INSTRUCTIONS FOR:

POWER BELT SANDER

MODEL NO: **SM100**

Thank you for purchasing a Sealey product. Manufactured to a high standard this product will, if used according to these instructions and properly maintained, give you years of trouble free performance.

⚠ ***IMPORTANT*: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS, AND CAUTIONS. USE THIS PRODUCT CORRECTLY, AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY.**

1. SAFETY INSTRUCTIONS

1.1 **ELECTRICAL SAFETY**

❒ **WARNING!** It is the responsibility of the owner and the operator to read, understand and comply with the following:
You must check all electrical products, before use, to ensure that they are safe. You must inspect power cables, plugs, sockets and any other connectors for wear or damage. You must ensure that the risk of electric shock is minimised by the installation of appropriate safety devices. A Residual Current Circuit Breaker (RCCB) should be incorporated in the main distribution board. We also recommend that a Residual Current Device (RCD) is used. It is particularly important to use an RCD with portable products that are plugged into a supply which is not protected by an RCCB. If in any doubt consult a qualified electrician. You may obtain a Residual Current Device by contacting your Sealey dealer.
You must also read and understand the following instructions concerning electrical safety.

1.1.1 The Electricity at Work Act 1989 requires that all portable electrical appliances, if used on business premises, are tested by a qualified electrician, using a Portable Appliance Tester (PAT), at least once a year.

1.1.2 The Health & Safety at Work Act 1974 makes owners of electrical appliances responsible for the safe condition of those appliances and the safety of the appliance operators. If in any doubt about electrical safety, contact a qualified electrician.

1.1.3 Ensure that the insulation on all cables and on the appliance is safe before connecting it to the power supply. See 1.1.1 and 1.1.2 and use a Portable Appliance Tester.

1.1.4 Ensure that cables are always protected against short circuit and overload.

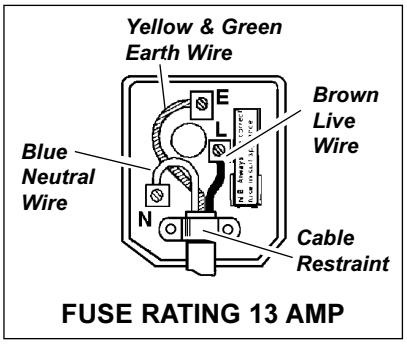
1.1.5 Regularly inspect power supply cables and plugs for wear or damage and check all connections to ensure that none is loose.

1.1.6 Important: Ensure that the voltage marked on the appliance matches the power supply to be used and that the plug is fitted with the correct fuse - see fuse rating at right.

1.1.7 DO NOT pull or carry the appliance by the power cable.

1.1.8 DO NOT pull the plug from the socket by the cable.

1.1.9 DO NOT use worn or damaged cables, plugs or connectors. Immediately have any faulty item repaired or replaced by a qualified electrician. When a BS 1363/A UK 3 pin plug is damaged, cut the cable just above the plug and dispose of the plug safely.
Fit a new plug according to the following instructions (UK only).
a) Connect the GREEN/YELLOW earth wire to the earth terminal 'E'.
b) Connect the BROWN live wire to the live terminal 'L'.
c) Connect the BLUE neutral wire to the neutral terminal 'N'.
d) After wiring, check that there are no bare wires, that all wires have been correctly connected, that the cable outer insulation extends beyond the cable restraint and that the restraint is tight. Double insulated products, which are always marked with this symbol ⧈, are fitted with live (brown) and neutral (blue) wires only. To rewire, connect the wires as indicated above - DO NOT connect either wire to the earth terminal.



FUSE RATING 13 AMP

1.1.10 Products which require more than 13 amps are supplied without a plug. In this case you must contact a qualified electrician to ensure that a suitably rated supply is available. We recommend that you discuss the installation of an industrial round pin plug and socket with your electrician.

1.1.11 If an extension reel is used it should be fully unwound before connection. A reel with an RCD fitted is preferred since any appliance plugged into it will be protected. The cable core section is important and should be at least 1.5mm², but to be absolutely sure that the capacity of the reel is suitable for this product and for others which may be used in the other output sockets, we recommend the use of 2.5mm² section cable.

