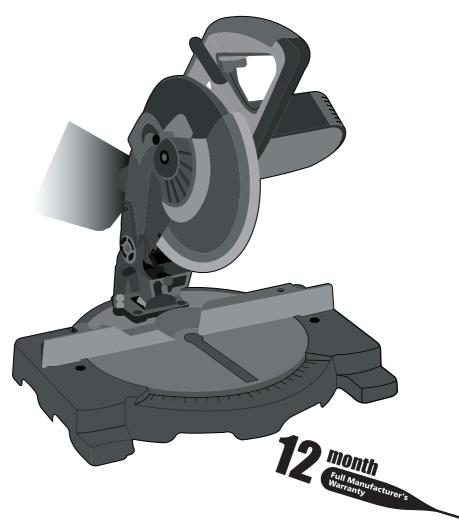
# DIRECTPOWER



**SAFETY AND OPERATING MANUAL** 



# DIRECTPOWER

Congratulations on your purchase of a <u>DIRECTPOWER</u> power tool from Screwfix Direct Ltd. We want you to continue getting the best performance from it so this handbook includes information on safety, handling and care. Please retain this handbook in case you need to refer to any of the information in the future.

Your <u>DIRECTPOWER</u> power tool comes with a 12-month guarantee, so should it develop a fault within this period contact Screwfix Direct Ltd on Freephone 0500 41 41 41.

# **GUARANTEE**

This **DIRECTPOWER** product carries a Screwfix Direct Ltd guarantee of 12 months. If your product develops a fault within this period, you should,in the first instance contact Screwfix Direct Ltd on Freephone 0500 41 41 41. If the fault occurs within the first 12 months, you may return the goods for a full refund or we will repair or replace the goods if you prefer. When repair is not practical or identical goods are not available, alternative goods of similar specification and quality will usually be provided but, failing this, you will be offered a partial or full refund depending on the time period since purchase.

This guarantee specifically excludes losses caused due to:

- Fair wear and tear
- Misuse or abuse
- Lack of routine maintenance
- Failure of consumable items (such as batteries)
- Accidental damage
- Cosmetic damage
- Failure to follow manufacturer's guidelines
- Loss of use of the goods
- Repairs attempted by anyone, unless authorised by Screwfix Direct Ltd.

This guarantee does not affect your statutory rights. This guarantee is only valid in the UK.

For further technical advice, spare parts or repair service (outside of guarantee) please contact the customer helpline number on 0845 607 6380.

# **SAFETY INSTRUCTIONS**



**WARNING!** Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

SAVETHESE INSTRUCTIONS

### 1. Keep the work area clean.

Cluttered areas and benches invite injuries.

#### 2. Consider work area environment.

Do not expose power tools to rain. Do not use power tools in damp or wet locations. Keep the work area well lit. Do not use power tools where there is risk to cause fire or explosion.

# 3. Guard against electric shock.

Avoid body contact with earthed or grounded surfaces (e.g. Pipes, radiators, ranges, refrigerators, other metal surfaces).

# 4. Keep children away.

Do not let visitors touch the tool or extension cord. All visitors should be away from area.

#### 5. Store idle tools.

When not in use, tools should be stored in a dry, high or locked up place, out of reach of children.

#### 6. Do not force the tool.

It will do the job better and safer at the rate for which it was intended.

#### 7. Use the right tool.

Do not force small tools or attachments to do the job of a heavy-duty tool. Do not use tools for purposes not intended, for example, do not use circular saws to cut tree limbs or logs.

# 8. Dress properly.

Do not wear loose clothing or jewellery, they can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protecting hair covering to contain long hair.

# 9. Use safety glasses.

Also use face or dust mask if the cutting operation in dusty.

# 10. Connect dust extraction equipment.

If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.

#### 11. Do not abuse the cord.

Never carry the tool by the cord or yank it to disconnect it from the socket. Keep the cord away from heat, oil and sharp edges.

