Spedo Conveyor Stacker 8500

Instruction Manual

Issue 2

Spedo UK Limited
76 Woolmer Way
Bordon
Hampshire
GU35 9QF
ENGLAND

Telephone: +44 (0) 1420 487 447
Fax: +44 (0) 1420 477 827
Email: spedo@spedouk.com
Web: www.spedouk.com

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History Sheet

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2	May 2015	Changed Format

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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.

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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.

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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 Conveyor Stacker 8500

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GENERAL DESCRIPTION SECTION 1

INTRODUCTION

Conveyor Stacker 8500 (Fig 1.1) is designed to operate with most types of guillotines, bursters, conveying/inkjet systems and sheet feeders. The speed can be varied to match on-line operation, as can the height of the machine bed.

Fig 1.1 8500 Conveyor Stacker

The conveyor stacker can be operated in step mode under optical sensor control or in step/stream mode for batching or continuous feed.

OPERATION WITH AN ANCILLARY UNIT

When fed from a cutter or burster, the conveyor stacker accepts paper in whatever sequence has been set up at the ancillary unit.

In continuous mode, if the in-feed of paper is in batches, the amount of space between batches is governed by the speed of the belts.

In *Batch Mode the conveyer is able to boost the forms while the input device is still running. This allows for batching without a reduction in productivity.

*Batch Mode available as an option fitted during manufacture

8500 Conveyor 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

Speed:

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

Power Requirements:

230 V +/- 10%

92 Watts

50 Hz to 60Hz

Noise Emissions:

57dB

Dimensions (approx):

Length: 1880mm

Width: 690mm

Height: 940 – 1000mm (Adjustable)

Weight (approx):

50kg

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.
  - Height Adjustable Legs.
  - Standard Vertical Stacking Tray.
  - 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.

Fitting the Height Adjustable Legs:

- Fit the front leg assembly to the fixings provided, ensure that the leg assembly is free to slide up and down with the locking levers released.
- Slide the legs down so they are in the lowest position and lock in to place using the locking levers.

Fig 1.2 Fitting the front leg assembly.

- Fit the rear legs using the fixings provided, ensuring they are both square to the conveyor frame.

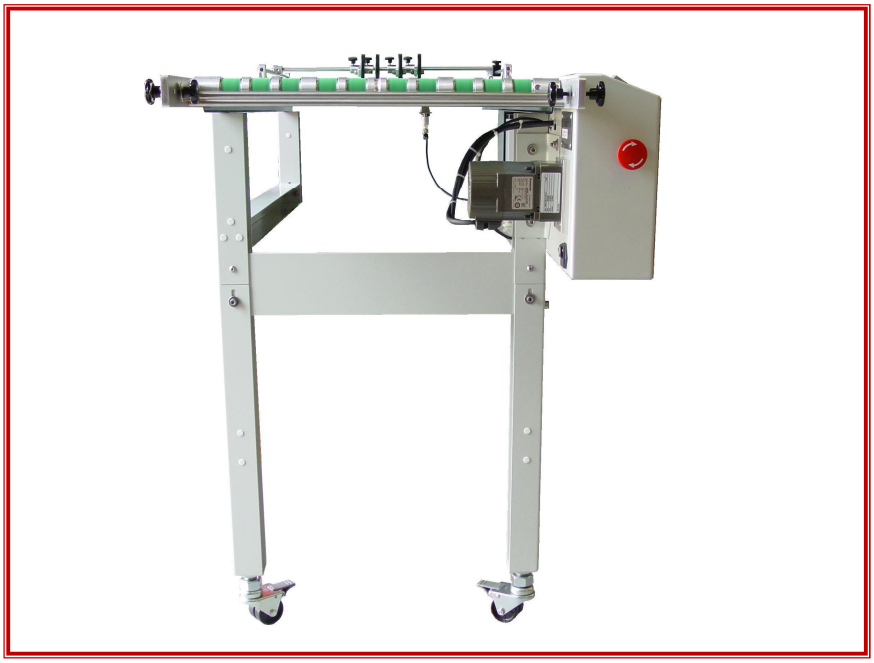


Fig 1.3 Fitting the rear legs.

Installation:

- WARNING: Never operate the conveyor 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.
- Position the conveyor stacker such that it is square on to the preceding ancillary unit. Lock the unit into position by engaging the brakes on the locking casters.
- To adjust the conveyor height, first release the adjustable caster locking nut, then use a 17mm socket to raise or lower the conveyor to the required height as shown. Finally tighten the adjustable caster locking nut to ensure the legs are secure.
- Plug in the mains power and interface cables provided, and connect to input device.