1.2 GENERAL SAFETY

✓ Disconnect the sander from the mains power before changing accessories, servicing or performing any maintenance.
✓ Maintain sander and belts in good condition. Check moving parts and alignment. If necessary use an authorised service agent.
✓ Replace or repair damaged parts. *Use genuine parts only. Unapproved parts may be dangerous and will invalidate the warranty.*
❒ **WARNING!** Always work with the sander safety guard in place.
✓ Wear approved safety goggles, ear defenders, appropriate dust mask if sander generates dust and safety gloves.
✓ Remove ill fitting clothing. Remove ties, watches, rings, and other loose jewellery, and contain long hair.
✓ Use sander in a suitable work area, keep area clean, tidy and free from unrelated materials, and ensure adequate lighting.
✓ Maintain correct balance and footing. DO NOT over-reach and ensure the floor is not slippery. Wear non-slip shoes.
✓ Check grinding disc to ensure they are not split, cracked or damaged in anyway. See chapter 4. If in doubt to not use the disc.
✓ Grinding discs must be securely attached before use, but not over tightened.
✓ Secure unstable workpiece with a clamp, vice or other adequate holding device, and ensure the sander is gripped with both hands.
✓ Keep non essential persons away from the working area, use screens if necessary.
✗ DO NOT operate the sander if any parts are missing or the sander is damaged.
✗ DO NOT use the sander for a task it was not designed to perform.
✗ DO NOT operate sander where there are flammable liquids or gasses.
❒ **WARNING!** DO NOT grind any materials containing asbestos.
✗ DO NOT get the sander wet or use in damp or wet locations.
✗ DO NOT switch the sander on whilst the belt is in contact with the workpiece.
✗ DO NOT touch the workpiece immediately after grinding as it will be very hot.
✗ DO NOT hold unsecured work in your hand, and DO NOT touch the sanding belt whilst operating, or whilst plugged into the mains power.
✗ DO NOT leave the sander running unattended.
✗ DO NOT operate the sander when you are tired or under the influence of alcohol, drugs or intoxicating medication.
✓ When not in use switch sander off, remove plug from power supply and store in safe, dry, childproof area.

2. DESCRIPTION & SPECIFICATIONS

The SM100 has a heavy cast base with adjustable sanding table. Fitted with magnetic no-volt release switch to prevent accidental starting should the belt jam. Equipped with a quiet and powerful 230V 1Hp motor, the SM100 is suitable for metal and fabrication workshops. An optional floor stand is available.

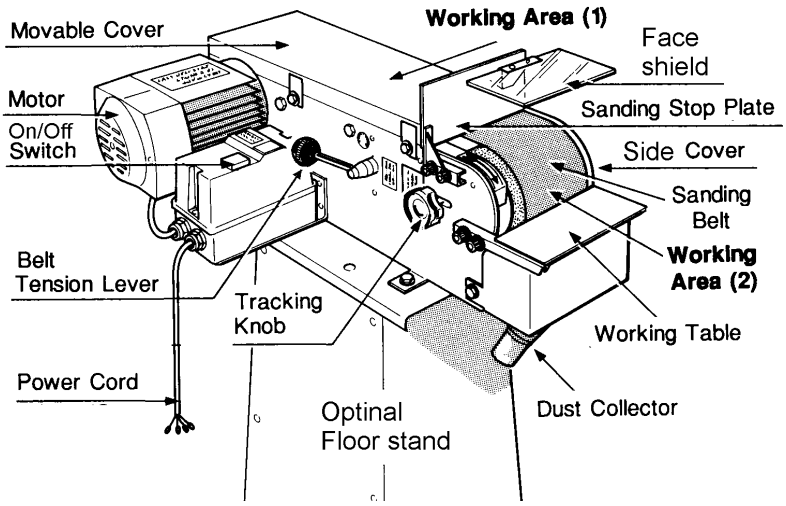
Motor	0.75kW 1Hp
Power	230V - 1ph
Sanding belt	100 x 1220mm
Belt speed	19m/sec (50Hz)
Driving wheel	Ø 126 x 105mm
Flat grinding surface	320 x 105mm
Dimensions (LxWxH)	650x380x260mm
Weight	27.5kg
"A" weighted sound	82.0 dB
"B" weighted sound	81.6 dB

Spare belts available as follows:

SM100/B080G	80 grit sanding belt
SM100/B100G	100 grit sanding belt

Optional stand part number SM100/ST specifications:

Machine height (with stand)	1070mm
Cabinet stand size (LxWxH)	380x395x810mm

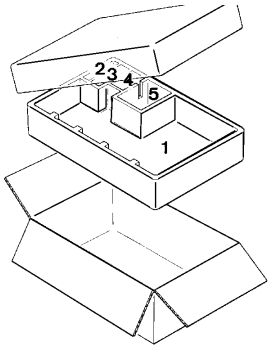


3. PACKAGE CONTENT & ASSEMBLY

3.1. Package content

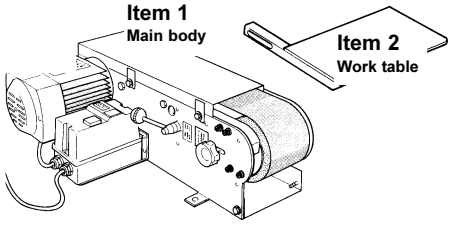
Unpack carton as illustrated below and identify each part according to item description. Should there be any damaged or missing parts contact your supplier immediately.

Carton with item identification

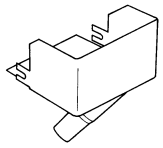


Item 1 Main body

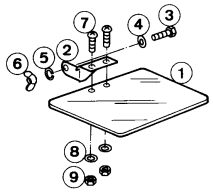
Item 2 Work table



Item 5 Dust cover

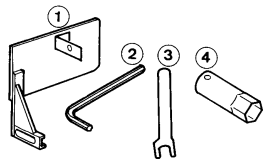


Item 3 Face Shield



No	Description	Qty
1	Face shield	1
2	Support plate	1
3	Hex bolt 1/4" x 1/2"L	1
4	Washer M6 x18x2	1
5	Spring washer 1/4"	1
6	Wing Nut 1/4"	1
7	Screw 3/16 x 7/16"L	2
8	Washer 3/16"x12x0.8	2
9	Hex nut 3/16"	2

Item 4 Sanding stop plate & tools



No	Description	Qty
1	Sanding stop plate	1
2	6mm Hex wrench	1
3	12mm open spanner	1
4	socket wrench	1

3.2 ASSEMBLY

❒ **WARNING!** Ensure sander has not been connected to mains power supply. Refer to diagrams to assist assembly.

3.2.1 TENSION AND SANDING STOP PLATE

The belt tension has been pre-set by the manufacturer. For shipping purposes the manufacturer has slackened the tension by turning the tension lever to the "Loosen" position. To re-tension the belt push the lever down toward the "tighten" position (fig 1). Install the sanding stop plate and ensure that it does not touch the sanding belt see fig 1 & 1a.

3.2.2 WORKING TABLE

Locate working table in correct position (fig 2) Ensure the distance between the working table and the sanding belt is at 3mm (fig 2a).

3.2.3 DUST COLLECTOR

Fit the dust collector unit with washer and bolt on each side (fig 3).

3.2.4 SAFETY FACE SHIELD

Install the face shield and make adjustments to gain the maximum protection (fig 4 & 5).

fig 1

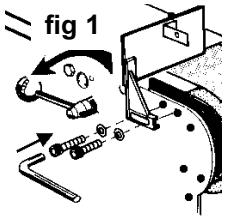


fig 2

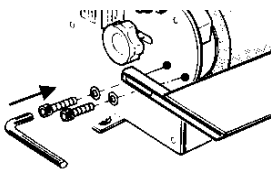


fig 3

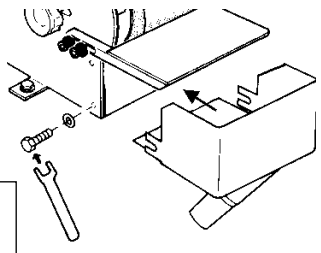


fig 4

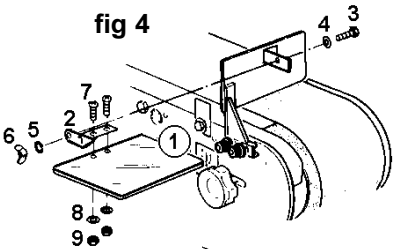


fig 1a

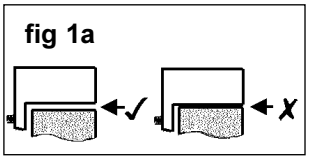


fig 2a

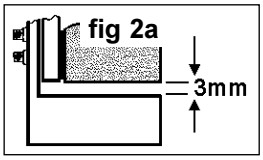
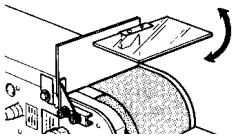


