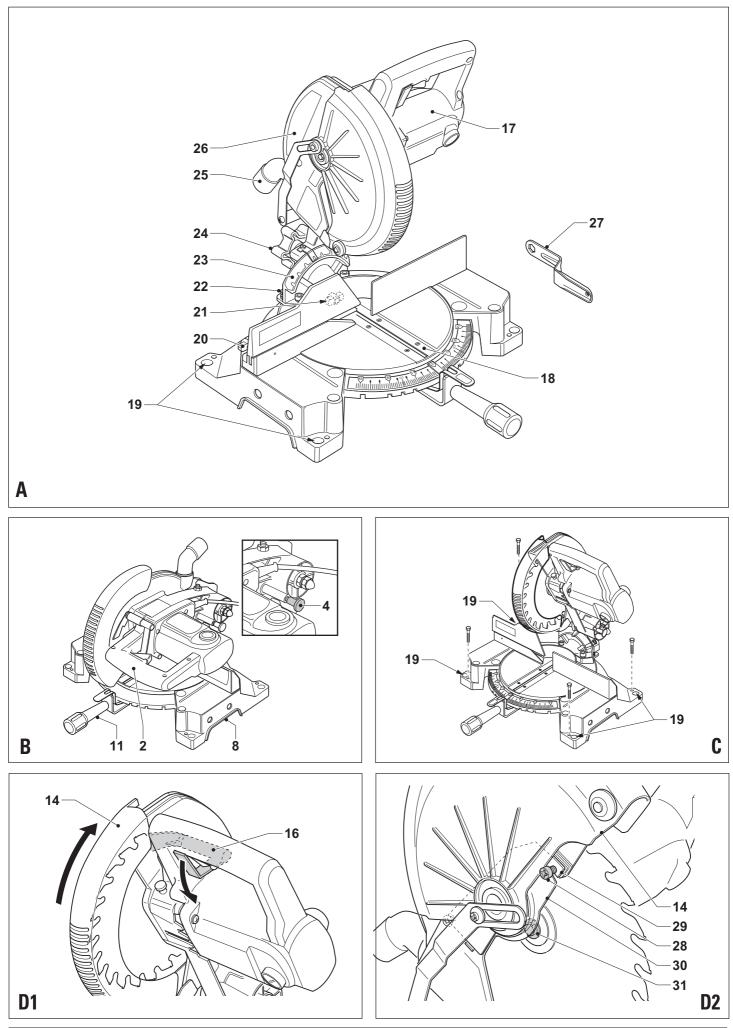


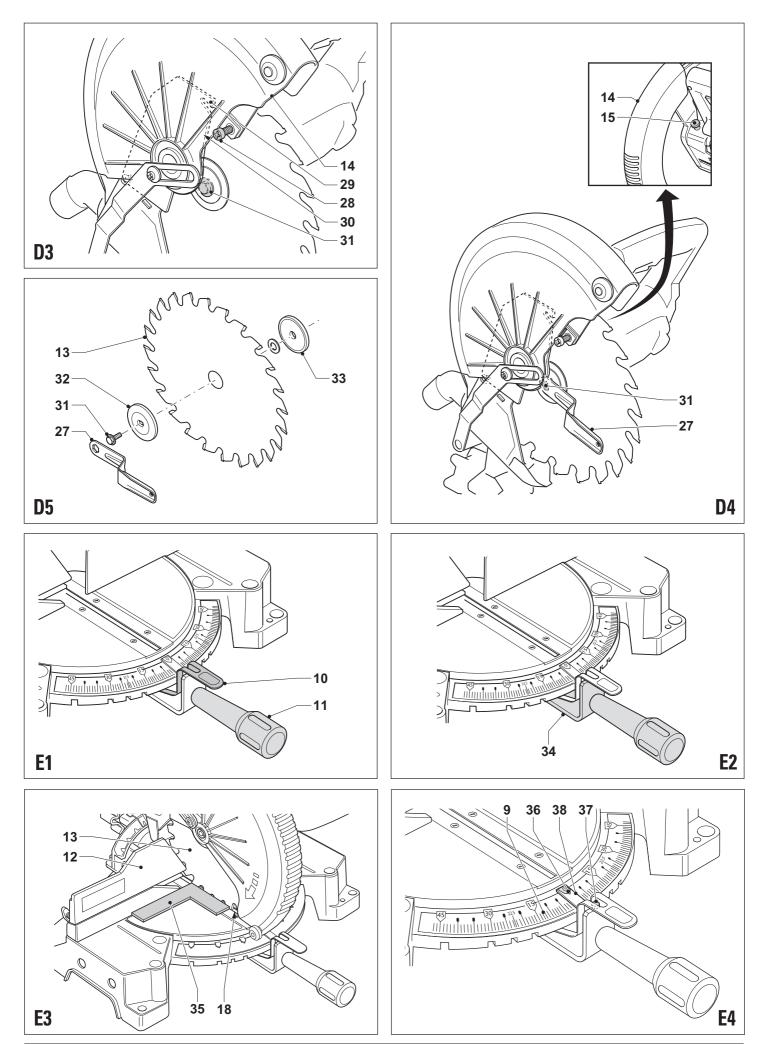
UK

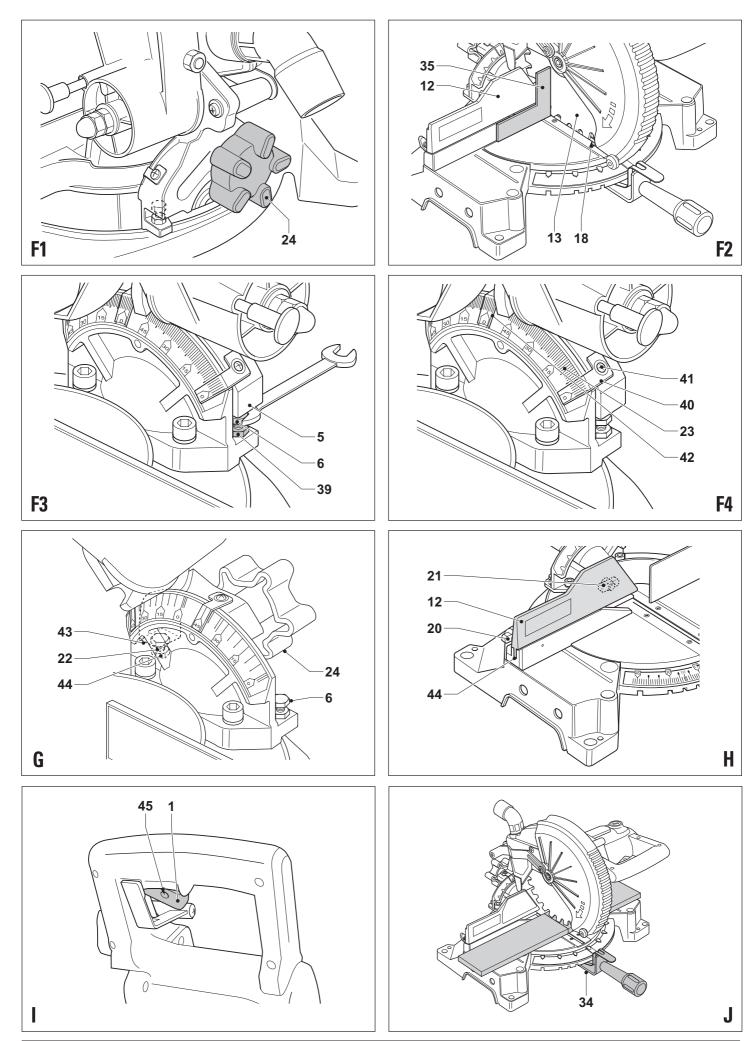
Ireland

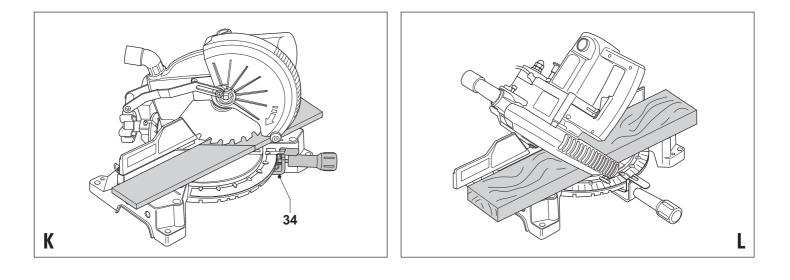
Australia

**New Zealand** 









# Intended use

Your Black & Decker mitre saw has been designed for sawing wood and wood products.

## Safety instructions

- Warning! When using mains-powered tools, basic safety precautions, including the following, should always be followed to reduce the risk of fire, electric shock, personal injury and material damage.
- Read all of this manual carefully before operating the tool.
- Retain this manual for future reference.
- · Remove the plug from the socket before carrying out any adjustment, servicing or maintenance.

# Keep work area clean

Cluttered areas and benches can cause accidents.

# **Consider work area environment**

Do not expose the tool to rain. Do not use the tool in damp or wet conditions. Keep the work area well lit. Do not use the tool where there is a risk of causing fire or explosion, e.g. in the presence of flammable liquids and gases.

# Keep children away

Do not allow children, visitors or animals to come near the work area or to touch the tool or mains cable.

# **Dress properly**

Do not wear loose clothing or jewellery, as these can be caught in moving parts. Preferably wear rubber gloves and non-slip footwear when working outdoors. Wear protective hair covering to keep long hair out of the way.

