Spedo Descending Stacker 8200

Instruction Manual

Issue 1

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History Sheet

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Unpack

Unpack the equipment and examine it thoroughly to ascertain whether any damage has occurred in transit. Report immediately any such damage to the agent or manufacturer. Retain the packing should further transportation be necessary.

All Goods

All goods manufactured by the Company are guaranteed to the extent hereafter mentioned against defects arising from faulty material or workmanship subject to the goods not having suffered maltreatment or interference. The Company's liability under this guarantee is limited to replacing any part or parts found defective within a period as laid down in Company instructions after the date of delivery or installation.

Other Goods

If goods not of the Company's manufacture are ordered, the guarantee of that company is to be accepted.

Descriptive Matter

Descriptive matter, illustrations, dimensions and weights issued by the Company are typical and shall not be held as binding.

Patterns and Designs

The Company reserves the right to alter patterns and designs without notice.

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We have taken every care in the preparation of this manual. If there are any inaccuracies, ambiguities or omissions, Spedo UK Limited and its consultants and distributors cannot accept responsibility for any loss or damage these errors may cause.

Spedo Descending Stacker 8200

Safety Measures

This instruction manual contains certain WARNING and CAUTION notices which must be followed by the user to ensure safe operation and to retain the equipment in a SAFE condition.

All users of the equipment described in this manual MUST have received adequate training in its use and application in order to ensure SAFE AND PROPER USE.

Any adjustment, maintenance or repair of the opened apparatus under voltage shall be carried out only by a skilled person who is AWARE OF THE HAZARD INVOLVED.

Spedo Descending Stacker 8200

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GENERAL DESCRIPTION SECTION 1

INTRODUCTION

Descending Stacker 8200 (Fig 1.1) is designed to operate with the Spedo range of continuous forms cutters. The speed can be varied to match on-line operation, as can the height of the machine bed.

The descending stacker can be operated in step mode under optical sensor control or in batch control mode, where the cutter initiates a batch or end of group condition.

Once the cutter indicates the end of the batch, as determined by the pre-set counter the cutter will momentarily pause while the continuous stream is ejected onto the stacker tray.

The system will restart once the positioned stack is removed.

Fig 1.0 8200 Descending Stacker

8200 Descending Stacker

Technical Data

Paper Format:

Capable of handling 1 or 2 streams, of up to 480mm in total.

Paper Weight:

Single Stream: 40 to 360 gsm

Dual Stream: 40 to 360 gsm

Form Length:

Min: 4 inches

Max: 14 inches

Stack Height:

Max: 2000 forms / 250mm

Speed:

Up To 100ft/Min (30.5 M/min)

Power Requirements:

230 V +/- 10%

1.7 Amps

400 Watts

50 Hz to 60Hz

Noise Emissions:

60dB

Dimensions (approx):

Length: 1070mm

Width: 730mm

Height: 1040mm

Weight (approx):

INSTALLATION & OPERATION SECTION 2

INTRODUCTION

- The installation procedures given in this section should only be carried out by a competent trained service technician.
- Once the Conveyor Stacker has been declared ready to operate, the operating personnel should be made familiar with its safe operation.

UNPACK

- Unpack the equipment and examine it thoroughly to ascertain whether any damage has occurred in transit.
- Report immediately any such damage to the agent or manufacturer, Retain the packing should further transportation be necessary.

ACCESSORIES

- The following items are supplied as standard:
  - Mains Cable to Guillotine.
  - Signal Interface Cable to Guillotine.
  - Stacking Guides
  - Instruction Manual.

SITE CONSIDERATIONS

- Consideration must be given to the layout and positioning of work tables and cupboards surrounding the working area, at the same time leaving enough space around the system for the operator to have access to all operational requirements.
- All units in the system should be set square in relation to each other.
- Refer to the relevant instruction manual of any other unit in the system, before making up the combined system.

Installation:

WARNING: Never operate the descending stacker when wearing items of loose clothing or other decorative jewellery, such as necklaces or bracelets as they could become entrapped in the machinery and cause injury.

CAUTION:

This equipment uses CLASS II LASER PRODUCTS (620-690nm 1mW). DO NOT STARE INTO THE BEAMS

- Secure the x2off Mounting Brackets to the cutter using the M8 fixings provided.
- Position the descending stacker such that it is square on to the preceding ancillary unit.
- To adjust the stacker height, using a 17mm socket to raise or lower the stacker to the required height as shown.
- Using the fixing handles secure the descending stacker to the cutter.
- Plug in the interface cables provided as follows.

