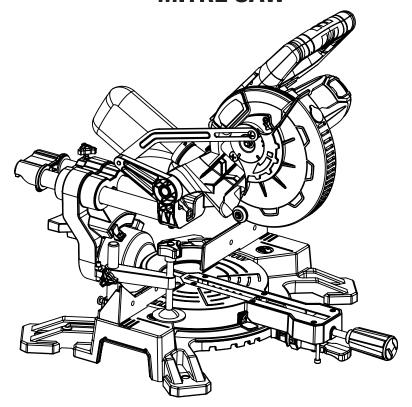
model no.: 055-6761-2



SLIDING COMPOUND MITRE SAW



IMPORTANT:

Please read this manual carefully before using this mitre saw and save it for reference

INSTRUCTION MANUAL

Mastercraft

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NOTE

If any parts are missing or damaged, or if you have any questions, please call our toll–free helpline at 1-800-689-9928.



SAVE THESE INSTRUCTIONS

This manual contains important safety and operating instructions. Read all instructions and follow them when using this product.

SAFETY GUIDELINES

SPECIFICATIONS

Motor	120V AC, 60 Hz, 9.5A
Speed	5000 RPM (no load)
Blade	7 1/4" (18.4 cm) 24-tooth carbide-tipped
Arbor Size	5/8" (15.9 mm)
Cutting Capacity	2 x 8" (5.1 x 20.3 cm) crosscut at 0° mitre, 0° bevel 2 x 6" (5.1 x 15.2 cm) mitre cut at 45° mitre, 0° bevel 1 1/2 x 6" (3.8 x 15.2 cm) compound cut at 45° mitre, 45° bevel 1 1/2 x 8" (3.8 x 20.3 cm) cross cut at 45° bevel, left
Weight	19 lb 13 oz (9 kg)

SAFETY GUIDELINES

- Keep guards in place and in working order.
- Remove adjusting keys and wrenches. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- **Keep work area clean.** Cluttered areas and benches invite injuries.
- **Don't use in dangerous environment.** Don't use power tools in damp or wet locations, or expose them to rain or snow. Keep work area well lighted.
- **Keep children away.** All visitors should be kept at a safe distance from work area.
- **Make workshop childproof** with padlocks, master switches, or by removing starter keys.
- **Don't force the tool.** It will do the job better and safer at the rate for which it was designed.
- **Use the right tool.** Don't force tool or attachment to do a job for which it was not designed.
- Wear proper apparel. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewellery which may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
- **Always use safety glasses.** Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact-resistant lenses, they are not safety glasses.
- **Secure work.** Use clamps or vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
- **Don't overeach.** Keep proper footing and balance at all times.
- **Maintain tools with care.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- **Disconnect tools before servicing;** when changing accessories, such as blades, clamps, extensions, and the like.
- Reduce the risk of unintentional starting. Make sure the switch is in the OFF position before plugging in.
- **Use recommended accessories.** Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.



WARNING!

To reduce the risk of injury, read the instruction manual.



WARNING!

Read and understand all instructions. Failure to follow the warnings and instructions listed below may result in electrical shock, fire and/or serious injury.

6

SAFETY GUIDELINES

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- Never stand on tool. Serious injury could occur if the tool is tipped or if something unintentionally
 comes into contact with the cutting tool.
- Direction of feed. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
- Never leave tool running unattended. Turn power off. Don't leave tool until it comes to a complete stop.

DOUBLE-INSULATED TOOLS

- When servicing, use only identical replacement parts.
- Polarized Plugs: To reduce the risk of electric shock, this equipment has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully into the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

ELECTRICAL SAFETY

- To reduce the risk of electric shock, double-insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit into a polarized outlet only one way. If the plug does not fit into the outlet properly, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.
- Double insulation eliminates the need for the three-wire grounded power cord and grounded power supply system. This compound mitre saw is a double-insulated tool.
- Before plugging in the tool, BE SURE that the outlet voltage supplied is within the voltage marked on the tool's data plate. DO NOT use "AC only" rated tools with a DC power supply.





WARNING!

Do not permit fingers to touch the terminal or plug when installing or removing the plug from an outlet



WARNING

Double insulation DOES NOT take the place of normal safety precautions when operating this tool.

- Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded.
- DO NOT expose power tools to rain or wet conditions and do not use power tools in wet
 or damp locations. Water entering a power tool will increase the risk of electric shock. This tool is
 intended for indoor use only.
- If operating a power tool in damp locations is unavoidable, ALWAYS USE a power supply for your tool that is protected by a Ground Fault Circuit Interrupter. ALWAYS WEAR electrician's rubber gloves and footwear in damp conditions.
- Inspect tool cords for damage. Have damaged tool cords repaired by a qualified person. BE SURE to stay constantly aware of the cord location, and keep it well away from the moving blade.
- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges and moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.
- Use proper extension cord. Make sure your extension cord is in good condition. When using an
 extension cord, be sure to use one heavy enough to carry the current your product will draw. An
 undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The
 following table shows the correct size to use depending on cord length and nameplate ampere rating.
 If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

MINIMUM GAUGE FOR CORD SETS

Ampere rating of the tool (120 V circuit only)			Total leng	th of cord	
		25' (7.62 m) 50' (15.24 m) 100' (30.48 m) 150' (45.72			150' (45.72 m)
more than	not more than	Minimum Gauge for the extension cord (AWG)			
0	6	18	16	16	14
6	10	18	16	14	12
10	12	16	16	14	12
12	16	14	12	Not recor	mmended

SPECIFIC SAFETY RULES FOR MITRE SAWS

- Always wear eye protection.
- Do not operate the saw without guards in place.



NARNING!

For your own safety, read the Instruction Manual before operating the mitre saw.

