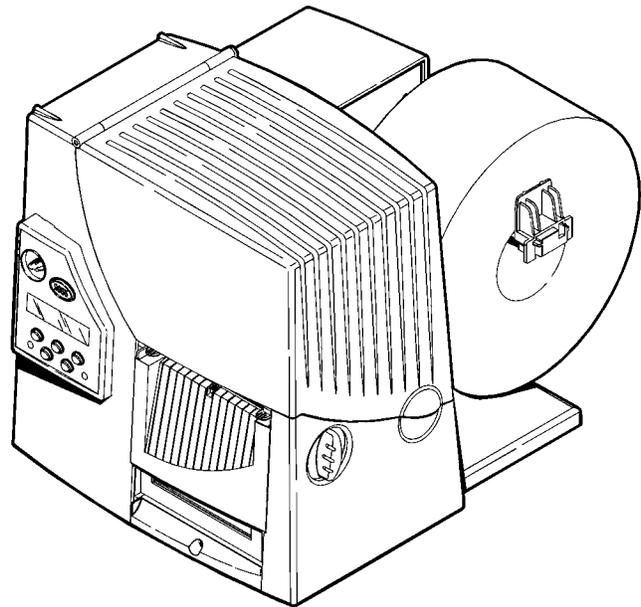

Users Manual

PAXAR

610 / 611 / 612 Printers



PAXAR Systems Group
Manual Edition 6.0
5 December 2003

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1. Getting Started

The Paxar 610 / 611 / 612 Care Label printers let you print text, graphics, and bar codes on thermal transfer (ribbon) fabric labels.

This chapter includes information about

- ◆ Unpacking the printer.
- ◆ Connecting the power cord.
- ◆ Connecting the communications cable.
- ◆ Using the printer's control panel.

Audience

The *User's Manual* is for the person who prints and applies labels.

Unpacking the Printer

After you unpack the printer, you should have: a 610 / 611 / 612 printer, power cord, communication cable and a ribbon take-up core (may already be on take-up reel).

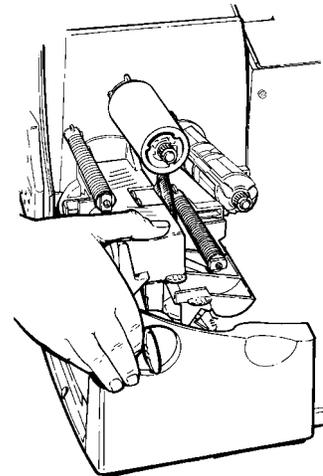
Keep the box and packaging material in case the printer ever needs repair.

Power cords are not supplied with 230-volt printers. You need to purchase a power cord separately. The power cord requires IEC 320 STD C13 end finish for the printer interface and it must meet requirements for 1.6 Amps at 115VAC and 1 Amp at 230VAC.

Shipping the Printer

If you need to ship the printer to a different location:

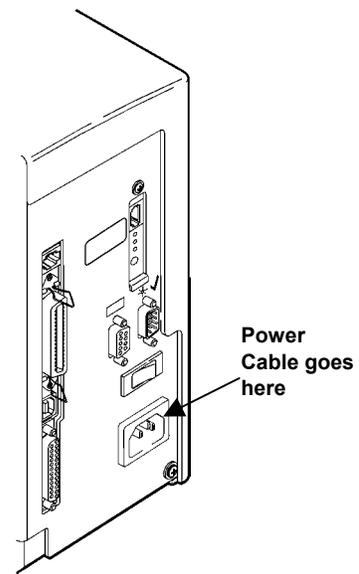
1. Remove the ribbon roll, if one is loaded.
2. Remove the supply roll, if one is loaded.
3. Close the printhead by pressing down on the thumb well until you hear it click into place.
4. Place the printer in the original box and secure with packaging material. **Make sure the printer is adequately packed to avoid damage during shipment.**



Connecting the Power Cable

To connect the power cable:

1. Plug the power cable into the socket. Plug the other end of the cable into a grounded electrical outlet.
2. Turn on the printer. Press (I) to turn on and (O) to turn off the printer.



Establishing Communications

Before the printer can accept print jobs from the host, you must:

- ◆ Connect the communication cable to the printer and to the host.
- ◆ Set the communication values on the printer to match those at the host. (Only required if you are using the serial port.)

Connecting the Communication Cable

Make sure the printer is off before connecting the cable to the communication port. Your printer is supplied with a parallel printer cable. You may optionally connect your printer to a serial port. To do this, you must purchase a serial interface cable compatible with your computer.

- ◆ Serial Communication
 - 9 to 25 pin cable
 - 25 to 25 pin cable
- ◆ Parallel Communication
 - IEEE-1284 or Centronics mode cable

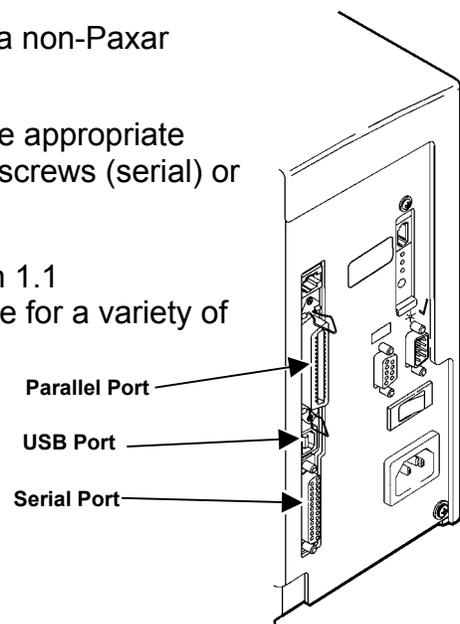
See Chapter 4, "Communication Values," for more information.

Connect the communications cable to the appropriate port on your computer. If you are unsure where to connect the cable, consult your computer documentation.

NOTE: It is highly recommended that you use the cable supplied with your printer. Paxar cannot be responsible for communications problems when a non-Paxar cable is used.

Connect the other end of the communication cable into the appropriate port on the printer. Secure the cable with the connecting screws (serial) or spring clips (parallel).

The printer also has a USB (Universal Serial Bus) Version 1.1 communication port. Drivers are available on our Web site for a variety of operating systems.



Default Serial Port Communication Values

If you are communicating with the host through the serial port, make sure the printer's communication values match those at the host. The factory default values are: 9600-Baud, 8 bit data frame Word Length, 1 Stop Bit, no Parity, and XON / XOFF Flow Control.

To change the printer's communication values, ask your System Administrator or see Chapter 4, "Communication Values," for more information.

Default Printer Settings

These defaults can be changed using Paxar's PCMate software. Print Speed - 4.0 ips (inches per second), Ribbon - High Energy, Supply Type - Black Mark, Contrast - 225, Backfeed - Disabled.

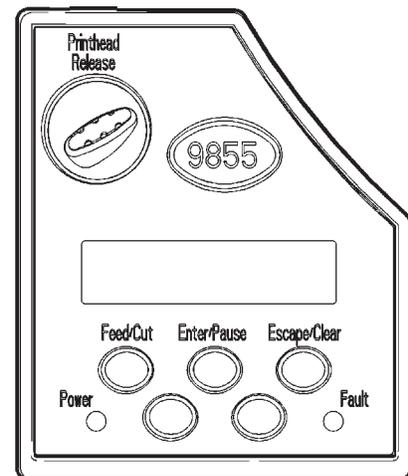
Using the Control Panel

The control panel has a two-line LCD display, 2 status lights, and five buttons. The control panel displays error codes / messages, and allows you to setup-configure the printer.

Printer Status Lights

Power: The printer shows a steady green light when it is on.

Fault: The printer shows a blinking amber light when there is a printer error.



Button Functions

Feed / Cut:

- ◆ Feeds a blank label if there is no print job.
- ◆ Prints a label with error information that is useful to your System Administrator if an error is displayed.
- ◆ Cuts the supply when pressed and held for two seconds if a knife is installed.
- ◆ When the printer is online, cuts the supply when pressed and held for two seconds if a knife is installed.
- ◆ When the printer is offline, changes the displayed value by one or 10.

Enter / Pause:

When the printer is online, pauses the current print job or resumes a paused print job. When the printer is offline, selects the displayed menu item.

Escape / Clear:

- ◆ When an error is present, clears the error.
- ◆ When a job (batch) is printing, cancels the print job (batch). For more information about canceling batches, see “Canceling a Paused Batch”.
- ◆ When the printer is online (without errors), enters the offline menu mode.
- ◆ When the printer is in the offline menu mode, returns the display to the next higher menu.



When the printer is in the offline menu mode, displays the previous menu item.



When the printer is in the offline menu mode, displays the next menu item.



In online mode, prints a test label when you press the buttons at the same time. Hold for one second and release.

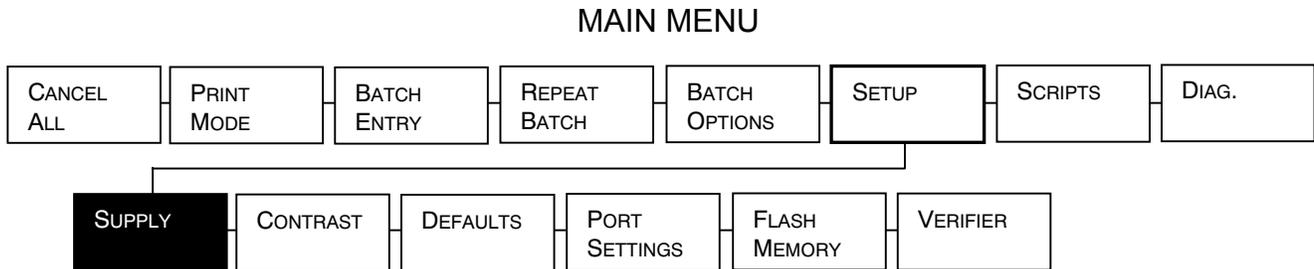
Display

The display shows a three-digit error code and brief message to identify any problem the printer may have. For a description of the problem, look up the error code in Chapter 9, “Troubleshooting”.

If there is no error, the display is blank.

Selecting a Function

The Main menu has several functions (operating modes). These functions are shown in the chart below.



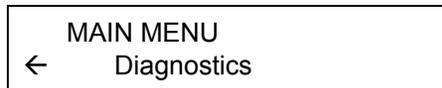
If the printer displays **PRINT MODE Ready** when you turn it on, press **Escape / Clear** to Display the Main Menu.

To display menu options, press **←** or **→**.

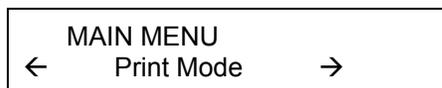
When the screen displays a right arrow, press **→** to display more options.



When the screen displays a left arrow, press **←** to display more options.



When the screen displays a left and a right arrow, press either **←** or **→** to display more options.



When you see the menu option you want, press **Enter / Pause** to select it.

The Main Menu controls the printer's setup and operation. Through the Setup Menu, you can select a sub-menu for the supply, contrast, default, or port settings. Each of those sub-menus have several options, such as ribbon, speed, monetary symbols, and baud rate.

Exiting an Option

To exit an option, press **Escape / Clear** once. You will exit to the next higher menu.

If you press **Escape / Clear** from a menu, your Settings are not saved.
Your settings are only Saved when you press **Enter / Pause** from a menu.

2. Loading Supplies

This chapter describes how to load a roll of supply and a ribbon roll.

You can use Paxar's fabric label kits containing fabric labels and ribbon. If you switch from black mark to continuous supplies make sure the printer is set for the correct supply type.

Make sure you use only approved Paxar supplies. See Appendix A, "Specifications and Accessories" for a list of Paxar supplies or contact your Paxar Representative for more information.

If you experience label jamming with narrow supplies in humid environments, store supplies separately from the printer in a dry, less humid environment.

CAUTION

The width of the ribbon must be greater than the supply width. Since some supplies are more abrasive to printheads than others, using a ribbon wider than your supply helps protect the printhead. Failure to do this may void your printhead warranty. Replacement printheads are expensive.

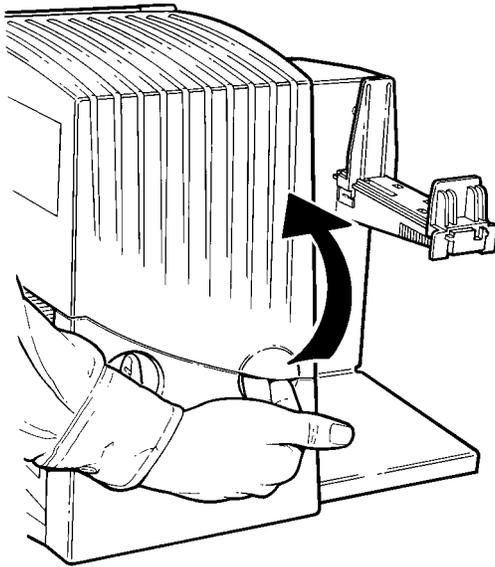
Loading Labels – 610 / 611

For instructions for loading labels for the 612, see "Loading Labels - 612."

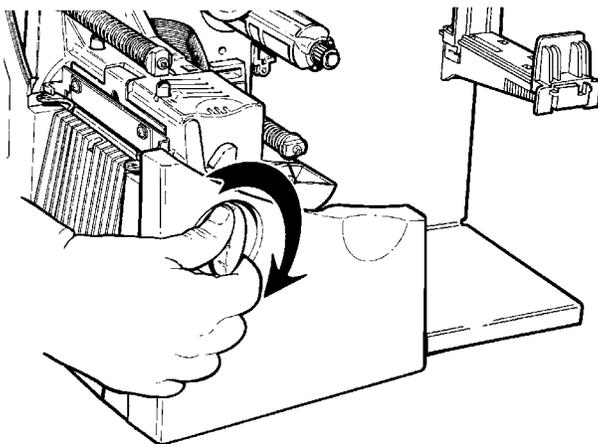
Make sure the printer is configured for the correct supply type.

To load a roll of labels:

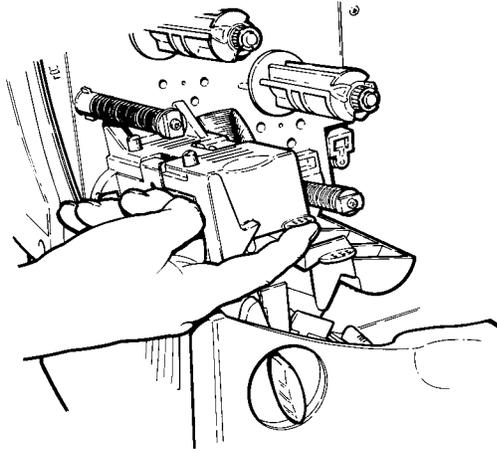
1. Open the cover.



2. Unlock the printhead by turning the retaining latch.



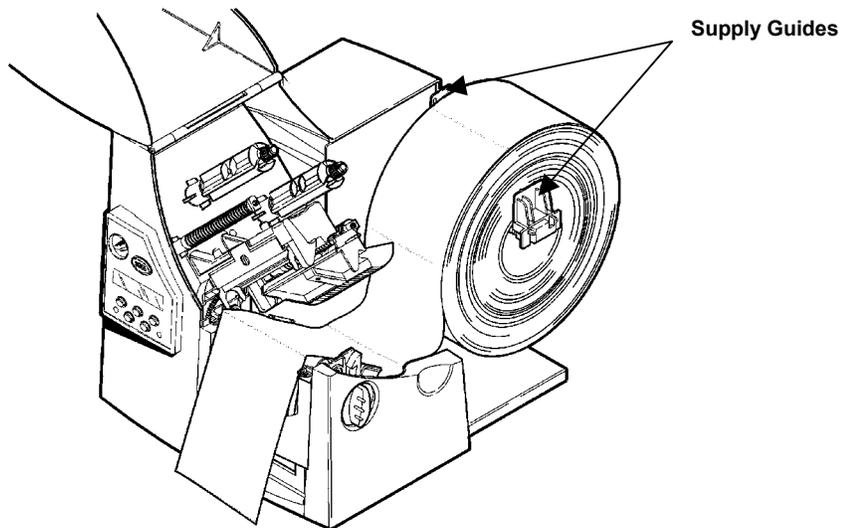
3. Lift printhead assembly using the printhead tab until the assembly locks into place.



CAUTION

Make sure you use only approved Paxar supplies. See Appendix A, "Specifications and Accessories" for a list of Paxar supplies or contact your Paxar Representative for more information.

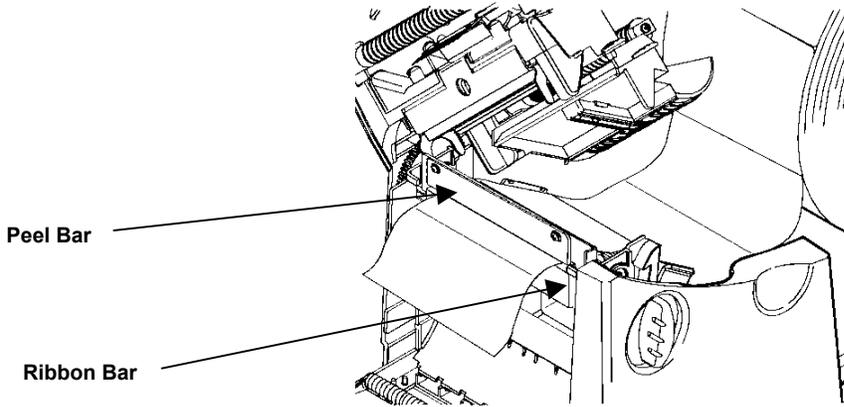
4. Place the roll of supply on the supply holder. Make sure the supply unrolls from the top as shown.



**Do not pick up the printer
by the supply holder.**

5. Adjust the supply holder guides so the sides barely touch the roll. Make sure the supply roll turns freely.

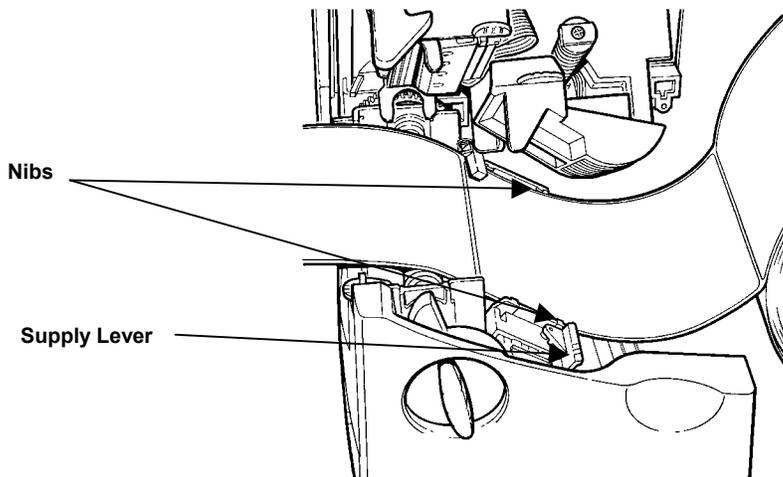
6. Push down on the supply lever to unlock the supply guides.
7. Lay the label strip across the supply guide. Lift the auxiliary rollers slightly and thread the supply under the rollers until it appears in the knife opening.



CAUTION

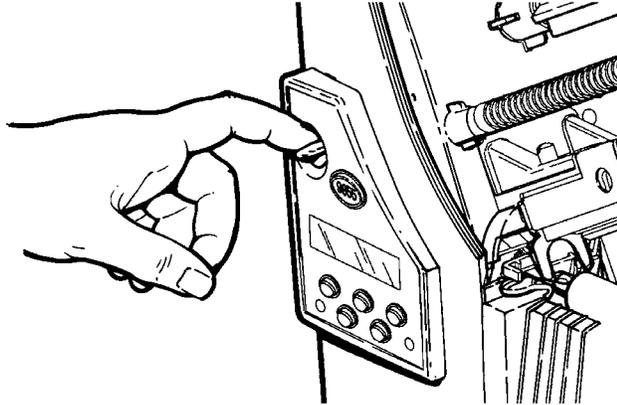
Make sure the supply is straight in the supply path and aligned with the printhead.