  Machine to Machine Mains Cable: 8200 Stacker (**X1**) to Forms Cutter (**X6/X7**)

  Forms Cutter Interface Cable: 8200 Stacker (**X2**) to Forms Cutter (**Inputs1 / Outputs1**)

Identification of Main Assemblies

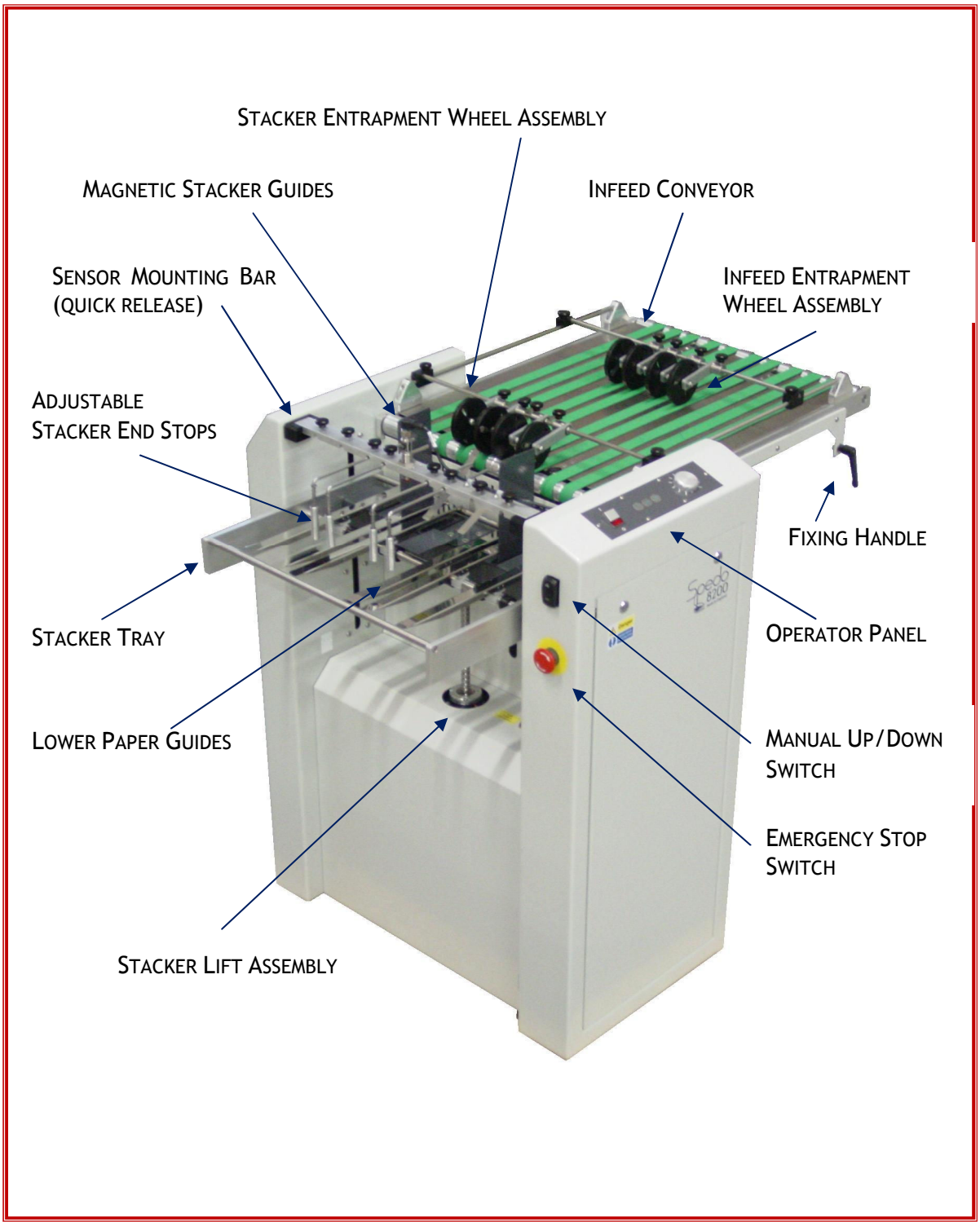


Fig 2.0 Identification of Main Assemblies

Operator Controls

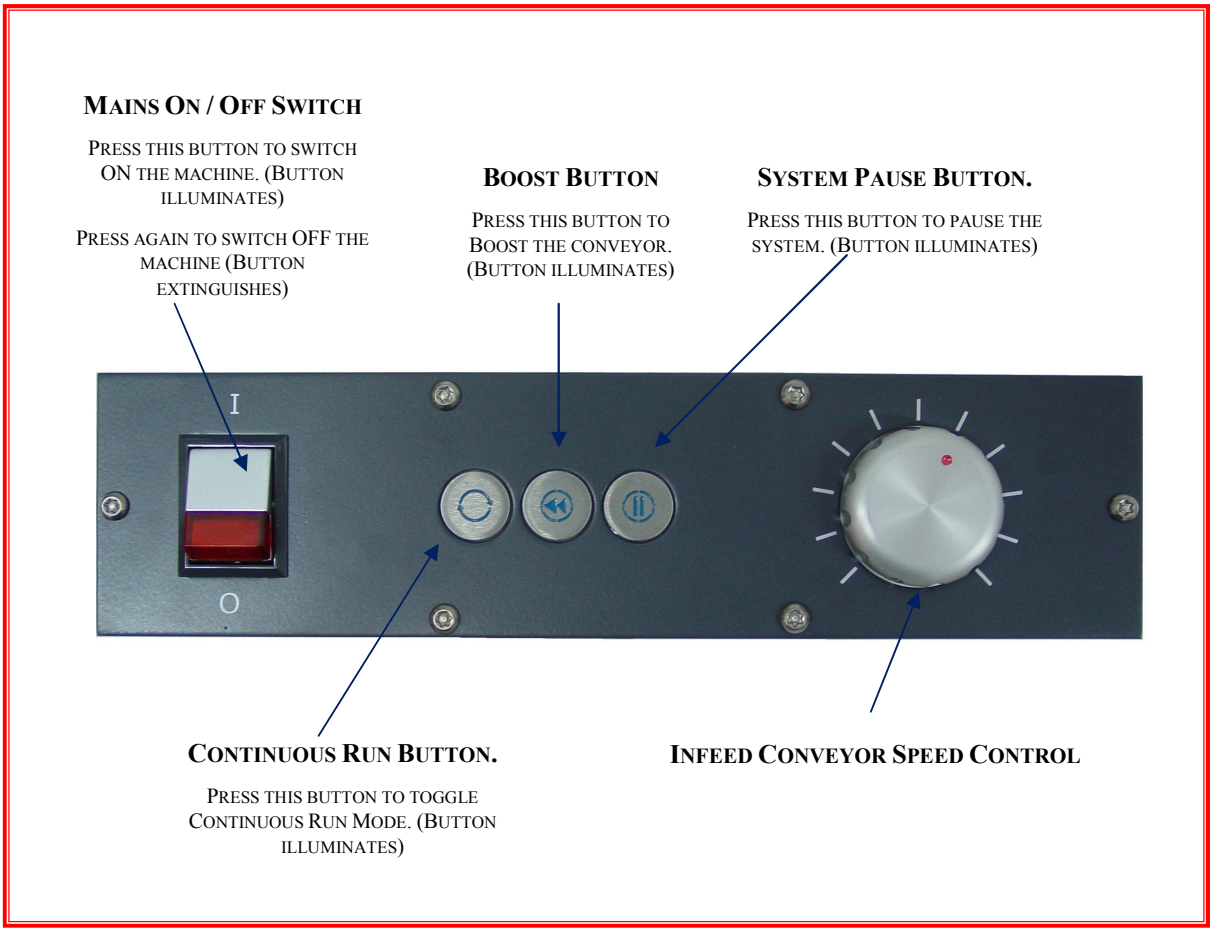


Fig 2.1 Identification of Controls

Switch ON and check that the ON:OFF switch illuminates (Fig 2.1).

Press the CONTINUOUS button and check that the button illuminates and the infeed conveyor starts. Adjust the SPEED control and check that the speed of the infeed conveyor varies. Press CONTINUOUS button again, and check that the button extinguishes and the infeed conveyor stops.

Press BOOST button, check infeed conveyor moves at maximum speed. Release button and the infeed conveyor should stop.

