

## Pressure Seal Group

# Technical Manual



## *PS 100* Compact Pressure Folder and Sealer



Telephone  
E-mail  
Website

+44 (0) 19 6273 5777  
service@pseal.co.uk  
www.pressure-seal.com

ISSUE 1.

# Contents

---

<b>Chapter One – Description .....</b>	<b>1</b>
General Description .....	2
Which Side Is Which? .....	3
Features .....	4
Folder Components .....	5
Document Guides .....	5
Feed Roll .....	5
In-Feed Table .....	5
Folding Plates .....	5
Folding Rollers .....	5
Jam Detection and Document Counting Circuitry .....	6
Conveyor and Outfeed Sensors .....	6
Operator Controls .....	6
Batch Counter .....	6
Illuminated Power Switch .....	6
Run Switch .....	6
Stop Switch .....	6
Power and Safety Components .....	7
Mains Lead .....	7
Top Cover .....	7
Sealing and Stacking Components .....	7
Pressure Bolts .....	7
Sealing Rollers .....	7
Output Tray .....	7
Technical Information .....	8
Folder/Sealer Specifications .....	8
Construction .....	8
Size .....	8
Weight .....	8
Power .....	8
Speed .....	8
Environment .....	8
Document Specifications .....	8
Weights .....	8
Sizes .....	8
Fold Configuration .....	8
System Overview .....	9

<b>Chapter Two – Installation.....</b>	<b>10</b>
Site Requirements.....	11
Floor Space Requirements.....	11
Power Requirements .....	11
Places to Avoid .....	11
Unpacking the PS100.....	12
To Unpack the PS100.....	12
Inspecting the PS100 .....	14
Setting up the PS100 and Verifying Operation .....	14
Training the Operator .....	15
Finishing the Installation .....	15
<b>Chapter Three – Electrical Operation .....</b>	<b>16</b>
Electrical Components List .....	17
Theory of Operation .....	18
Interrupt Operation .....	19
Jam Detect Theory of Operation.....	19
Board Functions .....	22
Troubleshooting Electrical Components.....	25
<b>Chapter Four – Assemblies and Adjustments.....</b>	<b>26</b>
Covers and Panels.....	27
Removing the Infeed Panel.....	28
Removing the Outfeed Panel.....	28
Removing the Operator Side Cover .....	29
Removing the Non-Operator Side Cover .....	29
Document Feed System .....	30
Removing the Feed Roll and Paper Separator.....	30
Replacing the Feed Roll and Paper Separator.....	31
Removing the Clutch .....	31
Document Folding System.....	32
Removing the Fold Rollers .....	32
Document Sealing System.....	33
Removing the Sealer Chain.....	33
Replacing the Sealer .....	34
Adjusting the Sealer Roller Pressure.....	34
Electrical Systems .....	35
Removing the Cover Switch .....	35
Removing the Infeed Sensor .....	36
Removing the Outfeed Sensor.....	37
Removing the Motor .....	38

<b>Chapter Six – Operation Errors .....</b>	<b>39</b>
Troubleshooting Guide .....	40
<b>Chapter Six – Preventative Maintenance.....</b>	<b>43</b>
Before You Begin.....	44
Cleaning the PS100 .....	44
Lubricating the PS100 .....	45
Inspecting the PS100 .....	45
<b>Chapter Seven – Illustrated Parts List.....</b>	<b>46</b>
Recommended Spares for Engineers .....	46
PS100 chassis .....	47
Paper Guide Plates.....	48
Motor and Mount.....	49
Fold Rollers .....	50
Top Fold Roller .....	51
In-Feed Shafts .....	52
Sealer .....	53
Gears and Clutch.....	54
Baseplate .....	55
Levers and Fold Plate Stubs .....	56
Springs.....	57
Sprockets and Chains .....	58
In-Feed Tray.....	59
Fold Plates .....	60
Covers .....	61
Feed Pad Adjuster Shaft Assembly .....	62
Feeder Wheel Assembly.....	62
Sealer Assembly .....	63
Sealer Sensor Bracket Assembly .....	64
Baseplate Assembly .....	65
Clutch Gear Assembly .....	66
Infeed Sprocket Assembly .....	66
In-Feed Tray Assembly .....	67
First Fold Plate Assembly .....	68
Second Fold Plate Assembly .....	69
Operator Side Cover Assembly .....	70
Infeed Cover Assembly .....	71
Outfeed Cover Assembly .....	72

# Diagrams

---

<b>Figure 1.</b>	Types of Fold Produced by the PS100 .....	2
<b>Figure 2.</b>	The Sides of the PS100.....	3
<b>Figure 3.</b>	The Features of the PS100.....	4
<b>Figure 4.</b>	The PS100's Components (Operator Side View).....	9
<b>Figure 5.</b>	The PS100's Components (Non-Operator Side View).....	9
<b>Figure 6.</b>	Unpacking the PS100 (export only) .....	13
<b>Figure 7.</b>	PS100 Circuit Board.....	20
<b>Figure 8.</b>	PS100 Circuit Board Mk II .....	21
<b>Figure 9.</b>	Schematic Diagram.....	23
<b>Figure 10.</b>	Schematic Diagram Mk II.....	24
<b>Figure 11.</b>	PS100 Covers .....	27
<b>Figure 12.</b>	Removing the Feed Roll and Paper Separator .....	30
<b>Figure 13.</b>	Removing the Clutch.....	31
<b>Figure 14.</b>	Removing the Sealer Chain.....	33
<b>Figure 15.</b>	Replacing the Sealer .....	34
<b>Figure 16.</b>	Removing the Cover Switch.....	35
<b>Figure 17.</b>	Removing the Infeed Sensor.....	36
<b>Figure 18.</b>	Removing the Outfeed Sensor .....	37
<b>Figure 19.</b>	Feed pad shaft and stop cam.....	42

# Chapter 1

---

## Description

This chapter introduces you to the Pressure Seal PS100 Folder/Sealer. Use the information here to familiarise yourself with component names and locations, and to gain a better understanding of the physical and performance characteristics of the PS100.

In Chapter 1 you'll find the following topics:

?? General description

?? Which side is which?

?? Features

?? Technical information

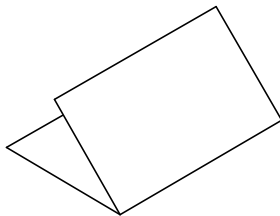
?? System overview

# General Description

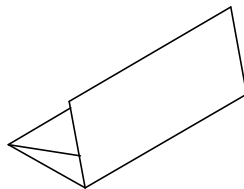
The Pressure Seal PS100 Folder/Sealer is a compact, portable unit requiring no more than desktop space to operate. Because of its compact size, the PS100 fits a variety of work spaces and can be moved easily (the PS100 weighs 80kg) anywhere it's needed.

The PS100 produces self-mailers at speeds of up to 4000 documents per hour. In one smooth operation, the PS100 folds and seals single sheets into self-mailers quickly and economically. Pressure activated adhesives provide an instantly secure seal on all sides of the document, whether you use a "V", "C" or "Z" fold.

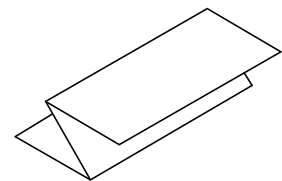
'V' fold



'C' fold



'Z' fold



*Figure 1. Types of fold produced by the PS100.*

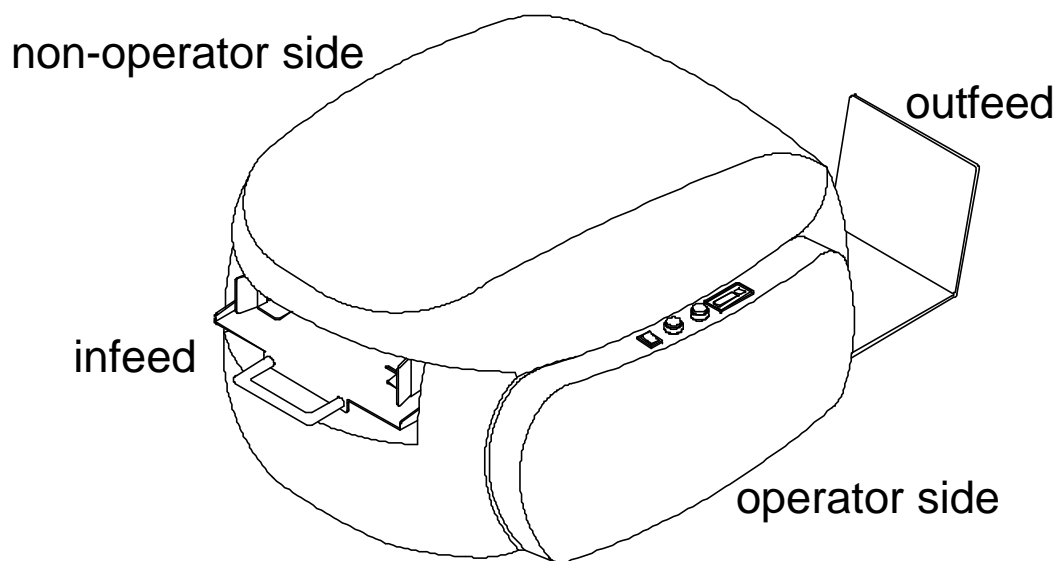
# Which side is which?

The terms “infeed”, “outfeed” and “operator side” are used throughout this manual to identify the sides of the PS100 (see figure 2 below).

?? The infeed is the side into which documents are fed.

?? The outfeed is the side out of which the finished mailers exit.

?? The operator side of the PS100 is the side on your right when you’re facing the infeed of the PS100 and has all of the operator controls mounted on it.



*Figure 2. The sides of the PS100.*

# Features

This section guides you through the features of the Pressure Seal PS100 Folder/Sealer. The component names introduced in this section are used throughout this manual.

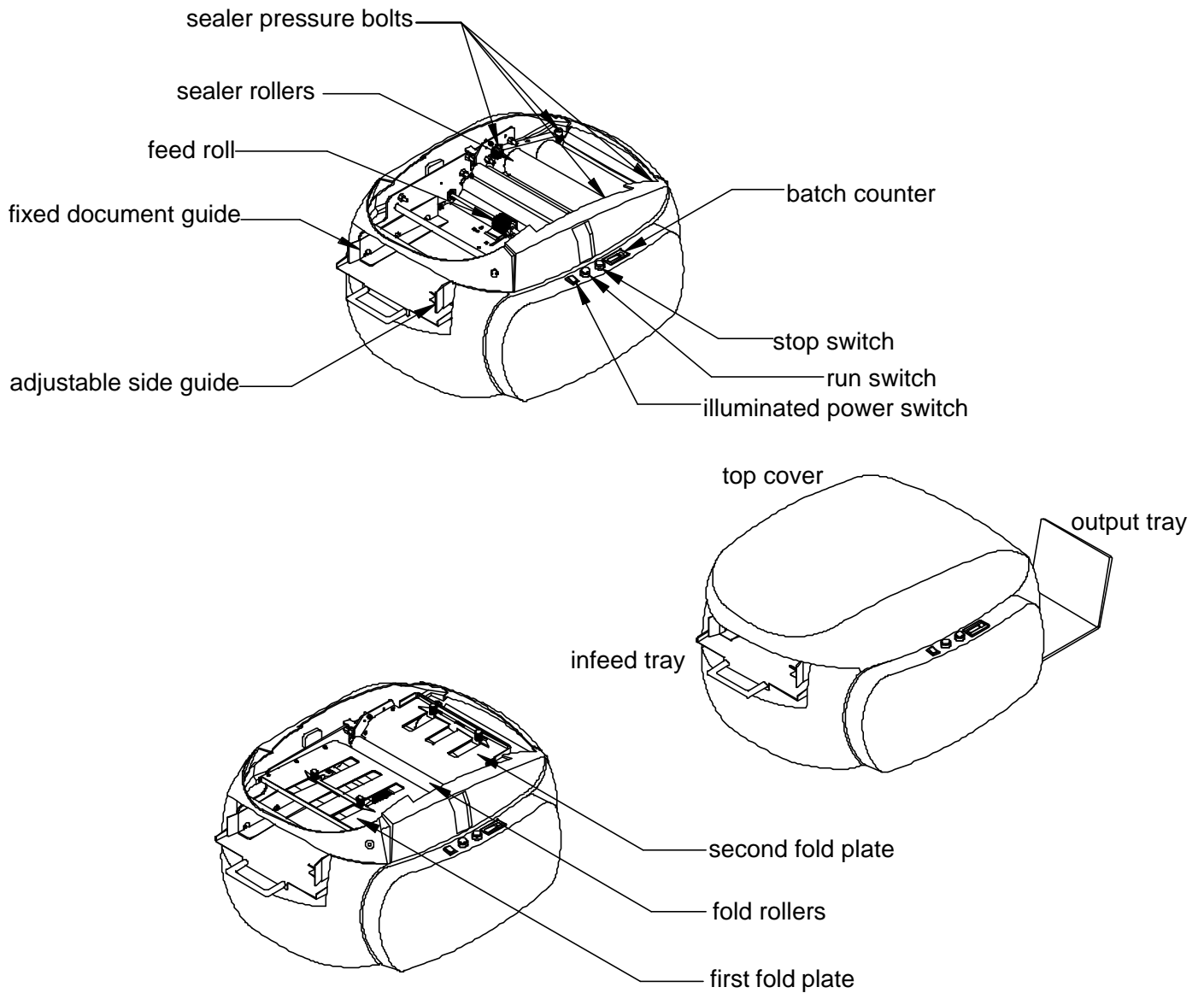


Figure 3. The features of the PS100.

# Folder Components

## Document guides

The document guides keep the documents aligned so the feed roll feeds each one squarely. The guide nearest the operator side of the PS100 is adjustable to accommodate various sheet widths.

## Feed roll

This provides reliable single-sheet document feeding into the folding area. The roll requires no adjustment.

## In-Feed table

The feed table holds the stack of documents allowing them to be fed by the feed roll. The spring-loaded table presses the documents against the feed roll, automatically providing the correct pressure to allow only one document at a time to be fed into the folder.

## Folding plates

These provide for simple "V" (centre or half) folds, "Z" (zigzag) folds or "C" (letter) folds. The plates are adjustable to accommodate various document lengths.

## Folding rollers

These work in conjunction with the folding plates to produce folds. The rollers feed the document into and out of the folding plates. The top roller is removable, which aids recovery of mishandled documents.

# **Jam detection and document counting circuitry**

## **Conveyor and outfeed sensors**

These monitor the flow of paper and should a misfeed occur they immediately shut down the PS100, minimising the risk of spoiled documents. The sensors also provide input to the counters.

## **Operator Controls**

### **Batch counter**

There are two types of batch counter available. The standard counter indicates the number of documents in the current batch (since it was last reset) and has a push button reset. There is an optional counter available for the cumulative total, and this may only be reset by a service engineer.

### **Illuminated power switch**

The power switch is illuminated when the PS100 is connected to the mains supply.

### **Run switch**

The run switch lights when:

?? Documents are properly loaded on the feed table, and

?? There are no mishandled documents in the PS100

When the run switch is lit:

?? Momentarily pressing the run switch processes one document

?? Pressing and holding the run switch for two seconds processes all loaded documents

### **Stop switch**

Pressing the stop switch stops the PS100 after the document currently being fed is processed. You can stop the PS100 anytime while documents are processing.

The stop switch flashes when there is an operating error. To clear an error condition:

?? Remove the lid from the PS100

?? Clear any mishandled documents

When the top cover is replaced, the PS100 automatically resets the error condition.

# **Power and safety components**

## **Mains lead**

Supplies electrical power to the PS100.

## **Top cover**

Provides access to the folding and sealing components. The cover has a safety interlock that disables operation of the PS100 when the cover is removed. The cover must be removed to reset an error condition.

# **Sealing and stacking components**

## **Pressure Bolts**

Let you release the pressure on the sealing rollers for clearing mishandled documents.

## **Sealing rollers**

Provide the pressure required to tightly seal the edges of the document.

## **Output tray (stacker)**

Collects the self-mailers and stacks them for easy removal.

# Technical information

## Folder/Sealer specifications

### Construction

Formed sheet metal steel side frames with ABS shell

### Size

685mm(L) x 495mm(W) x 375mm(H) (excluding output tray of 115mm)  
Footprint 675mm(W) x 495mm(L)

### Weight

80kg

### Power

110v AC, 60HZ, 5A  
230V AC, 50HZ, 2.7A

### Speed

4,000 documents per hour maximum

### Environment

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

### Feeder Capacity

150 sheets

### Noise

72dB

## Document Specification

### Weights

60 gsm minimum; 145gsm maximum

### Sizes

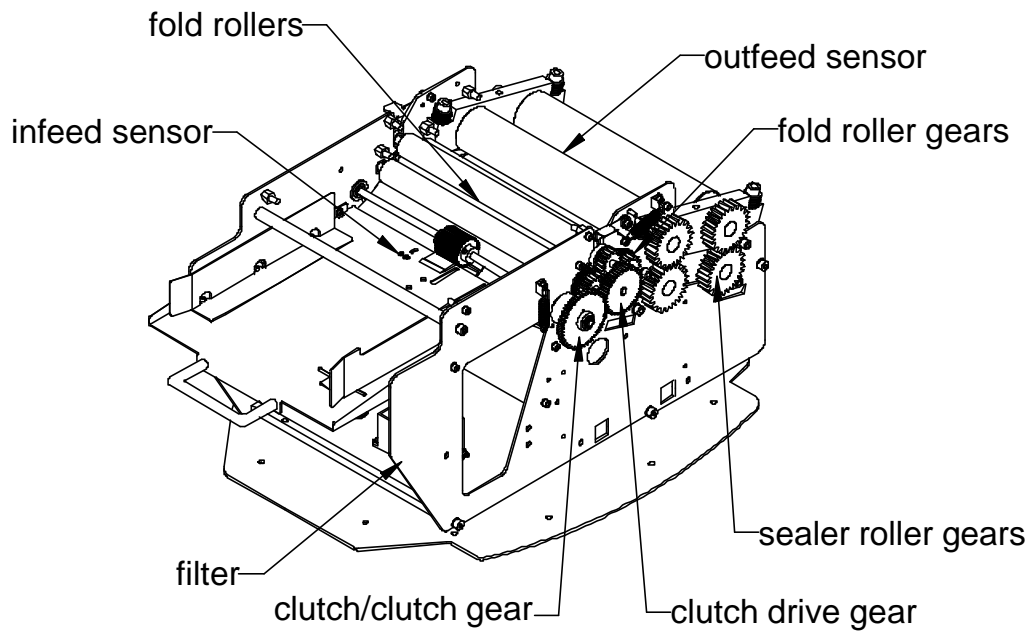
175mm (6.9in) x 100mm (4in)	minimum
216mm (8½in) x 385mm (14in)	maximum

### Fold Configuration

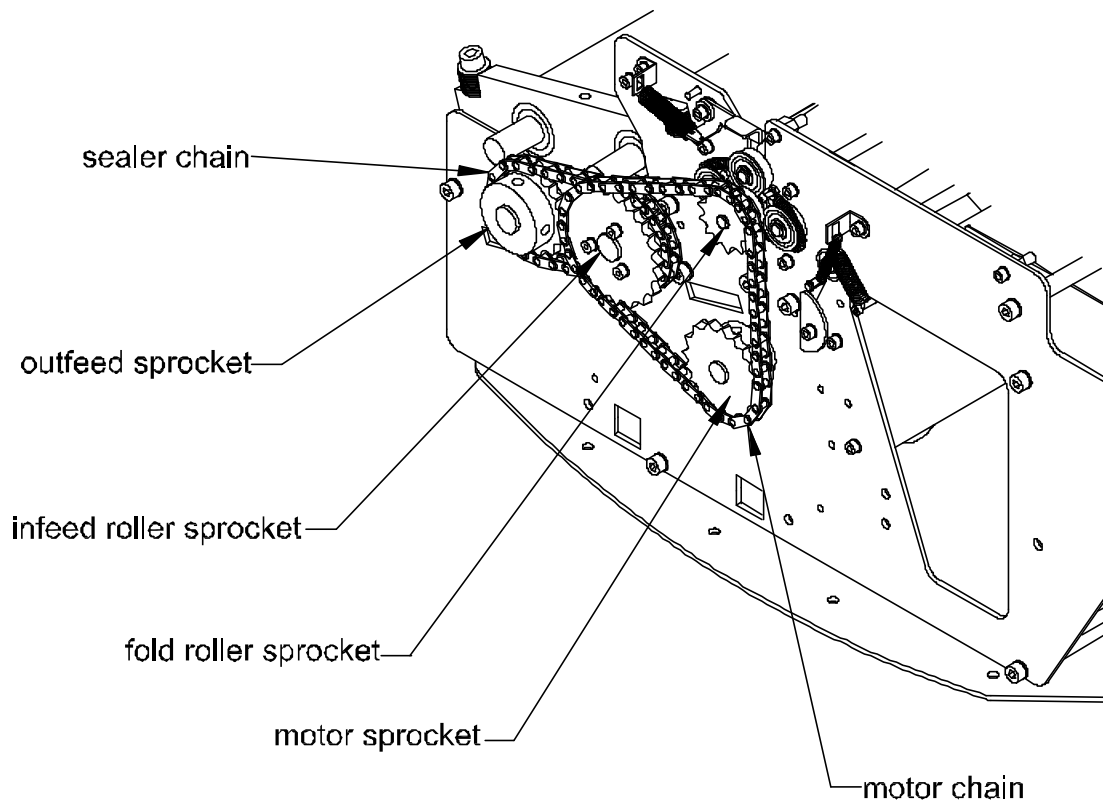
Z, V and C folds

# System overview

This section illustrates the locations of the major parts of the PS100 Folder/Sealer. Refer to figures 4 and 5 below.



*Figures 4 and 5. The PS100's components.*



# Chapter 2

---

## Installation

This chapter describes the site requirements and the sequence of tasks you must perform to successfully install the PS100 Folder/Sealer.