fig 5



4. SANDING BELT ADJUSTMENT

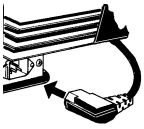
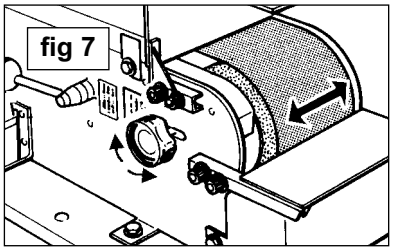


fig 6



4.1 TRACKING ADJUSTMENT

❒ **WARNING!** Ensure mains power lead is unplugged from the mains supply,

4.1.1 Connect the other end of the mains power lead to the sanding machine (fig 6)

4.1.2 Identify the tracking knob (fig 7) each turn of the knob will only render a slight adjustment to the belt tracking.

4.1.3 Rotate the tracking knob clockwise to move the belt to the left and anti-clockwise to move belt to the right.

4.1.4 Rotate the belt by hand whilst turning the tracking knob to effect movement.

4.1.5 To ensure the belt is aligned, connect the machine to the mains power supply, turn the machine "On", and then "Off", whilst adjusting the tracking knob to effect further fine adjustments.
Note: "I" = On. "0" = Off.

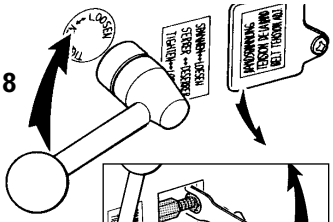


fig 8

4.2 BELT TENSION

❒ **WARNING!** Ensure the sander is switch off and unplugged from the mains power supply.
The belt tension has been pre-set by the manufacturer but will require adjustment after a period of use or when a new belt is fitted.

4.2.1 Locate cover plate to the right of the tension lever. Loosen screw and open the cover plate (fig 8).

4.2.2 Turn the tension lever to "Loosen".

4.2.3 Loosen locking nut (fig 9).

4.2.4 To decrease tension turn adjusting rod upward (fig 10).
To increase the tension turn the adjusting rod downward.

Note: One 360° turn on the adjusting rod will move the belt roller in or out by approximately 2.5mm.
We recommend small adjustments are made by turning the adjusting rod only to the degree that access will allow the spanner to move, and then test the belt tension before making further adjustments.

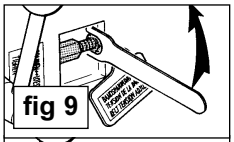


fig 9

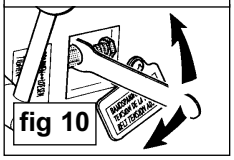


fig 10

4.2.5 When complete tighten the locking nut, close and lock the cover plate in place. Turn the belt tension lever back to the "Tighten" position, and re-check that the belt tracking is correct.

5. OPERATING PRINCIPLE

5.1 GENERAL

5.1.1 Ensure you have read and understood chapter 1 safety instructions.

5.1.2 Double check that the gap between the worktable and the belt is set at no more than 3mm.

5.1.3 Always start the belt first and bring your workpiece to the moving belt.
DO NOT start the belt whilst the workpiece is resting against the abrasive surface.

5.1.4 Check that there are no foreign bodies in the workpiece which could damage the sanding belt or cause a hazard. i.e. nails, screws etc.

5.1.5 We recommend you practice with off-cuts of wood to familiarise yourself with the machines capabilities.

❒ **WARNING!** do not allow your fingers to touch the surface of the moving belt.

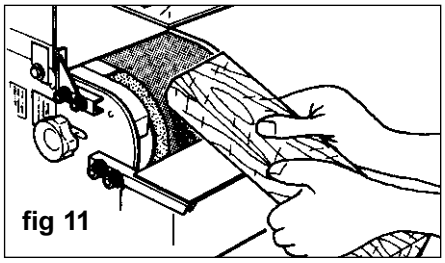


fig 11

5.2 ROLLER-SANDING

To sand work piece on the roller end of machine, position face guard for maximum protection and hold the workpiece firmly by hand whilst using the working table for support (fig 11).

