pitney bowes

Shipping & Mailing
Inserter

# Relay™ 3000/4000

## Document Inserting Systems with Touch Screen and Barcode Scanning

## User Guide

International English Edition

SV63138 Rev. B

August 31, 2015

**Statement of FCC Compliance**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause interference to radio communications. Operation of this equipment in a residential area is likely to cause interference, in which case the user will be required to correct the interference at his own expense. Use only a shielded interface cable to operate this equipment with a printer or other peripheral device.

**CAUTION:** Changes or modifications to this equipment not expressly approved by the party responsible for compliance (Pitney Bowes) could void the user's authority to operate the equipment.

CE It is certified that the equipment complies with all applicable Directives of the European Union. The touch screen and main inserting system contain a radio frequency transmitting device that is in compliance with the European Union's Directive 1999/5/EC on Radio Equipment and Telecommunications Terminal Equipment and the mutual recognition of their conformity.

UL Relay 3000/4000 is UL approved (US) and CUL approved (Canada).

**LED SAFETY**
LED emission according to EN 62471

SV63138 Rev. B August 31, 2015



We have made every reasonable effort to ensure the accuracy and usefulness of this manual; however, we cannot assume responsibility for errors or omissions or liability for the misuse or misapplication of our products.

Due to our continuing program of product improvement, equipment and material specifications as well as performance features are subject to change without notice. Your inserter system may not have some of the features described in this book.

E-Z Seal is a registered trademark of Pitney Bowes Inc. ENERGY STAR is a registered trademark of the United States Environmental Protection Agency.

## Chapter 3: Run a Job



## Chapter 4: OMR Scaning

## Chapter 5: Barcode Scanning

## Chapter 6: Clear Material



## Chapter 7: Troubleshooting and Error Messages



## Chapter 8: Material Specifications

## Safety

Follow these precautions whenever you use your inserting system:

- Read all instructions before you attempt to operate the system.
- Use this equipment only for its intended purpose.
- Place the system close to an easily accessible wall outlet.
- Place the system in an accessible location to allow for proper venting of the equipment and to facilitate servicing.
- Use the AC power adapter included with this device. Third party adapters may damage the device.
- Plug the AC adapter directly into a properly grounded wall outlet located near the equipment and easily accessible. Failure to properly ground the machine can result in severe personal injury and/or fire.
- The AC adapter/power cord is the primary means to disconnect this device from the AC supply.
- DO NOT use a wall outlet controlled by a wall switch or one that is shared with other equipment.
- DO NOT use an adapter plug on the line cord or wall outlet.
- DO NOT remove the ground pin from the line cord.
- DO NOT route the AC adapter power cord over sharp edges or trap it between furniture. Make sure there is no strain on the power cord.
- If the unit becomes damaged, unplug it from the wall.
- Keep fingers, long hair, jewelry and loose clothing away from moving parts at all times.
- Avoid touching moving parts or materials while the machine is in use. Before clearing a jam, be sure machine mechanisms come to a complete stop.
- Remove jammed material gently and carefully.
- DO NOT remove covers. Covers enclose hazardous parts that should only be accessed by properly trained service personnel.
- DO NOT place lighted candles, cigarettes, cigars, etc., on the system.
- To prevent overheating, do not cover vent openings.
- Use only approved supplies.
- Improper storage and use of aerosol dusters or flammable aerosol dusters can cause an explosive-like condition that could result in personal injury and/or property damage.
- Never use aerosol dusters labeled flammable and always read instructions and safety precautions on the duster container label.

- Operation of this equipment without periodic maintenance will inhibit optimum operating performance and could cause the equipment to malfunction.
- Always follow specific occupational safety and health standards for your workplace.
- To reduce the risk of fire or electrical shock, DO NOT attempt to remove covers or disassemble the control panel or its base. The cabinet encloses hazardous parts.
- Before operating the main inserting machine with this device, make sure the machine has been properly prepared and that any other personnel in the area are standing clear of the inserter.
- Immediately report to service any damaged or non-functioning components that renders the unit unsafe.
- Contact your system supplier for the following:
  - Supplies
  - Material Safety Data Sheets
  - If you should damage the unit
  - Required maintenance service schedule

**If Your Stacker has an AC Adapter:**

- Use the AC power adapter included with this device. Third party adapters may damage the device
- To protect against electrical shock, plug the AC adapter power cord into a properly grounded wall outlet.
- DO NOT route the power cord for the AC adapter over sharp edges or trap it between it between pieces of furniture. Make sure there is no strain on the power cord.

**IMPORTANT:** Some of the inserter features and options covered in this content may not be available on your inserter.

# 1 • System Overview

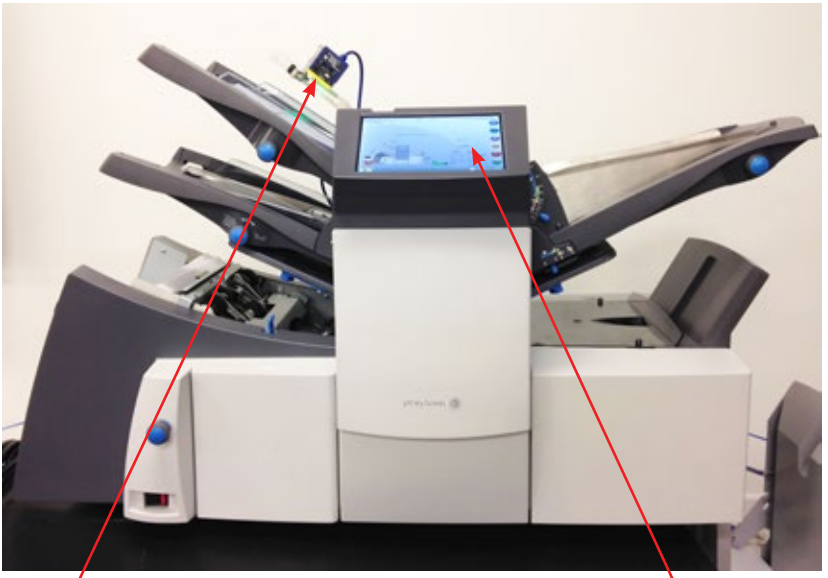
## Contents

*This page is intentionally blank.*

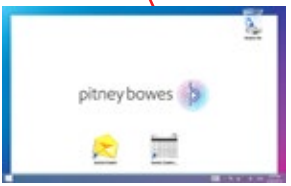
## Relay Inserter Introduction

The Relay 3000 and 4000 Inserters offer touch screen functionality and barcode scanning. The touch screen is standard on the Relay 4000 and an option for the Relay 3000. The touch screen is necessary for barcode scanning, which is an option for both systems.

Touch screen technology makes it easy to set up jobs and use the inserter. Enhanced barcode scanning decodes barcode information and enables the inserter to maintain the integrity of your mailpiece.



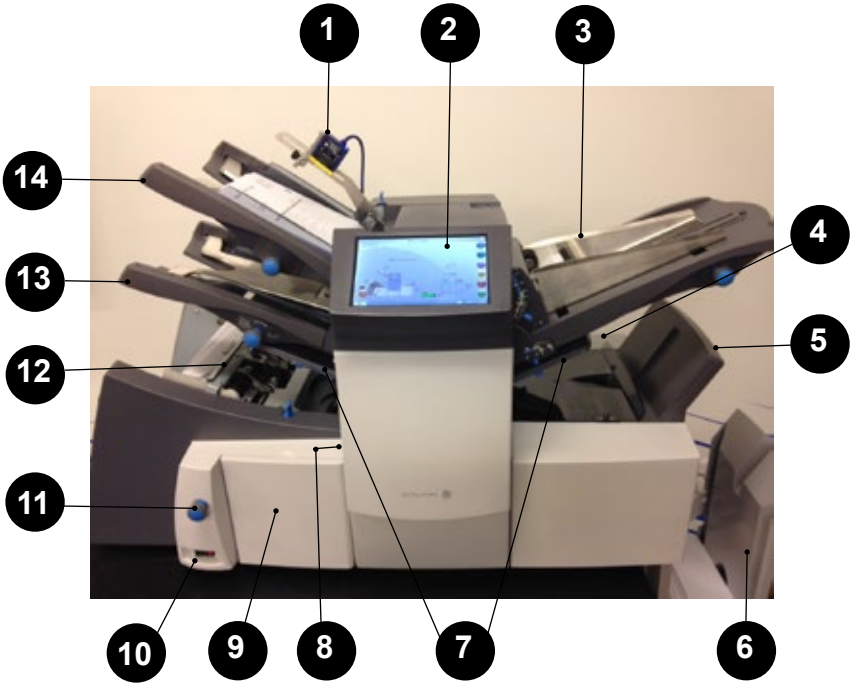
**Barcode Scanning**




**Touch Screen Control**

NOTE: The Relay Inserter touch screen is a WiFi enabled device. If clients choose to utilize this network connection it is the responsibility of the client to ensure that the settings adhere to their IT department standards.

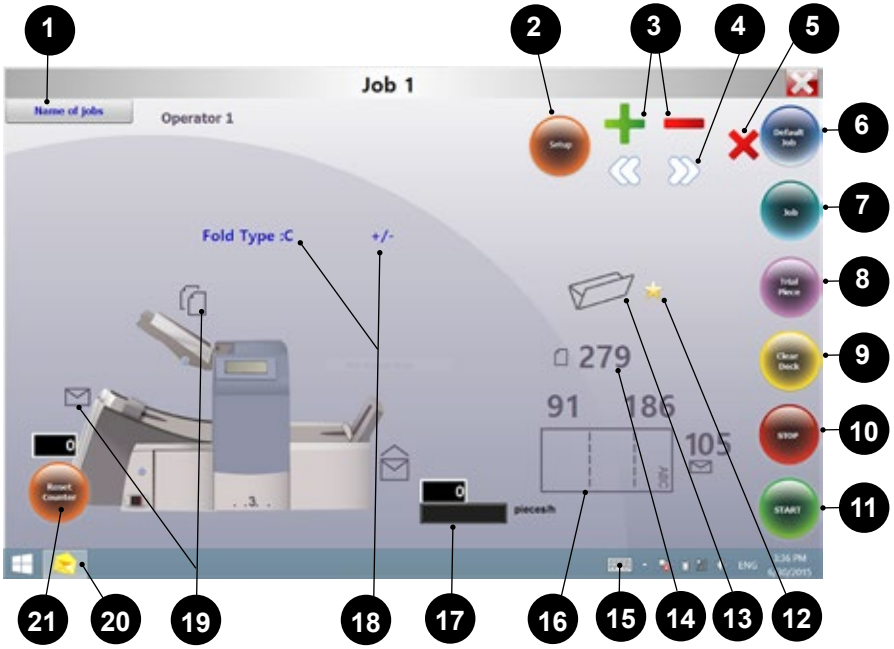
## Inserter Component Identification




| | |
|---|---|
| 1 | **2D Camera** - Converts barcode characters into mailpiece processing information. |
| 2 | **Touch Screen Display** - Use this interface to enter commands, setup jobs, and change settings. Symbols and icons on the display show the system status. |
| 3 | **Insert Feeder** - Use this feeder to add additional inserts to your envelope. Material fed from this feeder cannot be folded by the inserter. However, this feeder is especially suited to feeding pre-folded or thicker inserts. |
| 4 | **Sealer Bottle** - The sealer bottle is located on the rear of the inserter on the right side. It is under a hinged cover, labeled with the sealer icon. The sealer bottle provides sealing solution to the envelope sealer. |

| | |
|---|---|
| 5 | **Envelope Inverter** - Transports envelope into the stacker *face up.* |
| 6 | **Drop Stacker or Output Device** - located at the exit of the inserter, this device collects finished mailpieces. This device can be latched against the inserter when not in use. Alternatively, a range of power stackers are available which offer greater capacity than the standard drop stacker. |
| 7 | **Fold Plate 1 and 2** - They create the desired fold in material fed from the sheet feeder(s). The fold plates are automatically set from the control panel. |
| 8 | **Measuring Scale** - The scale is located on the left side of the inserter near the sheet feeders; used as an aid in measuring material and envelopes. |
| 9 | **Manual Advance Knob** - The knob is located under a cover on the front, left, lower corner of the inserter. Use it to turn the inserter mechanisms by hand to help clear a material. |
| 10 | **Power Switch** - This switch turns the inserter on and off. |
| 11 | **Side Guide Adjustment Knob** - Use this knob to adjust the side guides on the envelope feeder. |
| 12 | **Envelope Feeder** - Feeds envelopes into the inserting area where they are filled with material requested from the other feeder(s). |
| 13 | **Sheet Feeder 2** - Feeds material that requires folding. Its functions are similar to those of sheet feeder 1, but the manual feed option is NOT available from this feeder. |
| 14 | **Sheet Feeder 1** - this feeder is intended for feeding material that requires folding.<br>In addition, you can set sheet feeder 1 to **Manual Feed**. In this mode, you can run stapled sets of up to five sheets. The inserter waits for you to feed each set by hand into sheet feeder 1 before folding and inserting the set automatically. |

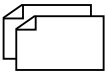
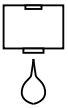
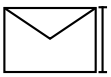
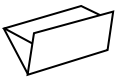
## Touch Screen Display Identification

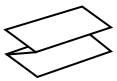
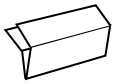
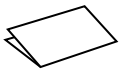
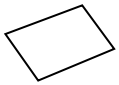
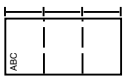
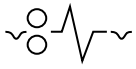



| | |
|---|---|
| 1 | **Name of Jobs** - Accesses the change job name screen. |
| 2 | **Setup** - Tap to access setup mode to program jobs into system memory and change options in existing jobs. *(Supervisor function; setup mode only)* |
| 3 | + − - Tap these icons to scroll through available options for job settings. *(Supervisor function; setup mode only)* |
| 4 | « » - Tap these icons to scroll through available job settings. *(Supervisor function; setup mode only)* |
| 5 | ✕ - Tap to delete a programmed job from the inserter memory. *(Supervisor function; setup mode only)* |
| 6 | **Default Job** - Tap to return inserter to its default or standard settings, which are pre-configured from the factory. A Pitney Bowes Service Representative can change these settings. |

| | |
|---|---|
| 7 | **Job** - Tap repeatedly to scroll through programmed jobs that are stored in the inserter and select a job you want to run. The inserter can store up to 21 jobs (including one default job). |
| 8 | **Trial Piece** - Tap to run a single test piece to check inserter setup. You must run a trial piece before you begin automatic operation using the **Start** button. If you use double detection, the inserter sets itself automatically as it runs the trial piece. The trial piece envelope will be unsealed and counted as one item. |
| 9 | **Clear Deck** - Tap to jog material through and out of the inserter. Also use it to clear the inserter and make it ready for automatic operation after a stoppage has occurred. |
| 10 | **Stop** - Tap to stop automatic operation at the end of the next cycle |
| 11 | **Start** - Tap to start automatic operation. |
| 12 | **Gold Star** - Helps guide you through the job settings by displaying next to the icon of the setting you are programming / changing. |
| 13 | **Fold Type Icon** - Represents the selected fold option. |
| 14 | **Sheet Length Icon** - Indicates in millimeters the length of the unfolded sheet. |
| 15 | **Keyboard Icon** - Tap to display a full keyboard displays on the lower half of the touch screen. |
| 16 | **Letter Fold Icon** - Indicates in millimeters the fold areas for the selected fold type. |
| 17 | **Counter** - Shows the number of mailpieces produced per hour. |
| 18 | **Option Icons** - Indicate there are available options within the selected setting. |
| 19 | **Symbol Icons** - Example of an icon that represents the contents of the feeder (double detect and envelope feed in this example). |
| 20 | **Insert Control Icon** - Tap to return display to opening screen. |
| 21 | **Reset Counter** - tap to reset the item or batch counter. |

