400)
>200 _
```

8. Press BKSP three times and type **150**. Press Enter.

```
Warning:  New Length
less than old length

  Press a key to
continue.  Or ESC to
  Abort> _
```

9. Press Enter to continue. You return to the Edit Header menu.

NOTE: If your format has fields defined that are close to the non-print zones (top or bottom of the label) and you change the supply length, those fields may print off the label (causing this warning).

```
- Edit Header Menu -
1. Change Menu Name
2. Edit MPCL Number
3. Edit Description
4. Change Length
5. Change Width
```

10. Press 5 to change the supply width.

```
Select Supply Width
1. 1.20 Inches
2. 1.5 Inches
3. 2.00 Inches
```

11. Press 2 to change the supply width to 1.50 inches, instead of 2.0 inches.

```
Warning:  New Width
less than old width

  Press a key to
continue.  Or ESC to
  Abort > _
```

12. Press Enter to continue. You return to the Edit Header menu.

NOTE: If your format has fields defined that are close to the non-print zones (edges of the label) and you change the supply width, those fields may print off the label (causing this warning).

```
- Edit Header Menu -
1. Change Menu Name
2. Edit MPCL Number
3. Edit Description
4. Change Length
5. Change Width
```

13. Press Esc to return to the Edit menu. Press 5 to exit the Edit menu.

```
Save changes? Y/N > _
```

14. Press **Y**. You return to the Format menu.

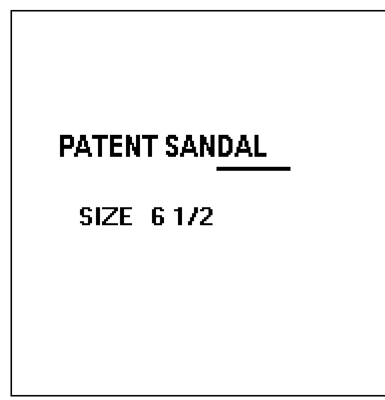
NOTE: The row and column locations need to be modified for each field (to fit on 1.5 inch by 1.5 inch supply) as follows:

Field	**Row**	**Column**
Text field (item)	90	10
Text field (size)	65	30
Line field	82	82 start 110 end

Printing the Format

From the Main Menu, select **Print Labels**, and the **SHOE-SIZE** format. Follow the field prompts as necessary.

Depending on the data you enter for the text fields, this sample prints the following label. This graphic shows the **SHOE-TAG** format with the new supply length and width dimensions.



NOTE: The selections:
2. Edit MPCL Number
3. Edit Description
are reserved for future use.

Deleting a Format

We will delete our **SHOE-TAG** format.

```
   - = Main Menu = -
1. Design Formats
2. Print Labels
3. Configuration
```

1. Press 1 to design your formats.

```
   - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

2. Press 4 to delete an existing format.

```
Select Format
for Deletion _
```

3. Select **SHOE-TAG**. Press Enter.

```
   - = Format Menu = -

AUTOPART
SHOE-PRICE
SHOE-TAG
```

```
      Delete Format:
7 SHOE-TAG
Are you sure?  Y/N _
```

4. Press **Y**.

```
     Format Deleted!
```

5. The format is deleted and you return to the Design menu.

```
   - = Design Menu = -
1. Create New Format
2. Edit Old Format
3. Copy Format
4. Delete Format
```

TROUBLESHOOTING

12

This chapter explains how to reset the printer, call Technical Support, and gives explanations of your printer's errors. The errors are classified by type and are listed in order. Call Technical Support if you receive any error message not listed in this chapter.

If you have trouble loading supplies or performing maintenance, refer to your *Equipment Manual*.

Problem	**Solution**
Error:Field off tag MPCL Error #614 Redefine current field	The field you are defining has run off the tag. You must redefine it.
Warning: Possible Field off tag error. Do you wish to redefine current field? (Y)es / (N)o > _	The field you are defining may run off the tag. You can, but it is not necessary, to redefine the field. Press **Y** to redefine or **N** to continue. When you print, one or more fields may not print if they are off the supply.
No fields in fmt	You saved the format without entering any fields. Delete the format, and recreate it.
Warning: Low Battery	Replace the current battery handle with a fully charged one. See your *Equipment Manual* for battery charging information.
Duplicate Name ReEnter _	Type a new format name and press Enter. You cannot have duplicate format names.
If you see the “Hot Key List”	Press Enter or Esc to return to the Main Menu.

Problem	Solution
If you see the DOS prompt B:\	Type **g** and press Enter to start the application.
I2 of 5 bar codes do not scan.	Refer to the *Equipment Manual* for proper scanning techniques. Verify that the I2 of 5 bar code scan lengths specified in the printer configuration are even numbers of characters.