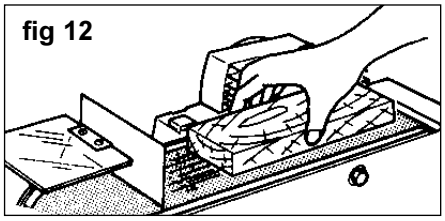


fig 12

5.3 SURFACE SANDING

For sanding a large flat workpiece, remove the belt cover. Hold workpiece on the flat surface of the abrasive belt to complete task (fig12).
Use the stop plate to rest work against.

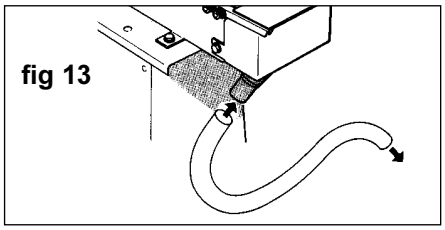


fig 13

5.4 DUST COLLECTOR

The SM100 is equipped with a dust collector provided with a 35mm Ø outlet for connection to your own dust extraction system (fig 13).
❒ **WARNING!** Dust produced by this operation may be hazardous in which case we recommend the use a face or dust mask.

6. MAINTENANCE

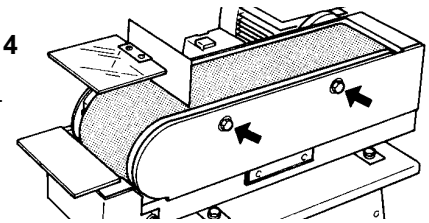


fig 14

❒ **WARNING!** Ensure the sander is switched off and unplugged from the mains power supply.

6.1 OVERLOAD SWITCH

Should the sander motor be overloaded an overload switch will activate cutting the power to the machine. If this happens allow the motor to cool. The overload switch is located on the main contactor underneath the switch cover.

6.2 BELT REPLACEMENT

6.2.1 Turn the belt tension lever to "Loosen".

6.2.2 Remove the two screws in (fig 14), open the belt cover and remove the used belt.

6.2.3 Place the new belt over the end rollers (fig 15).

6.2.4 Re set the belt tension lever by turning it to the "tighten" position.

6.2.5 Rotate the belt by hand whilst checking and adjusting the tracking.

6.2.6 Check and adjust the belt tension accordingly.

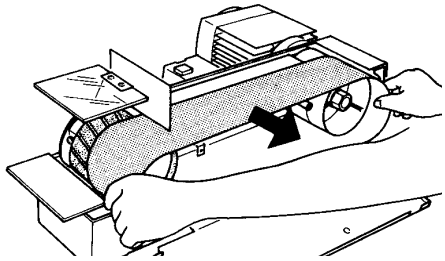


fig 15

❒ **WARNING!** Ensure the sander is switched off and unplugged from the mains power supply.

6.3 PRIME WHEEL REPLACEMENT

6.3.1 Turn the belt tension lever to “Loosen”.
6.3.2 Remove belt cover and remove the belt (fig 16).
6.3.3 Remove motor rear guard (fig 17).
6.3.4 Stop the motor shaft from turning by inserting a screw driver in spindle hole (fig 17).
6.3.5 Place socket wrench (chapter 3 item 4.4) over wheel nut, secure motor spindle whilst loosening nut (fig 18).
6.3.6 Remove retaining nut and draw the prime roller off centre spindle (fig 19) and replace with a new wheel reversing the above process to make ready for use.

fig 16

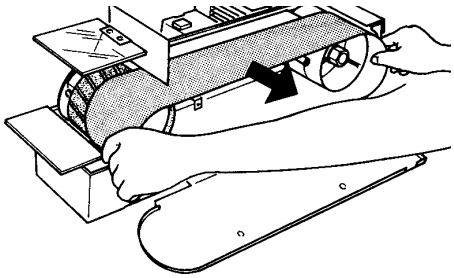


fig 17

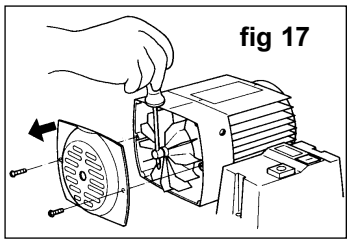


fig 18

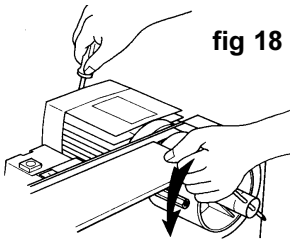
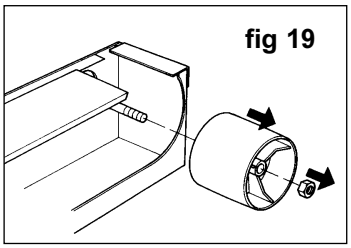