Installation tasks include:

- ?? Site requirements
- ?? Unpacking the PS100
- ?? Inspecting the PS100
- ?? Setting up the PS100 and verifying operation
- ?? Training the operator
- ?? Finishing the installation

# Site Requirements

## Space requirements

2.5m x 2.75m is required. This area allows approximately 1m of clear space around the machine.

## Power requirements

?? Input voltage: 240 volts UK (210/220V Europe) (110V USA)

?? Input frequency: 50 Hz UK/Europe (60Hz USA)

?? Input current: 2.7 amperes

?? Mains lead: 2m three-pin 5A (male plug with BSI363A connector)  
2m Schuko lead (Europe)  
2m NEMA 5 power cord (USA)

## Places to avoid

?? Avoid placing the PS100 under a blowing air duct or beside an open window. Strong air currents can disrupt document feeding, resulting in mishandled documents.

?? Avoid electrical outlets controlled by wall switches or timers.

?? Avoid locations subject to direct sunlight, excessive heat, moisture or dust.

?? Store Pressure Seal documents away from UV light sources. UV light degrades adhesives, shortening document shelf life.

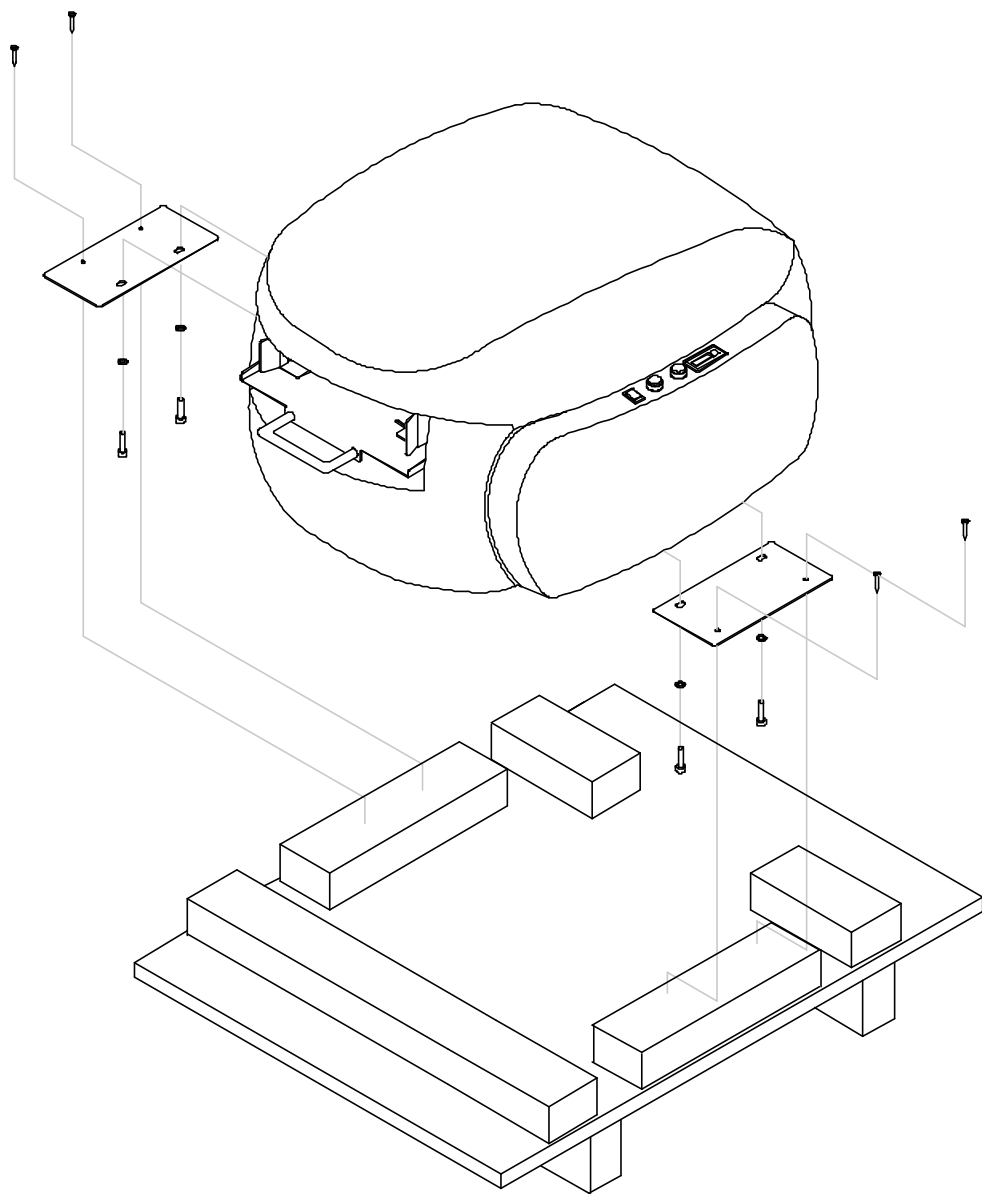
# Unpacking the PS100

The PS100 is shipped fully assembled in a wooden crate. Although some variation in packing is possible, the unit should arrive at the customer site as described below.

**Warning:** *The PS100 weighs 80 kg. Therefore, two people are required to lift the PS100 from the crate's skid onto the work surface. Do not pick up the PS100 by the infeed tray.*

## To unpack the PS100

1. Locate the crate immediately next to the location where the PS100 will be set up and operated.
2. Remove the screws that secure the top of the crate to the base of the crate, and then lift the top off the base.
3. Remove the four screws securing the transit plates to the base of the crate (shown in the following diagram).
4. Using two people, lift the PS100 from the base and onto the work surface.
5. Remove the four screws and washers securing the transit plates to the PS100 and situate the PS100 as required.



*Figure 6. Unpacking the PS100 (export only).*

# Inspecting the PS100

1. Visually inspect the exterior of the PS100 for damage.
2. Remove the left and right (operator) sides covers and inspect all electrical connections. Make sure none have come loose during shipping.
3. Replace the covers.
4. Power up the PS100. (See “powering up the PS100” in the operator manual for detailed procedures.)
5. Press the run switch for a few seconds. Listen for any unusual noises (grinding, clattering etc.). Troubleshoot if necessary.

# Setting up the PS100 and verifying operation

1. Adjust the stacker to accommodate the mailers.
2. Remove the top cover and set up the folder. (See “Setting up the folder” in the Operator Manual for detailed procedures.)
3. Load documents. (See “Loading documents” in the Operator Manual for detailed procedures.)
4. Start up and test the PS100. (See “Starting up and testing the PS100” in the Operator Manual for detailed procedures.) Verify the following:
  - ?? Straight folds. If the folds are not straight on the document, check the document guides on the feed table are parallel.

# Training the operator

Operator training is an important part of the installation process, and is the key to proper machine performance. By doing a thorough job in this area, you can reduce the number of service calls for typical performance issues such as document mishandling. Take the time to make sure the operator understands his or her role in making the PS100 a successful performer.

Using the Operator Manual as a guide, review the following information with the person(s) who will be responsible for operating the PS100.

1. Explain the features of the PS100 and the major components the operator will use to set up and operate the PS100.
2. Demonstrate the tasks required in setting up, loading, and operating the PS100. Stress the importance of properly installing the top folding roller and folding plates.
3. Point out the area of the PS100 that require periodic maintenance. Emphasise the importance of cleaning the machine on a regular basis.
4. Discuss the error conditions that can occur with the PS100, and explain the cause and how to correct the problem.
5. Review the PS100's technical specifications.
6. Explain document curl and show the different ways you can set up and load documents.

# Finishing the installation

Once you've trained the operator, make sure you complete the following steps to successfully complete the installation.

1. Review with the customer the service agreement coverage on the PS100.
2. Explain how to place calls for service and to the Help Desk.
3. Provide procedure for ordering cleaning kits.
4. Record the model and serial number.

# Chapter 3

---

## Electrical Operation

This chapter provides a comprehensive look at the electrical components and circuits of the PS100 Folder/Sealer.

In Chapter 3 you'll find the following information on the PS100's electrical operation.

?? Electrical components list

?? Theory of operation

?? Troubleshooting electrical components

?? Electrical diagrams

# Electrical components list

The PS100's electrical system includes the following primary components.

?? Infeed sensor

?? Outfeed sensor

?? Motor

?? Counter

?? Circuit board

?? Power switch

?? Cover switch

?? Run switch

?? Stop switch

?? Clutch

?? Filter

# Theory of Operation

When power is applied to the board:

- The LED connector should have +24V across it
- The +SI- (sensor infeed) and +SO- (sensor outfeed) will become active
- The two green LED's will illuminate (indicating +24V and +5V respectively)
- The counter will become active

If paper is placed over the infeed sensor:

- The RUN switch will light, (The RUN LED connector will have +24V across it)

In operation:

- When the lid is raised the machine will cancel all errors
- An error will be generated if a form is not processed in time or gets jammed in the machine
- Any errors are indicated by the stop button flashing

If there is no paper in the machine:

- No buttons are illuminated
- If run is pressed and released the motor will start but only run for enough time for a form to be ejected
- If run is pressed and held down, the machine will run continually until the run button is released
- If stop is pressed there will be no operation

If paper is in the infeed tray:

- The run button will be lit (indicating that the machine is ready to run)
- If run is pressed the motor will start after a short delay (1-2 seconds) the clutch will be energised
- If the run switch has been released, when the first form is ejected from the machine the motor will stop. This is the single form test run.

If the run switch is depressed when the first form is ejected then the machine will process the rest of the forms in the infeed tray. The run switch can be released any time after the first form has been ejected. The machine will cycle through a set routine as follows:

1. Check if forms have run out – stop machine if so
2. Energise clutch and counter for the length of time set by the two DIL switches
3. Check to see if the form has been ejected – start cycle again
4. Check to see if the cover has been lifted – if so stop the machine
5. Check to see if the stop switch has been pressed – if so continue processing current form then stop the machine

# Interrupt operation

The PS100 stops during normal operation when any of the following occurs:

- ?? Stop switch is pressed
- ?? Power switch is turned off
- ?? Top cover is removed
- ?? Power cord is disconnected from source
- ?? Feed table is emptied (infeed sensor not detecting documents)
- ?? Document is mishandled in the folding plates
- ?? Document is mishandled between folder and sealer
- ?? Document is mishandled in the sealer (outfeed sensor blocked for more than 350 ms)

# Jam detect theory of operation

The PS100's jam detection feature is controlled by a relationship between the infeed sensor, the outfeed sensor, and the circuit board.

Each time the board activates the clutch, the outfeed sensor must detect a form within a predetermined time, or the PS100 stops and the stop switch flashes. The PS100 will detect a jam if a document remains over the outfeed sensor for longer than 350 ms (about a third of a second) and again the stop switch will flash.

If the infeed sensor does not detect a form then the stop switch will be lit constantly.

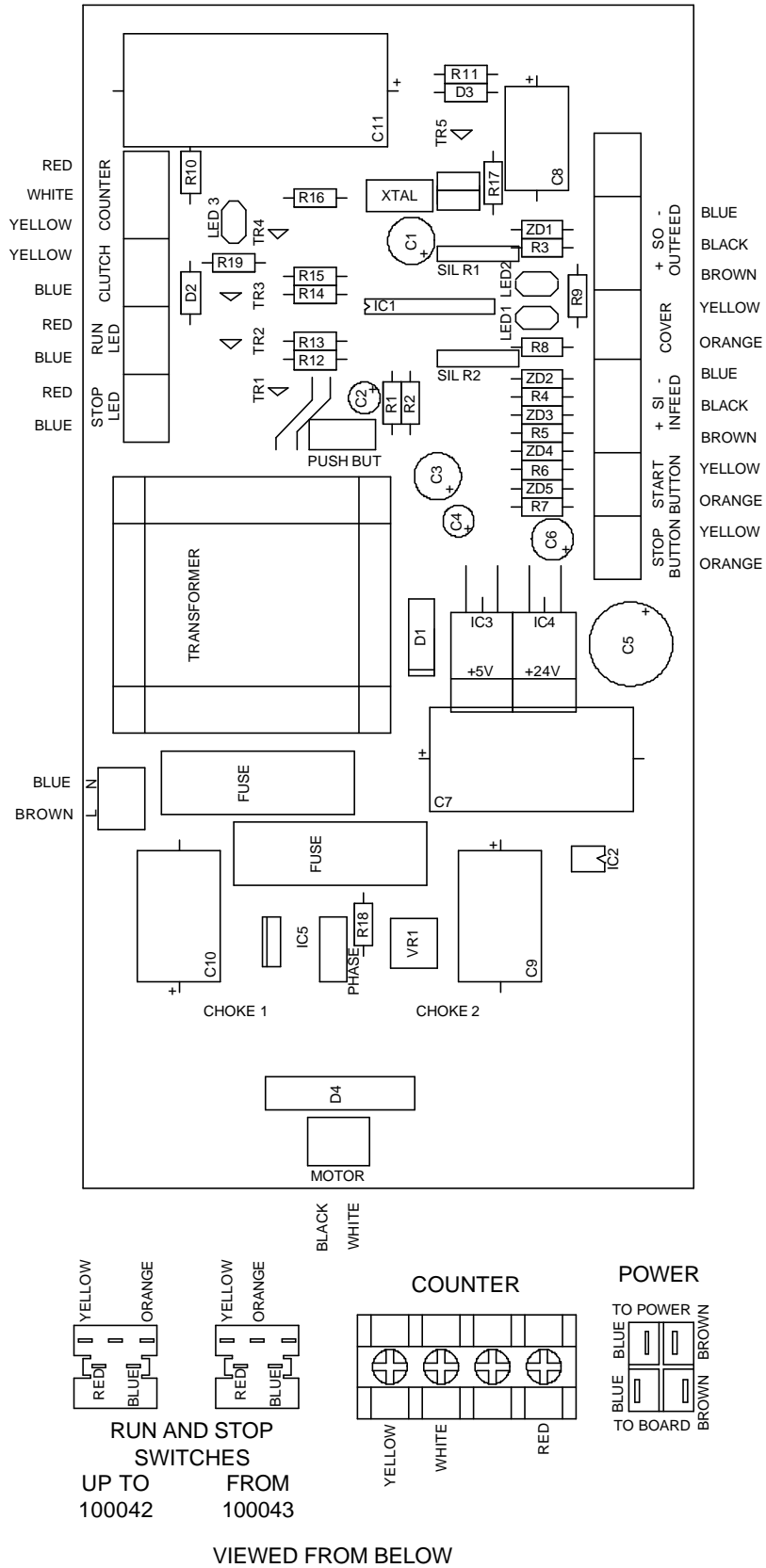


Figure 7. PS100 Circuit Board.

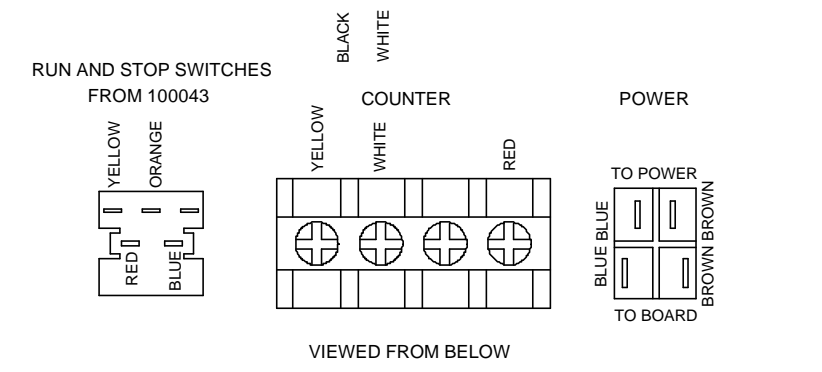
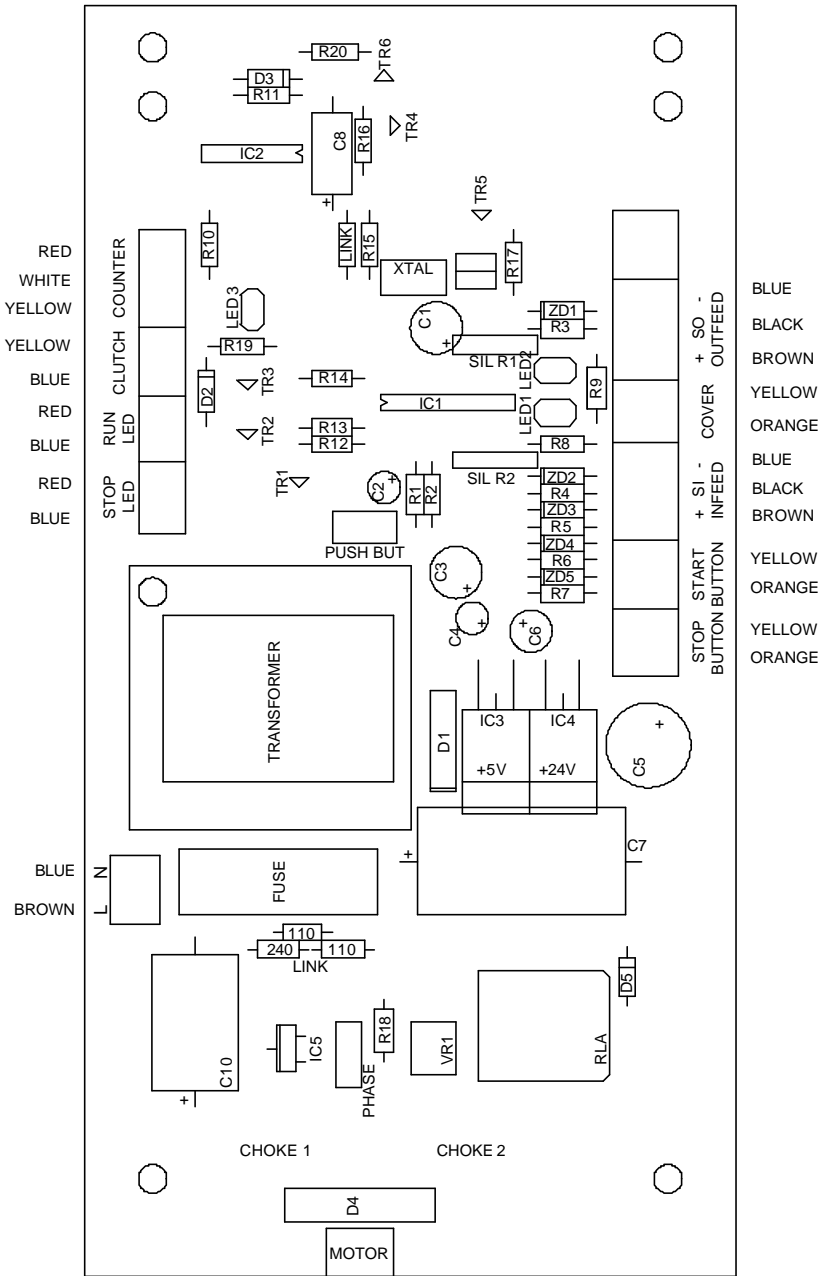


Figure 8. PS100 Circuit Board Mk II.

# Board functions

The circuit board controls almost all of the functions of the PS100.

- ?? The fuse next to the transformer is for the low voltage (+24V and +5V) part of the circuit.
- ?? The second fuse is for the motor
- ?? The red led indicates clutch operation
- ?? Led 1 indicates that +5V power is present on the circuit board
- ?? Led 2 indicates that +24V power is present on the circuit board
- ?? The push button will reset the microprocessor IC1
- ?? IC2 supplies power to a modified speed regulator which produces
  - + 180V DC - Europe
  - + 90V DC - - USA
- ?? IC3 and IC4 are power regulators for the +24V clutch, sensors and button led's, and +5V for the microprocessor
- ?? ZD1 and R3 to ZD5 and R7 are arranged to provide protection to the microprocessor from +24V being connected to the wrong terminal
- ?? VR1 controls the motor voltage
- ?? The timer controls the length of time the clutch is energised for

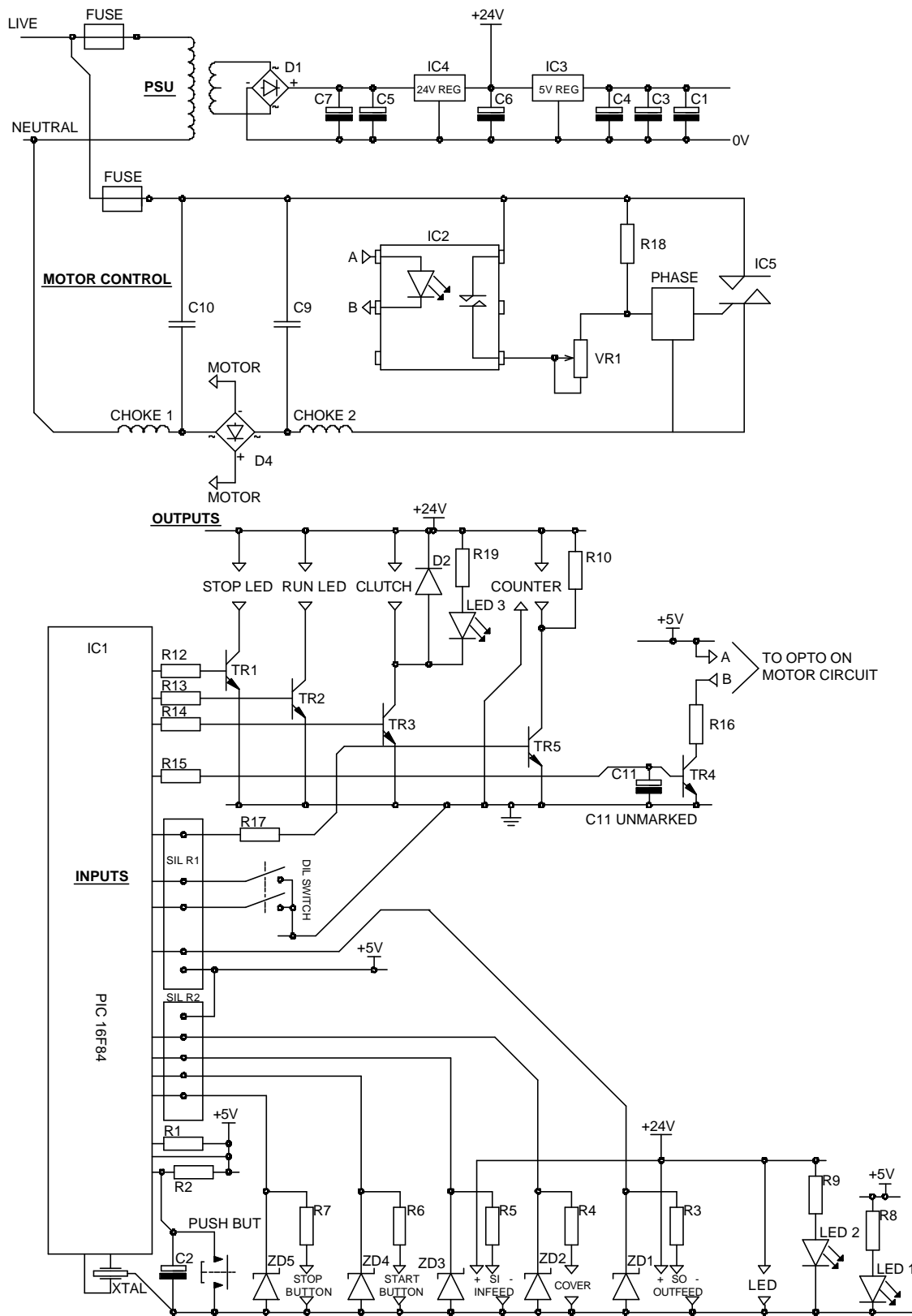


Figure 9. Schematic Diagram.