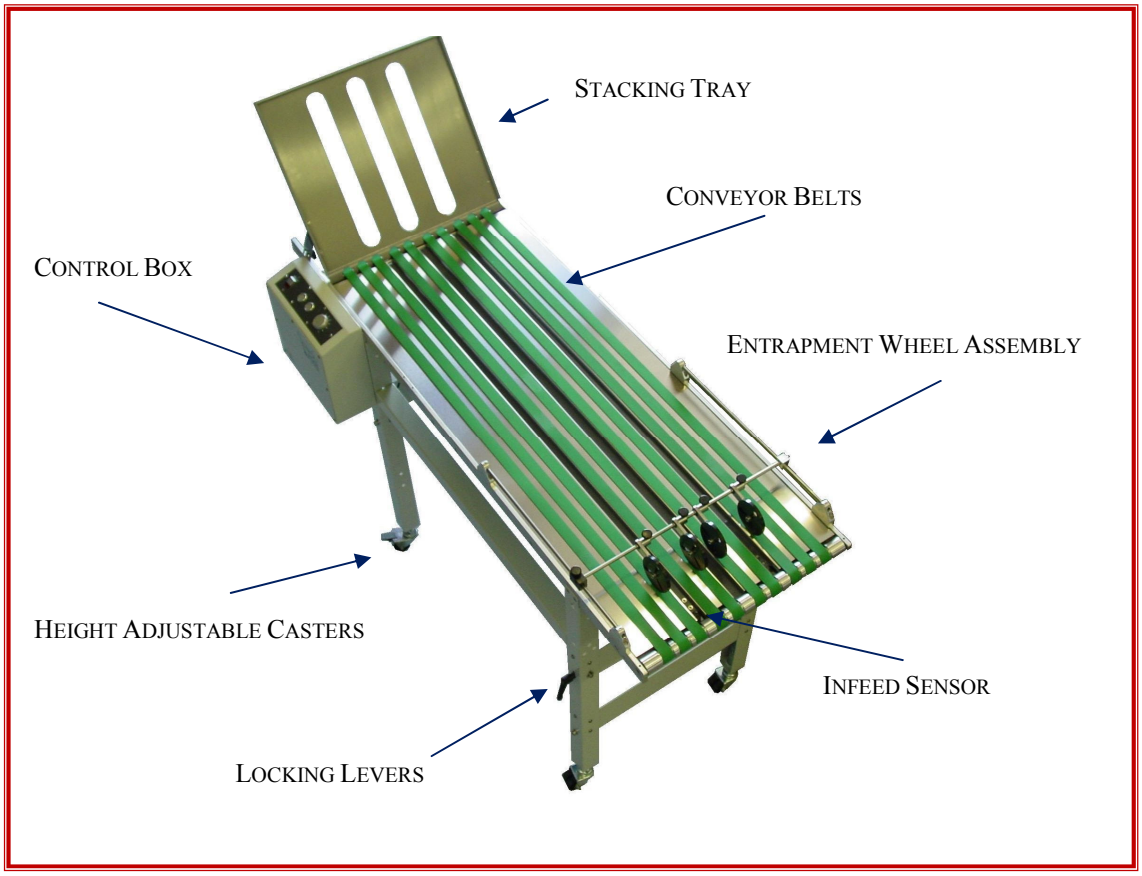


Fig 1.4 Identification of Main Assemblies

Operator Controls (Standard)

