INSTRUCTIONS FOR:

THREE WHEEL BANDSAW/DISC SANDER

Model: **SM1214**

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. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.**

1. SAFETY INSTRUCTIONS

1.1. ELECTRICAL SAFETY. ❒ WARNING! It is the user's responsibility to read, understand and comply with the following: You must check all electrical equipment and appliances to ensure they are safe before using. You must inspect power supply leads, plugs and all electrical connections for wear and damage. You must ensure the risk of electric shock is minimised by the installation of appropriate safety devices. An RCCB (Residual Current Circuit Breaker) should be incorporated in the main distribution board. We also recommend that an RCD (Residual Current Device) is used with all electrical products. It is particularly important to use an RCD with portable products that are plugged into an electrical supply not protected by an RCCB. If in 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 all portable electrical appliances, if used on business premises, to be 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 the appliance and the safety of the appliance operator. ***If in any doubt about electrical safety, contact a qualified electrician.***

1.1.3. Ensure the insulation on all cables and the product itself is safe before connecting to the mains power supply. See 1.1.1. & 1.1.2. above and use a Portable Appliance Tester (PAT).

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

1.1.5. Regularly inspect power supply, leads, plugs for wear and damage and all electrical connections to ensure that none is loose.

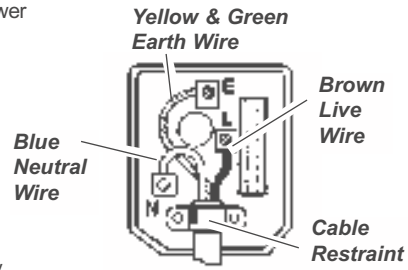
1.1.6. ***Important:*** Ensure the voltage marked on the product is the same as the electrical power supply to be used and check that plugs are fitted with the correct capacity fuse. A 13 amp plug may require a fuse smaller than 13 amps for certain products, see fuse rating at right.

1.1.7. **DO NOT** pull or carry the powered appliance by its power supply lead.

1.1.8. **DO NOT** pull plugs from sockets by the power cable.

1.1.9. **DO NOT** use worn or damaged leads, plugs or connections. Immediately replace or have repaired by a qualified electrician. A U.K. 3 pin plug with ASTA/BS approval is fitted. In case of damage, cut off and fit a new plug according to the following instructions (discard old plug safely).
(UK only - see diagram at right). ***Ensure the unit is correctly earthed via a three-pin plug.***

a) Connect the GREEN/YELLOW earth wire to the earth terminal 'E'.
b) Connect the BROWN live wire to live terminal 'L'.
c) Connect the BLUE neutral wire to the neutral terminal 'N'.
b) After wiring, check that there are no bare wires, that all wires have been correctly connected, that cable outer insulation extends beyond the cable restraint and that the restraint is tight.



FUSE RATING
THIS PRODUCT MUST BE FITTED WITH A
5 AMP FUSE

Double insulated products are fitted with live (BROWN) and neutral (BLUE) wires only. Double insulated products are always marked with this symbol ⧈. ***To re-wire, connect the brown & blue wires as indicated above. DO NOT*** *connect the brown or blue to the earth terminal.*

1.1.10. Some products require more than a 13 amp electrical supply. In such a case, *NO* plug will be fitted. ***You must*** contact a qualified electrician to ensure a 30 amp fused supply is available. We recommend you discuss the installation of a industrial round pin plug and socket with your electrician.

1.1.11. **Cable extension reels**. When a cable extension reel is used it should be fully unwound before connection. A cable reel with an RCD fitted is recommended since any product which is plugged into the cable reel will be protected. The section of the cores of the cable is important. We suggest 1.5mm² section as a minimum but to be absolutely sure that the capacity of the cable reel is suitable for this product and for others that may be used in the other output sockets, we recommend the use of 2.5mm² section cable.