# **Personal protection**

Always use safety glasses. Use a face or dust mask whenever the operations may produce dust or flying particles. Hearing protection should be worn.

# **Guard against electric shock**

Prevent body contact with earthed or grounded surfaces (e.g. pipes, radiators, cookers and refrigerators). Electric safety can be further improved by using a high-sensitivity (30 mA / 30 mS) residual current device (RCD).

#### Do not overreach

Keep proper footing and balance at all times.

#### Stay alert

Watch what you are doing. Use common sense. Do not operate the tool when you are tired. Secure workpiece

Use clamps or a vice to g>ëd the workpiece. It is safer and it frees both hands to operate the tool.

# **Connect dust extraction equipment**

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

# Remove adjusting keys and wrenches

Always check that adjusting keys and wrenches are removed from the tool before operating the tool.

#### Extension cables

Before use, inspect the extension cable and replace if damaged. When using the tool outdoors, only use extension cables intended for outdoor use. Up to 30 m of Black & Decker extension cable can be used without loss of power.

#### Use appropriate tool

The intended use is described in this instruction manual. Do not force small tools or attachments to do the job of a heavy-duty tool. The tool will do the job better and safer at the rate for which it was intended. Do not force the tool. Do not use the tool for purposes not intended, for example, do not use a circular saw to cut tree limbs or logs.

Warning! The use of any accessory or attachment or performance of any operation with this tool other than those recommended in this instruction manual may present a risk of personal injury.

# Check for damaged parts

Before use, carefully check the tool and mains cable for damage. Check for misalignment and seizure of moving parts, breakage of parts, damage to guards and switches and any other conditions that may affect its operation. Ensure that the tool will operate properly and perform its intended function. Do not use the tool if any part is damaged or defective. Do not use the tool if the switch does not turn it on and off. Have any damaged or defective parts repaired or replaced by an authorised repair agent. Never attempt any repairs yourself.

# Unplug the tool

Unplug the tool when it is not in use, before changing any parts of the tool, accessories or attachments and before servicing.

#### Avoid unintentional starting

Do not carry the tool with a finger on the on/off switch. Be sure that the tool is switched off when plugging in.

#### Do not abuse cord

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

#### Store idle tools

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

#### Maintain tools with care

Keep cutting tools sharp and clean for better and safer performance. Follow the instructions for maintenance and changing accessories. Keep handles and switches dry, clean and free from oil and grease.

#### Repairs

This tool complies with 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.

#### **Electrical safety**



This tool is double insulated; therefore no earth wire is required. Always check that the power supply corresponds to the voltage on the rating plate.

## Voltage drops

Inrush currents cause short-time voltage drops. Under unfavourable power supply conditions, other equipment may be affected. For example, artificial lighting will show a temporary drop in magnitude when the machine is switched on. If the system impedance of the power supply is lower than 0.29  $\Omega$ , disturbances are unlikely to occur.

#### Additional safety rules for mitre saws

- Do not allow untrained people to operate this machine.
- Make sure all locking knobs and handles are tight before starting any operation.
- Do not operate the machine without the guard in position. Do not operate the machine if the guard does not function or is not maintained properly.
- · Never use your saw without the kerf plate.
- Never place either hand in the blade area when the saw is connected to the mains supply.
- Refrain from removing any cut-offs or other parts of the work piece from the cutting area while the machine is running and the arm is not in the rest position.
- · Do not cut workpieces that exceed the cutting capacities as mentioned in the technical data.
- Never attempt to stop the machine in motion rapidly by jamming a tool or other means against the blade; serious accidents can be caused unintentionally in this way.
- Before using any accessory consult the instruction manual. The improper use of an accessory can cause damage.
- Select the correct blade for the material to be cut.
- Observe the maximum speed marked on the saw blade.
- Use a holder or wear gloves when handling a saw blade.
- Ensure that the blade is mounted correctly before use. Make sure that the blade rotates in the correct direction. Keep the blade sharp.
- Do not use blades of larger or smaller diameter than recommended. For the proper blade rating refer to the technical data. Use only the blades specified in this manual, complying with EN 847-1.
- Consider applying specially designed noise-reduction blades.
- Do not use HSS blades.
- Do not use cracked, bent or otherwise damaged saw blades.
- Do not use any abrasive discs.
- Raise the blade from the kerf in the workpiece prior to releasing the on/off switch.
- Ensure that the arm is securely fixed when performing bevel cuts.
- Do not wedge anything against the fan to hold the motor shaft. ٠
- The blade guard on your saw will automatically raise when the arm is brought down; ٠ it will lower over the blade when the arm is raised. The guard can be raised by hand when installing or removing saw blades or for inspection of the saw. Never raise the blade guard manually unless the machine is switched off.
- Do cut any other materials than those recommended.
- Keep the surrounding area of the machine well maintained and free of loose materials, e.g. chips and cut-offs.
- Check periodically that the motor air slots are clean and free of chips. ٠
- Replace the kerf plate when worn.
- Disconnect the machine from the mains before carrying out any maintenance or when ٠ changing the blade.
- Never perform any cleaning or maintenance work when the machine is still running ٠ and the arm is not in the rest position.
- Ensure the machine and the work area are provided with adequate general or localised liahtina.
- When possible, always mount the machine to a bench.