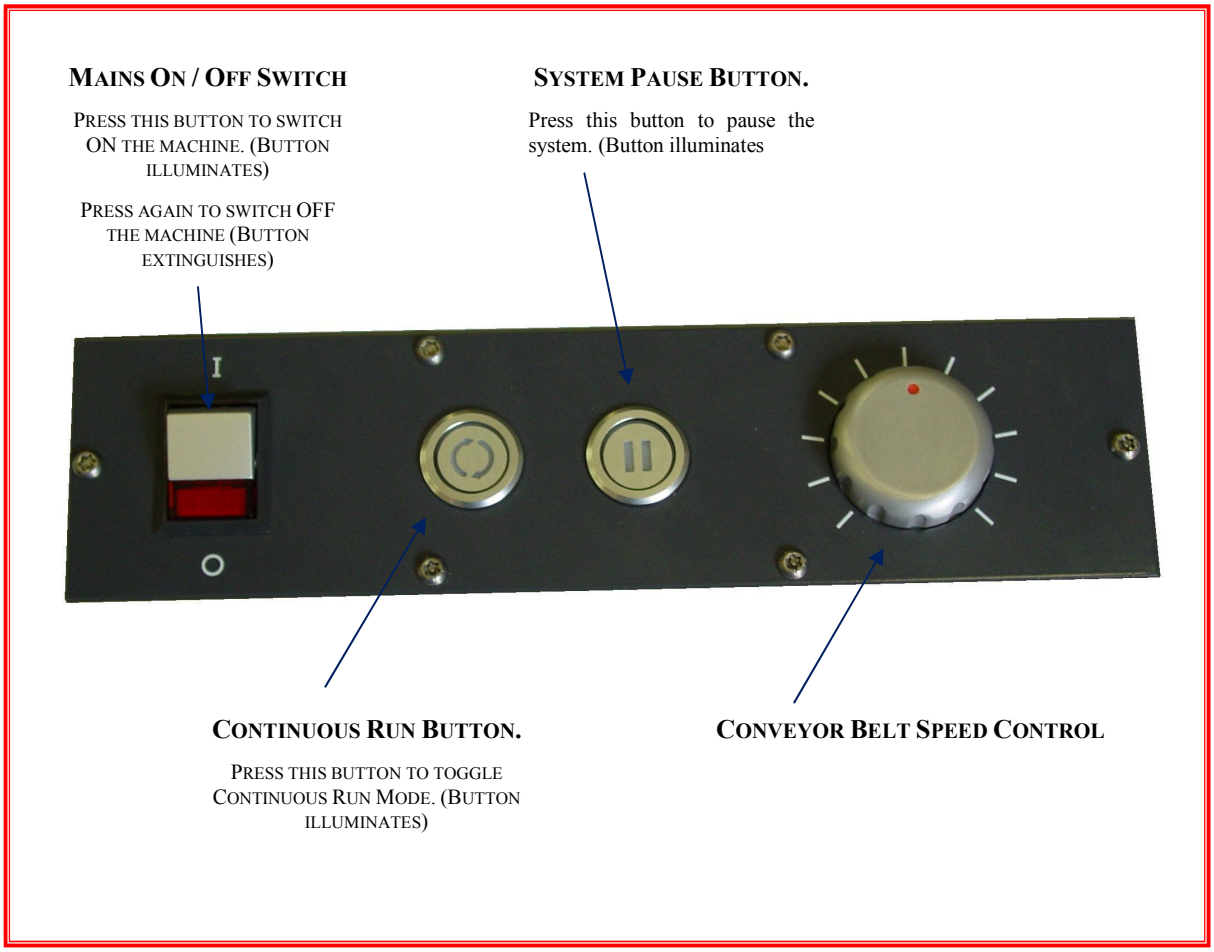


Fig 1.5 Identification of Controls

Switch ON and check that the ON:OFF switch illuminates (Fig 1.5).

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

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

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

Operator Controls (Enhanced)

