

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 & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE 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 before use to ensure they are safe. 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 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 and plugs for wear and damage and all 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 (*subject to 1.1.10. below*)' 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'.**

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.

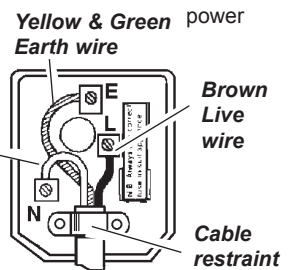
Double insulated products are often fitted with live (BROWN) and neutral (BLUE) wires only. Double insulated products are always marked with this symbol . **To re-wire, connect the brown & blue wires as indicated above. DO NOT connect the brown or blue to the earth terminal.**

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 an industrial round pin plug & 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 in 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

- ✓ Familiarise yourself with the product's application and limitations, as well as the specific potential hazards peculiar to the machine.
- WARNING!** Ensure all Health and Safety, local authority and general workshop practice regulations are strictly adhered to.
- WARNING!** Disconnect from the mains power supply before changing accessories, servicing or performing any maintenance.
- WARNING! DO NOT** grind any materials containing asbestos.
- ✓ Maintain the machine and keep it in good condition (use an authorised service agent).
- ✓ Check the alignment of moving parts regularly, for safest performance keep the machine clean at all times.
- ✓ Before each use check all abrasive attachments for condition. If worn or damaged replace immediately.
- ✓ Replace or repair damaged parts. Use recommended parts only. Non-authorized parts are dangerous and will invalidate the warranty.
- ✓ Locate the machine in a suitable area, keep area clean and uncluttered and ensure there is adequate lighting.
- ✓ Ensure the machine is situated on a solid work surface, capable of supporting the weight of the machine and the workpiece.
- ✓ Ensure there are no flammable or combustible materials near the work area.
- ✓ Remove ill fitting clothing, ties and loose jewellery, and tie back long hair.
- ✓ Maintain correct balance and footing, ensure the floor is not slippery and wear non-slip rubber soled footwear.
- ✓ Keep hands and body clear of the worktable when operating the machine.
- ✓ Wear approved safety eye or face protection when operating the machine. If dust is generated respiratory protection must be worn.
- x **DO NOT** operate the machine when you are tired, under the influence of alcohol, drugs or intoxicating medication.
- x **DO NOT** leave the machine running whilst unattended.
- x **DO NOT** touch the grinding wheel whilst operating, or whilst plugged in the mains power.
- x **DO NOT** touch the workpiece immediately after grinding, it will be very hot.
- x **DO NOT** try to cool the dry grinding wheel with water or any other lubricants.
- x **DO NOT** switch the machine on while the workpiece is in contact with the grinding wheel.

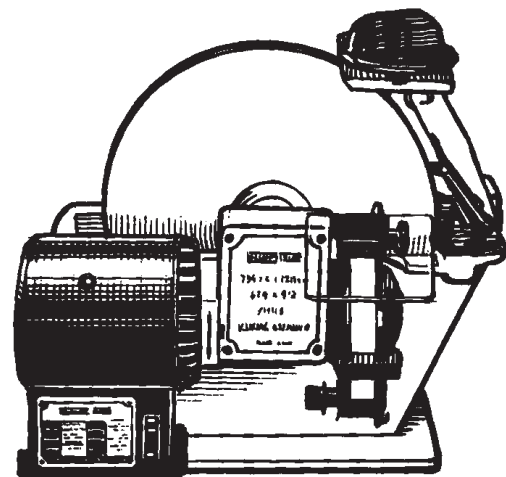


FUSE RATING
 THIS PRODUCT MUST BE FITTED
 WITH A
5 Amp FUSE

- X **DO NOT** operate the machine if any parts are damaged or missing as this may cause failure or possible personal injury.
- X **DO NOT** use the machine for any purpose other than that for which it is designed.
- X **DO NOT** allow children or untrained persons to operate the machine. Keep them away from the work area.
- X **DO NOT** remove the safety guards whilst the machine is in use.
- ✓ When not in use unplug from the mains power supply and make every effort to ensure the machine is childproof.