SAFETY GUIDELINES

- Be sure to turn the tool off and wait for the saw blade to stop before moving the workpiece or changing settings.
- **Be sure that the power is disconnected** before changing the blade or servicing the saw.
- Do not expose to rain or use in a damp location.
- When servicing, use only identical replacement parts.
- Never reach around the saw blade.
- **Do not perform any operation freehand.** Always place the workpiece to be cut on the mitre saw table and position it firmly against the fence as a backstop. Always use the fence.
- Always keep hands out of the path of the saw blade. Do not reach under the material being cut or into the blade's cutting path with your fingers or hand for any reason.
- To reduce the risk of injury, return the cutting head to the full rear position after each crosscut
- Always make sure that the mitre table and head assembly (bevel function) are locked in position before operating your saw. Lock the mitre table by securely tightening the mitre locking handle. Lock the head assembly (bevel function) by securely tightening the bevel locking knob.
- Be sure the blade path is free of nails. Always carefully inspect lumber and remove all nails BEFORE cutting.
- Always be sure the blade clears the workpiece. Never start the saw with the blade touching the workpiece. Always allow the motor to come up to full speed before starting a cut.
- Support long workpieces when cutting to minimize the risk of blade pinching or kickback. The saw may slip, walk or slide while cutting long or heavy boards.
- Never use a length-stop on the free end of a clamped workpiece. Never hold onto or bind the free end of the workpiece in any operation. If a clamp and length-stop are used together, they must both be installed on the same side of the saw table to prevent the saw from catching the loose end and kicking up.
- **Never cut more than one piece at a time.** Do not stack more than one workpiece on the worktable at a time.
- Avoid awkward operations and hand positions where a sudden slip could cause your hand to hit the blade. Always make sure you have good balance. Never operate your saw on the floor or in a crouched position.
- Only use the correct blades. Use the correct blade size, style and cutting speed for the material and the type of cut. Do not use blades with incorrect size holes. NEVER use blade washers or blade bolts that are defective or incorrect. The maximum blade capacity for this saw is 7 1/4" (18.4 cm).
- Always keep blades clean, sharp and properly set. Sharp blades minimize stalling and kickback.
- Do not use dull or damaged blades. Bent blades can break easily or cause kickback.

- Never hold a workpiece by hand if it is too small to be clamped. Always keep your hands clear of the "no hands" zone.
- Never apply lubricants to the blade when it is running.
- **Never use solvents to clean plastic parts.** Solvents could dissolve or otherwise damage the material.
- Do not turn the motor switch on and off rapidly. This could cause the blade to loosen, which could create a hazard. Should this ever occur, stand clear and allow the saw blade to come to a complete stop. Disconnect the saw from the power source and tighten the blade bolt securely.
- Never leave the saw unattended while it is connected to a power supply.
- Keep the motor air slots clean and free of chips or dust. To avoid motor damage, the motor should be blown out or vacuumed frequently. This keeps sawdust from interfering with the motor ventilation.
- Never lift this tool by gripping the switch handle or by the mitre fence. This may cause misalignment. Always lock the head assembly in the "Down" position and carry the saw by holding the base or lift it using the carrying handle/support bracket.

ADDITIONAL RULES FOR SAFE OPERATION

- **Know your power tool.** Read the instruction manual carefully. Learn the applications and limitations, as well as the specific potential hazards related to this tool. Following these rules will reduce the risk of electric shock, fire or serious injury.
- Always wear safety glasses or eye shields when using this saw. Everyday eyeglasses have only impact-resistant lenses; they are NOT safety glasses. All users and bystanders MUST wear eye protection that conforms to ANSI Z87.1.
- **Protect your lungs.** Wear a face mask or a dust mask if the operation is dusty.
- **Protect your hearing.** Wear appropriate personal hearing protection during use. Under some conditions and duration of use, noise from this product may contribute to hearing loss.
- All visitors and bystanders must wear the same safety equipment that the operator of the saw wears.
- **Inspect the tool cords periodically and,** if damaged, have them repaired by a qualified person.
- Always check the tool for damaged parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine whether it will operate properly and perform its intended function. Check for misalignment or binding of moving parts, broken parts and any other



WARNING!

The use of this tool can generate and/or disburse dust, which may cause serious and permanent respiratory or other injury. Always use NIOSH/OSHA approved respiratory protection appropriate for dust exposure. Direct particles away from the face and body.



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condition that may affect the tool's operation. A guard or other part that is damaged should be properly repaired or replaced by a qualified person.

 Save these instructions. Refer to them frequently and use them to instruct others who may use this tool. If someone borrows this tool, make sure he or she has these instructions.

GLOSSARY OF WOODWORKING TERMS

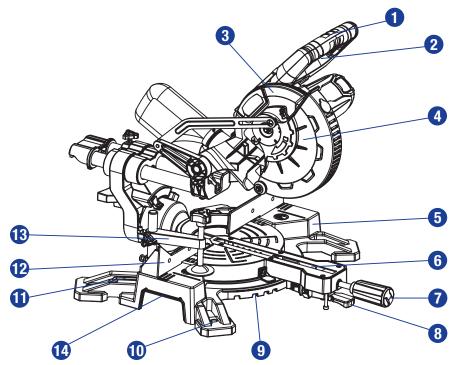
SAFETY GUIDELINES

- **Spindle:** The revolving shaft on which a blade or cutting tool is mounted.
- Spindle Lock: Allows the user to stop the blade from rotating while tightening or loosening the blade screw during blade replacement or removal.
- **Bevel Cut:** A cutting operation made with the blade at any angle other than 90° to the mitre table.
- **Chamfer Cut:** A cut removing a wedge from a block of wood so the end (or part of the end) is angled other than at 90°.
- **Compound Mitre Cut:** A cut made using both a mitre angle and a bevel angle at the same time.
- **Crosscut:** A cutting operation made across the grain of the workpiece.
- Freehand Cut: Performing a cut without using a fence, mitre gauge, fixture, work clamp, or other proper device to keep the workpiece from twisting or moving during the cut. Do not perform any operation freehand. Use a clamp or vice wherever possible.
- **Kerf:** The material removed by the blade in a through cut or the slot produced by the blade in a non-through or partial cut.
- Kickback: A hazard that can occur when the blade binds or stalls, throwing the workpiece back toward the operator.
- Mitre Cut: A cutting operation made with the blade at any angle other than 90° to the fence.
- No-Hands Zone: The area between the marked lines on the left and right side of the mitre table base. This zone is identified by No-Hands Zone symbols inside the lines marked on the mitre table base.
- Non-through Cut: Any cutting operation where the blade does not extend completely through the thickness of the workpiece.
- **Revolutions Per Minute (RPM):** The number of turns completed by a spinning object in one minute.
- **Saw Blade Path:** The area over, under, behind or in front of the blade, as it applies to the workpiece; the area that will be or has been cut by the blade.
- **Set:** The distance that the saw blade tooth is bent (or set) outward from the face of the blade.
- **Throat plate:** A plate inserted in the mitre saw's table that allows for blade clearance.
- Through Sawing: Any cutting operation where the blade extends completely through the thickness of the workpiece.
- Workpiece or Material: The item on which the cutting operation is being done. The surfaces of a workpiece are commonly referred to as faces, ends and edges.

Description	
Switch handle	
On/Off trigger switch	
Upper blade guard	
Lower blade guard	
Base	
Table insert	
Mitre handle	
	Switch handle On/Off trigger switch Upper blade guard Lower blade guard Base Table insert

No.	Description
8	Mitre stop locking lever
9	Positive mitre stop
10	Mounting hole
11	Hex wrench
12	Fence
13	Work clamp
14	Handhold for transportation

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NOTE:

Before attempting to use your saw, familiarize yourself with all of the operating features and safety requirements



Carefully remove the tool and any accessories from the box. Make sure that all items listed in the packing list are included. Inspect the tool carefully to make sure that no breakage or damage occurred during shipping.