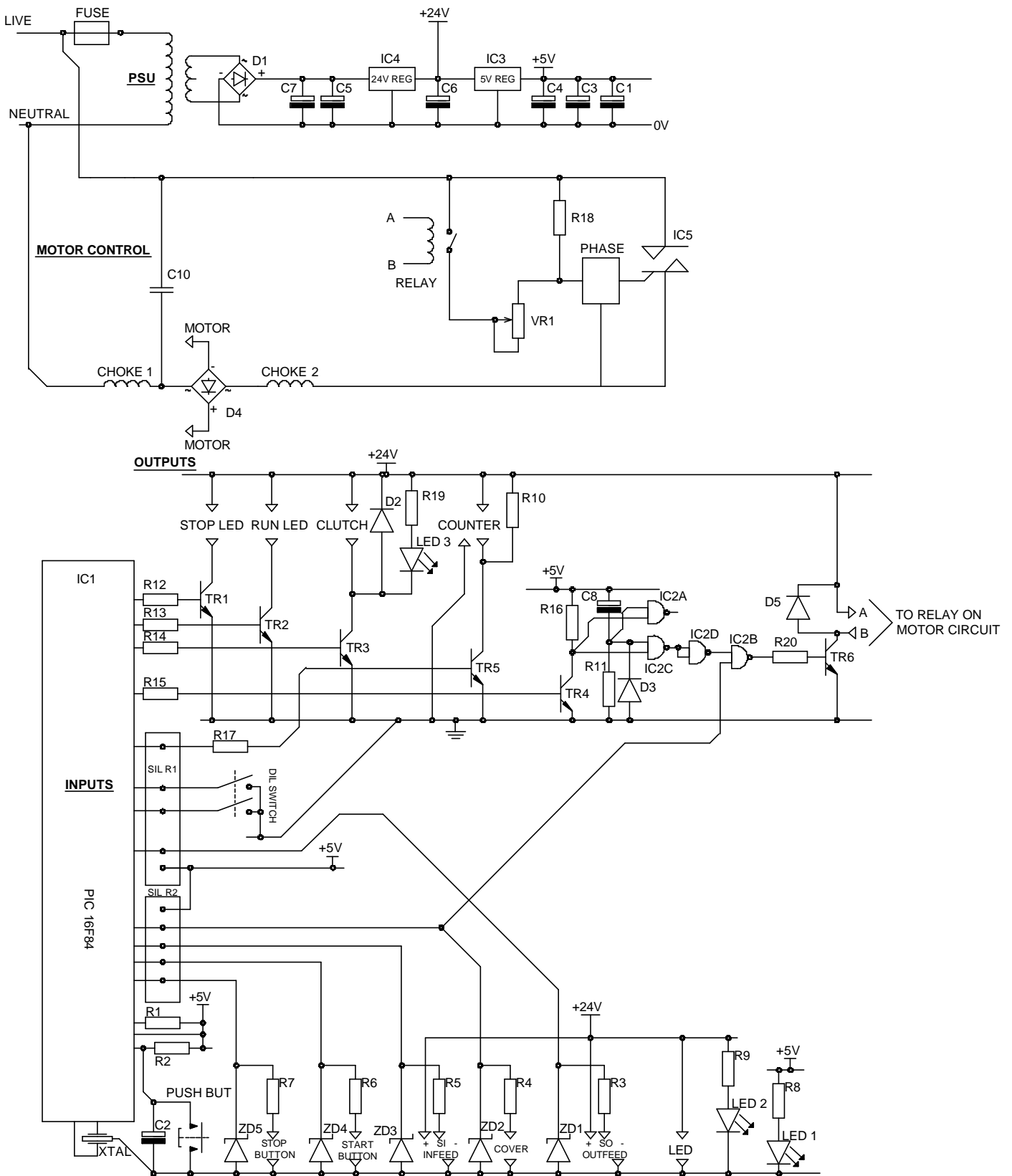


Figure 10. Schematic Diagram Mk II.

# Troubleshooting electrical components

Use the following information for diagnosing PS100 electrical component failures.

<b>Symptom</b>	<b>Problem</b>
LED1 and/or LED2 not lit	400mA fuse blown Power conversion components failed
Motor will not run (green LED lit)	3.15mA fuse blown Potentiometer failed Component failed Connector loose (motor, start, cover) Motor blown
Motor will not stop running	Component failed Start button/connector problem
Clutch will not operate (red LED will not light)	Component failed Connectors failed
Machine will not stop when Stop is pressed	Check the connectors Component has failed (replace PCB)

# Chapter 4

---

## Assemblies and Adjustments

This chapter describes how to remove, replace and where applicable adjust the major mechanical and electrical components of the PS100 Folder/Sealer. By following these procedures, you can quickly and correctly service a customer's PS100.

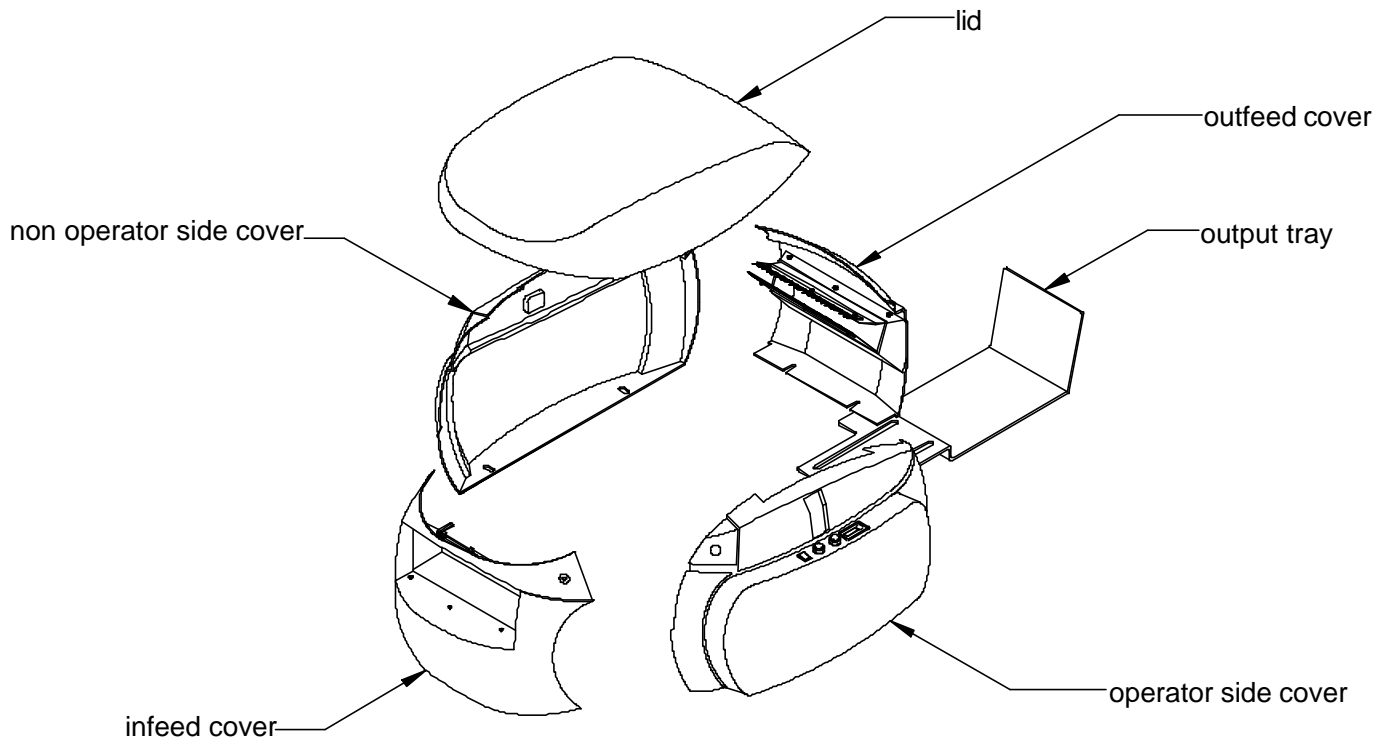
Refer to figures 4 and 5 on page 9, and the illustrated parts list in chapter 6 of this manual to help you understand the text-only procedures in this chapter.

**Note:** *Only authorised service people are allowed to work on and repair this device. Unauthorised repair work can result in extensive damage to the machine, serious injury to people, and invalidation of the warranty.*

# Covers and panels

This section shows you how to remove and replace the PS100's:

- ?? Right (operator) side cover
- ?? Left (non-operator) side cover
- ?? Infeed panel
- ?? Outfeed panel



*Figure 11. PS100 Covers*

## **Removing the infeed panel**

1. Press the PS100's power switch to the off position and then unplug the power cord from the wall outlet.
2. Remove the top cover.
3. Remove the four snake eye screws that hold the infeed panel in place (two at the top and two beneath the machine), and then remove the infeed panel.

To replace the infeed panel, complete the steps of this procedure in reverse order.

## **Removing the outfeed panel**

1. Press the PS100's power switch to the off position and then unplug the power cord from the wall outlet.
2. Remove the top cover.
3. Remove the four snake eye screws that hold the outfeed panel in place (two at the top corners and two underneath the unit), and then remove the outfeed panel.

To replace the outfeed panel and outfeed tray, complete the steps of this procedure in reverse order.

## **Removing the right (operator) side cover**

Removing the right side cover allows access to the clutch gear, clutch, fold roller gears, sealing roller gears, circuit board and operator controls.

1. Press the PS100's power switch to the off position and then unplug the power cord from the wall outlet.
2. Remove the top cover, infeed and outfeed covers.
3. Remove the two thumb screws located underneath the right side cover.
4. Remove the cover from the base, and lay it next to the PS100.

At this point the cover is still attached to the machine by the cable for the operator controls. To completely remove the cover from the machine, disconnect the connectors carefully from the circuit board.

To replace the right side cover, complete the steps of this procedure in reverse order.

## **Removing the left (non-operator) side cover**

Removing the left side cover allows access to the sprockets and chains.

1. Press the PS100's power switch to the off position and then unplug the power cord from the wall outlet.
2. Remove the top cover, infeed cover, outfeed cover and tray.
3. Remove both the thumb screws located underneath left side cover. Set the screws aside.
4. Remove the cover from the base, and lay it next to the PS100.

To replace the left side cover, complete the steps of this procedure in reverse order.

# Document feed system

This section shows you how to remove and replace the PS100's:

?? Feed roll and paper separator

?? Clutch

## Removing the feed roll and paper separator

1. Press the PS100's power switch to the off position and then unplug the power cord from the wall.
2. Remove the top cover, the first fold plate and the right side cover.
3. Remove the e-clip at either end of the shaft, inside the bearings. Move the shaft outwards, towards the operator side, and loosen the two screws securing the feed roller hub to the shaft.
4. Slide the coupling to the left, away from the clutch.
5. Lift the shaft from the machine.

When reinstalling the feed roll shaft, make sure the bearing is properly seated in the side frame.

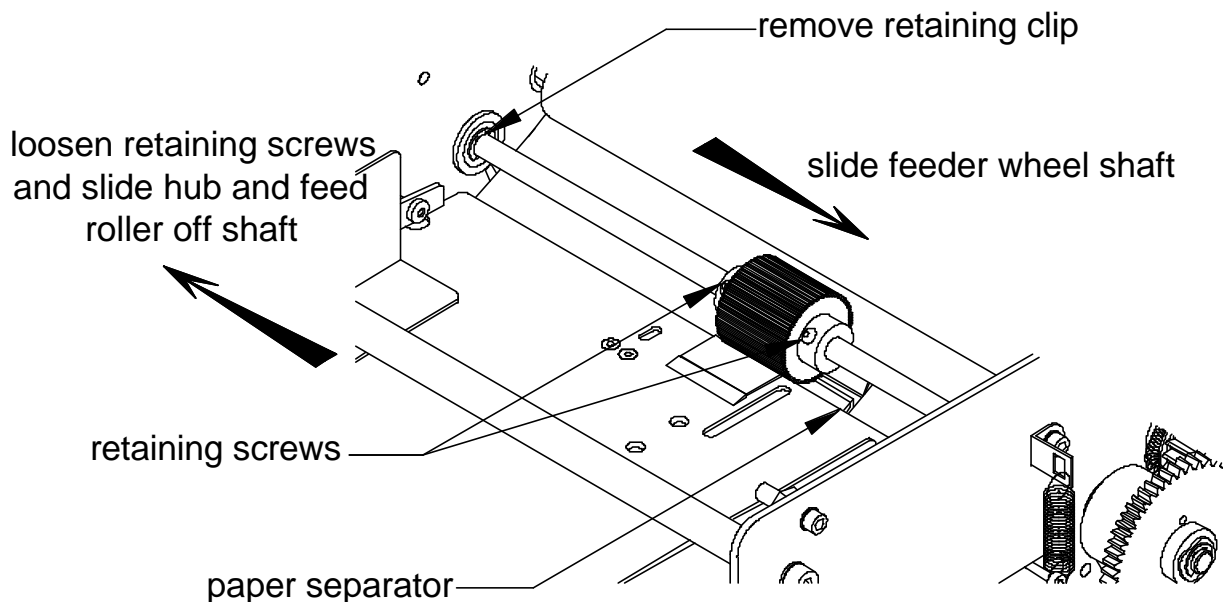


Figure 12. Removing the feed roll and paper separator.

# Replacing the feed roll and paper separator

Replace the feed roll and paper separator after every 200,000 documents.

Loosen the two securing screws and slide the old feed roll from the shaft. Reverse the procedure to install a new feed roll.

Using a flat blade screwdriver, pry the old paper separator from the mounting frame, and install a new one in the frame.

## Removing the clutch

The clutch enables the feed roll to feed single sheets.

1. Press the PS100's power switch to the off position and then unplug the power cord from the wall outlet.
2. Remove the top cover and right side cover.
3. Remove the E-clip located at the right end of the clutch shaft, take off the crinkle washer and then remove the clutch gear from the shaft.
4. Disconnect the cable to the clutch and remove the clutch.

To replace the clutch, complete the steps of this procedure in reverse order. A spot of light oil or grease applied to the clutch gear bearing can prevent squeal developing in this area.

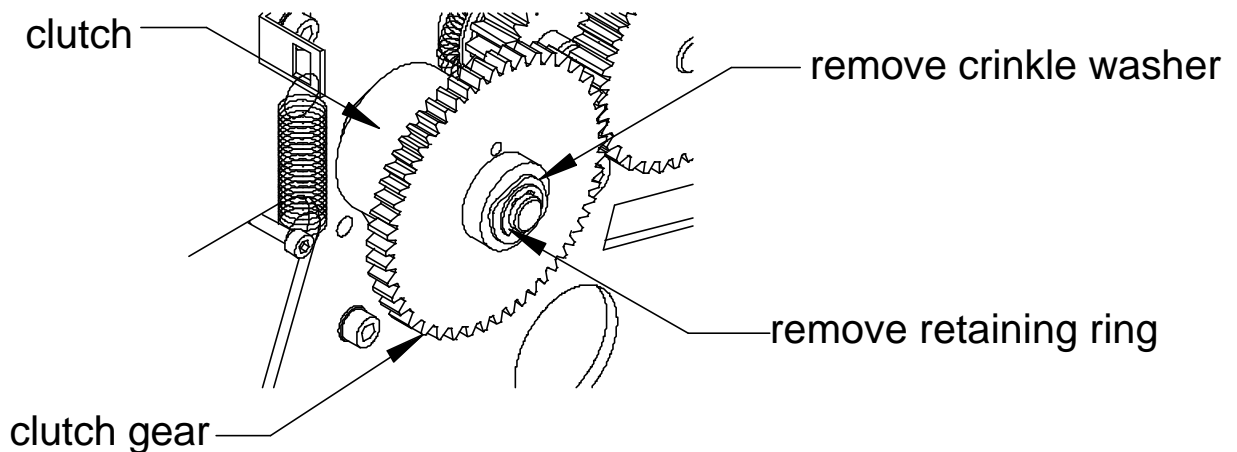


Figure 13. Removing the clutch.

# Document folding system

This section describes how to remove and replace the PS100's fold rollers

## Removing the fold rollers

Typically, the fold rollers only require periodic cleaning to remove the build-up of paper, dust, toner and paper coatings. However, extensive use over a long period of time may eventually make roller replacement necessary.

1. Press the PS100's power switch to the off position and then unplug the power cord from the wall outlet.
2. Remove the right and left side covers.
3. Remove both folding plates and then remove the top-folding roller.
4. Remove the chain-connecting link carefully with a flat blade screwdriver, and then remove the chain. Loosen the two grub screws and remove the fold roller sprocket.
5. Remove the springs from around the folding roller bearings.
6. Remove the E-clips and bearings from the ends of the three fold rollers.
7. Remove the folding rollers.

To replace the folding rollers, complete the steps of the procedure in reverse order.

# Document sealing system

This section shows you how to remove and adjust the PS200's:

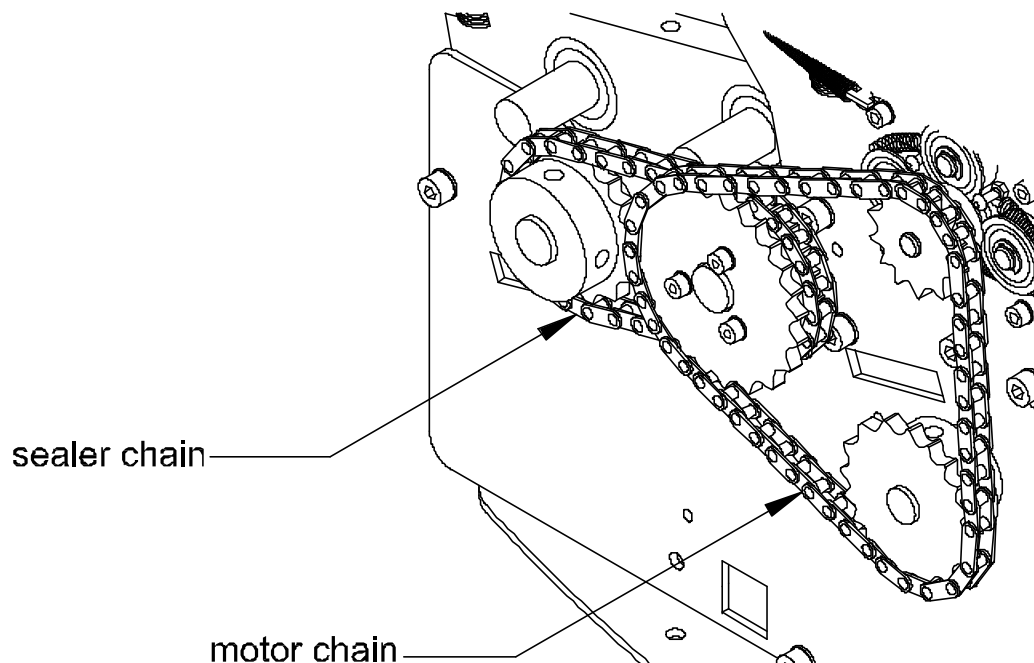
?? Sealer chain

?? Sealer

## Removing the sealer chain

The sealer sprocket drives the sealer chain on the sealer drive shaft. The chain drives the sealing rollers.

1. Press the PS100's power switch to the off position and then unplug the power cord from the wall outlet.
2. Remove the top cover and left side cover.
3. Using a flat blade screwdriver, remove the connecting link on the motor chain and remove the chain. When replacing the link, remember it should always face the direction of motion.
4. Loosen the grub screws securing both sprockets and remove sprockets and chain as a single unit.



*Figure 14. Removing the sealer chain.*

# Replacing the sealer

The PS100's sealing rollers, bearings and bearing blocks are replaceable.

## Removing the sealer:

1. Press the PS100's power switch to the off position and then unplug the power cord from the wall outlet.
2. Remove the top cover, outfeed panel, and the right and left side covers.
3. Remove the second fold plate.
4. Remove the motor chain by disconnecting the link and then remove the infeed sprocket, outfeed sprocket and chain.
5. Disconnect the outfeed sensor from the circuit board.
6. While supporting the sealing roller assembly, remove the eight screws (four per side) that mount it to the PS100's chassis. Remove the assembly and set it aside.

When installing the replacement sealer module, complete the steps of this procedure in reverse order.