2. TECHNICAL SPECIFICATIONS

Model	SM52
Grinding Wheel - Dry	125 x 16 x 13mm
Grinding Speed	2800rpm
Grinding Wheel - Wet	250 x 50 x 22mm
Grinding Speed	60rpm
Motor	1/4hp, 185 watts
Supply	230V/1ph
Weight	15kg



3. ASSEMBLY & ADJUSTMENT

- 3.1. Unpack the product and check contents against the parts listed below. Should there be any damaged or missing parts contact your supplier immediately.

Contents: 1) Bench Grinder Body
 2) Tool Rest Assembly (Wet Stone) including 2 Screws, 2 Washers
 3) Tool Rest (Dry Stone), including Thumb Screw, Nut and Washer
 4) Eye Shield, including Mounting Bracket, 2 Screws, 2 Nuts
 5) Tool Guide Assembly (Wet Stone)

3.2. Eye Shield

- 3.2.1. Attach mounting bracket to eye shield using screws and nuts provided. Note offset holes in shield and assemble as shown in fig. 1.
 3.2.2. Attach mounting bracket to upper right hand side of 5" wheel guard using thumb screw (supplied fitted to guard).

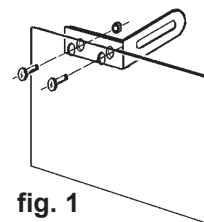


fig. 1

3.3. Tool Rest - Dry Stone

- 3.3.1. Run nut to top of thread on thumb screw and tighten.
 3.3.2. Fit tool rest to lower left hand side of 5" wheel guard so that slotted hole is over the two threaded bosses on the guard. Retain in position with thumb screw and washer (fig. 2).
 3.3.3. Adjust so the top of the tool rest is no more than 2mm from the grinding wheel.

Note : The tool rest assembly will need to be adjusted regularly as the grinding wheel wears.

3.4. Tool Rest - Wet Stone

- 3.4.1. Attach tool rest base to right hand end of water trough using screws and washers provided. Ensure base does not foul wheel.
 3.4.2. Loosen top and bottom locking levers, position tool rest close to, but not touching, wheel. Tighten locking levers.

Note : The tool rest assembly will need to be adjusted regularly as the grinding wheel wears.

3.5. Mitre Guide

- 3.5.1. The guide base bar locates in the channel machined in the wet stone tool rest.
 3.5.2. Once in position, the guide can be set to the required tool angle by slackening the clamp screw, setting the guide face and then retightening the screw.

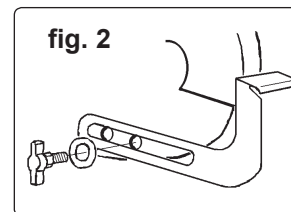


fig. 2

3.6. Water

- 3.6.1. When using the wet stone the water trough should be filled to approximately 30mm from the top.

4. OPERATING INSTRUCTIONS

- WARNING!** Before use, the machine must be bolted to a stable, fireproof bench or table which is strong enough to take the weight of the machine and the workpiece. Failure to comply with this instruction could result in severe personal injury.
- 4.1. **MANDATORY SAFETY INSTRUCTIONS. (The following instructions must be observed together with those in Section 1).**
- ▲ **DANGER! The use of a damaged wheel is dangerous and may cause damage or personal injury.**
- WARNING! Ensure grinder is unplugged from the mains power supply before attempting to change grinding wheels.**
- ✓ **Only persons qualified under the "Abrasive Wheels Regulations" and holding a current grinding wheel certificate are to change grinding wheels.**
- ✓ Grinding wheels used with this machine shall be of an adequate speed rating and of the correct composition for the material to be ground.
- ✓ Ensure the maximum speed specification of the wheel is higher than that indicated on the machine data plate.
- ✓ Before use check that grinding wheels are secure, are not worn or damaged and have no fissures or cracks. Replace faulty wheels immediately.
- ✓ Ensure replacement wheel is not damaged in any way - cracks, deformations or splinters etc. Also check the mounting flanges to ensure that these are not deformed, burred or chipped. Damaged items must not be used as they can produce high stresses in the wheel which may cause it to break. **DO NOT** over tighten a wheel. Never tamper with a wheel in order to adapt it to a different size drive shaft.
- ✓ Once mounted on the grinder test the wheel(s) before use by facing the grinder in a safe direction (point away from yourself, others and vulnerable items) and running it for a short time.