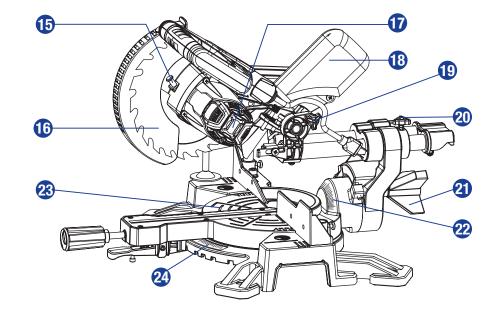
WARNING!

Do not discard the packing material until you have carefully inspected and satisfactorily operated

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ASSEMBLY AND ADJUSTMENTS

No.	Description
20	Sliding carriage lock knob
21	Bevel lock knob
22	Bevel scale
23	Table
24	Mitre scale



REMOVING AND INSTALLING THE BLADE

Removing blade (Fig. 1 to 4)

- Unplug the tool from the power source.
- Adjust the lock-down pin to raise the cutting head.
- Loosen the cover plate screw (1) about 4 turns with a star-head screwdriver. Do not remove this screw from the tool.
- Lift and hold up the lower blade guard (2) to expose the threaded blade bolt (3).
- Press and hold the spindle-lock button (4) and rotate the blade at the same time, until it is locked in position.
- Continue to hold the spindle lock button to keep it engaged, while using the wrench to turn the threaded blade bolt clockwise and remove the threaded blade
- Remove the outer flange (5) and the blade (6). Wipe the flanges and spindle to remove any dust and debris.

Fig. 2

Fig. 1

Installing blade (Fig. 1 to 4)

Unplug the mitre saw before changing/installing the blade.

• Install a 7 1/4" (18.4 cm) blade with 5/8" (15.9 mm) arbor onto the arbor shaft (7). Match the arrow on the blade with the arrow on the upper blade guard. Make sure that the blade teeth are pointing downward.

NOTE:

Pay attention to the pieces being removed, noting their position and the direction they face. Wipe the blade collar clean of any sawdust before installing a new blade.



WARNING!

Always be sure that the tool is switched off and unplugged before adjusting or checking function on the tool. Failure to switch off and unplug the tool may result in serious personal injury from accidental start-up.



WARNING!

Only use a 7 1/4" (18.4 cm) diameter blade. To avoid injury from an accidental start, make sure the switch is in the OFF position and the plug is not connected to the power source outlet.



KEY PARTS DIAGRAM

WARNING!

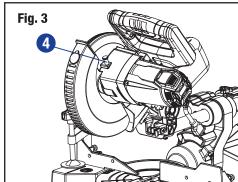
Your saw should NEVER be connected to the power source when you are assembling parts, making adjustments, installing or removing blades, cleaning, or when it it not in use. Disconnecting the saw will prevent accidental starting, which could cause serious personal injury.

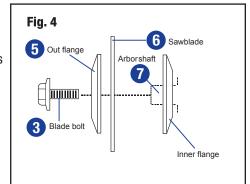


Do not allow familiarity with the mitre saw to cause a lack of alertness. A fraction of a second of carelessness is enough to cause severe injury.

ASSEMBLY AND ADJUSTMENTS

- Place the out flange against the blade and on the arbor. Thread the blade bolt onto the arbor in a counter-clockwise direction.
- Place the blade hex wrench into the blade bolt.
- Press the spindle lock button, holding it in firmly while turning the blade counterclockwise. When spindle lock engages, continue to press it in while tightening the blade bolt securely.
- Rotate the lower blade guard back to its original position until the slot in the cover plate engages with the cover plate screw. While holding the lower blade guard, tighten the screw with a Phillips screwdriver.
- Verify that the operation of the guard does not bind or stick.
- Be sure the spindle lock is released so the blade turns freely before operating the saw.





IMPORTANT:

Make sure the flats of the out flange are engaged with the flats on the arbor shaft. Also, the flat side of the out flange collar must be placed against the blade.

NOTE:

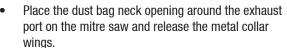
The lower blade guard must be in the right position to access the cover plate screw.



WARNING!

- To avoid injury, never use the saw without the cover plate securely in place. It keeps the blade bolt from falling out if it accidentally loosens and helps prevent the spinning blade from coming off the saw.
- Make sure the flanges are clean and properly arranged. Lower the blade into the lower table
 and check for any contact with the metal base or the mitre table.
- To avoid injury from an accidental start, make sure the switch is in the OFF position and the plug is not connected to the power source outlet.
- Never cut metals or masonry products with this tool. This mitre saw is designed for use on wood and wood-like products only.





MITRE SCALE (Fig. 6)

The sliding compound mitre saw scale can be easily read, showing mitre angles from 0° to 45° to the left, and 0° to 45° to the right. The mitre saw table has nine of the most common angle settings with positive stops at 0° , 15° , 22.5° , 31.6° and 45° . These positive stops position the blade at the desired angle quickly and accurately. Follow the process below for quickest and most accurate adjustments.

This tool is carefully adjusted and aligned at the factory, but rough handling may have affected the alignment. If your tool is not aligned properly, perform the following as needed.

To Adjust Mitre Angles:

- Unlock the table by turning the mitre handle (1) counterclockwise.
- Move the table while lifting up on the positive stop locking lever (2) to align the indicator (3) to the desired degree measurement.
- If the desired angle is one of the nine positive stops, release the positive stop locking lever, making sure the lever snaps into position, and then secure by tightening the mitre handle.
- If the mitre angle desired is not one of the nine positive stops, simply lock the table into desired angle position by turning the mitre handle in the clockwise direction.

IMPORTANT:

Check bag frequently and empty it before it gets full.

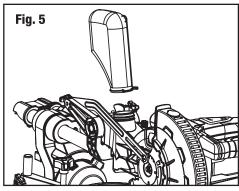
NOTE:

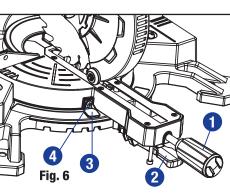
To empty the dust bag, remove it from exhaust port. Open zipper on underside of bag and empty into waste container.



WARNING!

Do not use this saw to cut and/or sand metals. The hot chips or sparks may ignite sawdust from the bag material.





ASSEMBLY AND ADJUSTMENTS

Mitre Angle Pointer Adjustment (Fig. 6)

- Move the table to the 0° positive stop.
- Loosen the screw (4) that holds the indicator with a Phillips screwdriver.
- Adjust the indicator (3) to the 0° mark and retighten the screw.