Press SYSTEM PAUSE button. Check that the button illuminates and the system pauses, (if connected)

Cover each infeed sensor in turn. Check that the infeed conveyor runs. Uncover the sensors and check that the infeed conveyor stops.

Operator Controls (continued)

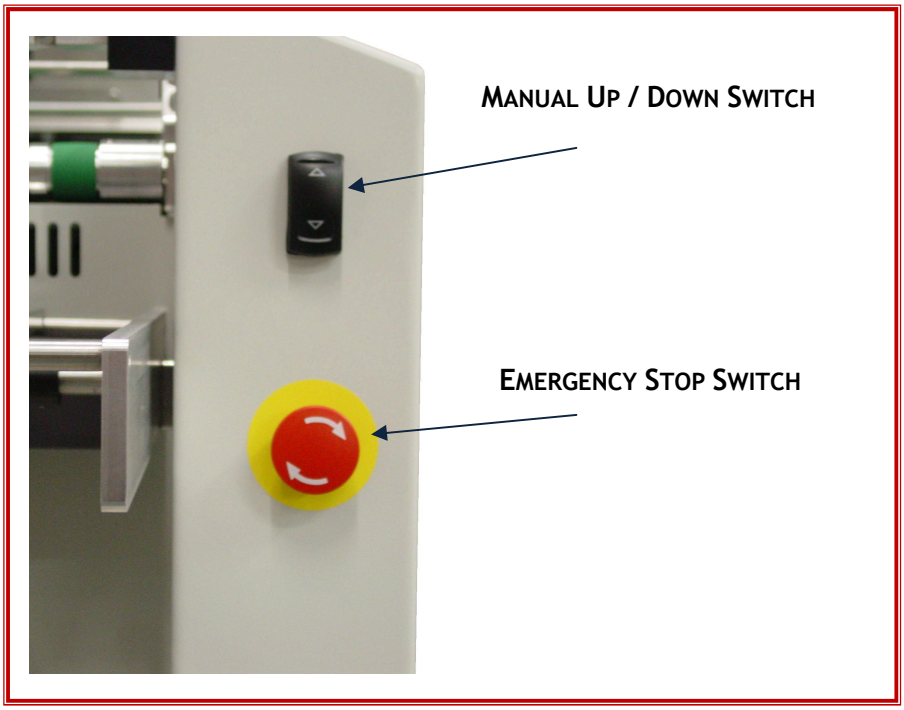


Fig 2.2 Identification of Controls (continued)

Press the **Manual UP** Switch to raise the Stacker Tray.
The tray will automatically lift until the stacker feed sensor is covered. The UP legend will illuminate when the stacker is rising.

Press the **Manual DOWN** Switch to lower the Stacker Tray.
The tray will automatically move the lowest position, the tray will then return to top is the Stacker empty sensor is uncovered. The DOWN legend will illuminate when the stacker is descending.