#### Additional safety instructions for Australia and New Zealand

- This appliance is not intended for use by young or infirm persons without supervision. Children must be supervised to ensure they do not play with the appliance.
- If the supply cord is damaged, it must be replaced by the manufacturer or an authorised Black & Decker Service Centre in order to avoid a hazard.

#### Labels on tool

The following pictograms are shown on the tool:



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Wear ear protectors.

🗸 Wear a dust mask

# Features

- 1. On/off switch
- 2. Operating handle
- Rear lower guard
   Saw arm lock-down
- Saw arm lock-down knob
   Angle position stop
- 5. Angle position stop
- 6. Vertical position adjustment stop
- Right-hand fence
   Hand indentation
- Hand indentation
   Mitre scale
- 9. Mitre scal
- 10. Mitre latch
- Mitre clamp knob
   Left-hand fence
- 13. Saw blade
- 14. Moveable lower guard
- 15. Spindle lock button
- 16. Saw arm lock-up release lever

# Fig. A

- 17. Motor housing
- 18. Kerf plate
- 19. Bench mounting holes
- 20. Upper fence clamping knob
- 21. Upper fence adjustment knob
- 22. Bevel position adjustment stop
- 23. Bevel scale
- 24. Bevel clamp knob
- 25. Saw dust outlet
- 26. Upper guard
   27. Blade spanner

# Assembly

Warning! Before assembly, make sure that the tool is switched off and unplugged.

#### Unpacking (fig. B)

- Carefully remove the tool from the packing material.
- Press down the operating handle (2) and pull out the lock-down knob (4), as shown.
- Gently release the downward pressure and allow the arm to rise to its full height.
- Fit the mitre clamp knob (11) as shown

#### Bench mounting (fig. C)

The feet are provided with holes (19) to facilitate bench mounting.

- Pass a bolt through each of the feet and tighten each bolt into a pre-drilled hole in the work bench. The two different sizes of holes accommodate different sizes of bolts. Use either hole; it is not necessary to use both. Always mount the machine firmly to prevent movement.
- To enhance the portability, mount the tool to a piece of 12.5 mm or thicker plywood. In this case it is possible to clamp the machine to your work support or move it to other job sites and reclamp it there.
- When mounting the machine to a piece of plywood, make sure that the mounting screws do not protrude from the bottom of the wood. The plywood must sit flush on the work support. When clamping the machine to any work surface, clamp only on the clamping bosses where the mounting screw holes are located. Clamping at any other point will interfere with the proper operation of the machine.
- To prevent binding and inaccuracy, be sure the mounting surface is not warped or otherwise uneven. If the machine rocks on the surface, place a thin piece of material under one foot until the machine is firm on the mounting surface.

#### Removing and fitting a saw blade (fig. D1 - D5)

#### Removing

- Depress the lever (16) to release the lower guard (14).
- Raise the lower guard as far as possible.
- Loosen the guard bracket screw (28) to release the angled corner piece (29).
- Push the angled corner piece between the head of the screw and the guard. This allows the guard bracket (30) to be raised enough to permit access to the blade screw (31).

- With the lower guard (14) held in the raised position by the guard bracket screw depress the spindle lock button (15) and rotate the blade until the lock engages.
- While keeping the spindle lock button depressed, loosen and remove the blade screw (31) by turning it clockwise using the spanner (27) supplied.
- Remove outer washer (33).
- Remove the saw blade (13).

#### Fitting

- Install the saw blade (13) onto the axle against the inner washer (34). Make sure that the arrow on the blade points in the same direction as the arrow on the tool.
- Replace the outer washer (33).
- While keeping the spindle lock button depressed, tighten the blade screw (31) by turning it counterclockwise using the spanner (27) supplied.
- Move the guard bracket (30) down until the angled corner piece (29) is below the head
  of the guard bracket screw (28).
- Tighten the guard bracket screw.

Warning! Never press the spindle lock while the blade is rotating.