#### 12. Secure work.

Use clamp or a vice to hold the work. It is safer than using your hand and frees both hands to operate the tool.

#### 13. Do not overreach.

Keep proper footing and balance at all times.

#### 14. Maintain tool with care.

Keep cutting tools sharp and clean for better and safer performance. Follow

instructions for lubrication and changing accessories. Inspect tool cord periodically and if damaged have it replaced by an authorised service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean and free of oil or grease.

#### 15. Disconnect tools.

When not in use, before servicing and when changing accessories such as blades, bits and cutters, remove the mains plug from the socket.

### 16. Remove adjusting keys and wrenches.

Make the habit of checking to see that keys and adjusting wrenches are hat keys and adjusting wrenches are removed from the tool before turning it on.

#### 17. Avoid unintentional starting.

Do not carry a plugged-in tool with a finger on the switch. Ensure switch is in the off when plugging in.

#### 18. Use outdoor extension leads.

When tool is used outdoors, use only extension leads approved for outdoor use.

#### 19. Stay alert.

Watch what you are doing. Use common sense. Do not operate tool when you are tired or under the influence of drugs or alcohol.

#### 20. Check damaged parts.

Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, free running of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorised service centre unless otherwise indicated in this instruction manual. Have defective switches replaced by an authorised service facility. Do not use the tool if the switch dose not turn it on and off.

# 21. Warning.

The using of any accessory or attachment, other than those recommended in this instruction manual may present a risk of personal injury.

# 22. Have your tools repaired by qualified person.

This electrical tool is in accordance with the relevant safety requirements. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

# ADDITIONAL SAFETY INSTRUCTIONS FOR YOUR MITRE SAW

1.If the supply cord is damaged have it replaced by a qualified person.

- 2. Only wood or products such as medium density fibre board can be cut with this saw. Other materials may shatter or cause the blade to grab.
- 3. Never fit substandard blades to the saw. Only fit correctly sized saw blade.
- 4. Let the blade reach full speed before commencing the cut.
- 5. Do not use damaged or worn blades.
- 6. Ensure that the directional arrow marked on the blade corresponds with the rotational direction of motor.
- 7. Ensure that the movable guards operate freely without jamming.
- 8. Never cut pieces too small to be held securely against the straight guide leave enough space for the hand to be a safe distance from the blade.
- 9. Regularly check the blade securing bolt.
- 10. Do not run the machine with any part of the casing missing or damaged.
- 11. Do not start the saw when the blade is inserted into the workpiece.
- 12. Let the blade come to a complete stop before removing any jammed or offcut material from around the blade area.

Do not attempt to stop the blade by placing sideways pressure on the blade disc.

- 13. Before cutting let the saw blade run freely for a few seconds. If it makes an unfamiliar sound or vibration switch it off immediately and disconnect from the power supply. Investigate cause or consult your dealer.
- 14. Ensure all securing clamps are tight and check for excessive play.
- 15. Never try to cut freehand. Always ensure that the workpiece is securely pressed against the straight guide and table support surface.
- 16. Disconnect from the mains supply, pull down the handle of the saw. With the blade in its furthest down position, rotate the blade by hand to ensure it is free from obstruction. Repeat this procedure at all maximum mitre and bevel positions before commencing work.
- 17. Ensure that the workpiece to be cut off has sufficient room to move sideways. Failure to do so may result in the off cut binding against the blade.
- 18. Ensure that irregular or round piece to be cut off has sufficient room to move or twist so that they cannot pinch the blade.
- 19. Do not forget to remove any adjustment keys, spanners and wrenches before switching on the tool.
- 20. When the machine is in operation, keep hands away from the cutting area.
- 21. Always ensure the safety guard is in working order before use. Should the guard not close quickly over the saw blade, do not use.
- 22. Do not tie or wedge open the safety guard.
- 23. Only use blades with the correct bore size for the spindle.
- 24. Do not use saw blade which does not comply with the characteristics specified in these instructions.
- 25. Do not use saw blades made of high speed steel.
- 26. Do not cut into screws or nails. Inspect workpiece for nails and screws before use.
- 27.Use a Residual Circuit Breaker on all 230V Power tools. This can help minimise the risk of an electrical shock if an earth fault or short circuits occurs.
- 28. If using a power cable extension ensure that the cable is fully unwound and that its length is less than 30m. Lengths over 30 m will effect the tools performance as a result of voltage drop.