Press the **Emergency Stop** Switch to cut the power to the Stacker.
Twist the switch to re-engage.

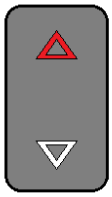
The operating condition of the descending stacker can be determined by checking the operator button illumination status.

Pause and Boost buttons flashing:
Door Safety switches open, ensure doors are secured.

Pause button illuminated:
Descending stacker has issued a cutter pause signal.Cutter will not run while illuminated

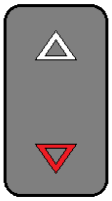
Boost button illuminated:
Infeed conveyor is boosting due to end of batch condition or button pressed.
Infeed conveyor runs full speed.

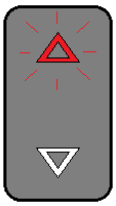
Continuous Button illuminated:
Infeed conveyor is running at a speed set by the speed control knob. Press continuous button or uncover infeed sensors to release.



UP Arrow illuminated:
Stacker is moving upwards and will stop when the sensor is covered.

DOWN Arrow illuminated:
Stacker is descending and will stop when the sensor is covered.





UP Arrow Flashing:
Stacker has reached the top and can travel no further.

DOWN Arrow Flashing:
Stacker has reached the bottom and will not return until Stacker tray is empty or UP button is pressed.

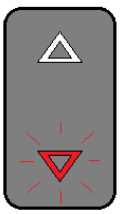


Fig 2.3 Machine Status Indicators

Setting the Entrapment Wheels:

Feed one form onto the infeed conveyor and set the entrapment wheels as follows. Unclamp each entrapment wheel by loosening each thumbwheel (Fig 2.4). Slide each wheel to the required position such that when a sheet of paper is fed onto the machine bed, the wheels entrap it. Re-clamp each wheel. Set the mode and speed as required.

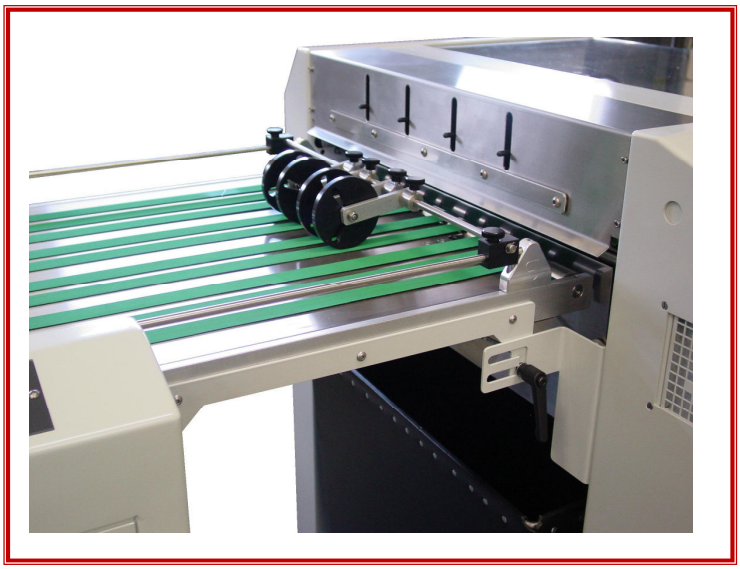


Fig 2.4 Infeed Entrapment Wheels and Thumbscrews

The Stacker Entrapment wheels must be positioned to the rear of the infeed conveyor; these will allow the forms to be ejected onto the Stacker Tray.
If 2-up forms are being processed then the wheels must be equally spaced over each form.

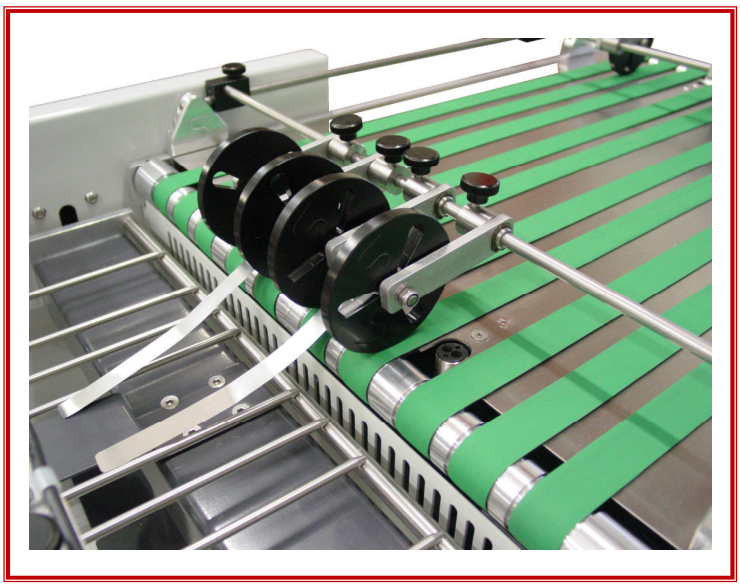


Fig 2.5 Stacker Entrapment Wheels.

Adjusting the Stacker Tray Guides:

The stacker tray guides must be set so that both the width and depth of the forms are controlled to give a neat consistent stack.