#### Checking and adjusting the blade to the fence (fig. E1 - E3)

- Loosen the mitre clamp knob (11).
- Press the mitre latch (10) to release the mitre arm (34).
- Adjust the mitre angle to 0°.
- Pull down the saw arm until the blade just enters the saw kerf (18).
- Place a square (35) against the left-hand fence (12) and the blade (13). Make sure that the teeth of the blade do not touch the square.
- Check the position of the mitre arm (34). If necessary, adjust the mitre arm until the blade is at 90° to the fence as measured with the square.
- Tighten the mitre clamp knob.
- Adjust the mitre pointer as necessary.

#### Adjusting the mitre pointer (fig. E4)

- Observe the pointer (36) and the scale (9).
- If the pointer does not indicate exactly zero, loosen the screw (37), move the plastic moulding (38) to read 0° and tighten the screw.

#### Checking and adjusting the blade to the table (fig. F1 - F3)

- Loosen the bevel clamp knob (24).
- Adjust the bevel angle to 0°. Move the saw arm to the right until the angle position stop (5) rests against the stop screw (39).
- Pull down the saw arm until the blade just enters the saw kerf (18).
- Place a square (35) against the table (12) and the blade (13). Make sure that the teeth
  of the blade do not touch the square.
- Check the position of the saw arm. If necessary, adjust the saw arm until the blade is at 90° to the table as measured with the square.
  - Loosen the lock nut (39) a few turns.
  - Turn the stop screw (6) in or out as required.
  - Tighten the lock nut (39).
- Tighten the bevel clamp knob.
- Adjust the bevel pointers as necessary.

# Adjusting the bevel pointers (fig. F4)

- Observe the pointer (40) and the scale (23).
- If the pointer does not indicate exactly zero, loosen the screw (41) that secures the pointer and move the pointer as necessary.
- Adjust the other pointer (42) according the the same instructions.

#### Checking and adjusting the bevel angle (fig. G)

- Slide the upper part of the left-hand fence (12) out of the way.
- Loosen the bevel clamp knob (24).
- Adjust the bevel angle to 45°. Move the saw arm to the left until the bevel position stop (43) rests against the stop screw (22).
- Check the position of the saw arm. If necessary, adjust the saw arm until the blade is at 45°.
  - Loosen the lock nut (44) a few turns.
  - Turn the stop screw (22) in or out as required.

Loosen the clamping knob (20) and the adjustment knob (21).

- Tighten the lock nut (44).

Adjusting the upper fence (fig. H)

• Slide the fence to the left.

setting of bevel angles.

- Tighten the bevel clamp knob.
- To achieve a 47° left bevel or a 2° right bevel, adjust the stop screw (6 or 22) to allow the arm to move as necessary.

The upper part of the left-hand fence (12) can be adjusted to provide clearance for the

- Make a dry run with the saw switched off and check for clearance. Adjust the fence to be as close to the blade as practical to provide maximum workpiece support, without interfering with the up and down movement of the arm.
- Tighten the clamping knob (20) securely.
- Fasten the adjustment knob (21) until both parts of the fence are level.

**Warning!** The guide grooves (44) can become clogged with sawdust. Use a stick or some low pressure air to clear the guide grooves.

#### Dust extraction (fig. A)

An adaptor is required to connect a vacuum cleaner or dust extractor to the machine. The adaptor can be purchased from your local Black & Decker retailer.

- Insert the dust extraction adapter into the saw dust outlet (25).
- Connect the vacuum cleaner hose to the adaptor.

#### Use

Warning! Let the tool work at its own pace. Do not overload.

#### Switching on and off (fig. I)

- To switch the tool on, squeeze the on/off switch (2).
- To switch the tool off, release the on/off switch.
- To lock the tool for use, insert a padlock in the padlock hole (45).

#### Sawing

- Let the blade run freely for a few seconds before starting the cut.
- Apply only gentle pressure to the tool while performing the cut.
- Clamp the workpiece to the tool.

#### Vertical straight cross cut (fig. A & J)

- Loosen the mitre clamp knob (11).
- Press the mitre latch (10) to release the mitre arm (34).
- Engage the mitre latch at the 0° position and tighten the mitre clamp knob.
- Place the wood to be cut against the fence (7 &12).
- Take hold of the operating handle (2) and depress the lock-up release lever (16) to release the saw arm. Switch on the machine.
- Depress the saw arm to allow the blade to cut through the workpiece and enter the kerf plate (18).
- After completing the cut, switch off the machine and wait for the saw blade to come to a complete standstill before returning the saw arm to its upper rest position.

#### Vertical mitre cross-cut (fig. A & K)

- Loosen the mitre clamp knob (11).
- Press the mitre latch (10) to release the mitre arm (34).
- Move the mitre arm into the desired mitre position. The mitre latch locks on the positions 15°, 22.5°, 30° and 45°. If any intermediate angle or 47° is required, hold the mitre arm firmly and tighten the mitre clamp knob.
- Proceed as for a vertical straight cross-cut.