ADJUSTING FENCE SQUARENESS (Fig. 7)

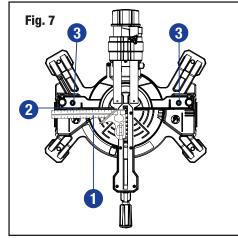
- Lower the cutting head and lock in position.
- Using a square (1), lay the heel of the square against the blade and the ruler against the fence (2) as shown.
- Loosen the two fence locking bolts (3) with a 6 mm hex wrench.
- Adjust the fence 90° to the blade and tighten the two fence locking bolts.
- After fence has been aligned, make a cut at 90° using a scrap piece of wood and check squareness on the piece. Readjust if necessary.

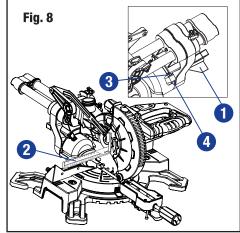
BEVEL STOP ADJUSTMENT

This tool is carefully adjusted and aligned at the factory, but rough handling may have affected the alignment. If your tool is not aligned properly, perform the following as needed.

90° (0°) Bevel Adjustment (Fig. 8)

- Loosen bevel lock knob (1) and tilt the pivot arm completely to the right. Tighten the bevel lock knob.
- Place a combination square (2) on the mitre table with the ruler against the table and the heel of the square against the saw blade.





\wedge

WARNING!

To avoid injury from an accidental start, make sure the switch is in the OFF position and the plug is not connected to the power source outlet.



WARNING!

To reduce the risk of injury, wear safety goggles or glasses with side shields.

- If the blade is not 90° square with the table, loosen the bevel lock knob, tilt the cutting head to the left, loosen the locknut (3) and turn the bevel angle adjustment bolt (4) in or out with a 3 mm hex wrench until the blade is square with the table.
- Tilt the pivot arm back to the right at 90° (0°) bevel and recheck for alignment.
- Repeat steps if further adjustment is needed.
- Tighten bevel lock knob and locknut (3) when alignment is achieved.

90° Bevel Pointer Adjustment (FIG. 9)

When the blade is exactly 90° to the table, loosen the bevel indicator screw (1) using a star-head screwdriver.

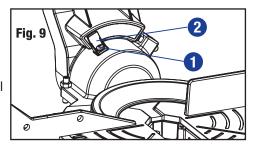
 Adjust bevel indicator (2) to the "0" mark on the bevel scale and retighten the screw.

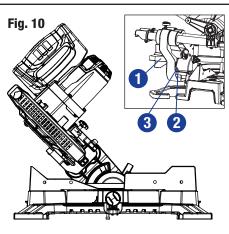
45° Bevel Adjustment (FIG. 10)

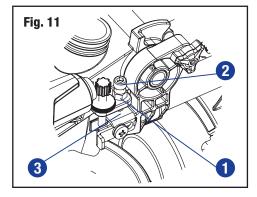
- Loosen the bevel lock knob (1) and tilt the cutting head completely to the left.
- Using a combination square, check to see if the blade is at a 45° angle to the table.
- If the blade is not at 45° to the mitre table, tilt the
 pivot arm to the right, loosen the locknut (2) on the
 bevel angle adjustment bolt (3) and use a 3 mm hex
 wrench to the adjust bolt depth in or out to increase or
 decrease the bevel angle.
- Tilt the cutting arm to the left to 45° bevel and recheck for alignment.
- Repeat steps until the blade is at 45° to the mitre table.
- Tighten bevel lock knob and locknut when alignment is achieved.

MAXIMUM CUTTING DEPTH (FIG. 11)

The maximum depth travel of the cutting head was set at the factory. Check to see that the blade does not extend more than 5/16" (0.8 cm) below the table insert, and does not touch the control arm throat or any part of the base or table. If the maximum depth needs readjusting:







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- Loosen the lock nut (1) to free the depth screw (2).
- Move the cutting head down until the blade extends just 5/16" (0.8 cm) below the table insert.
- Adjust the depth screw to touch the stop plate (3), then tighten the lock nut to secured the depth
- Recheck the blade depth by moving the cutting head front to back through the full motion of a cut along the control arm. If the blade touches the inside of the control arm, readjust the setting.
- When it is properly set, tighten the lock nut to lock the depth screw.

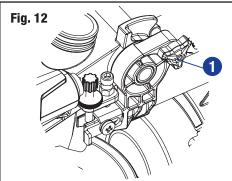
UNLOCKING AND LOCKING THE CUTTING **HEAD** (Fig. 12)

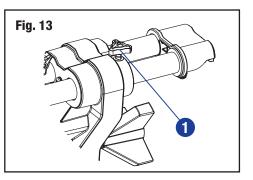
To unlock: Press and lightly hold down the cutting head. Pull out the lock-down pin (1) to release the cutting head. The cutting head should freely move up.

To lock: Place the cutting head at the lowest position. Secure the position and push the stop lock pin into the locking position. Please note, if there is any cutting depth setting, the lock in may not work. Release the cutting depth limitation, and then lock the cutting head in.

UNLOCKING THE SLIDE CARRIAGE (Fig. 13)

After removing the saw from the carton, loosen the slide carriage lock knob (1). When transporting or storing the mitre saw, the slide carriage should always be locked in position. The slide carriage lock knob is located on the upper side of the slide carriage.





IMPORTANT:

To avoid damage, never carry the mitre saw by the switch handle, the cutting arm or the mitre table handle. ALWAYS use the handholds for transportation.



CAUTION!

To avoid injury and damage to the saw, transport and store the mitre saw with the cutting head locked in the down position. Never use the stop pin to hold the cutting head in a down position for cutting operations.



CAUTION!

Always make sure that the spindle lock button is released so the blade can rotate freely. MAKE SURE that the locking pin is loose and the cutting head moves freely up and down. ENSURE that all clamps and locks are tightly in place, and that there is no excessive play in any parts.



WARNING!

Before each use, verify that the blade is free of cracks, loose teeth, missing teeth, or any other damage. Do not use if damage is observed or suspected.

Always wait for the blade to stop completely, and unplug the tool before changing accessories or making adjustments.

BENCH MOUNTING (Fig. 14)

This tool should be bolted with four bolts to a level and stable surface using the bolt holes (1) provided in the tool's base. This will help prevent tipping and possible injury.

INSTALLING THE WORK CLAMP (Fig. 15)

There are two mounting holes for the work clamp. These are located just behind the fence on the left and right side of the base.

- Loosen the locking screw with a Phillips screwdriver.
- Place the work clamp in the desired mounting hole.
- Tighten the screw to hold the work clamp.

