

# 1. System Overview

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## FPI 5100 - 8100 Inserter Overview

FPI 5100 - 8100 are high throughput, mail creation systems designed to handle a broad range of applications with minimum operator setup adjustments. These systems have the ability to feed, fold, and insert mail piece components into an outer envelope. The systems generate letters or flats as the final mail piece. The systems also accept a variety of options that provide a wide range of capacities and operating speeds.

### Product Features

- Folds up to a maximum of 10 sheets of 20 lb. (80 gsm) with a single fold
- Supports multiple inserts into flat envelopes
- Configurable with four flexible feeder trays, that come in two types:
  - Sheet trays - capable of feeding sheets
  - Insert trays - capable of feeding slip/insert materials, pre-folded inserts, thin booklets, and envelopes.
- The FPI 7100/8100 system is equipped with a High Capacity Envelope Feeder (HCEF) that allows for greater speed and throughput. The systems also accept material from optional upstream input devices.

### System Components

#### *Main Modules*

These systems are configured with two major components:

- Feeder Tower
- Transport Deck
- Envelope Sealer

The feeder tower sends material from the feeder trays to the transport deck. Job parameters determine whether or not the material passes through the folder to the transport deck. If it does, numerous fold types are available, as is the ability to insert folded material into the mail piece collation.

The system can seal envelopes (letter only) before sending the final mail piece to a stacker unit.

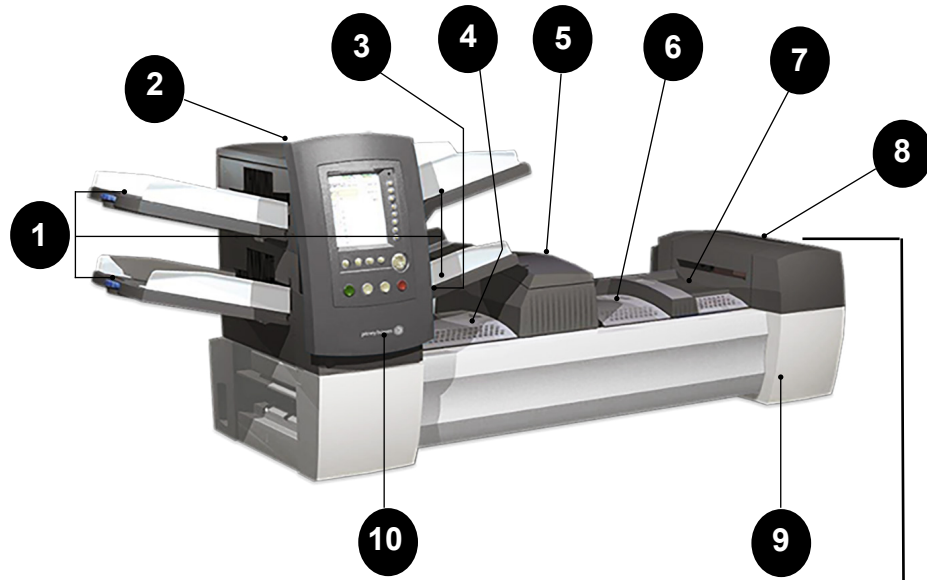
#### *Additional Modules Available*

The base system configuration includes a feeder tower, transport deck, and envelope sealer. The FPI 7100/8100 features an additional integrated High Capacity Envelope Feeder.

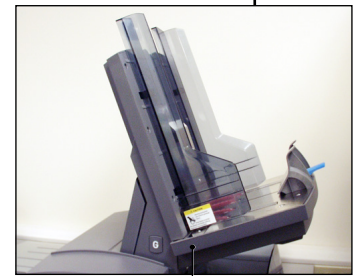
Additional modules can be added to utilize the full potential of the system. The availability of these modules and options for your inserting system varies by region.