## Control Panel Icons

| | |
|---|---|
|  | Used on sheet feeders to signify that the feeder is on **without** double detection. |
|  | Used on sheet feeders to signify that the feeder is on **with** double detection. |
|  | Used on insert feeder to signify that the feeder is on **without** double detection. |
|  | Used on insert feeder to signify that the feeder is on **with** double detection. |
|  | Used on sheet feeder 1 to signify that the feeder is set for manual feed. |
|  | Indicates the setting (from 1 to 5) of the envelope stop. |
| . . 3 . . | Indicates that the sealer bottle needs refilling. |
|  | Indicates the envelope depth. |
|  | Indicates the sealer unit is off (envelopes not sealed). |
|  | Indicates the sealer unit is off (envelopes not sealed). |
|  | Indicates the sealer unit is on (automatic envelope sealing) |
|  | Indicates a C (letter) fold is selected |

| | |
|---|---|
|  | Indicates a Z (accordion fold) is selected |
|  | Indicates a double fold is selected |
|  | Indicates a single fold is selected |
|  | Indicates a no-fold insert operation |
|  | Indicates a material stoppage. The position of this symbol in the display indicates where the stoppage has occurred. |
|  | Call Pitney Bowes for service |
|   | Indicates the paper size, address orientation and fold(s) set for sheet feeder |
|  | Indicates a material stoppage in a downstream device, such as a power stacker. |

## Turn the Touch Screen On/Off

1. Verify the inserter is powered up before you turn on the touch screen.
2. Press and hold the **ON/OFF** power button for a few seconds. The power button is located on the top eft frame of the touch screen.

   *NOTE: If the touch screen is in sleep mode, press the ON/OFF button.*

**Touch Screen ON/OFF Power Button**

## Use the Touch Screen Keyboard

*NOTE: If the Windows task bar does not show along the bottom of the display, swipe your finger down toward the bottom of the screen.*

1. To launch the keyboard, tap the icon on the task bar in the lower right corner of the display.
2. Tap the desired characters to enter information.
3. To close the keyboard tap the in the upper right corner.


**Capital Letters**

- For **single caps** tap the key **once**.
- To turn **Caps Lock** on tap the key **twice**.

## Change the Display Language

To change the language on the touch screen display:

1. Tap the icon on the opening screen.
2. When the Operator List displays, tap .
3. Select **Language>Program** from the menu bar. A screen opens displaying country flags associated with available languages.
4. Tap the flag that represents the language you want to display on the touch screen. *(This screen automatically closes and the display is now in the newly selected language.)*

## Touch Screen Usernames and Passwords

Operators and Supervisors can rename operator usernames and change operator passwords.

*NOTE: The customer service representative who installs your system provides the Supervisor password. Supervisor passwords cannot be changed.*

### *Rename Default Operator Usernames*

Each operator requires a unique username. This procedure can be used to rename an existing default operator username to a specific operator username. A maximum of 10 operators can be programmed into the touch screen.

1. Tap the  icon twice.
2. When the **Operator List** displays select a default Operator to rename (typically indicated as Operator 1 – Operator 10).
3. To launch the keyboard, tap the  icon (bottom right corner of the screen) and enter either the Supervisor or Operator password in the field. (*DO NOT tap*  .)
4. Select **File>Operators>Change** from the menu bar.
5. Use the touch screen keyboard to enter the new operator name.
6. Tap  .

### *Change an Existing Operator Password*

This procedure can be used to change an existing operator password.

1. Tap the  icon twice.
2. When the **Operator List** displays select an Operator username and tap  .
3. To launch the keyboard, tap the  icon on the bottom right corner of the screen and enter the Operator password in the field. (*DO NOT tap*  .)
4. Select **File>Password>Change** from the menu bar.
5. Use the touch screen keyboard to enter the new password; re-enter the password to confirm.
6. Tap  .
7. Tap  .

### *Recover an Existing Operator Password*

This activity requires Supervisor level access.

1. Tap the  icon twice.
2. When the **Operator List** displays, select the Operator name associated with the lost password and tap  .
3. Tap the touch screen keyboard and enter the Supervisor password **(71)** in the field. (*DO NOT tap*  .)
4. Select **File>Password>Recover** from the menu bar. The recovered password displays in the dialog box. *(Be sure to record the password for future reference.)*
5. Tap **OK** to close the dialog box.
6. Type the recovered password into the password field and tap  .

## Rename an Existing or Default Job

When a new job is created, a new name can be assigned to a default job. Operators and Supervisors can rename a job.

1. Tap the  icon twice.
2. When the **Operator List** displays select an Operator and tap  .
3. To launch the keyboard, tap the  icon on the bottom right corner of the screen and enter the Operator password in the field.
4. Tap  .
5. At the main control screen, tap the **Name of jobs** button in the upper left corner of the display.
6. Highlight a job in the **Name of jobs** list and tap **Change**.
7. Using the touch screen keyboard enter the new job name in the field.
8. Tap  to accept the new job name and tap  again to exit.

## Inserter Control Reports (on the Touch Screen)

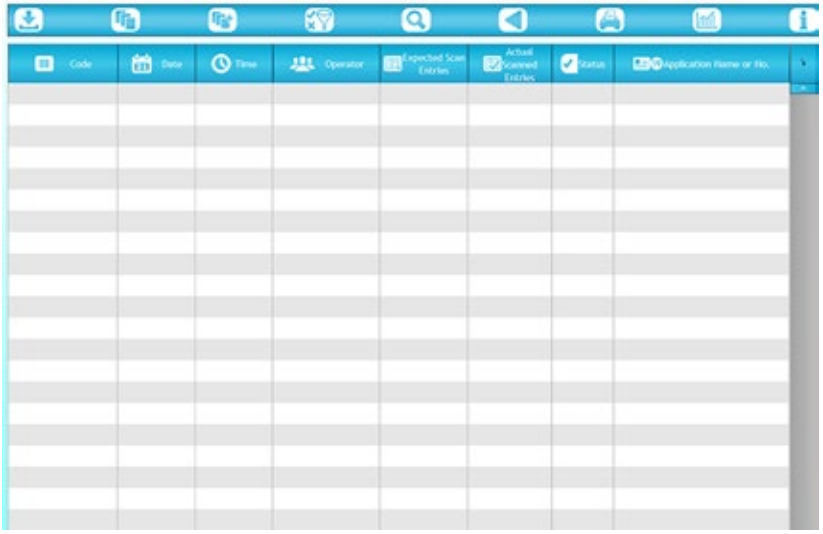
The touch screen offers mailpiece reporting features on inserters running enhanced barcode scanning applications.

The reports capture mailpiece data for a specified period of time or for specific jobs.

### *Report Data*

When running an enhanced barcode scanning application, the reports contain unique information found within the barcode.

- Date mailpiece was processed
- Time mailpiece was processed
- Operator name
- Job name
- Expected number of sheets
- Actual number of sheets *(processed from feeder with barcode reader)*
- Missing sheets
- Total number of envelopes
- Mailpiece status *(correctly processed indicated by OK or NOK)*
- Job start and end time



### *Access Reports*

Users are not required to log in to the touch screen to access inserter reports. There are two ways to access report data - you can select a specific date or set of dates or you can select a specific job or set of jobs.

#### Select by Date

To view inserter reports by a date or set of dates, follow these steps.

1. Tap the reports icon at the bottom of the touch screen desktop.

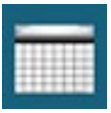
2. To select a report from a specific date, tap the **Open by date** icon at the top of the screen.

3. Select the date on the calendar and the report data populates the screen.
4. You can include information from additional dates in the report by repeating the date selection process.

#### Select by Job File

To view and/or print inserter reports by specific job(s) follow these steps.

1. Tap the reports icon at the bottom of the touch screen desktop.



2. To select a report by job, tap the **Open by file** icon at the top of the screen.

3. Browse for and select the desired the **.CRV** file. The report data populates the screen.

### *Archive Reports*

You can archive reports by setting up the system to automatically save them to the pre-installed SD card in the touch screen. This is typically a Supervisor activity.

1. Tap the  icon twice.
2. Select an Operator name and tap  .
3. Tap **Settings** from the menu bar.
4. Tap **Browse** and set the **Backup** field to the SD drive (usually D:\).
5. Tap  .

*All reports are automatically archived by date on the SD drive.*


### *Print Reports*

You can print reports directly through the touch screen if it is connected to an external printer on your wireless network.

1. Populate the screen with report data (either by date or job).
2. Tap the print icon to print the report. 

NOTE: If clients choose to print reports, it will be the responsibility of the client to connect the touch screen to their wireless network.

*This page is intentionally blank.*

# 2 • Program a Job

## Contents

*This page is intentionally blank.*

This section provides step-by-step instructions for setting up and saving a new scanning or non-scanning job and saving it using the touch screen display. Programming a job is typically a Supervisor activity.

## Navigate Using the Touch Screen

To help visually guide you through the programing sequence, a icon appears on the display next to the area being set.

- Tap the icons to scroll through and select available settings.
- Once the desired setting displays, tap the icons to scroll through available options or values for the selected setting.
- Tap to accept the selection and advance to the next setting.


*NOTE: For icon locations and descriptions, refer to the "System Overview" section of this guide.*

## Scanning and Non-Scanning Jobs

If scanning functionality (OMR or barcode) is enabled on your system, operators can toggle scanning on and off depending on the job. If scanning functionality is not available on your inserter, your job setup will differ slightly.

Refer to the table below to review the steps that apply to your job type and follow the step-by-step instructions provide in this section.

**Scanning and Non-Scanning Job Sequence**

| Scanning Job | Non-Scanning Jobs |
|---|---|
| Enable scanning (OMR On or Off) | Disable scanning (OMR Off) if available on your inserter. *(Skip if you inserter does not have scanning)* |
| Set fold type | Set fold type |
| Set main (scanning) sheet feeder | Set accumulation |
| Set select/supplementary sheet or insert feeder | Set first/main sheet feeder |
| Set the sealer | Set second/supplementary sheet feeder |
| Set paper length | Set insert feeder |
| Set fold A /fold B | Set mode type (insertion or fold) |
| Set envelope depth | Set the sealer |
| Set envelope stop | Set paper length |
| Set batch counter | Set fold A /fold B |
| Confirm job setup | Set envelope depth |
| Run a trial piece | Set envelope stop |
| | Set batch counter |
| | Confirm job setup |
| | Run a trial piece |

## Program a Job

### *Log In*

Log in with Supervisor level access.

1. Tap the  icon twice at the bottom of the touch screen desktop.
2. When the **Operator List** displays select Supervisor username or an Operator not in use (typically indicated as Operator 1 - Operator 10).
3. Tap  .
4. To launch the keyboard, tap the  icon in the bottom right corner of the screen and type the Supervisor password (**71**) in the field.
5. Tap  . The main control screen opens.
6. Tap  in the upper right corner to close the keyboard.

### *Enter Supervisor Access Code*

1. Tap the **Setup** button. The **Enter Access Code** field displays over the inserter model on the touch screen display.
2. Tap the  icons to increase or decrease to **71**.
3. Tap  to accept the access code and advance to the job settings.

### *Select the Job Number (New or Existing Job)*

When prompted for the job number, follow these steps to select or create the job. You can select an existing job and overwrite its current settings or you can select an unused job and program new settings.

1. Use the  icons to scroll through the job numbers until you find the desired job number. (*To identify an unused job, scroll through the jobs until there are no setup symbols displayed on the screen.)*
2. Tap  to accept the job number and advance to the first setting.

*NOTE: If you use an existing job number, the old settings will be overwritten by the new settings you are adding.*

## Program a Scanning Job

### Enable Scanning (OMR or Barcode)

1. When prompted, tap the  icons to select one of the **OMR on** settings. *(Refer to the OMR Settings table included here.)*
2. Tap  to accept the selection and advance to the next setting.

**Scanning Settings Table (OMR and Barcode)**

Some of the OMR settings have been configured to apply to both OMR and barcode scanning jobs. When you are running barcode scanning applications, use the OMR functions that apply to barcode scanning.

*OMR and Barcode Settings Table*

| OMR Settings | Description |
|---|---|
| OMR off | OMR or barcode scanning is turned off for this job. |
| OMR on | OMR or Basic barcode scanning is enabled for this job with *standard* OMR mark positioning. |
| OMR + Sequence | OMR scanning + Wrap Around Sequence scanning is enabled for this job, with *standard* OMR mark positioning. |
| OMR + Select feed | OMR scanning + Select Feed/Autobatch scanning for this job, with *standard* OMR mark positioning. |
| OMR + Select feed + Sequence | OMR scanning + Select Feed/Autobatch + Wrap Around Sequence *OR* Enhanced barcode scanning is enabled for this job, with *standard* OMR mark positioning. |
| OMR Offset on | OMR scanning is turned on for this job, with *offset* OMR mark positioning. |
| OMR Offset + Sequence | OMR scanning + Wrap Around Sequence scanning is enabled for this job, with *offset* OMR mark positioning. |
| OMR Offset + Select feed | OMR scanning + Select Feed/Autobatch scanning is enabled for this job, with *offset* OMR mark positioning. |
| OMR Offset + SF + Sequence | OMR scanning + Select Feed/Autobatch + Wrap Around Sequence scanning for this job, with *offset* OMR mark positioning. |

*NOTE: Available options depend on the scanning functionality of your inserter.*

*NOTE: The maximum number of pages per envelope that can be fed from this feeder when using barcode scanning must fall within the limits of the inserter.*

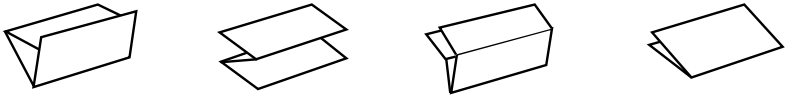
*NOTE: Sheet feeder options **SF Double Detect** and **On SF** are not supported when using barcode scanning.*

### Set the Fold Type

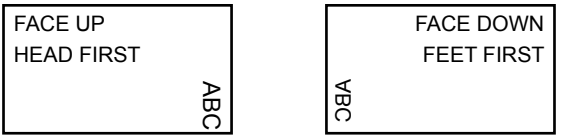
1. Tap the + − icons to scroll through the fold types.
2. Tap » to accept the fold type and advance to the next setting.

