

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 OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. RETAIN INSTRUCTIONS FOR FUTURE USE.

The use of symbols in this document is to attract your attention to possible danger. The symbols and warnings themselves do not eliminate any danger, nor are they substitutes for proper accident prevention measures.

# 1. SAFETY INSTRUCTIONS

### 1.1. ELECTRICAL SAFETY.

### ${\rm p}$ 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.

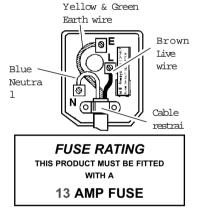
- 1.1.1. The *Electricity At Work Act 1989* requires all portable electrical appliances, if used on business premises, to be tested by a qualified electrician, using a Portable Appliance Tester (PAT), at least once a year.
- 1.1.2. The Health & Safety at Work Act 1974 makes owners of electrical appliances 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 (*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 power 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 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.

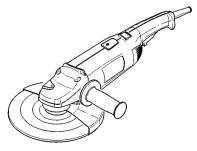
Double insulated products are often fitted with live (BROWN) and neutral (BLUE) wires only. Double insulated products are always marked with this symbol . To re-wire, connect the brown & blue wires as indicated above. DO NOT connect the brown or blue to the earth terminal. 1.1.10. Some products require 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 cable reel will be protected. The section of the cores of the cable is important. We suggest 1.5mm<sup>2</sup> 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 2.5mm<sup>2</sup> section cable.

## 1.2 GENERAL SAFETY

- <sup>3</sup> Disconnect the grinder from the mains power before changing accessories, servicing or performing any maintenance.
- 3 Maintain grinder and discs in good condition. Check moving parts and alignment. If necessary use an authorised service agent.
- 3 Replace or repair damaged parts. Use recommended parts only. Non-authorised parts may be dangerous and will invalidate the warranty.
- 3 Keep the grinder clean for best and safest performance.
- ${\tt p}$  **WARNING!** Always work with the grinder safety guard in place.
- 3 Wear approved safety goggles, ear defenders, safety gloves and appropriate dust mask if grinder generates dust.
- 3 The grinding disc must be changed only by persons holding an appropriate grinding wheel certificate.
- 3 Remove ill fitting clothing. Remove ties, watches, rings and other loose jewellery and contain long hair.
- 3 Use grinder in a suitable area, keep area clean, tidy and free from unrelated materials and ensure adequate lighting.
- 3 Maintain correct balance and footing. DO NOT over-reach and ensure the floor is not slippery. Wear non-slip shoes.
- 3 Use only approved grinding discs and only use the normal grinding surface. Never use the side or upper surface of disc for cutting.
- <sup>3</sup> Check grinding discs to ensure they are not split, cracked or damaged in anyway (See chapter 4). If in doubt do not use the disc.
- 3 Grinding discs must be securely attached before use, but do not over tighten.
- <sup>3</sup> Secure non-stable work piece with a clamp, vice or other adequate holding device and ensure the grinder is gripped with both hands.





- 3 Keep children and unauthorised persons away from the working area.
- 7 **DO NOT** operate the grinder if any parts are missing or the grinder is damaged.
- 7 **DO NOT** use the grinder for a task it is not designed to perform.
- 7 **DO NOT** operate grinder where there are flammable liquids or gases.
- p WARNING! DO NOT grind any materials containing asbestos.
- 7 **DO NOT** get the grinder wet or use in damp or wet locations.
- 7 DO NOT switch the grinder on whilst the disc is in contact with the workpiece.
- 7 **DO NOT** cover the grinder air vents. To do so will cause the machine to overheat.
- 7 **DO NOT** touch the workpiece immediately after grinding as it will be very hot.
- 7 DO NOT use the grinder as a fixed tool and DO NOT try to cool the grinding discs with water or other lubricants.
- 7 DO NOT hold unsecured work in your hand and DO NOT touch the grinding disc whilst operating, or whilst plugged in the mains power.
- 7 DO NOT leave the grinder running whilst unattended and DO NOT lay the grinder down whilst running.
- 7 DO NOT operate the grinder when you are tired, under the influence of alcohol, drugs or intoxicating medication.
- 3 When not in use switch off grinder, remove plug from power supply and store in safe, dry, childproof area.

### 2. INTRODUCTION

The SG180D and SG230D are heavy duty grinders suitable for industrial applications. Both machines feature a Stop-Lock spindle device for rapid disc removal and fitment. The control switches have a safety latch to prevent accidental operation.

### . TECHNICAL SPECIFICATIONS

Model	SG180D	SG230D
Disc Diameter (mm)	180	230
Thread Size	M14	M14
Motor	1800W/230V	1800W/230V
No Load Speed (rpm)	8000	6000
Weight (kg)	4.9	5.0

## 4. CONTENT & ASSEMBLY

#### 4.1. Content

 4.1.1. Remove items from packing and identify parts against the list below. Check to ensure they are in good condition. If any part is damaged or missing contact your supplier immediately. Content

Angle Grinder
 Safety Guard
 Handle
 Grinding Disc
 2-Pi

## 4.2. Assembly

p WARNING! Ensure the grinder is unplugged from the mains power supply before assembling.

- 4.2.1. Place the guard (fig.1.A) over central spindle and seat clamp ring around flange (fig.1.B). Tighten clamp ring screw.
- 4.2.2. Screw handle (fig.1.C) into threaded mounting hole (fig.1.D). Note that handle may be mounted either side to suit application and/or operator.