8. Tuck the supply under the nibs.

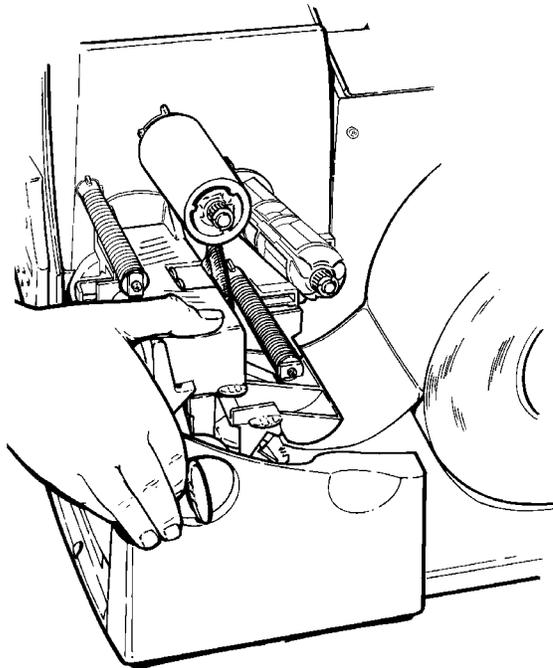


Make sure a few inches of supply are past the front end of the printer.

9. Adjust the supply guides so they touch the supply. Push up on the supply lever to lock the supply guides into place.
10. Hold the printhead assembly by the printhead tab while pressing down on the printhead



11. Close the printhead by pressing down on the thumb well until you hear it click into place.



12. Close the cover.

13. Press **Feed / Cut** to position the supply under the printhead.

You may need to adjust the wide / narrow knobs depending on the width of your supply. See "Adjusting the Wide / Narrow Knobs" for more information.

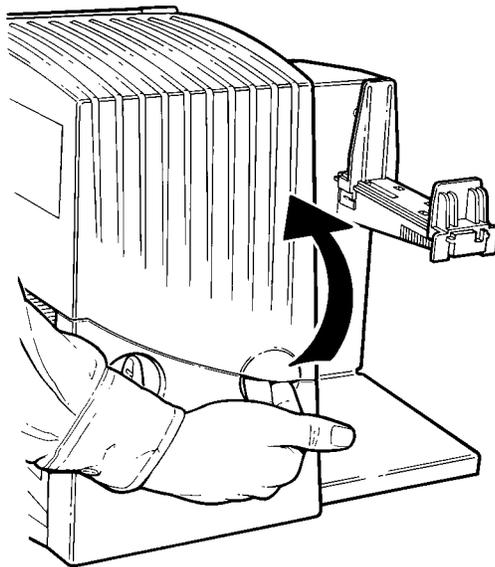
If the printer will be unused for extended periods of time, leave the printhead unlatched.

Loading Labels – 612

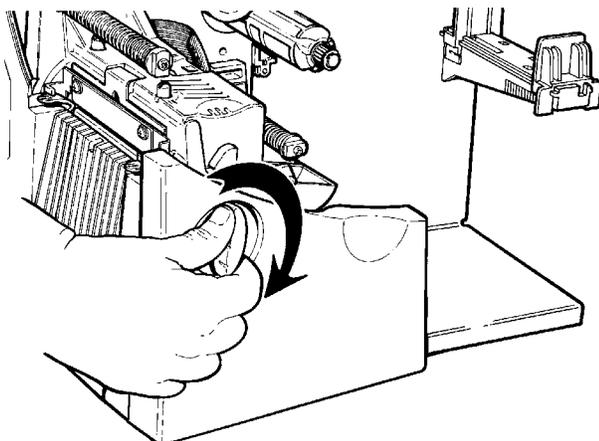
Make sure the printer is configured for the correct supply type.

To load a roll of labels:

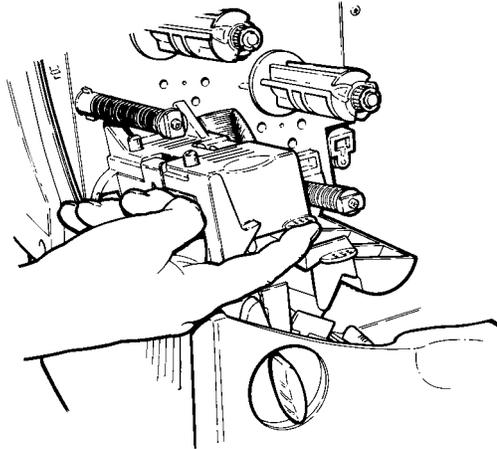
1. Open the cover.



2. Unlock the printhead by turning the retaining latch.



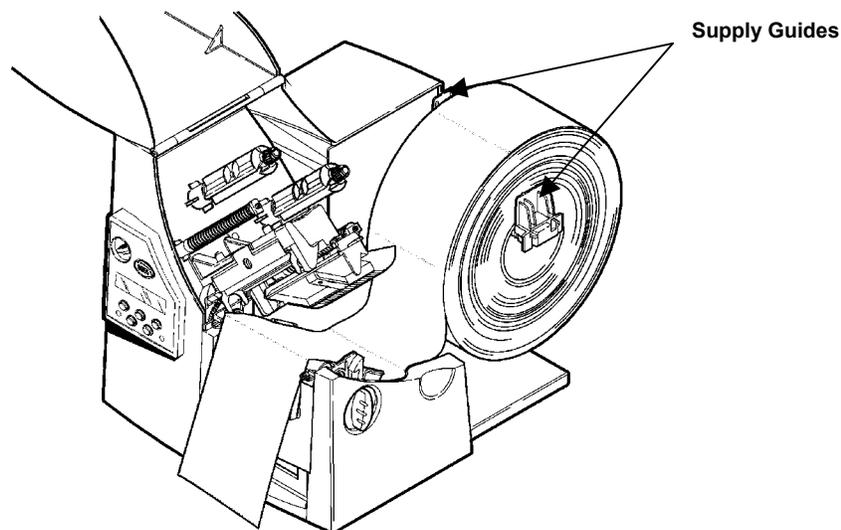
3. Lift printhead assembly using the printhead tab until the assembly locks into place.



CAUTION

Make sure you use only approved Paxar supplies. See Appendix A, "Specifications and Accessories" for a list of Paxar supplies or contact your Paxar Representative for more information.

4. Place the roll of supply on the supply holder. Make sure the supply unrolls from the top as shown.

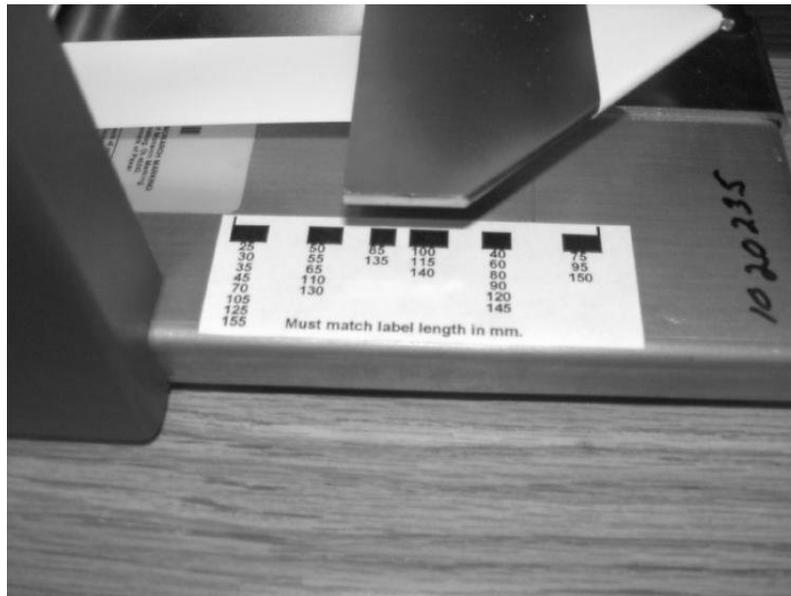


**Do not pick up the printer
by the supply holder.**

5. Adjust the supply holder guides so the sides barely touch the roll. Make sure the supply roll turns freely.

IMPORTANT

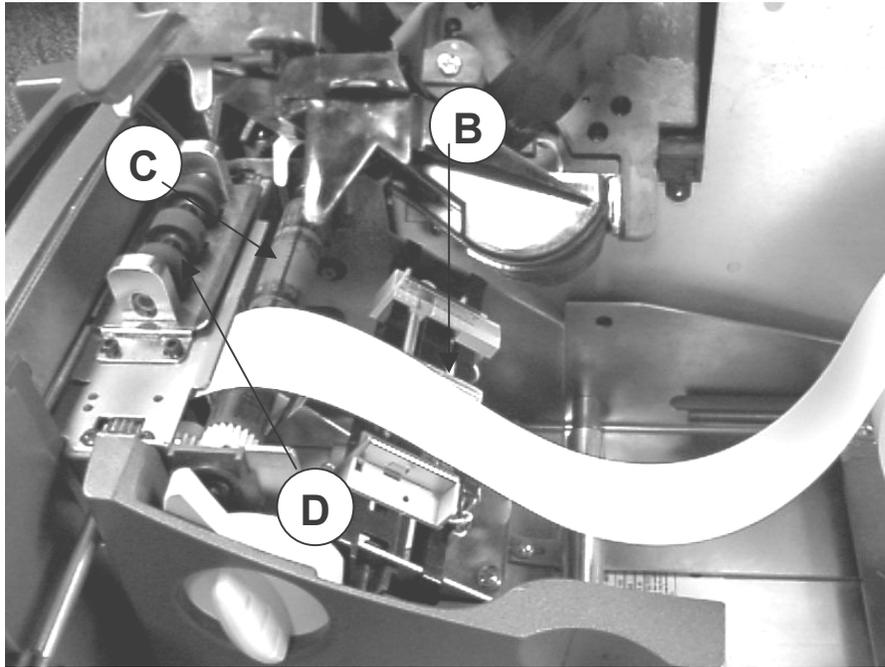
- Before threading the printer, you must set the label length adjustment. Turn the Label Length Adjustment Knob (A) so that the pointer on the turn bar is lined up with the black bar on the Label Length Gauge that corresponds to the length of the label to be printed. This is an approximate adjustment. The procedure for performing an exact alignment is described in section "**Printer Alignment – Top and Bottom Copy – 612**".



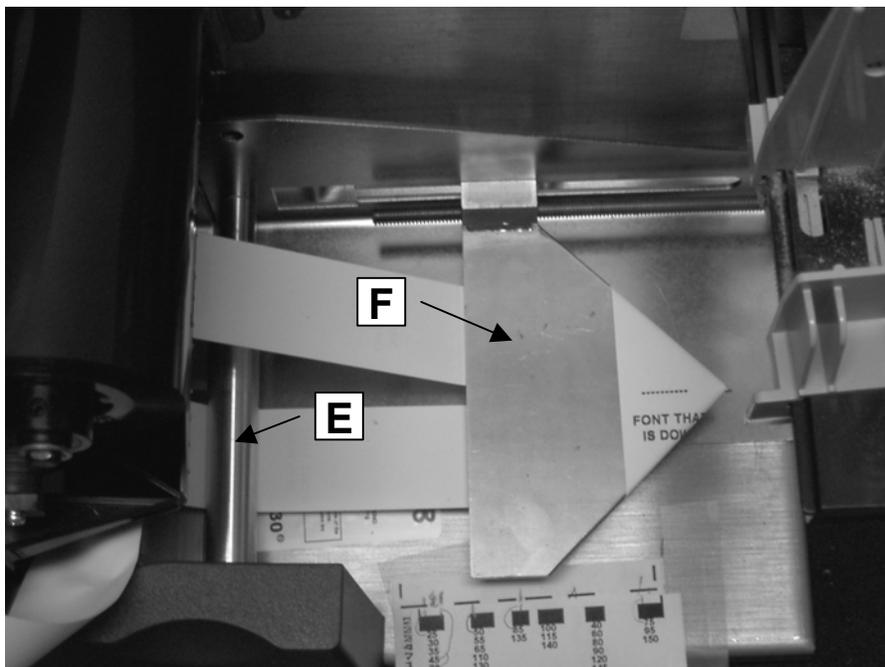
Label Length Adjustment Gauge

(Shown with approximate adjustment for 50, 55, 65, 110 and 130 mm labels)

7. Lay the label strip across the supply guide (B). It is not necessary at this point to put the label strip in the guide. Lay the label strip across the platen roller (C) and thread the end of the strip into the gap between the platen roller and the auxiliary feed (D).



8. Reach under the platen roller and pull the label strip back towards the turn bar (F). Thread the label strip under the guide roller (E) and around the turn bar (F) as shown below.



9. Bring the label strip over the guide roller and across the platen roller to the left of the strip that is already around the roller. Place the end of the strip into the auxiliary feed and feed it through using the advance knob (G). Press the advance knob toward the printer to engage the advance shaft. Turn the knob counter-clockwise to feed the label strip. Continue feeding the label strip until it appears coming out of the cutter.

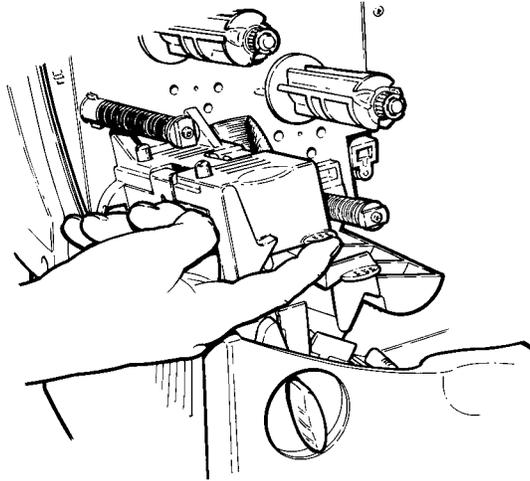


10. Insert the label strip into both sides of the supply guide. Adjust the supply guide by moving the right guide in or out, depending on the stock width. The label strip should be in the guide slots on the inner edges of the strip and under the sensor at the back right of the guide. Adjust the supply guide so that it just matches the width of the inner strip. The outer strip will be slightly loose.
 11. Push the black deflector tab down. Release the printhead latch, but do not lock the printhead assembly down. Gently roll the supply roll back to tighten the label strip. Continue until the label strip is snug around the turn bar. Lock the printhead down.
- Note:** If the printer is not used for an extended period, the label stock may take a “set” where it goes around the turnbar. After a period of not printing, it is recommended that you feed the material through the printer until the “set” material has gone through the knife. This will reduce the possibility of jamming.

Loading Ribbon

To load ribbon:

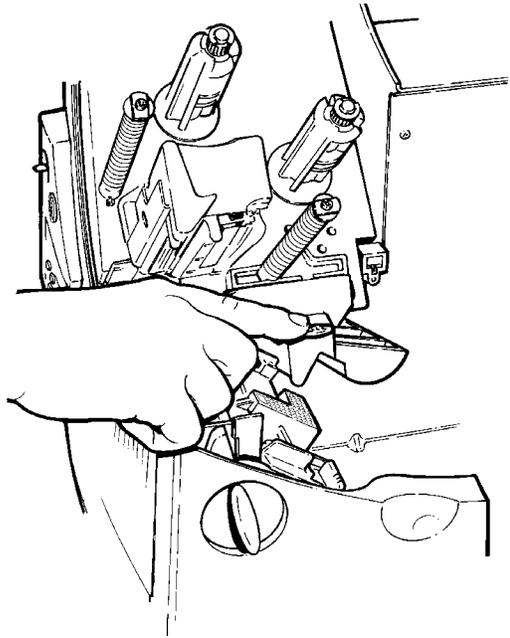
1. Open the cover.
2. Unlock the printhead by turning the retaining latch.
3. Lift printhead assembly using the printhead tab until the assembly locks into place.



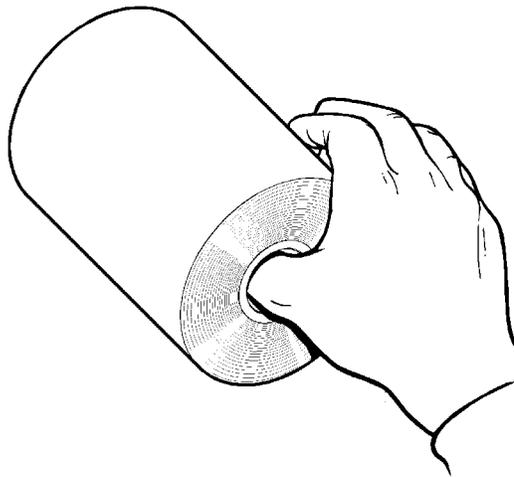
CAUTION

Make sure you use only approved Paxar supplies. See Appendix A, "Specifications and Accessories" for a list of Paxar supplies or contact your Paxar Representative for more information.

4. Push the deflector tab down.



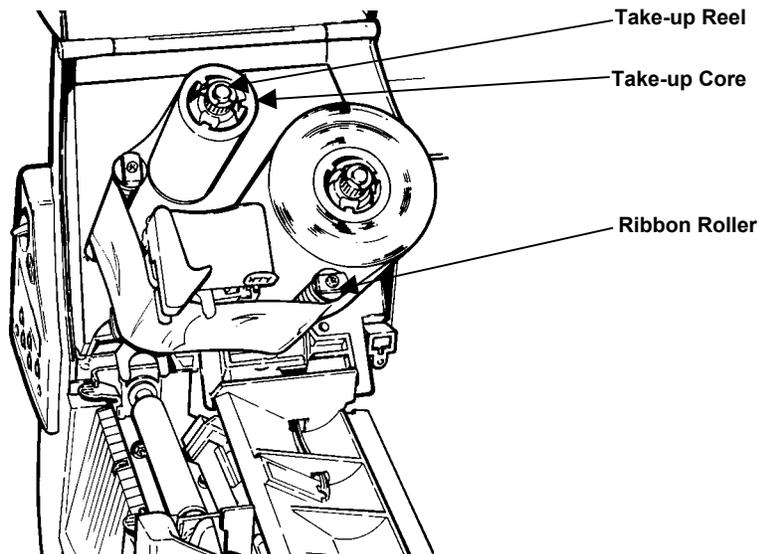
5. Slide the extra ribbon core on the take-up reel as far as it will go with the writing on the end of the core facing out. Use your empty ribbon core as the take-up core. The take-up core only fits on the take-up reel one way.
6. Remove the new ribbon from the package as shown. Do not wrinkle or crush the new ribbon.



CAUTION

Since some supplies are more abrasive to printheads than others, using a ribbon wider than your supply helps protect the printhead. Failure to do this may void your printhead warranty.

7. Slide the ribbon onto the back reel as far as it will go with the writing on the end of the core facing out. The ribbon roll only fits on the reel one way. Carefully unwind a few inches of ribbon from the bottom of the roll.
8. Carefully feed the ribbon under both ribbon rollers and printhead as shown.
9. Tape the ribbon to the take-up core. **Do not tape the ribbon to the take-up reel.**

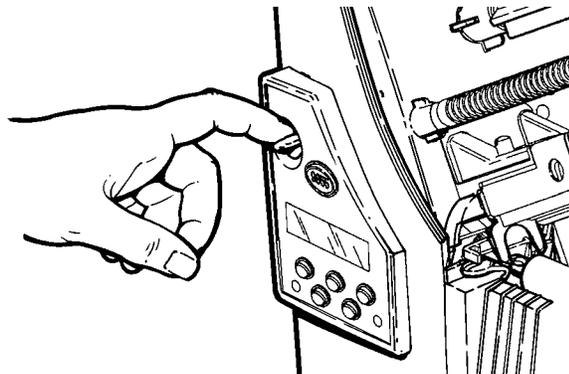


10. Align the ribbon with the printhead and supply.

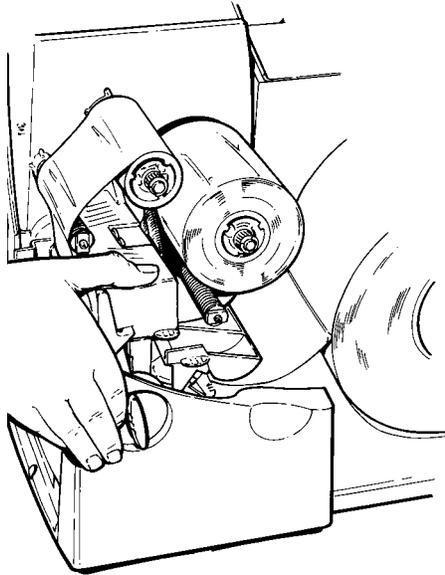
CAUTION

Make sure the ribbon is straight and centered throughout the path.

11. Rotate the take-up core until the leader is past the printhead.
12. Remove any slack in the ribbon by turning the take-up reel clockwise.
13. Hold the printhead assembly by the printhead tab while pressing down on the printhead release.



14. Close the printhead by pressing down on the thumb well until you hear it click into place. Close the cover.



Adjusting the Wide / Narrow Knobs

You may need to adjust the two wide / narrow knobs according to the width of your supply. For supply that is more than two inches, adjust the knobs to the wide setting. For supply that is two inches or less, adjust the knobs to the narrow setting.

