

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 AND/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 responsibility of the owner and the operator to read, understand and comply with the following:

You must check all electrical products, before use, to ensure that they are safe. You must inspect power cables, plugs, sockets and any other connectors for wear or damage. You must ensure that the risk of electric shock is minimised by the installation of appropriate safety devices. A Residual Current Breaker (RCCB) should be incorporated in the main distribution board. We also recommend that a Residual Current Device (RCD) is used. It is particularly important to use an RCD with portable products that are plugged into a supply which is not protected by an RCCB. If in any 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 that all portable electrical appliances, if used on business premises, are 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 those appliances and the safety of the appliance operators. **If in any doubt about electrical safety, contact a qualified electrician.**

1.1.3. Ensure that the insulation on all cables and on the appliance is safe before connecting it to the power supply. See 1.1.1. and 1.1.2. and use a Portable Appliance Tester.

1.1.4. Ensure that cables are always protected against short circuit and overload.

1.1.5. Regularly inspect power supply cables and plugs for wear or damage and check all connections to ensure that none is loose.

1.1.6. **Important:** Ensure that the voltage marked on the appliance matches the power supply to be used and that the plug is fitted with the correct fuse - see fuse rating, fig. 1.

1.1.7. **DO NOT** pull or carry the appliance by the power cable.

1.1.8. **DO NOT** pull the plug from the socket by the cable.

1.1.9. **DO NOT** use worn or damaged cables, plugs or connectors. Immediately have any faulty item repaired or replaced by a qualified electrician.

Fit a new plug according to the following instructions (UK only):

**MG214/230V - fig. 1**

**MG214/110V - fig. 2**

a) Connect the **GREEN/YELLOW** earth wire to the earth terminal 'E' or .

b) Connect the **BROWN** live wire to the live terminal 'L'.

c) Connect the **BLUE** neutral wire to the neutral terminal 'N'.

d) **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.**

1.1.10. If an extension reel is used it should be fully unwound before connection. A reel with an RCD fitted is preferred since any appliance plugged into it will be protected. The cable core section is important and should be at least 1.5mm<sup>2</sup>, but to be absolutely sure that the capacity of the reel is suitable for this product and for others which may be used in the other output sockets, we recommend the use of 2.5mm<sup>2</sup> section cable.

### 1.2. GENERAL SAFETY

**WARNING!** Disconnect the saw from the mains power and ensure that the blade is at a complete standstill before attempting to change accessories, service or perform any maintenance.

✓ Maintain the saw in good condition (use an authorised service agent).

✓ Replace or repair damaged parts. *Use recommended parts only. Unauthorised parts may be dangerous and will invalidate the warranty.*

✓ Locate the saw in a suitable work area. Ensure that the surface is flat and firm. Keep the area clean and tidy and free from unrelated materials, and ensure that there is adequate lighting.

✓ Keep the saw clean for best and safest performance and check moving parts alignment regularly.

**WARNING!** Before each use check that the blade is secure and that it is not worn or damaged.

**WARNING!** Keep guard and holding screws in place, tight and in good working order. Check regularly for damaged parts.

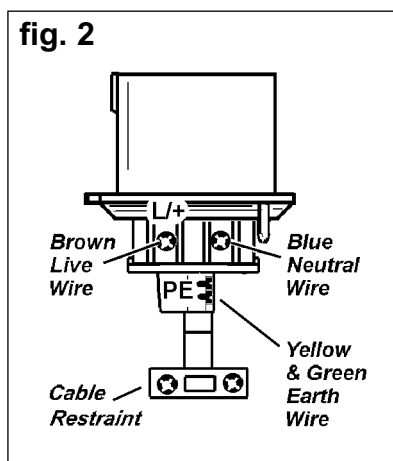
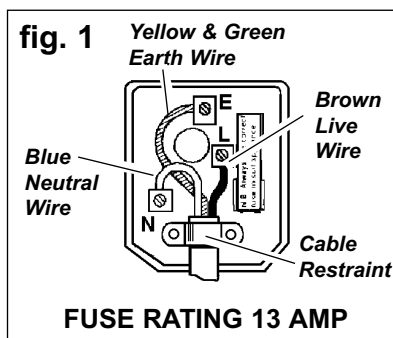
A guard or any other part that is damaged must be repaired or replaced before next use. The safety guard is a mandatory fitting when the saw is used on premises covered by the Health & Safety at Work Act.