Troubleshooting Information

If you experience problems using your printer, refer to this section.

If You Receive an Error Message

Any time you receive a message that is not described in this manual, or the recommended action does not solve the problem, call Technical Support.

Calling Technical Support

Technical support representatives are available Monday through Friday during regular business hours at 1-800-543-6650. Follow these steps before you call:

1. Record any error messages that occurred.

2. Try to recreate the problem, if you can.

3. List any changes that have recently been made to the system. Try to record what you did when the problem occurred.

If these steps do not solve the problem, call Technical Support.

Have the following information ready before you call:

- Paxar printer model
- support agreement, contract number, or invoice information
- customer number
- printer serial number

Data Errors

Errors 001 to 499 are data errors. A data error indicates that incorrect data was received from the host, causing the printer to ignore the entire print job. After checking the packet and correcting the problem, transmit the print job again.

The following is a list of data errors. These errors occur because data in the format, batch, check digit, font, or graphic packet is invalid.

Format Errors (1 - 99)

Error Code	Description
001	Format ID number must be **1** to **99**.
002	Name must be **1** to **8** characters inside quotes or a printer-assigned name ("").
003	Action must be **A** (add) or **C** (clear).
004	Supply length is invalid (maximum is 4").
005	Supply width is invalid (maximum is 2").
006	Storage device must be **R** (volatile RAM).
007	Unit of measure must be **E** (English).
010	Field ID number is outside the range **0** to **999**.
011	Field length exceeds **2710**.
012	Row field position is greater than the maximum stock dimension.
013	Column field position is greater than the maximum stock dimension.

014	Font style is invalid. See Chapter 5, "Defining Text Fields," for more information.
015	Character rotation must be **0** (0 degrees), **1** (90 degrees), **2** (180 degrees), or **3** (270 degrees). See Chapter 5, “Defining Text Fields," for information.
016	Field rotation must be **0** (0 degrees), **1** (90 degrees), **2** (180 degrees), or **3** (270 degrees). See Chapter 5, “Defining Text Fields" for information.
017	Field restriction must be **V** (variable) or **F** (fixed).
018	Code page selection defined in the field must be **1** (ASCII).
020	Vertical magnification must be **1** to **7**.
021	Horizontal magnification must be **1** to **7**.
022	Color must be **Black Opaque**, **White Opaque**, **Black Transparent**, or **White Transparent**. See Chapter 5, "Defining Text Fields," for more information.
023	Intercharacter gap must be **0** to **9** dots.
024	Field justification must be B (balanced), L (left), or R (right). See Chapter 5, "Defining Text Fields," for more information.
025	Data length is too long.
030	Bar code height must be at least **1** or is not within the supply dimensions.
031	Human readable option must be **1** no CD or NS **5** NS at bottom, no CD **6** CD at bottom, no NS **7** CD and NS at bottom **8** no text
032	Bar code type is invalid. See Chapter 6, “Defining Bar Code Fields," for valid options.

033	Bar code density is invalid. See Chapter 6, "Defining Bar Code Fields," for the bar code density values.
040	Line thickness must be **1** to **10**.
041	Line angle must be **0**, **90**, **180**, or **270**.
042	End row is invalid. Line segment end row is defined outside of printable area. See Chapter 8, “Defining Line Fields,” for more information.
043	End column is invalid. Line segment end column is defined outside of printable area. See Chapter 8, “Defining Line Fields,” for more information.
044	Dot pattern for line or box must be "".
045	Line length is defined beyond the maximum length of 3.72". See Chapter 8, "Defining Line Fields," for valid lengths.
046	Line type must be **S** (segment) or **V** (vector).
051	Imaging mode in the graphic header must be **0**.

Batch Errors (100 - 199)

101	The format referenced by batch is not in memory.
102	Print quantity is outside the range **0** to **25**.
104	Batch mode must be **N** (new) or **U** (update).
105	Batch separator in a batch control field must be **0** (Off).
106	Print multiple is not **1**.
108	Multiple part supply is outside the range **1** to **5**.