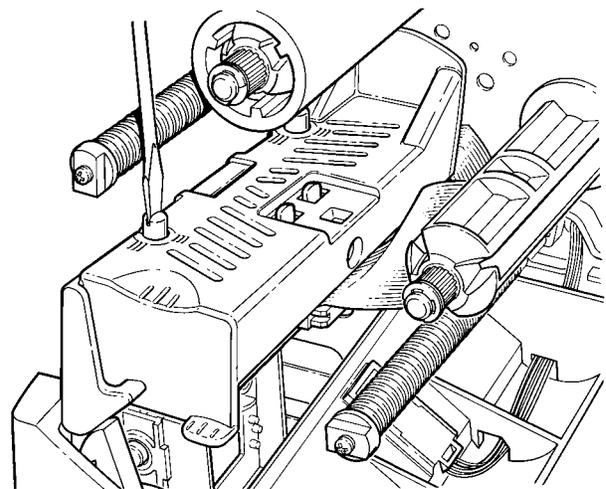
You must adjust both of the knobs to the same position.

If you experience ribbon smudging in cold, dry environments, adjust the wide / narrow knobs to the wide setting.

For wide supplies, push down and turn the wide / narrow knobs clockwise with a screwdriver.

For narrow supplies, turn the wide / narrow knobs counter-clockwise with a screwdriver until it pops back up.

The adjustment is shown in the wide position.



3. Setting Supply Options

This chapter explains how to select the supply type, ribbon, speed, feed mode, backfeed, print position, supply position, margin position, cut position, dispense position, backfeed distance, separators, and skip index mode.

You may need to set supply options when you change supplies. The options are listed in the table below.

Option	Choices	Default
Supply Type	Aperture / Die Cut / Black Mark / Continuous	Black Mark
Ribbon	No / Yes / High Energy	High Energy
Speed	2.5 / 4.0 / 6.0 / 8.0 / 10.0 / Default	4.0 IPS
Feed Mode	Continuous / On-Demand	Continuous
Backfeed	Off / On / Extended	Off
Print Position	-99 to +99	0
Supply Position	-300 to +300	0
Margin Position	-99 to +99	0
Cut Position	-300 to +300	0
Dispense Position	50 to 200	65
Backfeed Distance	10 to 200	65
Separators	No / Yes / Long	No
Skip Index	No/ Yes	No
Contrast	-699 to 699	225
Verifier, State	Disabled / Enabled	Disabled

To exit an option without changing the setting, press **Escape / Clear**.

Supply Type

You can print on aperture, black mark, die cut, or continuous supplies. You have to tell the printer which supplies you are using.

If you are using edge aperture supplies, use the die cut setting. If you are using center aperture supplies, use the aperture setting.

To change the setting, from the Main Menu, select Setup, then Supply. Then, follow these steps.

1. Press **←** or **→** until you see



2. Press **Enter / Pause** to set the supply type option. You will see the current setting, for example:

SUPPLY TYPE		
←	Black Mark	→

3. Press **←** or **→** to see the other options. After you display the option you want, press **Enter / Pause**. Press **Escape / Clear** twice to exit to the Main Menu.

Note: Select "Continuous" only for the 612 printer. The 612 printer does not support indexed supplies.

Ribbon

You have to tell the printer if your supplies require a ribbon.

To change the setting, from the Main Menu, select Setup, then Supply. Then, follow these steps.

1. Press **←** or **→** until you see

SUPPLY		
←	Ribbon	→

2. Press **Enter / Pause** to set the ribbon option. You will see the current setting, for example:

SUPPLY		
←	Yes	→

3. Press **←** or **→** to see the other options. After you display the option you want, press **Enter / Pause**. Press **Escape / Clear** twice to exit to the Main Menu.

If you set the Ribbon option to Yes, install a ribbon before printing.
If you want to use a high energy ribbon, select high energy for the ribbon
every time the printer is turned on.

Speed

You can change the print speed for bar codes or graphics. If you select "default" for speed, formats with serial bar codes automatically print at 2.5IPS and formats with parallel bar codes print at 6.0 ips. 10 ips printing is only available using thermal direct labels in continuous mode.

To change the setting, from the Main Menu, select Setup, then Supply. Then, follow these steps.

1. Press **←** or **→** until you see

SUPPLY		
←	Speed	→

2. Press **Enter / Pause** to set the speed option. You will see the current setting, for example:

```
SPEED
←  Default
```

3. Press **←** or **→** to see the other options. After you display the option you want, press **Enter / Pause**. Press **Escape / Clear** twice to exit to the Main Menu.

Feed Mode

You can use continuous or on-demand printing. On-demand printing allows you to remove a label before printing the next one.

To change the setting, from the Main Menu, select Setup, then Supply. Then, follow these steps.

1. Press **←** or **→** until you see

```
SUPPLY
←  Feed Mode  →
```

2. Press **Enter / Pause** to set the feed mode. You will see the current setting, for example:

```
FEED MODE
  Continuous  →
```

3. Press **←** or **→** to see the other option. After you display the option you want, press **Enter / Pause**. Press **Escape / Clear** twice to exit to the Main Menu.

Backfeed

Backfeed works by advancing each printed label to the desired dispense position. Once that label is removed, the next label to be printed is backed up underneath the printhead. In continuous mode, only the last label in the batch is advanced to the dispense position.

To change the setting, from the Main Menu, select Setup, then Supply. Then, follow these steps.

1. Press **←** or **→** until you see

```
SUPPLY
←  Backfeed  →
```

2. Press **Enter / Pause** to set the backfeed option. You will see the current setting, for example:

```
BACKFEED
←  On  →
```

3. Press **←** or **→** to see the other options. After you display the option you want, press **Enter / Pause**. Press **Escape / Clear** twice to exit to the Main Menu.

Positioning

This menu includes selections to change the print, supply, margin, cut, and dispense position along with the backfeed distance.

When you see

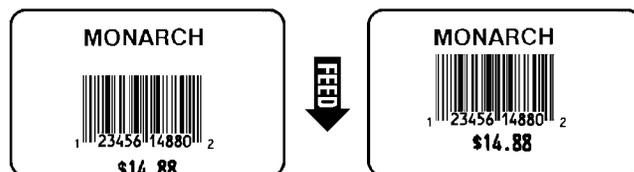
Enter print pos
[-99/99]: +0

Feed / Cut acts as a toggle switch to change the value by 10 or 1. For example, to make the print position 23 (from the default of 0), press **Feed / Cut**, then press **→** twice (20), press **Feed / Cut** again and press **→** three times (23).

Print Position

This function adjusts where data prints vertically on the supply. Adjust the print if it is too close to the top or bottom of the supply, or overtypes the pre-printed area. One dot is 0.0049 inch.

- ◆ If the data is too close to the bottom, increase the number.
- ◆ If the data is too close to the top, decrease the number.



Changing this setting only affects new formats sent to the printer.

To change the setting, from the Main Menu, select Setup, then Supply, then Positioning. Then, follow these steps.

1. Press **←** or **→** until you see

Positioning
← Print Pos →

2. Press **Enter / Pause**. You will see the current setting, for example:

Enter print pos
[-99/99]: +0

3. Press **←** or **→** to change the print position. Pressing **←** decreases the value (moves the image down); **→** increases it (moves the image up).
4. Press **Enter / Pause** when the number you need appears. Press **Escape / Clear** twice to exit to the Main Menu.

Supply Position

This function adjusts the machine to print at the vertical 0,0 point on the supply.

The supply position adjustment should only be made on initial printer setup. For format adjustments, change the print position.

You may need to adjust the supply in or out to allow

- ◆ tags and labels to be removed.
- ◆ die cut labels to be removed easily.

The adjustments are in dots (0.0049 inch).

- ◆ Increase the number to feed more supply out of the chute.
- ◆ Decrease the number to feed less supply out of the chute.

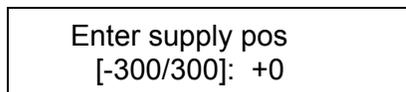
This option takes effect on the next label or tag printed. Changing supply position may also affect print position.

To change the setting, from the Main Menu, select Setup, then Supply, then Positioning. Then, follow these steps.

1. Press **←** or **→** until you see



2. Press **Enter / Pause**. You will see the current setting, for example:



3. Press **←** or **→** to change the supply position. Pressing **←** decreases the value (feeds less supply); **→** increases it (feeds more supply).
4. Press **Enter / Pause** when the number you need appears. Press **Escape / Clear** twice to exit to the Main Menu.

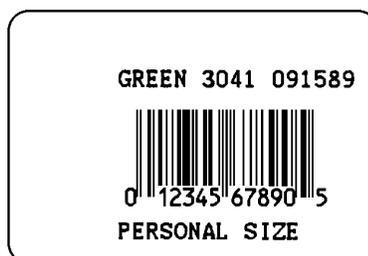
Margin Position

This function adjusts where the format prints horizontally on the supply. The adjustments are in dots (0.0033 inch), which is the smallest measurement the printer recognizes.

The width of the print area depends on your supply size. Maximum width is four inches. When you move the image to the right or left on the supply, avoid moving the image too close to either edge, because it may not print.



Print too far to the left.



Print too far to the right.

- ◆ If the data is too close to the left side, increase the number.
- ◆ If the data is too close to the right side, decrease the number.

Changing this setting only affects new formats sent to the printer.

To change the setting, from the Main Menu, select Setup, then Supply, then Positioning. Then, follow these steps.

1. Press **←** or **→** until you see

```

Positioning
←  Margin Pos  →
```

2. Press **Enter / Pause**. You will see the current setting, for example:

```

Enter margin pos
[-99/99]: +0
```

3. Press **←** or **→** to change the margin position. Pressing **←** decreases the value (moves the image toward the left side of the supply); **→** increases it (moves the image toward the right side of the supply).
4. Press **Enter / Pause** when the number you need appears. Press **Escape / Clear** twice to exit to the Main Menu.

Cut Position

This function adjusts where the tag is cut. The printer adjusts the cut position according to the black marks on the supply. You may need to adjust for aperture supplies. Increase to move the cut up; decrease to move the cut down.

To change the setting, from the Main Menu, select Setup, then Supply, then Positioning. Then, follow these steps.

1. Press **←** or **→** until you see

```

Positioning
←  Cut Pos  →
```

2. Press **Enter / Pause**. You will see the current setting, for example:

```

Enter knife adj
[-300/300]: +0
```

3. Press **←** or **→** to change the cut position. Pressing **←** decreases the value (moves the cut down); **→** increases it (moves the cut up).
4. Press **Enter / Pause** when the number you need appears. Press **Escape / Clear** to exit to the Setup Menu.

Dispense Position

This function adjusts the stopping point of the label.

To change the setting, from the Main Menu, select Setup, Supply, then Positioning. Follow these steps.

1. Press **←** or **→** until you see

```
POSITIONING
←  Dispense Pos  →
```

2. Press Enter/Pause.

```
DISPENSE POS
[50/200]: +65
```

3. Press **←** or **→** to change the dispense position. Pressing **←** decreases the value; **→** increases it.
4. Press **Enter / Pause** when the number you need appears. Press **Escape / Clear** until you see the Main Menu.

Backfeed Distance

This is the amount to move the label backwards. The backfeed distance can not be greater than the dispense position. If you make the backfeed distance greater than the dispense position, the dispense position automatically changes to match the backfeed distance.

The backfeed distance should equal the dispense position. An exception is when you are tearing labels, instead of peeling. Then, the backfeed distance must be 30 dots (0.15 inches) less than the dispense position to account for improper tearing of butt cut supplies. You will have a 30-dot non-print zone on your supply, but this prevents exposed adhesive under the printhead.

To change the setting, from the Main Menu, select Setup, Supply, then Positioning. Follow these steps.

1. Press **←** or **→** until you see

```
POSITIONING
←  Backfeed Dis
```

2. Press Enter/Pause.

```
BACKFEED DIS
[10/200]: +65
```

3. Press **←** or **→** to change the dispense position. Pressing **←** decreases the value; **→** increases it.
4. Press **Enter / Pause** when the number you need appears. Press **Escape / Clear** until you see the Main Menu.

Batch Separators

The 610 / 611 / 612 printers do not support Batch Separators. Paxar strongly recommends leaving the Batch Separator selection to “NO”.

Skip Index

You can use the skip index mode to skip (or ignore) a sense mark and print an image over multiple labels, if necessary. For example, if you have 4.0" long supplies loaded, but your image is 8.0" long, enable skip index mode to print the 8.0" long image on two labels. The image length is determined by the format header. See your System Administrator or the optional *Packet Reference Manual* for more information. The skip index feature is useful when you have a **single** format that contains two labels, such as a shelf label and a carton label.

When designing the format, make sure text or graphics do not print in the gap of label rolls.

To change the setting, from the Main menu, select Setup, then Supply.

1. Press **←** or **→** until you see

```
SUPPLY
←  Skip Index
```

2. Press **Enter/Pause** to set the skip index mode. You will see the current setting, for example:

```
SKIP INDEX
No    →
```

3. Press **←** or **→** to see the other options. After you display the option you want, press **Enter / Pause**. Press **Escape / Clear** until you see the Main Menu.

Verifier

The 610 / 611 / 612 printers do not support the use of a verifier. Leave the verifier setting at “Disabled”.

Setting Contrast

The print contrast controls the darkness of the printing on your supply. The range is **-699** to **+699** and the default is **225**. You may need to increase the print contrast for linerless supplies. Having the correct print contrast setting is important because it affects how well your bar codes scan and how long your printhead lasts. You can use a verifier to check the bar code print quality.

High contrast settings may

- ◆ require additional printhead cleaning.
- ◆ create bar code growth, leading to reduced scanning.

1. From the Main Menu, press **←** or **→** until you see

```
MAIN MENU
←  Setup  →
```

2. Press **Enter / Pause**. You will be at the Setup menu. Press **←** or **→** until you see

```
SETUP
←  Contrast  →
```

3. Press **Enter / Pause**. You will see the current setting, for example:

```
Enter contrast
[-699/699]: +225
```

3. Press **←** or **→** to change the contrast. Pressing **→** darkens the print; **←** lightens the print.
4. Press **Enter / Pause** to select the displayed value. Press **Escape / Clear** to exit to the Main Menu.

Contrast Knob Adjustment

The physical contrast knob that was located on the back of the printer has been replaced with a virtual contrast adjustment. This adjustment is controlled by software (virtual), not hardware, by sending an immediate command.

NOTE: Your printer already has the maximum value set as the default. If you want to lower the contrast, you can make this software adjustment. This adjustment should be made your System Administrator or another advanced user.

Your printer must be connected to the host and ready to receive data.

1. Enable the immediate command character, by sending this packet to the printer before you send any commands:

```
{I,E,"~123~044~034~124~125~126~094" | }
```

Enables the caret (~094) as the immediate command control character.

2. Use the table below to find your desired contrast setting from -125 to 125. Each count of this contrast adjustment is equal to four counts of the contrast value set offline or via MPCL packets.

Setting	Value								
A	5	F	30	K	55	P	80	U	105
B	10	G	35	L	60	Q	85	V	110
C	15	H	40	M	65	R	90	W	115
D	20	I	45	N	70	S	95	X	120
E	25	J	50	O	75	T	100	Y	125

3. Send an immediate command with your desired virtual contrast setting. Various examples are shown below:

^CPE Sets the virtual contrast to +25

^CPe Sets the virtual contrast to -25

^CP? Returns the current value of the virtual contrast

^CP0 Sets the virtual contrast to zero

NOTE: Lower case letters are used to set the contrast to a negative value.

4. Communication Values

This chapter tells you how to set the serial or parallel communication values. These values provide the link for normal online printing.

You need to set your Serial Comm values to match your computer's online communications. Before entering the communication values, see your System Administrator.

The serial communication values are listed in the table below.

Option	Choices	Default
Baud rate	1200 / 2400 / 4800 / 9600 / 19200 / 38400 / 57600 / 115200	9600
Word length	7 / 8	8
Stop bits	1 / 2	1
Parity	None / Odd / Even	None
Flow control	None / XON - XOFF / DTR - CTS	DTR
Reset	No / Yes	No

Baud Rate

To change the setting, from the Main Menu select Setup, Port Settings, then Serial Comm. Then, follow these steps:

1. Press **←** or **→** until you see

```
SERIAL COMM
Baud Rate    →
```

2. Press **Enter / Pause**. You will see the current setting, for example:

```
BAUD RATE
←  9600  →
```

3. Press **←** or **→** to display the baud rate you need, then press **Enter / Pause**. Press **Escape / Clear** three times to exit to the Main Menu.

Word Length

To change the setting, from the Main Menu select Setup, Port Settings, then Serial Comm. Then, follow these steps:

1. Press **←** or **→** until you see

```
SERIAL COMM
←  Word Length  →
```

2. Press **Enter / Pause**. You will see the current setting, for example:

```
WORD LENGTH
←  8
```

3. Press **←** or **→** to display the word length you need, then press **Enter / Pause**. Press **Escape / Clear** three times to exit to the Main Menu.

Stop Bits

To change the setting, from the Main Menu select Setup, Port Settings, then Serial Comm. Then, follow these steps:

1. Press **←** or **→** until you see

```
SERIAL COMM
←  Stopbits    →
```

2. Press **Enter / Pause**. You will see the current setting, for example:

```
STOPBITS
  1    →
```

3. Press **←** or **→** to display the number of stop bits you need, then press **Enter / Pause**. Press **Escape / Clear** three times to exit to the Main Menu.

Parity

To change the setting, from the Main Menu select Setup, Port Settings, then Serial Comm. Then, follow these steps:

1. Press **←** or **→** until you see

```
SERIAL COMM
←  Parity     →
```

2. Press **Enter / Pause**. You will see the current setting, for example:

```
PARITY
None  →
```

3. Press **←** or **→** to display the parity you need, then press **Enter / Pause**. Press **Escape / Clear** three times to exit to the Main Menu.

Flow Control

To change the setting, from the Main Menu select Setup, Port Settings, then Serial Comm. Then, follow these steps:

1. Press **←** or **→** until you see

```
SERIAL COMM
←  Flow Control  →
```

2. Press **Enter / Pause**. You will see the current setting, for example:

```
FLOW CONTROL
←  DTR  →
```

3. Press **←** or **→** to display the flow control you need, then press **Enter / Pause**. Press **Escape / Clear** three times to exit to the Main Menu.

XON is 17; XOFF is 19. Set flow control to DTR for PC computers (unless you have XON / XOFF software).

Reset to Default Values

To change the setting, from the Main Menu select Setup, Port Settings, then Serial Comm. Then, follow these steps:

1. Press **→** until you see

```
SERIAL COMM
←  Reset
```

2. Press **Enter / Pause**. You will see

```
Are you sure?
No →
```

3. Press **←** or **→** to make your selection, then press **Enter / Pause**. Press **Escape / Clear** three times to exit to the Main Menu.

The following defaults are restored: 9600 baud, No parity, 8 bit word length, and 1 stop bit.

Parallel Communications

The parallel communications menu allows you to set the active parallel port to either internal or external. The internal port is used for printer options installed inside the printer, such as the Ethernet communication port. Use the external selection when connecting a printer cable or external device directly to the parallel port.

The mode selection allows the user to select either compatible or IEEE-1284 mode when using the selected parallel port. Usually, the mode should be set to compatible for computer connection using a parallel cable and to IEEE-1284 when using an Ethernet port option.

The parallel communication values are listed in the table below.

Option	Choices	Default
Port	External / Internal	External
Mode	Compatible / IEEE-1284	Compatible (Centronics mode)

Port

To change the setting, from the Main Menu select Setup, Port Settings, then Parallel Comm. Then, follow these steps.

1. Press **←** or **→** until you see

```
PARALLEL COMM
Port →
```

2. Press **Enter / Pause**.

```
PORT
External →
```

3. Use **←** or **→** to select either "External" or "Internal." Press **Enter/Pause**. The internal port is used for printer options installed inside the printer, such as the Ethernet communication port. The external port is used to connect a printer cable or external device directly to the parallel port.
4. Press **Escape / Clear** until you see the Main Menu.

Mode

To change the setting, from the Main Menu select Setup, Port Settings, then Parallel Comm. Then, follow these steps.

1. Press **←** or **→** until you see

```
PARALLEL COMM
← Mode
```

2. Press **Enter/Pause**.

```
MODE
Compatible →
```

3. Use **←** or **→** to select either "Compatible" or "IEEE1284." Press **Enter / Pause**. Use compatible mode for a computer connection to the printer with a parallel cable. Use IEEE-1284 for bi-directional Ethernet communications.
4. Press **Escape / Clear** until you see the Main Menu.

5. Setting Defaults

This chapter explains how to select the monetary sign, secondary sign, decimal places, slashed zero, power-up mode, and prompt set.

