

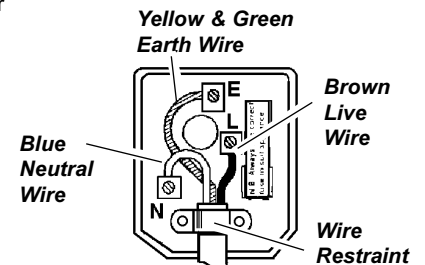
Thank you for purchasing a Sealey product. Manufactured to a high standard this product will, if used according to these instructions and properly maintained, give you years of trouble free performance.

⚠ 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 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 together with portable products that are plugged into an electrical supply not protected by an RCCB. If in doubt consult a professional 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 and all electrical connections for wear and damage, especially power connections, to ensure that none are 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 power plugs from sockets by the power cable.
- 1.1.9. DO NOT use worn or damage leads, plugs or connections. Immediately replace or have repaired by a qualified electrician. A U.K. 3 pin plug with AST/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'.**



THIS PRODUCT MUST BE FITTED WITH A 5 AMP FUSE

After wiring, check there are no bare wires, that all wires have been correctly connected and that the wire 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 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 reel will be protected. The section of the cores of the cable is important and should be at least 1.5mm². However, to be absolutely sure that the capacity of the 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 grinder from the mains power, and ensure the grinding wheels are at a standstill before attempting to changing accessories, servicing or performing any maintenance.
- ✓ Maintain the grinder in good condition and check moving parts alignment regularly.
- ✓ Replace or repair damaged parts. *Use recommended parts only. Non authorised parts may be dangerous and will invalidate the warranty.*
- ▲ **DANGER! DO NOT use a damaged stone as it is dangerous and may cause damage or serious personal injury.**
- WARNING! Only persons qualified under the "Abrasive Wheels Regulations" and holding a current grinding wheel certificate are to change or dress grinding stones. Unplug grinder from mains power and refer to chapter 4 "Grinding Stones" for details.**
- WARNING!** Keep all 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 checked to ensure that it will operate properly and perform its intended function before tool is used. The safety guard is a mandatory fitting where grinder is used in premises covered by the Health & Safety at Work Act.
- ✓ Locate grinder in an adequate working area for its function, keep area clean, tidy and free from unrelated materials. Ensure adequate lighting.
- ✓ Before each use check grinding wheel for condition. If worn or damaged replace immediately.
- WARNING!** Always wear approved eye or face protection when operating the grinder.
- ✓ Use breathing protection in accordance with COSHH regulations if fumes or dust pose a hazard. Wear ear defenders and gloves if necessary.
- ✓ Keep hands and body clear of the workpiece when operating the grinder.
- ✓ Maintain correct balance and footing. Ensure the floor is not slippery and wear non slip shoes.
- ✓ Remove ill fitting clothing. Remove ties, watches, rings, and other loose jewellery, and contain and/ or tie back long hair.
- ✓ Keep children and unauthorised persons away from the working area.
- x DO NOT force the grinder to achieve a task it was not designed to perform.
- x DO NOT operate the grinder if any parts are damaged or missing as this may cause failure or possible personal injury.
- WARNING! DO NOT grind, or sand any materials containing asbestos.**
- x DO NOT switch the grinder on whilst the wheel is in contact with the work piece.

- x DO NOT allow the workpiece to become jammed between the stone and eyeshield or tool rest.
- x DO NOT get the grinder wet or use in damp or wet locations or areas where there is condensation.
- x DO NOT use grinder where there is flammable liquids, solids or gases such as paint solvents, including waste wiping or cleaning rags etc.
- x DO NOT touch the workpiece close to the ground surface as it will be very hot. Allow to cool. The workpiece may also be very sharp.
- x DO NOT operate the grinder when you are tired, under the influence of alcohol, drugs or intoxicating medication.
- x DO NOT leave the grinder operating whilst unattended.
- ✓ When not in use switch the grinder off, and disconnect from the mains power supply, and clean the machine and working area.