✓ Remove adjusting keys and wrenches from the machine and its vicinity before turning it on.

**WARNING!** Wear approved safety eye protection, ear defenders, gauntlets and, if dust is generated, respiratory protection.

✓ Remove ill fitting clothing. Remove ties, watches, rings and other loose jewellery and contain long hair.

✓ Keep hands and body clear of the worktable when operating the saw.



- ✓ Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip shoes.
- ✓ Keep children and unauthorised persons away from the work area.
- ✓ Avoid subjecting the blade to excessive strain. Always ease the blade down against workpiece (a harsh downward impact may break the blade or damage the teeth). Do not apply undue force on the handle in order to cut workpiece. Maintain a controlled cutting speed.
- ❑ **WARNING!** DO NOT switch on the saw whilst the blade is in contact with the workpiece. Bring the rotating blade to the workpiece.
- ✓ Avoid un-intentional starting of the saw.
- x DO NOT hold the workpiece by hand. Use base vice to secure the workpiece.
- x DO NOT use the saw for a task it is not designed to perform.
- x DO NOT allow untrained persons to operate the saw.
- x DO NOT get the saw wet, or use in damp or wet locations or areas where there is condensation.
- ❑ **WARNING!** DO NOT use the saw where there are flammable liquids, solids or gases such as paint solvents and including waste wiping rags etc.
- x DO NOT operate the saw if any parts are missing or damaged as this may cause failure and/or personal injury.
- x DO NOT remove the safety guard whilst the saw is in use.
- x DO NOT attempt to remove a workpiece until the blade has stopped rotating.
- x DO NOT touch the workpiece close to the cut as it may be hot. The cut edge of the workpiece will also be very sharp.
- x DO NOT leave the saw operating unattended.
- x DO NOT operate the saw when you are tired or under the influence of alcohol, drugs or intoxicating medication.
- ✓ When not in use switch off the saw and remove the plug from the power supply.
- ✓ To move the saw, lock the machine head with the locking plate and lift by the handle.

## 2. APPLICATION & SPECIFICATIONS

The MG3143 is fitted with a tungsten steel blade which cuts slow and cold, without the need for coolant, and will handle steel, wood, brass, aluminium and most plastics. Powered by a 1900W motor and available for either 230 volt or 110 volt operation. Cast alloy base and saw arm with mitre vice. Fully guarded and fitted with dead-man trigger control to prevent injury. CE approved.

### Specifications:

Size of Blade . . . . .	355 x 2.4 x 25.4mm	Mitre angles . . . . .	0 - ±45°
Blade Pitch . . . . .	.80tpu	Rectangular Capacity @ 90° .	120 x 150mm
Blade Part No. . . . .	MG3143/213	Rectangular Capacity @ 45° .	90 x 120mm
Motor . . . . .	1900W	Round Capacity @ 90° . . . . .	Ø120mm
No-load speed . . . . .	1380rpm	Round Capacity @ 45° . . . . .	Ø90mm