**Fold Types**

*C - Letter* *Z - Accordion* *Double* *Single*



When the fold type is selected, the display indicates the correct orientation of the paper for loading into the feeders:




### Set the Main (Scanning) Sheet Feeder

1. Tap the + − icons to scroll through the options.
2. Tap » to accept the option and advance to the next setting.

*Main Sheet Feeder 1 Options (Scanning Jobs)*

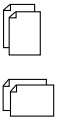
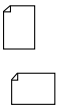
| Icon | Option | Description |
|---|---|---|
|  | On Double Detect | Feeder on with the double detector operating. (The double detector stops the inserter if two or more sheets feed simultaneously.) |
|  | On | Feeder on without the double detector. |

**Set Select/Supplementary Sheet or Insert Feeder**

Select feed allows for one piece to be *selectively* fed from either feeder per envelope.

1. Tap the  icons to scroll through the options. (Refer to the *Additional Feeder Options, Scanning Jobs* table for details.)
2. Tap  to accept the option and advance to the sealer setting.

*Additional Feeder Options (Scanning Jobs)*

| Icon | Option | Description |
|---|---|---|
|  | On Double Detect | Feeder on with the double detector operating. *(The double detector stops the inserter if two or more sheets feed simultaneously.)* |
|  | On SF Double Detect *(not shown on single or Z folds)* | Select feeder on with the double detector operating. *(The double detector stops the inserter if more than one sheet simultaneously feeds from the feeder.)* |
|  | On SF *(not shown on single or Z folds)* | Select feeder on without the double detector. |
| | Off | Feeder turned off for this job. |
|  | On *(not shown on single or Z folds)* | Feeder on without the double detector or select feed. |

*Setting the Scanning Feeder:*

- **If sheet feeder 1 is set for the main/scanning feeder** - you can program sheet feeder 2 and/or the insert feeder for normal (one per envelope) feeding or select feeding.
- **If sheet feeder 2 is set for the main/scanning feeder** - you can program sheet feeder 1 and/or the insert feeder for normal (one per envelope) feeding or select feeding.

### Set the Sealer

This setting appears only if *insertion mode is selected*. To select whether or not you want to seal envelopes.

1. Tap the + − icons to toggle the option to **On** or **Off**.
2. Tap » to accept the option and advance to the next setting.

*Sealer Options*

| Icon | Option | Description |
|---|---|---|
|  | On | Turns the sealer unit on for automatic sealing of envelopes. Make sure the sealer water bottle is full of E-Z Seal® or water. |
|  | Off | Turns the sealer unit off. Envelopes will be ejected unsealed. |

### Set Paper Length

1. Use the scale on the side of the inserter cover to measure the paper.
   - *US letter - 279mm (11 inches)*
   - *A4 paper - 297mm*
2. Tap the + − icons to scroll through paper lengths (displayed in mm).
3. Tap » to accept the paper length value and advance to the next setting.

**Set Fold A**

1. Select the size of the first fold required.

   *NOTE: Depending on the settings you made earlier for fold type and paper length, the inserter suggests the correct dimension for the first fold. Most of the time this setting will prove satisfactory.*

2. To change the standard fold setting, tap the + − icons until the length of required fold displays. A ★ icon displays next to the fold panel you are setting.

   *NOTE: The inserter automatically limits your options to available specifications on your inserter. (As you change the length of fold A, the dimension of fold B changes automatically to keep within the correct paper length and inserter specifications.)*

3. Tap » to accept the fold value and advance to the next setting.

**Set Fold B**

1. Select the size of the second fold required.

   *NOTE: Similar to setting fold, the inserter suggests the correct dimension for fold B.*

2. To change the standard setting, tap the + − icons until the length of fold required displays. A ★ icon displays next to the fold panel you are setting.

3. Tap » to accept the fold value and advance to the next setting.

   - **Inserting jobs** - continue to the *Set the Envelope Depth setting*.
   - **Fold-only job** - there are no more job settings, skip to *Confirming the Job Setup.*

**Set Envelope Depth**

1. Use the scale on the front cover to measure the envelope depth.
2. Tap + − to scroll through the measurements (displayed in mm).
3. Tap » to accept the value and advance to the next setting.

### Set the Envelope Stop

*NOTE: The stop has five positions numbered 1 to 5. Setting 3 is the standard setting for normal weight paper with standard folds. A thinner/lighter insert requires a lower setting and a thicker/heavier insert requires a higher setting.*

1. Tap the + − icons to scroll through the envelope stop positions.
2. Tap » to accept the position and advance to the next setting.

### Set the Batch Counter

The batch counter allows you to automatically process pre-defined batches of finished mailpieces. When the batch is complete, the inserter automatically stops.

*NOTE: If the batch counter is not turned on, the display counter simply counts the number of items processed until you press* **Reset Counter**.

1. Tap the **Start** button to begin processing the next batch.
2. Tap the + − icons to toggle the batch mode to **On** or **Off**.

   *NOTE: If the* **batch counter is turned on**, *the inserter prompts for the batch quantity. The default quantity is 50, but you may select any value up to 999 by tapping the + − icons.*
3. Tap » to accept the setting.

### Confirm Job Setup

Job setup is now complete. Using the inserter model and icons, the touch screen display shows all the selected job settings.

1. Review the job settings.
2. Tap the « » icons to scroll back and change a setting.
3. Tap the **Setup** button to accept the new settings and exit setup mode.
4. When setup changes are complete, the touch screen displays the new job settings with the message *Trial Piece Required*.
5. Test the setup by running a trial piece.

*NOTE: The inserter retains job settings until you change or delete them, even when the power is disconnected. If you need to change the name of the job, refer to "Change a Job Name" in the System Overview chapter of this guide.*

**Run a Trial Piece**

Run a trial piece to test the job settings.

1. Load material and tap the **Trial Piece** button.
2. If you need to make changes to the settings based on the trial piece:
   a. Tap the **Setup** button.
   b. Log in with Supervisor access level
   c. Tap the « » icons to scroll to the setting you wish to modify.
   d. Tap the + − icons to scroll to the desired option.
3. Tap the **Setup** button to accept the setting modification and return to run mode. The inserter saves the job with the new settings.
4. Run another trial piece to test the modified settings.

   *NOTE: Any time you modify settings you must run a trial piece.*

*Incorrect Address Position - Adjust Fold Settings*

When you run a trial piece, if the address is not in the correct position refer to the *Adjust Fold Settings* table to help you fine tune your folds settings.

*Adjust Fold Settings Table*

| Fold Type | Address Too Low | Address Too High |
|---|---|---|
| C - Letter Fold | Decrease Fold A | Increase Fold A and increase Fold B by the same amount. |
| Z - Accordion Fold | Increase Fold A | Decrease Fold A and increase Fold B by the same amount |
| Single Fold | Increase Fold A | Decrease Fold A |
| Double Fold | Decrease Fold A | Increase Fold A |

*It is recommended the fold is only adjusted by 0.20 inches (5mm) each time.*

## Program a Non-Scanning Job

Follow this sequence of steps to program a non-scanning job.

*NOTE: If scanning is not available on your system, begin with "Set Accumulation."*

### Disable Scanning (OMR or Barcode) if Functionality Exists

If scanning is enabled on your system, set it to OMR off.

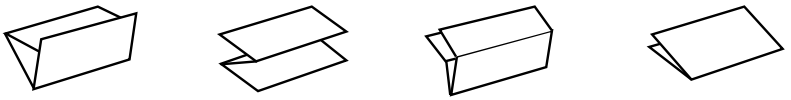
1. When prompted, tap the + − icons to select **OMR off**.
2. Tap » to accept the selection and advance to the next setting.

### Set the Fold Type

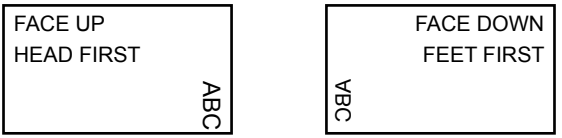
1. Tap the + − icons to scroll through the fold types.
2. Tap » to accept the fold type and advance to the next setting.

#### Fold Types

*C - Letter* *Z - Accordion* *Double* *Single*



When the fold type is selected, the display indicates the correct orientation of the paper for loading into the feeders:




*NOTE: For accumulation jobs, DO NOT manually change the automatic fold length dimensions at the Fold A and Fold B settings.*

### Set Accumulation

If *accumulation* is enabled, it allows multiple sheets to be fed from the sheet feeder into the envelope. *This setting is only available for non-scanning jobs.*

1. Tap the  icons to scroll through the accumulation options.
2. If you set accumulation to **ON**:
   a. Tap  to set the number of pages to feed into each envelope. (**Accumulation = 2 to 10**)
   b. Tap the  icons to enter the number of pages.
3. Tap  to accept the option and advance to the next setting.

*Inserter Accumulation Settings*

| Setting | Description |
|---|---|
| Accumulation: OFF | Accumulation is turned off for this job. |
| Accumulation From Main | Accumulation is turned on with sheets feeding from the main feeder. This feeder normally contains the address sheet. |
| Accumulation From Suppl | Accumulation is turned on with sheets feeding from the supplementary feeder - one address sheet from the main feeder followed by multiple sheets from the supplementary feeder. |
| Accumulation = (2 to 10) | If Accumulation is ON, select how many pages you want to feed into each envelope. |

*IMPORTANT! The number of sheets that can be accumulated is limited by inserter specifications. Exceeding this limit can cause a malfunction.*

### Set First/Main Sheet Feeder

The first feeder is automatically selected depending on the fold type.

- C*ollating different sheets using both sheet feeders* - load the prime (address-bearing) document into sheet feeder 1 for C and double folds. Load it into sheet feeder 2 for Z or single folds.
- *Running a single sheet* - use either sheet feeder or use both with the linked feeder feature described in the following *Sheet Feeder 1 Options* table.

1. Tap the  icons to scroll through the options**.**
2. Tap  to accept the selection and advance to the next setting.

*First/Main Sheet Feeder Options (Non-Scanning Jobs)*

| Icon | Option | Description |
|---|---|---|
|  | On Double Detect | Feeder on with the double detector operating. *(The double detector stops the inserter if two or more sheets feed simultaneously.)* |
| | Off | Feeder turned off for this job. |
|  | On | Feeder on without the double detector. |
|  | Manual Feed *(see the description following this table)* | Able to manually feed collated sets. Only available on sheet feeder 1. |
|  | Linked: On<br>*(only available on 3-station inserters)* | Feed will initially come from the first sheet feeder. When that feeder is empty, the inserter automatically switches feeding from the second sheet feeder.<br>When a trial piece is requested, *both* feeders must be loaded, as a trial piece will feed from each feeder. |
|  | Linked: On Double Detect<br>*(only available on 3-station inserters)* | |

**Manual Feed Option**

- The manual feed setting allows you to run stapled sets of up to five sheets - a maximum of 100 lbs.(400gsm) per set. The maximum compressed thickness of the set *after folding* must not exceed 0.08 inches (2mm).
- The inserter waits for manual insertion of each set into sheet feeder 1 after which it will fold and insert the set automatically.
- When running manual feed mode, sheet feeder 2 becomes inoperable.
- The manual feed option is only available when Accumulation is set to OFF.

**Set Second/Supplementary Sheet Feeder**

If you want to use the second sheet feeder use these settings.

1. Tap the + − icons to scroll through the options. (Refer to the *Second/Supplementary Sheet Feeder Options, Non-Scanning Jobs* table for descriptions)
2. Tap » to accept the option and advance to the next setting.

*Second/Supplementary Sheet Feeder Options (Non-Scanning Jobs)*

| Icon | Option | Description |
|---|---|---|
|  | On Double Detect | Feeder on with the double detector operating. *(The double detector stops the inserter if two or more sheets feed simultaneously.)* |
|  | On | Feeder on without the double detector. |
| | Off | Feeder turned off for this job. |

### Set the Insert Feeder

Select whether you want to use the insert feeder and how it will be used.

1. Tap the + − icons to scroll through the options. (Refer to the *Insert Feeder Options* table for descriptions.)
2. Tap » to accept the option and advance to the next setting.

*Insert Feeder Options*

| Icon | Option | Description |
|---|---|---|
|  | On Double Detect | Feeder on with the double detector operating. *(The double detector stops the inserter if two or more sheets feed simultaneously.)* |
|  | On | Feeder on without the double detector. |
| | Off | Feeder turned off for this job. |

### Set the Mode Type - Insertion or Fold-Only

This setting only appears if *Accumulation* is *not turned on.*

The inserter needs to know if the job requires inserting material into an envelope or if it is a fold-only job.

*To set the mode type:*

1. Tap the + − icons to toggle between the options.
   - **Insertion Mode**
     Activates the envelope feeder for a normal inserting job.
   - **Fold-Only Mode**
     Turns the envelope feeder off and sets the inserter to act as a folding module.
2. Tap » to accept the mode type and advance to the next setting.

### Set the Sealer

This setting appears only if *insertion mode is selected*.

1. Select whether or not you want to seal envelopes.
2. Tap the + − icons to toggle the option to **On** or **Off**.
3. Tap » to accept the option and advance to the next setting.
   - If you selected *either of the sheet feeders*, continue to the *Set Paper Length* setting.
   - If you are using the i*nsert feeder only*, folding is not possible; skip to the *Set Envelope Depth* setting.

*Sealer Options*

| Icon | Option | Description |
|---|---|---|
|  | On | Turns the sealer unit on for automatic sealing of envelopes. Make sure the sealer water bottle is full of E-Z Seal® or water. |
|  | Off | Turns the sealer unit off. Envelopes will be ejected unsealed. |

### Set Paper Length

1. Use the scale on the side of the inserter cover to measure the paper.
   - *US letter - 279mm (11 inches)*
   - *A4 paper - 297mm*
2. Tap the + − icons to scroll through paper lengths (displayed in mm).
3. Tap » to accept the paper length value and advance to the next setting.

**Set Fold A**

1. Select the size of the first fold required.

   *NOTE: Depending on the settings you made earlier for fold type and paper length, the inserter suggests the correct dimension for the first fold. Most of the time this setting will prove satisfactory.*

2. To change the standard fold setting, tap the  icons until the length of required fold displays. A  icon displays next to the fold panel you are setting.

   *NOTE: The inserter automatically limits your options to available specifications on your inserter. (As you change the length of fold A, the dimension of fold B changes automatically to keep within the correct paper length and inserter specifications.)*

3. Tap  to accept the fold value and advance to the next setting.

**Set Fold B**

1. Select the size of the second fold required.

   *NOTE: Similar to setting fold A, the inserter suggests the correct dimension for fold B.*

2. To change the standard setting, tap the  icons until the length of fold required displays. A  icon displays next to the fold panel you are setting.

3. Tap  to accept the fold value and advance to the next setting.

   - **Inserting jobs** - continue to the *Set the Envelope Depth setting*.
   - **Fold-only job** - there are no more job settings, skip to *Confirming the Job Setup.*

**Set Envelope Depth**

1. Use the scale on the front cover to measure the depth of your envelope.
2. Tap  to scroll through the measurements (displayed in mm).
3. Tap  to accept the value and advance to the next setting.