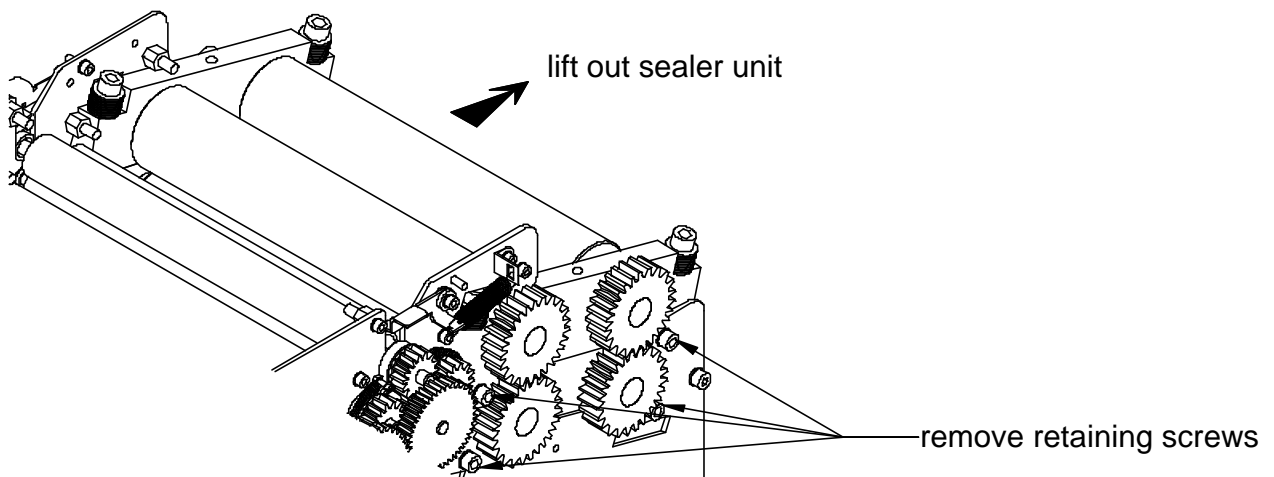


Figure 15. Replacing the sealer.

## Adjusting the sealing roller pressure

The process of removing lodged documents by releasing the sealing roller pressure is covered in the operator's manual.

# Electrical system

This section shows you how to remove and replace the following electrical components:

?? Lid switch

?? Infeed sensor

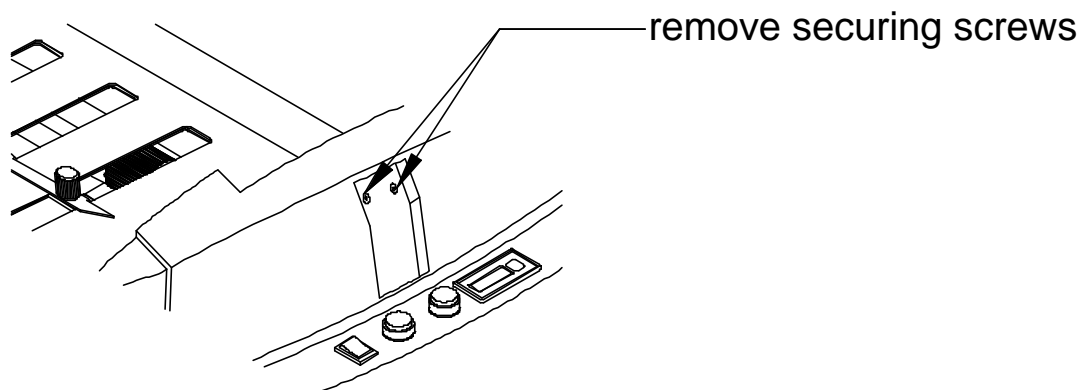
?? Outfeed sensor

?? Motor

## Removing the cover switch

1. Press the PS100's power switch to the off position and then unplug the power cord from the wall outlet.
2. Remove the top cover.
3. Remove the two countersunk screws that mount the cover switch to the operator side cover, taking care not to lose the washers and nuts inside the cover, and disconnect from the board after removing the cover to gain access.

To replace the cover switch, complete the steps of this procedure in reverse order.

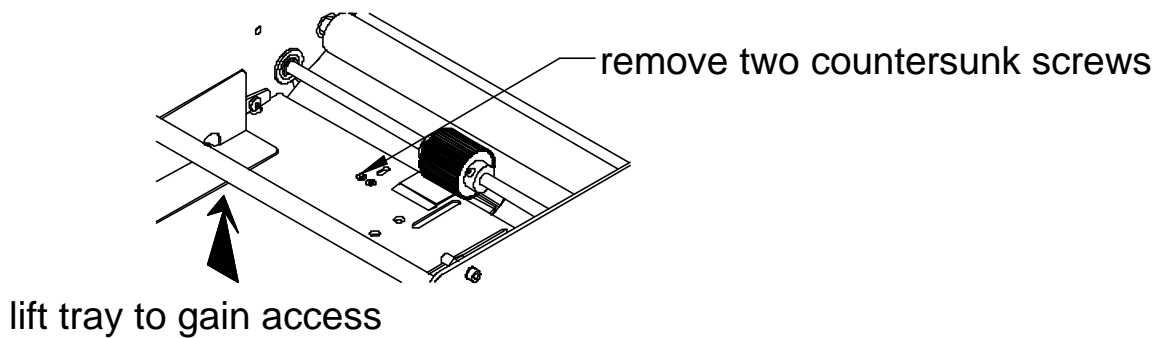


*Figure 16. Removing the cover switch.*

# Removing the infeed sensor

1. Press the PS100's power switch to the off position and then unplug the power cord from the wall outlet.
2. Remove the top cover and infeed cover.
3. Remove the two countersunk screws that mount the infeed microswitch bracket to the underside of the infeed table. Support the switch to prevent it and the two nuts and washers dropping into the machine. It may help to lift the infeed tray to gain access to the infeed sensor.
4. Replace the microswitch, ensuring the wires are reconnected correctly.

To replace the infeed microswitch bracket, complete the steps of this procedure in reverse order. Install new cable clamps if necessary.



*Figure 17. Removing the infeed sensor.*

# Removing the outfeed sensor

1. Press the PS100's power switch to the off position and then unplug the power cord from the wall outlet.
2. Remove the top cover.
3. Remove the top half of the sealer by unscrewing the four pressure adjustment bolts.
4. Remove the sealer sensor bracket assembly from the locating dowels and remove the two countersunk screws to free the sensor.
5. Detach the outfeed sensor terminal block from the board and disconnect the wires to completely remove the sensor.

To replace the outfeed sensor, complete the steps of this procedure in reverse order. Install new cable clamps and check sensor adjustment.

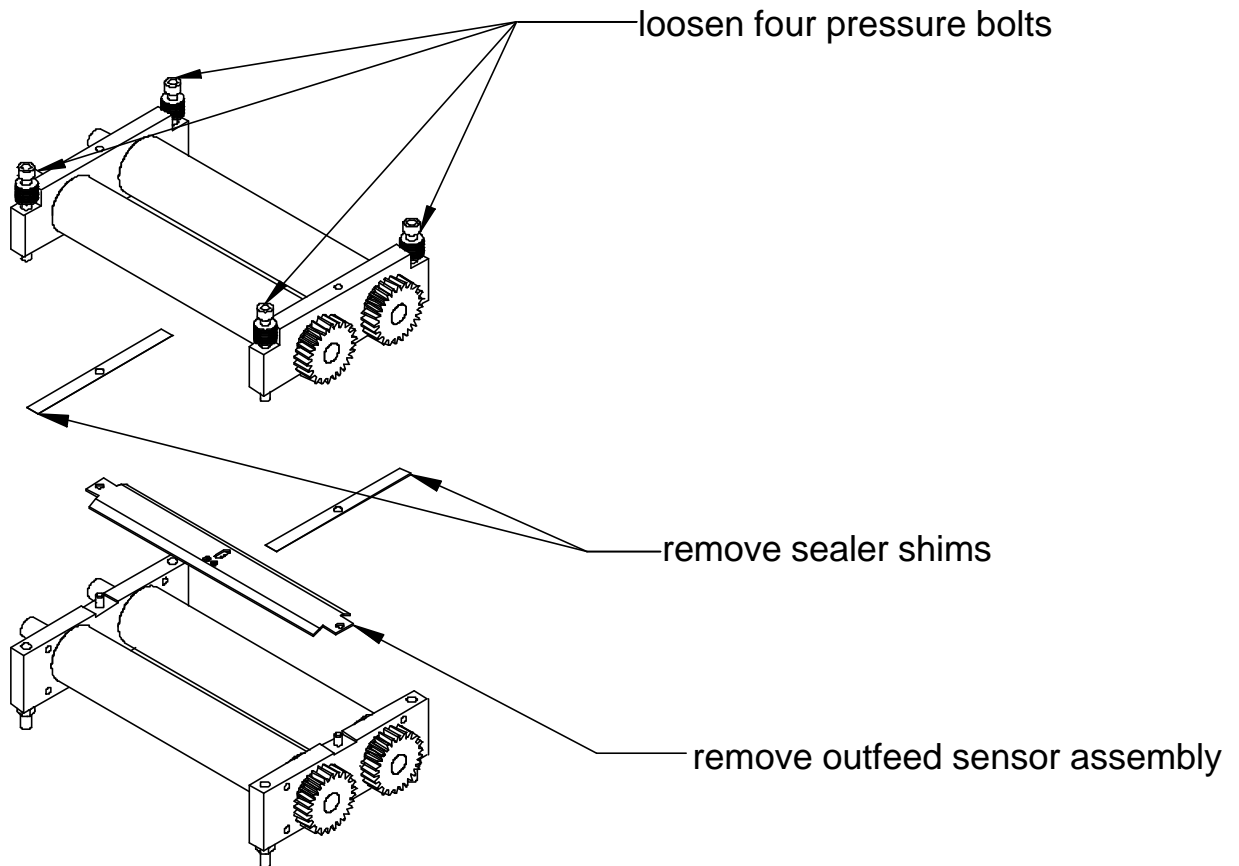


Figure 18. Removing the outfeed sensor.

# Removing the motor

1. Press the PS100's power switch to the off position and then unplug the power cord from the wall outlet.
2. Remove the top cover, right and left side covers, infeed and outfeed panels.
3. Grasp the tie bar above the feed table and tip the machine onto its outfeed end. Be careful, the unit is heavy!
4. Remove the four socket head screws that secure the baseplate to the PS100's frame. Remove the baseplate.
5. Remove the motor chain, motor sprocket, sealer sprocket and sealer chain.
6. Locate the four screws that secure the motor mount to PS100's chassis (two per side). Note where the screws are positioned with respect to the mounting slots. Also note how the motor wiring is routed near the motor. You'll need this information when reinstalling the motor.
7. While supporting the motor, remove the eight screws. Remove the motor and mounting bar as a unit.
8. At this point the motor is still attached to the machine by the motor cable. Trace the motor cable and remove any cable clamps that secure the motor cable to the machine.
9. Note colour and location of wires, and then disconnect the motor cable to completely remove the motor.
10. Remove the four screws that secure the motor to the motor mounting bar.

To replace the motor, complete the steps of this procedure in reverse order. Ensure you:

- ?? Route the motor wiring the way it was routed prior to removing the motor.
- ?? Position the four motor mounting screws in the same location in the mounting slots. This will provide proper tension on the drive chains.

# Chapter 5

---

## Operation Errors

The red flashing error light indicates a problem with the PS100. It is possible that a form is resting between the folder and the sealer, there is a misfeed or slipping of the folding mechanism or there is a form resting between the folding and sealing mechanisms or in the sealing mechanism.

The constant red light indicates that the infeed tray is empty. If forms are present and the red light remains on, then follow the guide to enable more accurate feeding.

This chapter provides you with the corrective action and possible reasons for any errors that may occur in normal operation of the PS100. The troubleshooting guide describes:

- ?? Symptoms you may encounter with the PS100.
- ?? Possible causes of any problems with the PS100.
- ?? Solutions for any errors on the PS100.

Symptom	Possible Cause	Solution
Documents not feeding	Infeed tray side guides too tight	Set the guides so there is just enough clearance to allow the document freedom of movement between the guides
	The feed pad or infeed roller may be worn	Check both of the components and replace if necessary
	The infeed roller shaft may be bent	Check the shaft and replace if damaged
	The square feed pad shaft may be tight in the chassis	Check the shaft is able to move freely, if not, check for any debris that may hinder movement. File out the chassis slots slightly until movement is no longer restricted
	The spring tension on the infeed tray may be incorrect	Adjust the spring tension by rotating the spring anchor bracket slightly. Either too much or too little tension may result in the same symptom.
	The clutch may not be energising	Check the connections at the board and on the clutch, and ensure the wires are not damaged in any way
Feeding multiple documents	Static in forms	Try and reduce static by fanning or tapping pack of forms, or allow forms to rest between removal from printer and folding.
	Activated adhesive sticking forms together	Forms unusable, check date and quality.
	Feed pad shaft not moving	Ensure free movement of shaft in slot by removing any burrs etc.
	Gap between feed pad shaft and feed pad shaft stop too great	Optimum gap is 1 - 1.5mm, adjust stop cam to accommodate see figure 19, p.42).

<b>Symptom</b>	<b>Possible Cause</b>	<b>Solution</b>
Sealer/folder rollers not rotating	Gear or sprocket loose on shaft	Change gear or sprocket
	Chain broken or connecting link dislodged	Check link, reinstate if necessary or replace chain
Documents not folding squarely	Check fold plate installation	Ensure the fold plates are correctly installed on all of the fold plate stubs.
	Check fold plate stop settings	Measure the paper as shown in appendix A and ensure settings are as stated on both fold plates.
	Check guides on infeed tray	Check that the guides are feeding the paper in squarely.
	Check alignment of first fold plate only, using plain paper	Adjust the fold plate setting for V-fold, then process plain paper to exaggerate any folding errors.
	Check that the fold rollers can move freely in the chassis slots	Ensure movement is not restricted, file slots in chassis slightly if required.
	Ensure the snap levers are in place	Check levers are resting on the bearing housings correctly.
	Adjust the infeed guide	Adjust position of the infeed guide by loosening the retaining screws and moving carefully, remembering to tighten screws again once repositioned.
Corners of document folding	Check installation of fold plates	Ensure the fold plates are correctly installed on all of the fold plate stubs.
	Check orientation of fold plates	If the fold plates are not aligned with the fold rollers mis-folding may occur.

Symptom	Possible Cause	Solution
Documents not sealing	Check sealer roller pressure	Increase the pressure slightly on the sealer rollers by turning the pressure bolts.
	Check orientation of the fold/ glue pattern	Refer to appendix A for paper orientation.
	Check the life of paper	If paper is out of date, discard.
Forms not ejecting properly	Check the paper for static	Try and reduce static by fanning or tapping pack of forms, or allow forms to rest between removal from printer and folding.
	Check the static brush strips	Clean static brush strips or replace, ensuring good contact with earth leads.

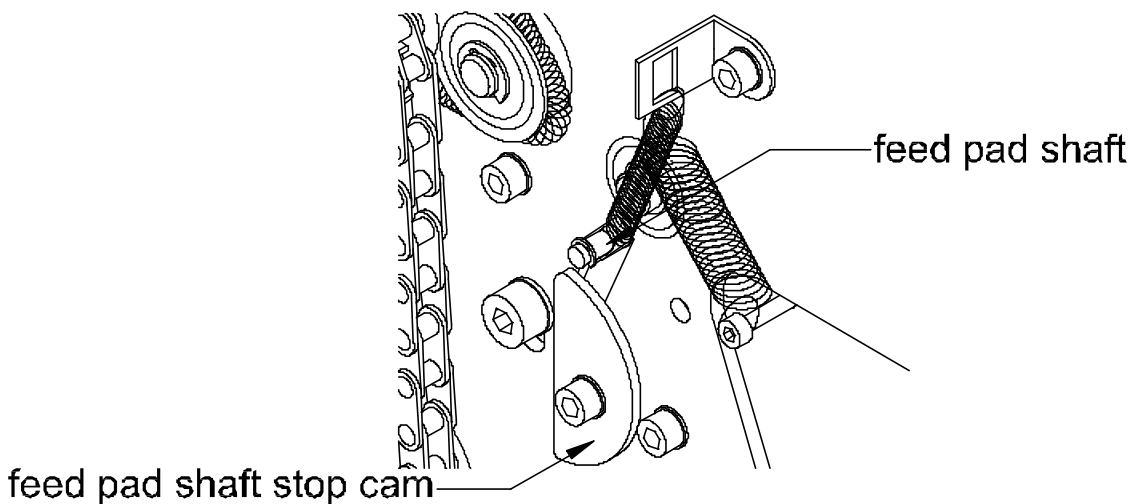


Figure 19. Feed pad shaft and stop cam.

# Chapter 6

---

## Preventative Maintenance

The PS100 requires preventative maintenance every six months or every two hundred thousand documents, whichever occurs first.

This chapter provides you with the preventative maintenance procedures you must perform to successfully maintain the performance of the customer's PS100 folder/sealer. The sequence of tasks you perform at each scheduled preventative maintenance includes:

?? Cleaning the PS100

?? Lubricating the PS100

?? Inspecting the PS100

# Before you begin

1. Ask the operator about:
  - ?? How the machine is performing
  - ?? Problems encountered during operation
  - ?? Frequency of use and the number of documents processed per month
2. Note any increase in machine usage rate and use this information as a guide for checking the machine
3. Check all operator adjustments and the document being processed

## Cleaning the PS100

1. Press the PS100's power switch to the off position and disconnect the mains lead from the power source.
2. Wipe the external covers using a soft cloth dampened with a mild household detergent.
3. Remove the top cover, both side covers, infeed and outfeed panels, folding plates, top folding roller and guide roller.
4. Vacuum all visible paper dust and debris. Remove any scraps of paper lodged in the folding plates.
5. Clean paper dust from the infeed and outfeed sensors.
6. Remove the in-feed roll. Clean the feed roll and paper separator with a lint-free cloth dampened with cleaning fluid.
7. Clean the top-folding roller with cleaning fluid.
8. Wipe the surface of the rubber fold rollers using the cloth dampened with cleaning fluid.
9. Wipe the surface of all four sealing rollers with cleaning fluid.

# Lubricating the PS100

Lubricate the drive chain and sprockets with chainlube.

# Inspecting the PS100

1. Check the feed roll, paper separator and fold rollers for cracks, tears or excessive wear. Replace if necessary.
2. Check the top cover switch for proper operation.
3. Check all electrical connections; check for worn or frayed electrical cables.

When completed, replace all removed components and power up the PS100. Verify that the machine operates properly.

If applicable, report higher-than-normal usage rates to your supervisor.