Option Errors (200 - 249)

200	Option number must be **1**, **4, 31**, **or 50**.
201	Copy length is outside the range **0** to **255**.

202	Copy start position must be **1** to **255**.
203	Destination start position must be **1** to **255**.
204	Source field must be **0** to **999**.
205	Copy type must be **1** (copy after rules) or **2** (copy before rules).
211	Narrow element value is less than **1** or greater than **99**. Correct the value and resend the format to the printer.
212	Wide element value is less than **1** or greater than **99**. Correct the value and resend the format to the printer.
214	Truncation code must be **S** (standard) or **T** (truncated bar code).
215	Aspect code must be **C** (columns) or **R** (rows).
216	Option definition must be **S** (set) or **T** (template).
217	Input device must be **D** (Default), **H** (Host), **K** (Keyboard), **N** (None), or **S** (Scanner).
220	Check digit selection must be **G** to generate check digit.
221	Primary or secondary price format is outside the range **1** to **15**.
222	Data type restriction is outside the range of **1** to **6**.
223	Option is not valid for the field.

Online Configuration Errors (250 - 299)

251	Power up mode must be **0** (online).
252	Language selection must be **0** (English).
253	Batch separator code in a supply setup packet must be **0** (off).
254	Slash zero selection must be **0** (standard zero).
255	Supply type must be **0** (black mark) or **1** (die cut).
256	Ribbon selection must be **0** (direct) or **1** (transfer).
257	Feed mode must be **0** (continuous) or **1** (on-demand).

258	Supply position is outside the range.
259	Contrast adjustment must be **-28** to **11**.
260	Print adjustment must be **-99** to **99**.
261	Margin adjustment must be **-99** to **99**.
262	Speed adjustment must be **0** (1.0 IPS).
263	Primary monetary symbol is invalid.
264	Secondary symbol selection must be **0** (none) or **1** (print secondary sign).
265	Monetary decimal places must be **0** to **3**.
272	Internal code page selection must be **1** (ASCII).
273	Cut adjustment must be **-99** to **99** dots.
282	RS232 Trailer string is too long. Use a maximum of **3** characters.
283	ENQ Trailer string is too long. Use a maximum of **3** characters.
284	The buffer type must be **T** (Transmit), **R** (Receive), **I** (Image), **F** (Format), or **D** (Downloadable Fonts).
285	The storage device type in the memory configuration packet must be **R** (volatile RAM).
286	The buffer size is invalid.
287	The printhead width must be **1.83** inches.
288	The battery voltage must be **1** (12-volt battery).
289	The printer address specified in the communication settings packet must use *exactly* six characters.

Check Digit Errors (300 - 324)

310	Check digit scheme number must be **1** to **10**.
311	Modulus must be **2** to **11**.
314	Check digit algorithm must be **D** (sum of digits) or **P** (sum of products).

General Packet Errors (400 - 435)

400	The character immediately following **{** is invalid.
401	Internal data error. Call Technical Support.
402	Field separator is not in the expected location.
403	Field separator was not found.
404	The number or string that is currently being processed is too long.
405	Too many fields exist in the format. You cannot have more than **50** fields in the format. Lines and constant text fields count as fields.
406	Packet is incomplete, attempted to delete or overwrite a format used by the current batch, or attempted to load a graphic while the printer was busy.
407	Parser timed out- no data. Resend packet to the printer.
408	No data. Resend packet to the printer.
409	The printer memory is full. Delete unnecessary formats from memory.
415	The buffer size you defined exceeds the total available in your machine.
420	Internal software error relating to list sync. Call Technical Support.
421	Internal software error relating to location name. Call Technical Support.
422	Internal software error relating to duplicate name. Call Technical Support.

423 Internal mailbox error. Call Technical Support.

424 Item in use. Call Technical Support.

425 Item already checked out. Call Technical Support.

426 Item not checked out. Call Technical Support.

427 Format name is invalid. Valid name is **1 - 8** characters inside quotes or "" for a printer-assigned name. If the error reappears, call Technical Support.

428 Batch name is invalid. If the error reappears, call Technical Support.

429 The field number appears more than once in a format.

431 The format file cannot be found.

433 The batch references a field number that does not exist in the format.

434 Internal software error caused by a downloaded task that is not executable. Turn off the printer. Wait two seconds and turn it back on. If the error persists, call Technical Support.

435 Internal software error caused by a downloaded task that already exists. Turn off the printer. Wait two seconds and turn it back on. If the error persists, call Technical Support.

Data Formatting Failures

Formatting errors indicate that a field will print incorrectly. After you have checked the data stream and corrected the data, retransmit the format and batch.

For errors 571-619, the batch will still print, but the field, font, bar code, or density may be incomplete, missing or contain incorrect data.

571 UPC or EAN bar code data length is invalid. The bar code data length in the batch does not fit the format.

573 Price field length is invalid. The price field length in the batch does not fit the format or the field contains blanks.