### Set the Envelope Stop

*NOTE: The stop has five positions numbered 1 to 5. Setting 3 is the standard setting for normal weight paper with standard folds. A thinner/lighter insert requires a lower setting and a thicker/heavier insert requires a higher setting.*

1. Tap the  icons to scroll through the envelope stop positions.
2. Tap  to accept the position and advance to the next setting.

### Set the Batch Counter

The batch counter allows you to automatically process pre-defined batches of finished mailpieces. When the batch is complete, the inserter automatically stops.

*NOTE: If the batch counter is not turned on, the display counter simply counts the number of items processed until you press* **Reset Counter**.

1. Tap the **Start** button to begin processing the next batch.
2. Tap the  icons to toggle the batch mode to **On** or **Off**.

   *NOTE: If the* **batch counter is turned on**, *the inserter prompts for the batch quantity. The default quantity is 50, but you may select any value up to 999 by tapping the*  *icons.*
3. Tap  to accept the setting.

### Confirm Job Setup

Job setup is now complete. Using the inserter model and icons, the touch screen display shows all the selected job settings.

1. Review the job settings.
2. Tap the  icons to scroll back and change a setting.
3. Tap the **Setup** button to accept the new settings and exit setup mode.
4. When setup changes are complete, the touch screen displays the new job settings with the message *Trial Piece Required*.
5. Test the setup by running a trial piece.

*NOTE: The inserter retains job settings until you change or delete them, even when the power is disconnected. If you need to change the name of the job, refer to "Change a Job Name" in the System Overview chapter of this guide.*

### Run a Trial Piece

Run a trial piece to test the job settings.

1. Load material and tap the **Trial Piece** button.
2. If you need to make changes to the settings based on the trial piece:
   a. Tap the **Setup** button.
   b. Log in with Supervisor access level.
   c. Tap the  icons to scroll to the setting you wish to modify.
   d. Tap the  icons to scroll to the desired option.
3. Tap the **Setup** button to accept the setting modification and return to run mode. The inserter saves the job with the new settings.
4. Run another trial piece to test the modified settings.

   *NOTE: Any time you modify settings you must run a trial piece.*

*Incorrect Address Position - Adjust Fold Settings*

When you run a trial piece, if the address is not in the correct position refer to the *Adjust Fold Settings* table to help you fine tune your folds settings.

*Adjust Fold Settings Table*

| Fold Type | Address Too Low | Address Too High |
|---|---|---|
| C - Letter Fold | Decrease Fold A | Increase Fold A and increase Fold B by the same amount. |
| Z - Accordion Fold | Increase Fold A | Decrease Fold A and increase Fold B by the same amount |
| Single Fold | Increase Fold A | Decrease Fold A |
| Double Fold | Decrease Fold A | Increase Fold A |

*It is recommended the fold is only adjusted by 0.20 inches (5mm) each time.*

## Modify an Existing Job

To modify an existing job follow these steps. (This requires Supervisor level access.)

1. Tap the **Setup** button to enter setup mode.
2. The **Enter Access Code** field displays over the inserter model on the touch screen display. Tap + − to increase or decrease to **71**.
3. Tap » to accept the code and advance to the job selection.
4. Tap the + − icons to display the job you wish to modify.
5. Tap » to accept the job selection and advance to the job programming settings.
6. Tap the « » icons to scroll through the setting(s).
7. Tap the + − icons to scroll through the options or desired values.
8. Tap » to accept the job setting.
9. Tap the **Setup** button to save the changes and exit setup mode.

## Delete a Job

To delete an existing job from the inserter system follow these steps. (This requires Supervisor level access.)

1. Tap the **Setup** button to enter setup mode.
2. The **Enter Access Code** field displays over the inserter model on the touch screen display. Tap + − to increase or decrease to **71**.
3. Tap » to accept the code and advance to the job selection.
4. Tap the + − icons to display the job you wish to delete.
5. Tap the ✕ to delete the job. The display shows “Press again to confirm.”
6. Tap the ✕ again. The display briefly shows “Deleting Job” as the job is erased.
7. Tap the **Setup** button to exit setup mode.

*This page is intentionally blank.*

# 3 • Run a Job

## Contents

*This page is intentionally blank.*

## Run a Job

The operating activities outlined here assume that a job has already been programmed into the Relay 3000 or 4000 inserter. *(Programming a job is typically a Supervisor function.)*

Activities Operators perform with the touch screen to run a previously programmed job:

- Verify the inserter has power
- Turn on the touch screen
- Log into the system
- Select a job
- Load material
    - Adjust and load the sheet feeders
    - Adjust and load the envelope feeders
    - Adjust and load the insert feeders
- Run a trial piece
- Run the job
- Fill the sealer *(if needed)*
- Adjust the stacker *(if needed)*

**Read the safety information in this guide *before* connecting the inserter.**

## Verify the Inserter Has Power

1. Verify the power cord is connected to the socket on the back of the inserter.
2. Verify the power cord is plugged into a power outlet near the machine and is easily accessible.
3. Turn the power switch ON.

## Turn On the Touch Screen

1. Make sure the inserter is powered up before you power up the touch screen.
2. Press and hold the **ON/ OFF** power button for a few seconds. The power button is located on the top left rim of the touch screen.

   *NOTE: If the touch screen is in sleep mode, press the ON/OFF button.*


## Log In

1. Tap the  icon twice.
2. Highlight the operator name from the list and tap  .
3. To launch the keyboard, tap the  icon in the bottom right corner of the screen and type the password in the field..
4. Tap  . The main control screen opens.

*Operators can run all pre-programmed jobs using the touch screen main control screen.*

## Select a Job

When the inserter is turned ON and you are logged in, the touch screen displays the last job run with the message *Trial Piece Required*.

Select the job you wish to run.

1. Tap the **Job** button to scroll through the jobs, until the job you want displays, *OR* tap the **Default** button if you want to run the inserter with your default job settings.

   *NOTE: Only a PB Service Representative can modify default job settings.*

2. Load material - refer to the *Loading Material* section in this guide.
3. If material is already loaded, tap the **Trial Piece** button. The inserter sets itself and runs a test piece for you to check.

## Manual Feed Jobs

If you select a manual feed job where sheet feeder 1 is set for manual feed of collated sets, DO NOT load the sheet feeder. Instead, you will feed collated sets one at a time, by hand, as required.

Before you run a manual feed job, pull back the lever (shown here).

This opens the feed mechanism for manual feed operation.

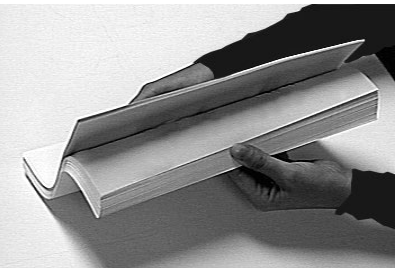
*NOTE: Return this lever to its normal position when you use the feeder for automatic operation.*

## Load Material

### *Adjust and Load the Sheet Feeders*

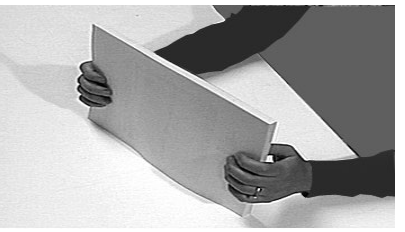
1. Adjust the side guides to the *width* of the material, then back-off a quarter turn on the side guide control. This sets the correct clearance between the guides and the material.

2. Aerate (fan) the stack of paper to ensure that individual sheets are not stuck together.



3. Jog stack back into alignment.

   *The display indicates the correct orientation of the paper.*



| FACE UP<br>HEAD FIRST | FACE DOWN<br>FEET FIRST |
|---|---|
| ABC | ABC |

4. Place the paper stack onto the feed deck. Allow the deck to move down and the top of the paper stack to slide under the feed roller.

### *Adjust and Load the Envelope Feeder*

The envelope feeder feeds the outer envelope for the inserting job.

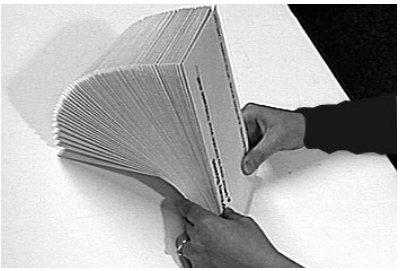
1. Press the envelope feeder loading switch to lower the feeder tray.

2. Use the side guide adjustment knob to adjust the side guides to the *width* of the envelopes. Once adjusted, back-off the adjustment knob 1/4 turn.

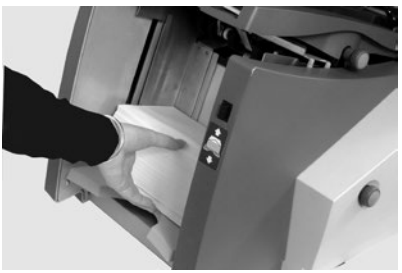
   *This sets the correct clearance between the guides and envelopes.*

3. Take the stack of envelopes; aerate and fan it to ensure that individual envelopes are not stuck together.

4. Place the stack of envelopes into the feeder with the flap side **UP** and flap **LAST**.



5. Press the envelope feeder loading switch again to raise the envelope stack to the normal feeding position.



### Load Envelopes without Stopping the Inserter

1. Press the envelope feeder loading switch to lower the feeder tray.
2. Load envelopes as described earlier in this section.
3. Press the envelope feeder loading switch again.

   *The envelope stack rises to the normal feeding position and processing continues automatically.*

### *Adjust and Load the Insert Feeder*

The insert feeder feeds items that do not require folding. Depending on configuration of your inserter, you may not have an insert feeder.

1. Use the side guide adjustment knob to adjust the side guides to the *width* of the inserts you are running. Once adjusted, back-off the adjustment knob 1/4 turn.

   *This sets the correct clearance between the guides and inserts.*

2. Refer to the labels located on the insert feeder and match your insert type (slip, reply envelope, pre-folded, booklet) with the icon and color.

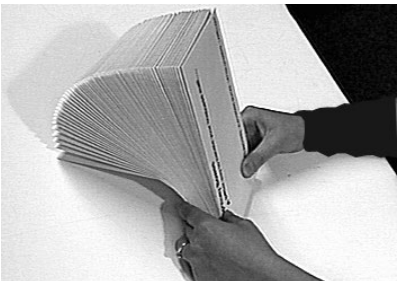
   ***Identifying Your Insert***

   *If the label indicates a range of settings, we recommend you select a higher number or letter for a thicker the insert*.

3. Set the blue separator gap lever to the **number** required.

4. Set the blue separator shield lever to the **letter** required.

5. Take the stack of inserts and aerate and fan it to ensure that individual pieces are not stuck together.



6. Shingle the inserts *(as shown here)* and place them on the feed deck.

   *Loading orientation can vary depending on the inserts. As a general rule, load inserts using the orientation guidelines in the table below.*

7. Let the wedge (material prop) slide down behind the stack to support the inserts.

**Orientation Table for Loading Inserts**

| Insert Type | Orientation |
|---|---|
| Slip | Face up, bottom edge first |
| Reply Envelope | Face up, top edge first |
| Pre-Folded | Face up, closed edge first |
| Booklet | Face up, bound edge first |

## Run a Trial Piece

Run a trial piece to test the job settings.

1. Load material and tap the **Trial Piece** button to verify setup is correct.
2. You can still make changes to the job settings at this point if the trial piece needs fine tuning. *(This requires Supervisor level access.)*
   a. Tap the **Setup** button.
   b. Log in with Supervisor access level.
   c. Tap the  icons to scroll to the setting you wish to modify.
   d. Tap the  icons to scroll to the desired option.
3. Tap the **Setup** button to accept the change to the setting and return to run mode. The inserter saves the job with the new settings.
4. Run another trial piece to test the modified settings.

### *Trial Pieces and Linked Feeding*

- If you are using *linked feeding*, load *both* sheet feeders *before running a trial piece*.
- Two trial pieces are produced when linked feeding is enabled.
- When running the inserter the display shows: **1 > 2 > 1**. This confirms feeding automatically switches between feeders.

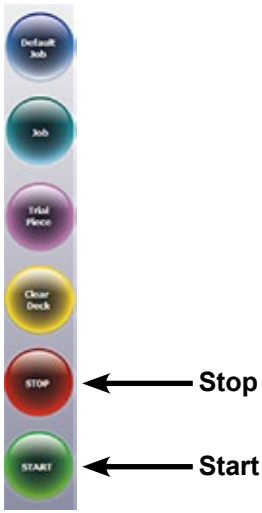
### *Material Changes or Double Detect Issues During Operation*

If you load material during a job run with different characteristics (weight, color shade, etc.), *OR* if you have problems with the double detect, run another trial piece.

This causes the inserter to recalibrate the double detect function for the new material.

## Start and Stop the Inserter

1. Tap the **Start** button on the touch screen to begin automatic operation.
2. The inserter runs until it runs out of material or you tap the **Stop** button on the touch screen.



## Fill the Sealer

When the sealer unit needs refilling, the **Add Sealing Solution** icon flashes in the display.

When this happens, add E-Z Seal® Sealing Solution or water:

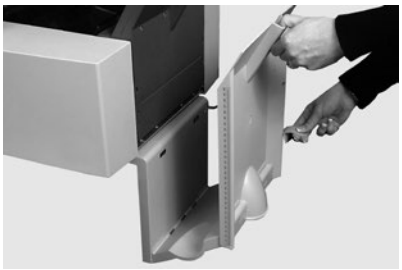
1. Open the sealer bottle cover hinge located at the rear, right side of the inserter and remove the bottle.
2. Fill the bottle with solution or water to the level indicated.
3. Place the sealer bottle in position in the inserter and close the cover.

   *NOTE: If the sealer unit was completely empty, allow time for the fresh solution or water to soak through the sealer before you resume operation. This helps assure a good seal.*

   *NOTE: We recommend Pitney Bowes E-Z Seal to minimize algae growth and scale build-up.*

## Adjust the Stacker

If necessary, adjust the drop stacker to accommodate the job material.



1. Lift the lever at the rear of the stacker and adjust the stacker to one of the preset positions.
2. Lower the lever to lock the stacker into position.

   *NOTE: When not in use, you can raise the stacker and latch it vertically against the exit area of the inserter.*

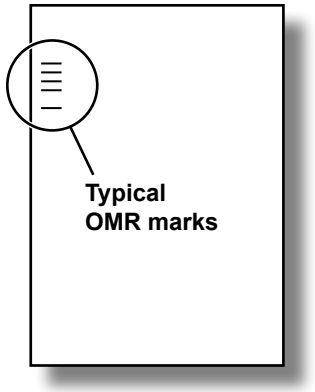
# 4 • OMR Scanning

## Contents

*This page is intentionally blank.*

## Optical Mark Recognition (OMR)

An OMR mark is normally a dark solid line on a sheet of light colored paper that is perpendicular to the direction of paper travel. This line must be thick and dense to trigger the OMR scanner.




The OMR scanner works with the OMR system software to check for one or more different OMR marks on a document as it is fed through the system. Tracking of these marks enhances mail piece integrity by assuring the documents that belong together (a set) stay together throughout the inserting process.