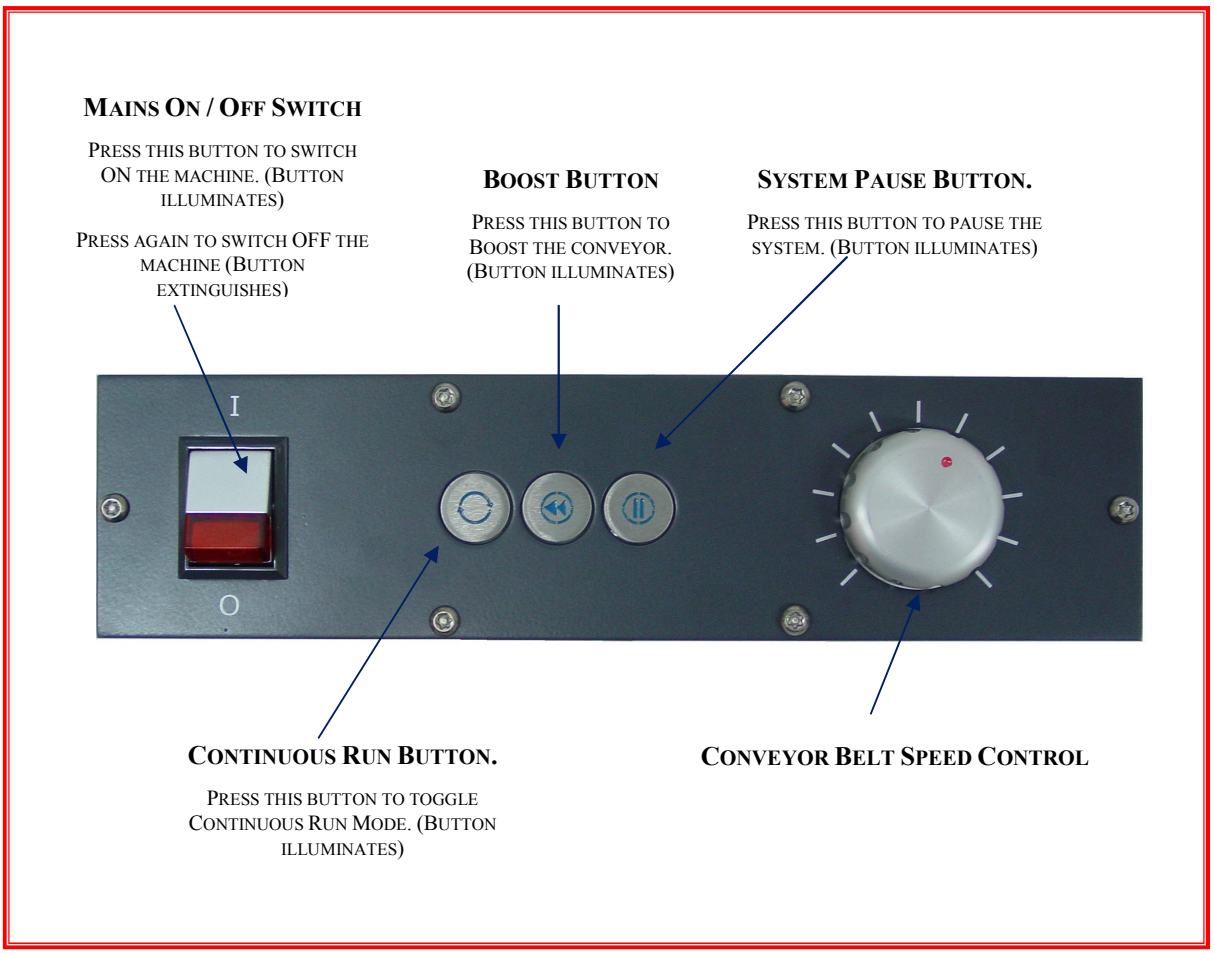


Fig 1.6 Identification of Controls

Switch ON and check that the ON:OFF switch illuminates (Fig 1.6).

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

Press BOOST button, check conveyor moves at maximum speed. Release button and the 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 conveyor runs. Uncover the sensors and check that the conveyor stops.

Setting Entrapment Wheels:

Feed one form onto the conveyor and set the entrapment wheels as follows. Unclamp each entrapment wheel by loosening each thumbwheel (Fig 1.7). 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.

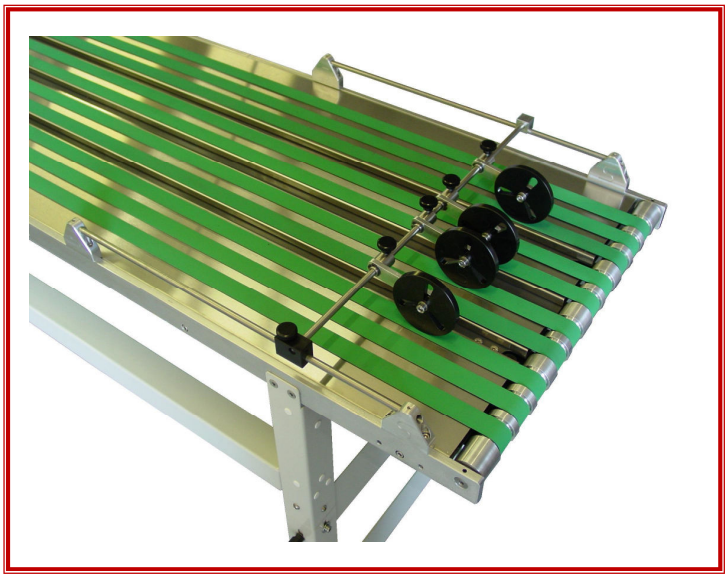


Fig 1.7 Entrapment Wheels and Thumbscrews

Operating Height Adjustment:

The operating height of the conveyor bed and be adjusted if required. Release the locking leavers on either side of the conveyor legs (Fig1.8). Once release the conveyor bed assembly can be raised to the required height. Once in position re-tighten locking leavers.

NOTE: The conveyor bed must be in the bottom position is unit is to be moved.

Fig 1.8 Releasing the conveyor height locking levers.

Stacking Options

Standard Vertical Stacking

The standard stacking tray (Part No. SP 007 134) can be used to stack the processed forms vertically. This is useful when processing short batches of forms or cheques and vouchers which are more manageable when stacked in this way.

Fig 1.9 Standard Vertical Stacking

Optional Downward Stacking

The optional Downward Stacking Tray (Part No. SP 007 144) can be used to stack the processed forms downwards. This is useful when processing forms up to 14" in larger quantities. Forms which are stacked downwards will be stacked more precisely than vertical stacking, making handling easier.

Fig 2.0 Optional Downward Stacking

OPERATIONAL MAINTENANCE SECTION 3

WARNINGS

Electrical

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

Clothing & Jewellery

Never operate the guillotine 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 Conveyor/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: No lubrication is necessary.