#### 4.3. Fitting Disc. (Only to be performed by person holding grinding wheel certificate).

- 4.3.1. Place the disc flange (fig 1.E) on the centre spindle ensuring that the spindle is fully engaged in the flange recess.
- 4.3.2. Place grinding disc (fig 1.F) on the spindle and screw on disc securing ring (fig 1.G). Note that orientation of securing ring will depend on thickness of disc (see fig.2)
- 4.3.3. Lock the spindle by pushing in and holding the stop button (fig 1.H) while turning the spindle by hand.
- 4.3.4. Tightening the disc securing ring (fig 1.G) with the pin wrench (fig 1.J). DO NOT over tighten.
- 4.3.5. When complete, release the locking button and check that it has sprung back to its initial position.
- 4.4. Positioning of the Guard.
- The guard (fig.1.A) may be positioned at any angle according to the grinding task required. 4.4.1. Position the guard to allow maximum working performance whilst providing maximum
- protection for the operator.
- 4.4.2. Lock the guard in place by tightening clamp ring screw.

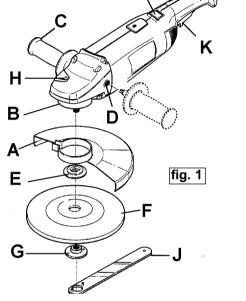
### 5. GRINDING DISCS

p WARNING! DO NOT USE DISCS THAT ARE DAMAGED, OR SUSPECTED OF DAMAGE.

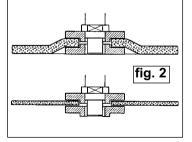
Before using a grinding disc ensure there are no fissures or cracks. Once mounted on the grinder test the disc before use by facing the grinder in a safe direction (point away from yourself, others and vulnerable items) and run for a short time.

s DANGER! use of damaged discs may cause damage and/or personal injury.

Grinding and cutting discs used in association with this machine shall be of an adequate speed rating and be suitable for the job in hand. The discs shall be made in accordance with British Standard 4481:Part 1 1989. Only persons holding a grinding wheel certificate are authorised to change grinding discs.



2-Pin Spanner



## 6. OPERATION

p WARNING! Ensure grinder is unplugged from the mains power supply before changing accessories.

#### 6.1. Preparation.

- 6.1.1. Attach grinding disc according to 4.3. and position side handle left or right to suit the task.
- 6.1.2. Ensure the disc safety guard is correctly positioned.
- 6.1.3. Plug grinder into the mains power supply.

#### 6.2. Control Switch

- The control switch (fig.1.K) is designed to avoid starting should the switch be pressed in error.
- 6.2.1. Start the grinder by pressing safety latch (fig.1.L) and then sqeezing control switch. Once grinder is running release safety latch. p WARNING! When the grinder first starts it will 'kick', you must ensure therefore that the tool is securely gripped in both hands. Especially important is the position you choose to secure the front handle grip in order to maintain stability.
- 6.2.2. To switch off machine release control switch (fig.1.K), the machine will stop and the control switch will be locked in the 'Off' position.

 $_{
m p}$  WARNING! Before grinding ensure that you wear approved safety goggles, ear defenders, safety gloves and, if grinder will generate dust, appropriate dust mask, and that all other safety instructions in Section 1 are followed carefully.

#### 6.3. Grinding

The key to effective operation is controlling the pressure and surface contact between the disc and the workpiece.

p WARNING! DO NOT switch the grinder on whilst the disc is in contact with the workpiece. Bring the rotating disc to the workpiece.
6.3.1. Allow the disc to reach full speed before starting to grind.

- 6.3.2. Grind flat surfaces at an angle of between 10 to 20 degrees to the workpiece. Too great an angle will cause a concentration of pressure in one small area resulting in gouging or burning of the surface.
- 6.3.3. When grinding is complete allow the workpiece to cool. DO NOT touch the workpiece as it will be hot surface.
- 6.3.4. Unplug the grinder from the mains power supply, clean and store in a safe, dry, childproof area.

## 7. MAINTENANCE

p WARNING! Ensure the grinder is disconnected from the mains power supply before attempting any maintenance.

- 7.1. Keep the grinder ventilation slots clean and free from obstructions. If available, blow compressed air into the vents to clear any internal dust (safety goggles must be warn when undertaking this process). Keep the outer case of the grinder clean and free from grease. DO NOT wash with water or use solvents or abrasives.
- 7.2. The motor brushes must only be changed by an authorised Sealey service agent.
- 7.3. After each 500 hours of use gear head grease should be replaced, by an authorised Sealey service agent.

73/23/EEC Low Voltage Directive (S.I. 1994/3260) 89/336/EEC EMC Directive (S.I. 1992/2372 & Amendmen	s). Signed by Mark Sweetman Date 24th November 1999
98/37/EC Machinery Directive (S.I. 1992/3073)	The construction files for these products are held by the Manufacturer and may be inspected on request by contacting Jack Sealey Ltd.
93/68/EEC CE Marking Directive	For Jack Sealey Ltd. Sole importer into the UK of Sealey Power Tools.

are in conformity with the following standards and directives.

Declaration of Conformity We, the sole importer into the UK, declare that the products listed here

**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.

Heavy Duty Angle Grinder Models: SG180D & SG230D

INFORMATION: For a copy of our latest catalogue call us on 01284 757525 and leave your full name and address, including postcode.

