



# Ø150MM BENCH GRINDER 150W

MODEL NO: **BG150CX.V4**

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.



Refer to instructions



Wear eye protection



Wear a mask



Wear ear protection

## 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.
  - ✓ Ensure that the insulation on all cables and on the appliance is safe before connecting it to the power supply.
  - ✗ **DO NOT** use worn or damaged cables, plugs or connectors.
  - ✓ Ensure that any faulty item is repaired or replaced immediately by a Sealey qualified technician.
  - ✓ If the cable or plug is damaged during use, switch off the electricity supply and remove from use.
  - ✓ Sealey recommend that an RCD (Residual Current Device) is used with all electrical products. If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.
- 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.
- ✓ Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adaptor plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- ✓ Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- ✗ **DO NOT** expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- ✗ **DO NOT** abuse the cord. Never use the cord for carrying, pulling, or unplugging the power tool. Keep cord away from the heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- ✓ If the replacement of the supply cord is necessary, this has to be done by the manufacturer or his agent in order to avoid a safety hazard.
- ✓ When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.

### 1.2. GENERAL POWER TOOL SAFETY WARNINGS

- ☐ **WARNING!** Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.
- ✓ Save all warning and instructions for future reference.

#### 1.2.1. WORK AREA SAFETY

- ✓ Keep work area clean and well lit. Cluttered or dark area invites accidents.
- ✗ **DO NOT** operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- ✓ Keep children and bystanders away whilst operating a power tool. Distractions can cause you to lose control.
- ✓ Keep the distance between the spark arrestor/work rest and the wheel as small as possible.
- ✓ Replace worn wheels when these gaps are no longer able to be maintained.

#### 1.2.2. PERSONAL SAFETY

- ✓ Stay alert, watch what you are doing and use common sense when operating a power tool.
- ✗ **DO NOT** use a power tool whilst you are tired or under the influence of drugs, alcohol, or medication. A moment inattention whilst operating power tools may result in serious injury.
- ✓ Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat or hearing protection use for appropriate conditions will reduce personal injuries.
- ✓ Prevent unintentional starting. Ensure the switch is in the off position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your fingers on the switch or energising power tools that have the switch on invites accidents.
- ✓ Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- ✗ **DO NOT** overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- ✓ Dress properly. **DO NOT** wear loose clothing or jewellery. Keep your hair and clothing away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- ✓ If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.
- ✗ **DO NOT** let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.

- ✓ Always use the guard, work rest, transparent screen and spark arrestor as required for the accessory/ies.
- 1.2.3. POWER TOOL USE AND CARE**
- ✗ **DO NOT** force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
  - ✗ **DO NOT** use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
  - ✓ Disconnect the plug from the power source from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
  - ✓ Store idle power tools out of the reach of children and do not allow persons unfamiliar with these power tools or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
  - ✓ Maintain power tools and accessories. Check for misalignment or binding of the moving parts, breakage of parts and any other condition that may affect the power tool's operation.
  - ✓ If damages, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
  - ✓ Use the power tool, accessories and tool bits etc, in accordance with these instructions, considering the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.
  - ✓ Keep handles and grasping surfaces dry, clean and free from oil and grease. Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situation.
  - ✗ **DO NOT** use a damaged accessory. Before each use, inspect the accessory such as abrasive wheels for chips and cracks. After inspecting and installing an accessory, position yourself and bystanders away from the plane of the rotating accessory and run the power tool at maximum no-load speed for one minute. Damaged accessories will normally break apart during this test time.
  - ✓ The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool. Accessories running faster than their rated speed can break and fly apart.
  - ✓ Never grind on the sides of a grinding wheel. Grinding on the side can cause the wheel to break and fly apart.
  - ✓ Only use accessory with a diameter according to the value on the product.
  - ✓ Make sure that the bench grinder is always stable and secure.
  - ✓ Check that wheels are free of defects before use.
  - ✓ Always adjust the work rest so that the angle between the work rest and the tangent of the accessory is always greater than 85°.
  - ✓ Always use the tool with accessories on both spindles in order to limit the risk of contact with the rotating spindle.
- 1.2.4. SERVICE**
- ✓ Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.
- 1.2.5. NOISE EMISSIONS**
- The declared noise emission value(s) have been measured in accordance with a standard test method and may be used for comparing one tool with another.
- The declared noise emission value(s) may also be used in a preliminary assessment of exposure. The noise emissions during actual use of the power tool can differ from the declared values depending on the ways in which the tool is used, especially what kind of work-piece is processed.
- Identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use.
- The declared vibration total values and the declared noise emission values may also be used in a preliminary assessment of exposure.