*NOTE: Depending on the model, your inserter may be equipped with OMR scanning.*

*NOTE: For instructions on programing an OMR job, refer to the Programing a Job section of this manual.*

### *Accuracy*

OMR on this system uses extensive error checking. This means insertion accuracy is very high: the probability of the wrong set of sheets being inserted into an envelope is low.

## OMR and Feeders on the Inserter

OMR-equipped models have scanning heads on each sheet feeder.

One of the sheet feeders holds sheets with OMR marks and they feed multiple sheets per envelope.

- Sheet feeder 1 for C-fold and double fold
- Sheet feeder 2 for Z-fold and single fold

You can set up the sheet and insert feeders to be under the selective control of the OMR sheets. As a result, you can use OMR to fill an envelope with a variable number of sheets from one feeder, with or without a supplementary sheet and an insert.

A supplementary sheet and folded insert are nested with the first sheet in the envelope. Because OMR applications allows each envelope to contain tailored contents, the last sheet in the envelope includes address information for use with windowed envelopes. This ensures that each set of sheets is addressed to the correct recipient.

## OMR Scanning Types

### *Basic OMR*

- Enables the collation of multi-page documents.
- Enables you to vary the number of pages per envelope.
- The inserter folds each OMR sheet separately and inserts it into an envelope, starting with the last sheet of the set and adding each folded sheet in turn until the address sheet has been inserted.

### *Enhanced OMR*

- Allows you to stop feeding sheets at selected points in a run and/or select whether the other feeders are used.
- It provides a higher level of mailpiece integrity so that sensitive documents are not sent to the wrong customer.

## OMR Mark Positions

For the inserter scanners to read the printed OMR marks correctly, they *must* be located within a defined range of positions on the page.

- **Standard** OMR positions *OR*
- **Offset** OMR positions allow the marks to be positioned further down the page.

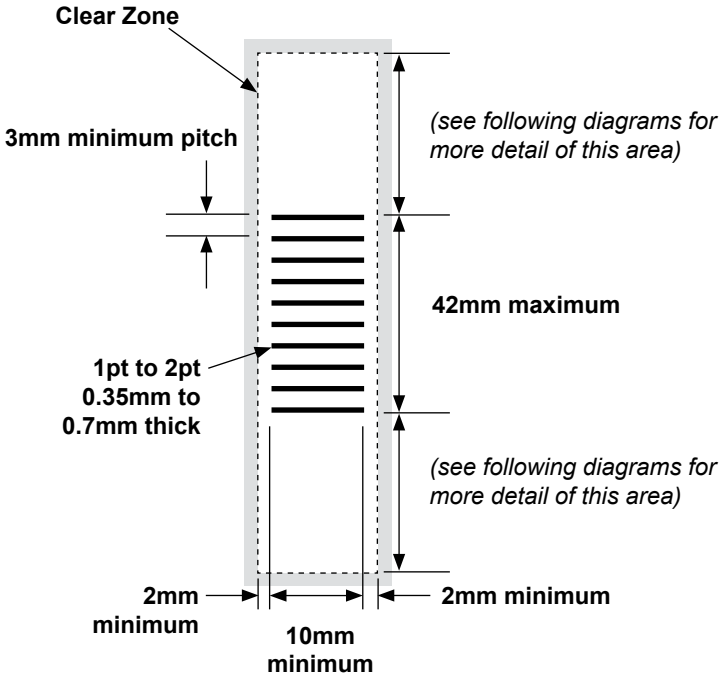
## OMR Specifications

The OMR mark must be a solid black line between 1pt and 2pts thick (0.014 inch (0.35mm) to 0.027 inch (0.7mm]) and at least 0.393 inch (10mm) wide.

Each mark position must be evenly spaced, at least 0.118 inch (3mm) apart.

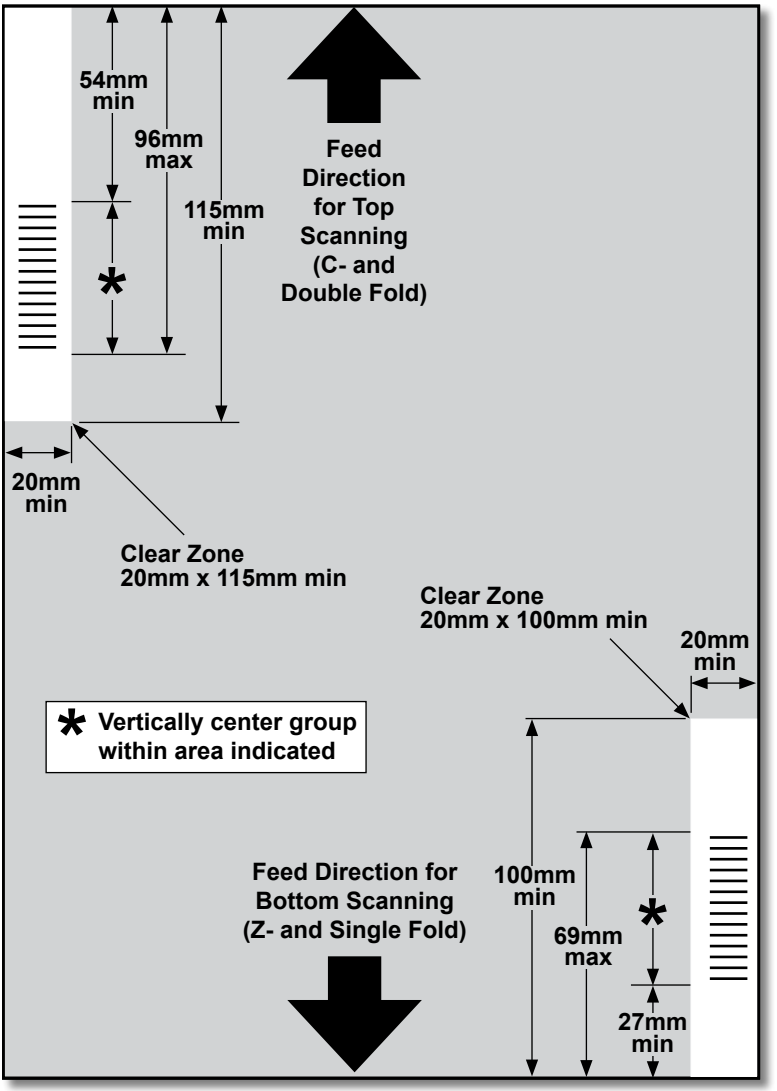
The area around the marks (the clear zone) should be kept clear from print and any other marks that the scanner might read in error.

There should be no print on the opposing face of the sheet immediately behind the clear zone.




*(Note: diagram is not to scale)*

### *Standard OMR Positions*

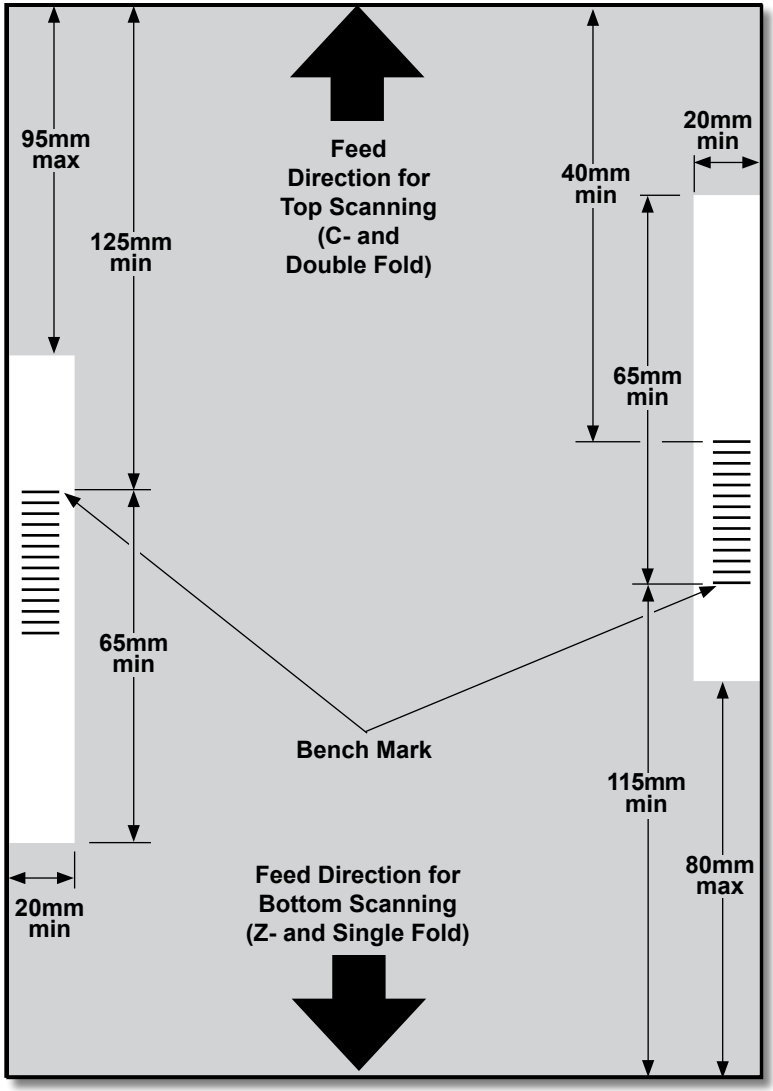



**Position OMR marks as follows:**

- C-Fold and Double Fold: top scanning, top left corner
- Z-Fold and Single Fold: bottom scanning, bottom right corner

*(diagram is not to scale)*

### *Offset OMR Positions*




**Position OMR marks as follows:**

- C-Fold and Double Fold: top scanning, left margin
- Z-Fold and Single Fold: bottom scanning, right margin

*(diagram is not to scale)*

## Available OMR Marks

This section gives brief descriptions of the OMR marks that can or must be allocated to an OMR Code.

*NOTE: Some marks within this section are available as added features that expand OMR capability. OMR features will vary depending on the options you purchased.*

### *Benchmark*

This is a mandatory mark. It must be the *first* mark of the code and will appear on *every* page within the set.

### *Safety*

This is a mandatory mark that improves the integrity of your mail piece. It is automatically placed immediately after the benchmark.

### *End-of-Collation (EOC)*

This mark indicates that this sheet is the *last sheet fed within the collation/set* (the address sheet).

Your system operates on the *absence* of this mark, that is, the action will take place if the mark is *not* read by the scanner. It is therefore indicated on the OMR code as **Not EOC**.

### *Beginning-of-Collation (BOC)*

This mark indicates this sheet is the *first sheet fed within the collation/set*.

Your system operates on the *absence* of this mark, that is, the action will take place if the mark is *not* read by the scanner. It is therefore indicated on the OMR code as **Not BOC**.

### *Parity*

This mark is a security feature that makes the number of marks total an even number when printed. If any one of the marks in the code is missed during scanning, the inserter stops so the operator can correct the error.

### *Re-timing Mark*

This mark is mandatory in each group of OMR marks making up the code (see later in this section for an explanation of OMR mark grouping).

It allows the inserter to recalibrate for accurate scanning. Re-timing marks count in the parity calculation.

### *Select Feed (SF1, SF2)*

These marks are used to control the feed of material from the feeder holding the supplementary sheets/inserts on a set-by-set basis. Therefore you cannot use select feed on a single-station inserter.

Use **Select Feed 1** marks are in the primary sheet feeder to select material from the supplementary sheet feeder. For C- and double fold, the primary feeder is sheet feeder 1. For Z- and single fold, the primary feeder is sheet feeder 2.

Use **Select Feed 2** marks in the primary sheet feeder to select material from the insert feeder. For C- and double fold, the primary feeder is sheet feeder 1. For Z- and single fold, the primary feeder is sheet feeder 2.

### *Auto Batch*

This mark identifies the last set of a batch, when the batch function is in use. It must appear on all sheets of the OMR set that requests this function.

### *Wrap Around Sequence (WAS1, WAS2, WAS3)*

This is a numbering system which uses a sequential binary coding. If a page is missing or the set goes out of sequential order, the system stops processing and declares an error.

Three wrap around sequence marks are used within the code. The use of three binary digits allows a decimal count of 0 to 7. Pages are numbered from 0 up to 7, and then back to 0 on a continuous cycle throughout the print run.

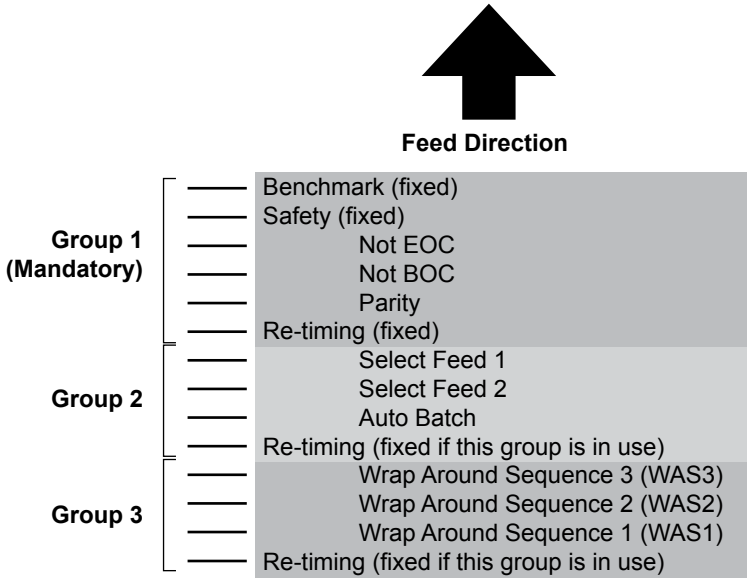
## OMR Mark Grouping

Each OMR code begins with two fixed marks: benchmark and safety mark. These marks are located at the end nearest to the sensor. These are followed by one, two, or three groups of marks where each group comprises three data marks followed by a fixed mark. Each data mark is present or absent as required to reflect the desired function. Each code must end with a re-timing mark.

The **Basic OMR** mode uses only Group 1. The **Enhanced OMR** mode uses Group 1 plus Group 2 and/or Group 3, as needed for a particular job.

### *C-Fold and Double-Fold Jobs*

Place marks in the upper left corner of the sheet. Print marks in top-to-bottom order.

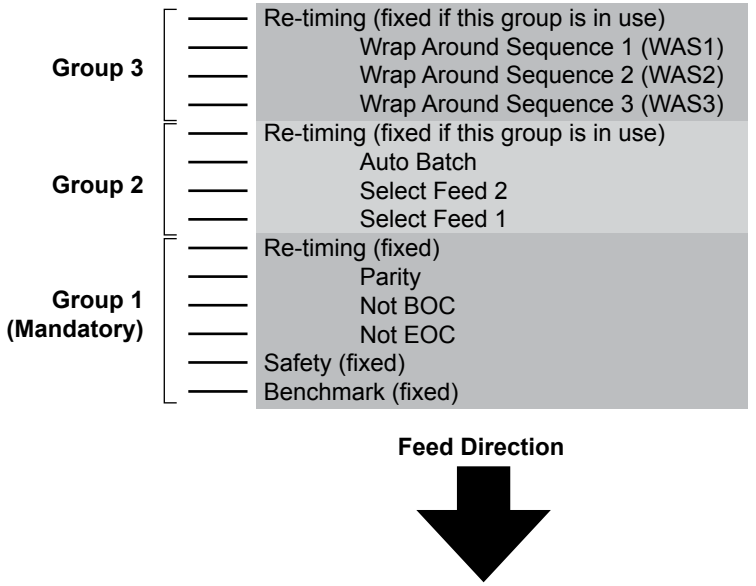



#### Printing

Print sheets in reverse collation order. When you do this, the last sheet processed in each set is the address sheet and the first sheet processed is the last of each set.