- High Capacity Sheet Feeder
- Flats Sealer
- Pre-folded Insert Feeder
- Vertical Power Stacker
- Horizontal Belt Stacker
- Exit Scanner

### Component Identification



FPI 5100/6100 System



11

FPI 7100/8100 only

<p>1</p>	<p><b>Feeder Tower Trays</b> - feed sheets or inserts to the feeder tower.</p>
<p>2</p>	<p><b>Feeder Tower</b> - is a two-sided tray holder/material feeder.  <b>NOTE:</b> If enabled, the lower left tray is assigned with the letter "A" on the Mail Piece Icon Tree. When a High Capacity Envelope Feeder is not part of the system configuration, this Tray is the primary tray for feeding envelopes designated for a given job.</p>
<p>3</p>	<p><b>Manual Feeder</b> - allows you to manually feed stapled or unstapled sets of up to 5 sheets of 20 lb (80gsm) paper. The machine waits for each set to be manually fed before folding and inserting the set automatically into the envelope. The Manual Feed option is available during job creation. Inserts and/or sheets from other trays can also be added to the job.</p>

<b>4</b>	<b>Pre-fold Accumulator</b> - is a staging area for the material that needs to be collated together and then sent to the folder.
<b>5</b>	<b>Folder</b> - applies one of the available fold types to sheets.
<b>6</b>	<b>Post-fold Accumulator</b> - is a staging area for the folded sheets to meet any inserts that are to be included.
<b>7</b>	<b>Insertion Area</b> - is the part of the transport where the collation intended for a single addressee is inserted into an outer envelope.
<b>8</b>	<b>Moistener, Closer, Sealer</b> - Brushes sweep across the envelope flap to wet the glued area of the flap. The letter-size envelope then moves through the closer and sealer areas of the unit to complete the mail piece.
<b>9</b>	<b>Sealing Solution Bottle</b> - is located inside an opening cover at the front right side of the machine. It provides sealing solution to the envelope sealing system.
<b>10</b>	<b>Control Panel</b> - allows you to run the machine and configure job settings. It also displays the machine status and shows loading instructions and details of the job. <i>(Detailed information included in this section.)</i>
<b>11</b>	<b>High Capacity Envelope Feeder (FPi 7100/8100 only)</b> - holds at least 500 letter-sized envelopes. It feeds directly to the insertion area.

## Control Panel Identification



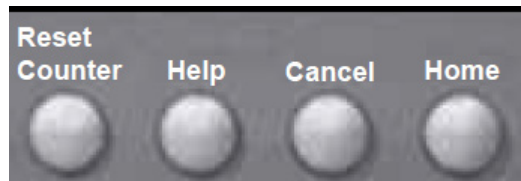
<b>1</b>	<b>LED Status Indicator</b>
<b>2</b>	<b>Screen Option Keys</b> - allow you to define settings for up to 24 jobs that you can store in the system's memory. These keys also provide the means to edit any of the stored jobs.
<b>3</b>	<b>Fixed Function Keys</b> - allow you to access the system's built-in tools that appear on the screen (such as the system's help file).
<b>4</b>	<b>Screen Navigation Keys</b> - allow you to move UP/DOWN and right/left in the Display and to apply selections that you've made.
<b>5</b>	<b>Machine Action Keys</b> - control hardware components and mechanical movements.

### Screen Option Keys

The eight screen option keys correspond to options on the screen, and therefore have no dedicated labels. Use these keys to highlight an item in a displayed pick list and/or to select the associated menu, item, action, or option.

### Fixed Function Keys

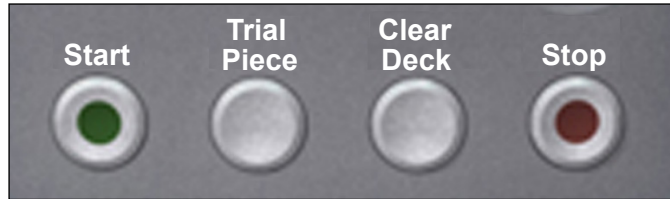
Each of the four fixed function keys has an assigned function that is enabled or disabled based on the screen that displays.



<b>Reset Counter</b>	<ul style="list-style-type: none"> <li>• <i>Piece Counter</i> is a cumulative counter; it increments for each completed mail piece.</li> <li>• <i>Batch Counter</i> counts up to a set number. It increments one count for each completed mail piece that the system detects. The system stops when it reaches the batch count.</li> <li>• If your system has a flats sealer, the <i>Mark Piece Count</i> option is available. It allows you to reset the counter for the envelope edge mark to zero.</li> <li>• <i>Reset Both</i> allows you to reset both the piece counter <i>and</i> the batch counter to zero.</li> </ul>
<b>Help</b>	Select <b>Help</b> for information about the screen that currently displays and for access to the entire Help file.
<b>Cancel</b>	Select <b>Cancel</b> to return to the previous screen.
<b>Home</b>	Returns you to the Home screen for the current job. The current job automatically includes any changes made while editing the job. Changes are not saved until you choose <b>Save Job</b> . Jobs that were changed but not saved have an asterisk (*) next to the job name (top of the Home screen)


### Machine Action Keys

The four machine action keys run the system.