## 2. INTRODUCTION

Compact bench grinder with powerful induction motor for general workshop use. Supplied with eye shields, spark arrestors and tool rests. Supplied with coarse and fine aluminous oxide grinding stones for general workshop grinding and sharpening. Supplied with 3-pin plug.

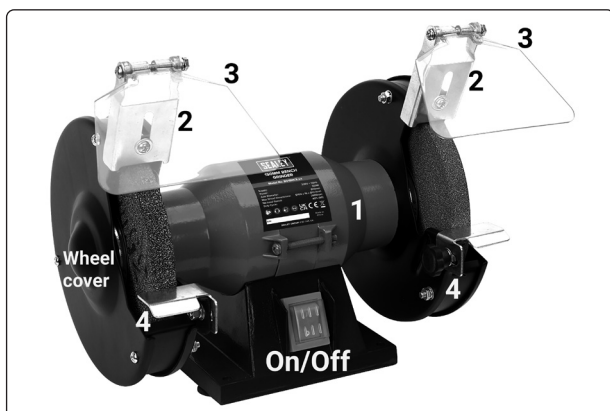
## 3. SPECIFICATION

Model No.....BG150CX.V4  
 Axle Diameter.....M12  
 Fuse Rating:.....5A  
 Power Supply Cable Length:.....1.6m  
 Motor/Supply .....150W/230V  
 No Load Speed .....2980rpm

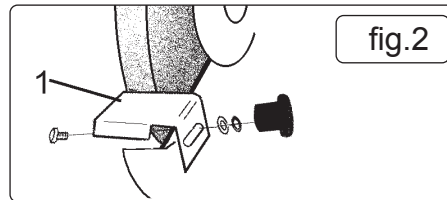
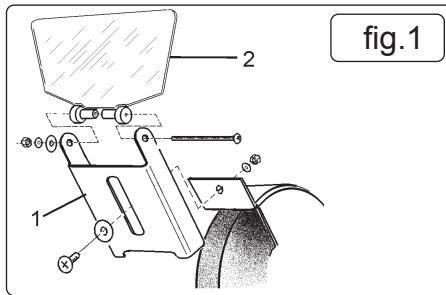
Maximum Grinding Wheel Dimension: .....150mm Diameter  
 .....16mm Width  
 Sound Pressure: .....LpA:82.7dB/LwA: 95.7dB  
 Duty Cycle:.....105W S1; 150W S6 40%

## 4. CONTENTS

- 4.1. Unpack the product and check contents against the list below. Should there be any damaged or missing parts contact your supplier immediately.
- |                                    |                                 |
|------------------------------------|---------------------------------|
| 1. Grinder                         | 2. Eye Shield Support Plate x 2 |
| 3. Eyeshields x 2                  | 4. Right & Left Hand Tool Rests |
| 5. Screws & Washers (shown fitted) |                                 |



## 5. ASSEMBLY



☐ **WARNING!** Before assembly check to ensure grinder is unplugged from mains.