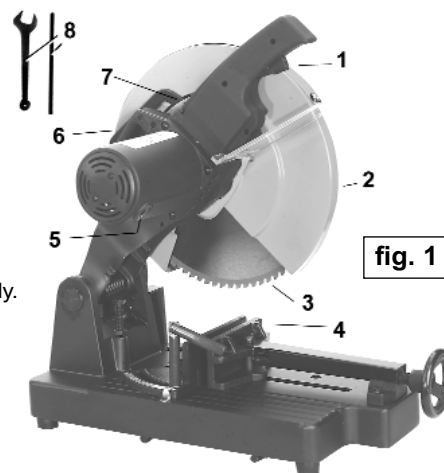


fig. 1

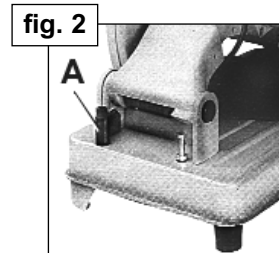
## 3. CONTENTS & ASSEMBLY

Unpack the product and check the contents.  
Ensure that there is no damage. If any problem is noted, contact your supplier immediately.

### Description:

1 On/Off switch	5 Brush cap
2 Blade safety guard	6 Carry handle
3 Blade	7 Overload switch
4 Vice	8 Blade removing tools

- 3.1. Open the carton, remove any packing, and carefully lift the saw out by holding the hand grip. Ensure that you maintain the correct posture for lifting.
- 3.2. To clamp the motor head in the (down) transport position turn the locking plate inward (fig. 2.A).
- 3.3. Position the saw on a flat, stable work bench, strong enough to support the saw and any workpiece.
- 3.4. Remove any packing from the vice.
- 3.5. Fit the vice hand wheel, align the hex screw with the flat on the shaft and tighten the hex screw using the hex key provided.
- 3.6. Screw the handle fixing bolt into the vice hand wheel and tighten the lock nut.
- 3.7. Before using the saw, check that blade is perpendicular to the base of machine and that all parts are in good order and correctly secured.

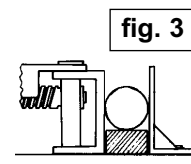


## 4. OPERATING INSTRUCTIONS

❑ **WARNING!** Before cutting ensure that you wear approved safety goggles, ear defenders, appropriate dust mask if cutting generates dust, and safety gloves. All safety instructions in Section 1 must be followed.

### 4.1. Securing workpiece

- 4.1.1. Ensure that the saw is unplugged from the power supply and then secure the workpiece in the base vice (fig. 1.4). We recommend that you place a block of wood (slightly narrower than the workpiece) in the vice below the item to be cut to act as a support (fig. 3).
- 4.1.2. When cutting long workpieces use additional supports along the length.



### 4.2. On/Off switch

Plug the saw into the power supply and start the saw by depressing the power switch located on the handgrip (fig. 1.1). Release the switch to stop the saw.

### 4.3. Overload switch

If the saw becomes overloaded the overload switch (fig. 1.7) will cut the power to the machine. To reset, press the switch down, first ensuring that the On/Off switch is in the Off position.

### 4.4. Operation

- ❑ **WARNING!** DO NOT switch on the saw whilst the blade is in contact with the workpiece. Bring the rotating blade to the workpiece.
- 4.4.1. The blade must be running at maximum speed before attempting to lower the cutting edge onto the workpiece.

- 4.4.2. Lower the blade slowly and smoothly down toward the workpiece (avoid jerky movements).
- 4.4.3. Avoid subjecting the blade to excessive strain. Always ease the blade down against workpiece (a harsh downward impact may cause blade damage). Do not apply undue force on the handle when cutting the workpiece. Maintain a controlled cutting speed.
- 4.5. Completing the cut**
- 4.5.1. When cutting is complete, fully raise the blade and release the On/Off switch.
- 4.5.2. Wait until the blade has stopped rotating before attempting to remove the workpiece.
- 4.6. Mitre cutting**
- To cut the workpiece at an angle the base of the saw must be adjusted.
- 4.6.1. To make an angled cut, loosen the vice back plate clamp (fig. 4.E) and turn the turntable to the required angle, reading the graduated scale around the perimeter of the vice back plate.
- 4.6.2. Re-tighten the clamp and make the cut.