29. Always use the appropriate safety equipment that is required for the product. e.g. Goggles / Safety Spectacles, Ear defenders (essential with tools with a noise rating of over 85 dbA), Gloves and face masks. In all cases ensure that the safety equipment is in good condition.

Double insulation:

The tool is double insulated. This means that all the external metal parts are electrically insulated from the mains power supply. This is done by placing insulation barriers between the electrical and mechanical components making it unnecessary for the tool to be earthed.

#### **Important note:**

Remove the main plug from socket before carrying out any adjustment or servicing. Ensure your mains supply voltage is the same as your tool rating plate voltage.

# **SYMBOLS**



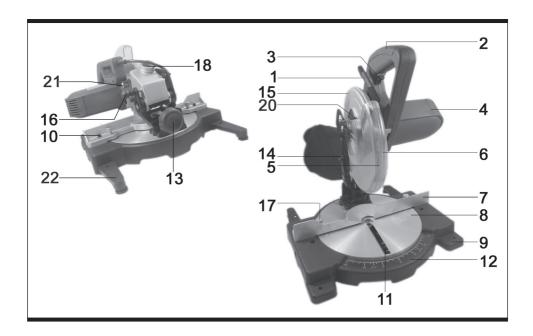
Read the manual







Wear dust mask,eye & ear protection



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- 2 HANDLE
- **3 TRIGGER**
- **4 MOTOR**
- **5 SAWBLADE**
- **6 RETRACTABLE SAFETY GUARD**
- **7 FENCE**
- **8 ROTARY TABLE**
- **9 BASE PLATE**
- **10 LOCKING SCREWS FOR STRAIGHT GUIDE**
- **11 ROTARY TABLE SLOT**
- **12 ROTARY TABLE ANGLE SCALE**
- **13 HEAD TILT CLAMPING KNOB**
- **14 RETRACTABLE SAFETY GUARD ACTUATOR**
- **15 BLADE COVER**
- **16 LOCK PIN**
- **17 ROTARY TABLE LOCKING KNOBS**

#### **18 DUST EXTRACTION PORT**

#### 19 TILT ANGLE SCALE (SEE FIG7)

#### **20 SAFETY GUARD MOUNTING PLATE**

#### 21 BLADE LOCK LEVER

**22 SUPPORT FOOT** 

# **TECHNICAL DATA**

Voltage:	230V~50Hz
Input power:	1200W
No load speed:	5,000min <sup>-1</sup>
Cutting capacity (Bevel/Mitre)	
Straight cut 0° X 0°	120 X 60mm
45° Mitre cut 0° X 45°	80 X 60mm
45° Bevel cut 45° X 0°	120 X 35mm
Compound cut 45° X 45°:	80 X 35mm
Net weight:	6.9kg

# **NOISE AND VIBRATION DATA**

Sound pressure level:	93.2dB (A)
Sound power level:	106.2dB (A)
Vibration level:	1.408m/s <sup>2</sup>

# **SAW BLADE:**

#### 210mm diameter

30mm bore diameter

#### 2.6mm thickness blade tooth

This saw comes with a 24 Teeth Tungsten Carbide Tipped Blade. Saw blades are available with differing number of teeth so choose according to the quality of cut required eg more teeth for finer cut. Always use blades with the dimensions shown above.