### 5.1. EYE SHIELD

5.1.1. Attach eye shield support plates (fig.1.1) to the grinding wheel covers with screws and washers.

5.1.2. Fit eye shields (fig.1.2) to support plates with screws, nuts and washers.

### 5.2. TOOL REST

5.2.1. Take tool rest (fig 2.1) and align it with bolt holes on the inside of the grinding wheel cover.

5.2.2. Secure rest with bolts and washers as shown, ensuring gap between wheel and rest is a maximum of 2mm.

5.2.3. When both rests have been fitted turn the grinding wheels by hand to confirm clearance, (2mm).

## 6. INSTALLATION

### 6.1. TRANSPORT

6.1.1. Grinder should be transported in its original packaging.

6.1.2. Care should be taken not to damage the grinding stones during Transport.

6.2. The grinder should be mounted on a firm, fireproof surface.

6.2.1. The grinder is supplied with suction feet but should also be bolted or screwed to the work bench using the 4 holes in the base.

## 7. GRINDING WHEELS

7.1. **MANDATORY SAFETY INSTRUCTIONS** (The following instructions must be observed together with those in Section 1).

▲ **DANGER!** Use of a damaged wheel (stone) is dangerous and may cause damage and/or personal injury.

□ **WARNING!** Ensure grinder is unplugged from mains supply before attempting to change grinding wheel (stone). Only persons qualified under the "Abrasive Wheels Regulations" and holding a current grinding wheel certificate are authorised to change and dress grinding wheels (stones).

✓ Grinding wheels used with this machine must be of an adequate speed rating and suitable for the material to be ground.

✓ Ensure the maximum speed specification of the wheel is higher than that indicated on the machine data plate.

✓ Check that grinding wheels are secure and that wheels are not worn or damaged, that there are no fissures or cracks. If damaged replace immediately.

### 7.1.1. EXAMINATION OF ABRASIVE WHEELS

Wheels should be carefully unpacked, cleaned with a brush and examined for possible damage in transit. In unpacking, the careless use of a tool may cause damage to the wheel. The soundness of wheels can be further checked by tapping them with a light, non-metallic implement. This is known as the 'ring' test.

Wheels must be dry and free from sawdust for the ring test otherwise the sound will be deadened. It should also be noted that organic bonded wheels do not emit the same clear metallic ring as inorganic bonded wheels. Light wheels should be suspended from their hole on a finger or small pin.

If the wheel sounds dead, for example due to cracking, it should not be used.

Comparison with other wheels of the same lot and specification will allow rejection of any wheel with a suspiciously different ring before use. In case of doubt, the manufacturer should be notified.

### 7.1.2. HANDLING OF ABRASIVE WHEELS

All abrasive wheels are relatively fragile. It should not be assumed that organic bonded wheels (resin, shellac, rubber) will stand rough handling. The following rules should be observed to avoid chipping, cracking and breakage:

- handle wheels carefully to prevent dropping or bumping.

✗ **DO NOT** let wheels topple over and be damaged.

✗ **DO NOT** pile heavy castings or tools on top of abrasive wheels.

### 7.1.3. STORAGE OF ABRASIVE WHEELS

- Most plain and tapered wheels are best supported on their edges or on a central support.

- Blotters or other packing should not be placed between stacked thin wheels. However, if the wheels are supplied with blotters attached, suitable separators should be used to preserve flatness.

7.1.4. Ensure replacement wheel is not damaged in any way such as cracks, deformations or splinters etc. Also check the mounting flanges for deformation, burrs or chips. Damaged flanges must **NOT** be used as they may produce high stresses in the wheel causing it to break. **DO NOT** over tighten a wheel. Never tamper with a wheel in order to adapt it to a different size shaft.

7.1.5. Once mounted on the grinder test the wheel before use by facing the grinder in a safe direction (point it away from yourself, others and vulnerable items) and run for a short time. Dress the wheel if necessary.

### 7.2. WHEEL CHANGING PROCEDURE

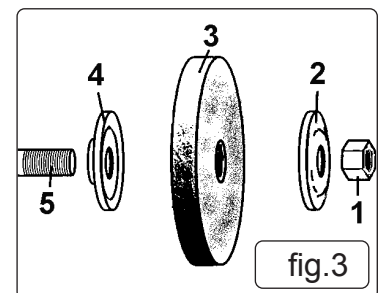
□ **WARNING!** Unplug grinder from the mains power supply before changing wheel.