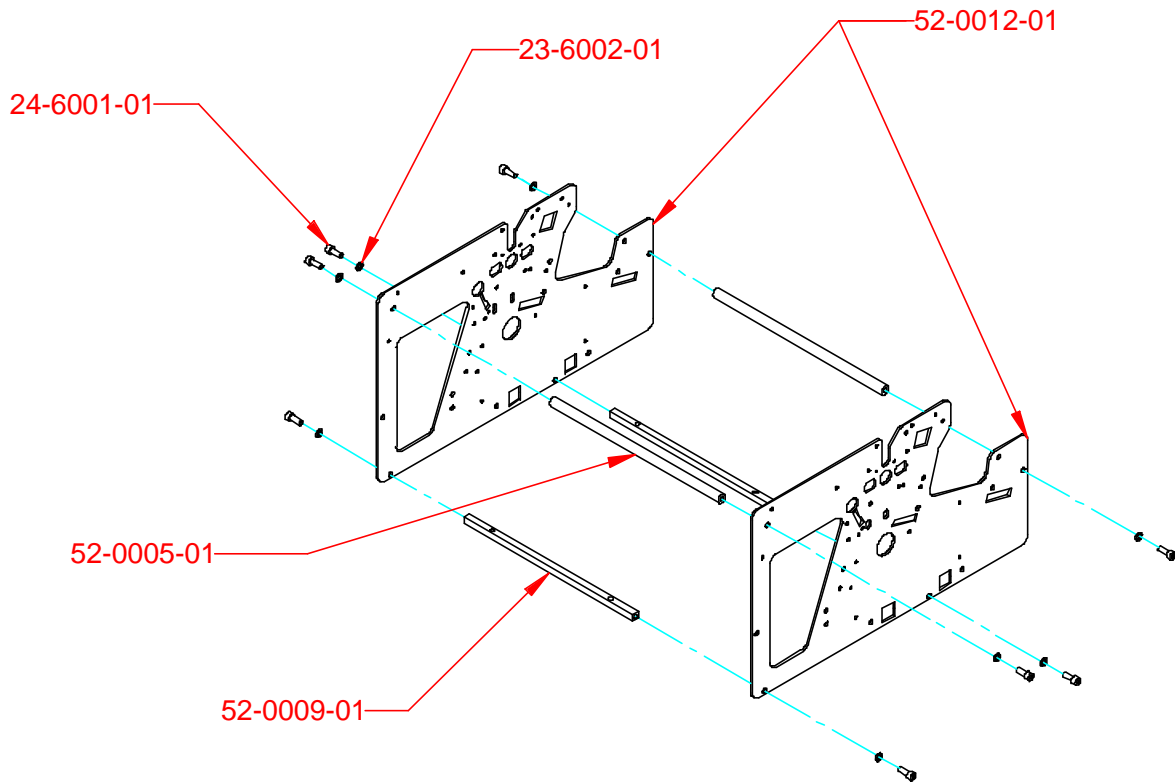
# Chapter 7

## Illustrated Parts List

### Recommended Spares for Engineers

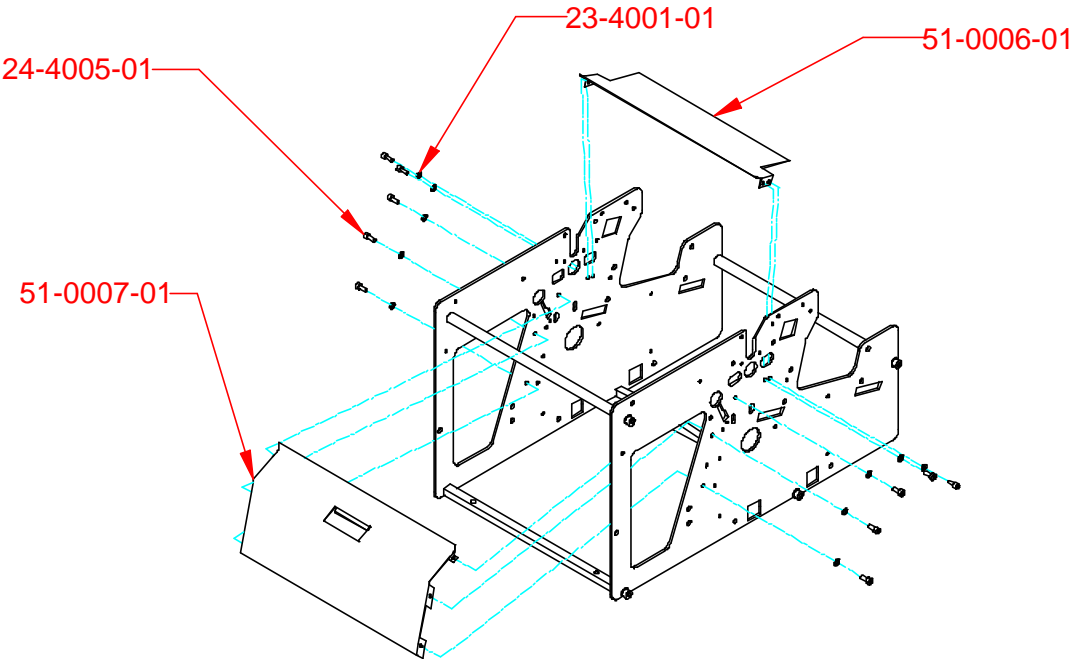
Part number	Description	Quantity
50-0008-01	Fold plate stub	10
51-0005-01	Spring anchor bracket	4
33-0002-01	Infeed tray spring	2
33-0004-01	Bearing housing pressure spring	2
33-0005-01	Adjustable side guide spring	1
33-0003-01	Feed pad adjuster shaft spring	1
33-0001-01	Locking lever spring	2
33-0006-01	Adjuster shaft flat spring	1
32-0009-01	Sealer roller gear	4
32-0008-01	Fold roller drive gear	4
13-0001-01	50T Clutch gear	1
32-0011-01	42T Clutch drive gear	1
44-0008-01	14 way top entry pcb header – open end	1
44-0009-01	2 way top entry pcb header – open end	2
44-0010-01	3 way top entry pcb header – open end	1
44-0011-01	6 way top entry pcb header – open end	1
44-0012-01	2 way screw terminal plug	9
44-0013-01	3 way screw terminal plug	3
40-0023-01	PCB	1
40-0012-01	Photoelectric sensors	2
35-0003-01	8mm flanged bearings	4
35-0004-01	8mm plain bearings	6
60-0007-01	Plastic bearing housings	6
40-0008-01	Clutch, connector & wiring	1
51-0008-01	Locking levers	Pair
22-0002-02	6.4mm e-circlip	
22-0001-02	3.3mm e-circlip	
60-0024-01	Feed roller	1
60-0025-01	Feed roller hub	1
23-8001-02	8mm Belleville washers	53
60-0021-01	M4 thumb wheel	5
60-0026-01	Torque knob M6 x 15	4
42-0014-01	Complete stop switch assembly	1
42-0015-01	Complete run switch assembly	1
42-0013-01	Power on switch	1
40-0002-02	Red led with chrome bezel	1
40-0022-01	Filter	1
40-0010-01	Counter	1
60-0006-01	Plastic feet	4
60-0013-02	Outfeed tray	1
12-0003-01	1 <sup>st</sup> fold plate	1
12-0004-01	2 <sup>nd</sup> fold plate	1
60-0018-01	PCB stand-offs	5
60-0016-01	Cable tie bases	
24-4007-01	M4 x 6 socket grub screw	
24-6004-01	M6 x 12 socket grub screw	
24-8003-01	M8 x 40 socket grub screw	
42-0008-01	Reed proximity switch	2
42-0009-01	Actuator magnet	1

# PS100 chassis



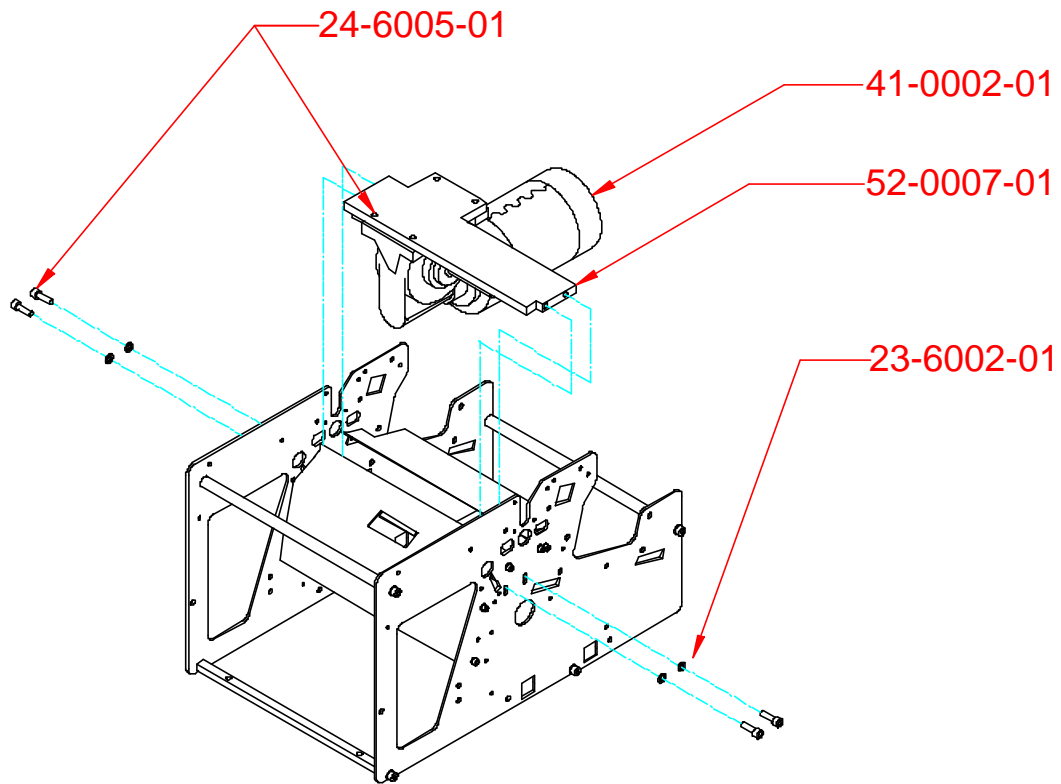
Part Number	Description	Quantity	Notes
23-6002-01	M6 shakeproof washer	8	
24-6001-01	M6x16 socket head cap screw	8	
52-0012-01	PS100 side plate	2	
52-0009-01	Square tie bar	2	
52-0005-01	Round tie bar	2	

# Paper guide plates



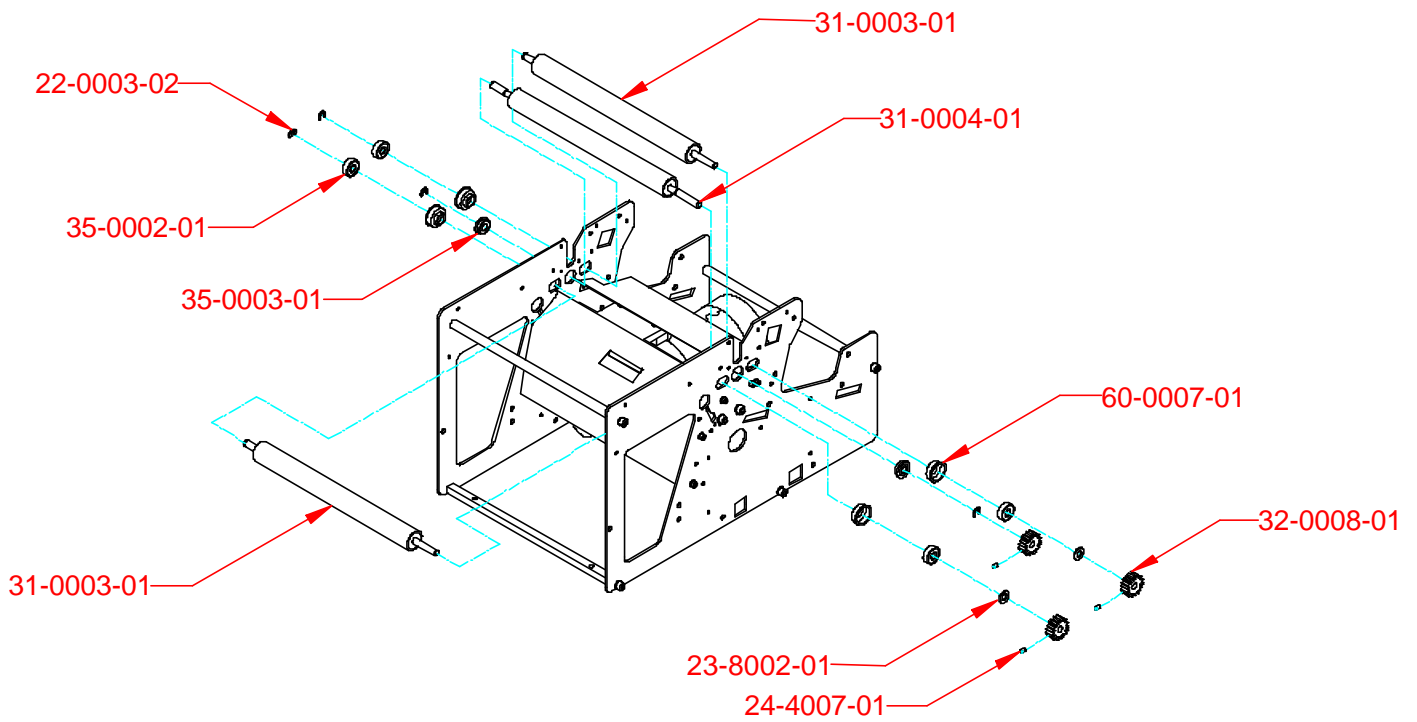
Part Number	Description	Quantity	Notes
23-4001-01	M4 shakeproof washer	10	
24-4005-01	M4x10 socket head cap screw	10	
51-0006-01	Paper deflector plate	1	
51-0007-01	Folder/sealer infeed guard	1	

## Motor and mount



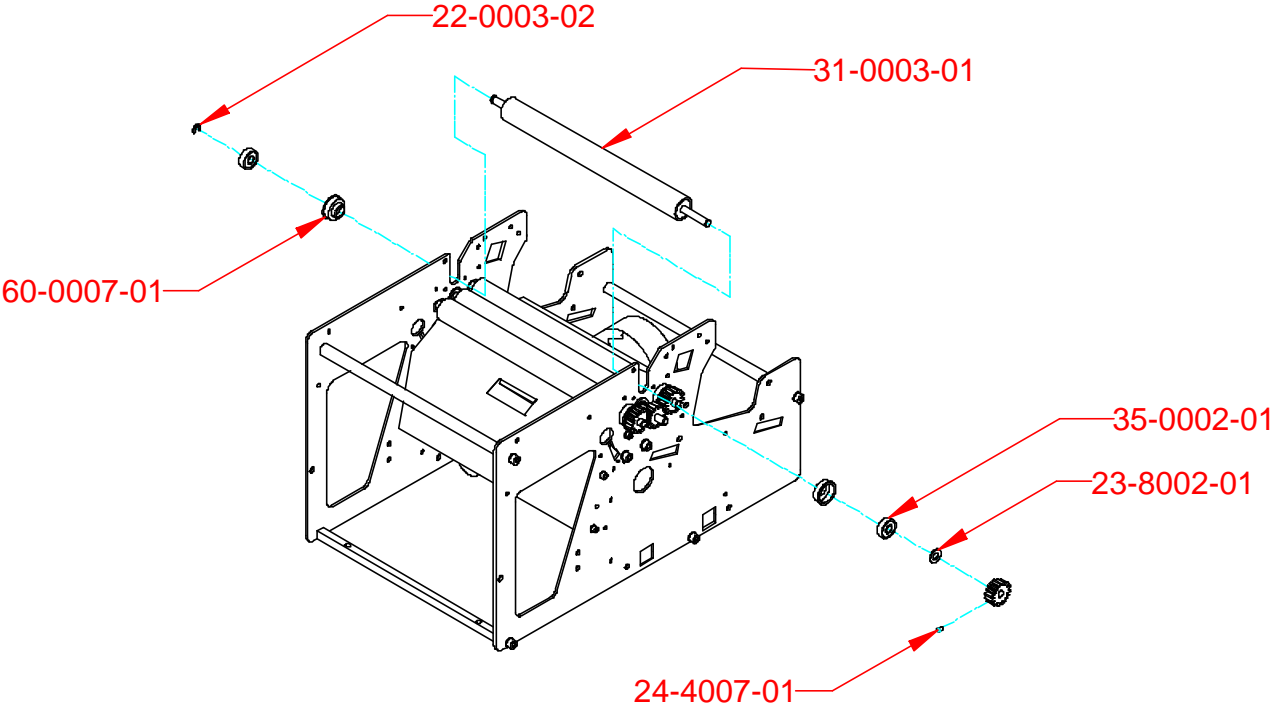
Part Number	Description	Quantity	Notes
23-6002-01	M6 shakeproof washer	8	
24-6005-01	M6x16 socket head cap screw	8	
41-0002-01	Baldor motor	1	
52-0007-01	Motor mounting bracket	1	

## Fold rollers



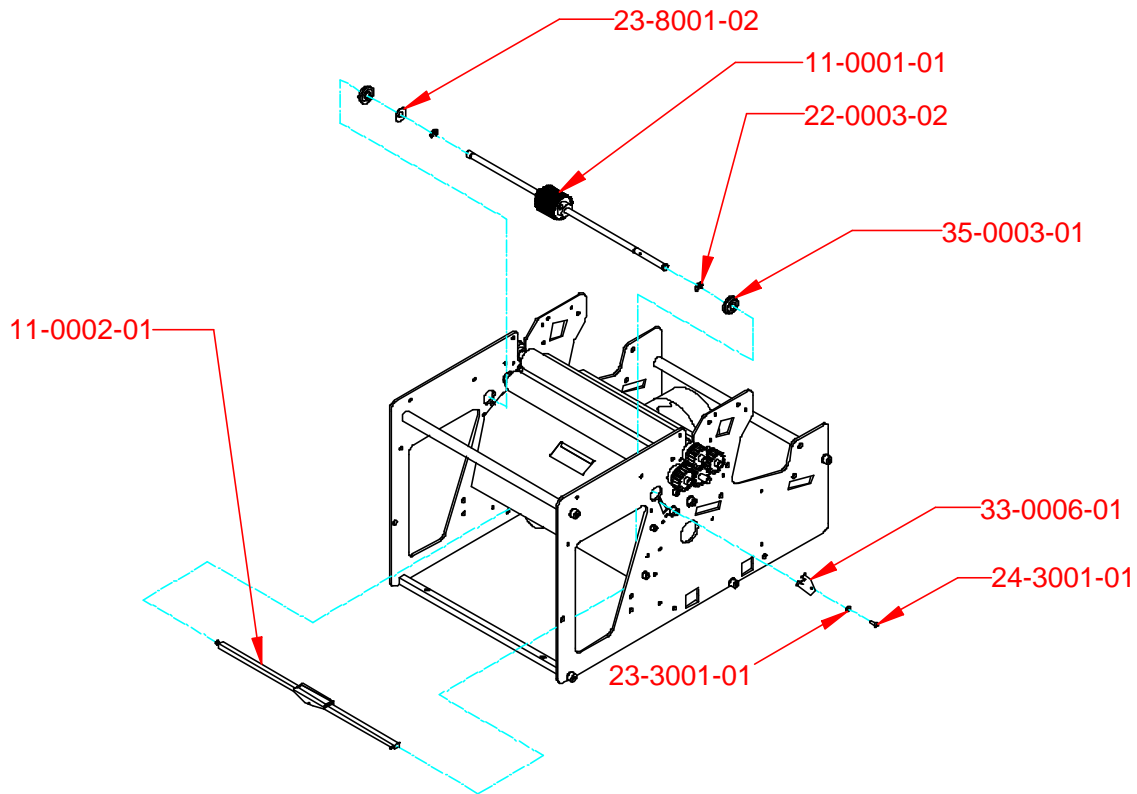
Part Number	Description	Quantity	Notes
22-0003-02	6.4mm E circlip	4	
23-8002-01	8mm plain washer	2	
24-4007-01	M4x6 socket grub screw	3	
31-0003-01	Sprung rubber roller	2	
31-0004-01	Fixed centre rubber roller	1	
32-0008-01	Roller drive gear	3	
35-0002-01	8mm plain bearing	4	
35-0003-01	8mm flanged bearing	2	
60-0007-01	Plastic bearing housing	4	

# Top fold roller



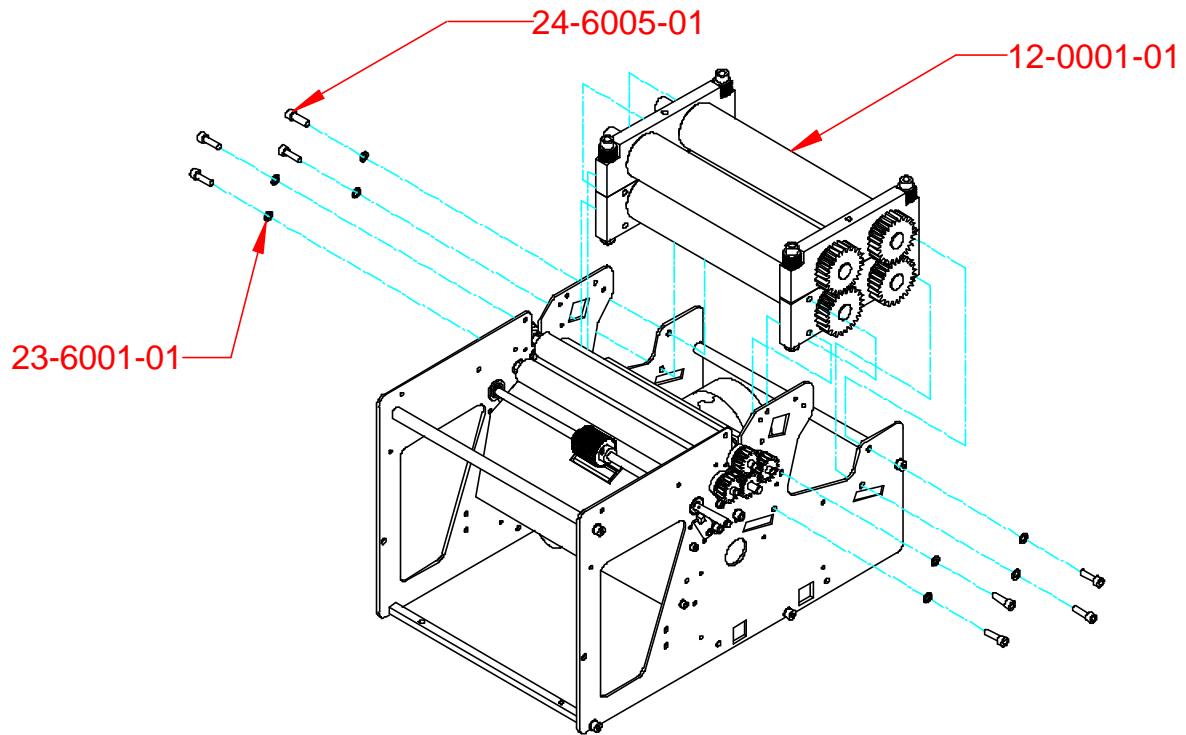
Part Number	Description	Quantity	Notes
22-0003-02	6.4mm E circlip	1	
23-8002-01	8mm plain washer	1	
24-4007-01	M4x6 socket grub screw	1	
31-0003-01	Sprung rubber roller	1	
32-0008-01	Roller drive gear	1	
35-0002-01	8mm plain bearing	2	
60-0007-01	Plastic bearing housing	2	