You can set your printer configurations to fit your daily operation, using either the offline menus or the online configuration option. After an option is selected in the online configuration or offline Setup Menu, the option is saved when the printer is turned off.

The monetary formatting options are listed in the table below.

Option	Choices	Default
Monetary sign	None / USA / UK / Japan / Germany / France / Spain / Italy / Sweden / Finland / Austria / India / Russia / Korea / Thailand / China / Euro-Dollar	USA
Secondary Sign	No / Yes	No
Decimal Places	0 / 1 / 2 / 3	2
Slashed Zero	No / Yes	No
Power-up Mode	Online / Offline	Online
Prompt Set	English / French / German / Spanish	English
Flash Storage	Disabled / Enabled	Disabled

The monetary sign, secondary sign, and decimal places options are used in conjunction with option **42**. Refer to the optional *Packet Reference Manual* for more information.

The settings for Monetary Sign, Secondary Sign, Slashed Zero, and Decimal Places are applied when a format is downloaded. Changing the settings does not affect batches already in the printer.

Monetary Sign

You can also select None if you do not want a monetary sign to print in price fields. The monetary signs available for 15 countries are shown in the table below.

Country	Currency	Description
USA	\$	Dollar
UK	£	Pound
Japan	¥	Yen
Germany	DM	Deutsche mark
France	F	Franc
Spain	P	Peseta
Italy	L.	Lira
Sweden	Kr.	Krona
Finland	FM	Markka
Austria	S	Schilling
India	Rs	Rupee
Russia	R	Ruble
Korea	₩	Won
Thailand	฿	Baht
China	¥	Yuan
Euro-Dollar	€	Euro-dollar

To change the setting, from the Main Menu, select Setup, then Defaults. Then, follow these steps. To exit an option without changing the setting, press **Escape / Clear**.

1. Press **←** or **→** until you see

```
DEFAULTS
← Monetary Signs →
```

2. Press **Enter / Pause**. You will see the current setting, for example:

```
MONETARY SIGN
← USA →
```

3. Press **←** or **→** until you see the country's monetary sign you want.
4. Press **Enter / Pause**. Press **Escape / Clear** twice to exit to the Main Menu.

Secondary Sign

If you select USA as the monetary sign, you can print amounts less than \$1.00 either by using a dollar sign and decimal (\$0.30) or by using a cent sign (30¢).

- ◆ If you set the secondary sign option to No, prices under \$1.00 will print like this: \$.45
- ◆ If you set the secondary sign option to Yes, prices under \$1.00 will print like this: 45¢

The same option applies to the appropriate secondary sign for monetary signs other than USA.

To change the setting, from the Main Menu, select Setup, then Defaults. Then, follow these steps.

1. Press **←** or **→** until you see

```
DEFAULTS
←  Secondary Sign  →
```

2. Press **Enter / Pause**. You will see the current setting, for example:

```
SECONDARY SIGN
No  →
```

3. Press **←** or **→** until you see the option you want. Then press **Enter / Pause**. Press **Escape / Clear** twice to exit to the Main Menu.

Decimal Places

You can set the printer for 0, 1, 2, or 3 places after the decimal in a price field. In U.S. currency, you might print prices like this: \$24.00 (2 decimal places) or like this: \$24 (0 decimal places).

1. Press **←** or **→** until you see

```
DEFAULTS
←  Decimal Places  →
```

2. Press **Enter / Pause**. You will see the current setting, for example:

```
DECIMAL PLACES
←  2  →
```

3. Press **←** or **→** until you see the option you want. Then press **Enter / Pause**. Press **Escape / Clear** twice to exit to the Main Menu.

Slashed Zero

The slashed zero feature lets you select how you want the zero character printed; either without a slash, 0 or, with a slash, Ø

Standard or reduced fonts print the slashed zero character (Ø). Bold and OCR fonts print the standard zero (0) only. The slashed zero selection will **not** be in effect until the format is sent to the printer again. If you change the way zero is printed, you must resend your formats.

To change the setting, from the Main Menu, select Setup, then Defaults. Then, follow these steps.

1. Press **←** or **→** until you see

```
DEFAULTS
←  Slashed Zero  →
```

2. Press **Enter / Pause**. You will see the current setting, for example:

```
SLASHED ZERO
No  →
```

3. Press **←** or **→** until you see the option you want. Then press **Enter / Pause**. Press **Escape / Clear** twice to exit to the Main Menu.

Power-Up Mode

Power-up mode lets you decide how your printer starts each time you turn it on. If you want the printer to be ready to start printing when it is turned on, use the Online power-up mode. If you want the operator to perform some other task first, use the Offline power-up mode.

To change the setting, from the Main Menu, select Setup, then Defaults. Then, follow these steps.

1. Press **←** or **→** until you see

```
DEFAULTS
←  Powerup Mode  →
```

2. Press **Enter / Pause**. You will see the current setting, for example:

```
MONETARY SIGN
←  USA  →
```

3. Press **←** or **→** until you see the option you want. Then, press **Enter / Pause**.
4. Press **Escape / Clear** twice to exit to the Main Menu.

Prompt Set

Prompt set determines which language displays on the printer's menu. You can select English, French, German, Spanish-ES, Japanese, Portuguese, Italian, Swedish, Spanish 2-MX, Danish, Dutch, Finnish, and Norwegian. Some prompts may remain in English, even if you select a different language.

To change the setting, from the Main Menu, select Setup, then Defaults. Then, follow these steps.

1. Press **←** or **→** until you see

```
DEFAULTS
← Prompt Set
```

2. Press **Enter / Pause**. You will see the current setting, for example:

```
PROMPT SET
English →
```

3. Press **←** or **→** until you see the option you want. Then press **Enter / Pause**.
4. Press **Escape / Clear** twice to exit to the Main Menu.

This option only affects the displayed prompts. It does not change what
is printed by the printer.

Flash Storage

Flash storage allows packets (with "R" or "N" selectors) to be stored in flash memory, instead of volatile RAM. Packets stored in flash memory are saved when the printer is turned off. However, flash memory storage is limited.

You must format flash memory before enabling this option. Formatting
flash memory is only required once during initial printer setup.

To change the setting, from the Main Menu, select Setup, then Defaults. Then, follow these steps.

1. Press **←** or **→** until you see

```
DEFAULTS
← Flash Storage
```

2. Press **Enter/Pause**. The current setting is displayed, for example:

```
FLASH STORAGE
Disabled →
```

3. Press **←** or **→** until you see the option you want. Then press **Enter/Pause**.
4. Press **Escape/Clear** until you see the Main Menu.

Using Flash Memory

The flash memory options are listed in the table below.

Option	Choices	Default
Format Flash	No / Yes	No
Unused Flash	NA	NA
Pack Flash	No / Yes	No

Formatting Flash Memory

Before storing packets in flash memory, downloading a script, or if the printer's firmware is updated, you must format the flash memory. **Formatting flash memory is only required once during initial printer setup.**

When you format flash memory, the script and any downloaded TrueType® fonts saved in the printer's flash memory are deleted and must be resent to the printer.

To format flash memory, from the Main Menu, select Setup. Then, follow these steps.

1. Press **←** or **→** until you see

```
  SETUP
←  Flash Memory  →
```

2. Press **Enter/Pause**.

```
FLASH MEMORY
  Format Flash  →
```

3. Press **Enter/Pause**.

```
Are you sure?
  No    →
```

4. Press **→** to display "Yes" and press **Enter/Pause**.

```
CREATING FLASH
FILE SYSTEM 1
```

The printer's flash memory is cleared and reformatted. *This process may take several minutes.* The printer reboots automatically after formatting flash memory. You need to resend any fonts you want to use to flash memory again. You return to "Print Mode Ready."

Checking Available Flash Memory

If you receive errors when downloading a script or other packets, make sure you have enough flash memory available.

When you format flash memory, the script and any downloaded TrueType fonts saved in the printer's flash memory are deleted and must be resent to the printer.

To check available flash memory, from the Main Menu, select Setup. Then, follow these steps.

1. Press **←** or **→** until you see

```
SETUP
←  Flash Memory  →
```

2. Press **Enter / Pause**.
3. Press **←** or **→** until you see

```
FLASH MEMORY
←  Unused Flash  →
```

4. Press **Enter/Pause**. You see the number (in bytes) of available flash memory.

```
Unused Flash
←  1006216_
```

5. Press **Escape/Clear** until you see the Main Menu.

Packing Flash Memory

Packing flash memory permanently removes any deleted files from memory. Periodically select this option to "clean up" the printer's memory. Any deleted files are removed from memory when you pack flash.

To pack flash memory, from the Main Menu, select Setup. Then, follow these steps.

1. Press **←** or **→** until you see

```
SETUP
←  Flash Memory  →
```

2. Press **Enter/Pause**. Press **←** or **→** until you see

```
FLASH MEMORY
←  Pack Flash
```

3. Press **Enter/Pause**.

```
Are you sure?
No  →
```

4. Press **→** to display "Yes" and press **Enter/Pause**.
All the deleted files in flash memory are permanently erased.
5. Press **Escape/Clear** until you see the Main Menu.

Memory Guidelines

Use these basic guidelines when storing files in your printer's memory.

- ◆ Your printer may have volatile RAM (packets deleted when the printer is turned off), non-volatile RAM (packets saved when the printer is turned off), and flash memory (packets saved when the printer is turned off). Each printer has a different limit of available memory.
- ◆ Before you save any packets in flash memory, you must format flash memory first. See "Formatting Flash Memory" for more information.
- ◆ Formats, graphics, and check digits can be saved in flash (but they are also duplicated in RAM). Any packets saved in flash cannot exceed the memory available in RAM.
- ◆ Fonts are stored differently in flash. If you print TrueType or double-byte Asian fonts, purchase a printer with the extended memory option.
- ◆ There is not a 1-to-1 ratio between the memory in your printer and the memory in your PC. For example, a file that is 5K in Windows may require 15-20K to store in your printer.
- ◆ When using graphics, use the lowest-resolution graphic possible. If your printer uses a 203 dpi printhead, the graphic's resolution should be 150 to 200 dpi. In fact, 96 dpi may work. Try to create the smallest file size possible.
- ◆ Use temporary storage for graphics that are only used once or twice. However, if you have a logo that is used on multiple formats, save the graphic in flash. Once again, try to create the smallest file size possible for your graphic.
- ◆ Each line in a packet requires the same amount of memory. The smaller the format, the less memory required to save it.

Setting Batch Options

You can select Batch Options to change which prompts appear during Batch Entry mode and set default values for those prompts. Customizing which prompts appear during batch entry can reduce the time it takes to enter data for a format. If you set a new default value for an option, that value is used even if the prompt is not displayed. If you do not change a default value for an option, the system default is used if the prompt is not displayed.

Setting batch options requires the optional keypad, which must be purchased separately.

Refer to your keyboard's *Operating Instructions* for more information.

About Scripts

Using the Scripts menu requires custom software from Paxar. It allows you to print data streams written for other printers.

Ignore these menus if you do not use Scripts.

6. Printing

This chapter explains how to

- ◆ Use on-demand mode printing.
- ◆ Print an error label.
- ◆ Print, pause, restart, cancel, and repeat a batch.

You can send format, batch, and graphic data to the printer from a host. When the printer receives the data, batches begin printing automatically. The optional *Packet Reference Manual* tells how to create, store, and download the data necessary to print batches. You can also use the Monarch® MPCL™ Toolbox utilities to create and download packets.

Printing

Before you print, make sure the printer is connected and ready to receive data.

1. Turn on the printer. Your printer is ready to receive and print batches when you see

PRINT MODE Ready

2. Download a format and a batch. Refer to the optional *Packet Reference Manual* for information on downloading print jobs.
3. The printer prints a strip of labels.
4. Remove the printed labels.

If the printer will be unused for extended periods of time, we recommend leaving the printhead unlatched.

An optional keypad is also available to enter offline batch data. The keypad must be purchased separately. If there are offline batches in the print queue, the offline batches print after the downloaded batches have printed.

NOTE: Due to the way labels are printed by the 612 printer, the total label count will not be exactly the same as the batch size.

Printing an Error Label

If the printer displays a data error (errors 0-499), press **Feed** to print an error label and continue printing. See your System Administrator about the error label.

Do not print an error label on a 612 printer.

PAXAR	
MODEL: M9855	SW: Version 1.8
FORMAT NAME :	40200
BATCH NAME :	
PACKET TYPE :	F
FIELD TYPE :	C
LINE # :	8
ERROR # :	18

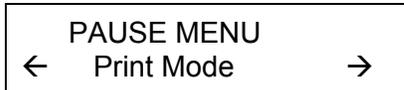
Pausing a Batch

You can pause printing by pressing **Enter / Pause**. You may want to interrupt a batch to make adjustments for:

Loading a different roll of supply or a ribbon. See Chapter 2, "Loading Supplies".

Adjusting the supply position or contrast using the Setup menu. See Chapter 3, "Setting Supply Options."

When you press **Enter / Pause** you will see



You can press **Enter / Pause** to resume printing or press ← or → to display the Pause Menu options.

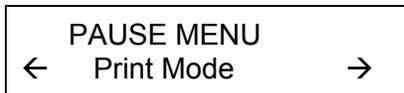
The following chart shows the Pause Menu options.



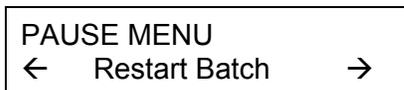
Restarting a Batch

You can reprint a paused batch from the beginning (using the original quantity).

1. When you press **Enter / Pause**, you will see



2. Press ← or → until you see



3. Press **Enter / Pause**. The batch starts printing from the beginning.

Canceling a Paused Batch

You can cancel a paused batch, delete a format, graphic, or font in memory, or all the batches waiting to print.

Before any format, graphic, or font in memory can be deleted, you must cancel all batches.

You can cancel a batch by pressing **Escape / Clear** while the batch is printing, or you can use the Pause Menu to cancel a batch.

1. Press **Enter / Pause** to interrupt printing. You will see

PAUSE MENU		
←	Print Mode	→

- ◆ If you want to cancel only the paused batch, skip step 3.
- ◆ If you want to cancel all the batches, skip step 2.

2. To cancel only the paused batch, press **←** or **→** until you see

PAUSE MENU		
	Cancel Batch	→

Then, press **Enter / Pause**. The batch is deleted and the printer prints any remaining batches.

3. To cancel all the batches (including the paused batch), press **←** or **→** until you see

PAUSE MENU		
←	Cancel All	→

and press **Enter / Pause**. You will see

Cancel Batches?		
No	→	

You can

- ◆ exit without canceling any batches. Press **Escape / Clear** or press **→** to display **No** and then press **Enter / Pause**. The printer returns to the Pause Menu. Press **←** or **→** to select another function from the Pause Menu, or to return to Print Mode and print all the batches.
- ◆ cancel all batches in the print queue. Press **→** to display **Yes**, then press **Enter / Pause**. You will see

Cancel Format?		
No	→	

4. Press **←** or **→** then press **Enter / Pause**.

If password protection is enabled, you will be prompted to enter a password before the formats, graphics, and fonts are deleted. Press **Feed / Cut** three times and then press **Enter / Pause**.

All formats are deleted. If you enter the wrong password, you return to the Main menu. For more information about password protection, see "Using Password Protection" in Chapter 8. If password protection is disabled, you will see

```
Cancel Graphic?
No   →
```

Press ← or → then press **Enter / Pause**. You will see

```
Cancel Font?
No   →
```

Press →, then press **Enter / Pause**. You return to the Pause Menu. If you select "Yes," these prompts delete ALL formats, graphics, and / or fonts in the printer.

5. Press ← or → to select another function from the Pause Menu, or to return to Print mode.

Repeating a Batch

Before you start printing a new batch, you can reprint the last batch. The batch can be either the last one you printed completely or one that you canceled after starting to print.

1. From the Main Menu, press ← or → until you see

```
MAIN MENU
←   Repeat Batch   →
```

2. Press **Enter / Pause**. You will see

```
Printing
xxxx of xxxx
```

The number increments until the entire batch has printed. When it is finished, you will see

```
PRINT MODE
Ready
```

NOTE: This feature will not operate properly on the 612 printer.

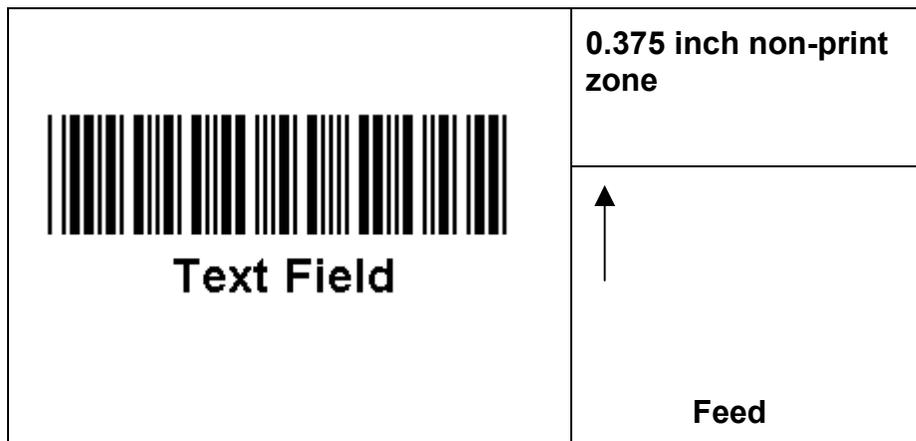
Printer Alignment - Top and Bottom Copy – 612

The 612 printer must be adjusted so that the copy on the top and bottom of the label lines up correctly. On the base of the unit near the supply roll is an adjustment guide (see the picture on page 20). On the guide are several black bars, each of which corresponds to a set of label lengths. The guide allows an approximate adjustment when the label material is loaded (see **Loading Labels – 612**). After the supplies are loaded, the printer must be adjusted to properly align the print on the top and bottom of the finished label.

1. Unlatch the printhead. Turn the Label Length Adjustment Knob until the pointer on the turn bar falls within the black bar corresponding to the length of the label to be printed.
2. With the printhead resting in the down position, but not latched, gently turn the supply roll back until the stock is snug around the turn bar. Latch the printhead.
3. Load a batch and print several test labels, until labels are printed with print on both the top and bottom. Note the alignment of the front and back copy. If the back copy is too far toward the top of the label, turn the Label Length Adjustment Knob counter-clockwise. If the back copy is too far toward the bottom of the label, turn the Label Length Adjustment Knob clockwise.
4. Run several more labels and check the alignment. Make further adjustments as necessary.

Non-Printing Zone

A non-print zone is required for text (light copy) and bar codes (heavy copy). Thin lines and most fonts require a 0.25-inch non-print zone at the leading edge of the label. Bar codes, bold fonts, and Care symbol fonts require a 0.375-inch non-print zone at the leading edge of the label. Without these non-print zones, the ribbon sticks to the supply and can cause jams.



PCMate Software has a built-in non-print zone; however, some third party software packages may not. You should verify the non-print zone or check defaults.

Regardless of the software package you are using to create / design formats, do not place logos or bar codes too close to the edge of your supply.

Preventing Jams

To prevent jams

- ◆ Design formats using the appropriate non-print zones.
- ◆ Do not leave the printhead closed (in the locked position) longer than 30 minutes without printing. Open (unlock) the printhead before a break period, at the end of each shift, and at the end of each day.

Printing Serial Bar Codes

Currently, the 610 / 611 / 612 printer does not support printing serial (ladder) bar codes.



Parallel (Picket Fence) Bar Code



Serial (Ladder) Bar Code

Adjusting the Cut Angle

To adjust the cut angle:

1. Loosen the thumbscrews.
2. Slightly rotate the knife to the left or to the right. The knife may appear to sit at a slight angle to the printer.
3. Tighten the thumbscrews.
4. Cut another batch of tags. If you are unable to adjust for a straight cut, call Technical Support.

Using the Knife

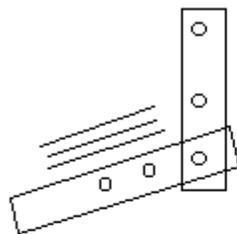
The installed knife is two and a half (2-1/2) inches away from the printhead. Pressing and holding **Feed / Cut** for two seconds marks the tag under the printhead to be cut when it reaches the knife. Depending on the length of your supply, you may lose up to two tags after the last batch.

The knife operates when the printer is running. If the printer is paused, the knife stops cutting.

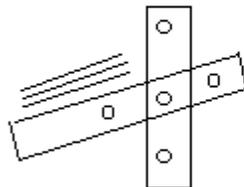
Adjusting the Drop Tray

Depending on the model purchased, your printer may have a drop tray stacker. Adjust the drop tray by removing the plastic pins and re-inserting them according to the diagram below. Select the setting based on the length of your label.