7.2.1. Remove the eye shield support plate, loosen and pull the tool rest out as far as possible.

7.2.2. Remove the three screws and the corresponding nuts washers and lock washers from the side of the wheel cover and remove.

7.2.3. Hold grinding wheel firmly - protect your hands with a cloth, or wear gloves. Unscrew retaining nut (fig.3.1).

**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 a soft-faced hammer, to loosen the nut.

7.2.4. Remove grinding wheel washer (2), wheel (3), and washer (4) from main spindle (5) see fig.3.

7.2.5. Carefully inspect the new wheel before installing to ensure there are no fissures, chips, or cracks.

**WARNING! DO NOT USE A DAMAGED WHEEL**

7.2.6. Install the new wheel by reversing steps above. Ensure washers (2 & 4) are installed correctly with the concave side against the wheel.

7.2.7. Hold wheel steady and secure locking nut. **DO NOT** over-tighten as this may crack the wheel.

7.2.8. Replace wheel cover, replace eye shield, re-adjust tool rest to not more than 2mm from wheel and tighten securely.

## 8. OPERATION

8.1. These machines are intended grinding of ferrous metals only. Copper, brass aluminium, wood, plastic, etc must not be applied to these machines.

8.2. Size of workpiece must be appropriate for the aperture of the bench grinder.

**8.3. PRE-USE INSPECTION**

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

8.3.1. Check the tool rests are securely fixed and are not more than 2mm from the grinding wheels.

8.3.2. Check that eye shields are in good condition, secure and that you can see through them clearly.

8.3.3. Turn the grinding wheels 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.

**8.4. WHEEL USE**

The grinder is supplied with two aluminium oxide wheels, one coarse and one fine. Fine is preferred for hard materials and coarse for soft materials.

If the surface of wheel becomes "loaded" (coated with particles of the material being ground) it is probably the wrong grade for the job. Important reminder: Only a person holding a grinding wheel certificate may install wheels. See Section 4.

**8.5. USING THE GRINDER**

**WARNING!** Before commencing work, ensure you read, understand and apply the Section 1 Safety Instructions.

8.5.1. Plug grinder into the mains power supply.

8.5.2. Adjust the eyeshield to give maximum protection.

8.5.3. **SWITCH ON** the grinder ("I" button) allow wheel to run up to speed and bring the workpiece slowly into contact with the rotating wheel.

8.5.4. **SWITCH OFF** "O" button.

8.5.5. When the task is complete unplug the grinder from the mains power supply and clean the machine ready for next use.

**8.6. WHAT TO DO IN EVENT OF AN ACCIDENT OR BREAKDOWN**

8.6.1. If grinder makes any untoward noises or fails to operate stop using and if safe to do so turn off using the Off button or if necessary mains supply.

8.6.2. Professional repair only.

## 9. MAINTENANCE

**WARNING!** Ensure the grinder is unplugged from the mains power supply before performing any maintenance or service.

9.1. As the grinding wheels wear, adjust the positions of the tool rests. Each rest must be set not more than 2mm from the grinding surface.

9.2. Regularly remove the grinding wheel covers and clean out any dust and dirt.

9.3. The machine motor and bearings are sealed units and require no regular maintenance. Contact Sealey for assistance.



### 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.



REGISTER YOUR PURCHASE HERE



### 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.

**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. Please note that other versions of this product are available. If you require documentation for alternative versions, please email or call our technical team on [technical@sealey.co.uk](mailto:technical@sealey.co.uk) or 01284 757505.

**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.

Jack Sealey Ltd t/a Sealey Group, Kempson Way, Suffolk Business Park, Bury St Edmunds, Suffolk, IP32 7AR UK

Jack Sealey (EU) Ltd t/a Sealey Group, Farney Street, Carrickmacross, Co. Monaghan, A81 PK68 Ireland

Tel: 01284 757500 • Email: [sales@sealey.co.uk](mailto:sales@sealey.co.uk) • Web: [www.sealey.co.uk](http://www.sealey.co.uk)