## In-feed shafts



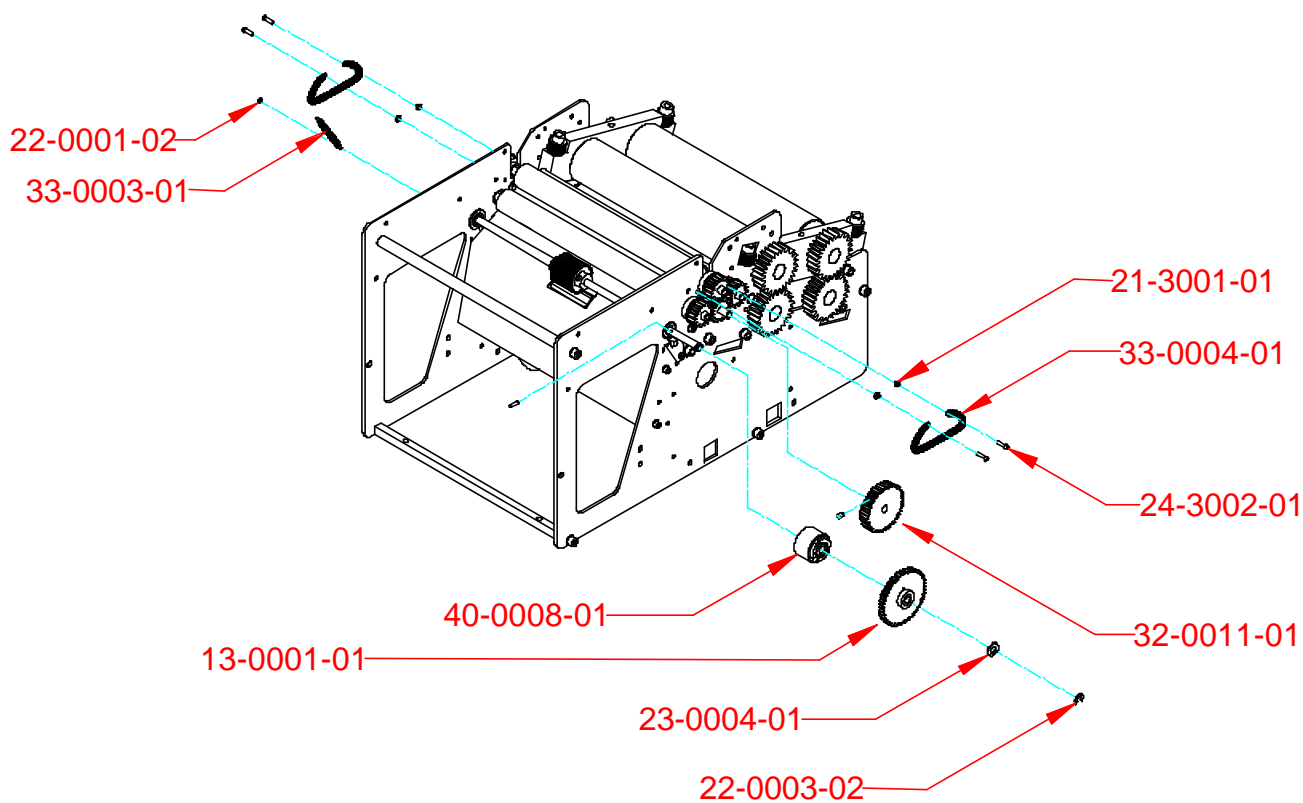
Part Number	Description	Quantity	Notes
11-0001-01	Feeder wheel assembly	1	A
11-0002-01	Feed pad adjuster shaft assembly	1	B
22-0003-02	6.4mm E circlip	2	
23-3001-01	M3 shakeproof washer	1	
23-8001-02	M8 Belleville washer	1	
24-3001-01	M3x8 socket button head screw	1	
33-0006-01	Adjuster shaft flat spring	1	
35-0003-01	8mm flanged bearing	2	
<b>Notes</b>			
A	See diagram of feeder wheel assembly		
B	See diagram of feed pad adjuster shaft assembly		

# Sealer



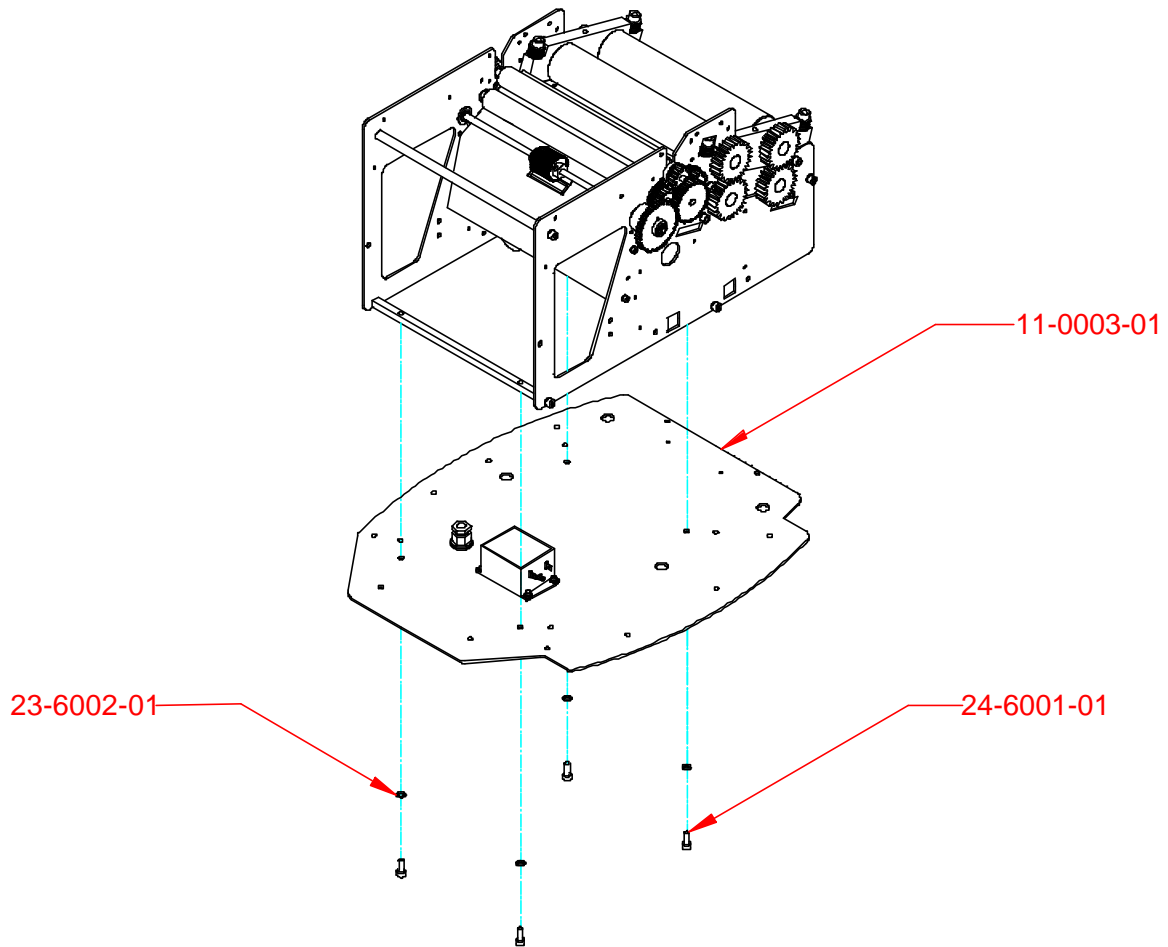
Part Number	Description	Quantity	Notes
12-0001-01	Sealer assembly	1	C
23-6001-01	M6 shakeproof washer	4	
24-6005-01	M6x20 socket head cap screw	4	
<b>Notes</b>			
C	See diagram for sealer assembly		

## Gears and clutch



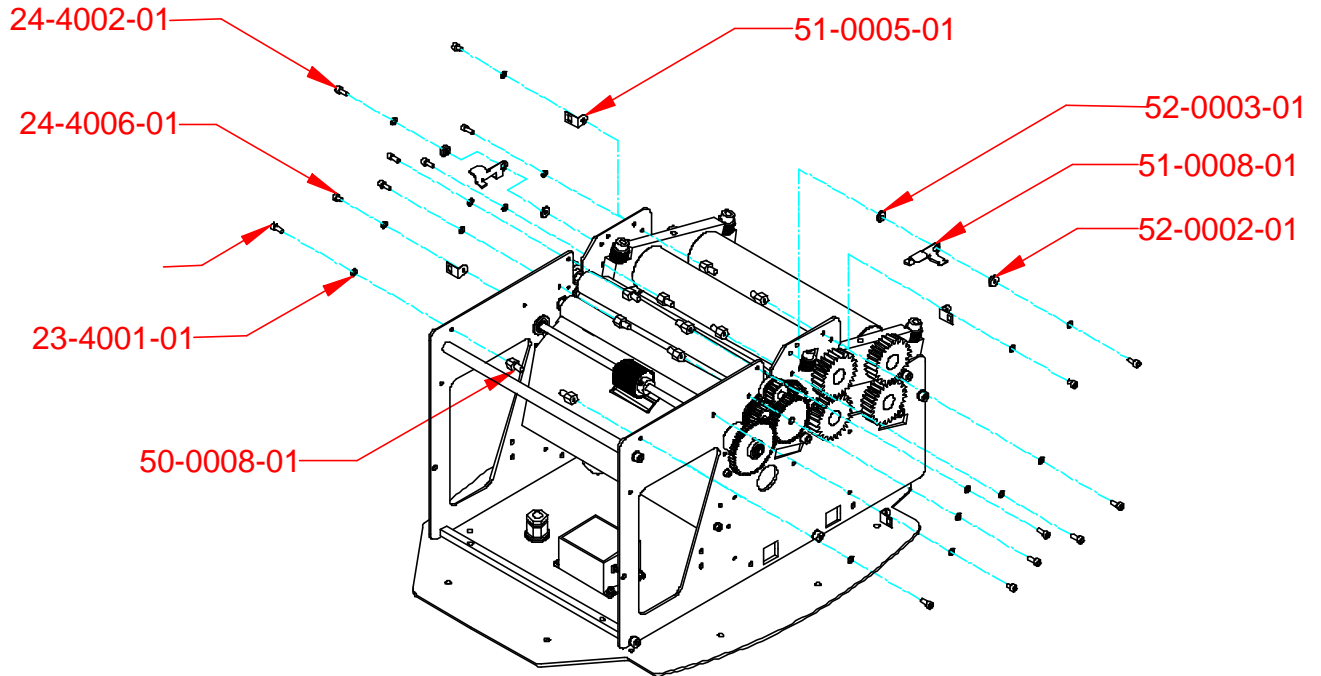
Part Number	Description	Quantity	Notes
13-0001-01	Clutch gear assembly	1	D
20-2004-01	2.5x12 selok pin	1	
21-3001-01	M3 full nut	4	
22-0001-02	3.3mm E circlip	1	
22-0003-02	6.4mm E circlip	1	
23-0004-01	M8 Beryllium crinkle washer	1	
24-3002-01	M3x12 socket button head screw	4	
24-4007-01	M4x6 socket grub screw	1	
32-0011-01	Clutch drive gear	1	
33-0003-01	Square bar tension spring	1	
33-0004-01	Bearing housing pressure spring	2	
40-0008-01	Clutch	1	
<b>Notes</b>			
D	See diagram for clutch gear assembly		

# Baseplate



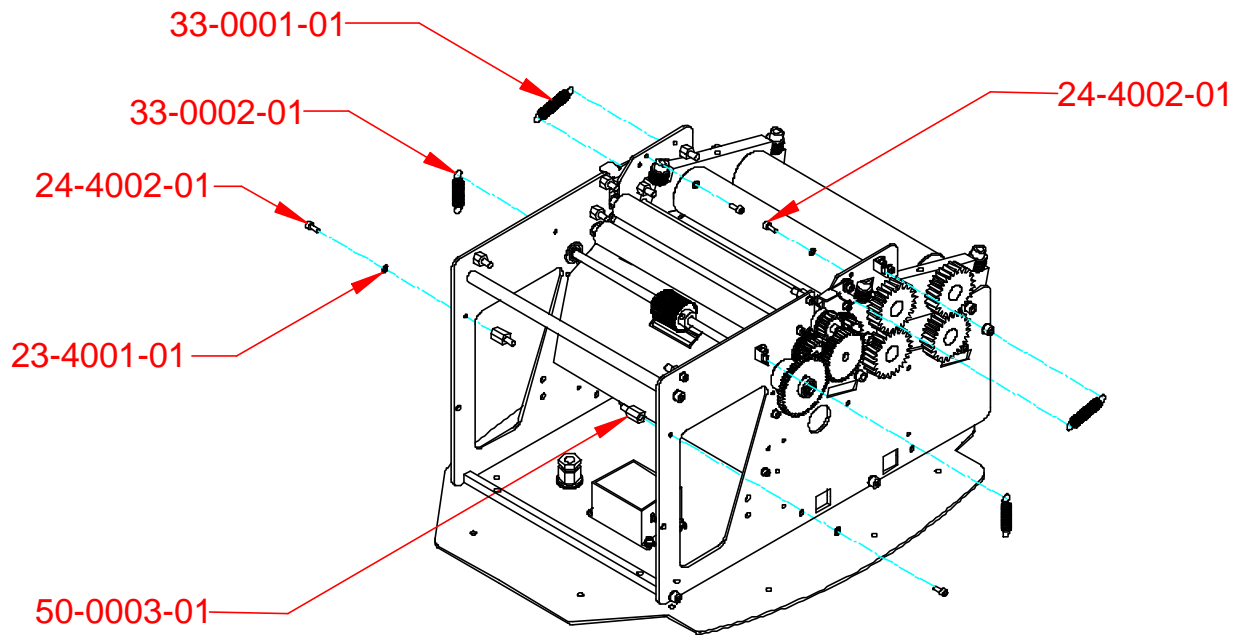
Part Number	Description	Quantity	Notes
11-0003-01	Baseplate assembly	1	E
23-6002-01	M6 shakeproof washer	4	
24-6001-01	M6x16 socket head cap screw	4	
<b>Notes</b>			
E	See diagram for baseplate assembly		

## Levers and fold plate stubs



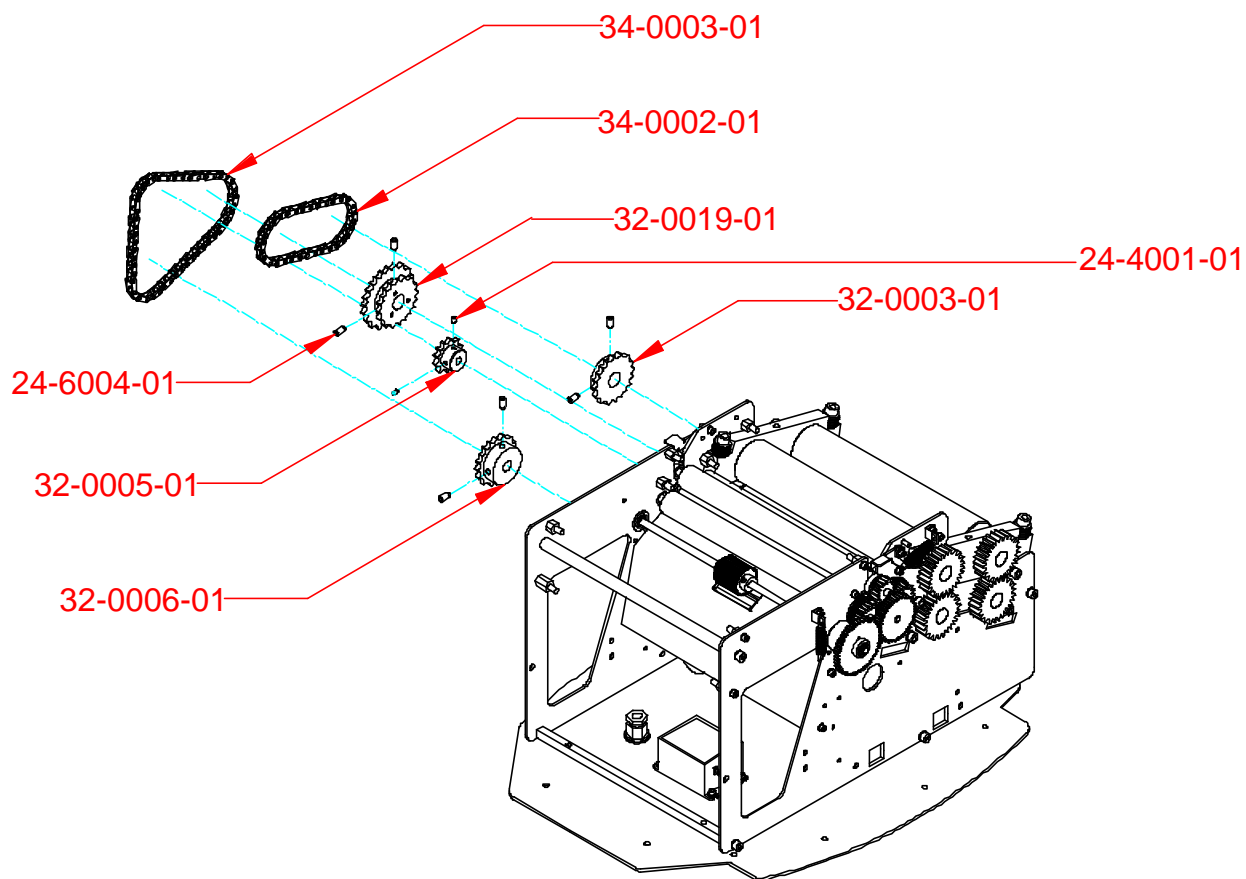
Part Number	Description	Quantity	Notes
23-4001-01	M4 shakeproof washer	16	
24-4002-01	M4x12 socket head cap screw	2	
24-4005-01	M4x10 socket head cap screw	10	
24-4006-01	M4x6 socket head cap screw	4	
50-0008-01	Fold plate stub	10	
51-0005-01	Spring anchor bracket	4	
51-0008-01	Locking lever (pair)	1 pair	
52-0002-01	Flanged spacer	2	
52-0003-01	Plain spacer	2	

# Springs



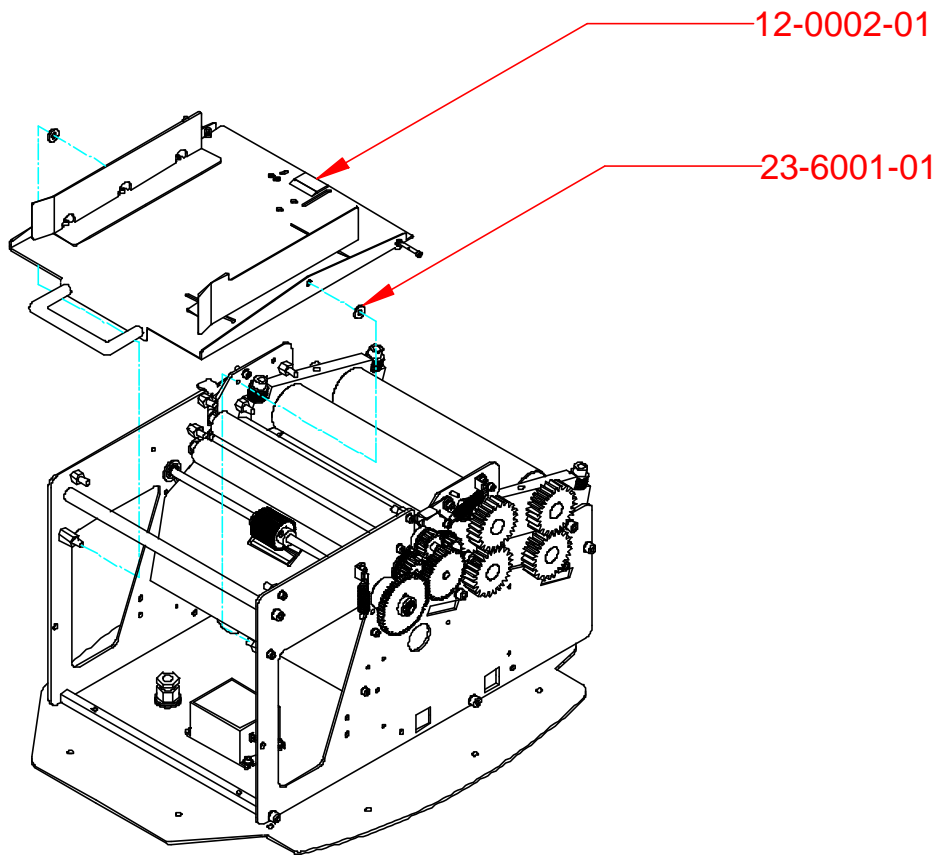
Part Number	Description	Quantity	Notes
23-4001-01	M4 shakeproof washer	4	
24-4002-01	M4x12 socket head cap screw	2	
24-4005-01	M4x10 socket head cap screw	2	
33-0001-01	Locking lever spring	2	
33-0002-01	Infeed tray spring	2	
50-0003-01	Extended fold plate stub	2	

# Sprockets and chains



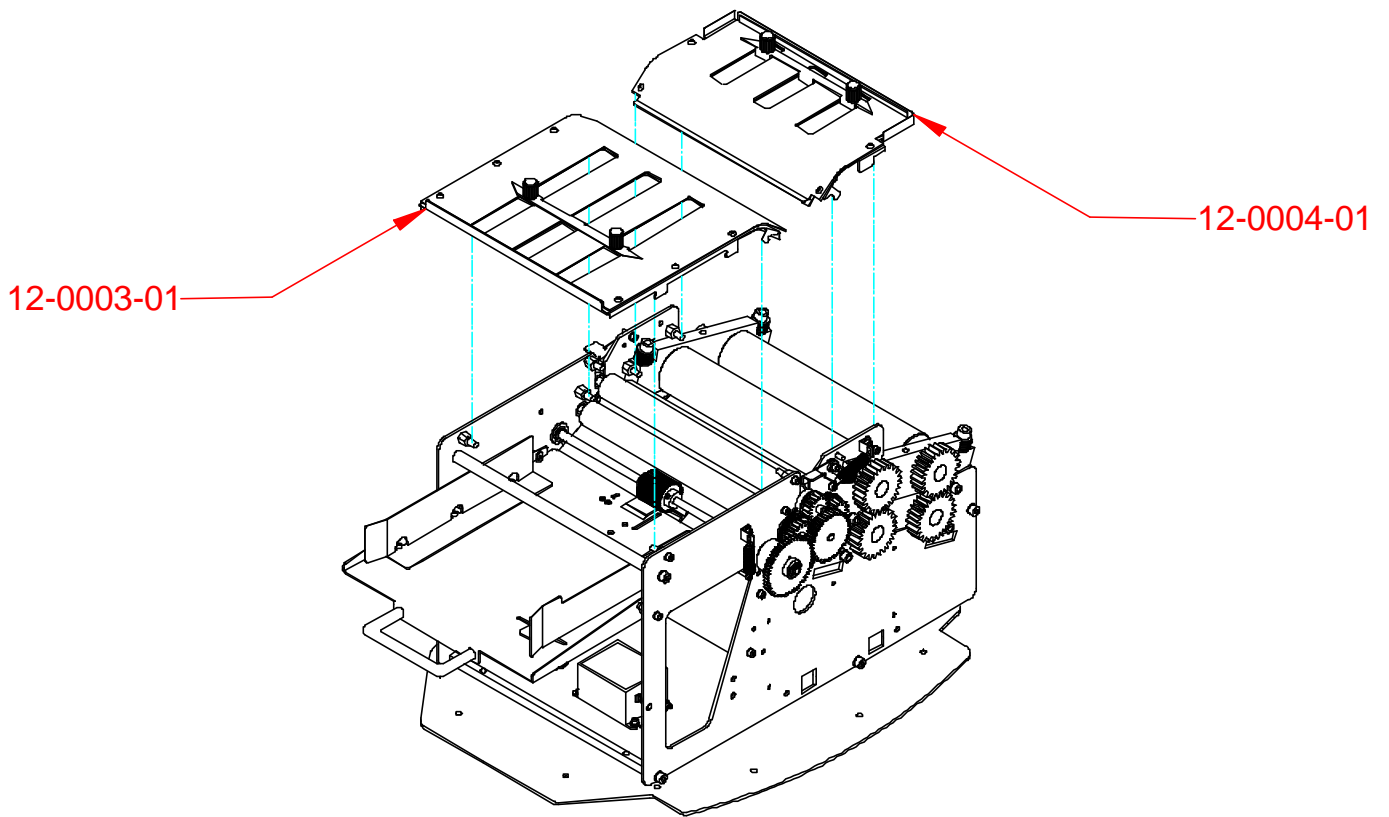
Part Number	Description	Quantity	Notes
24-4001-01	M4x10 socket head grub screw	2	
24-6004-01	M6x12 socket head grub screw	6	
32-0003-01	18T outfeed roller sprocket	1	
32-0005-01	12T fold roller sprocket	1	
32-0006-01	18T motor sprocket	1	
32-0019-01	Infeed roller sprocket	1	F
34-0002-01	Sealer chain	1	
34-0003-01	Motor chain	1	
<b>Notes</b>			
F	See diagram for infeed roller sprocket assembly		

