

# BENCH GRINDER Ø150MM WITH 50MM BELT SANDER & LIGHT 250W/230V MODEL NO: BG150BS

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 AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



instruction manual

shield clothing

# 1. SAFETY

#### 1.1. **ELECTRICAL SAFETY**

WARNING! It is the user's responsibility to check the following:

> Check all electrical equipment and appliances to ensure that they are safe before using. Inspect power supply leads, plugs and all electrical connections for wear and damage. Sealey recommend that an RCD (Residual Current Device) is used with all electrical products. You may obtain an RCD by contacting your local Sealey stockist.

If the product is used in the course of business duties, it must be maintained in a safe condition and routinely PAT (Portable Appliance Test) tested.

- Electrical safety information, it is important that the following information is read and understood. 1.1.1.
- 1.1.2. Ensure that the insulation on all cables and on the appliance is safe before connecting it to the power supply.
- Regularly inspect power supply cables and plugs for wear or damage and check all connections to ensure that they are secure. 1.1.3. Important: Ensure that the voltage rating on the appliance suits the power supply to be used and that the plug is fitted with the × correct fuse - see fuse rating in these instructions.
  - x **DO NOT** pull or carry the appliance by the power cable.
- **DO NOT** pull the plug from the socket by the cable. ×
- DO NOT use worn or damaged cables, plugs or connectors. x
- 1.1.4. Ensure that any faulty item is repaired or is replaced immediately by a qualified electrician.
- 1.1.5. This product is fitted with a BS1363/A 13 Amp 3 pin plug.
  - If the cable or plug is damaged during use, switch off the electricity supply and remove from use. Ensure that repairs are carried out by a qualified electrician.

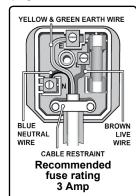
Replace a damaged plug with a BS1363/A 13 Amp 3 pin plug. If in doubt contact a qualified electrician. a) Connect the GREEN/YELLOW earth wire to the earth terminal 'E'.

- b) Connect the BROWN live wire to the live terminal 'L'.
- c) Connect the BLUE neutral wire to the neutral terminal 'N'.

Ensure that the cable outer sheath extends inside the cable restraint and that the restraint is tight. Sealey recommend that repairs are carried out by a qualified electrician.

#### 1.2. **GENERAL SAFETY**

- Disconnect the grinder from the mains power before changing accessories, servicing or performing any maintenance.
- Maintain grinder and stone 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 grinder safety guard in place.
- ~ The grinding wheel or stone must only be changed by persons holding an appropriate grinding wheel certificate.
- Wear approved safety goggles, ear defenders and appropriate dust mask if grinder generates dust.
- Remove ill fitting clothing. Remove ties, watches, rings, and other loose jewellery, and contain long hair.
- Use grinder 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.
- Use only approved grinding stones, and only use the normal grinding surface.
- Check grinding stones to ensure they are not split, cracked or damaged in anyway. See chapter 5. If in doubt DO NOT use the stone.
- ~ Grinding stones must be securely attached before use, but not over tightened.
- Keep non essential persons away from the working area, use screens if necessary.
- **DO NOT** operate the grinder if any parts are missing or the grinder is damaged. ×
- DO NOT use the grinder for a task it was not designed to perform.
- × DO NOT operate grinder where there are flammable liquids or gasses.
- WARNING! DO NOT grind any materials containing asbestos.
- DO NOT get the grinder wet or use in damp or wet locations. ×
- DO NOT switch the grinder on whilst the stone is in contact with the workpiece.
- DO NOT cover the grinder air vents. To do so will overheat the machine. ×
- DO NOT touch the workpiece immediately after grinding as it will be very hot.
- DO NOT try to cool the grinding stones with water or other lubricants.
- DO NOT touch the grinding disc whilst operating, or whilst plugged into the mains power.
- DO NOT leave the grinder running unattended. ×
- DO NOT operate the grinder when you are tired or under the influence of alcohol, drugs or intoxicating medication.



✓ When not in use switch grinder off, remove plug from power supply.

- **WARNING!** The grinding process can produce streams of sparks which are a potential source of ignition.
- DO NOT use the grinder where there are flammable liquids, solids or gases.
- \* DO NOT allow grinder sparks to make contact with the operator's clothing or any other fabric such as cleaning rags. Fabrics
- contaminated with flammable 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.