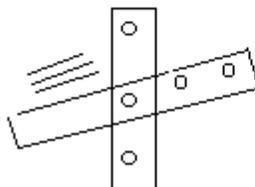
612 Stacker Positions



Long Labels
>100mm



Medium Labels
60 - 100mm



Short Labels
25 - 60 mm

Printing Care Symbol Fonts

Ginetex Font

The 610 / 611 / 612 printers can print the Ginetex care symbols in two sizes with Ginetex Font 70 and Font 71. The 300 DPI version of the 610 / 611 / 612 printers, using Font 70, can fit five (5) symbols in 22mm (0.88 inches). Please refer to the Paxar® *PcMate Plus Programming Manual* or the Monarch® *Packet Reference Manual* for details on programming the Ginetex care symbols.

32	33 ○	34 Ⓐ	35 Ⓕ	36 Ⓟ	37 ⊗	38 Ⓕ	39 Ⓟ
40 △	41 ▲	42 ⊗	43 ⊠	44 ⊗	45 ⊠	46 ⊠	47 ⊠
48 □	49 □	50 ⊠	51 ⊠	52 ⊠	53 ⊗	54 ⊠	55 ⊗
56 ⊠	57 ⊠	58 ⊠	59 ⊠	60 ⊠	61 ⊠	62 ⊠	63 ⊠
64 ⊠	65 ⊠	66 ⊠	67 ⊠	68 ⊠	69 ⊠	70 ⊠	71 ⊠
72 ⊠	73 ⊠	74 ⊠	75 ⊠	76 ⊠	77 ⊠	78 Ⓢ	79 Ⓢ
80 Ⓢ	81 Ⓢ	82 ⊠	83 ⊠	84 ⊠	85 ⊠	86 ⊠	87 ⊠

NAFTA / ASTM Font

The 610 / 611 / 612 printers can print the NAFTA / ASTM care symbols in two sizes with NAFTA / ASTM Font 72 and Font 73. The 300 DPI version of the 610 / 611 / 612 printers, using Font 72, can fit five (5) symbols in 22mm (0.88 inches). Please refer to the Paxar® *PcMate Plus Programming Manual* or the Monarch® *Packet Reference Manual* for details on programming the NAFTA / ASTM care symbols.

32	33	34	35	36	37	38	39
40	41	42	43	44	45	46	47
48	49	50	51	52	53	54	55
56	57	58	59	60	61	62	63
64	65	66	67	68	69	70	71
72	73	74	75	76	77	78	79
80	81	82	83	84	85	86	87
88	89	90	91	92	93	94	95
96	97	98	99	100	101	102	103
104	105	106	107	108	109	110	111
112	113	114	115	116	117	118	119
120	121	122	123	124	125	126	

7. Care and Maintenance

This chapter tells you how to

- ◆ Clear supply jams
- ◆ Clear knife jams
- ◆ Clean the printhead and platen roller
- ◆ Replace a printhead
- ◆ Lubricate the knife

CAUTION

Do not use sharp objects to clean the printhead. This may damage the printer and void your warranty.

Clearing Supply Jams

When you are printing and a jam occurs, the **Fault** light on the printer's front panel blinks. To clear the jam:

1. Turn off the printer.
2. Open the cover and printhead assembly.
3. If necessary, remove the supply roll and ribbon.
4. Remove the jammed supply and reload the supply roll.
5. Close the printhead assembly and turn on the printer.
6. Press **Feed / Cut** to position the supply under the printhead.

Clearing a Knife Jam

If tags are jammed in the knife, the printer displays 760 on the LED. To clear a knife jam, you might have to disconnect the stacker from the knife.

1. Turn off the printer.
2. You can see the tag path in the knife by looking through the slot on the top of the knife. Clear the tag path by using a tool, such as a screwdriver or needle-nose pliers, to pull the jammed tags out of the knife.

CAUTION

DO NOT PLACE YOUR FINGERS NEAR THE KNIFE'S BLADE. DO NOT USE EXCESSIVE FORCE TO REMOVE TAGS BECAUSE DAMAGE TO THE KNIFE MAY OCCUR.

3. Turn on the printer. Send a test batch of tags to the printer.

Cleaning

The rate and frequency at which you print determines how often you must clean the printer.

You must clean the printhead as described below to maintain printhead life.

You may need to clean the printhead and platen roller:

- ◆ If there is any lint or debris build up in the supply path
- ◆ Whenever you load new supplies
- ◆ Daily if your printer is in an excessively dirty, hot, or humid environment
- ◆ When you see voids or streaking in the print as shown.

You may have to clean the supply sensor more often if you frequently receive supply error codes.

Paxar recommends that you clean the printhead and platen roller at least once a day when the printer is in use. You may need to clean more frequently depending on usage.

To clean the printhead, supply sensor, and platen roller:

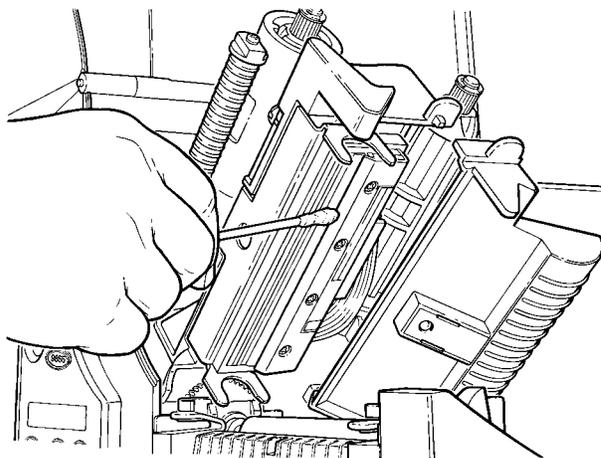
1. Turn off the printer.
2. Open the cover and printhead assembly.
3. Remove the label roll and ribbon (when cleaning the printhead).
4. Clean the platen roller with a dry cloth or small brush. However, if there is adhesive gum build-up on the platen roller, moisten a cotton swab with isopropyl alcohol. Turn the platen roller with your finger and run the cotton swab or dry cloth across it. Make sure the platen roller is clean all the way around.
5. Moisten another cotton swab with isopropyl alcohol. Rub the cotton swab across the printhead and remove any build-up.



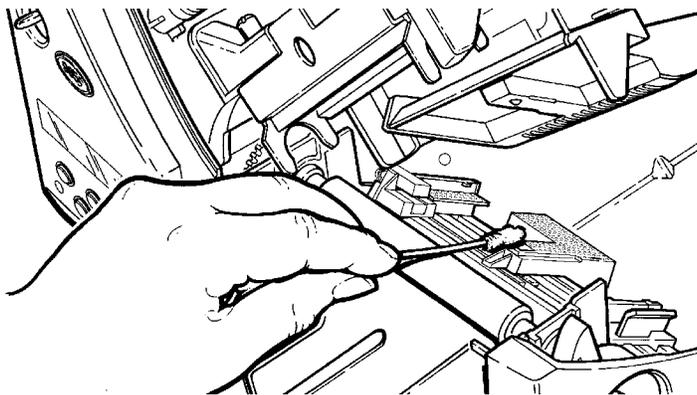
Voids



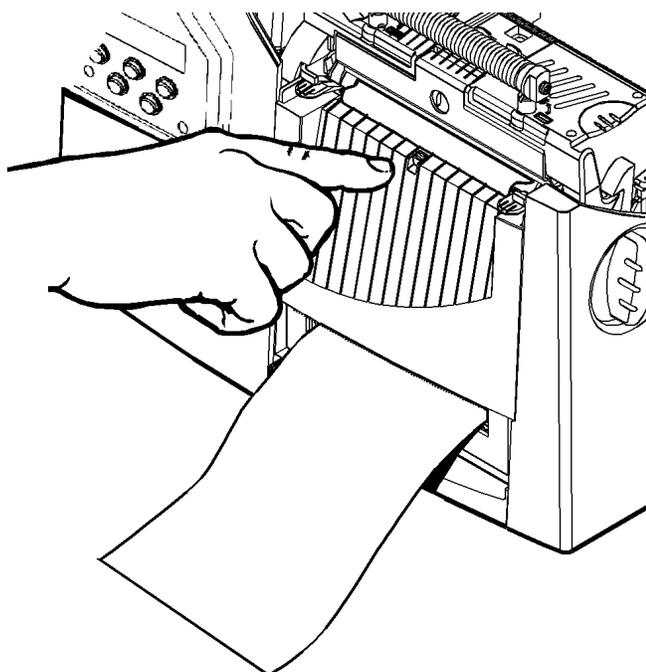
Streaks



6. Rub the cotton swab across the supply sensor and remove any build-up.



7. Clean the build-up in the supply path.
8. Let the printer dry and reload your supplies.
9. Close the exit cover by pushing firmly on it as shown. Both latches will click into place.



10. Close the cover and printhead assembly.
11. Turn on the printer.
12. Press **Feed / Cut** to position the supply under the printhead.

Replacing the Printhead

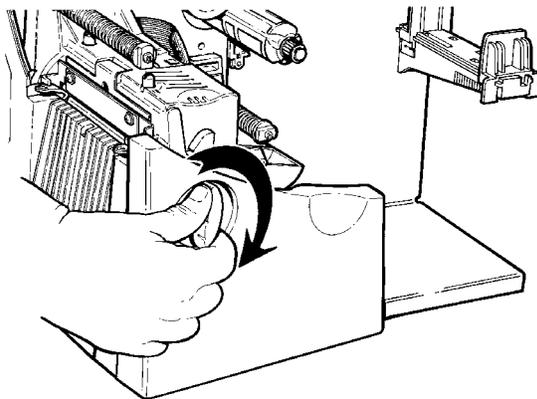
You may have to replace the printhead if it is damaged or worn-out. For example, you may see 616 (bad dot or dots) or 768 (printhead failure) error codes.

CAUTION

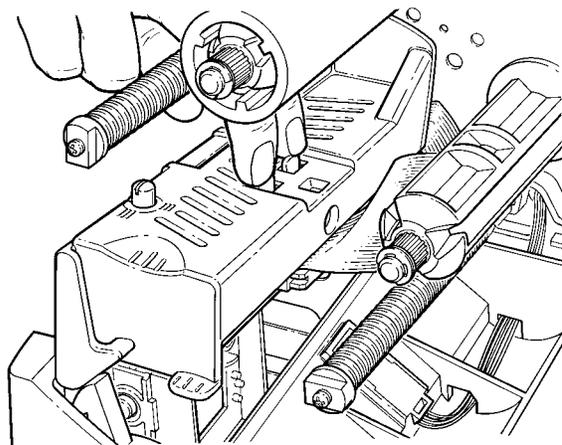
The printhead is sensitive to static electricity, which can damage the printhead or reduce its life. Ground yourself by touching some metal, such as the printer's metal base, before touching the printhead. Clean the printhead to remove any salt or oil left from handling prior to operation.

To replace the printhead:

1. Turn off the printer.
2. Open the cover.
3. Unlock the printhead by turning the retaining latch.



4. Press forward and down on the two latches on top of the printhead assembly as shown. The printhead will drop down.

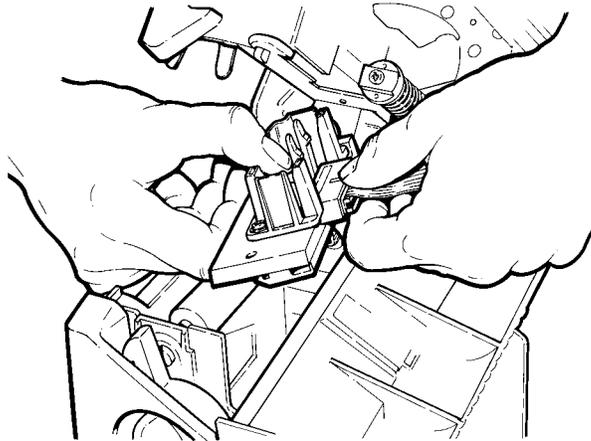


5. Lift the printhead assembly using the printhead tab and push back until the printhead assembly clicks into place.

- Carefully unplug the cable from the printhead as shown.

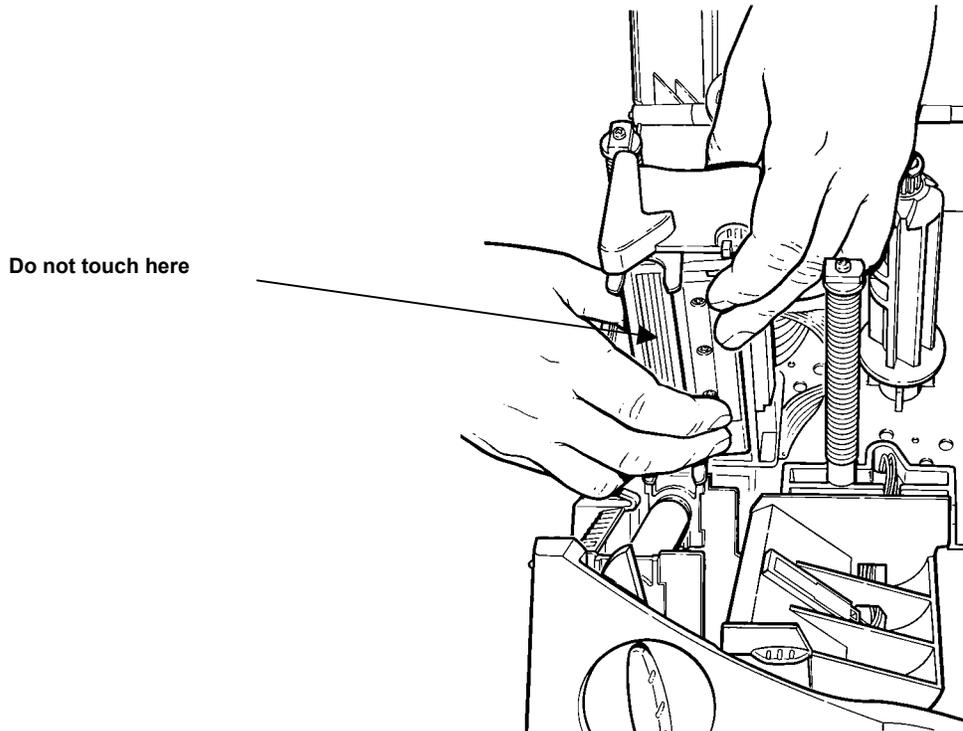
CAUTION

The printhead is sensitive to static electricity, which can damage the printhead or reduce its life. Ground yourself by touching some metal, such as the printer's metal base, before touching the printhead.



- Carefully plug the cable into the new printhead. The cable connector is keyed, so you cannot incorrectly connect the cable. However, it is normal to feel some resistance when correctly connecting the cable.
- Align the new printhead with the tabs.

9. Snap the printhead into place.



10. Make sure the printhead cable does not touch the ribbon roll.
11. Clean the new printhead with a cotton swab dipped in isopropyl alcohol to remove any salt or oil left from handling.
12. Let the printhead dry and reload your supplies.
13. Close the printhead assembly and the cover.
14. Turn on the printer.
15. Press **Feed / Cut** to position the supply under the printhead.

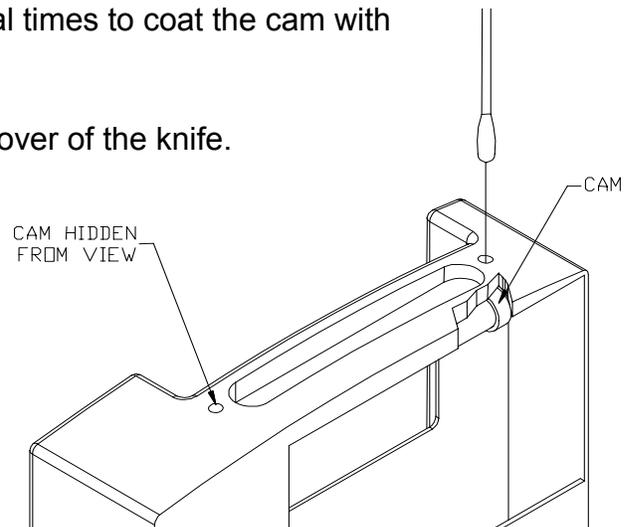
Lubricating the Knife

We recommend lubricating the knife after using 15 rolls of supply or performing 100,000 cuts.

To prevent excessive wear on the knife, regularly lubricate the knife cams. The cams are located directly below the guiding holes.

To lubricate the knife:

1. Turn off the printer.
2. Lightly coat a long cotton swab with multi-purpose grease.
3. Insert the cotton swab into one of the two guiding holes until it stops on the cam.
4. Move the cotton swab up and down several times to coat the cam with grease.
5. Repeat steps 2 – 4 for the other cam.
6. Wipe off any excess grease from the top cover of the knife.
7. Turn on the printer.



Anti-Static Protection

To help minimize static build-up in printed labels, the 610 / 611 / 612 printers are equipped with an anti-static plastic plate where the labels exit the printer. To ensure continued protection, a bottle of anti-static solution is provided with the printer.

To apply the solution, spray a small amount of a soft cloth and apply it to the plastic plate. Apply the solution weekly or as needed if static becomes a problem.

To order a replacement bottle, see Appendix A, “Specifications and Accessories.”

You can also print a test label by pressing **←** and **→** at the same time. Hold for one second and release. If test labels do not print, call Technical Support.

Checking Supply Quality

The printer continuously stores data from the most recent 16 supplies printed to check the reflectivity of the sensor marks on the supply. Before you check your supply quality, print a batch of supplies or test labels.

1. From the Diagnostics menu, press **←** or **→** until you see

```
DIAGNOSTICS
←  User Diag  →
```

2. Press **Enter / Pause**. You will be at the User Diagnostics Menu. Press **←** or **→** until you see

```
USER DIAG
  Supply Quality  →
```

3. Press **Enter / Pause**. If you have not printed any labels, the message "No data! Press Enter" appears. You will also see the "No data! Press Enter" message if you are using continuous (non-indexed) supplies.

If you have printed labels since turning on the printer, you will see

```
Len  Min  Max  OK
← 1568 034 124 Y  →
```

The Len listing is the length of the loaded supply in dots.

The Max listing should always be greater than the Min listing. The OK listing tells whether the sense mark on the supply passed a detection test. Press **←** or **→** to see the other readings.

Using Password Protection

The password protection feature prevents formats, graphics or fonts from accidentally being deleted from the printer's memory.

Enabling the Password (System Administrators only)

A System Administrator can enable the password that must be entered before formats, graphics or fonts can be deleted.

1. From the Main Menu, press **←** or **→** until you see

```
MAIN MENU
←  Diagnostics
```

2. Press **Enter / Pause**. You will see

```
Enter Password
  _ _ _ _ _
```

Enter the password: press **Feed / Cut** three times and then press **Enter / Pause**.
If you enter the wrong password, you return to the Main Menu.

3. From the Diagnostics Menu, press **←** or **→** until you see

```
DIAGNOSTICS
←  User Diag
```

4. Press **Enter / Pause**. Then, press **←** or **→** until you see

```
USER DIAG
←  Password
```

5. Press **Enter / Pause**. You will see

```
Enable Password?
←  No
```

The default for password protection is "No," so you will always see "No" even if passwords are enabled.

6. If you do not want the user to enter a password before they can delete formats, graphics or fonts, press **Enter / Pause**. You return to the User Diagnostics Menu.

OR

Press **→** to display "Yes" and press **Enter / Pause**. The password protection is enabled for formats, graphics or fonts. You return to the User Diagnostics Menu.

7. Press **Escape / Clear** twice to exit to the Main Menu.

Service Diagnostics

The Service Diagnostics menu can only be accessed by a Monarch Representative, because it requires a separate password. If you need to call Technical Support, print a test label first.

9. Troubleshooting

This chapter provides:

- ◆ Solutions to minor printing problems.
- ◆ Explanations of error messages you may receive while using the printer.

Troubleshooting

This section helps you correct some problems that may occur.

Problem	Action
Error message appears during startup.	Turn off the printer, wait fifteen seconds and then turn on the printer. Call Technical Support if the error message reappears.
Does not print.	Check supply. Check ribbon. Send a corrected batch.
Does not feed.	Set wide / narrow knobs correctly. Try the narrow setting first, if the printing is too light, use the wide setting.
Partially printed data.	Clean the printhead. Send a corrected batch.
Printing shadows or smears	Clean the printhead. Change supply. Check ribbon.
Light printing.	Change supply. Adjust the print contrast. Check wide / narrow knobs. Try the narrow setting first, if the printing is too light, use the wide setting. Check ribbon.
Heavy printing.	Clean the printhead. Change supply. Adjust the print contrast. Check the wide / narrow knobs. Try the narrow setting first, if the printing is too light, use the wide setting. Check ribbon
Voids in printing.	Clean the printhead. Change the supply type. Check ribbon. Leave printhead unlatched when not in use.
Blank labels print or 750 series errors.	Clean supply sensors.
Backing paper is wrapped around platen or peel roller.	Carefully remove the backing paper. Make sure the backing paper tears at the saw-toothed tear edge when using backfeed and peel mode.