# **ACCESSORIES**

Spanner: 1pc Dust Bag: 1pc Allen Key: 1pc

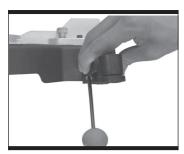


Fig 2

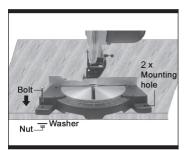


Fig 3

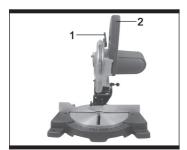


Fig 4



Fig 5

# **OPERATION INSTRUCTIONS**

#### 1.FIT ADDITIONAL SUPPORT FEET

In order to further stabilize the unit and prevent excess movement should the head be released accidentally you MUST fit the additional support feet to the rear of the base plate as follows:

Turn the unit around so you are facing the back of the saw. The feet mount on either side of the base plate. Locate and secure the feet using the two screws provided. Check and confirm they are secure. (See Fig 2)

#### 2.MOUNTING BOLT

Before use, the saw should be fixed to a firm, level surface with the 2 mounting bolts (supplied).

Four holes are provided in the base of the saw to enable it to be fixed to a bench, or other supporting surface. (See Fig3)

#### 3.TO MAKE A CUT

a.Connect the machine to power outlet ensure that the mains cable is clear of the blade and base plate.

b.Position the material to be cut on the machine bed, ensure it is firmly held so that it will not move during cutting.

Ensure that the rotary table lock knobs (17) and head tilt clamp knob (13) are tightened before cutting. (Fig1)

c.Press the trigger (3) and allow the saw blade to run up the speed.

d.Still holding in the trigger, press the safety release lever (1) towards the handle. It will then be possible to push the saw head down by the handle.

e.Continue to move the saw head down smoothly and make the cut exerting only gentle pressure on the downward stroke, letting the saw do the work.

#### 4. MITRE CUTS USING THE ROTARY TABLE

The saw can be moved from the normal cross cut 0° position (See Fig4) to an angle position up to 45° left or right of the 0° position (Fig5 shows 45° to left position).

Release the rotary table lock knobs (17). Move the saw to the desired angle by twisting so that the table turns. Set at the desired angle, and tighten the rotary table lock knobs (17). Make your cut.

#### 5. BEVEL CUTS USING THE HEAD TILT

The saw can be moved from the normal  $90^{\circ}$  - perpendicular position of Fig4 to an angled position down to  $45^{\circ}$  from the horizontal, on the left only. Fig6 shows the saw in the  $45^{\circ}$  to horizontal position (with the rotary table in the 0 position).

To adjust head tilt, release the clamping knob (13) and tilt the saw head to the left, until the desired angle is reached on the angle scale (21). Retighten the clamping knob (13) and make your cut (See Fig7).

#### 6. COMPOUND ANGLE CUTS

By using both the rotary table adjustment and the head tilt, cutting of compound angles is possible. Fig8 shows the saw with 45° set on the rotary table and the saw head tilted 45°.

#### 7. PRECISION SETTING OF ANGLES

While the machine has been factory set, it is advisable that the 0° setting of the rotary table and the 90° perpendicular setting of the tilt be checked, as these positions may have moved in transit. (Ensure power is disconnected while making these adjustments).

To confirm the 0° rotary table setting, set the rotary table at 0° and tighten the rotary table lock knob. Check that the angle between the straight guide and the blade is 90° using a try square (A, not supplied) as shown in Fig9. If the angle requires adjustment, loosen the straight guide clamp screws (10), and align the straight guide (7) against the try square.

Retighten the clamp screws (10).

Similarly, check that the angle of the blade to the face of the rotary table is 90°. If necessary adjust the tilt angle of the saw head at the 90° position by altering the set screw (23) position.

When the 90° position is correct, tighten the locknut on the set screw (24). Refer Fig7, Fig10 and Fig11.

The  $45^{\circ}$  bevel tilt should also be adjusted use a  $45^{\circ}$  set square or mitre gauge (B, not supplied), to check the  $45^{\circ}$  angle, then adjust the set screw (19) to set the correct stop position, then tighten the lock screw (20). Refer Fig11 and Fig7.