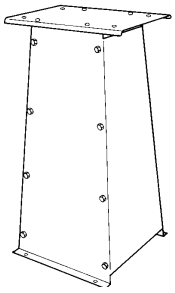
fig 19

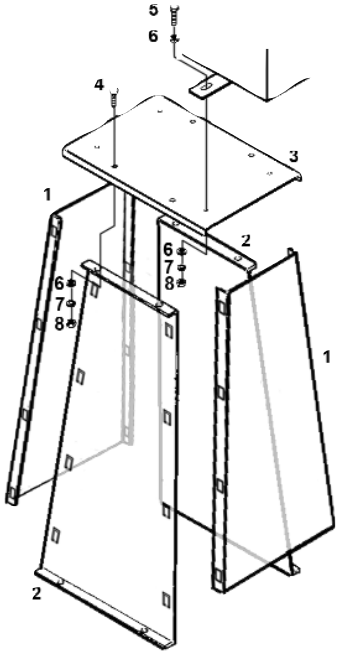


7. OPTIONAL FLOOR STAND

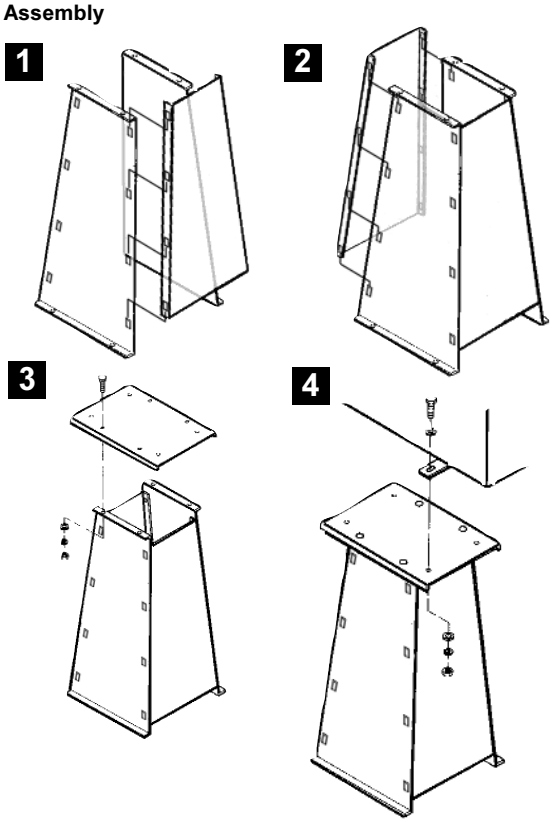
List of contents

No	Description	Qty
1	Stand leg (front & rear)	2
2	Stand leg (left & right)	2
3	Stand Top	1
4	Square neck bolt 5/16”-18NCx5/8”	4
5	Hex bolt 5/16” -NCX3/4”	4
6	Washer 5/16”x23/32Dx1/16”	12
7	Spring washer 5/16”	8
8	Hex nut 5/16” -18NC	8





Assembly



NOTE: *It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.* **IMPORTANT:** No liability is accepted for incorrect use of this equipment. **WARRANTY:** Guarantee is 12 months from purchase date, proof of which will be required for any claim. **INFORMATION:** For a copy of our latest catalogue and promotions call us on 01284 757525 and leave your full name and address, including postcode.

Declaration of Conformity We, the sole importer into the UK, declare that the product listed here is in conformity with the following standards and directives.

POWER BELT SANDER
Model: SM100
98/37/EC Machinery Directive
73/23/EEC Low Voltage Directive
89/336/EEC EMC Directive
93/68/EEC CE Marking Directive

CE The construction file for this product is held by the Manufacturer and may be inspected, by a national authority, upon request to Jack Sealey Ltd.

Signed by Mark Sweetman

28th February 2005

For Jack Sealey Ltd.
Sole importer into the UK
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