If you cannot fix a problem, call Technical Support.

Error Messages

You may receive the following types of error messages:

- ◆ Data Errors
- ◆ Communication Errors

Some errors numbered 400 – 438 and 500 – 574 are internal software errors. Errors numbered 900 – 999 are hard printer failures. If you cannot clear an error, turn off the printer, wait several seconds and then turn on the printer. Call Technical Support if you receive any error message not listed in this chapter.

Data Errors

Errors 001 to 405 and 429 to 435 are data errors. This type of error indicates that incorrect data was sent to the printer, and the printer is ignoring it. Your System Administrator should correct the packet and send it back to the printer.

Error Description / Action

- 001 Packet ID number must be 1 to 999.
- 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.
- 005 Supply width is invalid.
- 006 Storage device must be **F** (Flash), **N** (non-volatile RAM), **R** (volatile RAM), or **T** (temporary for graphics).
- 007 Unit of measure must be **E** (English), **M** (Metric), or **G** (Dots).
- 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 must be **1**, **2**, **3**, **4**, **10**, **11**, **15**, **16**, **17**, **18**, or **50**.
- 015 Character rotation must be **0** (0 degree), **1** (90 degree), **2** (180 degree), or **3** (270 degree).
- 016 Field rotation must be **0** (0 degree), **1** (90 degree), **2** (180 degree), or **3** (270 degree).
- 017 Field restriction must be **V** (variable) or **F** (fixed).

- 018 Code page selection defined in the field must be **0** (Internal), **1** (ANSI), **100** (Macintosh), **101** (Wingdings), **102** (UNICODE), **103** (BIG5 for UNICODE), **104** (GB2312 for UNICODE), **105** (SJIS for UNICODE), **106** (GB2312), **107** (BIG5), **437** (DOS Page 437), **850** (DOS Page 850), **852** (Latin 2), **855** (Russian), **857** (Turkish), **860** (Portuguese), **1250** (Latin 2), **1251** (Cyrillic), **1252** (Latin 1), **1253** (Greek), **1254** (Turkish), **1255** (Hebrew), **1256** (Arabic), **1257** (Baltic), or **1258** (Vietnamese).
- 020 Vertical magnification must be **1** to **7** or **4** to **255** for the scalable or downloaded TrueType fonts.
- 021 Horizontal magnification must be **1** to **7** or **4** to **255** for the scalable or downloaded TrueType fonts.
- 022 Color must be **B**, **D**, **O**, **R**, or **W**.
- 023 Intercharacter gap must be **0** to **99** dots.
- 024 Field justification must be **B** (balanced), **C** (centered), **E** (end), **L** (left), or **R** (right).
- 025 Data length is outside the range **0** to **2710**.
- 030 Bar code height must be at least **19** (English), **48** (Metric), **38** (203 dpi Dots), **57** (300 dpi Dots), or is not within the supply dimensions.
- 031 Human readable option must be **0**, **1**, **5**, **6**, **7**, or **8**.
- 032 Bar code type is invalid.
- 033 Bar code density is invalid.
- 040 Line thickness must be **0** to **99** dots.
- 041 Line direction must be **0**, **90**, **180**, or **270**.
- 042 The line segment or box end row is defined outside of printable area.
- 043 The line segment or box end column is defined outside of printable area.
- 044 Dot pattern for line or box must be “ ”.
- 045 Line length is defined beyond the maximum length.
- 046 Line type must be **S** (segment) or **V** (vector).
- 051 Imaging mode in the graphic header must be **0**.
- 101 Format referenced by batch is not in memory.
- 102 Print quantity is outside the range **0** to **32000**.
- 104 Batch mode must be **N** (new) or **U** (update).
- 105 Batch separator must be **0** (off), **1** (on), or **2** (Double).
- 106 Print multiple is outside the range **1** to **999**.
- 107 Cut multiple is outside the range **0** to **999**.
- 108 Multiple part supply is outside the range **1** to **5**.
- 109 Cut type is invalid.

- 200 Option number must be **1, 4, 30, 31, 42, 50, 60, 61**, or **62**.
- 201 Copy length is outside the range **0** to **2710**.
- 202 Copy start position must be **1** to **2710**.
- 203 Destination start position must be **1** to **2710**.
- 204 Source field must be **0** to **999**.
- 205 Copy type must be **1** (Copy after rules) or **2** (Copy before rules).
- 206 Increment / Decrement selection must be **I** (increment) or **D** (decrement).
- 207 Incrementing start position must be **0** to **2710**.
- 208 Incrementing end position must be **0** to **2710**.
- 209 The incrementing amount must be **0** to **999**.
- 210 Security value for a PDF417 bar code must be **0** to **8**.
- 211 Narrow element value is less than **1** or greater than **99**.
- 212 Wide element value is less than **1** or greater than **99**.
- 213 Dimension must be **1** to **30** for a column or **3** to **90** for a row.
- 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).
- 218 Pad direction must be **L** (from left) or **R** (from right).
- 219 Pad character is outside the range **0** to **255**.
- 220 Check digit selection must be **G** to generate check digit.
- 221 Primary or secondary price format is outside the range **1** to **16**.
- 222 Data type restriction is outside the range of **1** to **6**.
- 223 Option is not valid for the field.
- 224 Bar code Intercharacter gap must be **0** to **99** in printer dots.
- 251 Power up mode must in **0** (online) or **1** (offline).
- 252 Language selection must be **0** (English), **1** (French), **2** (German), **3** (Spanish-ES), **4** (Japanese), **5** (Portuguese), **6** (Italian), **7** (Swedish), **8** (Spanish2-MX), **9** (Danish), **10** (Dutch), **11** (Finnish), or **12** (Norwegian).
- 253 Batch separator code must be **0** (off), **1** (on), or **2** (Double).
- 254 Slash zero selection must be **0** (standard zero) or **1** (slash zero).
- 255 Supply type must be **0** (black mark), **1** (die cut), **2** (continuous), or **3** (aperture).
- 256 Ribbon selection must be **0** (direct), **1** (transfer), or **2** (High Energy).

- 257 Feed mode must be **0** (continuous) or **1** (On-Demand).
- 258 Supply position is outside the range.
- 259 Contrast adjustment must be **-699** to **699** dots.
- 260 Print adjustment must be **-99** to **99** dots.
- 261 Margin adjustment must be **-99** to **99** dots.
- 262 Speed adjustment is invalid.
- 263 Primary monetary symbol is invalid.
- 264 Secondary symbol selection must be **0** (none) or **1** (primary secondary sign).
- 265 Monetary decimal places must be **0** to **3**.
- 266 Character string length in Packet **E** must be **5** (MPCL control characters) or **7** (ENQ / IMD command character).
- 267 Baud rate selection must be **0** (1200), **1** (2400), **2** (4800), **3** (9600), **4** (19200), **5** (38400), **6** (57600), or **7** (115200).
- 268 Word length selection must be **0** (7 bits) or **1** (8 bits).
- 269 Stop bits selection must be **0** (1 bit) or **1** (2 bits).
- 270 Parity selection must be **0** (none), **1** (odd), or **2** (even).
- 271 Flow control selection must be **0** (none), **1** (DTR / DSR), **2** (CTS / RTS), or **3** (XON / XOFF).
- 272 Internal code page selection must be **0** (internal), **1** (ANSI), **2** (DOS 437), or **3** (DOS 850).
- 273 Cut adjustment must be **-300** to **+300** 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, batch date and graphics), **D** (downloadable fonts), or **V** (vector / scalable fonts).
- 285 The storage device type must be **N** (non-volatile RAM) or **R** (volatile RAM).
- 286 The buffer size is invalid.
- 287 The printhead width must be **0**.
- 290 Action must be **0** (disable) or **1** (enable) for Backfeed Control.
- 291 Dispense position must be **50** to **200** dots and / or the backfeed distance is greater than the dispense position.
- 292 Backfeed distance must be **10** to **200** dots.
- 293 The skip index selection defined in the field must be **0** (disabled) or **1** (enabled).
- 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).
- 325 Duplicating direction must be **0** or **1**.
- 327 Amount of row adjustment must be **0** to **999**.
- 328 Duplicate count must be **0** to **999**.
- 340 Bitmap line encoding must be **H** (hex) or **R** (run length).
- 350 Font selector must be **1** to **9999**.
- 351 Font data length must be **68** to **16384**.
- 352 Insufficient font memory is available for the downloaded font.
- 380 Job request is outside the range **0** to **4**.
- 400 Invalid character following {.
- 401 Internal software failure. Call Technical Support.
- 402 Field separator is not in the expected location.
- 403 Field separator was not found.
- 404 The number of string that is currently being processed is too long.
- 405 Too many fields exist in the format. You cannot have more than 1000 fields in the format. Lines, boxes, and constant text fields count as fields.
- 409 Printer memory is full. Delete unnecessary formats or graphics from memory. Try run length encoding for large graphics.

Communication Failures

Errors 409 to 413 usually indicate a communication failure. These errors happen when the host and the printer cannot communicate. Ask your System Administrator for help.

Error Description / Action

- 410 Parity mismatch.
- 411 Framing error (baud rate mismatch). This error may appear when you turn off the printer.
- 412 Flow control mismatch.
- 413 Online receive buffer is full. Check flow control settings.
- 414 The internal keyboard buffer is full or you need a new keypad.
- 415 The buffer size you defined exceeds the total available in your machine.
- 416 Flash/PC board error. Call Technical Support.
- 417 Flash memory is full. Clear flash. If the error reappears, call Technical Support.
- 420 Internal software list error. Call Technical Support.

- 421 Internal software list error. Call Technical Support.
- 422 Duplicate internal name. Call Technical Support.
- 423 Internal software list error. Call Technical Support.
- 424 Internal software list error. Call Technical Support.
- 425 Internal software list error. Call Technical Support.
- 426 Internal software list error. Call Technical Support.
- 427 Format name is invalid. Valid name is 1-8 characters inside quotes or "" for a printer-assigned name. Press **Escape / Clear** to continue. If the error reappears, call Technical Support.
- 428 Batch name is invalid or graphic not found.
- 429 A field number appears more than once in a format.
- 430 The format uses a graphic file that cannot be found.
- 433 The batch references a field number that does not exist in the format.
- 497 An error occurred during the loop back test on the parallel port. Call Service.
- 499 An error occurred during the loop back test on the serial port. Call Service.

Data Formatting Errors

Errors 571 to 618 are data formatting errors. This type of error happens when a field prints incorrectly. Your System Administrator can correct the format, batch, or graphic packet and send the print job again. For errors 571 to 614, the printer will still print, but the data may be incomplete, missing, or wrong.

Error Description / Action

- 571 UPC or EAN bar code data length in the batch doesn't fit the format.
- 572 Batch data doesn't fit the format, the field contains blanks, or data mismatch.
- 573 Batch data in price field doesn't fit the format or the field contains blanks.
- 574 Batch data in check digit scheme doesn't fit the format, or the field contains blanks.
- 575 The graphic included in your format could not be found.
- 600 Imaging error because the batch was refused.
- 601 An error occurred while the batch was imaging.
- 602 The batch was not found during imaging.
- 603 The batch was not found while imaging. Resend the batch packet. If the error persists, call Technical Support.
- 611 Font, bar code, or density in the batch doesn't fit the format.
- 612 Batch data is missing or doesn't match the format.
- 613 Reference point off tag.

- 614 Portion of field off tag.
- 615 Bar code width is greater than 16 inches, or keywords of PDF417 bar code exceed **928**.
- 616 A bad dot falls on a bar code that cannot be shifted. Call Service or replace the printhead.
- 618 Magnification must be **1** to **7** or **4** to **255** for the scalable font.
- 620 Font and printhead density mismatch. Check the font or verify the correct printhead (203 dpi or 300 dpi) is installed.
- 621 An error occurred opening the TrueType font file. Select a different font to download. If the error message persists, call Technical Support.
- 622 Not enough memory to create the downloaded TrueType characters in the scalable (vector) fonts buffer. Reconfigure the printer's memory and increase the scalable fonts buffer. If the error message persists, call Technical Support.

Machine Faults

Errors 700 to 765 happen when there is a problem with the printer.

Error Description / Action

- 700 An error is pending and the printer cannot continue with the batch.
- 701 Printer received a command that it cannot execute while it is running.
- 702 Check your printer's SETUP settings.
- 703 The printer sensed a calibration of different-sized black marks.
- 704 Printer didn't detect a sense mark within the maximum feed length or out of supplies. Check or load supplies.
- 705 Invalid batch received.
- 750 Printhead is overheated. Turn off the printer and let it cool.
- 751 Printer didn't detect a sense mark when expected.
- 752 Printer detected a sense mark in the wrong place.
- 753 Printer detected a sense mark that is too long.
- 754 Out of ribbon or ribbon jam. Check or load ribbon. Remove any slack in the ribbon by turning the take-up reel clockwise. Load a new ribbon.
- 755 Printhead is open. Close the printhead.
- 756 Out of supplies. Load supplies.
- 757 Reload supplies (supply length mismatch).

- 758 The supply was not seen or the On-Demand sensor is not working correctly. Check for a supply jam. Clear the supply path or reload supplies. This error may occur if you remove a label too quickly in the On-Demand mode. The printer does not recalibrate after this error.
- 759 Knife is not moving. Call Technical Support.
- 760 Knife jam. Call Technical Support.
- 761 Stacker is full or jammed. Empty the stacker before continuing.
- 762 Low battery. Recharge the battery.
- 763 Waiting to dispense label. Press **Feed / Cut**.
- 764 Verifier scan error. Press **Escape / Clear** to clear the error and continue printing. Turn off the printer and then turn it back on to clear the error.
- 765 The printhead has less than 8 bad dots. The printer can shift bar code fields to avoid bad dots. You may need to press **Escape / Clear** to continue printing. Print a test label to confirm the number of bad dots.
- 768 Printhead has more than 8 bad dots within the format area or is not connected. Make sure the printhead is connected and if necessary, replace the printhead.
- 770 The print motor is not ready. Call Technical Support.
- 771 The format specified by the application was not found. Reload your application and format and try again. If the problem continues, call Technical Support.
- 772 Verifier failure. The verifier detected three or more bad scans in a row. Press **Escape / Clear** to clear the error and continue printing. The printer does not recalibrate after this error.
- 773 Verifier is enabled, but not connected. Make sure the I/O and/or serial cable is connected to the verifier.
- 790 The printer is busy. Wait until the printer is idle (not receiving data or no batch waiting to print) before you send any packets. This error may occur when you try to print a test label if the printer is busy.
- 791 The printer has an error pending. Turn off the printer. Wait 15 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 15 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.

Error 911 may appear when you turn off the printer.

Appendix A - Specifications and Accessories

Printer Specifications

Height:	12.5 inches (318 mm)
Width:	12 inches (305 mm)
Depth:	13 inches (330 mm)
Weight:	29 lb. (13 kg)
Shipping Weight:	33 lb. (15 kg)
Power:	90-264 VAC with autoselect 50/60Hz
Operating Limits:	For Thermal Transfer (ribbon) 40° to 95° F (4° to 35° C)
Storage:	15° to 120° F (-9° to 49° C)
Humidity:	5% to 90% non-condensing
Printhead:	Thermal at 4 inches (102 mm) wide 300 dpi (11.8 dots per mm)
Printing Method:	Thermal Transfer (ribbon)
Print Speed:	4.0 inches (102 mm) per second

Supply Specifications

Supply Types:	Thermal Transfer Perforated Fabric Labels
Fabric Label Kits:	Kits include fabric and ribbon
Paxar Systems:	The fabric is available in standard widths, ranging from 1.0 inch (25 mm) to 1.75 inches (45 mm), perforated to standard lengths.
Paxar Europe:	The fabric is available in 25 mm to 50 mm widths.
Sizes:	Supplies are available in widths ranging from 1.0 inch (25 mm) to 4.25 inches (108 mm) and lengths ranging from 1.0 inches (25 mm) to 12.5 inches (318 mm).

Contact your Paxar Representative for more information about kits and approved supplies. Additional configurations may be available.
If you experience label jamming with narrow supplies in humid environments, store supplies separately from the printer in a dry, less humid environment.

Ribbon Specifications

Ribbon Storage:	Do not leave ribbon in direct sunlight, high temperatures, or high humidity.
Ribbon Type:	CT1111 (Paxar Systems)
Ribbon Widths:	CT1111 is available in the following widths: 1.3 inches (33 mm) 1.61 inches (41 mm) 2.16 inches (55 mm) 4.1 inches (105 mm)

For best results, use a ribbon that is 0.25 inches (6.35 mm) wider than your fabric.

Ribbon Length:	23,600 inches (600 meters)
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Contact your Paxar Representative for more information about approved ink products. Additional configurations may be available.

Accessories

- ◆ Replacement Printhead - 12055201 (Printhead kit - 300dpi)
- ◆ Anti-Static Solution - 05441303

To order supplies or call customer support, use the following numbers:

Contacting Paxar

When ordering machines and supplies in the U.S.A., reference all correspondence to the address below.

PAXAR Corporation
One Wilcox Street
Sayre, Pa. 18840

Call: **1-800-96PAXAR (967-2927) or (570) 888-6641**

Fax: (570) 888-5230

For spare parts, requests for service or technical support

PAXAR Corporation
One Wilcox Street
Sayre, Pa. 18840

Call: **1-800-96PAXAR (967-2927) or (570) 888-6641**

Fax: (570) 888-5230

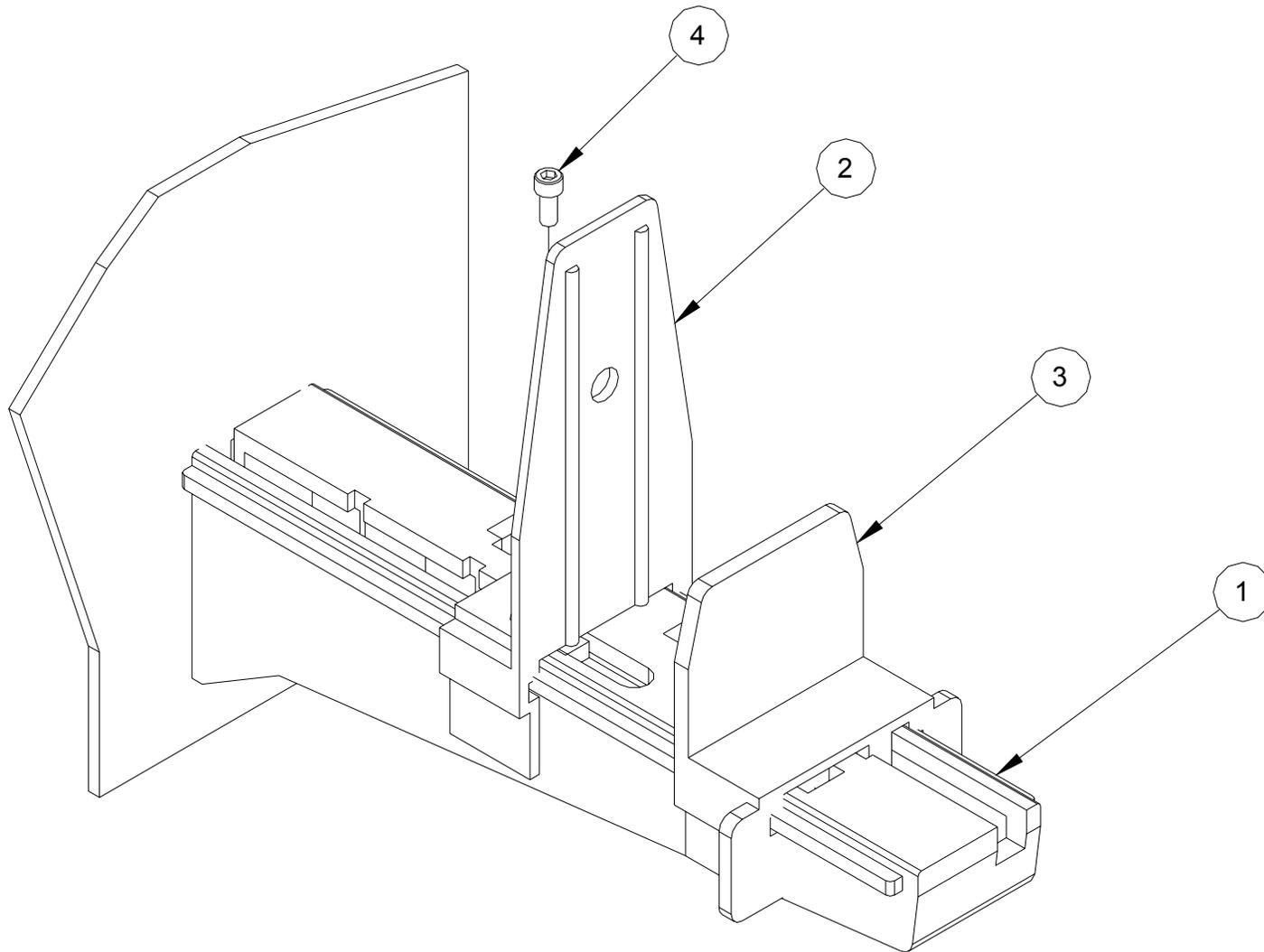
For parts and service in other countries please contact your local PAXAR supplier.