The **Magnetic Stacker Guides** are placed to control the width of the paper stack, and should be placed as close as possible to both sides of the form(s).

The **Stacker End Stops** are placed to control the depth of the paper stack, and can be adjusted by loosening the thumbscrew above each **Stacker End Stop**. These should be adjusted to that the stack is held close to the back plate.

Care must also be taken when setting the **Lower Paper Guides** that they do not interfere with the **Stacker End Stops** (which are fixed to the sensor mount bar).

Adjustable rings have been fitted to the lower paper guide mounting bar which can be positioned in line with the **Stacker End Stops.**

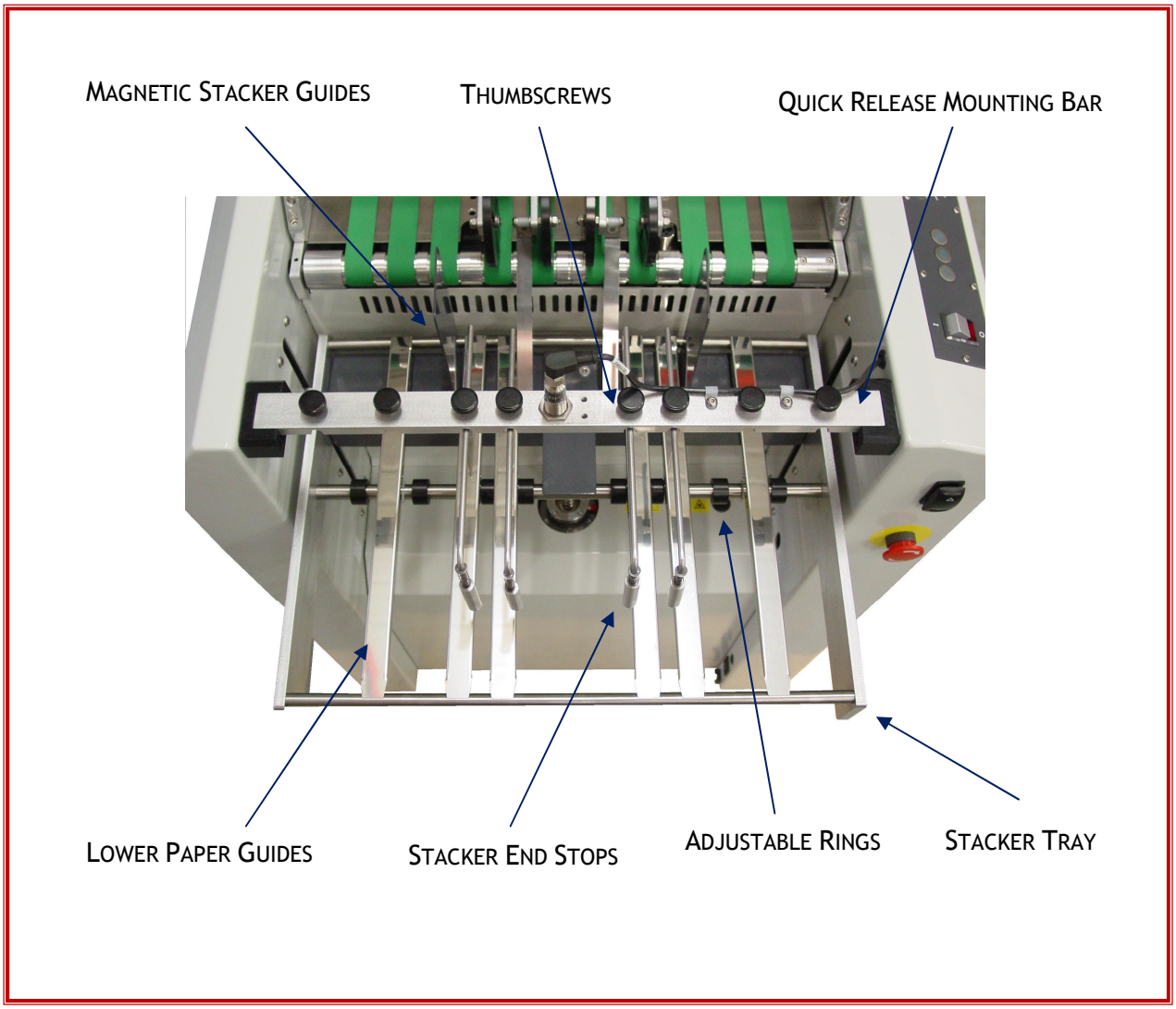


Fig 2.6 Identification of Stacker Tray Parts.

Adjusting the Stacker Sensors:

WARNING: CLASS II LASER PRODUCTS IN USE; DO NOT STARE INTO THE BEAMS.