Fig 6

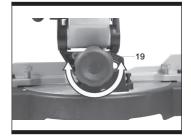


Fig 7



Fig 8

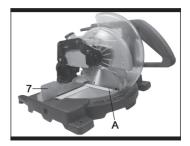


Fig 9

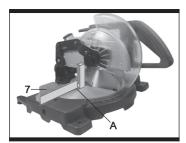


Fig 10



Fig 11

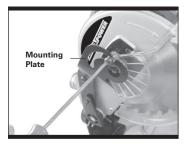


Fig 12



Fig 13

#### 8. DUST EXTRACTION PORT

To reduce build up of saw dust and maintain top efficiency of cutting, the saw may be connected to a workshop vacuum cleaner via the dust extraction port (18). The port accepts 32mm diameter vacuum hose. Alternatively saw dust collection can be achieved by clipping a dust bag on the dust extraction port. To ensure optimal dust collecting, empty the dust bag when it becomes filled to approximately 2/3 of its capacity. To empty the dust bag, remove from the dust extraction port, open the dust bag by unzipping the slide fastener.

#### 9. CHANGING THE SAW BLADE

Disconnect the saw from the power supply. Remove the screw on lower left of guard mounting plate and loosen slightly the other screw on upper right of mounting plate then slide along the slot and turn the mounting plate to rest the retractable safety guard on the top of the upper blade guard. (See Fig12 &13)

Press blade lock button and rotate blade until it is locked, then loosen and remove the blade securing bolt, and outer flange

with the socket wrench provided. (See Fig14)

**Note:** Blade securing bolt has a left hand thread. Remove the blade, (See Fig15) (we recommend the use of a stout glove for this). Clean any saw dust and debris from the arbor and saw blade securing flanges.

To refit the blade follow the above procedure in reverse order. If you take the inner flange off to clean re-fit as shown in Fig16.

# **MAINTENANCE**

- 1.Keep the machine's air vents unclogged and clean at all times.
- 2.Remove dust and dirt regularly from the machine. Cleaning is best done with compressed air or a rag.
- 3.Re-lubricate all moving parts at regular intervals.
- 4. Never use caustic agents to clean plastic parts.

# **ENVIRONMENTAL PROTECTION**

Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.



The fuse in the main plug of your power tool should always be replaced with one of identical rating.

Check the voltage given on your power tool matches the supply voltage.

The power tool is supplied with a fitted plug, however if you should need to fit a new plug follows the instruction below.

### **IMPORTANT**

The wire in the mains lead are coloured in accordance with the following code:

#### Blue ---Neutral Brown ---Live

The wire that is coloured **blue** must be connected to the terminal that is marked with the letter **N.**The wire that is coloured **brown** must be connected to the terminal that is marked with the letter **L.** 

A 13AMP (BS1363 or BS1363/A) plug must be used and a 13 AMP fuse must be fitted.

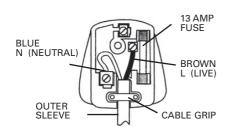




Fig 14



**Fig 15** 

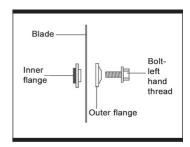


Fig 16



# **Declaration of Conformity**

We, Importer

**Screwfix Direct Ltd Mead Avenue Houndstone Business Park** Yeovil **BA 22 8RT** 

Declare that the product

**MITRE SAW BM210J** 

Complies with the essential health and safety requirements of the following directives:

89/336 EEC. 93/68 EEC.-EMC Directive.

73/23 EEC, 93/68 EEC.-Low Voltage Directive 98/37 EC.-Machinery Directive.

Standards and technical specifications referred to:

EN 61029-1:2000 EN 61029-2-9:2002 EN 55014-1:2000/+A1:2001/+A2:2002 EN 55014-2:1997/+A1:2001 EN 61000-3-2:2000 EN 61000-3-11:2000

#### **Authorised Signatory**

Date:

03/15/05

Signature: P.C. Hames

Name: Peter Harries Screwfix Direct Ltd Quality Manager

2005