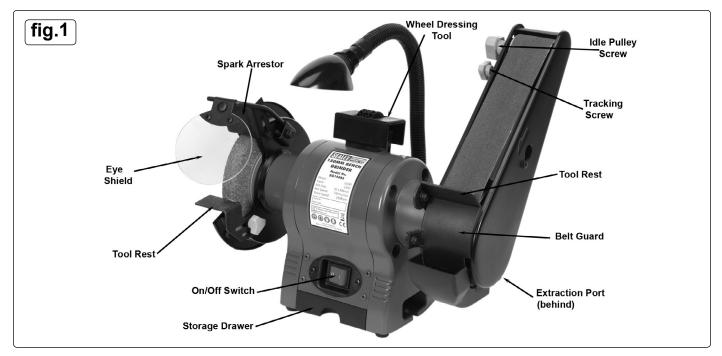
# 2. INTRODUCTION

Induction motor suitable for general use. Fitted with stone guard, eye shield and spark arrestor. Includes water tray for cooling hot materials. Features built in wheel dresser for cleaning, sharpening and truing grinding wheel surfaces. The belt sander is fitted at an angle of 45°. The sanding belt can be easily adjusted by the quick release tracking system. Pivoting work light for added visibility.

# 3. SPECIFICATION

| Model No:<br>Motor:<br>Input:<br>Belt Size:<br>Belt Speed:<br>Stone Size:<br>Stone Speed:<br>Table Tilt: |     |
|--|-----|
| Stone Speed:<br>Table Tilt:<br>Weight:   | 45° |

# 4. ASSEMBLY & INSTALLATION



4.1. Unpack the product and check contents. If there are any damaged or missing parts contact your supplier immediately.
 WARNING! Before assembly check to ensure grinder is unplugged from mains.

#### U WARNING! E 4.2. EYESHIELD

- 4.2.1. Adjust eyeshield so that the perspex shield provides maximum protection against debris being thrown from the wheel.
   4.3. TOOL REST
- 4.3.1. Tool rest should be adjusted to provide no more than a 2mm gap between the wheel and rest.
- 4.3.2. Turn wheel by hand to check that this distance remains true for the complete rotation.

## 4.4. SPARK ARRESTOR

4.4.1. Adjust spark arrestor to ensure that the lower edge is no more than 2mm from the surface of the wheel.

## 4.5. WHEEL DRESSING TOOL

4.5.1. Wheel dressing tool is removed by pulling from motor casing and placing on the tool rest. The rotating toothed wheels should be placed in gentle contact with the grinding face of the wheel.

## WARNING: Wheel dressing should only be carried out by a suitably trained and qualified person.

## 4.6. BELT SANDER

- 4.6.1. Tool rest should be be adjusted to provide no more than 2mm gap between the belt and rest.
- 4.6.2. With the machine isolated from the mains, operate the belt by hand. If the belt runs out of true alter the tracking by adjusting the tracking screw. If the belt runs off to the right, turn the tracking screw in a clockwise direction and vice versa.

## 4.7. INSTALLATION

- 4.7.1. Bolt the grinder securely to a fireproof workbench, capable of carrying the grinder's weight, using the base securing slots as a template. Check that all assembly nuts and bolts are secure then read section 5 (grinding stones) before use.
- 4.7.2. If the machine requires connecting to an extraction system, an extraction port is provided at the rear of the belt guard. A conical adaptor may be needed if the hose is not of the same diameter as the port.

# 5. GRINDING STONES

- 5.1. 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 and/or personal injury.
  - WARNING! Ensure grinder is unplugged from the mains power supply before attempting to change grinding stone. 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 this machine must be of an adequate speed rating and suitable for the material to be ground.
  - Ensure the grinding stone's maximum speed specification is higher than that indicated on the machine data plate.
  - Check grinding stone is secure, the stone is not worn or damaged and that there are no splits or cracks. If damaged replace
    immediately.
  - Ensure replacement stone is not damaged in any way such as cracks, deformations or splinters. Also check the mounting flanges to ensure they are not deformed, burred or chipped. Damaged items must NOT be used as they may cause irregular pressure on the stone which may cause a 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 5.2. 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 operate for a short time. Dress the stone if necessary.