574 No CD scheme or room for CD. The CD scheme in the batch does not fit the format or the field contains blanks.

580 Out of memory. Try to reallocate memory. Resend the packet. If the error persists, call Technical Support.

603 Internal software error caused by the batch not being held. Turn off the printer. Wait two seconds and turn it back on. If the error persists, call Technical Support.

611 Font, bar code or density is invalid. The font, bar code or density in the batch does not fit the format.

612 The data in this line of the batch is either missing or does not match the format.

613 Reference point off tag.

614 Portion of field off tag. There may be an invalid character in the packet. Make sure you did not enter **O** for ∅.

615 Bar code width is greater than 16 inches or the number of keywords for your PDF 417 bar code exceeds **928**. Decrease the density or shorten the amount of data to print the bar code.

616 Dot shifting failed. A bad dot falls on a bar code that cannot be shifted. Call Technical Support.

618 Magnification must be **1** to **7**.

Machine Faults

Errors 700 to 799 occur when there is a problem with the printer.

703 The printer sensed a calibration of different-sized black marks. Make sure the correct supply is loaded.

704 Printer has not sensed a supply mark within the specified number of inches or out of supplies. Check the supply tracking, supply marks, black mark sensor position, and supply roll for binding. If the error continues to appear, change the supply.

706 The printer's motor stalled.

730 A memory allocation error occurred during initialization.

750 Printhead is overheated. Turn off the printer to let the printhead cool. If the error persists, call Technical Support.

751	Printer did not sense a black mark when expected. The supply may be jammed. For errors 751-753, Check the supply tracking, supply marks, black mark sensor position, and supply roll for binding. If the error continues to appear, change the supply.
752	Printer sensed a mark in the wrong place.
753	Printer sensed a mark that is too long.
755	Printhead is open. Close the printhead before continuing. If the error persists, call Technical Support.
756	The printer is out of supplies. Load supplies.
757	Load supplies. The calibrated supply length differs by plus or minus .25 inches from the format.
758	Check supply. Either the supply is not seen or the on-demand sensor is broken. Check for a label jam. Clear the supply path or reload supplies. This error may occur if you remove a label too quickly in on-demand mode. The printer does not recalibrate after this error.
762	Low battery. Recharge the battery.
763	Waiting to dispense label. Press the trigger.
765	Printhead failure. You need a new printhead. Call Technical Support.
770	The print motor is not ready. Call Technical Support.
771	The format was not found. Recreate the format, and try again. If the problem continues, call Technical Support.
790	The printer is busy. Turn off the printer. Wait two seconds and turn it back on. Resend the packets. If the problem continues, call Technical Support.
791	The printer has an error pending. Turn off the printer. Wait two seconds and turn it back on. Resend the packets. If the problem continues, call Technical Support.

792 The printer is not initialized. Call Technical Support.

793 The printer job queue is full. Turn off the printer. Wait two seconds and turn it back on. Resend the packets. If the problem continues, call Technical Support.

Errors numbered 900-999 are hard printer failures. Call Technical Support if you receive these messages.

SAMPLE FORMATS

A

The following pages include several samples of different applications, such as item pricing, item identification and receiving/inventory. You can customize any of these formats to meet your needs.

Item Pricing

The following sample, **PRETZELS** (2.0 long x 2.0 wide), contains two text fields, one bar code field, and one price field.

The human readable characters under the bar code are automatically generated using a combo text field that copies the data entered from the bar code field.

Use the following information to create the bar code field:

Prompts	Bar Code Field 1
Bar Code	1. UPC-A
Field Class	1. Simple
Field Prompt	SCAN UPC#
Fixed Data	None
Row	80
Column	15
Density	1. 80
Bar Height	40
Field Rotation	1. Top of Supply
Edits	None

Use the following information to create the text and combo text field for human readable characters:

Prompts	Text Field 2	Combo Field 3
Field Class	1. Simple	2. Combo
Data Type	Alpha-numeric	N/A
Max. Length	10	12
Min. Length	1	1
Field Prompt	ENTER ITEM	N/A
Field Number	N/A	01
Start Position	N/A	01
Num. of Chars.	N/A	12
Fill Direction	N/A	3. Do not Fill
Fixed Data	None	None
Row	135	65
Column	35	15
Font	2. CG Trium 8pt 1001	2. CG Trium 8pt 1001
Height Mag.	1	1
Width Mag.	1	1
Justification	1. Left	1. Left
Field Rotation	1. Top of Supply	1. Top of Supply
Edits	None	None

Use the following information to create the price field:

Prompts	Price Field 4
Field Class	2. Price Field
Max. Length	5 (including the $ and . point)
Min. Length	1
Field Prompt	ENTER PRICE
Fixed Data	None
Row	40
Column	35
Font	2. CG Trium 8pt 1001
Height Mag.	1
Width Mag.	1
Justification	1. Left
Field Rotation	1. Top of Supply

The following sample, **DETERGENT** (2.0 long x 2.0 wide), contains two text fields, one bar code field, and one price field.