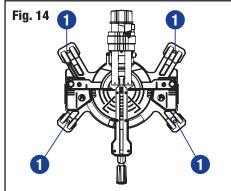
ON/OFF TRIGGER SWITCH (Fig. 16)

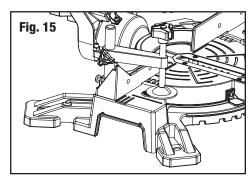
To turn the saw on, depress the trigger switch. To turn the tool off, release the switch. There is no provision for locking the switch on. To lock the saw off, place a padlock in the hole provided in the trigger switch.

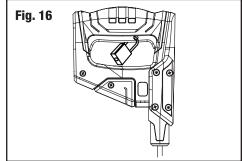
When the trigger switch is released, the blade will be stopped within 10 seconds.

DRY RUN

For safe operation, it's necessary to know where the blade will contact the workpiece during the cutting process. Always perform the simulated cutting process with the switch off to check and understand the projected path of the saw blade. Adjust the work clamps and fences to avoid any contact with the lower guard and cutting action.







MITRE CUT (Fig. 17)

- When a mitre cut is required, unlock the table by turning the mitre handle (1) counter-clockwise.
- While holding the mitre handle, lift up on the positive stop locking lever (2).
- Rotate the table to the right or left with the mitre handle.
- When the table is in the desired position, as shown on the mitre scale (3), release the positive stop locking lever and tighten the mitre handle. The table is now locked at the desired angle. Positive stops are provided at 0°, 15°, 22.5°, 31.6° and 45°.

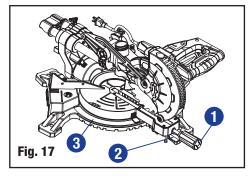
BEVEL CUT (Fig. 18)

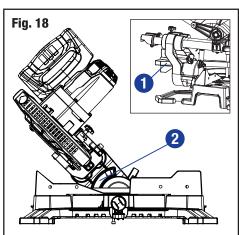
- When a bevel cut is required, loosen the bevel lock knob (1) by turning it clockwise.
- Tilt the cutting head to the desired angle, as shown on the bevel scale (2).
- The blade can be positioned at any angle, from a 90° straight cut (0° on the scale) to a 45° left bevel.
 Tighten the bevel lock knob to lock the cutting head in position. Positive stops are provided at 0° and 45°.

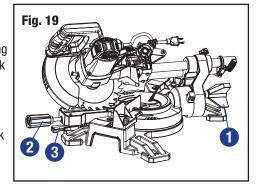
COMPOUND CUT (Fig. 19)

A compound cut is the combination of a mitre and a bevel cut simultaneously.

- Loosen the bevel lock knob (1) and position the cutting head at the desired bevel position. Lock the bevel lock knob.
- Loosen the mitre handle (2). Lift up the positive stop locking lever (3) and position the table at the desired angle. Release the positive stop locking lever and lock the mitre handle.







^

WARNING!

Ensure that the tool will not move on the supporting surface. Movement of the mitre saw on the supporting surface while cutting may result in loss of control and serious personal injury.



NARNINGI

- To avoid injury, after completing a cut and releasing the trigger switch, wait and confirm that
 the blade has stopped before raising the cutting head.
- To avoid injury, check and tighten the blade bolt periodically.

IMPORTANT:

Always tighten the mitre table lock handle before performing every cutting operation.

SLIDING CARRIAGE SYSTEM (Fig. 20)

- For chop cutting operations on small workpieces, slide the cutting head completely toward the rear of the unit and tighten the carriage lock knob (1).
- To cut wide boards up to 8" (20.3 cm), the carriage lock knob must be loosened to allow the cutting head to slide freely.



To avoid injury:

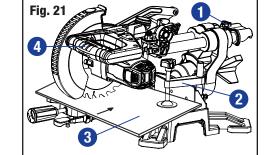
Let the blade reach full speed before cutting. This will help reduce the risk of a thrown workpiece.

Fig. 20

 Do not make crosscuts by lowering the blade and pulling the cutting head through the wood toward you.

To Slide Cut Wide Boards (Fig. 21)

- Unlock the carriage lock knob (1) and allow the cutting head assembly to move freely.
- Set both the desired bevel angle and/or the mitre angle and lock into position.
- Use a work clamp (2) to secure the workpiece (3).
- Grasp and pull the switch handle (4) forward until the centre of the saw blade is over the front of the workpiece.
- Engage the trigger to turn the saw on.
- When the saw reaches full speed, slowly push the switch handle down, cutting through the leading edge of the workpiece.
- Slowly move the switch handle toward the fence, completing the cut.
- Release the trigger and allow the blade to stop spinning before raising the cutting head and removing the workpiece.





CAUTION!

To reduce the risk of injury, return carriage to the full rear position after each crosscut operation.



CAUTION!

Always use a work clamp to maintain control and reduce the risk of workpiece damage and personal injury.

SETTING CUTTING DEPTH (Fig. 22)

The depth of cut can be preset for even and repetitive shallow cuts.

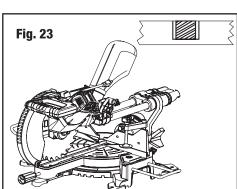
- Slide the stop plate (1) towards the front position.
- Loosen the lock nut (2) to free the lock knob (3), turn the stop knob until the cutting head down until the teeth of the blade are at the desired depth.
- While holding the upper arm in that position, tighten the lock nut to secured the stop knob.
- Recheck the blade depth by moving the cutting head front to back through the full motion of typical cut along the control arm.

CUTTING GROOVES (Fig. 23)

- Mark lines to identify the width and depth of the desired cut on the workpiece and put the workpiece on the table and aim the inside tip of the blade at the line. Use a work clamp to secure the workpiece on the table.
- Lower the cutting head so the tip of the blade touches the top surface of the workpiece at the marked line.
- While holding the upper arm in position, loosen the lock nut and turn the stop knob until it touches the stop plate, then retighten the lock nut. (SEE "SETTING CUTTING DEPTH")
- Cut two parallel grooves as shown.
- Use a wood chisel or make multiple passes with a router to remove the material between the two
 outside grooves to create the groove.

3

Fig. 22



NOTE:

Always perform a dry run cut so you can determine if the operation being attempted is possible before power is applied to the saw.



NARNING!

DO NOT USE A DADO BLADE, use only the standard saw blade for this operation.

CUTTING WARPED MATERIAL (Fig. 24)

When cutting warped material, be sure that the convex side is against the fence. If the workpiece is placed with the concave side facing the fence, it will pinch the blade near the completion of the cutting.

