

**Pressure Seal Group**

# Operator's Manual

Issue 3



*PS800*

## Folder and Pressure Sealer

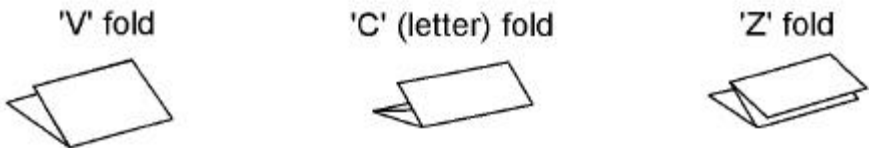


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# ***Introduction***

## **Introduction to the PS800 sealer**

The PS800 sealer is used in conjunction with the MB CAS38 (single fold unit) fitted with a delivery table (AM52). These units are connected together to provide a complete system that will fold and seal laser printed cut-sheet documents into “self-mailers” quickly and economically. Pressure activated adhesives provide an instantly secure seal on the document, whether you use a “V”, “C” or “Z” fold.



*Figure 1. Types of fold produced by the PS800.*

Features of the PS800 sealer include:

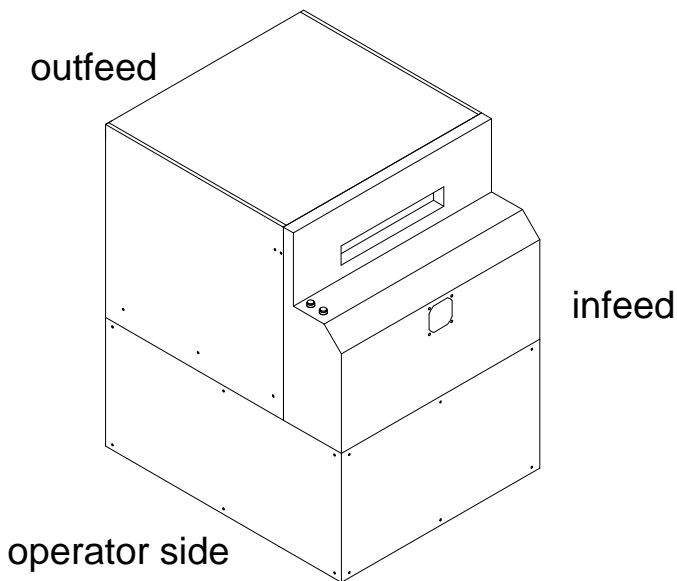
- Simple to operate
- C, V, offset V and Z fold styles
- No adjustment required when changing the weight of forms used
- Paper flow error detection

This PS800 sealer operator manual describes the operating instructions and error conditions for the PS800 sealer. This manual is written as a reference for an operator who is familiar with mailing operations and who has received some basic training in operating the PS800.

## Which Side Is Which?

The terms “infeed”, “outfeed” and “operator side” are used throughout this manual to identify the sides of the PS800 sealer (see fig.2 below).

- The **infeed** is the side into which the folded documents are fed.
- The **outfeed** is the side out of which the finished mailers exit.
- The **operator side** of the PS800 is the side on your left when you're facing the infeed of the PS800 sealer.



*Figure 2. Identifying the sides of the PS800 sealer.*

# How to Use This Manual

Here is a summary of what is contained in this manual and where:

- **Features** – describes the major components you use to operate the PS800. New operators should read this section to gain a basic understanding of how the PS800 works. Experienced operators, read this section when you have a specific question about the function of a particular feature.
- **Operation** – provides easy step-by-step procedures for using the PS800 sealer.
- **Operation errors** – lists common operating problems and possible causes and solutions.
- **Cleaning** – provides details of the cleaning required to keep your PS800 sealer in the best possible condition.
- **Specifications** – provides the technical details of your PS800 sealer.

# Safety Precautions

The design of your PS800 sealer includes safeguards for set-up and operation when you adhere to the following precautions.

**No one should use the PS800 unless they have been trained to do so. Pressure Seal Systems Ltd accept no responsibility for unauthorised use.**

## Operating environment

- Dress safely. Loose clothing, long hair and jewellery can become tangled in moving parts.
- Keep your work area and the PS800 clean and clear of dust or debris. Details of how to clean the PS800 thoroughly are given later in this manual.
- Do not locate the PS800 in a position where it may become unstable.
- Do not allow anything to rest on the cables. Do not locate the PS800 where the cables would form a hazard to individuals working on or passing by the PS800.
- Keep hands clear of the in-feed and out-feed areas when the machine is running.