1.2. GENERAL SAFETY

❒ ***WARNING!*** Disconnect the saw from the mains power before changing saw blades and accessories, servicing or performing maintenance.
✓ Mount the saw on a secure surface such as a work table or workbench. Keep area clean and tidy and free from unrelated materials and ensure that there is adequate lighting.
✓ Maintain the saw in good condition (use authorised service agent only).
✓ Replace or repair damaged parts. *Use recommended parts only. Unauthorised parts may be dangerous and will invalidate the warranty.*
✓ Keep machine clean and blade sharp for best and safest performance. Check moving parts alignment regularly.
✓ Before each use check saw blade condition. If worn or damaged replace immediately.
✓ Place the blade guard to within 3mm (1/8") of the material being cut.
❒ **WARNING!** Keep all safety guards and holding screws in place, tight and in good working order. Check regularly for damaged parts. A guard or any other part that is damaged should be repaired or replaced before the saw is next used. The safety guard is a mandatory fitting.
✓ Remove adjusting keys and wrenches from the saw before turning it on.
✓ Wear approved safety eye protection, ear defenders, safety gloves and, if dust is generated, respiratory protection.
✓ Remove ill fitting clothing. Remove ties, watches, rings and other loose jewellery and contain long hair.
✓ Maintain correct balance and footing. Ensure floor is not slippery and wear non-slip shoes.
✓ Keep children and unauthorised persons away from the work area.
✓ Secure an unstable workpiece with a clamp, vice or other adequate holding device.
✓ Avoid unintentional starting.
✓ Keep hands and fingers a safe distance from saw blade, especially at the end of a cut. Guide the work with a push stick rather than your fingers when cutting small pieces.

1.2. GENERAL SAFETY Continued

✓ Disconnect the saw from the power supply before removing wood chips or dust.
✓ Use a workpiece support when sawing material which extends beyond the saw table.
✗ **DO NOT** operate the machine if damaged.
✗ **DO NOT** operate the machine if any parts are missing as this may cause machine failure and/or personal injury.
✗ **DO NOT** use saw blades which are damaged or deformed. Use only Sealey blades and spare parts. Non-standard blades can be dangerous.
✗ **DO NOT** use as a saw unless the sanding disc guard is in place.
✗ **DO NOT** use the sander without the sanding table attached.
✗ **DO NOT** get the saw wet or use in damp or wet locations or areas where there is condensation and **do not** wet the sanding abrasive.
✗ **DO NOT** expose the saw housing to flame or high temperature.
✗ **DO NOT** allow untrained persons to operate the saw.
✗ **DO NOT** use saw where there are flammable liquids, solids or gases such as paint solvents and including waste wipers and cleaning rags.
✗ **DO NOT** leave the saw operating unattended.
✗ **DO NOT** operate the saw when you are tired or under the influence of alcohol, drugs or intoxicating medication.
✗ **DO NOT** saw or sand materials containing asbestos.
✗ **DO NOT** use the saw for a task it is not designed to perform.
✓ When not in use switch off the saw and unplug from the mains power.

2. DESCRIPTION & SPECIFICATION

The SM1214 is fully approved to CE regulations. Fitted with powerful induction motor and features ball bearing type blade guides for precision cutting. Fully guarded blade wheels. Integral sanding disc and sanding table. Both tables can be adjusted for angled cutting and sanding. Mitre gauge included fits both tables. No-volt release switch prevents uncontrolled re-start after power interruption. Suitable for cutting wood, plastics and thin metal sheet.

Motor Power	.375W
Power Supply	.230V.AC. - 1ph
Throat Depth	.360mm
Max. Cutting Height	.145mm
Cutting Speed	.160, 750, 1200m/min
Blade Length	.1784mm
Saw Table Size	400 x 400mm
Saw Table Adjustment	0 to 45°
Sanding Disc	Ø150mm
Disc Speed	1720rpm
Sanding Table Adjustment	0 to 45°
Dust Extraction Port	Ø50mm
Weight	30kg

3. ASSEMBLY

Unpack the saw and check contents for damage. Should there be any damaged or missing parts contact your supplier immediately.

Package content: Bandsaw, Saw Table, Sanding Table with Mounting Rod and Clamp Knob, Mitre Gauge, Fence, Sanding Belt, Sanding Disc, Circle Cutting Attachment, Locking Screw x 2, Washer, Sanding Belt Stop x 2, Hex. Wrench x 2.

3.1. Assembly

3.1.1. Remove the table aligning screw and clamp from the underside of the table (fig. 2).
3.1.2. Remove the table lock knob, spring and spring bush from the table support rod (fig. 3).
3.1.3. Place the saw table onto the saw frame with the saw blade passing through the slot in the table. The table support rod goes through the curved slot in the tilt indicator, under the table.
3.1.4. Re-fit the spring bush, spring and knob to the table support rod.
3.1.5. Re-fit the table aligning screw and clamp.
3.1.6. Using a set square, position table at right angles to the blade and then adjust pointer to align with 0° on table scale.
3.1.7. **Important!** Bolt saw to a firm, stable work surface capable of supporting the saw and any workpiece. **DO NOT** attempt to use the saw as a free-standing unit as it may topple over during use and cause damage and/or personal injury.
3.1.8. Connect extraction port (fig. 1.A) to dust extractor system (if available).