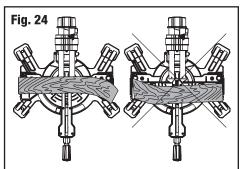
AUXILIARY WOOD FENCE (Fig. 25)

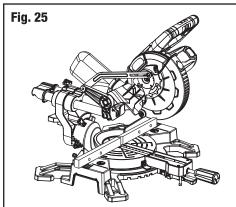
When making multiple or repetitive cuts that result in cut-off pieces of 1" (2.5 cm) or less, it is possible for the saw blade to catch the cut-off piece and throw it out of the saw or into the blade guard and housing, possibly causing damage or injury. To minimize this, an auxiliary wood fence can be mounted to your saw. Holes are provided in the saw fence to attach an auxiliary wood fence (this provides additional depth of cut). This fence should be constructed of straight auxiliary wood approximately 3/4" (1.9 cm) thick by 1 1/2" (3.8 cm) high by 16" (40.6 cm) long. Attach the wood fence securely and make a full depth cut to make a blade slot. Check for interference between the wood fence and the lower blade guard. Adjust if necessary.

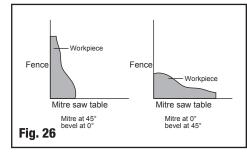
CUTTING BASE MOULDING (Fig. 26)

Base mouldings and many other mouldings can be cut on a compound mitre saw. The setup of the saw depends on moulding characteristics and applications, as shown. Perform practice cuts on scrap material to achieve best results:

- Always make sure mouldings rest firmly against the fence and table. Use hold-down or C-clamps, whenever possible, and place tape on the area being clamped to avoid marks.
- Reduce splintering by taping the cut area prior to making cut. Mark cut line directly on the tape.
- Splintering typically happens due to wrong blade application and thinness of the material.







NOTE:

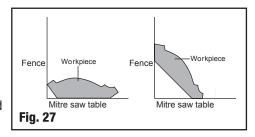
Always perform a dry run cut so you can determine if the operation being attempted is possible before power is applied to the saw.

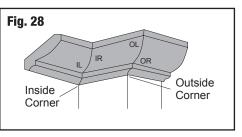
CUTTING CROWN MOULDING (Fig. 27, 28)

Your compound mitre saw is suited for the difficult task of cutting crown moulding. To fit properly, crown moulding must be compound-mitreed with extreme accuracy. The two surfaces on a piece of crown moulding that fit flat against the ceiling and wall are at angles that, when added together, equal exactly 90°.

Most crown moulding has a top rear angle (the section that fits flat against the ceiling) of 52° and a bottom rear angle (the section that fits flat against the wall) of 38°.

In order to accurately cut crown moulding for a 90° inside or outside corner, lay the moulding with its broad back surface flat on the saw table. When setting the bevel and mitre angles for compound mitres, remember the settings are interdependent; changing one changes the other, as





Bevel/Mitre Settings (when the angle between the walls equals 90°)

KEY	BEVEL SETTING	Mitre SETTING	TYPE OF CUT
Inside corner -	Left side		
IL	33.9°	31.6° Right	 Position top of moulding against fence. Mitre table set at RIGHT 31.6°. LEFT side is finished piece.
Inside corner -	Right side		
IR	33.9°	31.6° Left	 Position bottom of moulding against fence. Mitre table set at LEFT 31.6°. LEFT side is finished piece.
Outside corner	- Left side		
0L	33.9°	31.6° Left	 Position bottom of moulding against fence. Mitre table set at LEFT 31.6°. RIGHT side is finished piece.
Outside corner	- Right side		
OR	33.9°	31.6° Right	 Position top of moulding against fence. Mitre table set at RIGHT 31.6°. RIGHT side is finished piece.

CROWN MOULDING CHART

To aid in the correct setting, the compound angle setting chart below has been provided.

	52/38° CROWN I	MOULDING	45/45° CROWN I	MOULDING
Angle Between Walls	Mitre Setting	Bevel Setting	Mitre Setting	Bevel Setting
67	42.93	41.08	46.89	36.13
68	42.39	40.79	46.35	35.89
69	41.85	40.50	45.81	35.64
70	41.32	40.20	45.28	35.40
71	40.79	39.90	44.75	35.15
72	40.28	39.61	44.22	34.89
73	39.76	39.30	43.70	34.64
74	39.25	39.00	43.18	35.38
75	38.74	38.69	42.66	34.12
76	38.24	38.39	42.15	33.86
77	37.74	38.08	41.64	33.60
78	37.24	37.76	41.13	33.33
79	36.75	37.45	40.62	33.07
80	36.27	37.13	40.12	32.80
81	35.79	36.81	39.62	32.53
82	35.31	36.49	39.13	32.25
83	34.83	36.17	38.63	31.98
84	34.36	35.85	38.14	31.70
85	33.90	35.52	37.66	31.42
86	33.43	35.19	37.17	31.34
87	32.97	34.86	36.69	30.86
88	32.52	34.53	36.21	30.57
89	32.07	34.20	35.74	30.29
90	31.62	33.86	35.26	30.00
91	31.17	33.53	34.79	29.71
92	30.73	33.19	34.33	29.42
93	30.30	32.86	33.86	29.13
94	29.86	32.51	33.40	28.83
95	29.43	32.17	32.94	28.54
96	29.00	31.82	32.48	28.24
97	28.58	31.48	32.02	27.94
98	28.16	31.13	31.58	27.64
99	27.74	30.78	31.13	27.34
100	27.32	30.43	30.68	27.03
101	26.91	30.08	30.24	26.73
102	26.50	29.73	29.80	26.42
103	26.09	29.38	29.36	26.12

	52/38° CROWN	MOULDING	45/45° CROWN	MOULDING	
Angle Between Walls	Mitre Setting	Bevel Setting	Mitre Setting	Bevel Setting	
104	25.69	29.02	28.92	25.81	
105	25.29	28.67	28.48	25.50	
106	24.89	28.31	28.05	25.19	
107	24.49	27.96	27.62	24.87	
108	24.10	27.59	27.19	24.56	
109	23.71	27.23	26.77	24.24	
110	23.32	26.87	26.34	23.93	
111	22.93	26.51	25.92	23.61	
112	22.55	26.15	25.50	23.29	
113	22.17	25.78	25.08	22.97	
114	21.79	25.42	24.66	22.66	
115	21.42	25.05	24.25	22.33	
116	21.04	24.68	23.84	22.01	
117	20.67	24.31	23.43	21.68	
118	20.30	23.94	23.02	21.36	
119	19.93	23.57	22.61	21.03	
120	19.57	23.20	22.21	20.70	
121	19.20	22.83	21.80	20.38	
122	18.84	22.46	21.40	20.05	
123	18.48	22.09	21.00	19.72	
124	18.13	21.71	20.61	19.39	
125	17.77	21.34	20.21	19.06	
126	17.42	20.96	19.81	18.72	
127	17.06	20.59	19.42	18.39	
128	16.71	20.21	19.03	18.06	
129	16.37	19.83	18.64	17.72	
130	16.02	19.45	18.25	17.39	
131					
132	15.67	19.07	17.86	17.05	
133	15.33	18.69	17.48	16.71	
	14.99	18.31	17.09	16.38	
134	14.66	17.93	16.71	16.04	
135	14.30	17.55	16.32	15.70	
136	13.97	17.17	15.94	15.36	
137	13.63	16.79	15.56	15.02	
138	13.30	16.40	15.19	14.62	
139	12.96	16.02	14.81	14.34	
140	12.63	15.64	14.43	14.00	
141	12.30	15.25	14.06	13.65	
142	11.97	14.87	13.68	13.31	
143	11.64	14.48	13.31	12.97	
144	11.31	14.09	12.94	12.62	
145	10 99	13 71	12 57	12 29	