To print the human readable characters, you must set the default UPC appearance from the configuration menu.

Use the following information to create the bar code field:

Prompts	Bar Code Field 1
Bar Code	1. UPC-A
Field Class	1. Simple
Field Prompt	SCAN UPC#
Fixed Data	None
Row	80
Column	25
Density	2. 120
Bar Height	45
Field Rotation	1. Top of Supply
Edits	None

Use the following information to create the text (item) and text (dept.) fields:

Prompts	Text Field 2	Text Field 3
Field Class	1. Simple Field	1. Simple Field
Data Type	Alpha-numeric	Alpha-numeric
Max. Length	12	5
Min. Length	1	1
Field Prompt	ENTER ITEM	ENTER DEPT#
Fixed Data	None	None
Row	55	25
Column	50	15
Font	2. CG Trium 8pt 1001	2. CG Trium 8pt 1001
Height Mag.	1	1
Width Mag.	1	1
Justification	1. Left	1. Left
Field Rotation	1. Top of Supply	1. Top of Supply
Edits	None	None

Use the following information to create the price field:

Prompts	Price Field 4
Field Class	2. Price Field
Max. Length	5 (including the $ and . point)
Min. Length	1
Field Prompt	ENTER PRICE
Fixed Data	None
Row	25
Column	140
Font	2. CG Trium 8pt 1001
Height Mag.	1
Width Mag.	1
Justification	1. Left
Field Rotation	1. Top of Supply

The following sample, **SALE** (4.0 long x 2.0 wide), contains two constant text fields, four text fields, one bar code field, and two price fields with fixed data.

To print the human readable characters, you must set the default UPC (and EAN) appearance from the configuration menu.

Use the following information to create the two constant text fields for store# and dept.#.

Prompts	Constant Text Field 1	Constant Text Field 2
Fixed Data	063	DEPT#25
Row	300	300
Column	15	125
Font	1. CG Trium 6.5 1000	1. CG Trium 6.5 1000
Height Mag.	1	1
Width Mag.	1	1
Justification	1. Left	1. Left
Field Rotation	1. Top of Supply	1. Top of Supply

Use the following information to create the four text fields for the item description:

Prompts	Text Field 3	Text Field 4
Field Class	1. Simple Field	1. Simple Field
Data Type	Alpha-numeric	Alpha-numeric
Max. Length	12	8
Min. Length	1	1
Field Prompt	ENTER ITEM	ENTER SIZE
Fixed Data	None	None
Row	265	245
Column	50	55
Font	3. CG Trium 10p 1002	3. CG Trium 10p 1002
Height Mag.	1	1
Width Mag.	1	1
Justification	1. Left	1. Left
Field Rotation	1. Top of Supply	1. Top of Supply
Edits	None	None

Prompts	Text Field 5	Text Field 6
Field Class	1. Simple Field	1. Simple Field
Data Type	Alpha-numeric	Alpha-numeric
Max. Length	8	14
Min. Length	1	1
Field Prompt	ENTER COLOR	ENTER FABRIC
Fixed Data	None	None
Row	225	205
Column	60	30
Font	3. CG Trium 10p 1002	3. CG Trium 10p 1002
Height Mag.	1	1
Width Mag.	1	1
Justification	1. Left	1. Left
Field Rotation	1. Top of Supply	1. Top of Supply
Edits	None	None

Use the following information to create the bar code field:

Prompts	Bar Code Field 7
Bar Code	7. EAN-13
Field Class	1. Simple
Field Prompt	SCAN BAR CODE
Fixed Data	None
Row	150
Column	35
Density	1. 80
Bar Height	40
Field Rotation	1. Top of Supply
Edits	None

Use the following information to create the two price fields.

Prompts	Price Field 8	Price Field 9
Field Class	2. Price Field	2. Price Field
Max. Length	14	14
Min. Length	1	1
Field Prompt	ENTER ORIG PRICE	ENTER SALE PRICE
Fixed Data	WAS	NOW
Before or After	B	B
Row	105	80
Column	10	10
Font	4. CG Trium 12p 1003	4. CG Trium 12p 1003
Height Mag.	1	1
Width Mag.	1	1
Justification	1. Left	1. Left
Field Rotation	1. Top of Supply	1. Top of Supply

Item Identification

The following sample, **SWEATER** (2.0 long x 2.0 wide), contains four text fields and two date/time fields with fixed data.