***Warning:*** Except as explained elsewhere in this operator manual, do not attempt to service the PS800. Doing so may expose you to dangerous voltage points or other risks. Don't remove the protective side covers from the PS800. Refer servicing to qualified service personnel. Only a trained, authorised service person should remove the protective side covers – and then only for servicing purposes.

## **Power requirements**

- The PS800 must be operated from the CAS38 fold unit. It connects into the socket used by the AM52 delivery table, which in turn connects into the PS800 sealer unit to form the complete system. If you are unsure consult your Pressure Seal representative or local power company.

## **If the machine is damaged**

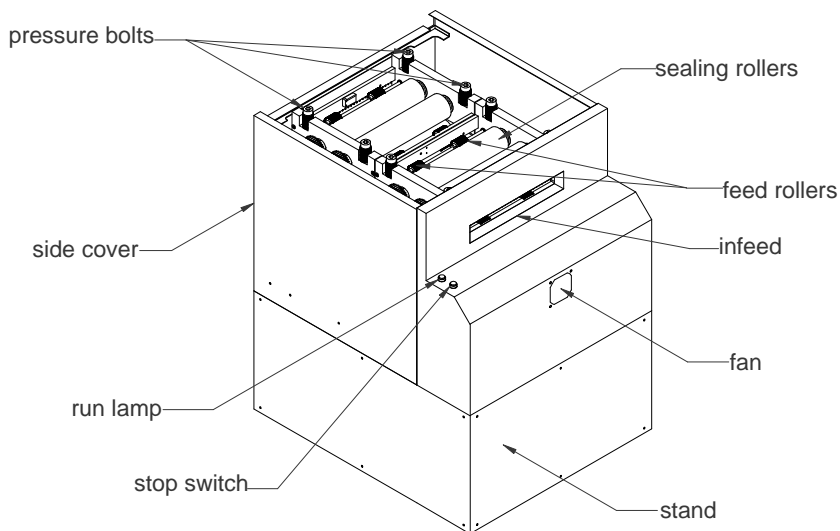
- Unplug the PS800 from the wall outlet and refer servicing to qualified personnel under the following conditions:
- If the connecting leads are damaged.
- If liquid has been spilled into the PS800.
- If the PS800 has been exposed to water.
- If the PS800 does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
- If the PS800 has been damaged in any way.
- If the PS800 exhibits a distinct change in performance, indicating a need for a service.

# Chapter 1 – Features

## Features of the PS800

This section guides you through the features of the PS800 sealer. The component names introduced in this section are used throughout this manual.

Please refer to the following diagram as you read about the features of the PS800.



*Figure 3. The features of the PS800 sealer.*

# Operator controls

The start and stop status of the PS800 sealer is controlled by the MB CAS38 central operator panel. Whenever the fold roller drive button is selected, the fold unit drive and the sealer drive motors operate together.

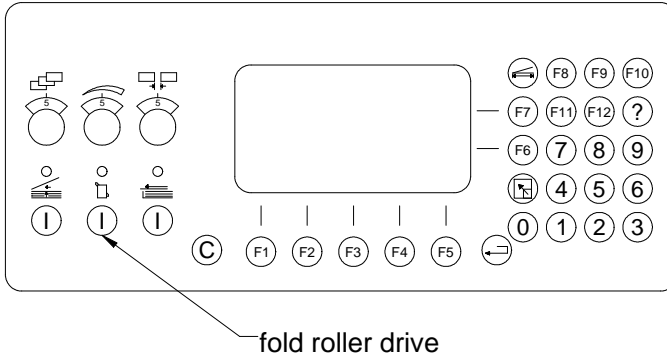


Figure 4. CAS38 operator controls.

Although the PS800 sealer unit has two push switches, neither requires operating while the sealer is functioning correctly.

## Green push button (run lamp)

The green push button is used to release the top cover latch once the motor has come to rest. It does not require operation while the sealer is functioning normally.

The green led indicator reports the state of the sealer. It has three states:

- **On continuously** – indicates that the sealer is awaiting forms to process
- **Flashing on and off once per second** – indicates that the sealer is ready but the operator is required to pull back the top cover to check that the processing pathway is clear
- **Off** – indicates that the PS800 is not ready for processing forms

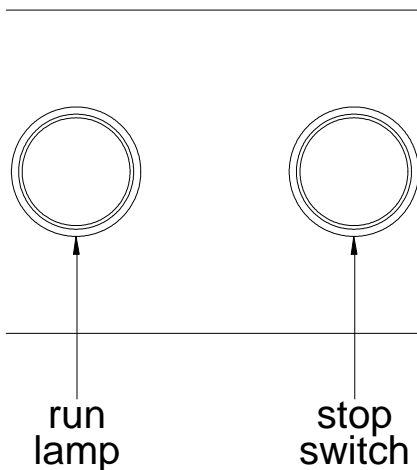
# Stop switch

Pressing the red switch stops the folder from feeding further forms into the sealer. This would, however, be interpreted as an abnormal stoppage by the folder.