- WARNING! Before each use** rotate the grinding wheel by hand to check it is undamaged and secure. Remove adjusting keys and wrenches before turning the machine on. *Ensure you wear approved safety goggles, gloves, ear defenders and, if the machine generates dust, respiratory protection.*
- WARNING! Avoid subjecting machine/wheel** to excessive strain or harsh impact. **DO NOT** force the workpiece against the wheel. *Failure to comply with this instruction may cause the wheel to break resulting in severe personal injury.*
- WARNING! DO NOT** switch the machine on whilst the workpiece is in contact with the wheel. Keep all guards and holding screws in place, tight and in good working order. A guard, or other part, that is damaged should be replaced to ensure that it will operate properly and perform its intended function, **before** the machine is used. The safety guard is mandatory when the machine is used in premises covered by the Health & Safety at Work Act.

4.2. GRINDING

- 4.2.1. All grinding should be done slowly, maintaining a controlled progression. Rather than attempting to grind the workpiece in one go, complete the task in even, controlled stages. Never force the workpiece into the grinding wheel and remember that metals being ground will increase in temperature quickly. **DO NOT** touch the workpiece close to the cut as it may be very sharp. Serious personal injury may result if the above advice is not followed.

5. GRINDING WHEELS

- WARNING!** Grinding wheels used in association with this machine **must be** of an adequate speed rating and size. The wheels must also be made in accordance with British Standard 4481:Part 1 1989.
- DANGER! Only persons holding a grinding wheel certificate are authorised to change the grinding wheel.**
- DANGER! Damaged wheels are dangerous.** Before each use check that wheels are secure and are not damaged, mis-shapen, chipped or cracked in any way. Also check that the mounting washers are not deformed. **Damaged wheels must be replaced immediately** as they can break without warning, resulting in personal injury.

Note: Numbers in brackets are the item numbers shown on the Parts Diagram.

5.1. Replacing Wet Stone Wheel

- 5.1.1. Remove the tool rest and remove screw (66) to drain water from trough.
- 5.1.2. Holding the grinding wheel firmly in one hand with a rag or cloth, loosen the retaining nut (12) (it may be necessary to strike the wrench with a soft faced hammer).
- 5.1.3. Remove the two mounting screws (15), pull motor/gearbox/wheels assembly forward to disengage shaft from bearing (13) and lift assembly from trough.
- 5.1.4. Remove retaining nut (12) and slide wheel from shaft.
- 5.1.5. When installing a new wheel ensure washer (10) is placed concave side facing wheel.
- 5.1.6. Refit motor/gearbox/wheels assembly to trough and retain with screws (15).
- 5.1.7. Hold the wheel as before and tighten the nut firmly. Do not overtighten as this will cause the wheel to crack.
- 5.1.8. Replace tool rest and refill trough.

Note : When a new wheel has been fitted, start the machine and let it run for a short period with no load.

5.2. Replacing Dry Stone Wheel

- 5.2.1. Remove the tool rest and eye shield and then the wheel cover (28) by removing screws (29).
- 5.2.2. Holding the grinding wheel firmly in one hand with a rag or cloth, loosen the retaining nut (27) (it may be necessary to strike the wrench with a soft faced hammer).
- 5.2.3. Remove retaining nut (12) and slide wheel from shaft.
- 5.2.4. When installing a new wheel ensure washers (25) are positioned with concave sides facing wheel.
- 5.2.5. Hold the wheel as before and tighten the nut firmly. Do not overtighten as this will cause the wheel to crack.
- 5.2.6. Replace wheel cover, tool rest and eye shield.

Note : When a new wheel has been fitted, start the machine and let it run for a short period with no load.

5.3. Maintenance

- 5.3.1. The wheels may require dressing occasionally. This must only be done by a qualified person, using the correct type and size of dresser.
- 5.3.2. The dry wheel guard should be removed regularly and any dust removed.
- 5.3.3. Drain and replace water weekly if wet wheel is used frequently.
- 5.3.4. Regularly lubricate shaft via oiler (16) and at support bearing (13).

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 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.



Sole UK Distributor, Sealey Group,
Kempson Way, Suffolk Business Park,
Bury St. Edmunds, Suffolk,
IP32 7AR



01284 757500



www.sealey.co.uk



01284 703534



sales@sealey.co.uk