RENEWAL PROCEDURES

Main Drive Belt (Fig 2.1)

- Remove Control Compartment Door.
- 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 Box Cover using x8 M4x12 Torx Screws.

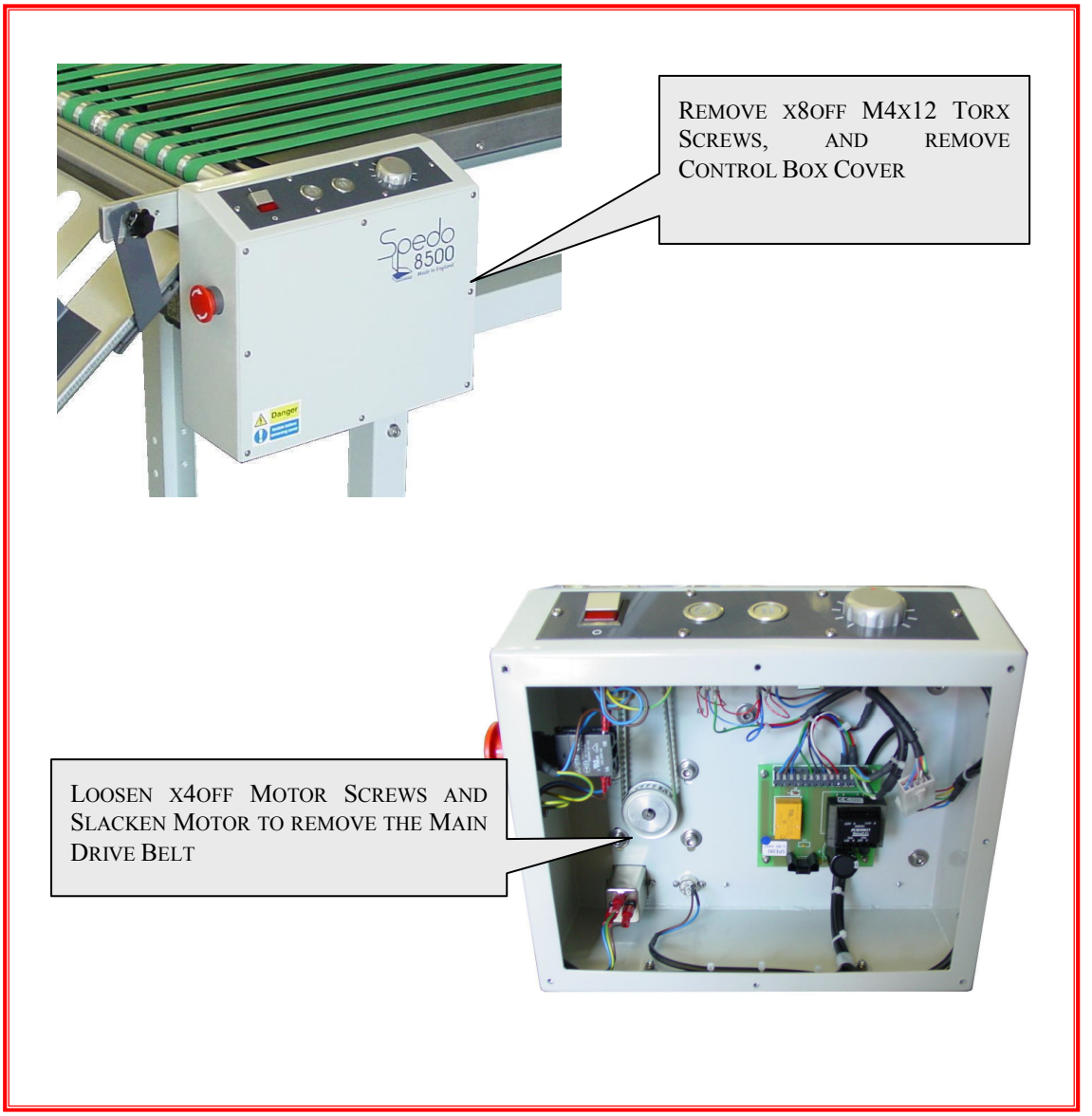


Fig 2.1 Replacing the Main Drive Belt

Conveyor Bed Belts (Fig 2.2)

- Remove the Stacking Tray, if fitted.
- Unscrew and remove both infeed sensor cables.
- Remove the main drive belt as shown in Fig 2.1.
- Remove the Roller Drive Pulley, by loosening the grub screw.
- Remove x3off electrical control box retaining screws and carefully remove control box.
- Remove x2off down stack retaining bars.
- Remove x8off conveyor bed retaining screws and carefully lift the conveyor bed from the frame assembly.
- Remove and replace Conveyor Bed Belts.
- Re-assemble the Conveyor Bed in the reverse to the procedure given above.