	52/38° CROWN	MOULDING	45/45° CROWN MOULDING	
Angle Between Walls	Mitre Setting	Bevel Setting	Mitre Setting	Bevel Setting
146	10.66	13.32	12.20	11.93
147	10.34	12.93	11.83	11.59
148	10.01	12.54	11.46	11.24
149	9.69	12.16	11.09	10.89
150	9.37	11.77	10.73	10.55
151	9.05	11.38	10.36	10.20
152	8.73	10.99	10.00	9.85
153	8.41	10.60	9.63	9.50
154	8.09	10.21	9.27	9.15
155	7.77	9.82	8.91	8.80
156	7.46	9.43	8.55	8.45
157	7.14	9.04	8.19	8.10
158	6.82	8.65	7.83	7.75
159	6.51	8.26	7.47	7.40
160	6.20	7.86	7.11	7.05
161	5.88	7.47	6.75	6.70
162	5.57	7.08	6.39	6.35
163	5.26	6.69	6.03	6.00
164	4.95	6.30	5.68	5.65
165	4.63	5.90	5.32	5.30
166	4.32	5.51	4.96	4.94
167	4.01	5.12	4.61	4.59
168	3.70	4.72	4.25	4.24
169	3.39	4.33	3.90	3.89
170	3.08	3.94	3.54	3.53
171	2.77	3.54	3.19	3.10
172	2.47	3.15	2.83	2.83
173	2.15	2.75	2.48	2.47
174	1.85	2.36	2.12	2.12
175	1.54	1.97	1.77	1.77
176	1.23	1.58	1.41	1.41
177	0.92	1.18	1.06	1.06
178	0.62	0.79	0.71	0.71
179	0.31	0.39	0.35	0.35

SAWDUST

Periodically, sawdust will accumulate under the table and base. This could cause difficulty in the movement of the table when setting up a mitre cut. Frequently blow out or vacuum up the sawdust.

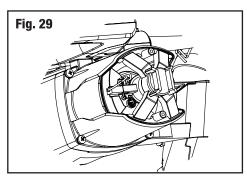
LOWER BLADE GUARD

Do not use the saw without the lower blade guard.

The lower blade guard is attached to the saw for your protection. Should the lower guard become damaged, do not use the saw until the damaged guard has been replaced. Check regularly to make sure the lower guard is working properly. Clean the lower guard of any dust or buildup with a damp cloth.

REPLACING CARBON BRUSHES (Fig. 29)

Replace both carbon brushes when either has less than 1/4" (0.6 cm) length of carbon remaining, or if the spring or wire is damaged or burned. To inspect or replace brushes, first unplug the saw. Remove the two screws on the back cover of the motor and take the cover off. Move the coil spring which press on the carbon brush to other side to free the carbon brush. Pull out the brush and the wire which connect to the holder. Replace it for a new carbon brush. When replace for the other side. To reassemble, reverse the procedure. Tighten two screws on the back cover.



NOTE:

To reinstall the same brushes, first make sure the brushes go back in the way they came out.



CAUTION!

If blowing sawdust, wear proper eye protection to keep debris from blowing into eyes.



CAUTION!

- Do not use solvents on the guard. They could make the plastic cloudy and brittle.
- When cleaning the lower guard, unplug the saw to avoid unexpected start-up.



WARNING!

- To avoid fire or toxic reaction, never use gasoline, naphtha acetone, lacquer thinner or similar highly volatile solvents to clean the mitre saw.
- To avoid injury from unexpected starting or electrical shock, unplug the power cord before working on the saw.
- For your safety, this saw is double-insulated. To avoid electrical shock, fire or injury, use
 only parts identical to those identified in the parts list. Reassemble exactly to avoid electrical
 shock

SUCCESTED CORRECTIVE

This will avoid a break-in period that reduces motor performance and increases wear.

LUBRICATION (Fig. 30)

30

MAINTENANCE

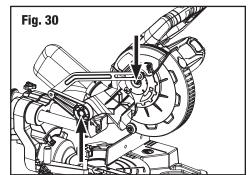
All the motor bearings in this tool are lubricated with a sufficient amount of high-grade lubricant for the life of the unit under normal operating conditions; therefore, no further lubrication is required.

Lubricate the following as necessary:

Chop pivot: Apply light machine oil to points indicated in illustration.

Central pivot of plastic guard: Use light household oil (sewing machine oil) on metal-to-metal or metal-to-plastic

guard contact areas as required for smooth, quiet operation. Avoid excessive oil as sawdust will cling to it.



PROBLEM	PROBABLE CAUSE	SUGGESTED CORRECTIVE ACTION
	Motor brushes not sealed or lightly sticking	Inspect/clean/replace brushes
Brake does not stop blade within 10 seconds	Motor brake overheated from use of defective or wrong size blade or rapid ON/OFF cycling	Use a recommended blade
	Arbor bolt is loose	Retighten
	Brush worn	Replace brushes
Motor does not start	Power source fuse or time delay fuse	Check time delay fuse or circuit breaker
Angle of out incourate	Mitre table unlocked	Rotate the mitre locking handle all the way to the right
Angle of cut inaccurate	Too much sawdust under table	Vacuum or blow out dust while wearing eye protection
	Parts failure	Contact service centre
Head assembly cannot fully	Pivot spring not replaced properly after service	Contact service centre
raise or blade guard can- not fully close	Sawdust build-up	Clean and lubricate moving parts
,	Lock-down pin not set properly	Check, adjust and properly set saw- head locking pin
	Improper operation	See OPERATING INSTRUCTIONS section
Blade binds, jams or burns wood	Dull blade	Replace or sharpen blade
wood	Improper blade	Replace blade
	Warped blade	Replace blade
Blade hits table	Misalignment	See "Assembly and adjustments" section
Brush sparks excessively when switch is released	Brush worn/damaged	Replace brushes
	Saw blade damaged	Replace blade
	Saw blade loose	Tighten black bolt
Saw vibrates or shakes	Saw not properly fastened down	Fasten saw to stand, bench or table
	Workpiece not properly supported	Properly support or clamp workpiece

EXPLODED VIEW

116 112 113 132 131 120 104

MASTERCRAFT® 7 1/4" (18.4 CM) SLIDING MITRE SAW

When servicing the Mastercraft® Sliding Compound Mitre Saw, use only Mastercraft® replacement parts. The use of any other parts may cause damage to the product. All servicing of the mitre saw should be performed by a qualified service technician. For more information, call the Toll-Free Helpline at 1-800-689-9928.