### *Z-Fold and Single-Fold Jobs*

Place marks in the lower right corner of the sheet. Print marks in bottom-to-top order:



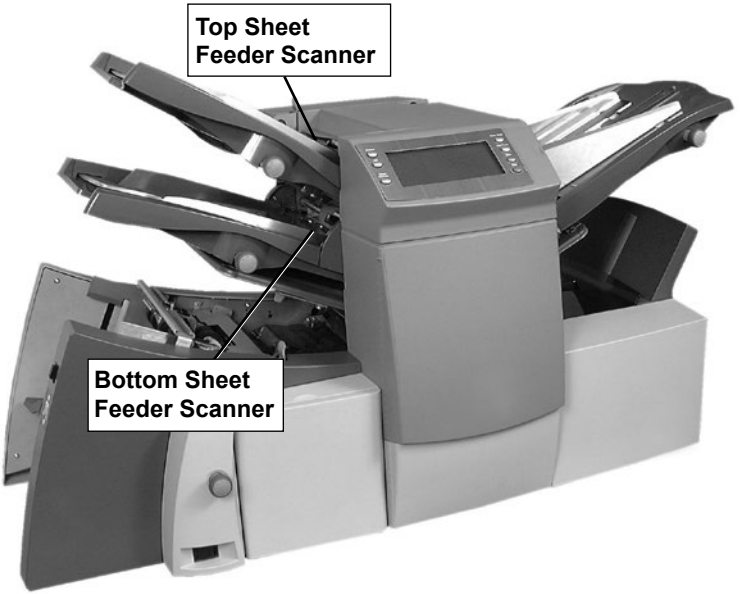

**Printing**

Print sheets in normal collation order. When you do this, the first sheet processed in each set is the address sheet and the last sheet processed is the last of each set.

## Adjust the OMR Scanner

In order for OMR scanning to work correctly, it is important to ensure that the scanning heads are positioned in line with the Scan Dash (OMR) marks printed on the material.

1. To locate the scanning head for the top sheet feeder 1, open the top cover. The scanning head is at the rear of the inserter.
2. To locate the scanning head for the bottom sheet feeder 2, remove both sheet feeder 2 and the fold plate situated below sheet feeder 2. The scanning head is mounted to the front of the inserter.

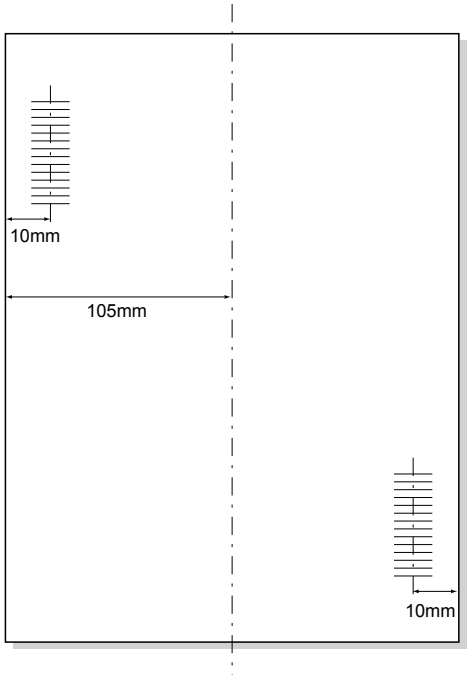



3. Fold a sheet of material in half and measure the distance from the side of the sheet to the middle.
   - A4 size sheet = this measurement is 105mm
   - Letter size sheet = 8.5 x 11 inches (108mm)
4. Next, measure the distance from the edge of the sheet to the middle of the scan dash marks (as shown in the following example), and subtract this measurement from the half-fold measurement.

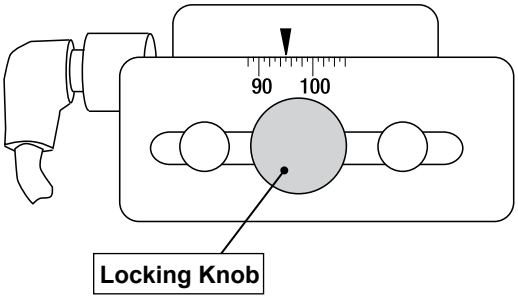
**Folding Example:**

For an A4 size sheet, the half fold measurement is **105mm**.

If the distance from the edge of the form to the middle of the scan dash marks is **10mm**, the scanning head setting will be **95mm** (105mm – 10mm).




5. Loosen the locking knob and set the relevant scanning head to the correct setting.
6. Retighten the locking knob.
7. If you adjusted the bottom sheet feeder scanner, install both sheet feeder 2 and the fold plate situated below sheet feeder 2.

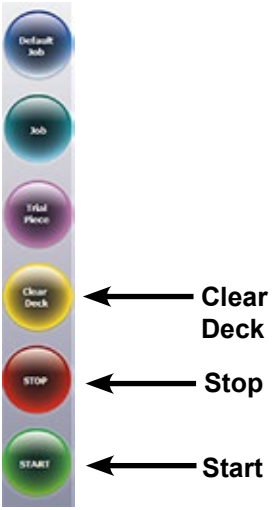


## OMR Troubleshooting

### *Error Recovery for OMR Jobs*

If the inserter stops during an OMR job, and indicates one of the error messages listed below, follow these steps.

1. Tap the **Clear Deck** button on the control panel. Any envelope at the insertion area will eject into the stacker.
2. The remaining pages of the current set will feed/fold and eject into the stacker. Manually insert into the envelope if necessary.
3. The FIRST page of the NEXT set will pre-feed into the feed rollers and stop. Pull the sheet back to the normal feed position .
4. Tap the **Start** button to resume operation.




### *Error Recovery for Accumulation Jobs*

If the inserter stops during an accumulation job, follow these steps.

1. Tap the **Clear Deck** button on the control panel.
2. The envelope at the insertion area ejects into the stacker. You must manually remove the remaining pages of the set from the feeder.
3. Fold/insert the remaining pages into the envelope.
4. Tap the **Start** button to resume operation once you've determined the cause of the stoppage.

### *Error Recovery for Empty Feeders*

If any feeder runs out of material the inserter will stop, and the following instructions scroll across the display.

1. Re-fill the empty tray.
2. Tap **START** to continue *OR* tap **STOP** and **Clear Deck**.
3. Reload the feeders and proceed as required.

## OMR Error Messages

| Message | Action |
|---|---|
| Bad OMR marks Spacing | Two marks that are closer together than half the expected distance are read. Check scan marks on material. |
| No OMR marks | • No marks on paper.<br>• Scan sensor is not centered over scan marks.<br>• Paper not loaded correctly. |
| Bad OMR Code length | Code type on paper does not match the setup. *(Example: setup has **OMR+ Sequence** but paper has **OMR + Select Feed + Sequence.**)* |
| Bad OMR Code format | A re-timing scan mark is missing. Check material. *(Example: mark 6 missing from a 10 mark code.)* |
| Expected 1st Sheet of set | The BOC mark (position 4) was present when it was not expected. First page of the set was expected. |
| Not a new Envelope | The BOC mark (position 4) was absent when it was expected. Pages other than the first page of the set were expected. |
| OMR: Parity Error | The code doesn't have an even number of marks. |
| OMR: Sequence Error | The sequence number is not sequential with the previous page fed. Therefore, sheets are in the wrong order or missing. |
| OMR: SF marks Inconsistent | The Selective feed and Autobatch marks at positions 7 to 9 are different from those on the previous sheet of this set. |
| OMR: SF not in Use | A selective feed mark is present at positions 7 to 8, but the job setup does not include select feed. |
| OMR: Set too Large | The set contains too many sheets from the main feeder. |
| OMR: End of Batch<br>Ready to Run | • Inserter has stopped for “End of Batch."<br>• Allows the operator to manually sort envelopes. |
| Mode Change Recheck Feeders | Check sheet and insert feeder settings against the job you are loading before exiting the setup mode. |

*This page is intentionally blank.*

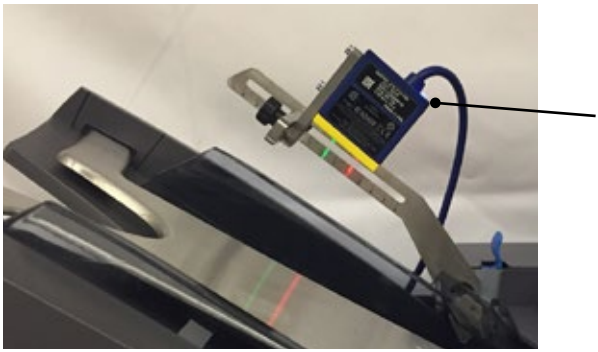
# 5 • Barcode Scanning

## Contents

*This page is intentionally blank.*

## Barcode Scanning

Enhanced barcode applications support mailpiece integrity by ensuring proper mailpiece assembly. Barcodes that contain specific instructions about your job can be printed on the front of your primary sheet set. Information like record #, page number, and page total can be contained in the code.



**2D Barcode Camera mounted on the Relay Inserter**

### *How Barcode Scanning Works*

When the barcode sheet is fed, the information in the enhanced barcode gets sent to the inserter. The inserter checks this information and verifies that the correct sheet is fed and inserted in the envelope. If a sheet is skipped or if the sheets get out of sequential order, the inserter stops processing and displays an error.

### *1D and 2D Barcode Scanning*

- **1D barcode scanners** read barcode characters in a straight line and then translates that data into instructions for the inserter to process the mailpiece.
- **2D barcode cameras** take a picture of the barcode and then decode the information into instructions for mailpiece processing by the inserter. A 2D camera, which is 1D capable, can decode a 1D barcode provided the 1D barcode fits within the camera range, maximum length of 40mm

### *Jobs with Barcode Scanning*

- Sheet feeder 1 (the top feeder) holds the sheets with the barcodes printed on them.
- Multiple sheets can be inserted into an envelope with barcode scanning. The number of sheets inserted into an envelope is determined by the information in the barcode.
- An additional sheet or insert can be fed from other feeders with barcode scanning.
- Only C and double folds can be processed with barcode scanning.

## Barcode Options

There are two barcode options:

- **Basic *(1D barcodes only)*** - uses a unique identification number contained within the barcode to determine when to insert into a new envelope.
- **Enhanced *(2D barcodes only)*** - uses additional information within the barcode to aid the integrity of your mailing.

### *Basic Barcode Reading (1D barcodes only)*

Basic barcode reading is made up of 1D (ladder format) barcodes and can only be read by 1D scanners. Basic barcode reading is used only to identify a change of the unique identification number (within the barcode) and to control the automated insertion process.

### *Enhanced Barcode Reading (2D barcodes only)*

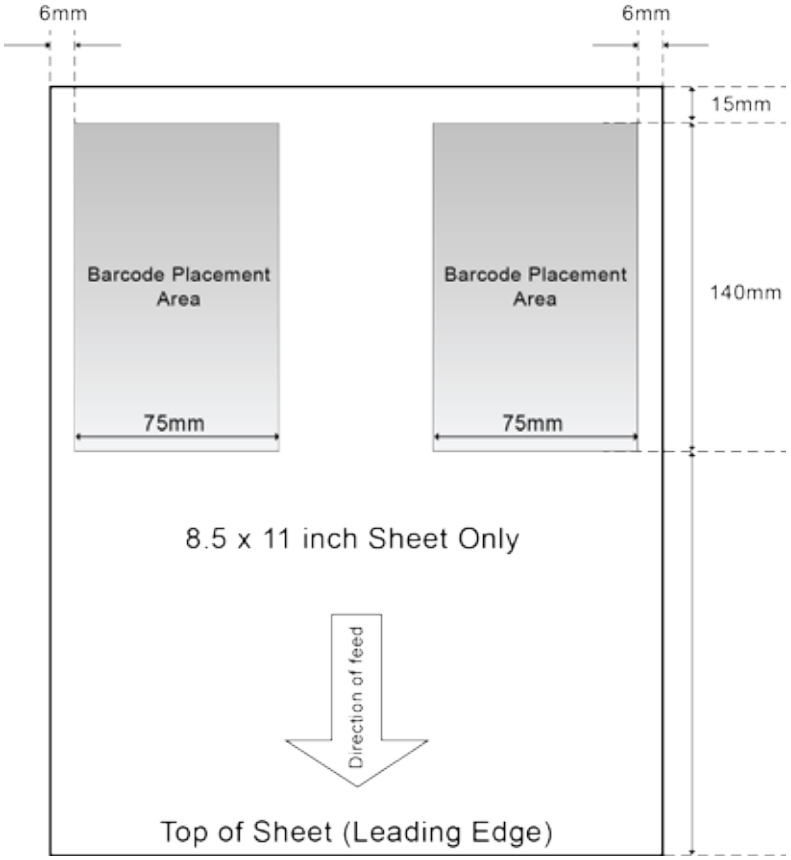
Enhanced barcodes contain additional characters that aid the integrity of your mailing and can only be read by 2D barcode cameras. For example, if a page is missed or if your mailing gets out of sequential order, the inserter stops and displays an error message.

## Barcode Placement Specifications

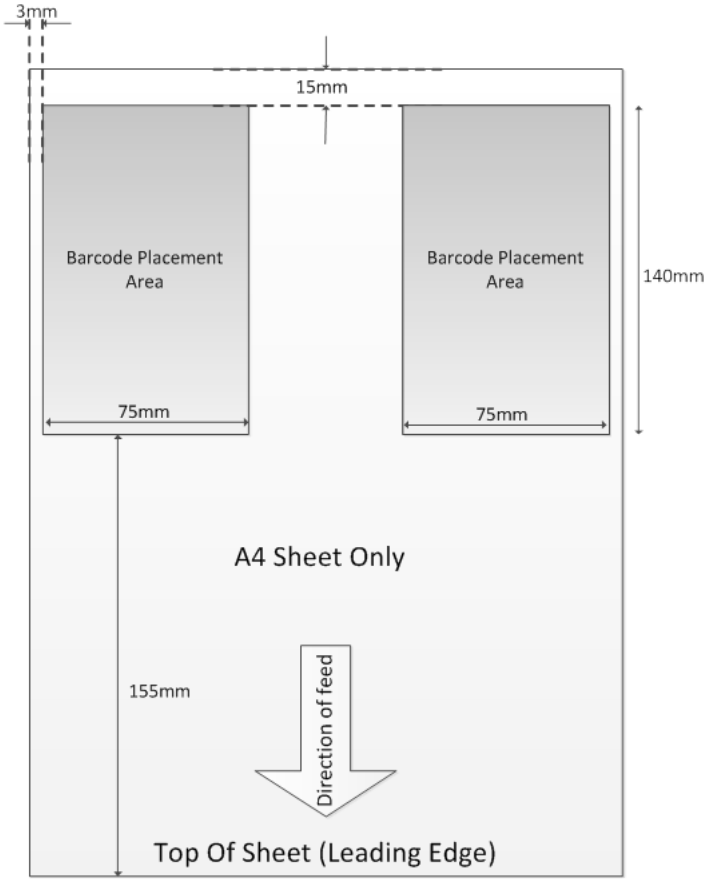
### *Barcode Placement Areas*

The barcode can be positioned anywhere within the barcode placement area shown in this diagram. The areas identified here are at the bottom (trail edge) of the sheet.