<b>Start</b>	Press this green-colored <b>Start</b> key to begin running the selected job
<b>Trial Piece</b>	Press <b>Trial Piece</b> to do a test run on your job. One complete mail piece will be prepared.
<b>Clear Deck</b>	Press <b>Clear Deck</b> to rid the system of materials currently in process in the paper paths.  <b>NOTE:</b> Only press <b>Clear Deck</b> when prompted by the system to minimize lost material and manual mail piece generation.
<b>Stop</b>	Press <b>Stop</b> to finish in-process mail.

### Screen Navigation Keys

The <b>screen navigation keys</b> move the cursor on the screen to highlight items in the Mail Piece Icon Tree. The screen navigation keys consist of a two-tiered circular button.	
<b>UP/DOWN</b> and <b>LEFT/RIGHT</b> arrow keys, on the outer tier of the button, move the cursor UP/DOWN and LEFT/RIGHT on the screen.	
<b>OK</b> button, on the inner tier of the button, applies the selection that you made with the arrow keys.	



## Change the Language Display

1. From the Home screen, select **Menu**.
2. From the Menu screen, select **Change Language**, a list of available languages displays.
3. If necessary, use the **Next** and **Previous** options to view additional languages on the list, and select the appropriate language.
4. Select **Finished**.
5. Press **HOME** to return to the Home screen.



## How the System Works

### ***Transport Deck***

The transport deck accepts material from the feeder tower and moves it through the various modules to produce a finished mail piece.



### ***Mail Piece Path***

Material from the feeder trays comes down the feeder tower in a pre-defined order. Material moves rapidly from one station to the next in the transport deck to produce a finished mail piece that is dropped into a stacking bin or onto an optional high capacity output stacker. A brief description of the function of each module in the paper path is presented here.

### ***Pre-fold Accumulator***

The pre-fold accumulator is the first stop in the paper path. The pre-fold accumulator is a stacking place for the material that needs to be collated and folded. When the appropriate components for one mail piece finish collating on the pre-fold accumulator, they move into the folder.

### ***Folder***

The stack of collated sheets exits the pre-fold accumulator and moves into the folder. A fold is applied to the stack and the collation moves to the post-fold accumulator.

Fold types offered:

- C Fold
- Z Fold
- Single Fold
- Double Fold
- No Fold

*(An optional inverter may be used for some address location/fold type combinations.)*

### ***Post-fold Accumulator***

The accumulation of folded sheets exits the folder onto the post-fold accumulator area. Other components of the mail piece, such as a Business reply envelope or a pre-folded insert, are added to the accumulation in the post-fold accumulator area. When all components are present, the stack moves to the insertion area.

### ***Insertion Area***

The contents of the mail piece meet the outer envelope at the insertion area. The envelope arrives at the insertion area with its front face down and flap open. Envelope openers open the envelope wide enough to allow the contents to be slid inside.

### ***Folder Bypass Path***

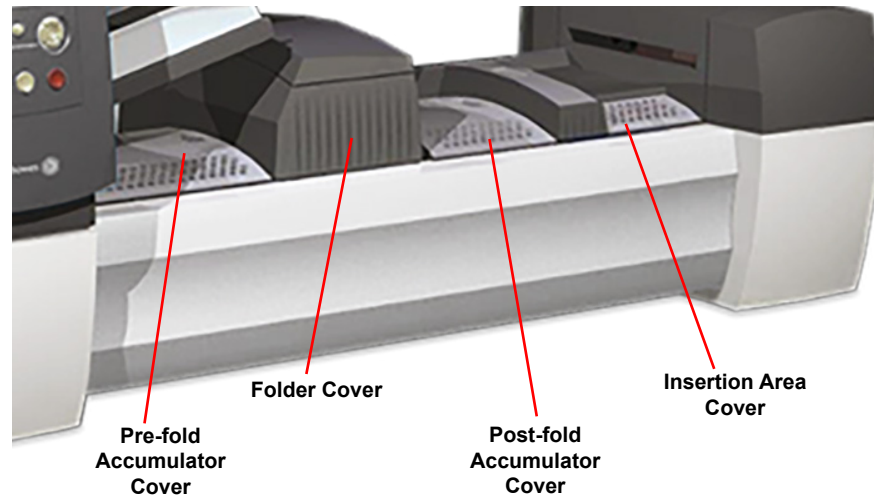
The outer envelope, fed from the feeder, that will contain the collated media runs through the bottom part of the transport deck. The route this envelope travels is known as the folder bypass path.