NO.	Description	Qty	No.	Description	Qty
01	Screw	8	26	Inner flange	1
02	Self-tapping screw	8	27	Spindle	1
03	Top handle	1	28	Flat key	1
04	Trigger	1	29	Gear box cover	1
05	Rubber sleeve	1	30	Bearing	1
06	Cord press plate	1	31	Screw	2
07	Power cord sleeve	1	32	Spindle lock stop plate	1
80	Power cord and plug	1	33	Gear	1
09	Trigger spring	1	34	Criclip for shaft	1
10	Micro-switch	1	35	Copper sleeve	1
11	Screw	3	36	Spindle lock pin	1
12	Spring washer	11	37	Circlip	1
13	Washer	10	38	Spindle lock pin spring	1
14	Lower handle	1	39	Fixed guard	1
15	Locknut	2	40	Cuting depth adjustment screw	1
16	Moving guard cover plate	1	41	Socket head cap screw	1
17	Moving guard	1	42	Nut	4
18	Torsional spring	1	43	Knurled nut	1
19	Tooth screw	1	44	Setscrew	1
20	Screw	1	45	Bearing	1
21	Guard support	1	46	Rotor	1
22	Hex bolt	1	47	Bearing	1
23	Hex reverse screw	1	48	Fan guard	1
24	Outer flange	1	49	Self-tapping screw	2
25	Blade	1	50	Stator	1

PARTS LIST

NO -	Description	Other	No.	Description	Otre
NO.	Description	Qty	_	Description	Qty
51	Motor housing	1	76	Half-round head screw	4
52	Brush holder	2	77	Cuting depth stop plate	1
53	Coil spring	2	78	Location pin	1
54	Carbon brush	2	79	0-ring	1
55	Self-tapping screw	4	80	Location pin knob	1
56	Motor housing cover	1	81	Support	1
57	Mitre lock handle	1	82	Shoulder screw	1
58	Mitre angle lock rod	1	83	Connection rod	1
59	Square nut	1	84	Wave washer	3
60	Location push button spring	1	85	Shoulder screw	2
61	Location push button	1	86	Buffer ring	2
62	Lock plate for mitre lock rod	1	87	Bearing cover	1
63	Screw	1	88	Straight bearing	2
64	Turntable	1	89	Bevel angle indication label	1
65	Screw	7	90	Crank arm	1
66	Spring washer	7	91	Short knob	2
67	Washer	5	92	Bevel lock knob	1
68	Mitre angle pointer	1	93	Hex bolt	1
69	Insert	1	94	Rotary shaft	1
70	Sunk screw	6	95	Washer	1
71	Washer	3	96	Locknut	1
72	Socket head cap screw	1	97	Guide rod support	1
73	Bevel angle pointer	1	98	Guide rod	2
74	Setscrew	1	99	Screw	2
75	Setscrew	2	100	Spring washer	2
•		_		- i - g	

NO.	Description	Qty	No.	Description	Qty
101	Hex screw	2	117	Big torsional spring	1
102	Fence	1	118	Brand label	1
103	Base	1	119	Dust bag	1
104	Locknut	1	120	Inner hex screw	1
105	Mitre angle indication label	1	121	Rating label	1
106	Storage for hex key	1	122	Warning label	1
107	Hex key	1	123	Spring	1
108	Press plate of clamp	1	124	Locknut	1
109	Clamp arm	1	125	Socket head cap screw	1
110	Clamp screw knob	1	126	Mitre lock handle cover	1
111	Clamp rod	1	127	Inner wire sleeve	1
112	Inner tooth washer	1	128	Washer	1
113	Moving guard wheel	1	129	Terminal	1
114	Washer	2	130	Washer	1
115	Rotary shaft	1	131	Wave washer	1
116	Big torsional spring sleeve	1	132	Clamp lock knob	1

WARRANTY

Component A: Accessories, which are guaranteed for a period of 1-year from the date of original retail purchase against defects in workmanship and materials.

Subject to the conditions and limitations described below, this product, if returned to us with proof of purchase within the stated warranty period and if covered under this warranty, will be repaired or replaced (with the same model, or one of equal value or specification), at our option. We will bear the cost of any repair or replacement and any costs of labour relating thereto.

These warranties are subject to the following conditions and limitations:

- a) a bill of sale verifying the purchase and purchase date must be provided:
- this warranty will not apply to any product or part thereof which is worn or broken or which has become inoperative due to abuse, misuse, accidental damage, neglect or lack of proper installation, operation or maintenance (as outlined in the applicable owner's manual or operating instructions) or which is being used for industrial, professional, commercial or rental purposes;
- this warranty will not apply to normal wear and tear or to expendable parts or accessories that may be supplied with the product that are expected to become inoperative or unusable after a seasonable period of use;
- d) this warranty will not apply to routine maintenance and consumable items such as, but not limited to, fuel, lubricants, vacuum bags, blades, belts, sandpaper, bits, fluids, tune-ups or adjustments;
- e) this warranty will not apply where damage is caused by repairs made or attempted by others (i.e. persons not authorized by the manufacturer);
- f) this warranty will not apply to any product that was sold to the original purchaser as a reconditioned or refurbished product (unless otherwise specified in writing);
- g) this warranty will not apply to any product or part thereof if any part from another manufacturer is installed therein or any repairs or alterations have been made or attempted by unauthorized persons;
- h) this warranty will not apply to normal deterioration of the exterior finish, such as, but not limited to, scratches, dents, paint chips, or to any corrosion or discolouring by heat, abrasive and chemical cleaners; and
- i) this warranty will not apply to component parts sold by and identified as the product of another company, which shall be covered under the product manufacturer's warranty, if any.

Additional limitations

This warranty applies only to the original purchaser and may not be transferred. Neither the retailer nor the manufacturer shall be liable for any other expense, loss or damage, including, without limitation, any indirect, incidental, consequential or exemplary damages arising in connection with the sale, use or inability to use this product.

Notice to consumer

This warranty gives you specific legal rights, and you may have other rights, which may vary from province to province. The provisions contained in this warranty are not intended to limit, modify, take away from, disclaim or exclude any statutory warranties set forth in any applicable provincial or federal legislation.