*The diagram below is for an 8.5 x 11-inch sheet.*



*The diagram below is for an A4 sheet.*



### *Barcode Zones - Clear and Blank*

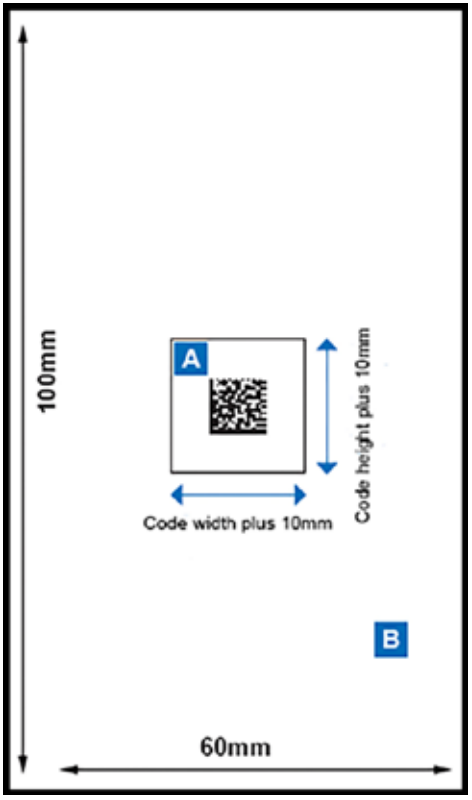
There are specific guidelines regarding printing text and additional barcodes in the areas around the primary barcode.

*Clear Zone (A)*

The clear zone is the closest area to the barcode. This area (represented by letter A in the diagram below) includes the size of the barcode plus 5mm on each side (10mm) and 5mm on the top and bottom (10mm). There should be no print of any kind in this area.

*Blank Zone (B)*

The blank zone refers to a more extended area around the barcode (represented by the letter B in the diagram below). In this diagram, the blank zone is 100mm x 60mm. No other barcodes should be placed in this area.



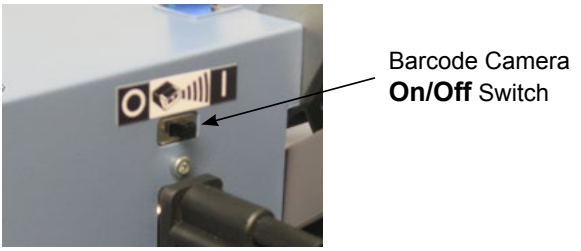
## 2D Barcode Camera Setup

Setting up the 2D barcode camera is an operator activity.

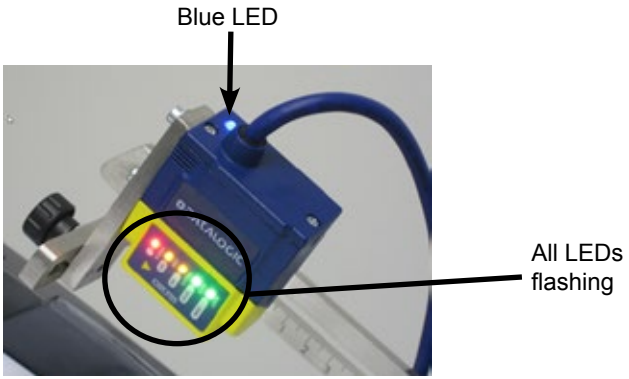
### *Turn On the 2D Barcode Camera*

You can alternate between OMR (if your system has this option) and barcode scanning, depending on the features available on your system.

1. To *enable 2D barcode scanning,* turn the 2D barcode camera *on* using the On/Off switch.
2. To *disable 2D barcode scanning,* turn the 2D barcode camera *off* using the On/Off switch.




- When the 2D barcode camera is powered On, all LEDs flash once.
- The blue LED, located where the cable enters the 2D barcode camera, indicates the reader is powered correctly.

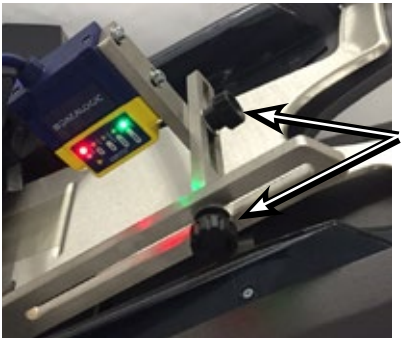


### *Adjust the Position of the 2D Barcode Camera*

1. Verify the inserter is powered up and the 2D barcode camera is on.
2. Place the sheet with your barcode on it into the sheet feeder.
3. Loosen the two locking knobs on the scanner adjustment arms.
4. Move the barcode scanner directly above the barcode on the sheet.
5. Once the camera is positioned correctly, a green light flashes on the barcode.
6. Be sure the center point of the green light is to the right of the barcode when looking from the front of the machine.

   *NOTE: If you adjust the camera position too far to the right, the green light changes to a red light.*

7. When the camera adjustment is set, tighten the two locking knobs.



## 2D Barcode Scanning Final Checklist

- Confirm that you have the correct job selected.
- Make sure that the barcode camera switch is in the ON position.
- Verify the barcode camera is positioned correctly above the barcode; adjust if necessary.
- Follow the inserter operation procedures in this guide.

## Barcode Error Messages

The inserter software uses the same error messages for both OMR and barcode scanning. Use this table as a reference for understanding and troubleshooting error messages.

| Message | Issue | Solution |
|---|---|---|
| No OMR marks | • Barcode was not seen by scanner.<br>• Paper not loaded correctly. | • Reposition the barcode scanner (Refer to "Adjusting/Positioning your Barcode Camera.")<br>• Check paper orientation.<br>• Confirm paper with barcode is loaded in right feeder. |
| Expected first sheet of set | Expected first sheet of set was not detected by barcode scanner. | • Add missing page(s).<br>• Correct sheet sequence. |
| Not a new envelope | First sheet of set was detected; rest of sheets were expected. | Add missing sheets and/or correct your sheet sequence . |
| OMR: Sequence error | Sequence number in barcode is not sequential with the previous page fed. | Add missing sheets and/or correct the sheet sequence. |
| OMR: SF Marks Inconsistent | n/a | Not used for barcode jobs. |
| OMR: Set to Large | Sheet set contains too many sheets. | Refer to fold types and thickness limits in this guide. |
| OMR: End of Batch – Ready to Run | Indicates machine has stopped for "End of Batch." | Operator can manually sort envelopes in stacker. |
| Mode change re-check feeders | | Check the sheet and insert feeder settings for the job before exiting setup mode. |

## 2D Barcode Specifications

### *Paper Specifications*

- 8.5 x 11 inches
- A4
- Minimum paper weight 70 gsm (47 lb)
- Maximum paper weight 120 gsm (81 lb)
- White paper only

### *2D Barcode Specifications*

- Print quality
  - Minimum requirement ANSI Grade B
  - Recommended ANSI Grade A
  - Black print on white paper
  - Barcode resolution: 0.20 mm
- Module size: 0.35 mm (minimum) and 0.50 mm (maximum)
- Maximum 18 characters
- Uses ECC 200 standards
- Barcode cannot be printed over any text or graphics
- Barcode should not intersect any perforation
- Cells should all be identical in size

# 6 • Clear Material

## Contents

*This page is intentionally blank.*

## Clear Material

The inserter is designed to assure maximum performance. In the event of a material stoppage, the display flashes a symbol indicating where the stoppage has occurred.

To clear a jam follow these steps.

1. Tap the **Clear Deck** button to feed the material through the inserter.
2. If this doesn't work, manually remove the remove the trays and fold plates related to the jam to gain access to the jammed material.

**Manual Advance Knob**

Once you locate the jammed material, you may need to use the manual advance knob to manually feed paper out of the grip of feed rollers.

The manual advance knob is located behind the drop-down cover at the left front of the inserter.

## Access Areas of the Inserter for Jam Removal

### *Sheet Feeders Trays - Remove and Replace*

To **remove** the sheet feeder trays:

1. Lift the rear of the tray slightly and pull it straight out from the inserter.

   *NOTE: If the tray is loaded, gently hold the material in place to prevent it sliding forward as the tray is removed.*

To **replace** the sheet feeder trays:

1. Place the tray into its location guides in the side frames.
2. Lift the rear of the tray slightly and push it into the inserter. The tray automatically drops into its correct position.

### *Fold Plates - Remove and Replace*

To **remove** the fold plates:

1. Pull the two catches on the underside of the plate outward to release them.
2. Pull the plate straight out of the inserter.

To **replace** the fold plates:

1. Pull the two catches (on the underside of the plate) outward to release.
2. Slide the plate into its location guides and release the catches to lock the plate in position.

### *Insert Tray - Remove and Replace*

To **remove** the insert tray, pull the insert tray straight out from the inserter.

To **replace** the insert tray, slide the tray into the location guides; push until it clicks into place.

### *Access the Carriage Assembly*

Pull out the carriage assembly to access the jam.

1. Remove the insert feeder.
2. Remove fold plate 2.
3. Pull out the carriage assembly.

### *Access to Envelope Feeder Area*

**Unlatch** the envelope area feed rollers to access a jam in the envelope feeder area.

1. Pull the release lever in the direction of the arrow.
2. Lift the envelope area feed rollers for access to the jam

To **relatch** the feed rollers:

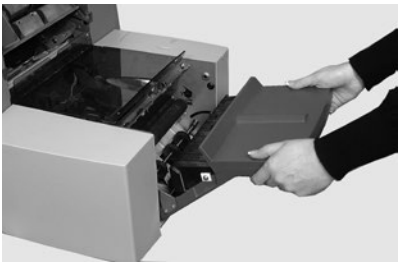
1. Release the envelope area feed rollers and let them rest in position
2. Push the rollers firmly down until they latch into position.

   *NOTE: You can get better access to this area by removing fold plate 1 and sheet feeder 2.*

### *Access the Envelope Exit Area*

1. Pull down the access door (shown here) to gain access to the jammed material.

2. When you close the access door, make sure to latch it firmly in position.

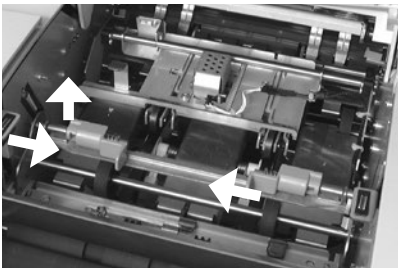


### *Access the Envelope Inserting/Sealing Area*

To access the insertion and sealing areas:

1. Lift the tinted plastic cover and lower the envelope inverter access door.

2. The points identified in the image can be unlatched to allow access to stalled material.



### *Access to the Sheet Feed Area*

**Unlatch** the blue handles to access a jam in the sheet feeder area.

1. Open the top cover.
2. Squeeze the two blue handles together and pivot the guide assembly to the right to gain access to the jammed material.

To **relatch** the blue handles:

1. Squeeze the two blue handles together and pivot the guide assembly back to its closed position.
2. Release the two blue handles, making sure the assembly is securely latched into position.
3. Close the top cover.

# 7 • Troubleshooting and Error Messages

## Contents

*This page is intentionally blank.*

## General Troubleshooting

| *Issue* | *Possible Solutions* |
|---|---|
| | |
| **INSERTER** | |
| **Blank Screen** | |
| No power. | Check that the power cord is firmly connected and the wall socket is switched ON. |
| Inserter not switched ON. | Turn the power switch (located on left side) ON. |
| **Inserter will not Operate** | |
| Cover open. | Check that all covers are closed - check display for cover information. |
| Feed trays/fold plates not located correctly. | Remove and relocate all feeders and fold plates. Verify they are in the correct positions and fully seated. |
| **Insertion Problems** | |
| Outer envelope contents do not enter the envelope correctly. | Check the envelope troubleshooting information.<br>Check that the fold selected is correct for the material size.<br>If running heavy or light material, the envelope stop adjustment might need changing. |

| *Issue* | *Possible Solutions* |
|---|---|
| | |
| **ENVELOPES** | |
| **Poor Envelope Feed** | |
| Envelope side guides set incorrectly. | Set the guides to the envelope width and then back off 1/4 turn. |
| Poor envelope quality. | Check that the envelopes are not curled. Try a new box of envelopes. Make sure to fan stack *before* loading. |
| Envelopes loaded incorrectly. | Load envelopes flap side up with the flap feeding last. |
| **Envelopes Fail to Open** | |
| Envelopes loaded incorrectly. | Load envelopes flap side up with the flap feeding last. |
| Poor envelope quality. | Check the envelopes are not stuck due to excessive dampness.<br>Try a new box of envelopes. |
| **Envelope Sealing Problems** | |
| No sealing solution. | Refill the sealer unit. |
| Seal mode not selected. | • Check job setup.<br>• Activate sealing mode. |
| Poor sealing. | You may need to replace the sealing felts. *(Refer to the "Change the Sealer Unit Felts" procedure in this section.)* |

| *Issue* | *Possible Solutions* |
|---|---|
| | |
| **SHEETS** | |
| **Poor Sheet Feed** | |
| Feeder not selected to feed. | Check job setup. |
| Sheet feeder side guides set incorrectly. | Set guides to sheet width and back off 1/4 turn. |
| Sheets loaded incorrectly. | Make sure to fan stack *before* loading. |
| **Multiple Sheets Feed when One Sheet is Expected** | |
| Manual feed mode is selected. | Check job setup and manual feed lever position. |
| Sheets loaded incorrectly. | Make sure to fan stack *before* loading. |
| **Address in Wrong Position in Envelope Window** | |
| Address bearing sheets incorrectly loaded. | Load sheets so that the address appears through the envelope window. |
| Folds incorrectly set. | Check job setup. |
| **Poor Folding** | |
| A fold is *almost* corresponding with a perforation on the sheet, causing a box fold or third fold. | Adjust the fold sizes slightly to avoid this situation. |

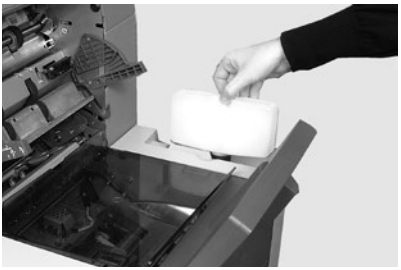
| *Issue* | *Possible Solutions* |
|---|---|
| | |
| **INSERTS** | |
| **Poor Insert Feed** | |
| Feeder not selected to feed. | Check job setup. |
| Insert feeder side guides set incorrectly. | Set guides to insert width and back off 1/4 turn. |
| Insert feeder separator adjustments incorrect. | Verify the two insert feeder adjustments (number and letter settings) are set correctly for the type of insert you're running. |
| Inserts loaded incorrectly. | Make sure to fan the stack before loading. It may help to change the orientation of the insert stack. |
| Insert feeder wedge used incorrectly. | Let the wedge slide down behind the insert stack to support it. |
| Inserts out of specification. | Check the specifications in this guide. |

| **DOUBLE DETECT** | |
|---|---|
| **Inserter Stops for Doubles that Aren't There or Feeds Doubles without Stopping** | |
| Double detect is not turned ON. | • Check double detect status. Double detect icon appears alongside all items where the double detect is operational.<br>• Correct loading or correct job setup as necessary. |
| Double detect is not correctly calibrated. | Run a trial piece whenever a new batch of material is loaded to recalibrate double detect. The new batch might be of slightly different thickness. |

### *Changing the Sealer Unit Felts*

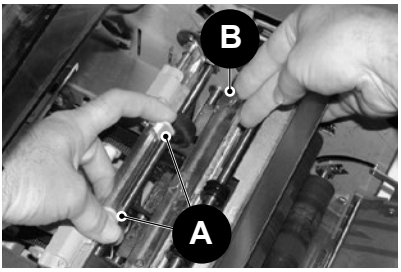
If you are experiencing poor sealing, the sealer unit felts may need to be changed. The sealer unit felts are supplied as part of a kit. Operators can change them as necessary.