# In-feed tray



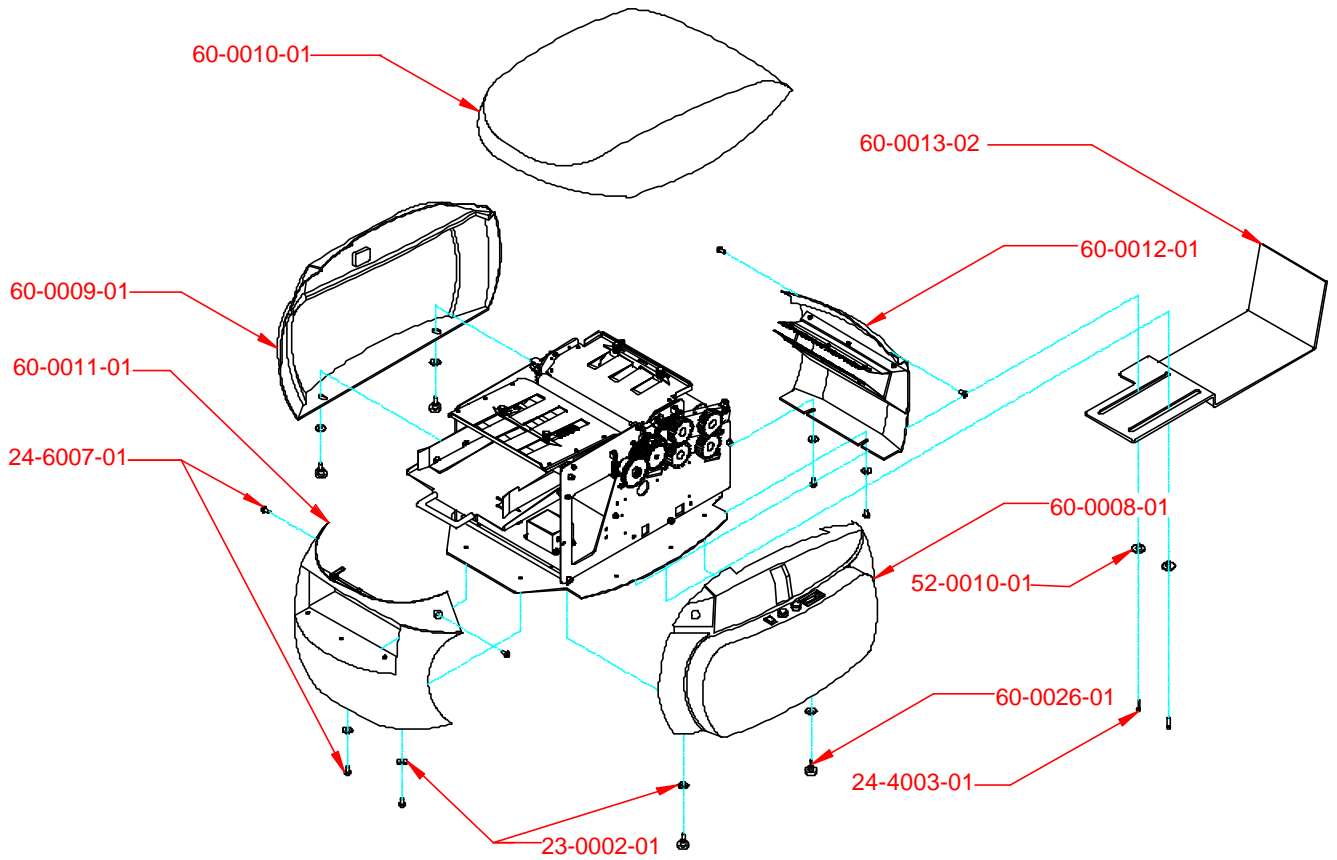
Part Number	Description	Quantity	Notes
12-0002-01	Infeed tray assembly	1	G
23-6001-01	M6 plain washer	2	
<b>Notes</b>			
G	See diagram for infeed tray assembly		

# Fold plates



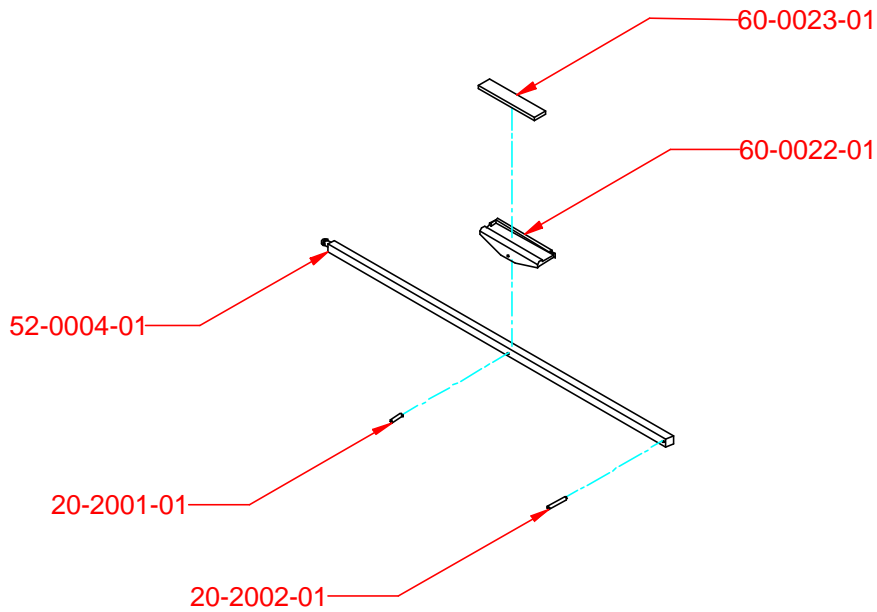
Part Number	Description	Quantity	Notes
12-0003-01	First fold plate assembly	1	H
12-0004-01	Second fold plate assembly	1	I
<b>Notes</b>			
H	See diagram for the first fold plate assembly		
I	See diagram for the second fold plate assembly		

# Covers



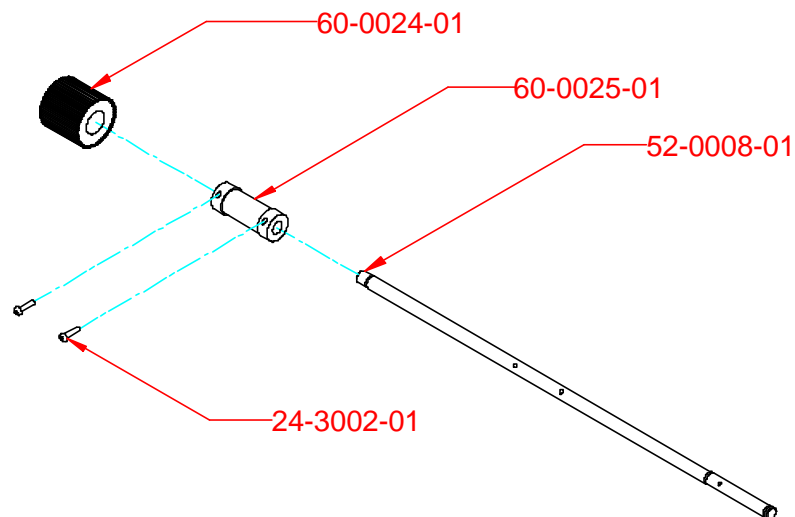
Part Number	Description	Quantity	Notes
23-0002-01	¼" mudwing washer	8	
24-4003-01	M4 x 20 socket head cap screw	2	
24-6007-01	M6 x 12 snake eye screw	8	
52-0010-01	Delivery tray locator	2	
60-0008-01	Operator side cover	1	J
60-0009-01	Non-operator side cover	1	
60-0010-01	Lid	1	
60-0011-01	Infeed cover	1	K
60-0012-01	Outfeed cover	1	L
60-0013-01	Output tray	1	
60-0026-02	M6 x 15 torque knob	4	
<b>Notes</b>			
J	See operator side cover assembly diagram		
K	See infeed cover assembly diagram		
L	See outfeed cover assembly diagram		

## Feed pad adjuster shaft assembly



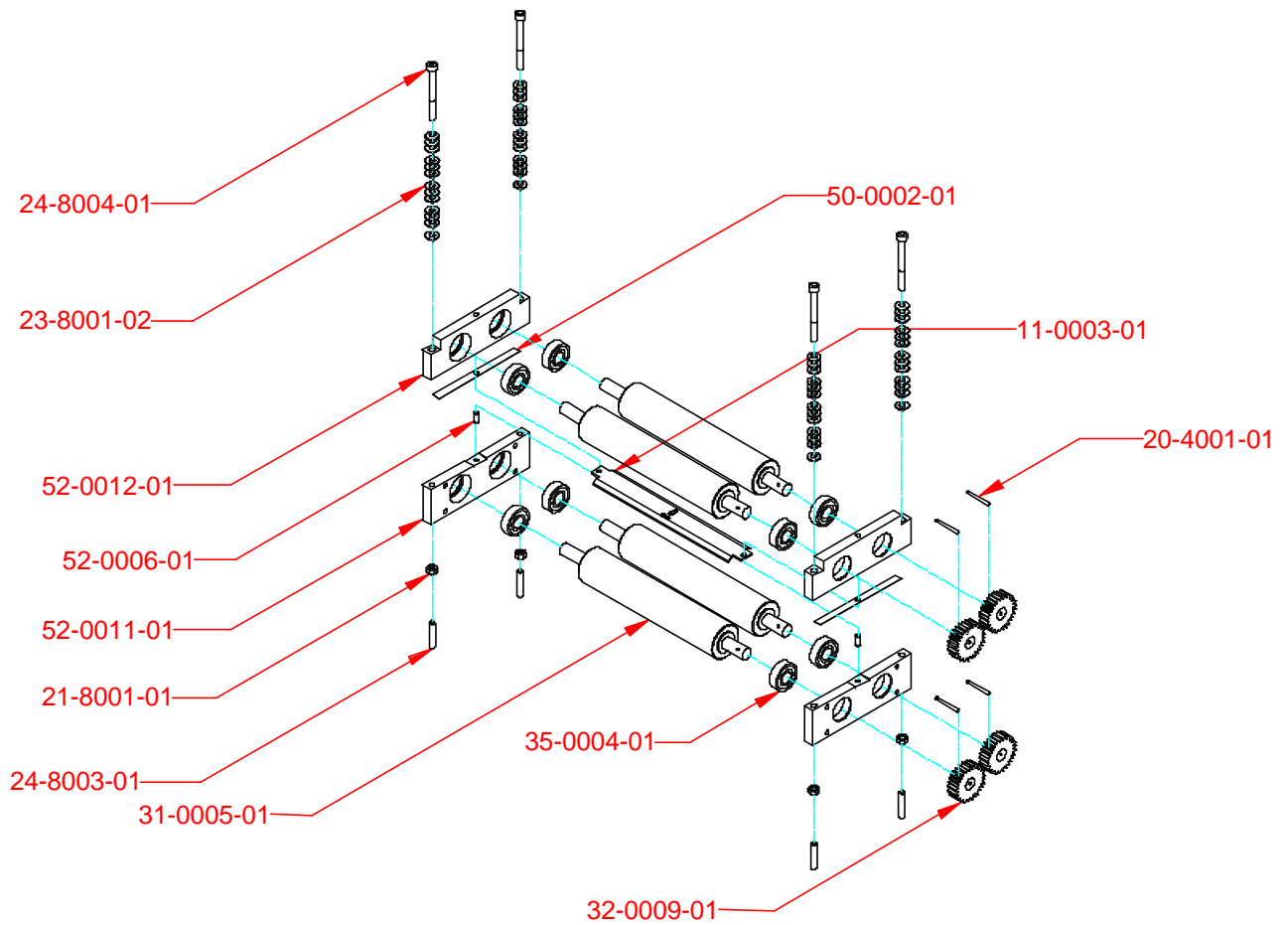
Part Number	Description	Quantity
20-2001-01	2 x 10 selok pin	1
20-2002-01	2 x 16 selok pin	1
52-0004-01	Feed pad adjuster shaft	1
60-0022-01	Feed pad holder	1
60-0023-01	Feed pad	1

## Feeder wheel assembly



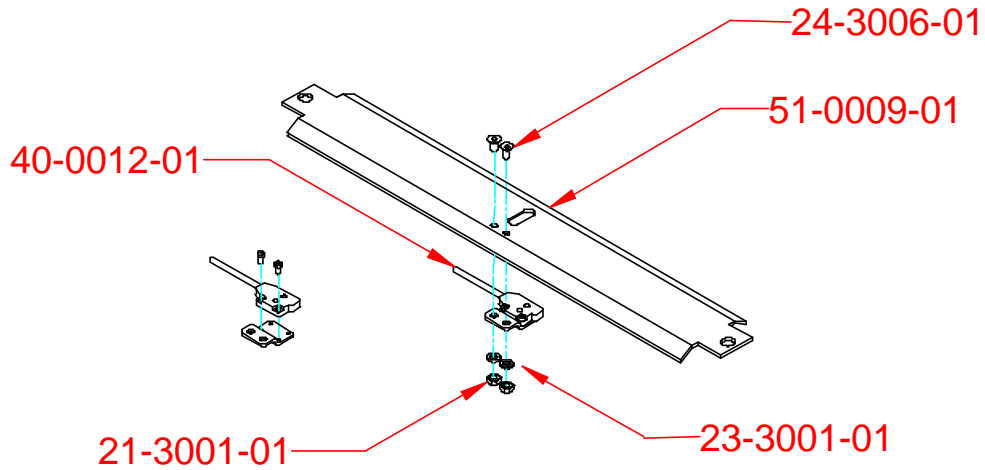
Part Number	Description	Quantity
24-3002-01	M3 x 12 socket button head screw	2
52-0008-01	Feed roller shaft	1
60-0024-01	Feed roller	1
60-0025-01	Feed roller hub	1

# Sealer assembly



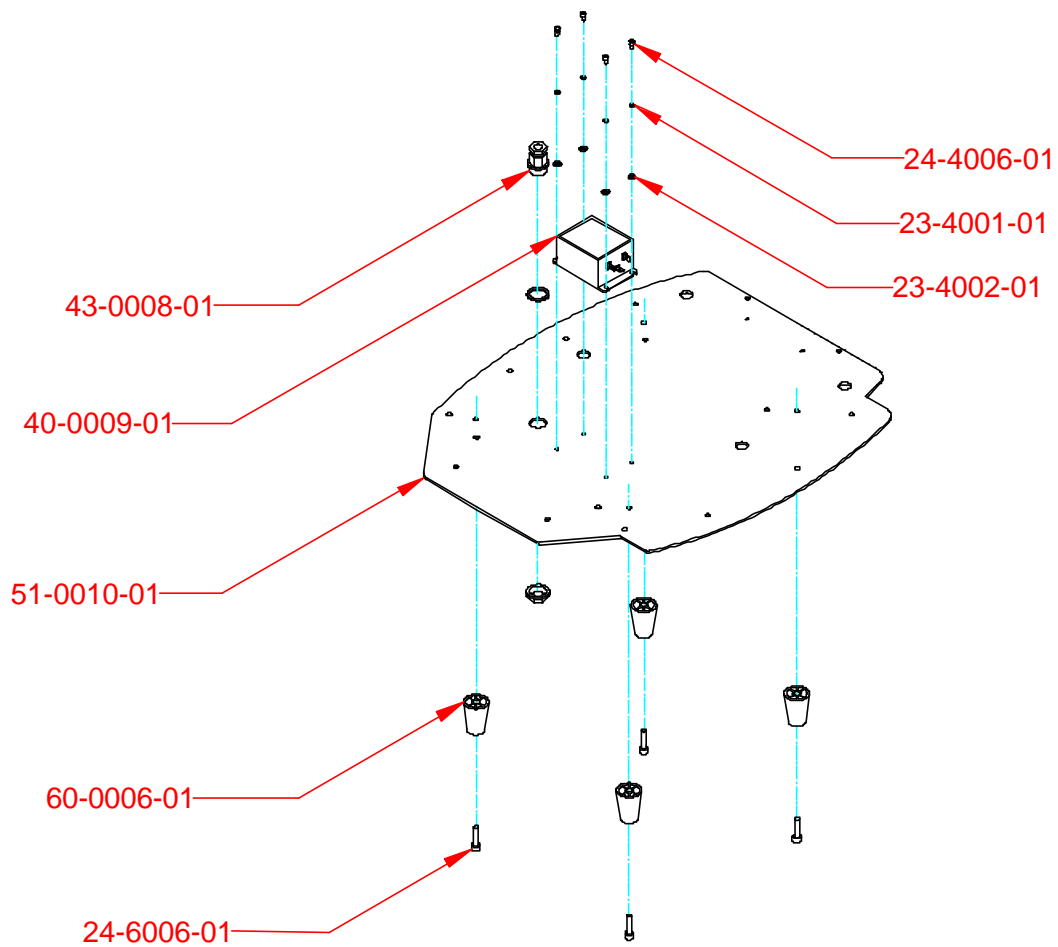
Part Number	Description	Quantity	Notes
11-0003-01	Sealer sensor bracket assembly	1	J
20-4001-01	M4 x 40 selok pin	4	
21-8001-01	M8 full nut	4	
23-8001-02	M8 Belleville washer	52	
24-8003-01	M8 x 40 socket grub screw	4	
24-8004-01	M8 x 80 socket head cap screw	4	
31-0005-01	Sealer roller	4	
32-0009-01	Sealer roller gear	4	
35-0004-01	17mm plain ball race	8	
50-0002-01	Sealer shim	2	
52-0006-01	Location dowel	2	
52-0011-01	Bottom bearing housing	2	
52-0012-01	Top bearing housing	2	
<b>Notes</b>			
J	See diagram 'Sealer sensor bracket assembly' on the following page		

## Sealer sensor bracket assembly



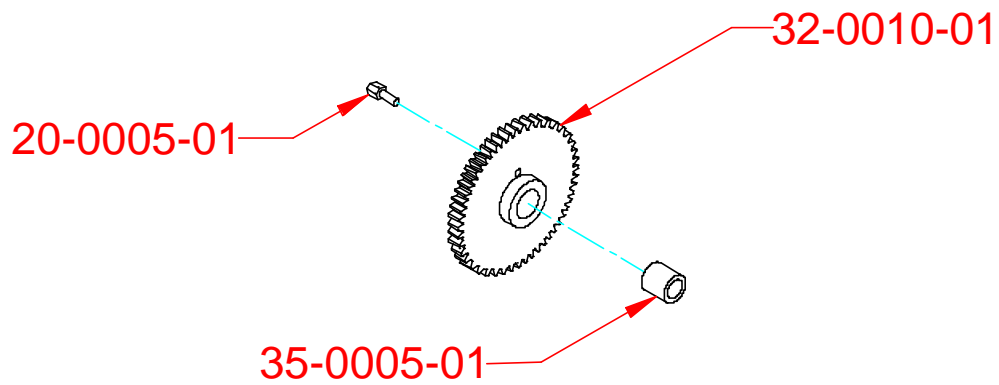
Part Number	Description	Quantity
21-3001-01	M3 full nut	2
23-3001-01	M3 shakeproof washer	2
24-3006-01	M3 x 6 csk socket head screw	2
40-0012-01	Sensor and bracket	1
51-0009-01	Sealer roller guide plate	1

## Baseplate assembly



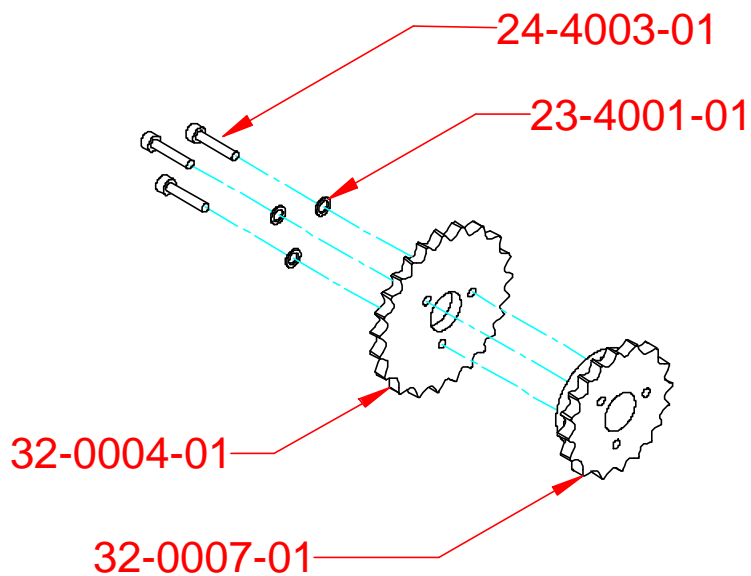
Part Number	Description	Quantity
23-4001-01	M4 shakeproof washer	4
23-4002-01	M4 plain washer	4
24-4006-01	M4 x 6 socket head cap screw	4
24-6006-01	M6 x 25 socket head cap screw	4
40-0009-01	Filter	1
43-0008-01	Cable gland	1
51-0010-01	Baseplate	1
60-0006-01	Plastic foot	4