The red led indicates when there is an operating error. To clear an error condition:

- Slide the PS800 top cover to the left
- Clear any mishandled documents
- Slide the PS800 top cover to the closed position

The sealer's error condition will be cleared automatically when the top cover is returned to the closed position.



*Figure 5. Operating controls of the PS800 sealer.*

# **Power and safety components**

## **Connectors**

To connect the sealer unit to the CAS38 requires a qualified technician to ensure that the 3-phase supply, feeding the CAS38, has been switched off.

## **Cover**

The cover provides access to the sealing components. The cover has a safety interlock switch that disable operation of the PS800 when it is open.

# **Sealing and stacking components**

## **Pressure bolts**

These allow you to release the pressure on the sealing rollers for clearing mishandled documents with the allen key that is provided.

## **Sealing rollers**

The sealing rollers provide the pressure required to tightly seal the edges of the document.

# Chapter 2 – Operating the PS800

## Operating the PS800 sealer

It is assumed that the CAS38 is switched on and has been set up correctly to process the required paper fold configuration. Additionally, it should be ensured that the pressure seal paper stock is not time expired.

Operating the PS800 is a simple four-step process:

1. Verify that the green led on the sealer unit is illuminated, indicating that the sealer is ready to process forms. If it is not illuminated or is flashing it indicates that an error condition has been detected which must be cleared before operation (see the following chapter for error conditions).
2. Operate the folder as described in the CAS38 operator's manual.

**Note:** *When the fold roller drive button is selected to run, the sealer motor also begins to run. Deselecting the fold roller drive also stops the sealer motor.*

3. Check that the fold and seal quality is satisfactory by operating in single shot mode first and, if necessary, make appropriate adjustments.
4. When satisfied with the fold quality, allow the CAS38 to process forms as normal.

**Warning:** *It is not recommended that any internal adjustments be made to the PS800. If adjustments are needed, contact an authorised service representative.*

## Interrupting operation

The system will stop processing forms if the fold roller drive button is pressed, which is the normal procedure for stopping the sealing operation.

If the sealer detects an error condition, or if the sealer's stop button is pressed during normal operation, the folder will automatically stop. Both of these conditions are assumed to be abnormal and will result in the message "STOPPED BY EXTERNAL CONTROL" being displayed on the CAS38 operator's display panel.

**Note:** *The emergency stop buttons for the whole system are mounted on the folder and delivery table only; there are none on the sealer itself.*

# ***Chapter 3 – Operation Errors***

## **Error Conditions**

Errors can occur during the feeding, folding, sealing or delivery processes. When an error is detected it causes the system as a whole to stop. The CAS38 operator panel will state the cause of the stoppage if the feeder, folder or delivery process has detected an error. However, if the cause of the stoppage is stated to be “STOPPED BY EXTERNAL CONTROL”, it can be assumed that the sealer has detected an error, which will be evident from the illumination of the red led indicator on the sealer.

The following chapter describes the various error conditions that the sealer may detect and how to clear each condition.

**Note:** *In the event of an error condition, manually remove any forms from the Transfer Bridge and Folder **before** clearing any forms from the sealer.*

## Operation errors

The red indicator, located in the stop push switch, reports error conditions. There are four possible conditions detected and reported for corrective action. The errors are indicated by the red led to show the operator what has caused the break in processing. In each case the cause of the error must be corrected before further processing can take place. The various error codes are explained below:

1. **Red led flashing once every three seconds** – this indicates that the sealer motor has not started or has stopped, or the infeed rollers are not rotating.
2. **Red led flashing twice every three seconds** – indicates that the sealer had received forms that are too close together.
3. **Red led flashing three times every three seconds** – indicates that the sealer had received an over length form (incorrect fold) or an overlapping form.
4. **Red led is continuously illuminated** – indicates that there is a form resting under a sensor at the sealer's entry or exit openings.

In all cases the cause of the error must be removed. The sealer's error condition will be cleared automatically when the top cover is returned to the closed position.