1. Open the water bottle cover located at rear right side of the inserter and remove the bottle.

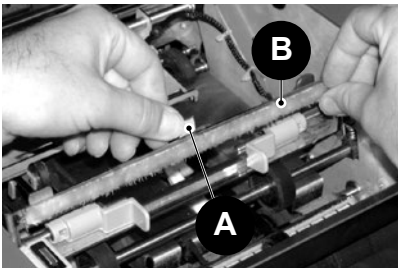


2. Open the envelope inverter access door and lift the insertion area plastic cover.

3. Squeeze both blue tabs (A) together and lift one tab (B) to gain access to the sealer unit felts.



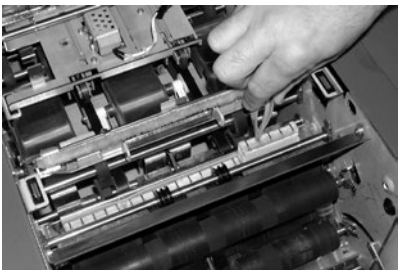

4. Push the latch (A) back, grasp the upper sealer felt (B), and slide it towards the front of the inserter



5. Remove it from its mounting bar and discard the old felt.

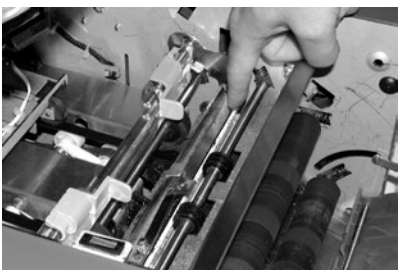
6. Install the new upper felt. Locate the tabs on the back of the felt assembly in the corresponding holes of the mounting bar and slide the felt toward the rear of the machine. Make sure it has fully latched into position.

7. Using the plastic tweezers provided in the kit, remove all four felts from the sealer tank. Discard these old felts.



8. Install the four new felts into the sealer tank. They will only fit one way. Push them fully down into the tank.

9. Push down on the blue tab to return the upper felt assembly to its operating position. Make sure that the blue latches (A) spring out and fully latch into position.



10. Put the water bottle back into position and close the covers.

## Error Messages

| Message | Action |
|---|---|
| CALL SERVICE | Power the inserter off and on. If the message is still displayed, call service. |
| CHECK /CLEAR FEEDER | Feeder indicated has failed to feed material. Remove material from the feed tray, reload and restart the inserter. |
| CHECK FEEDER | Feeder indicated is not located correctly.<br>• Remove tray and relocate.<br>• Also check loading of material in indicated feeder. |
| CHECK FOLD PLATE | Fold plate indicated is not located correctly. Remove fold plate and relocate. |
| CHECK INVERTER | Envelope inverter unit has not set to its correct position.<br>• Open the inverter cover and check for material.<br>• Close the cover and restart. |
| CHECK LAST MAIL PIECE | Envelope has failed to open.<br>• Check the envelopes are loaded correctly.<br>• Reload the envelopes and restart machine. |
| CLEAR FOLD PLATE | Material was detected inside the fold plate indicated on the display.<br>• Remove the fold plate and check for any material.<br>• Install fold plate. |
| CLEAR INSERTION AREA | Material was detected in the inserting area.<br>• Open tinted plastic cover on left side of the inserter and remove any material.<br>• Close the cover and restart the inserter. |
| CLEAR MOISTENER | Material is detected in the sealer brush area.<br>• Open the tinted plastic cover on left hand side of machine and remove any material.<br>• Close cover and restart the inserter. |

| Message | Action |
|---|---|
| CLEAR SEALER | Material is detected in the sealer brush area.<br>• Open the tinted plastic cover on left side of the inserter and remove any material.<br>• Close cover and restart. |
| CLOSE COVER | Cover indicated is not fully closed. Close the indicated cover and restart the inserter. |
| CLOSE MAN ADV COVER | The manual advance knob door is not fully closed. Close the door. |
| DEFLECTOR ERROR | The function of half fold is not possible due to a fault. Remove fold plates and check for any material. |
| DOUBLE FEED | A double feed has been detected from the feed tray indicated.<br>• Remove the material from the inserter and restart.<br>• If double feeds persist, request another trial piece. |
| DOUBLE FEED CHECK STACKER | A double feed has been detected from the feed tray indicated.<br>• Remove the double feed from the stacker<br>• Restart the inserter. |
| FOLD PLATES NOT SET | The fold plates has not set to the correct position.<br>• Remove fold plates and check for any material.<br>• Install the fold plates and restart the inserter. |
| MANUAL FEED TIMEOUT | Material feed has not been detected within a predetermined time.<br>• In manual feed mode, you must feed material within a set time.<br>• Restart the machine by pressing **Start**. |

| *Message* | *Action* |
|---|---|
| PAPER SHORT | The inserter detected that the material used is too short in length.<br>• Check the actual material length matches the length displayed.<br>• If correct, request another trial piece. |
| PAPER SHORT CHECK STACKER | The inserter detected that the material used is too short in length.<br>• Check the actual material length matches the length displayed.<br>• If correct, request another trial piece. |
| SET LEVER | The manual feed lever is in the incorrect position for the mode of running.<br>• Move the manual feed lever to the correct position (left position: manual; right: automatic). |
| STREAM FEED | The inserter detected two sheets fed together from the feed tray indicated.<br>• Remove the material from the inserter.<br>• Reload and restart the inserter. |
| STREAM FEED CHECK STACKER | The inserter detected two sheets fed together from the feed tray indicated.<br>• Remove the stream feed from the stacker.<br>• Reload and restart the inserter. |
| SYSTEM ERROR POWER DOWN | A fault has been detected in the main software.<br>• Switch the inserter off and on and retry.<br>• If the problem persists, call for service. |
| TRAY EMPTY | The tray indicated has no material. Reload the tray and press **Start**. |

*This page is intentionally blank.*

# 8 • Material Specifications

## Contents

*This page is intentionally blank.*

## Material Specifications

**IMPORTANT: All specifications are subject to change without notification and are subject to test.**

### *Sheet Feeders*

**Sheet Sizes**

| | Minimum sheet size | Maximum sheet size |
|---|---|---|
| Width | 5 inches (127mm) | 9 inches (229mm) |
| Length | 5 inches (127mm) | 16 inches (406mm) |

**Paper Weights**

| | Minimum | Maximum |
|---|---|---|
| Non-OMR | 16 lb. (60gsm) | 32 lb. (120gsm) |
| OMR | 18 lb. (70gsm) | 32 lb. (120gsm) |

**Fold Configurations** *(material length limits before folding)*

| Fold Type | Measurement |
|---|---|
| Single fold | 5 inches (127mm) - 12 inches (315mm) |
| C-fold *(letter fold)* | 6 inches (150mm) - 14 inches (356mm) |
| Z-fold *(accordion fold)* | 8 inches (201mm) - 14 inches (356mm) |
| Double fold | 12 inches (305mm) - 16 inches (406mm) |

**Double Document Detector Material Range**

| Minimum | Maximum |
|---|---|
| 16 lb. (60gsm) | 32 lb. (120gsm) |

**Feed Tray Capacity**

- Maximum of 325 sheets of 20 lb. bond (80gsm)

**Manual Feed Mode**

- Inserter processes stapled sets of up to five sheets of 20 lb. bond (80gsm) up to a maximum total weight of 100 lbs. (400gsm) per set.

  *NOTE: For manual feed applications, you may use only sheet feeder number 1, plus the insert feeder if required.*

- Maximum compressed thickness after folding *must not* exceed 0.078 inch (2mm).
- We *do not* recommend the use of glossy/coated sheets.

**Fold Type and Overall Thickness Limits**

Check this table for the maximum number of sheets that can be accumulated/collated for each fold type.

*IMPORTANT! Do not program jobs that exceed these maximums or impose them by OMR code printing and/or OMR selective feed.*

| Number of sheets | *Paper Weights (lb /gsm)* | | |
|---|---|---|---|
| | 16-20 lb (60-80 gsm) | 20-26 lb (81-100 gsm) | 26-32 lb (101-120 gsm) |
| 1 | C,Z,S,D | C,Z,S,D | C,Z,S,D |
| 2 | C,Z,S,D | C,Z,S,D | C,Z,S |
| 3 | C,Z,S,D | C,Z,S | C,Z,S |
| 4 | C,Z,S | C,Z,S | |
| 5 | C,Z,S | | |
| | | | |
| Fold Types: C = C Fold, Z = Z Fold, S = Single Fold, D = Double Fold | | | |

*NOTES:*

- You can use the sheet limits above with one additional sheet from the supplementary feeder plus one insert, *only* if total mail piece contents do not exceed 0.078 in. (2mm) total compressed thickness.
- For single fold only, using 16 lb. to 20 lb. (60-75gsm) paper only, you can place a maximum of 10 items in an envelope. This maximum includes any additional sheets from the supplementary feeder and/or insert feeder. The overall maximum compressed thickness of 0.078 in. (2mm) still applies.

## Insert Feeder

**Insert Sizes**

| | Minimum insert size | Maximum insert size |
|---|---|---|
| Width | 5 inches (127mm) | 9 inches (230mm) |
| Length | 3.25 inches (82mm) | 6 inches (152mm) |

**Paper Weights**

| | Minimum | Maximum |
|---|---|---|
| Non-folded cut sheet | 20 lbs. (75gsm) | |
| Single sheet | | 50 lbs. (180gsm) |
| Folded material | 16 lbs. (60gsm) | |
| Inserts of up to a maximum compressed thickness of 0.078 in. (2mm) | | |

*NOTE: Pre-folded or single panel inserts should be fed from the insert feeder.*

**Double Document Detector Material Range**

| Minimum | Maximum |
|---|---|
| 16 lbs. (60gsm) | 32 lbs. (120gsm) |

**Feed Tray Capacity**

- Up to a maximum of 300 inserts

## Sealer

- Inserters seal up to a maximum of 1,200 envelopes between refills.

## Stacker

- Envelope stackers accommodate up to 150 filled envelopes *(depending on size and contents of the envelope)*.

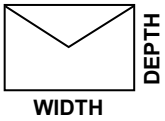
## Material Requirements

- For best performance, use only materials approved by Pitney Bowes
- Materials should be good quality and properly stored.
- Recommended storage conditions:
  - 65°F (18°) to 77°F (25°C)
  - 40% to 60% relative humidity

## *Envelope Feeder*

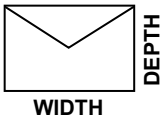
### Minimum Envelope Size

- Depth: 3.5 inches (88mm)
- Width: 8.5 inches (220mm)




### Maximum Envelope Size

- Depth: 6.5 inches (164mm)
- Width: 9.5 inches (242mm)




### Envelope Weights

- Minimum: 17 lbs. (65gsm)
- Maximum: 26 lbs. (100gsm)

### Envelope Tray Capacity

- Up to a maximum of 300 24 lb. (90gsm) envelopes.

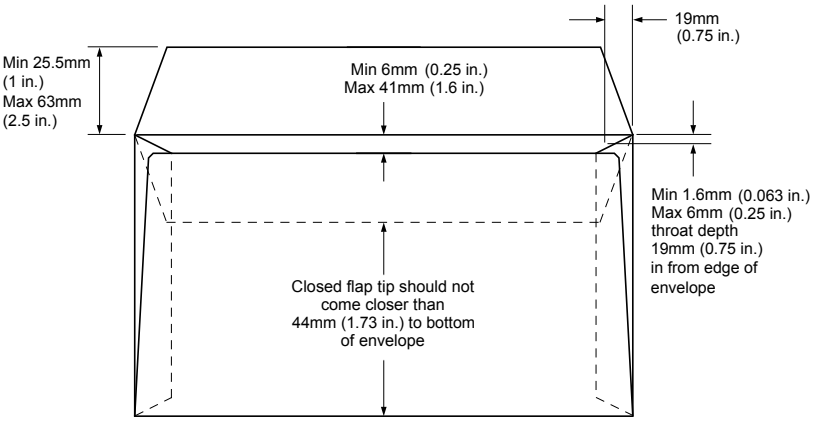
### End Clearance

- End clearance between insert and envelope - minimum of 0.236 inches (6mm) at each side
- Overall - a minimum of 0.472 inches (12mm)
- Take this measurement with all documents placed in the envelope

### Depth Clearance

- Inserts (unfolded) - allow a minimum clearance of 0.118 inches (3mm), below the flap crease after it is fully inserted into the envelope.
- Inserts (folded) - allow a minimum clearance of 0.236 inches (6mm), below the flap crease after it is fully inserted into the envelope.

## Envelope Flap and Throat Requirements



## Inserter Specifications

### Physical Dimensions

- Length - 38.6 inches (980mm)
- Depth - 20.25 inches (514mm)
- Height - 20.75 inches (525mm)
- Weight - 143 lbs. (65kg)

### Noise Level

- 73dBA *(system running)*

### Electrical

- USA and Canada**:** 120V, 60Hz, 6.0A
- Europe: 220/240V 50Hz
- Japan**:** 100V, 50/60Hz

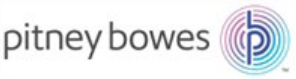
### Speed

Up to a maximum of 3,500 cycles per hour *(depending on inserter condition, operator skill, fold type, and material quality)*

### Fold Modes

- Single fold
- C - Letter fold
- Z - Accordion fold
- Double fold

*This page is intentionally blank.*



3001 Summer Street
Stamford, CT 06926-0700
www.pitneybowes.com

SV63138 Rev. B