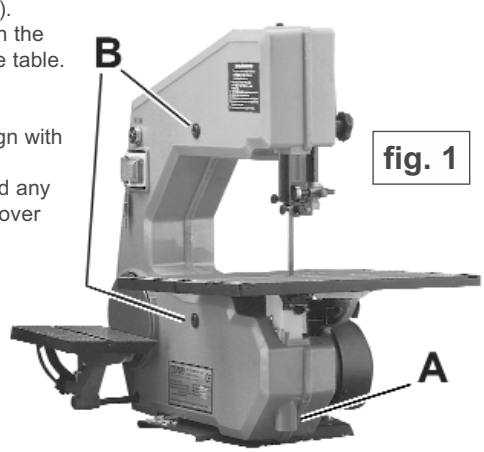


fig. 1

4. ADJUSTMENTS

❐ **WARNING! ENSURE THE BANDSAW IS DISCONNECTED FROM THE MAINS POWER SUPPLY BEFORE ATTEMPTING ANY ADJUSTMENTS.**

4.1. Changing the blade

4.1.1. Remove the saw table, and the sanding table, if installed.
4.1.2. Unscrew the two front cover retainers (fig. 1.B) and remove the cover.
4.1.3. Remove the two retaining screws (fig. 5.1) and lift off the upper blade guard (fig. 5.2).
4.1.4. Loosen the upper and lower blade guide locking screws (upper shown, fig. 4.1) and move the guides (fig. 4.2) away from the blade.
4.1.5. Loosen the locking screws (upper shown, fig. 4.3) and move the upper and lower support bearings (upper shown, fig. 4.4) away from the blade.

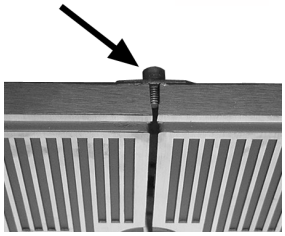


fig. 2

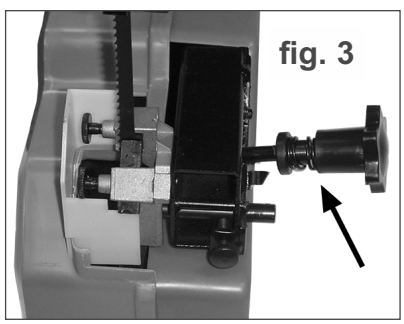


fig. 3

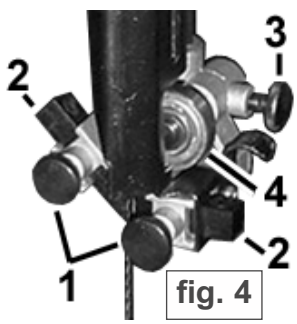


fig. 4

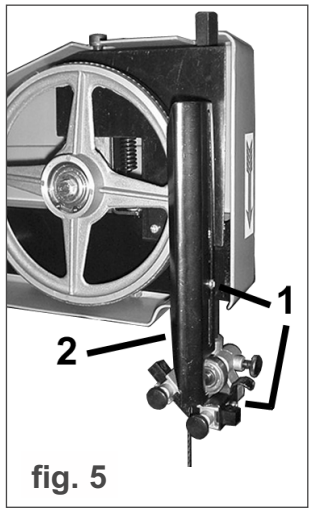


fig. 5

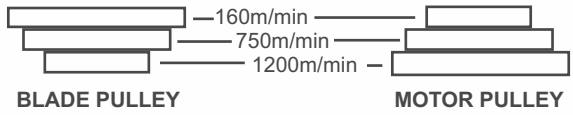
4.1.6. Turn the blade tension screw (fig. 6.1) anticlockwise to remove the tension and then carefully remove the blade.
4.1.7. Install the new blade. Be sure the teeth are pointing down in the cutting area.
4.1.8. To give the correct blade tension, turn the blade tension screw clockwise until you can no longer feel the spring load on the screw.
4.1.9. Rotate the upper wheel by hand - take care - to check that the blade runs in the centres of the three wheels. Adjust, if necessary, the tracking screw (fig. 6.2).
4.1.10. Adjust the top and bottom support bearings so that they just touch the back of the blade and lock in place.
4.1.11. Adjust the four blade guides so that there is a gap of approximately 1mm between each guide and the blade. Lock in place.
4.1.12. Reinstall the upper blade guard. Note that the guard slides behind the head of the upper screw during vertical adjustment of the upper guide and therefore the screw should not be tightened.
4.1.13. Refit the table and the front cover.