## Clutch gear assembly



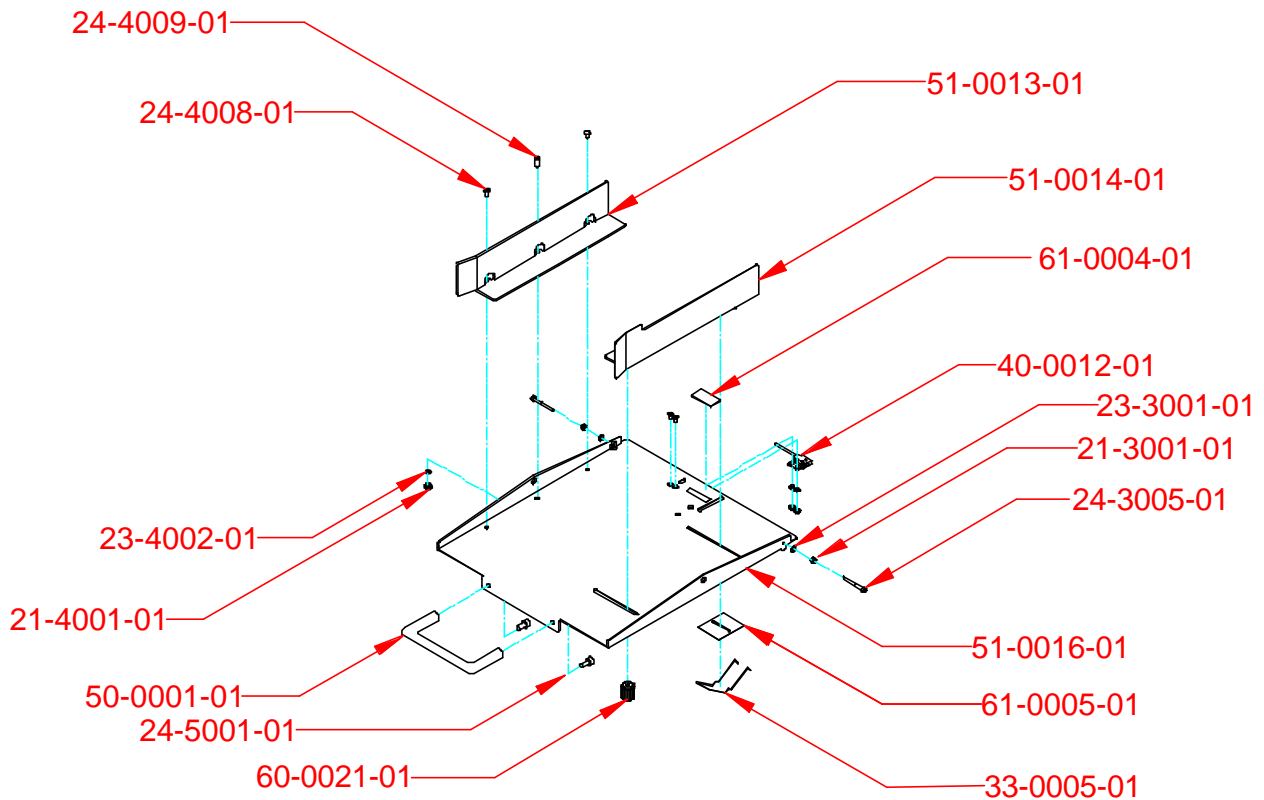
Part Number	Description	Quantity
20-0005-01	Hexagonal spacer	1
32-0010-01	50T clutch gear	1
35-0005-01	8 x 12 x12 oilite bush	1

## Infeed sprocket assembly



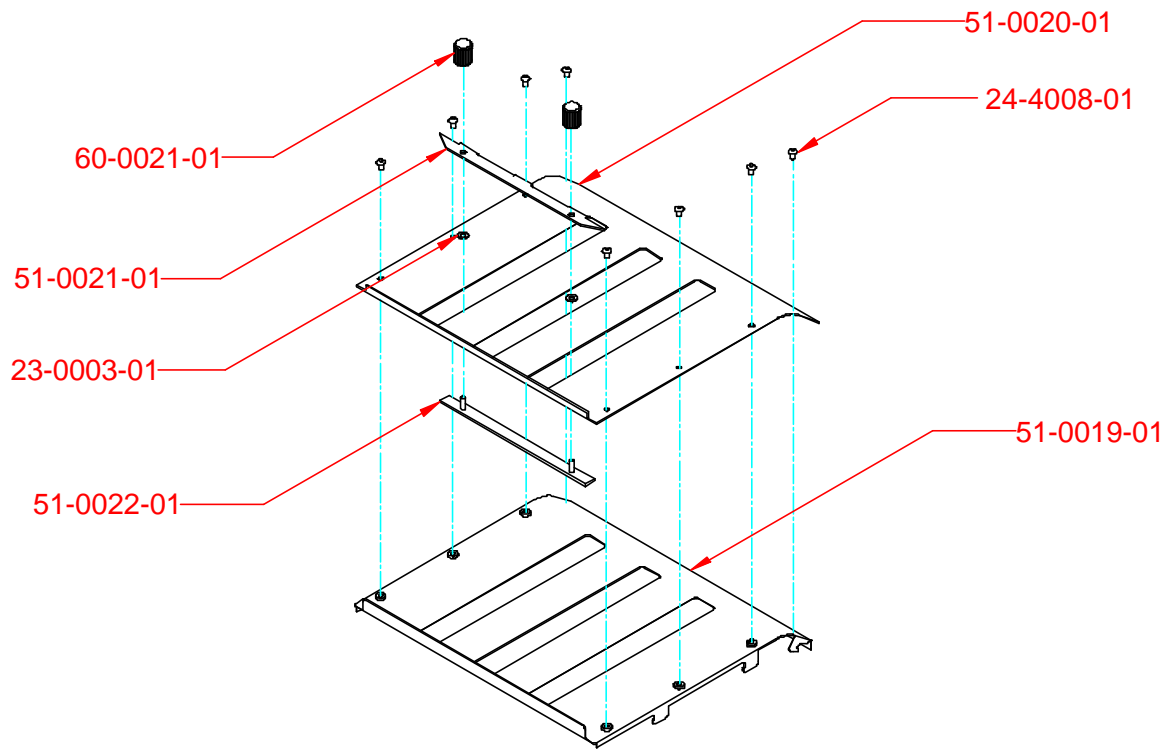
Part Number	Description	Quantity
23-4001-01	M4 shakeproof washer	3
24-4003-01	M4 x 20 socket head cap screw	3
32-0004-01	23T infeed sprocket	1
32-0007-01	18T infeed sprocket	1

# In-feed tray assembly



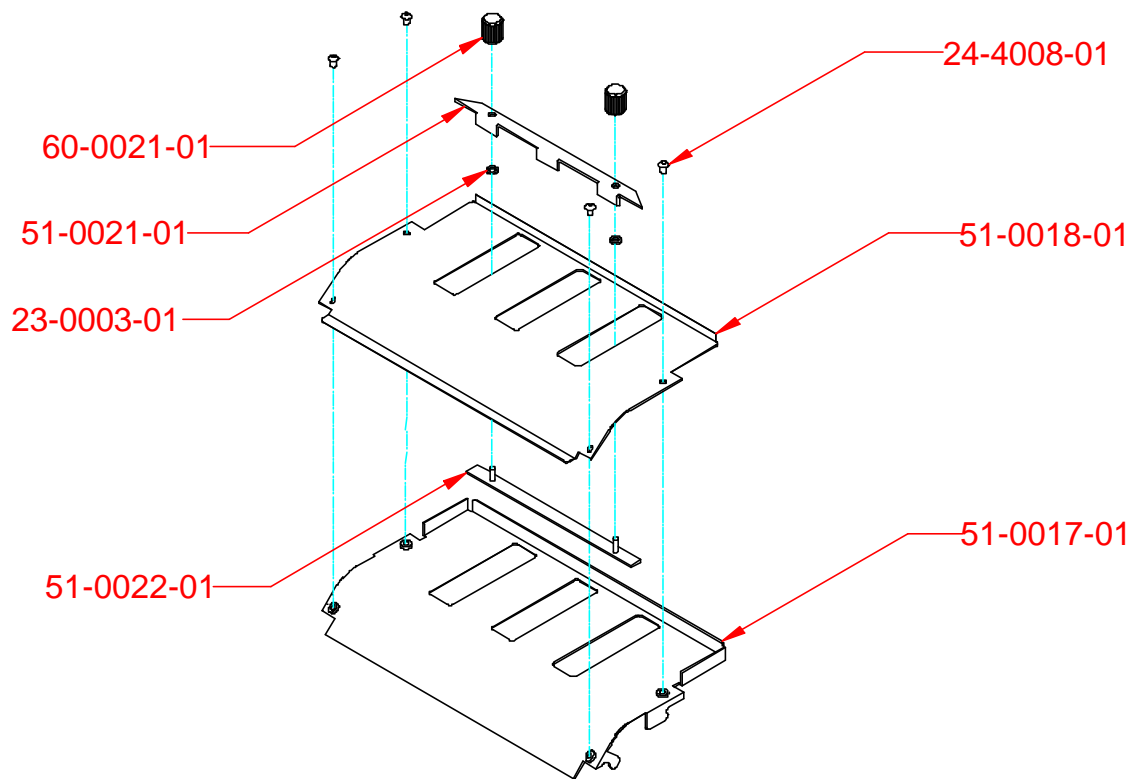
Part Number	Description	Quantity
21-3001-01	M3 full nut	4
21-4001-01	M4 full nut	1
23-3001-01	M3 shakeproof washer	2
23-3002-01	M3 plain washer	2
23-4002-01	M4 plain washer	1
24-3005-01	M3 x30 socket head cap screw	2
24-3006-01	M3 x 6 csk socket head screw	2
24-4008-01	M4 x 6 socket button head screw	2
24-4009-01	M4 x 10 socket button head screw	1
24-5001-01	M5 x 10 socket head cap screw	2
33-0005-01	Spring	1
40-0012-01	Sensor and bracket	1
50-0001-01	Anodised handle	1
51-0013-01	Fixed side guide	1
51-0014-01	Adjustable side guide	1
51-0016-01	Infeed tray base	1
60-0021-01	M4 thumb wheel	1
61-0004-01	Infeed tray felt	1
61-0005-01	Protective card	1

# First fold plate assembly



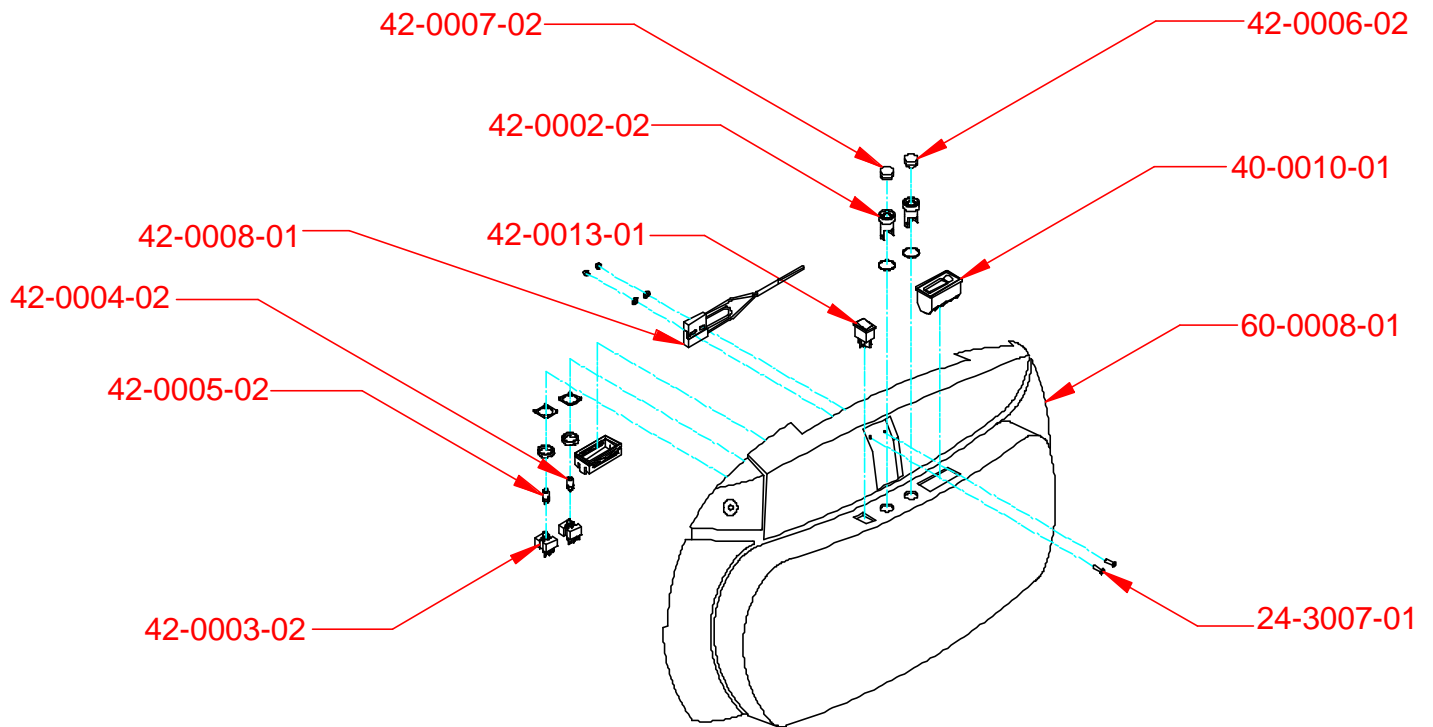
Part Number	Description	Quantity
23-0003-01	M4 nylon washer	2
24-4008-01	M4 x 6 socket button head screw	8
51-0019-01	1 <sup>st</sup> fold plate bottom	1
51-0020-01	1 <sup>st</sup> fold plate top	1
51-0021-01	Stop bar	1
51-0022-01	Stop bar base clamp	1
60-0021-01	M4 thumb wheel	2

## Second fold plate assembly



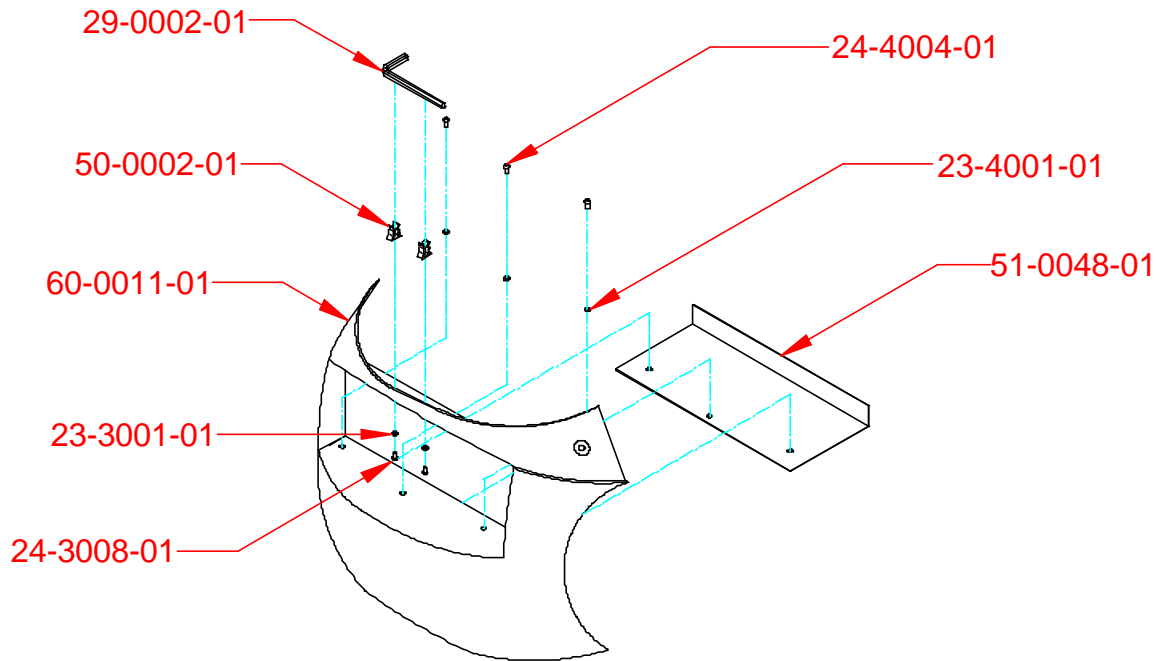
Part Number	Description	Quantity
23-0003-01	M4 nylon washer	2
24-4008-01	M4 x 6 socket button head screw	4
51-0017-01	2 <sup>nd</sup> fold plate bottom	1
51-0018-01	2 <sup>nd</sup> fold plate top	1
51-0021-01	Stop bar	1
51-0022-01	Stop bar base clamp	1
60-0021-01	M4 thumb wheel	2

# Operator Side Cover Assembly



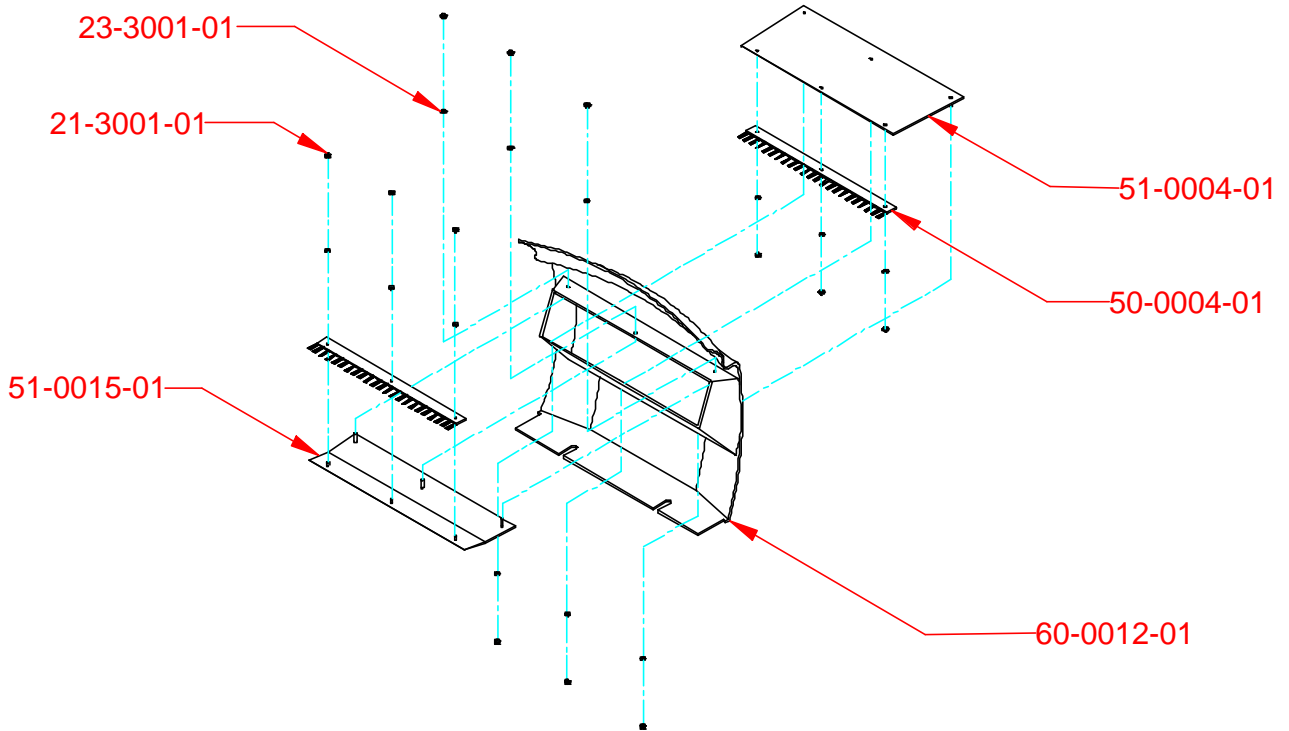
Part Number	Description	Quantity	Notes
21-3001-01	M3 full nut	2	
23-3001-01	M3 shakeproof washer	2	
24-3007-01	M3 x 12 countersunk socket head screw	2	
40-0010-01	Counter	1	
42-0002-02	Round switch body, momentary action	2	
42-0003-02	SPDT switch socket	2	
42-0004-02	LED – red for switch	1	
42-0005-02	LED – green for switch	1	
42-0006-02	Lens screen – round – red	1	
42-0007-02	Lens screen – round – green	1	
42-0008-01	Normally open reed proximity switch	2	
42-0013-01	Illuminated rocker switch	1	
60-0008-01	Operator side cover	1	

# Infeed Cover Assembly



Part Number	Description	Quantity	Notes
23-3001-01	M3 shakeproof washer	2	
23-4001-01	M4 shakeproof washer	3	
24-3008-01	M3 x 6 socket button head screw	2	
24-4004-01	M4 x 8 socket button head screw	3	
29-0002-01	6mm allen key	1	
50-0002-01	1/4" spring clip – black	2	
51-0048-01	Blanking plate	1	
60-0011-01	Infeed cover	1	

# Outfeed Cover Assembly



Part Number	Description	Quantity	Notes
21-3001-01	M3 full nut	12	
23-3001-01	M3 shakeproof washer	12	
50-0004-01	Anti-static brush strip	2	
51-0004-01	Bottom outfeed guide	1	
51-0015-01	Top outfeed guide	1	
60-0012-01	Outfeed cover	1	