**Warning!** When mitring the end of a piece of wood with a small off-cut, position the wood to ensure that the off-cut is to the side of the blade with the greater angle to the fence; i.e. left mitre, off-cut to the right - right mitre, off-cut to the left.

#### Bevel cuts (fig. A & L)

Bevel angles can be set from  $47^{\circ}$  left to  $2^{\circ}$  right and can be cut with the mitre arm set between zero and a maximum of  $45^{\circ}$  mitre position right or left.

- Slide the upper part of the left-hand fence (12) out of the way.
- Loosen the bevel clamp knob (24).
- Move the saw arm into the desired bevel position. Hold the saw arm firmly and tighten the bevel clamp knob.
- Adjust the upper part of the left-hand fence (12) as necessary.
- Proceed as for a vertical straight cross-cut.

#### Compound mitre

A compound mitre is a cut made using a mitre angle and a bevel angle at the same time. This is the type of cut used to make frames or boxes with slanting sides.

**Warning!** If the cutting angle varies from cut to cut, check that the bevel clamp knob and the mitre lock knob are securely tightened. These knobs must be tightened after making any changes in bevel or mitre.

#### Hints for optimum use

- Place your hands no closer than 150 mm from the blade.
- Hold the workpiece tightly to the table and the fence when cutting. Keep your hands in
  position until the switch has been released and the blade has completely stopped.
- Always make dry runs (without power) before finish cuts so that you can check the path of the blade.
- Do not cross your hands.

- · Keep both feet firmly on the floor and maintain proper balance.
- As you move the saw arm left and right, follow it and stand slightly to the side of the saw blade.
- Sight through the guard louvres when following a pencil line.

#### Cutting base mouldings

The cutting of base moulding is performed at a  $45^\circ$  bevel angle.

- · Always make a dry run without power before making any cuts.
- All cuts are made with the back of the moulding laying flat on the saw.

# Inside corner

- Left side
   Desition the record line with the of the record line
  - Position the moulding with top of the moulding against the fence.
     Save the left side of the cut.
- Right side
  - Position the moulding with the bottom of the moulding against the fence.
  - Save the left side of the cut.

#### Outside corner

- Left side
  - Position the moulding with the bottom of the moulding against the fence.
     Save the right side of the cut.
- Right side
  - Position the moulding with top of the moulding against the fence.
  - Save the right side of the cut.

#### Cutting crown mouldings

The cutting of crown moulding is performed in a compound mitre. In order to achieve extreme accuracy, your saw has pre-set angle positions at 22.5° mitre and 33.85° bevel. These settings are for standard crown mouldings with 52° angles at the top and 38° angles at the bottom.

- Make test cuts using scrap material before doing the final cuts.
- All cuts are made in a left bevel and with the back of the moulding against the base.

#### Inside corner

- Left side
   Top of the moulding against the fence.
  - Mitre right.
  - Save the left side of the cut.
- Right side
- Bottom of the moulding against the fence.
- Mitre left.
- Save the left side of the cut.

### Outside corner

- Left side
  - Bottom of the moulding against the fence.
  - Mitre left.
  - Save the right side of the cut.
- Right side
  - Top of the moulding against the fence.
  - Mitre right.
  - Save the right side of the cut.

## Accessories

The performance of your tool depends on the accessory used. Black & Decker and Piranha accessories are engineered to high quality standards and designed to enhance the performance of your tool. By using these accessories you will get the very best from your tool.

# Transporting (fig. B)

- To transport the machine, lower the arm and depress the lock down pin (4). Lock the
  mitre arm in the utter right mitre angle, to make the machine as compact as possible.
- Always carry the machine at the hand indentations (8) shown in fig. B.

Warning! Do not carry the machine by the guard.

#### Maintenance

Your tool has been designed to operate over a long period of time with a minimum of maintenance. Continuous satisfactory operation depends upon proper tool care and regular cleaning.

- · Regularly clean the ventilation slots with a clean, dry paint brush.
- To clean the tool, use only mild soap and a damp cloth. Never let any liquid get inside the tool and never immerse any part of the tool into liquid.

Warning! Before carrying out any maintenance, make sure that the tool is switched off and unplugged.

# Mains plug replacement (U.K. & Ireland only)

- If a new mains plug needs to be fitted:
- Safely dispose of the old plug.
- Connect the brown lead to the live terminal in the new plug.
- Connect the blue lead to the neutral terminal.

**Warning!** No connection is to be made to the earth terminal. Follow the fitting instructions supplied with good quality plugs. Recommended fuse: 13 A.

# Protecting the environment



Separate collection. This product must not be disposed of with normal household waste.

Should you find one day that your Black & Decker product needs replacement, or if it is of no further use to you, do not dispose of it with household waste. Make this product available for separate collection.