4.2. Upper blade guide position

4.2.1. The upper blade guide should always be adjusted to about 3mm (1/8") above workpiece. To adjust, loosen the adjusting knob (fig. 6.3) and slide the assembly to the required position. Tighten adjusting knob.

4.3. Blade speed

4.3.1. Unscrew the two front cover retainers (fig. 1.B) and remove the front cover.
4.3.2. Move the belt to the required position, see diagram.
4.3.3. Replace the front cover.



4.4. Mitre gauge and fence

4.4.1. The mitre gauge, which locates in the table slot, is adjustable through 60° in either direction. Loosen the central locking knob, adjust to the desired angle and then tighten locking knob.
4.4.2. The fence (fig. 7.1) is mounted on the table as shown and is locked in position with the locking screw (fig. 7.2).

4.5. Belt sanding

4.5.1. Remove the saw blade and replace with the sanding belt, as detailed in 4.1.1. to 4.1.9. Ensure that the blade guides and support bearings are locked in position **well clear** of the belt.
4.5.2. Fit sanding stop to table (fig. 8) and adjust so that it just touches the belt. Note that two stops are provided, one with a flat face and the other with a curved face.

fig. 6

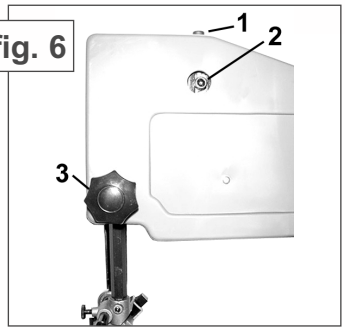


fig. 7

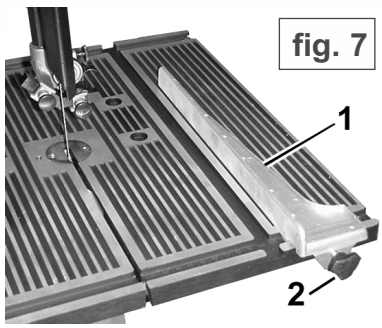
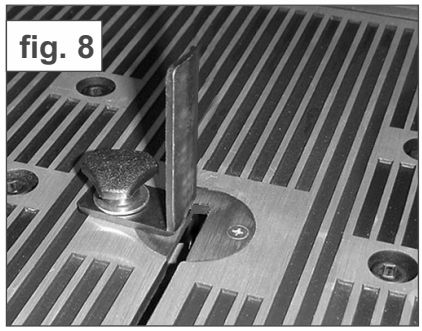


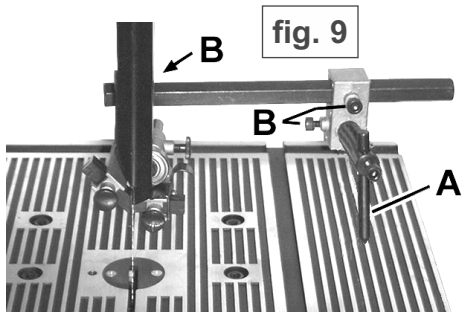
fig. 8



4.6. Circle cutting attachment

4.6.1. The circle cutting attachment is attached to the rear of the upper guide support rod using the bracket and screw provided.
4.6.2. Start to cut into the workpiece at the perimeter of the required circle and then stop saw and isolate from power supply.
4.6.3. Adjust circle cutting attachment so that pivot pin (fig. 9.A) is the required distance (circle radius) from the blade and is in line with the blade teeth. Press point of pivot pin into workpiece and tighten all cutting attachment locking screws (fig. 9.B).
4.6.4. Reconnect saw to the power supply and commence cutting whilst rotating the workpiece about the pivot pin.

fig. 9



5. OPERATING INSTRUCTIONS

❒ **WARNING!** When sawing or belt sanding always ensure that the protective cover (fig.10.1) is in place over the sanding disc.

5.1. Cross cutting

To cut wood at right angles to the grain. This type of cut can be made freehand but using the mitre guide ensures accurate results. The guide can also be adjusted to a 45° angle to produce mitre cuts, or compound mitre cuts with the table tilted. Ensure the work is held firmly against the table and against the face of the mitre guide.

❒ **WARNING!** Keep your fingers away from the blade, particularly at the end of the cut.

fig. 10

5.2. Freehand

When freehand cutting, select the widest blade suitable for cutting the smallest radius in the work you have planned (see below). Always feed the work slowly to follow your saw line. Ensure you do not drag the work off-line forcing the blade sideways or twisting it.
It may be helpful to make an initial rough cut about 5mm away from the line. For difficult curves which may be too tight for the blade, make relief cuts on the face of the curve so that the waste wood will fall away as the final radius is cut.