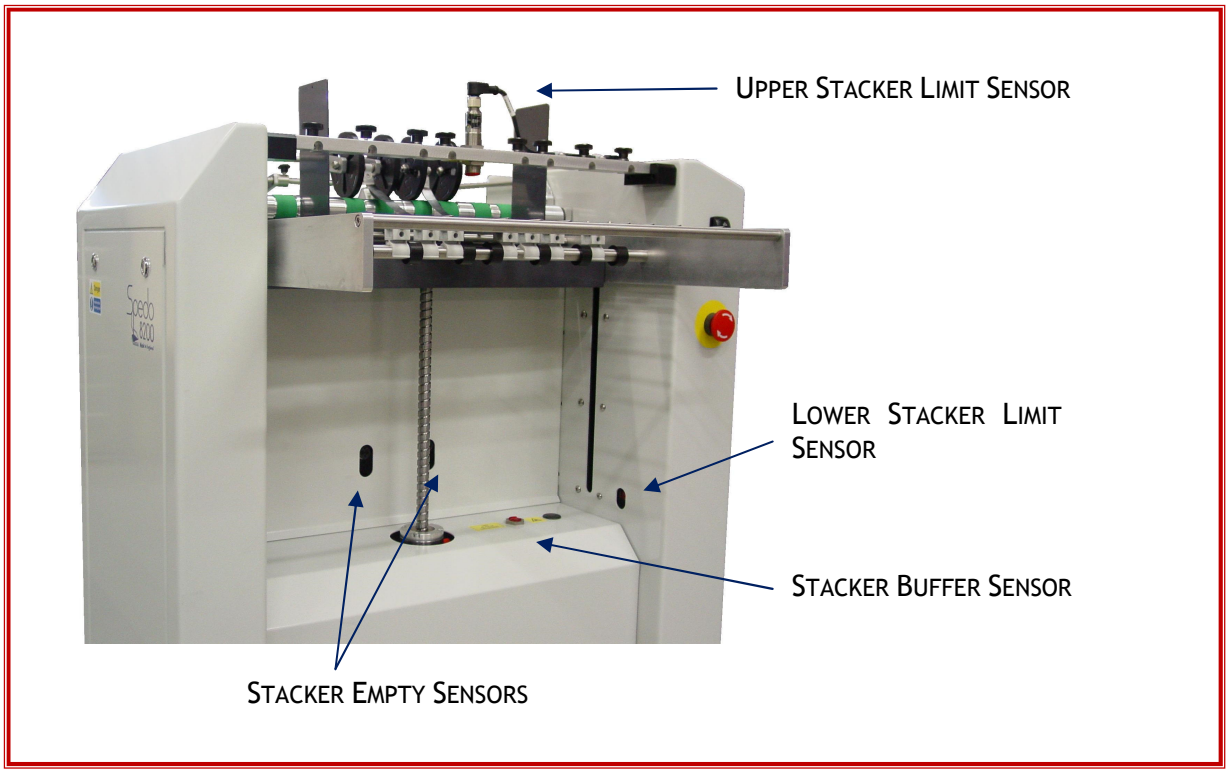


Fig 2.7 Sensor Positions

UPPER STACKER LIMIT SENSOR:
This sensor can be adjusted to set the maximum height of the Stacker Tray.
This must be set so that, when empty, the Stacker End Stops protrude through the lower paper guides.

LOWER STACKER LIMIT SENSOR:
This sensor is fixed at the lowest position of the Stacker Tray. The sensor must be aligned with the reflector to operate correctly.

STACKER BUFFER SENSOR:
This sensor can be adjusted to set a buffer which allows the infeed conveyor to be emptied when the cutter has stopped.

STACKER EMPTY SENSORS:
These sensors are used to detect the presence of the paper stack when the Stacker Tray is in its lowest position. Set these sensors so that the Stacker Tray does not return automatically until both sides are clear.

OPERATIONAL MAINTENANCE SECTION 3

WARNINGS

Electrical

Before starting any maintenance, ensure that the Descending Stacker has been disconnected from the mains supply.

Clothing & Jewellery

Never operate the Descending Stacker when wearing items of loose clothing or other decorative jewellery, such as necklaces or bracelets as they could become entrapped in the machinery and cause injury.

TASK INTERVALS

The Descending Stacker has been designed for low maintenance and service costs.

Cleaning: This is limited to removing the build up of paper dust with an airline on a regular basis.

Lubrication: Ensure the Stacker Guide Rails are greased regularly.

RENEWAL PROCEDURES

Main Drive Belt (Fig 3.0)

- Remove Control Compartment Door using the key provided
- Using a 5mm Allen key, loosen the x4off M6 socket head screws holding the motor in place.
- Loosen the motor assembly and remove and replace the drive belt.
- Adjust the belt tension by moving the drive motor assembly up and down.
- When the correct tension is achieved, tighten all drive motor screws.
- Replace Control Compartment Door.