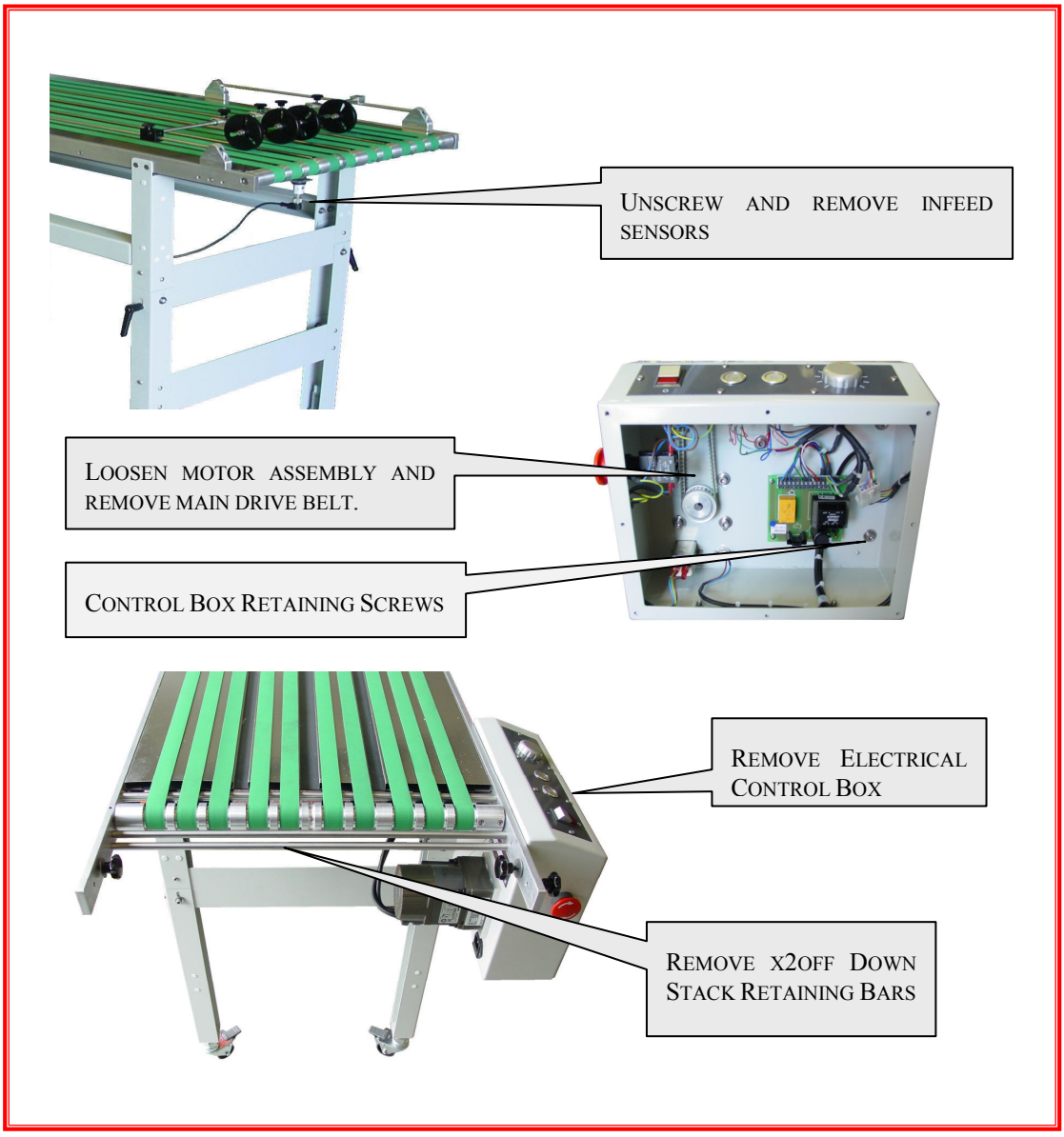
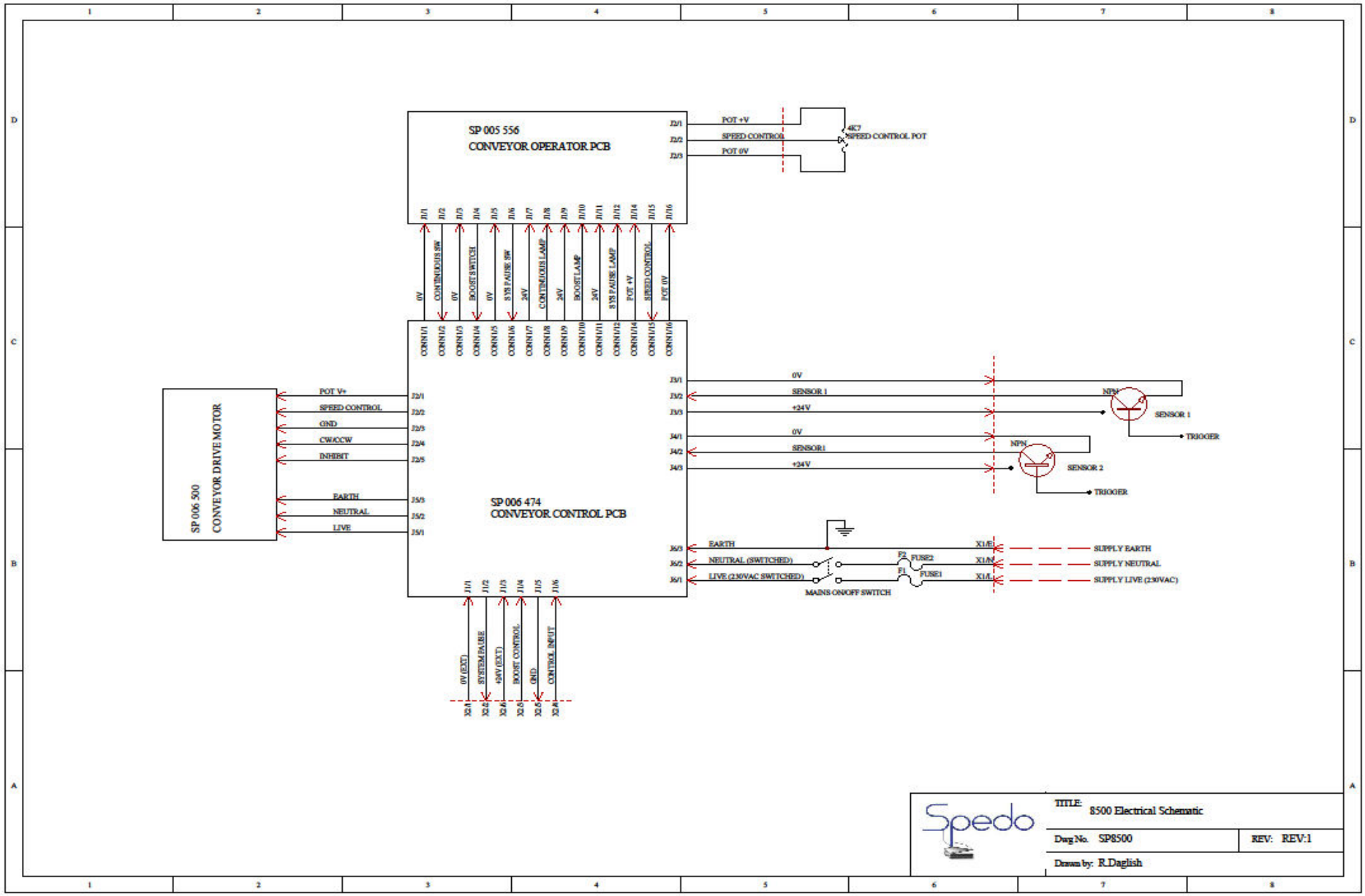