Use the following information to create the four text fields for the item description:

Prompts	Text Field 1	Text Field 2
Field Class	1. Simple Field	1. Simple Field
Data Type	Alpha-numeric	Alpha-numeric
Max. Length	12	8
Min. Length	1	1
Field Prompt	ENTER ITEM	ENTER SIZE
Fixed Data	None	None
Row	120	100
Column	10	10
Font	3. CG Trium 10p 1002	3. CG Trium 10p 1002
Height Mag.	1	1
Width Mag.	1	1
Justification	1. Left	1. Left
Field Rotation	1. Top of Supply	1. Top of Supply
Edits	None	None

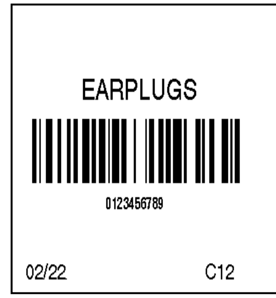
Prompts	Text Field 3	Text Field 4
Field Class	1. Simple Field	1. Simple Field
Data Type	Alpha-numeric	Alpha-numeric
Max. Length	8	14
Min. Length	1	1
Field Prompt	ENTER COLOR	ENTER FABRIC
Fixed Data	None	None
Row	80	60
Column	10	10
Font	3. CG Trium 10p 1002	3. CG Trium 10p 1002
Height Mag.	1	1
Width Mag.	1	1
Justification	1. Left	1. Left
Field Rotation	1. Top of Supply	1. Top of Supply
Edits	None	None

Use the following information to create the two date/time fields with fixed data.

Prompts	Date/Time Field 5	Date/Time Field 6
Field Class	3. System Date/Time	3. System Date/Time
Template	MM/DD	MM/DD
Fixed Data	STOCK(space)	SALE 7/4-
Before or After	B	B
Row	30	10
Column	10	10
Font	1. CG Trium 6.5 1000	1. CG Trium 6.5 1000
Height Mag.	1	1
Width Mag.	1	1
Justification	1. Left	1. Left
Field Rotation	1. Top of Supply	1. Top of Supply

The following sample, **MEDICAL** (2.0 long x 2.0 wide), contains two text fields, one bar code field, one combo text field, and one date/time field.

The human readable characters under the bar code are automatically generated using a combo text field that copies the data entered from the bar code field.



Use the following information to create the two text fields:

Prompts	Text Field 1	Text Field 2
Field Class	1. Simple Field	1. Simple Field
Data Type	Alpha-numeric	Alpha-numeric
Max. Length	12	4
Min. Length	1	1
Field Prompt	ENTER ITEM	ENTER DEPT#
Fixed Data	None	None
Row	100	5
Column	50	130
Font	3. CG Trium 10p 1002	1. CG Trium 6.5 1000
Height Mag.	1	1
Width Mag.	1	1
Justification	1. Left	1. Left
Field Rotation	1. Top of Supply	1. Top of Supply
Edits	None	None

Use the following information to create the bar code field:

Prompts	Bar Code Field 3
Bar Code	8. Code 128
Field Class	1. Simple
Data Type	Numeric
Max. Length	10
Min. Length	1
Field Prompt	SCAN BAR CODE
Fixed Data	None
Row	60
Column	10
Density	5.8/11.7 cpi 3 dots
Bar Height	30
Field Rotation	1. Top of Supply
Edits	None

Use the following information to create the combo field.

Prompts	Combo Field 4
Field Class	4. Combo
Max. Length	10
Min. Length	1
	Press Enter (begin field entry)
Field Number	03
Start Position	01
Num. of Chars.	10
	Press Enter (end field entry)
Fill Direction	3. Do not Fill
Fixed Data	None
Row	45
Column	50
Font	1. CG Trium 6.5 1000
Height Mag.	1
Width Mag.	1
Justification	1. Left
Field Rotation	1. Top of Supply
Edits	None

Use the following information to create the date/time field.

Prompts	Date/Time Field 5
Field Class	3. System Date/Time
Template	MM/DD
Fixed Data	None
Row	5
Column	5
Font	1. CG Trium 6.5 1000
Height Mag.	1
Width Mag.	1
Justification	1. Left
Field Rotation	1. Top of Supply

Receiving/Inventory

The following sample, **CODE39-LOT** (4.0 long x 2.0 wide), contains three text fields (2 with fixed data), one bar code field, one combo field, and one date/time field.

The human readable characters under the bar code are automatically generated using a combo text field that copies the data entered from the bar code field.