DANGER OF FIRE/EXPLOSION HAZARD

- **WARNING!** The grinding process can produce streams of sparks (especially when grinding metal) which are a potential source of ignition.
- x **DO NOT** use the grinder where there are flammable liquids, solids or gases.
- x **DO NOT** allow grinder sparks to make contact with the operator's clothing or any other fabric such as cleaning rags. Fabrics contaminated with inflammable materials such as petrol, oil, grease, paint and solvents are a particular fire hazard.
- ✓ To reduce the risk of clothing catching fire the operator should wear wool or cotton outer garments treated with a fire retardant in preference to man-made fibres.

2. TECHNICAL SPECIFICATIONS

Model: SM53

Dry Grinding stone dims 150 x 25 x 20mm
 Dry grinding stone part no SM53-5/GW150C (Course)
 SM53-5/GW150F (Fine)

Dry Grinding Speed 2850 RPM
 Wire Brush dims 150x16x12mm
 Wire Brush part no SM53-5/WB125
 Buffing Mop 125 x 16 x 12 mm
 Buffing Mop part no SM53-5/BM125
 Motor 1/2 Hp - 230V/1ph

Model: SM54

Dry Grinding stone dims 200 x 25 x 20mm
 Dry grinding stone part no SM54-6/GW200C (Course)
 SM54-6/GW200F (Fine)

Dry Grinding Speed 2850 RPM
 Wire Brush dims 200x16x12mm
 Wire Brush part no SM54-6/WB175
 Buffing Mop 175 x 19 x 12 mm
 Buffing Mop part no SM54-6/BM175
 Motor 3/4 Hp - 230V/1ph

3. ASSEMBLY & ADJUSTMENT

Unpack the product and check contents, should there be any damaged or missing parts contact your supplier immediately.

- **WARNING!** Before use, the machine must be bolted to a stable, fireproof bench or table. Strong enough to take the weight of the machine and the workpiece. Failure to comply with this instruction could result in damage or severe personal injury.

3.1. EYESHIELD ASSEMBLY

- 3.1.1. Remove protective film from eyeshields, place support plate on top and assemble as in figure 1.
- 3.1.2. Assemble shield arms as in figure 2. One connects to the right hand side of grinder and the other to the left.
- 3.1.3. Securely attached each eyeshield to the grinding stone guard as in figure 4 A.
- 3.1.4. Set the clearance between the stone and the eyeshield at 5mm (fig 3).

3.2. TOOLREST ASSEMBLY

- 3.2.1. Bolt each tool rest to the bottom of the stone guard as in figure 4. B.
- 3.2.2. Set the clearance between the stone and the toolrest at 2mm (fig 3).

fig 4

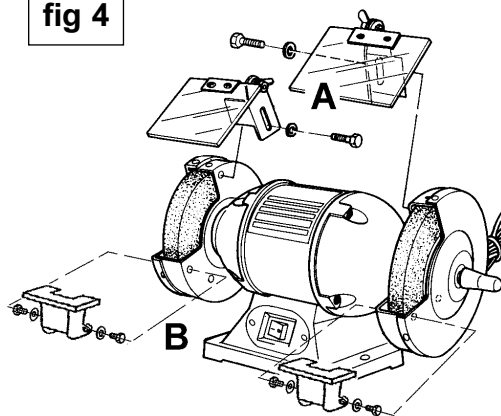
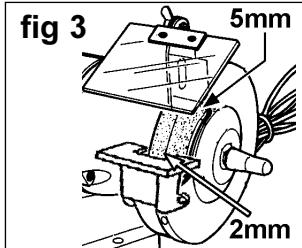
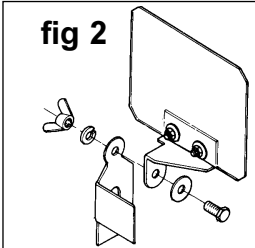
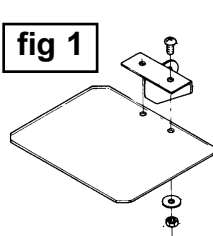
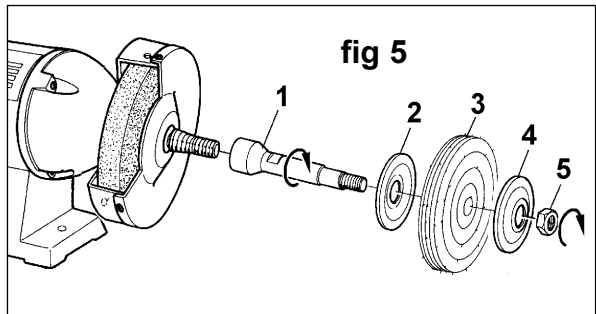