## 5. CHANGING THE BLADE

**▲ DANGER! The use of damaged blades is dangerous and may cause injury.**

**☐ WARNING! Ensure that the saw is unplugged from the power supply before attempting to change the blade.**

Before using a blade ensure that it is undamaged. Once mounted on the saw test the blade before use by facing the saw in a safe direction (turned away from yourself, others and vulnerable items) and running it for a short time.

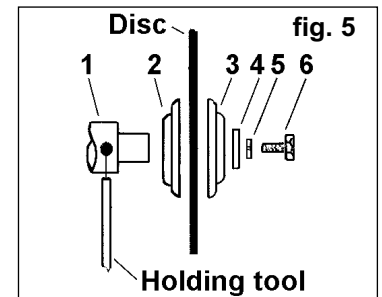
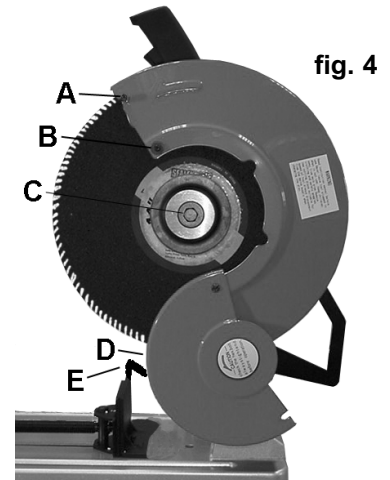
**IMPORTANT! Blades used with this machine shall be of an adequate speed rating and suitable for the task in hand.**

### 5.1. Removing blade

- 5.1.1. With the head in the up position rotate the blade guard until the handle engages with the slot in the fixed guard (fig. 4.A).
- 5.1.2. Loosen the centre guard clamp screw (fig. 4.B) and swing the centre guard (fig. 4.D) down.
- 5.1.3. Place the holding tool in the spindle hole (hole is located on the motor side of the blade, see fig. 5).
- 5.1.4. Use the spanner to remove blade clamp bolt (fig. 4.C).
- 5.1.5. Carefully remove the blade and clamping parts.
- 5.1.6. Clean parts before re-assembly.

### 5.2. Fitting blade (fig. 5)

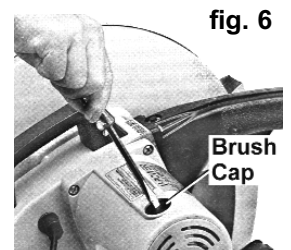
- 5.2.1. Fit the inner flange (2) checking to ensure that it seats correctly on the spindle (1).
- Fit the blade and items 3, 4 & 5 to the spindle.
- 5.2.2. Fit and tighten the locking bolt (6).
- 5.2.3. Before plugging the saw into the mains, move the blade guard back to the closed position so that the blade is covered.
- 5.2.4. Check that the guard is working properly by raising and lowering the operating head.



## 6. MAINTENANCE

**☐ WARNING! Ensure that the saw is unplugged from the power supply before attempting any maintenance.**

- 6.1. Regularly clean the dust which accumulates inside the protective guard and on the external parts.
- 6.2. Periodically clean and oil the vice screw.
- 6.3. Change the blade when it is worn and does not cut efficiently.
- 6.4. To change the motor brushes removed the brush caps with a screwdriver (fig. 6). Replace the carbon brushes and re-install the brush caps.



## 7. DECLARATION OF CONFORMITY

**Cut-Off Machines**  
**Models MG3143 & MG3143/110**  
 73/23/EEC Low Voltage Directive  
 89/336/EEC EMC Directive  
 98/37/EC Machinery Directive  
 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 standards and directives.



Signed by Mark Sweetman

9th April 2003

The construction files for these products are held by the Manufacturer and may be inspected, by a national authority, upon request to 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 equipment.

**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.



Sole UK Distributor,  
 Sealey Group,  
 Bury St. Edmunds, Suffolk.

☎ 01284 757500

☎ 01284 703534

✉ sales@sealey.co.uk

🌐 www.sealey.co.uk