Separate collection of used products and packaging allows materials to be recycled and used again. Re-use of recycled materials helps prevent environmental pollution and reduces the demand for raw materials.

Local regulations may provide for separate collection of electrical products from the household, at municipal waste sites or by the retailer when you purchase a new product.

Black & Decker provides a facility for the collection and recycling of Black & Decker products once they have reached the end of their working life. To take advantage of this service please return your product to any authorised repair agent who will collect them on our behalf.

You can check the location of your nearest authorised repair agent by contacting your local Black & Decker office at the address indicated in this manual. Alternatively, a list of authorised Black & Decker repair agents and full details of our after-sales service and contacts are available on the Internet at: **www.2helpU.com** 

## Technical data

		XTS100	
Voltage	V <sub>AC</sub>	230	
Power input	Ŵ	1,500	
No-load speed	min <sup>-1</sup>	5,000	
Blade diameter	mm	254 mm	
Blade bore	mm	16	
Blade body thickness	mm	2.8	
Max. cross-cut capacity 90°	mm	140	
Max. mitre capacity 45°	mm	100	
Max. depth of cut 90°	mm	89	
Max. depth of bevel cross-cut	mm	57	
Mitre (max. positions)	left	47°	
	right	47°	
Bevel (max. positions)	left	47°	
	right	2°	
Weight	kg	14	
Cutting capacities			
0° mitre			_
Resulting width at max. height 89 mm	mm	89	
Resulting height at max. width 140 mm	mm	38	
45° mitre			
Resulting width at max. height 89 mm	mm	38	
Resulting height at max. width 38 mm	mm	89	
45° bevel			
Resulting width at max. height 38 mm	mm	140	
Resulting height at max. width 140 mm	mm	38	
Cutting crown mouldings			
Resulting height at max. width 133 mm	mm	20	

# EC declaration of conformity

XTS100

Black & Decker declares that these products conform to: 98/37/EC, 89/336/EEC, EN 61000, EN 61029, EN 55014

 $L_{_{pA}}$  (sound pressure) 93.5 dB(A),  $L_{_{WA}}$  (acoustic power) 106.9 dB(A), hand/arm weighted vibration 1.57 m/s²

 $K_{nA}$  (sound pressure uncertainty) 3 dB(A),  $K_{WA}$  (acoustic power uncertainty) 3 dB(A)



Kevin Hewitt Director of Consumer Engineering Spennymoor, County Durham DL16 6JG, United Kingdom 1-7-2005

#### Guarantee

Black & Decker is confident of the quality of its products and offers an outstanding guarantee. This guarantee statement is in addition to and in no way prejudices your statutory rights. The guarantee is valid within the territories of the Member States of the European Union and the European Free Trade Area.



If a Black & Decker XT product (excluding accessories, attachments, batteries, chargers and chucks) becomes defective due to faulty materials, workmanship or lack of conformity within 3 years from the date of purchase, Black & Decker guarantees to replace all defective parts, repair products subject to fair wear and tear or replace such products, provided that the product is registered on the Black & Decker XT warranty website within 90 days of purchase. If the product is not registered, then only the standard warranty (2 years) applies.

The warranty does not apply if:

- The product has been used for trade, professional or hire purposes;
- The product has been subjected to misuse or neglect;
- The product has sustained damage through foreign objects, substances or accidents;
- · Repairs have been attempted by unauthorised persons;
- The product has been adapted in any way from its original specification;
- Unsuitable accessories or attachments have been used.

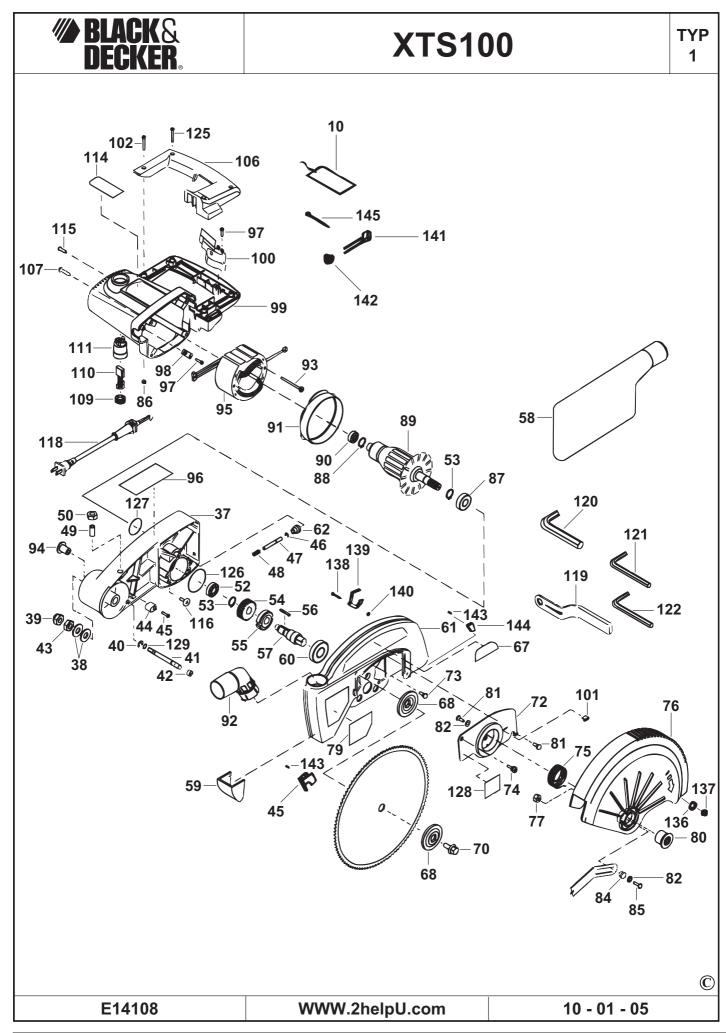
The extended warranty does not apply if:

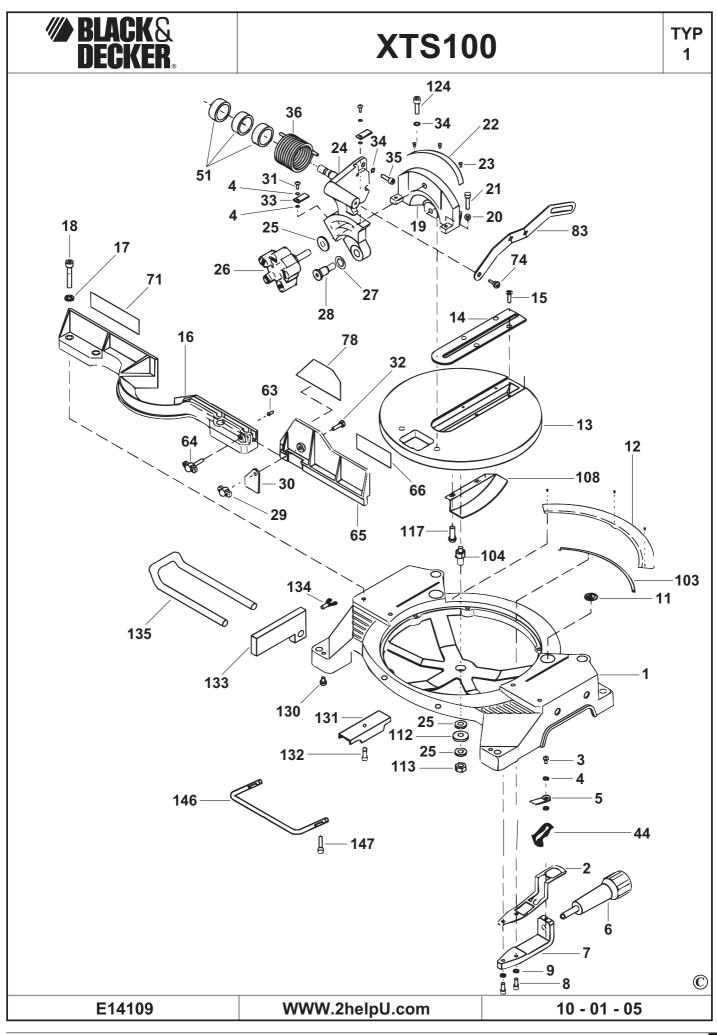
• Proof of purchase and the original extended warranty certificate is not produced.

# Register your product on-line now at <u>www.blackanddecker.co.uk/xt</u> to qualify for the extended warranty (3 years), and to be kept up to date on new products and special offers.

To claim on the guarantee, you will need to submit proof of purchase to the seller or an authorised repair agent. You can check the location of your nearest authorised repair agent by contacting your local Black & Decker office at the address indicated in this manual. Alternatively, a list of authorised Black & Decker repair agents and full details of our aftersales service and contacts are available on the Internet at: **www.2helpU.com** 

Further information on the Black & Decker brand and our range of products is available at **www.blackanddecker.co.uk** 





#### Australia

Black & Decker (Australia) Pty. Ltd. Tel. 03-8720 5100 20 Fletcher Road, Mooroolbark, Fax 03-9727 5940 Victoria, 3138

# New Zealand

Black & Decker 81 Hugo Johnston Drive Penrose, Auckland, New Zealand

United Kingdom Black & Decker 210 Bath Road Slough, Berkshire SL1 3YD

Tel. 01753 511234 Fax 01753 551155 Helpline 01753 574277

Tel. 09 579 7600 Fax 09 579 8200

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