**Note:** *If the message "STOPPED BY EXTERNAL CONTROL" is attributed to the sealer's stop switch being pressed during normal processing, then the red led will not be on but the green led will be flashing to request the operator to ensure that the sealer's processing path is clear.*

## **Clearing reported error conditions**

When the sealer has reported an error, indicated by the red led, the cause must be removed before processing can commence.

### **When red led flashes once every three seconds**

This reported error might require a service visit to repair the fault if the error is not the result of a jam.

1. Check for mishandled documents by pressing the open switch and sliding the top cover to the left to expose the sealing rollers and to inspect the process path. (See Note on page 15)
2. If multiple forms are under the sealer rollers the next step is to loosen all eight sealer head bolts by at least one turn anti-clockwise, using the 10mm Allen key provided.
3. Any forms can then be pulled free.
4. Having removed all the forms from the sealer all the bolts must be re-tightened until the stop point is reached.

### **When red led flashes twice every three seconds**

This reported error occurs when two forms have arrived at the sealer so close together that the minimum permissible gap separation between them has been detected.

1. Manually clear any forms from the transfer bridge and any that may still be in the folder.
2. Press both the open and stop switches on the sealer unit together to clear any forms that may still be in the sealer unit.
3. At the CAS38 operator panel, increase the sheet gap on the registry table.

## When red led flashes three times every three seconds

This reported error occurs when an over length form (incorrect fold) or an overlapping form has been received

1. Manually clear any forms from the transfer bridge and any that may still be in the folder.
2. There may be multiple forms under the sealer head. To check, press the open switch and slide the top cover to the left to expose the sealing rollers and to inspect the process path.
3. If there are a series of single separated forms then close the top cover and press both the open and stop switches on the sealer unit together to clear any forms that may still be in the sealer unit.
4. If the sealer motor fails to start there may be multiple forms under the sealer head. To check, press the open switch and slide the top cover back and inspect the process path again.
5. If multiple forms are under the sealing rollers, loosen all eight sealer head bolts by at least one turn anti-clockwise using the 10mm Allen key supplied. The forms can then be pulled free. Once all the forms are removed the sealer bolts must all be re-tightened until the stop point is reached.

## When red led is illuminated continuously

This means there is a form resting under the entry or exit sensor.

1. Manually clear any forms from the transfer bridge and any that may still be at the folder's entry or exit points.

**Note: *Top cover (Lid) release.*** The top cover-opening switch normally operates as soon as it is depressed, if the motor is not running; however, having reported an error the sealer allows 10 seconds for the Operator to slide back the top cover. If this is not accomplished within an elapse time of 10 seconds the top cover will re-latch. To release it again depress the cover-opening switch for 3 to 4 seconds.

# **Chapter 4 – Cleaning the PS800**

## **Cleaning procedure**

The PS800 sealing mechanism should be cleaned in the following manner:

1. Be sure that the room is well ventilated.
2. Press the green button and pull back the top cover.
3. Switch off the mains power and unplug or disconnect from the mains.
4. Remove as much paper dust as possible using a soft brush. Try to avoid letting the dust drift down into the lower machinery.
5. Moisten a clean, lint-free cloth with the cleaning solution.

**Warning:** *Avoid breathing the fumes or getting the solution in an open wound or other sensitive areas such as the eyes or mouth. Read the label on the container carefully before use.*

6. Wipe clean the surface of all the folding and sealing rollers using the moistened cloth. It will be necessary to rotate each roller, taking care not to let anything get caught between them. A moderate amount of effort may be required to turn the sealing rollers. Wipe off any fingerprints from the rollers as they are turned.
7. Replace the top cover and then restore the mains power.

# ***Chapter 5 – Specifications***

## **Sealer Specifications**

### **Construction**

Formed sheet metal steel side frames

### **Sealer**

Integral eight-roller system

### **Size**

765mm(L) x 635mm(W) x 1050mm(H)

### **Weight**

242kg

### **Power**

1000 Watts @ 3 x 416V/50Hz/N/PE or 3 x 208 – 230V/60Hz/PE

### **Speed**

40,000 documents per hour (A4 Z fold)

### **Environment**

Operating	10? – 40? C 15% - 40% humidity
Non-operating	5? – 50? C 5% - 80% humidity

### **Colour**

Light graphite

### **Linear Velocity**

88 metres per minute

# Document Specification

## Weights

80 gsm minimum; 120gsm maximum

## Sizes

W 203mm (8in) x L 355mm (14in)	minimum
W 230mm (9in) x L 355mm (14in)	maximum
Cut-sheet	

## Fold Configuration

Z, V and C folds