Blade width	Minimum cutting radius
1/8”	5mm
1/4”	16mm
3/8”	35mm

5.3. Blade and blade speed selection

5.3.1. The hardness of the workpiece determines the blade speed required. Soft materials (light wood) - high speed, hard materials (metals) - low speed.

5.3.2. There should be at least three saw teeth in contact with the workpiece at any one time during cutting. Therefore the thinner the workpiece the higher the blade tpi required.

5.4. Bevel cutting

When bevel cutting with the table tilted always have the workpiece guide (fence or mitre) on the lower part of the table.

5.5. Workpiece stability

Any workpiece which does not have a flat surface which will ensure stability on the saw table **must be** held in a suitable device which will prevent rotation.

5.6. Disc sanding

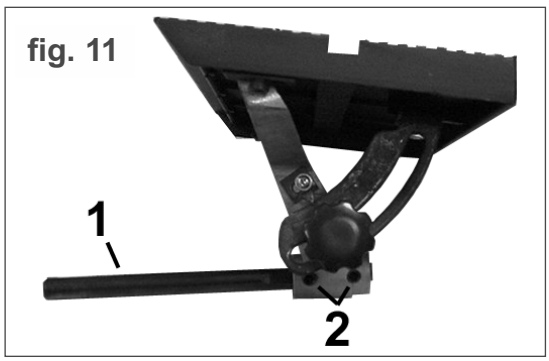
❒ **WARNING!** It is recommended that, when disc sanding, the saw blade is removed or the upper blade guide is lowered onto the table so that a minimum of blade is exposed.

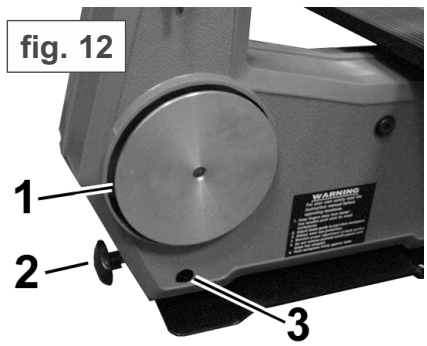
5.6.1. Sanding disc is self-adhesive. Remove backing paper and stick sanding disc centrally onto aluminium disc (fig. 12.1). To remove the sanding disc, peel off.

5.6.2. Insert mounting rod (fig. 11.1) - end with flat - into sanding table support and tighten the two set screws (fig. 11.2) onto the flat.

5.6.3. Screw locking knob into the side of the table mounting tube (fig. 12.2).

5.6.4. Slide the mounting rod into the mounting tube (fig. 12.3) and clamp with the locking knob. The edge of the table should be no more than 1.5mm (1/16") from the face of the sanding disc. Always sand at the highest speed.





6. MAINTENANCE

❒ **WARNING! ENSURE THAT THE MACHINE IS DISCONNECTED FROM THE MAINS POWER SUPPLY BEFORE CARRYING OUT ANY MAINTENANCE.**

6.1. Changing tyres

Eventually the tyres on the bandsaw wheels will wear due to the constant contact with the blade teeth.
Lift the edge of the tyre with a small screwdriver and the tyre can be worked off the wheel easily. It is recommended that all three tyres are changed at the same time.

6.2. Blade guides

Blade guides should be inspected regularly for wear or chipping. When replacing guides, replace all guides at the same time, both upper and lower.

6.3. Table insert

The insert should be inspected regularly and replaced if wear or damage is found.

6.4. Bearings

All bearings used in the construction of the bandsaw and motor are sealed and lubricated for life.

6.5. Cleaning

Remove dust and chips from the inside of the bandsaw frequently. Open the front covers and use a brush or vacuum cleaner. At the end of every work session, clean sawdust away from the motor vents.

7. DECLARATION OF CONFORMITY

Three Wheel Bandsaw/Disc Sander

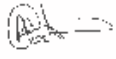
Model SM1214

73/23/EEC Low Voltage Directive
89/336/EEC EMC Directive
98/37/EC Machinery Directive
93/68/EEC CE Marking Directive

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.

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  Date 29th August 2001

For Jack Sealey Ltd. Sole importer into the UK of Sealey Quality Machinery.

***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 product.
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.

SEALEY Quality MACHINERY
Sole UK Distributor,
Sealey Group,
Bury St. Edmunds, Suffolk.
01284 757500 *01284 703534* ***E-mail:*** *sales@sealey.co.uk*