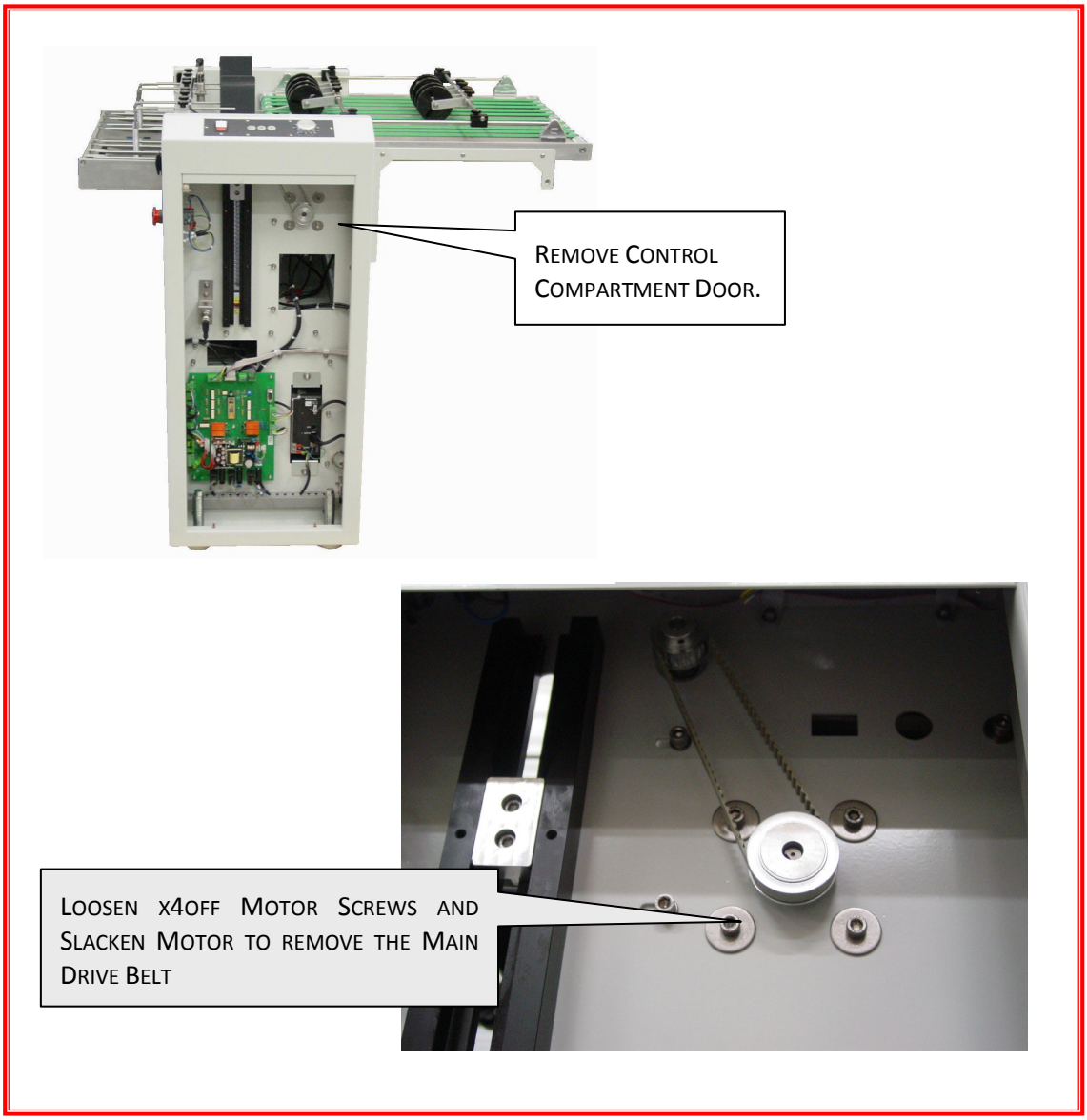
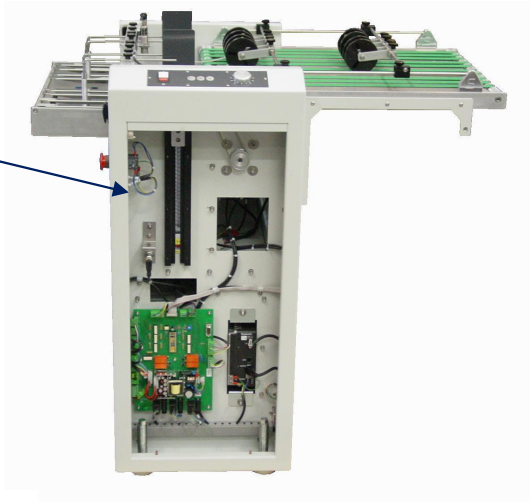


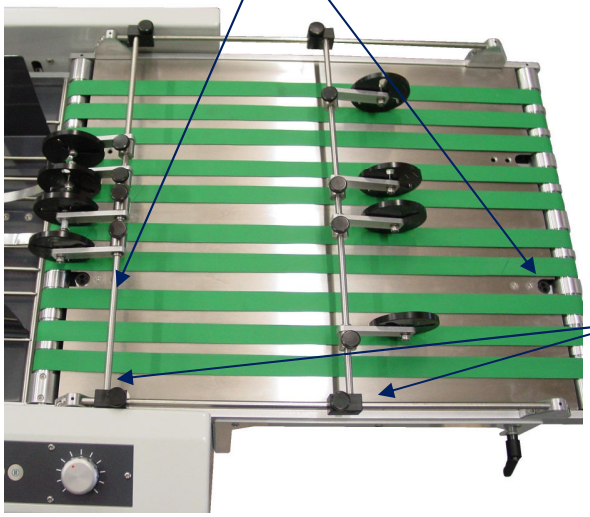
Fig 3.0 Replacing the Main Drive Belt

Replacement of Infeed Conveyor Belts (Fig 3.1, 3.2, 3.3)

REMOVE BOTH CABINET DOORS USING THE KEY PROVIDED.