### ***Moistener, Closer, Sealer***

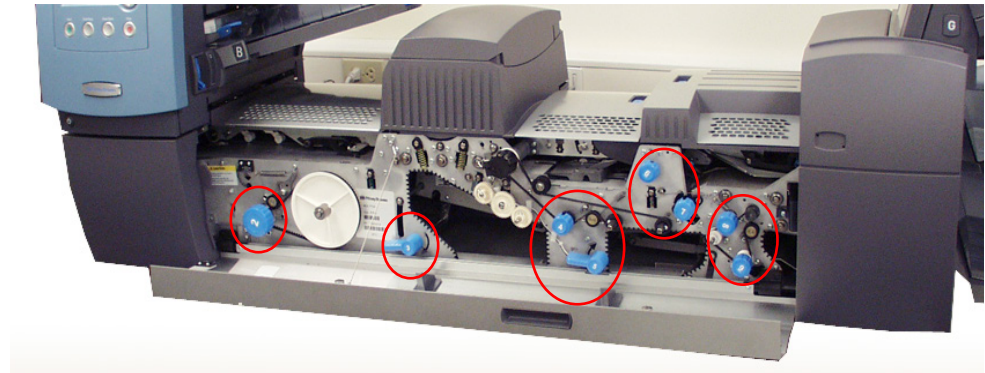
As the envelope passes over the moistener, brushes sweep across the top of the flap to wet the glued area of the flap. The envelope is then inverted and slid through the closer and sealer portion of the system to complete the mailpiece. From there, the mailpiece is dropped onto a stacker.

## System Covers

Transport deck covers open to provide access to the rollers in the main paper path.



The three covers on the front side of the system open to provide access to the paper release knobs.



**NOTE:** The tower base cover is interlocked with the main transport deck cover. You must open the main transport deck cover *before* opening the tower base cover.

**CAUTION**

**Moving mechanism can result in personal injury.**

Keep hands, long hair, ties, jewelry and loose clothing away from moving parts.

## ***Open the Covers***

### **Main Transport Deck Cover**

To open the main transport deck cover:

1. Place your fingers into the slot on the top of the cover.
2. Pull down gently. A security tie keeps the cover within the recommended range of movement.

**IMPORTANT!** *Do not* lean on the open cover.

### **Main Tower Base Cover**

To open the tower base cover:

1. Open the main transport deck cover.
2. Pull down on the tower base cover handle.

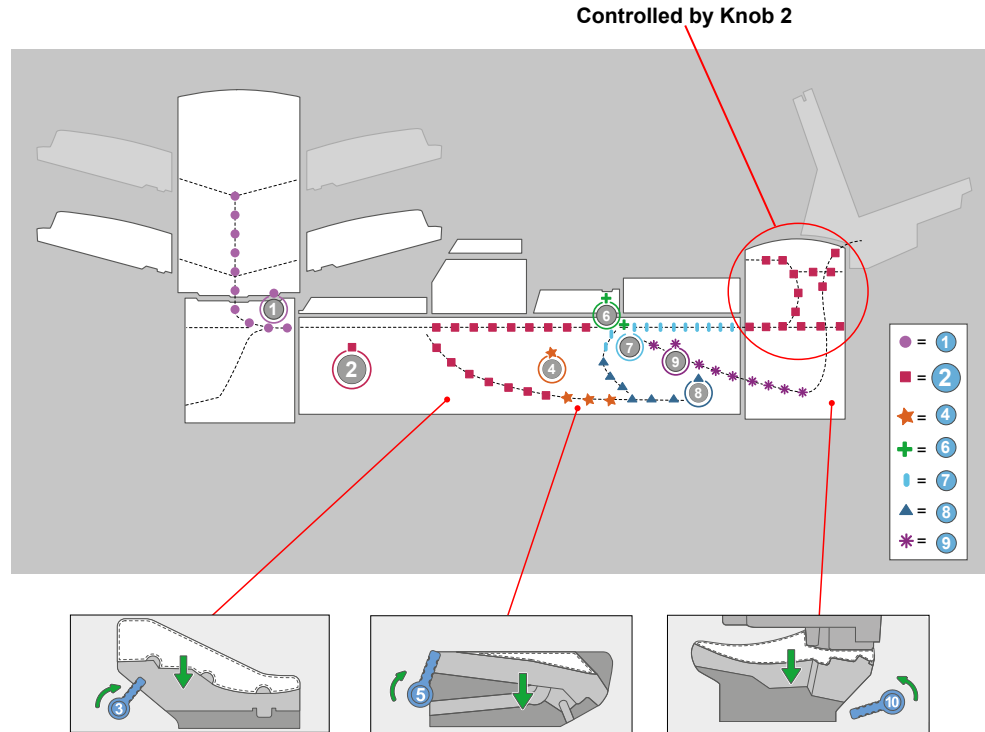
## ***Close the Covers***

To close the lower tower and/or the main transport deck cover, push the cover up until it is seated in place on the system deck.

## Paper Release Knobs/Levers

There are ten paper release knobs and levers on the front side of the system. Each knob provides the means to turn rollers and move material out of the area in which it stalled. Each paper release lever opens an area of the system and allows you to clear any material that may have stalled.

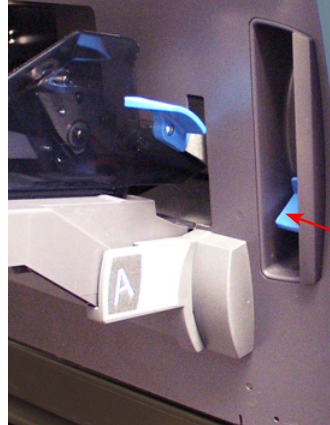
The following image indicates the various knob/lever locations, as well as the areas each knob moves material through and each lever opens.



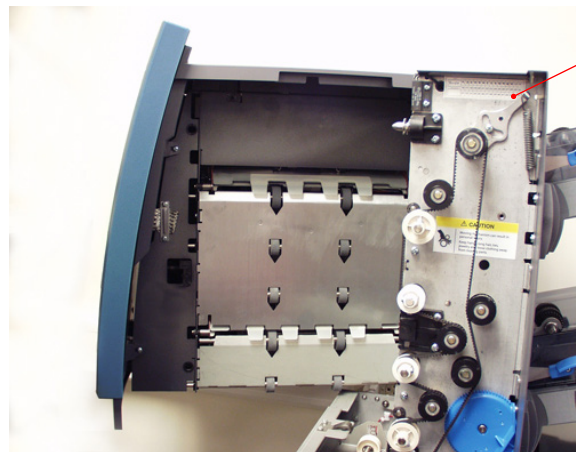
## Feeder Tower

The feeder tower is a two-sided tray holder/material feeder that stands at one end of the unit. Unlocking a latch on the left side of the tower opens it to expose feeder exit and tower transport rollers. This makes it easy to access material that may stop as it exits the tower.


Depending on the system configuration, the tower accepts two or four feeder trays. There are two types of feeder trays - sheet and insert trays. The required tray type is based on the type of material selected for a given job.



Push latch up to open Tower cover



Two-sided Feeder Tower - provides easy access to feed rollers

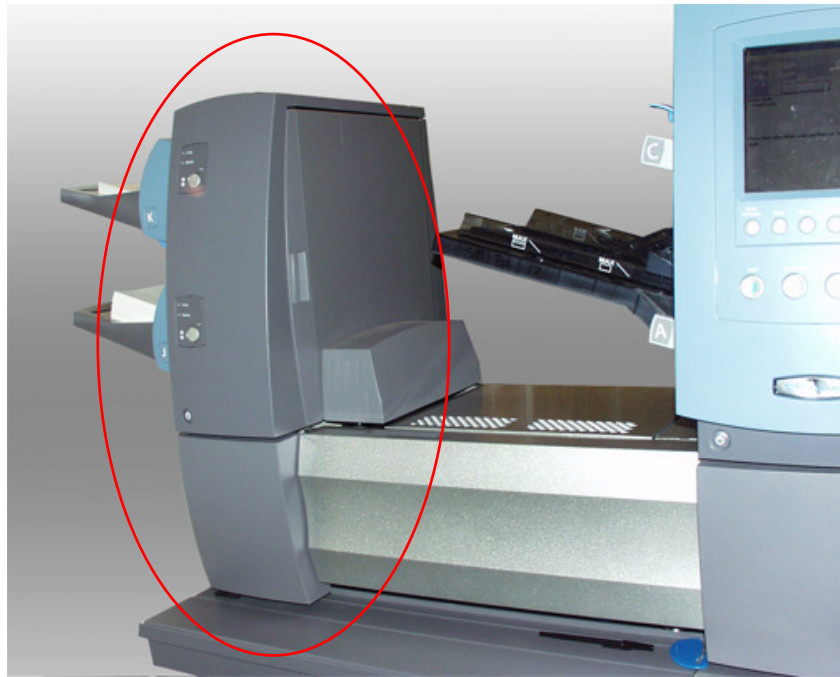
 <b>CAUTION</b>	
	<p><b>Moving mechanism can result in personal injury.</b>  <b>Keep hands, long hair, ties, jewelry and loose clothing away from moving parts.</b></p>