PAXAR Apparel Identification Systems Group reserves the right to incorporate any modifications or improvements in the machine system and machine specifications which it considers necessary and does not assume any obligation to make said changes in equipment previously sold.

www.paxar.com

Assembly Drawings

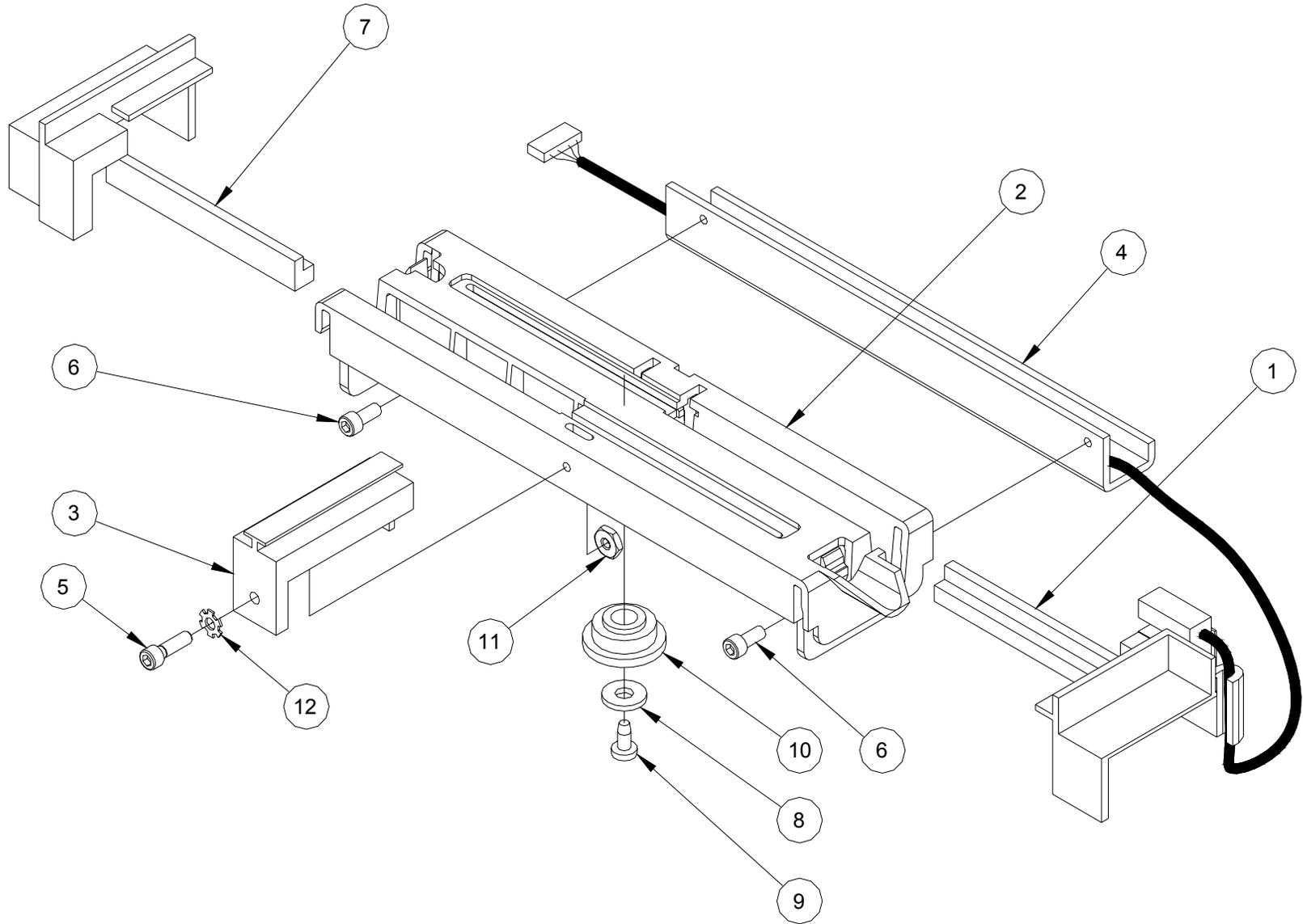
612 Supply Holder Assembly Drawing



612 Supply Holder Parts List

Item	Part #	Description	Qty
1	443001	Frame, Supply	1
2	443002	Guide, Back	1
3		Guide, Front	1
4	990006	4-40 x 1/4 Cap Screw	1

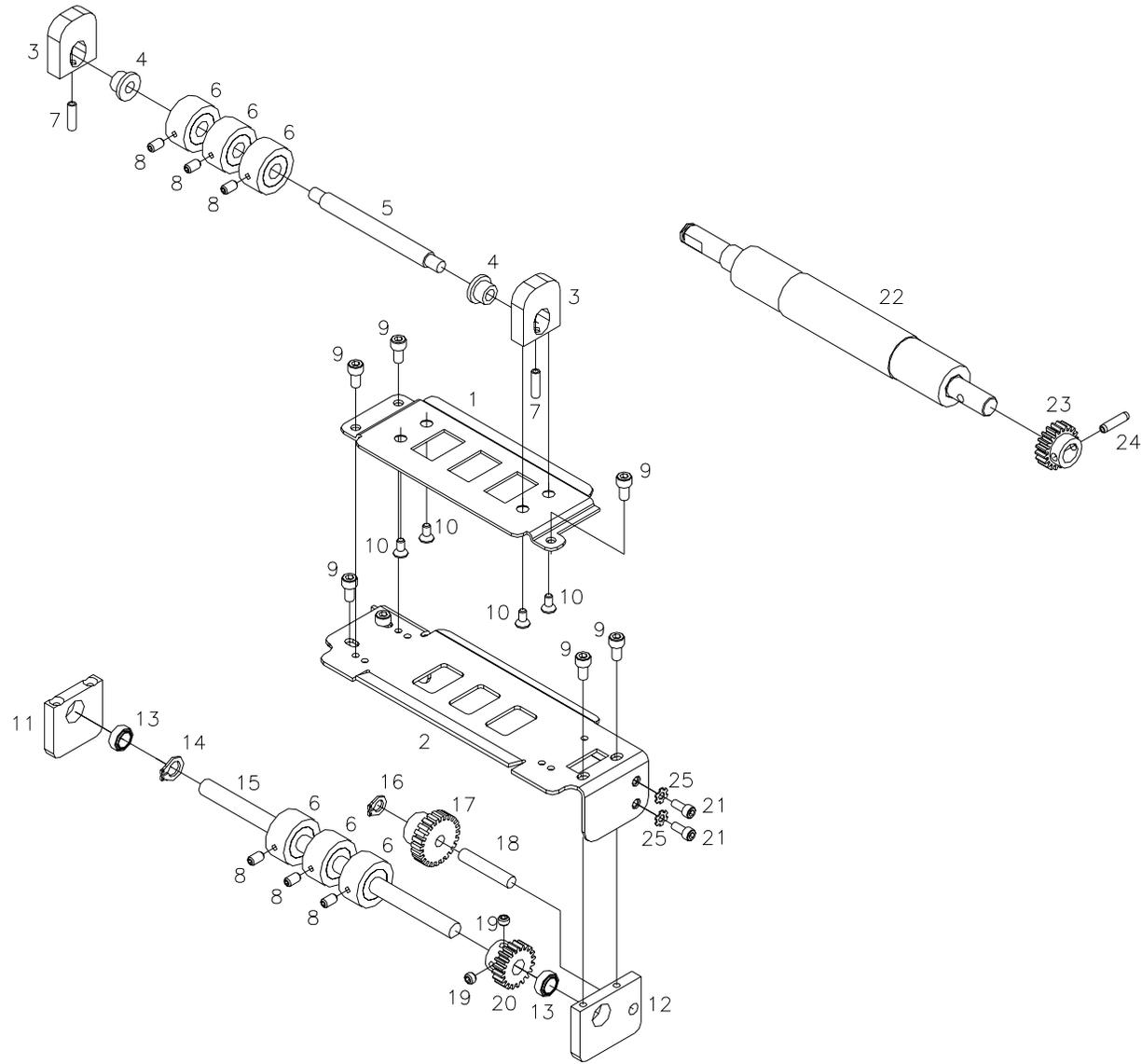
612 Sensor Block Assembly Drawing



612 Sensor Block Parts List

Item	Part #	Description	Qty
1	444191	Harness, Web Guide, 612	1
2	444110	Bracket, Guide Bar	1
3	444109	Bracket, Web Guide	1
4	444117	Bracket, Cover, Guide Bar	1
5	990424	4-40 x 3/8 Cap Screw	1
6	990006	4-40 x 1/4 Cap Screw	2
7		Guide, Monarch 117998	1
8	991186	Disc, Spring, .126 x .394 x .0197	1
9		4-40 Self Tapping Screw	1
10		Gear, Monarch 117983	1
11	990005	4-40 Hex Nut	1
12	989966	Washer, #4 Star	1

611 Auxiliary Feed Assembly Drawing

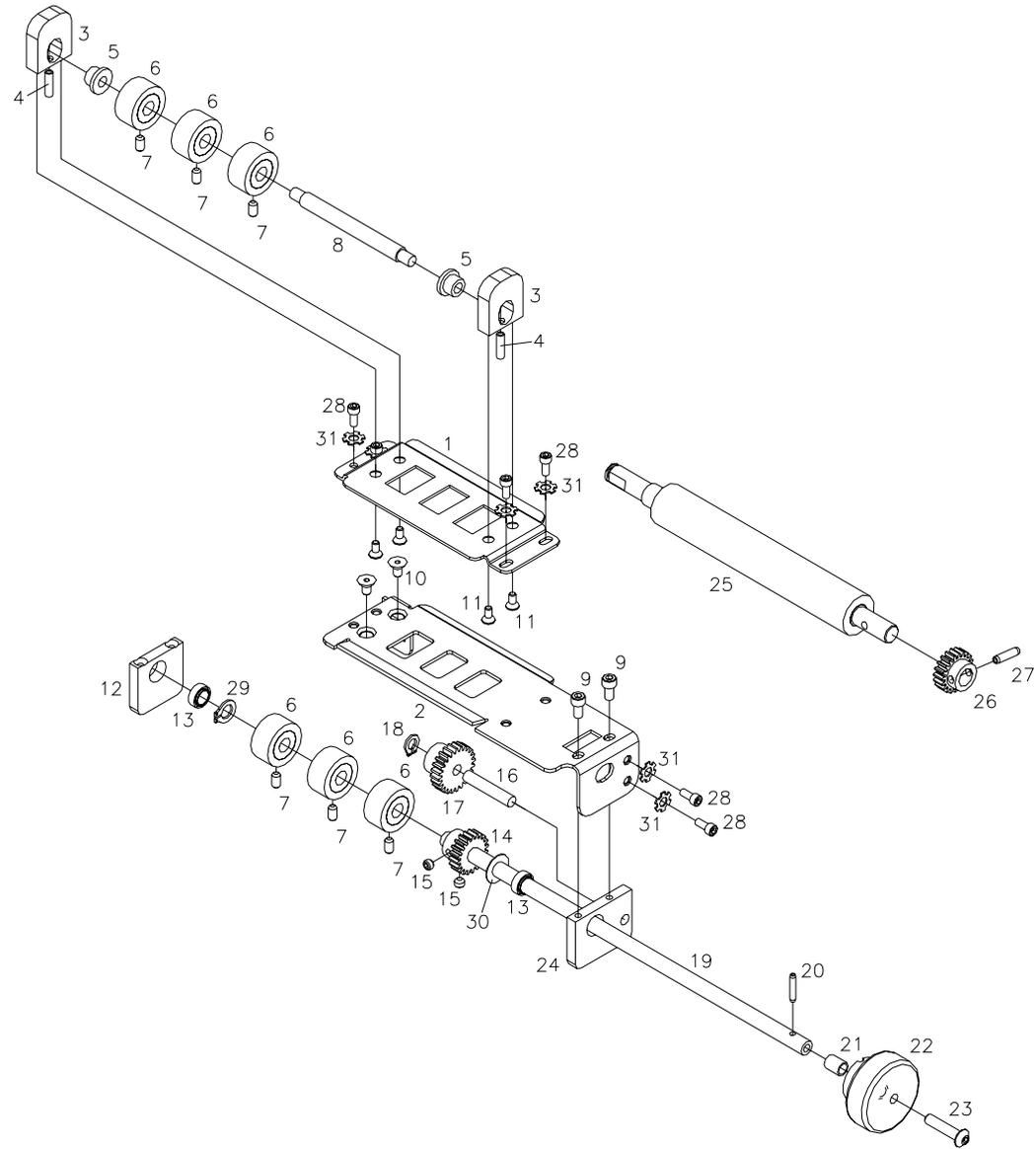


611 Auxiliary Feed Parts List

Item	Part #	Description	Qty
1	444017	Bracket, Roller Mount 3"	1
2	444004	Bracket, Aux. Drive	1
3	374026	Plate Support	2
4	999099	Bearing, 3/16 x 5/16 x 1/4	2
5	444012	Shaft, Upper	1
6	354031	Feed, Roller	6
7	991130	Spring, Eccentric Lift	2
8	990756	6-32 x 3/16 Set Screw	6
9	990015	6-32 x 1/4 Cap Screw	7
10	990003	4-40 x 1/4 Flat Head Screw	4
11	444002	Bracket, Shaft Mount Short	1
12	444001	Bracket, Shaft Mount Long	1
13	999079	Bearing, Miniature	2

Item	Part #	Description	Qty
14	990262	Snap Ring, 1/4"	1
15	444011	Shaft, Drive	1
16	990261	Snap Ring, 3/16"	1
17	354008	Gear, Idler	1
18	990269	Dowel Pin, 3/16 x 1.0	1
19	990057	6-32 x 1/8 Set Screw	2
20	444015	Gear, Roller Drive	1
21	990006	4-40 x 1/4 Cap Screw	2
22	445004	Roller Cut-Down, Molded	1
23	444018	Drive, Main Drive Gear	1
24	990247	ROLL PIN, 1/8X1/2	1
25	989966	#4-External Tooth washer	2

612 Auxiliary Feed Assembly Drawing

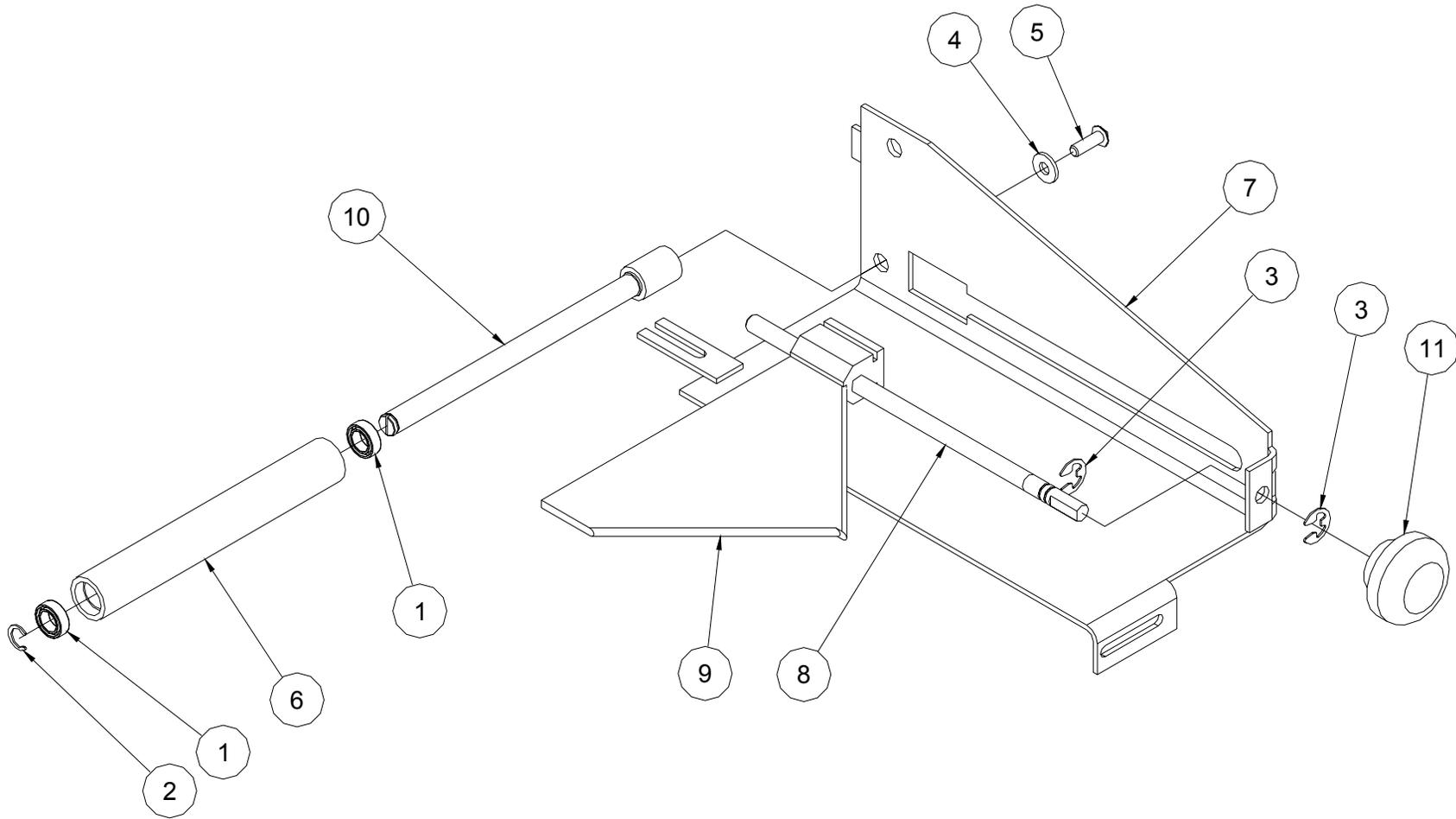


612 Auxiliary Feed Parts List

Item	Part #	Description	Qty
1	444019	Bracket, Roller Mount	1
2	444020	Bracket, Aux. Drive	1
3	374026	Plate Support	2
4	991130	Spring, Compression	2
5	999099	Bearing, 3/16 x 5/16 x 1/4	2
6	354031	Feed, Roller	6
7	990756	6-32 x 3/16 Set Screw	6
8	444012	Shaft, Upper	1
9	990015	6-32 x 1/4 Cap Screw	2
10	990029	6-32 x 1/4 Flat Head Screw	2
11	990003	4-40 x 1/4 Flat Head Screw	4
12	444002	Bracket, Shaft Mount Short	1
13	999079	Bearing, Miniature	2
14	444015	Gear, Roller Drive	1
15	990057	8-32 x 1/8 Set Screw	2
16	990269	Dowel Pin, 3/16 x 1	1

Item	Part #	Description	Qty
17	354008	Gear, Idler	1
18	990261	Snap Ring, 3/16	1
19	444021	Shaft, Aux. Drive	1
20	990240	Roll Pin, 3/32 x 1/2	1
21	990494	Spring, Compression	1
22	444022	Knob, Drive Shaft	1
23	990045	8-32 x 3/4 Button Head Screw	1
24	444001	Bracket, Shaft Mount Long	1
25	445003	Drive, Main, Molded Roller	1
26	444018	Drive, Main Drive Gear	1
27	990247	Roll Pin, 1/8 x 1/2	1
28	990006	4-40 x 1/4 Cap Screw	6
29	990262	Snap Ring, 1/4	1
30	990274	Washer, 1/4" Belleville	1
31	989966	Washer, #4 External Tooth	6