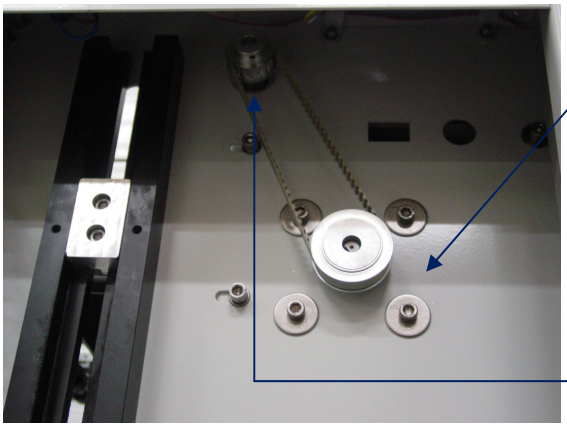
DISCONNECT BOTH FRONT AND REAR INFEED CONVEYOR SENSOR CABLES



REMOVE BOTH FRONT AND REAR INFEED CONVEYOR ENTRAPMENT WHEEL ASSEMBLIES BY LOOSENING THE RETAINING SCREWS IN THE SLIDING PIECES.

SLACKEN OFF OR CUT THE OLD INFEED CONVEYOR BELTS TO RELEASE THE TENSION ON THE DRIVE ROLLERS.

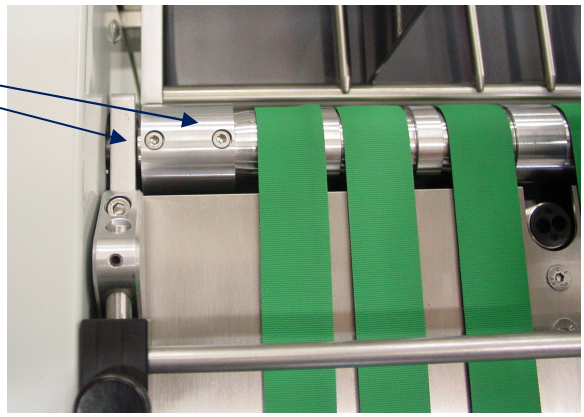
Fig 3.1 Replacement of Conveyor Belts

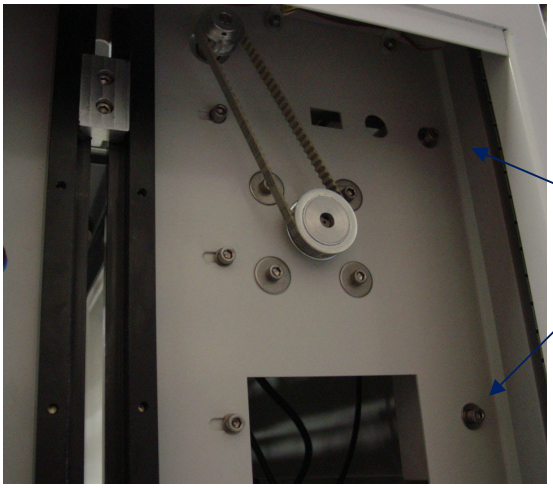


LOOSEN X4OFF MOTOR SCREWS AND SLACKEN MOTOR TO REMOVE THE MAIN DRIVE BELT.

LOOSEN THE DRIVE PULLEY FIXING SCREWS AND REMOVE PULLEY FROM DRIVE SHAFT.

REMOVE X2OFF DRIVE SHAFT RETAINING SCREWS AND REMOVE ROLLER DRIVE SHAFT.

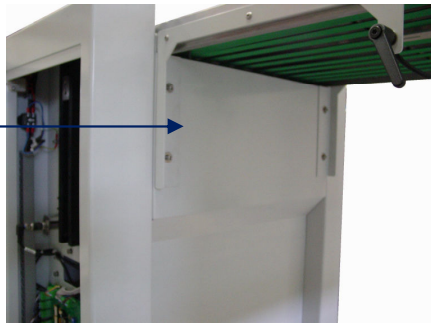




REMOVE X4OFF INFEED CONVEYOR FIXING SCREWS (X2OFF IN EACH SIDE) AND CAREFULLY REMOVE THE INFEED CONVEYOR ASSEMBLY.

Fig 3.2 Replacement of Conveyor Belts

REMOVE THE MOUNTING FRAME FROM THE INFEED CONVEYOR BED.



REMOVE THE OLD BELTS AND LOOSELY FIT THE NEW ONES.

ONCE THE NEW BELTS HAVE BEEN LOOSELY FITTED, REASSEMBLE THE INFEED CONVEYOR ASSEMBLY USING FIG 3.1, 3.2 + 3.3 IN REVERSE ORDER

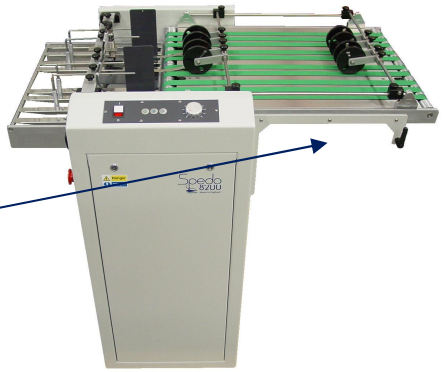


Fig 3.3 Replacement of Conveyor Belts

ELECTRICAL SCHEMATICS