fig 1



3.3. BRUSH OR BUFFER ATTACHMENT.

- 3.3.1. Hold grinding stone firmly. To protect your hands use a cloth or wear gloves. Remove the thread cap from the grinding stone spindle and screw on the adaptor arm (fig 5.1.).
- 3.3.2. Install flange (2), install the brush or buffer (3) and hold the second flange (4) against (3) and lock with nut (5). Ensure washers are installed with the flange on the outside, (i.e. the concave side against the blotter).



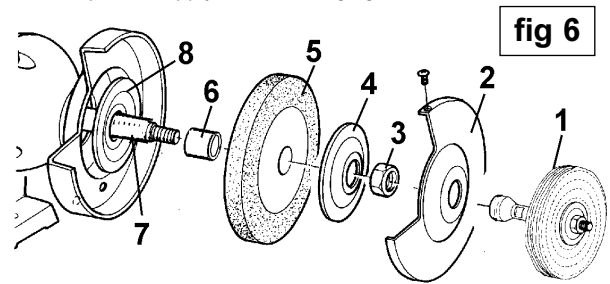
4. GRINDING STONES

- 4.1. **MANDATORY SAFETY INSTRUCTIONS.** (The following instructions must be observed together with chapter 1 safety).
 - ▲ **DANGER!** use of a damaged stone is dangerous and may cause damage or personal injury.
 - **WARNING!** Ensure grinder is unplugged from the mains power supply before attempting to change grinding stones (or wheel).
 - ✓ Only persons qualified under the "Abrasive Wheels Regulations" and holding a current grinding wheel certificate are authorised to change and dress grinding stones (wheels).
 - ✓ Grinding stones (wheels) used with the machine must be of an adequate speed rating and suitable for the material to be ground.
 - ✓ Ensure the cutting stone's maximum speed specification is higher than that indicated on the machine data plate.
 - ✓ Check grinding stones are secure, and the stone is not worn or damaged, that there are no fissures or cracks. if damaged replace immediately.
 - ✓ Ensure replacement stone is not damaged in any way such as cracks, deformations or splinters etc. Also check the mounting flanges to ensure they are not deformed, burred or chipped. Damaged flanges must **NOT** be used as they may cause irregular pressure on the stone

- ✓ which may cause stone to break. DO NOT over tighten a stone. Never tamper with a stone in order to adapt it to a different size holder. Install a new stone as in 4.2. Once mounted on the grinder test the stone before use by facing the grinder in a safe direction (point away from yourself, others and vulnerable items) and run for a short time. Dress the stone if necessary.

4.2. Stone Changing Procedure. **WARNING!** unplug grinder from the mains power supply before changing stone.

- 4.2.1. Raise the eye shield up, and away from the stone.
 4.2.2. Loosen and pull the tool rest out as far as possible, but, DO NOT remove it.
 4.2.3. Remove the brush or buffer (fig 6.1.)
 4.2.4. Remove screws from the side of the wheel cover and remove the cover (2).
 4.2.5. Hold grinding stone firmly. To protect your hands use a cloth or wear gloves. Unscrew retaining nut (3).