Use the following information for the three text fields:

Prompts	Text Field 1	Text Field 2
Field Class	1. Simple Field	1. Simple Field
Data Type	Alpha-numeric	Alpha-numeric
Max. Length	10	8
Min. Length	1	1
Field Prompt	ENTER LOT#	ENTER QTY
Fixed Data	LOT#(space)	QTY(space)
Before or After	B	B
Row	280	65
Column	165	165
Font	2. CG Trium 8pt 1001	2. CG Trium 8pt 1001
Height Mag.	1	1
Width Mag.	1	1
Justification	1. Left	1. Left
Field Rotation	4. Right of Supply	4. Right of Supply
Edits	None	None

Use the following information to create the third text field:

Prompts	Text Field 3
Field Class	1. Simple Field
Data Type	Alpha-numeric
Max. Length	20
Min. Length	1
Field Prompt	ENTER ITEM
Fixed Data	None
Row	215
Column	30
Font	1. CG Trium 6.5 1000
Height Mag.	1
Width Mag.	1
Justification	1. Left
Field Rotation	4. Right of Supply
Edits	None

Use the following information to create the bar code field:

Prompts	Bar Code Field 4
Bar Code	4. Code 39 – no c/d
Field Class	1. Simple
Data Type	Numeric
Max. Length	12
Min. Length	1
Field Prompt	SCAN BAR CODE
Fixed Data	None
Row	260
Column	100
Density	6.6 cpi 1:2.5 2 dots
Bar Height	50
Field Rotation	4. Right of Supply
Edits	None

Use the following information to create the combo text field:

Prompts	Combo Field 5
Field Class	4. Combo
Max. Length	12
Min. Length	1
Field Number	04
Start Position	01
Num. of Chars.	12
	Press Enter (only one field in combo)
Fill Direction	3. Do not Fill
Fixed Data	None
Row	260
Column	85
Font	2. CG Trium 8pt 1001
Height Mag.	1
Width Mag.	1
Justification	1. Left
Field Rotation	4. Right of Supply
Edits	None

Use the following information to create the date/time field:

Prompts	Date/Time Field 6
Field Class	3. System Date/Time
Template	MM/DD/YY
Fixed Data	None
Row	200
Column	50
Font	1. CG Trium 6.5 1000
Height Mag.	1
Width Mag.	1
Justification	1. Left
Field Rotation	4. Right of Supply

USING FONTS

B

This appendix contains the information you need to work with fonts. These fonts are standard in your printer.

Number	Font Size and Appearance	Type of Spacing	# of Dots Between Characters
1000	CG Triumvirate Bold 6.5 pt	proportional	varies w/each letter
1001	CG Triumvirate Bold 8 pt	proportional	varies w/each letter
1002	CG Triumvirate Bold 10 pt	proportional	varies w/each letter
1003	CG Triumvirate Bold 12 pt	proportional	varies w/each letter
1004	CG Triumvirate Bold 18 pt	proportional	varies w/each letter
1005	CG Triumvirate Bold 22 pt	proportional	varies w/each letter
1006	CG Triumvirate Bold Condensed 6.5 pt	proportional	varies w/each letter
1007	CG Triumvirate Bold Condensed 8 pt	proportional	varies w/each letter
1008	CG Triumvirate Bold Condensed 10 pt	proportional	varies w/each letter
1009	CG Triumvirate Bold Condensed 12 pt	proportional	varies w/each letter
1010	CG Triumvirate Bold Condensed 18 pt	proportional	varies w/each letter
1011	CG Triumvirate Bold Condensed 22 pt	proportional	varies w/each letter
1012	Letter Gothic Bold 6 pt	monospaced	1
1013	Letter Gothic Bold 9 pt	monospaced	2

NOTE: Point sizes greater than 12 include only the following characters:
0123456789#$%&(),./@DFKLMPS\kprö¢£¥

Refer to the following pages for illustrations of these fonts.

Monospaced Font Magnification

Monospaced characters occupy the same amount of space within a magnification. Use monospaced fonts for price fields and data you want to list in a column. Decide how wide and tall you want the characters to appear on the labels. The following two tables show the width and height of each of the monospaced fonts after magnification.

This table includes the default gap spacing for Letter Gothic 6 pt and Letter Gothic 9 pt.

Width Mag.	**Letter Gothic 6 pt**		**Letter Gothic 9 pt**	
Units	Character Width	Sample	Character Width	Sample
1x 1/100 in.	4.69	L	7.29	L
7x 1/100 in.	32.81	L	51.04	L

Height Magnification

Letter Gothic	L	L
1/100 in	6.9	48.28

Proportional Font Magnification

Each character in a proportionally spaced font is a different width. You may be able to place more characters on a line using proportionally spaced fonts. You may want to experiment with these fonts and adjust field measurements in your format as needed. The following tables provide height and width magnification of sample characters.