## Add-On Modules

### *High Capacity Sheet Feeder (HCSF)*

The HCSF add-on module attaches to the feed tower end of the system to provide greater upstream volume. The HCSF has two feeder trays and a horizontal transport. Each Feeder Tray holds up to 1000 sheets of 20 lb. (80 gsm) paper.

The system can handle up to two High Capacity Sheet Feeders. Each HCSF attaches to the next to form an upstream flow from one to the other and finally into the main system.





### ***Flats Sealer***

The flats sealer closes the flap, seals the envelope, and sends it on to the next module downstream. The Flats Sealer also contains an envelope edge marker.



### ***Vertical Power Stacker***

The vertical power stacker is a compact, powered, bottom-feed stacker that connects to the output of several inserting systems, including the FPi inserters.

### ***Horizontal Belt Stacker***

#### **Belt Stacker - Letter or Flats**

The Horizontal Belt Stacker can be used in Right Angled or In Line configuration with the FPi inserters.

#### **Tandem Belt Stacker - Letter and Flats Mail**

A particular configuration of the stacker is available for the FPi inserters that allows automatic stacking of 'Letters' and 'Flats' simultaneously.

### ***Exit Transport***

The Exit Transport connects to the inserter and can be mounted to other output devices while maintaining flats envelope functionality.

## **Optional Features**

There are several optional features you may have on your inserter system.

### ***File Based Processing***

This solution uses documents with barcodes that enable a dedicated computer to keep track of the mailpiece during the process. The barcode tells the inserter how to build each mailpiece to the specified completion.

### ***Exit Options***

The exit portion of the system accepts a variety of options. The letter drop stacker and the flats drop stacker are standard options for all systems.

### ***Mail Machine Interface (MMI)***

The Mail Machine Interface (MMI) enables communication between the inserter and the mailing systems via a USB connection.

## Access Rights

There are two security modes available on the system:

- **Login Not Required Mode** - requires four-digit access code to perform supervisor and manager functions.
- **Login Required Mode** - sets up access levels and requires a user ID and password for all system operator, supervisor, and manager functions.

## User Access Levels

The system has three levels of user access:

- Operator
- Supervisor
- Manager

User	Access Rights
Operator	Access to selecting and running a job, limited scanning activities, and running a Swift Start job. System operators may be required to log in and out of the system if a security mode has been enabled.
Supervisor	Access to all operator functions as well as programming a job, saving a job, and deleting a job (with the correct access code <i>or</i> user ID and password).
Manager	Access to all of the above functions <i>plus</i> exclusive rights to manage other users (i.e. assign/restrict functions and selecting the account mode).

**NOTE:** Depending on the security mode, the supervisor and manager access levels require entry of an access code *or* user ID and password. These are assigned by the system manager.

### **Log In**

- When the **Login Required Mode** is enabled, entry of a user ID and password is needed to access the system.
- When **Login Not Required Mode** is enabled, entry of an access code is needed to access restricted functions.

**NOTE:** Managers assign the user IDs and passwords or access codes. User IDs can contain alphanumeric characters; access codes and passwords *must* be numeric only.

### **Login Required Mode**

If Login Required Mode is enabled:

1. At the Select User screen, select the appropriate user ID.  
(If necessary, select **Next** to view additional user IDs.)
2. Enter your password.

**NOTE:** Passwords are four-digit numeric codes. Numbers 1, 2, 3, 4 and 5 display on the first screen. Press "Next" to access numbers 6, 7, 8, 9, and 0.

3. Select **Accept** and the Home screen displays.

### **Login Not Required Mode**

If Login Not Required Mode is enabled on your system and user IDs and passwords have been set up by the manager, the log in option displays on the Home screen.

### **Log Out**

To log out, on the Home screen, select **Log Out**.

**NOTE:** You must log out of the system in order for the next operator to log in.