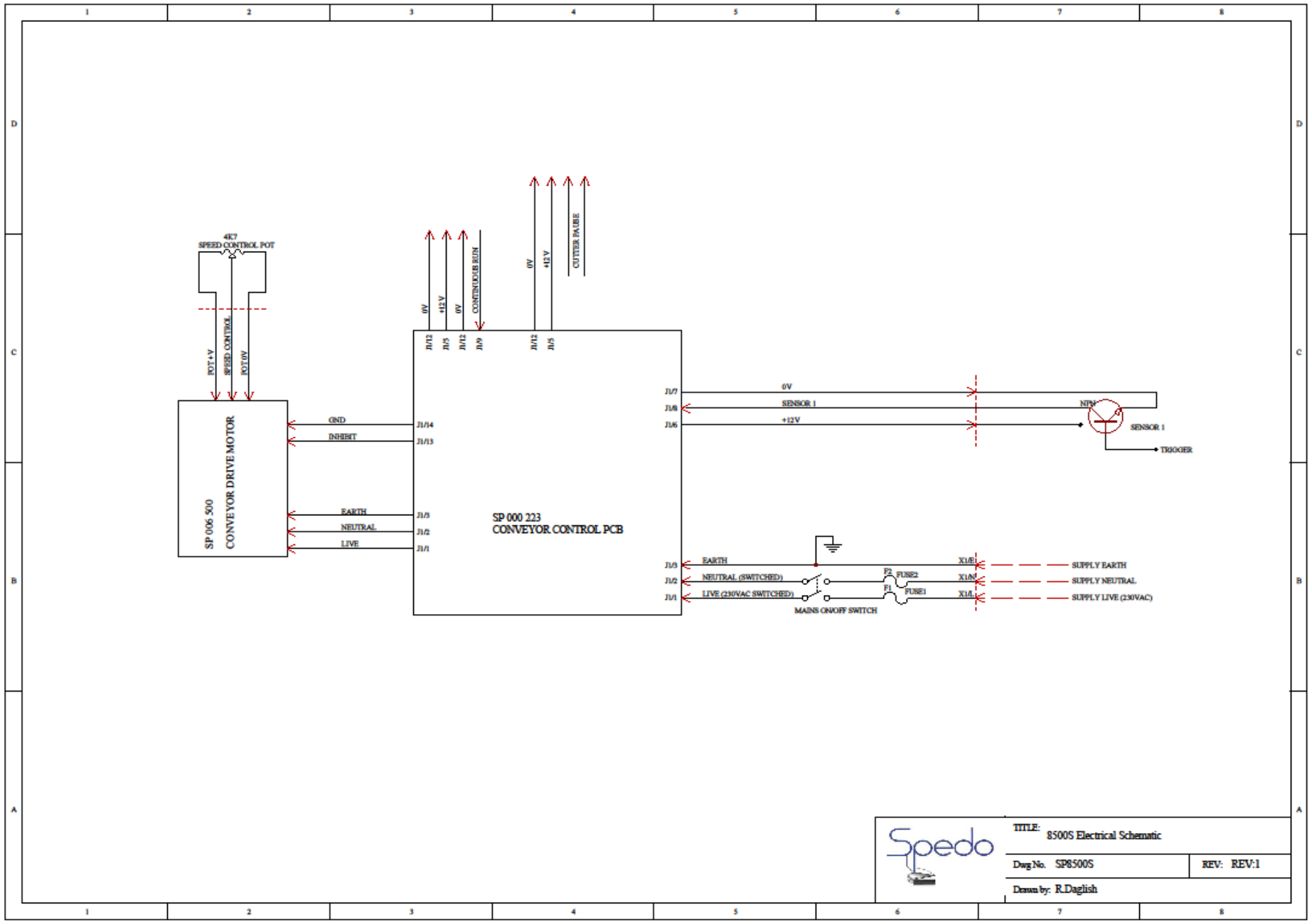