CG Triumvirate Bold (8 pt.)

Width Mag.	Minimum	Average	Maximum
1x 1/100 in.	1.56 I	5.73 L	10.94 W
7x 1/100 in.	6.9 I	20.7 L	41.4 W

CG Triumvirate Bold (6.5 pt.) Font #1000

Width Mag.	Minimum	Average	Maximum
1x 1/100 in.	1.56 I	4.69 L	9.90 W
7x 1/100 in.	10.94 I	32.81 L	69.27 W

Height Magnification

	1x W	**7x** W
1/100 in	6.77	47.40

CG Triumvirate Bold (8 pt.) Font #1001

Width Mag.	Minimum	Average	Maximum
1x 1/100 in.	1.56	5.73	10.94
7x 1/100 in.	6.9	20.7	41.4

Height Magnification

	1x	7x
1/100 in	8.33	58.33

CG Triumvirate Bold (10 pt.) Font #1002

Width Mag.		Minimum	Average	Maximum
1x	1/100 in.	1.56	6.77	13.02
	1/10 mm	3.97	17.20	33.07
	Dots	3	13	25
7x	1/100 in.	10.94	47.40	91.15
	1/10 mm	27/78	120.39	231.51
	Dots	21	91	175

Height Magnification

	1x	7x
1/100 in	10.42	72.92

CG Triumvirate Bold (12 pt.)   Font #1003

Width Mag.	Minimum	Average	Maximum
1x 1/100 in.	2.60 I	8.85 L	16.15 W
7x 1/100 in.	18.23 I	67.94 L	113.02 W

Height Magnification

	1x W	**7x** W
1/100 in	12.50	87.50

CG Triumvirate Bold (18 pt.)   Font #1004

Width Mag.	Minimum	Average	Maximum
1x 1/100 in.	7.81 1	12.50 8	22.92 %
7x 1/100 in.	54.69 1	87.50 8	160.42 %

Height Magnification

	1x 8	**7x** 8
1/100 in	19.27	134.90

CG Triumvirate Bold (22 pt.) Font #1005

Width Mag.	Minimum	Average	Maximum
1x 1/100 in.	9.38 1	15.63 8	27.08 %
7x 1/100 in.	65.63 1	109.38 8	189.58 %

Height Magnification

	1x 8	**7x** 8
1/100 in	23.44	164.05

CG Triumvirate Bold Cond (6.5 pt.)   Font #1006

Width Mag.	Minimum	Average	Maximum
1x 1/100 in.	1.04	3.65	6.25
7x 1/100 in.	7.29	25.52	43.75

Height Magnification

	1x	**7x**
1/100 in	6.77	47.40

CG Triumvirate Bold Cond (8 pt.)   Font #1007

Width Mag.	Minimum	Average	Maximum
1x 1/100 in.	1.56	4.69	8.85
7x 1/100 in.	10.94	32.81	67.94

Height Magnification

	1x	**7x**
1/100 in	8.85	61.98

CG Triumvirate Bold Cond (10 pt.) *Font #1008*

Width Mag.	Minimum	Average	Maximum
1x 1/100 in.	2.08 l	5.73 L	11.98 W
7x 1/100 in.	14.58	40.10	83.85

Height Magnification

	1x W	**7x**
1/100 in	10.94	76.56

CG Triumvirate Bold Cond (12 pt.) *Font #1009*

Width Mag.	Minimum	Average	Maximum
1x 1/100 in.	2.60 l	7.29 L	14.58 W
7x 1/100 in.	18.23	51.04	96.88

Height Magnification

	1x W	**7x**
1/100 in	13.02	91.15

CG Triumvirate Bold Cond (18 pt.)   Font #1010

Width Mag.	Minimum	Average	Maximum
1x 1/100 in.	7.81 1	10.94 8	21.88 %
7x 1/100 in.	54.69 1	76.56 8	153.12 %

Height Magnification

	1x 8	**7x** 8
1/100 in	20.31	142.19

CG Triumvirate Bold Cond (22 pt.)   *Font #1011*

Width Mag.	**Minimum**	**Average**	**Maximum**
1x 1/100 in.	9.38 1	13.02 8	26.56 %
7x 1/100 in.	65.63 1	91.15 8	185.94 %

Height Magnification

	1x 8	**7x** 8
1/100 in	24.48	171.35

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