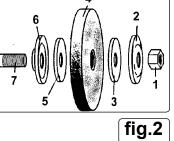
# 5.2. STONE CHANGING PROCEDURE

- WARNING! Unplug grinder from the mains power supply before changing stone.
- 5.2.1. Raise the eye shield up and away from the stone.
- 5.2.2. Remove tool rest.
- 5.2.3. Remove the screws from the side of the wheel cover and remove the cover.
- 5.2.4. Hold grinding stone firmly. To protect your hands use cloth or wear gloves. Unscrew retaining nut (fig 2.1.). Note: 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.
- 5.2.5. Remove grinding stone washer (fig 2.2), blotter (3), stone (4), 2nd blotter (5), washer (6) from main spindle (7).
- 5.2.6. Carefully inspect the new stone before installing to ensure there are no fissures, chips, or cracks.

# WARNING! DO NOT USE A DAMAGED STONE.

- 5.2.7. Inspect the blotters, if they are damaged replace them. The grinder must never be used without blotters. Should you not have any available when you need to replace them, cut out a piece of suitable cardboard the same shape for temporary use only.
- 5.2.8. Install the new stone by reversing steps above. Ensure washers (2 & 6) are installed with the flange on the outside, (i.e. the concave side against the blotter).
- 5.2.9. Hold stone steady and secure locking nut. **DO NOT** over tighten as this may crack the stone.
- 5.2.10. Replace stone cover, re-adjust tool rest to a maximum of 2mm from stone face and tighten

# securely.



# 6. OPERATION

## 6.1. PRE-USE INSPECTION

- □ WARNING! INSPECT THE GRINDER BEFORE OPERATING THE MACHINE. ENSURE THE GRINDER IS UNPLUGGED FROM THE MAINS POWER BEFORE COMMENCING THE INSPECTION.
- 6.1.1. Check the tool rests are securely fixed and are set at a maximum of 2mm from the grinding stone.
- 6.1.2. Check that eye shield is in good condition, are secure and that you can see through it clearly.
- 6.1.3. Turn the grinding stone by hand and check for any damage. Check that it does not touch the tool rest and is correctly aligned.
- 6.1.4. If any of the above checks fail, replace, repair, or adjust as necessary before starting the grinder.

## 6.2. STONE USE

- 6.2.1. Stones have two grades, fine for hard materials and coarse for soft materials.
- 6.2.2. 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:* Grinding stones **MUST ONLY** be assembled by a person holding a grinding wheel certificate. See section 5. USING THE GRINDER

- **WARNING!** Before commencing work, ensure you have read, understood, and apply the chapter 1 'Safety Instructions'.
- 6.3.1. Plug grinder into the mains power supply.
- 6.3.2. Place the eyeshield in its appropriate safety location.
- 6.3.3. Switch the grinder on and bring the workpiece slowly into contact with the spinning stone.
- 6.3.4. When using the sanding belt, rest work piece against tool rest and ensure fingers are kept clear of the belt.
- 6.3.5. When you have completed your task, unplug the grinder from the mains power supply, and clean the machine ready for next use.

# 7. MAINTENANCE



- **WARNING!** Ensure the grinder is unplugged from the mains power supply before performing any maintenance or service.
- 7.3.1. As the grinding stone wears, adjust the position of the tool rests. The rest must be set at a maximum of 2mm from the stone surface.
- 7.3.2. Remove the grinding stone cover regularly and clean out any dust and dirt.
- 7.3.3. The machine motor and bearing are sealed units and require no regular maintenance. Should you require assistance, contact your local Sealey service agent.
- 7.3.4. For information relating to the handling and maintenance of grinding stones refer to section 5.

## 7.1. BELT CHANGING

- 7.1.1. To change belt: remove belt guard by slackening securing screw (fig.3) and sliding guard down over screw head.
- 7.1.2. Slacken idle pulley screw (fig.1) and press down against spring pressure (fig.4) so releasing belt.
- 7.1.3. Remove belt from bottom pulley.
- 7.1.4. Refitting is reverse of 7.1.1 and 7.1.2.
- 7.1.5. Check that belt is running true as in 4.6.2



#### WEEE REGULATIONS

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.



#### ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.

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 is required for any claim.

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