Fig 2.2 Replacement of Conveyor Bed Belts


SP 005 556
CONVEYOR OPERATOR PCB
POT +V
SPEED CONTROL
POT 0V
4K7
SPEED CONTROL POT
0V
CONTINUOUS SW
BOOST SWITCH
0V
STS FAUSE SW
24V
CONTINUOUS LAMP
24V
BOOST LAMP
24V
STS FAUSE LAMP
POT +V
SPEED CONTROL
POT 0V
SP 006 500
CONVEYOR DRIVE MOTOR
POT V+
SPEED CONTROL
GND
CW/CCW
INHIBIT
EARTH
NEUTRAL
LIVE
SP 006 474
CONVEYOR CONTROL PCB
0V
SENSOR 1
+24V
NPN
SENSOR 1
TRIGGER
0V
SENSOR1
+24V
NPN
SENSOR 2
TRIGGER
EARTH
NEUTRAL (SWITCHED)
LIVE (230VAC SWITCHED)
MAINS ON/OFF SWITCH
FUSE2
FUSE1
SUPPLY EARTH
SUPPLY NEUTRAL
SUPPLY LIVE (230VAC)
0V (EXT)
SYSTEM FAUSE
+24V (EXT)
BOOST CONTROL
GND
CONTROL INPUT
Spedo
TITLE: 8500 Electrical Schematic
Dwg No. SP8500
REV: REV:1
Drawn by: R.Daglish


4K7
SPEED CONTROL POT
POT +V
SPEED CONTROL
POT 0V
SP 006 500
CONVEYOR DRIVE MOTOR
GND
INHIBIT
EARTH
NEUTRAL
LIVE
J1/14
J1/13
J1/3
J1/2
J1/1
0V
+12 V
0V
CONTINUOUS RUN
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J1/5
J1/12
J1/9
0V
+12 V
CUTTER FAIRIE
J1/12
J1/5
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J1/8
J1/6
0V
SENSOR 1
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NPN
SENSOR 1
TRIGGER
J1/3
J1/2
J1/1
EARTH
NEUTRAL (SWITCHED)
LIVE (230VAC SWITCHED)
MAINS ON/OFF SWITCH
F2
FUSE2
F1
FUSE1
X1/E
X1/N
X1/L
SUPPLY EARTH
SUPPLY NEUTRAL
SUPPLY LIVE (230VAC)
Spedo
TITLE:
8500S Electrical Schematic
Dwg No. SP8500S
REV: REV:1
Drawn by: R.Daglish