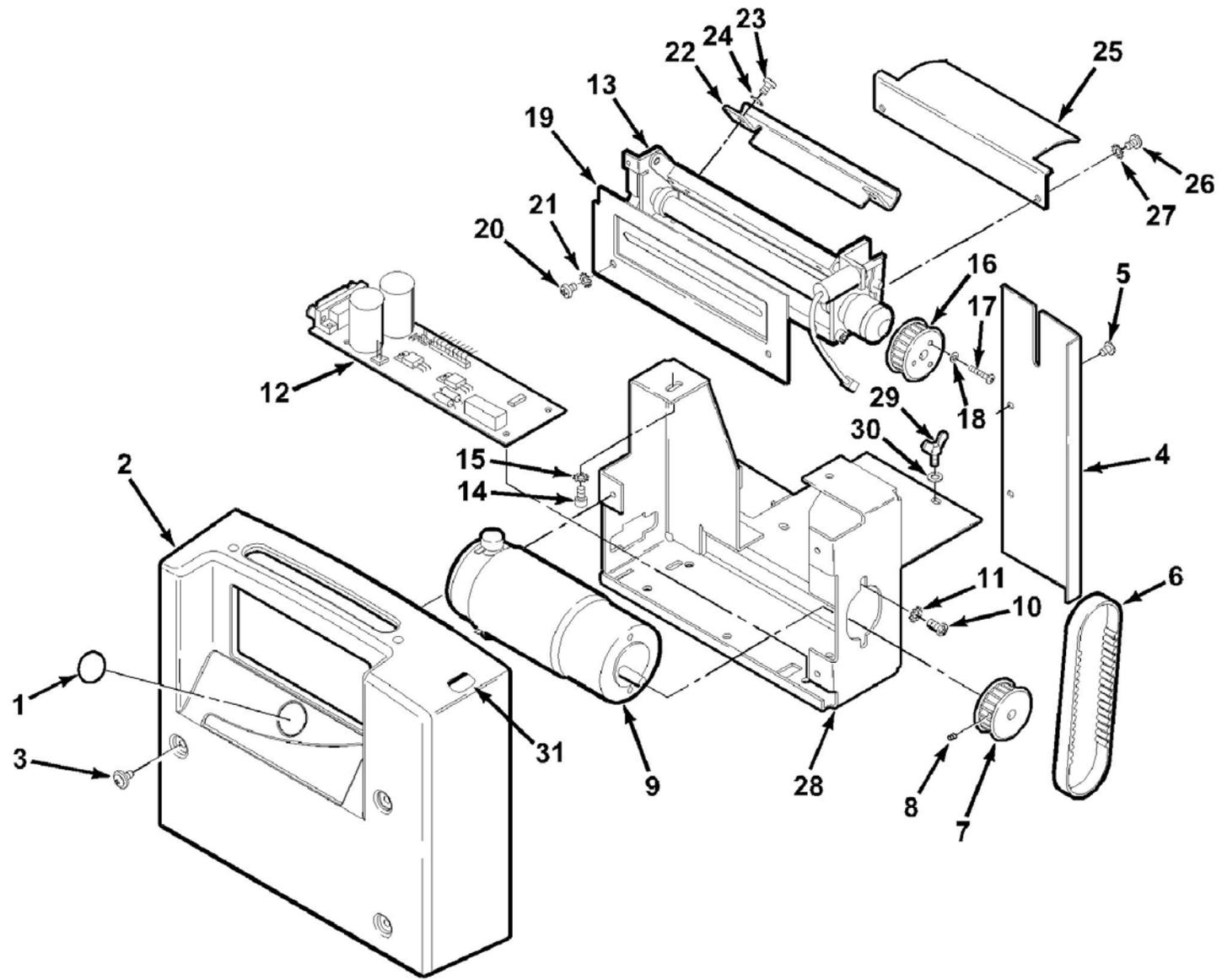
612 Web Turnaround Assembly Drawing



612 Web Turnaround Parts List

Item	Part #	Description	Qty
1	343048	Bearing, Ball Spindle	2
2	343035	C-Ring	1
3	990326	E-Ring 1/4"	2
4	990067	Washer, #8 Flat	1
5	990073	8-32 x 1/2 Button Head Screw	1
6	444108	Roller, Shaft, Web Turnaround	1
7	444101	Base, Web Turnaround	1
8	444105	Shaft, Adj. Screw	1
9	444112	Bar, Web Turnaround	1
10	444103	Shaft, Roller	1
11	105023	K. Impression Adj. Knob	1

Knife Assembly Drawing

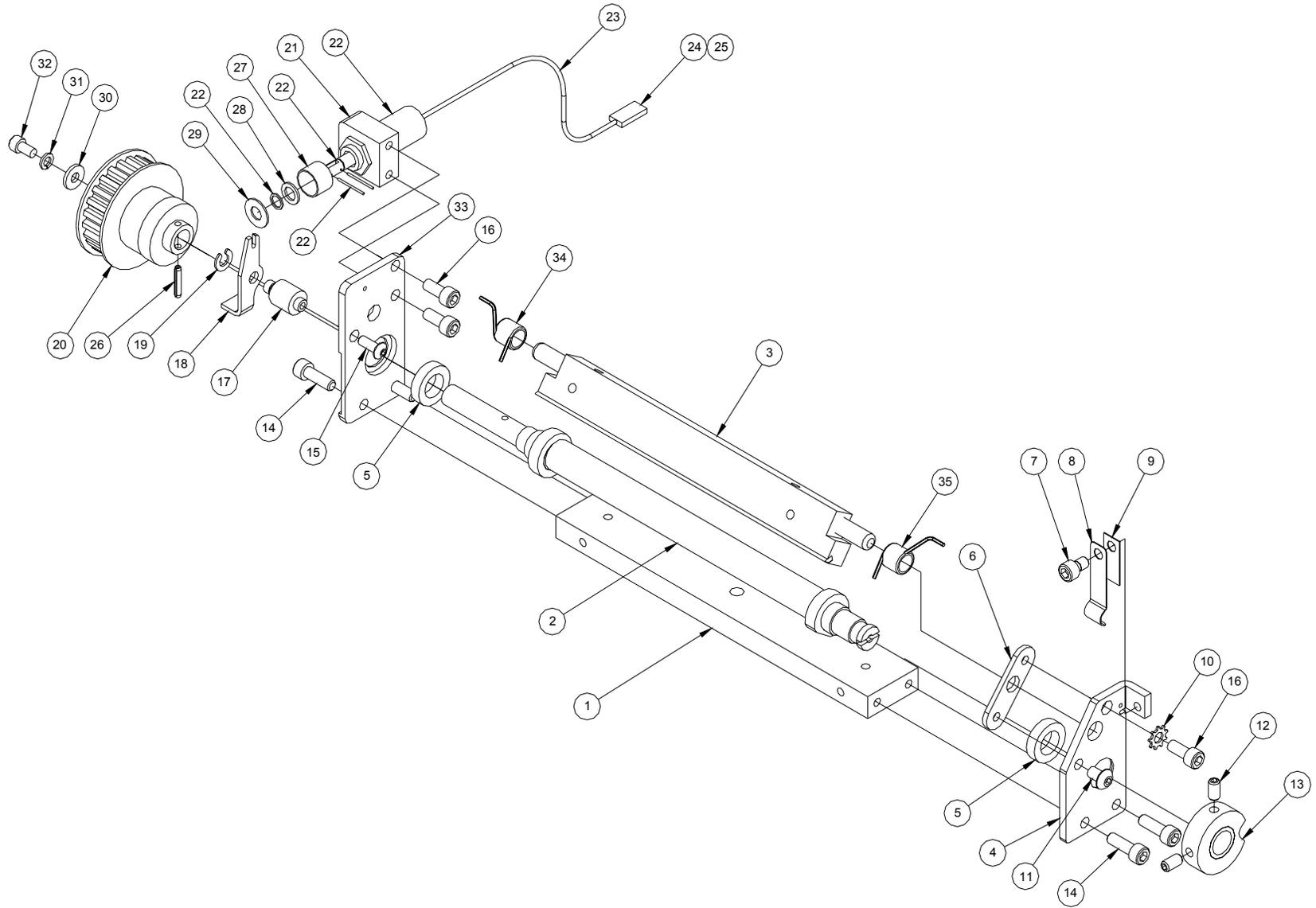


Knife Assembly Parts List

Item	Part #	Description	Qty
	M00926	Knife Assembly	
1	114622	Label, "No Hands"	1
2	118490	Case, Cutter	1
3	0999074008	Screw, Phil Hd	3
4	118529	Cover, Back	1
5	0999074008	Screw, Phil Hd	2
6	118487	Belt, Timing	1
7	118485	Pulley, Timing Belt	1
8	008652	Screw, Socket Set	1
9	118803	Motor, DC	1
10	PB00730831	Screw, Pan Hd	2
11	008682	Lockwasher, Ext tooth	2
12	118671	Board, Knife Control	1
13	118830	Knife Assy	1
14	009065	Screw, Socket Hd Cap	2
15	008684N	Lockwasher, Ext tooth	2

Item	Part #	Description	Qty
16	487003	Pulley, Knife	1
17	PB00730607	Screw, Phil Pan Hd	3
18	PB00520504	Lockwasher, Ext tooth	3
19	118530	Guard, Knife	1
20	PB00730609	Screw, Phil Pan Hd	2
21	008684N	Lockwasher, Int tooth	2
22	118538	Guide, Supply upper	1
23	PB00730609	Screw, Phil Pan Hd	2
24	008684N	Lockwasher, Int tooth	2
25	118537	Guide, Supply lower	1
26	PB00730609	Screw, Phil Pan Hd	2
27	008684N	Lockwasher, Int tooth	2
28	118483	Frame, Cutter Module	1
29	111383	Screw, Wing	3
30	PB00520165	Lockwasher, Int tooth	3
31	118687	Label, Lubrication	1

Rotary Knife Assembly Drawing

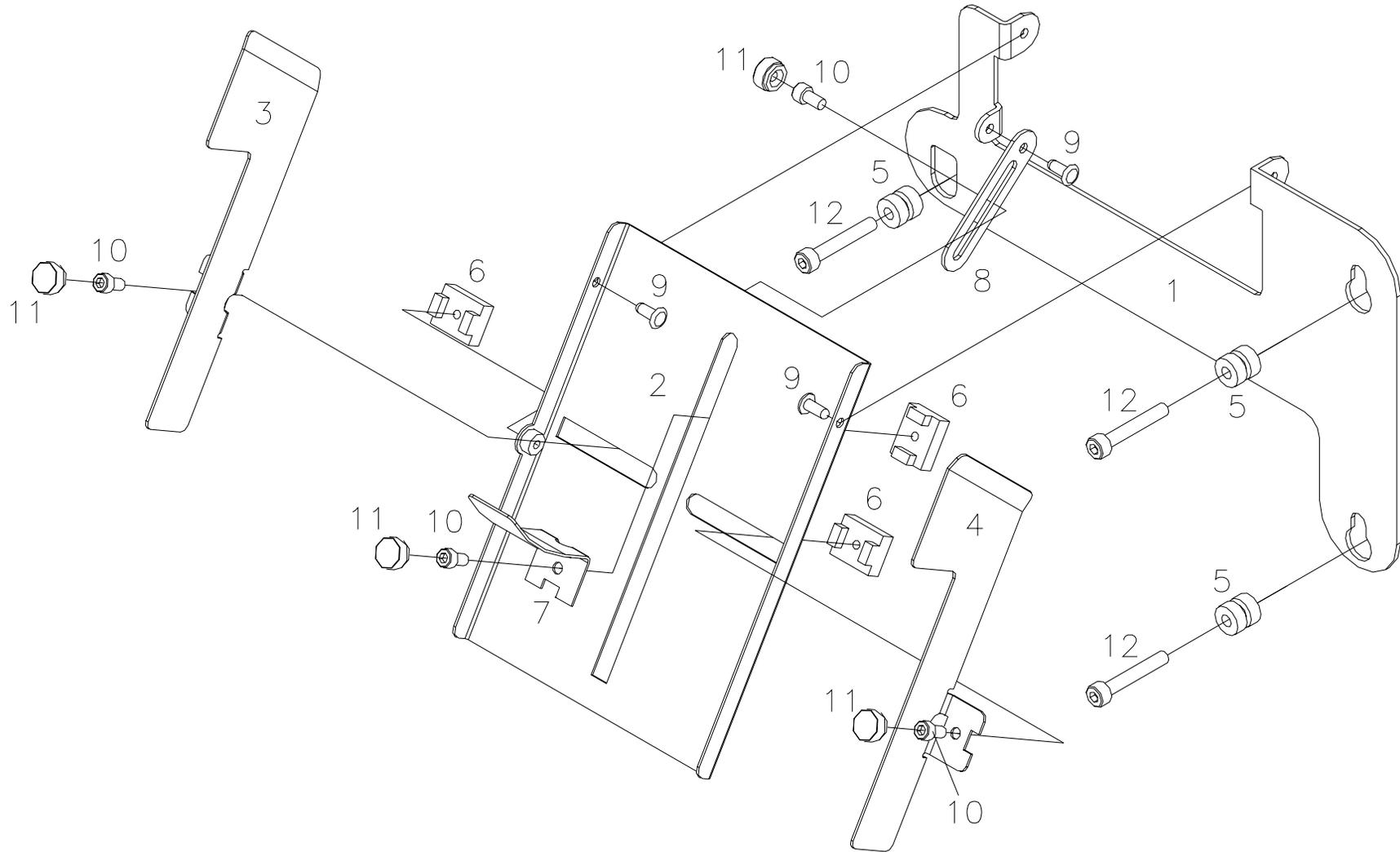


Rotary Knife Parts List

Item	Part #	Description	Qty
1	487007	Bracket, Knife Base	1
2	487091	Knife Assy, Ground (Monarch)	1
3	197390	Assy, Stationary Knife	1
4	257056	Bracket, Front Side	1
5	999075	Bearing, Ball-R1038-ZZ	2
6	197308	Adjuster, Knife	1
7	990047	8-32 x 1/8 Cap Screw	1
8	197312	Spring, Cam	1
9	197313	Plate, Spring Cam	1
10	989978	Washer, #8 Star	1
11	990066	8-32 x 1/4 Button Head Screw	1
12	991067	8-32 x 5/16 Knurled Cup Point	2
13	197311	Cam, Knife Homing	1
14	990052	8-32 x 1/2 Cap Screw	4
15	990020	6-32 x 3/8 Button Head Screw	1
16	990051	8-32 x 3/8 Cap Screw	3
17	197309	Standoff, Solenoid Arm	1
18	487004	Knife, Actuator	1

Item	Part #	Description	Qty
19	990325	Snap Ring, 3/16	1
20	487003	Clutch, 6 Roller W/ Pulley	1
21	487009	Bracket, Solenoid Mount Block	1
22	197320	Solenoid Assy, 6V	1
23	990638	Heat Shrink Tubing, 3/16	AR
24	990643	Connector, VHR-2N	1
25	990644	Pin, Contact Pin On Roll	2
26	990240	Roll Pin, 3/32 x 1/2	1
27	197317	Compression Spring, Solenoid	1
28	991013	Washer, .335 x .215 x .031 Nylon	1
29	990729	Washer, .450 x .213 x .025 Nylon	1
30	990037	Washer, #6 SAE	1
31	989965	Washer, #6 Split Lock	1
32	990015	6-32 x 1/4 Cap Screw	1
33	487008	Bracket, Back, Knife Side	1
34	197318	Torsion Spring, Left	1
35	197319	Torsion Spring, Right	1

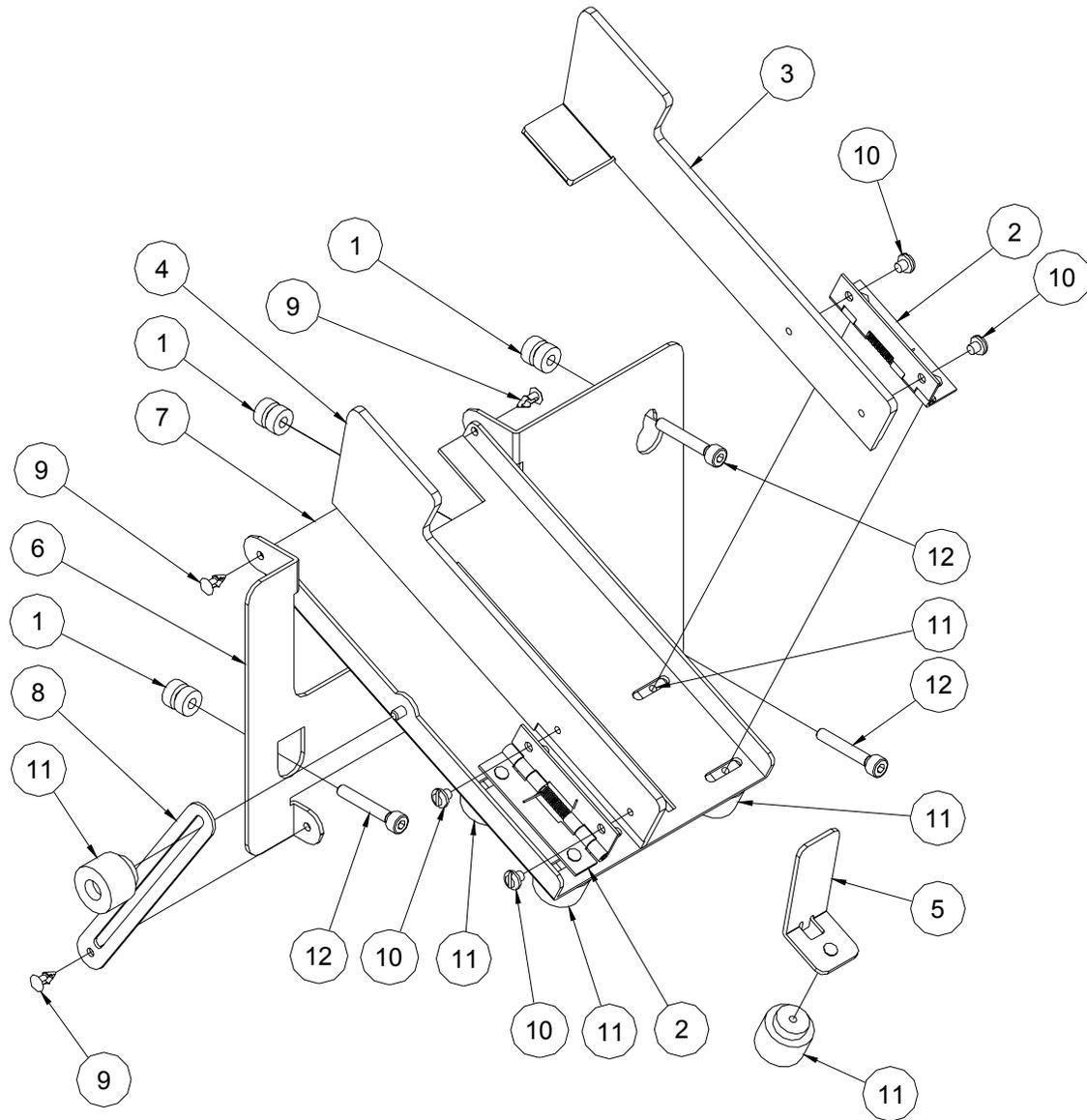
611 Stacker Assembly Drawing



611 Stacker Parts List

Item	Part #	Description	Qty
1	448001	Bracket, Stacker Base	1
2	448002	Bracket, Label Tray	1
3	448003	Bracket, Guide Left	1
4	448004	Bracket, Guide Right	1
5	448005	Bushing, Stacker Mount	3
6	448006	Nut, Stacker Slide	3
7	448007	Bracket, Label Stop	1
8	448008	Bracket, Lock	1
9	991200	Rivet	3
10	990015	6-32 x ¼ Cap Screw	4
11	990312	#6 Thumb Screw Knob	4
12	990423	4mm x 25mm Cap Screw	3

612 Stacker Assembly Drawing



612 Stacker Parts List

Item	Part #	Description	Qty
1	448005	Bushing, Stacker	3
2	448019A	Hinge, Spring Loaded, Altered	2
3	448023	Bracket, Label Guide Right	1
4	448018	Bracket, Label Guide Left	1
5	448022	Bracket, Label Stop	1
6	448016	Bracket, Stacker Base	1
7	448017	Bracket, Label Tray	1
8	448013	Bracket, Stacker Lock	1
9	991200	Rivet	3
10	991201	6-32 x 1/8 Slotted Head Screw	4
11	991210	Thumb Knob, 6-32	6
12	990423	M4 x .7 x .25 Cap Screw	3