Note: The nut on the right side of the grinder has standard right hand thread (undo anti-clockwise). The left side nut has a left hand thread and must be loosened by turning clockwise. It may be necessary to strike the wrench sharply in the loosening direction with the heel of your hand to loosen the nut.

- 4.2.6. Remove grinding stone washer (4) stone (5) from main spindle (7), ensure sleeve (6) remains on the spindle. Check that washer (8) is sound.
 4.2.7. Carefully inspect the new stone before installing to ensure there are no splits, chips, or cracks.

WARNING! DO NOT USE A DAMAGED STONE.

- 4.2.8. Install the new stone by reversing steps above. Ensure washers (8 & 4) are installed with the flange on the outside, (i.e. the concave side against the blotter).
 4.2.9. Hold stone steady and secure locking nut. DO NOT over tighten as this may crack the stone.
 4.2.10. Replace stone cover, brush or buffer and re-adjust tool rest to 2mm and eyeshield 5mm from stone face.

5. OPERATING INSTRUCTIONS

5.1. Pre use Inspection.

- WARNING! INSPECT THE GRINDER BEFORE OPERATING THE MACHINE. ENSURE THE GRINDER IS UNPLUGGED FROM THE MAINS POWER BEFORE COMMENCING THE INSPECTION.**

- 5.1.1. Check the tool rests are securely fixed and are set at a maximum of 2mm from the grinding stone.
 5.1.2. Check eye shields are in good condition, set at 5mm from the stone, are secure and that you can see through them clearly.
 5.1.3. Turn the grinding stones by hand and check for any damage. Check they do not touch the tool rests and are correctly aligned. If any of the above checks fail, replace, repair, or adjust as necessary before starting the grinder.

5.2. Stone Use.

Depending on the model, grinders are supplied with one or two aluminous oxide stones. Stones have two grades, fine are preferred for hard materials a coarse stones for soft materials.

When grinding, should surface of the stone become "loaded" (coated with particles of the material being ground) it is probably the wrong grade of stone for the job.

Important reminder: Grinding stones MUST Only be assembled by a person holding a grinding wheel certificate. See chapter 4.

5.3. Using the Grinder.

- WARNING! Before commencing work, ensure you have read, understood, and apply the chapter 1. Safety Instructions**
 Plug grinder into the mains power supply.
 Place the eyeshield in it's appropriate safety location.
 Switch the grinder on, and bring the workpiece slowly into contact with the spinning stone, wire wheel or buffer.
 When you have completed your task. Unplug the grinder from the mains power supply, and clean the machine ready for next use.

6. MAINTENANCE

- WARNING!** Ensure the grinder is unplugged from the mans power supply before performing any maintenance or service.
 6.1. As the grinding stone wears, adjust the position of the tool rests. The rest must set at a maximum of 2mm from the stone surface.
 6.2. Regularly remove the grinding stone covers and clean out any dust and dirt.
 6.3. The machine motor and bearing are sealed units and require no regular maintenance. Should you require assistance, contact your local Sealey service agent.
 6.4. For information relating to the handling and maintenance of grinding stones refer to chapter 4.

**BENCH GRINDERS & BUFFERS
 Models: SM53.V3 & SM54.V3**

73/23/EEC Low Voltage Directive (S.I. 1989/728)
 89/336/EEC EMC Directive (S.I. 1992/2372).
 98/37/EC Machinery Directive (S.I. 1992/3073)
 93/68/EEC CE Marking Directive

Declaration of Conformity We, the sole importer into the UK, declare that the products listed here are in conformity with the following EEC standards and directives



Signed by Mark Sweetman

1st February 2000

The construction files for these products are held by the Manufacturer and may be inspected on request by contacting Jack Sealey Ltd.

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 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 catalogue and latest promotions call us on 01284 757525 and leave your full name, address and postcode.

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