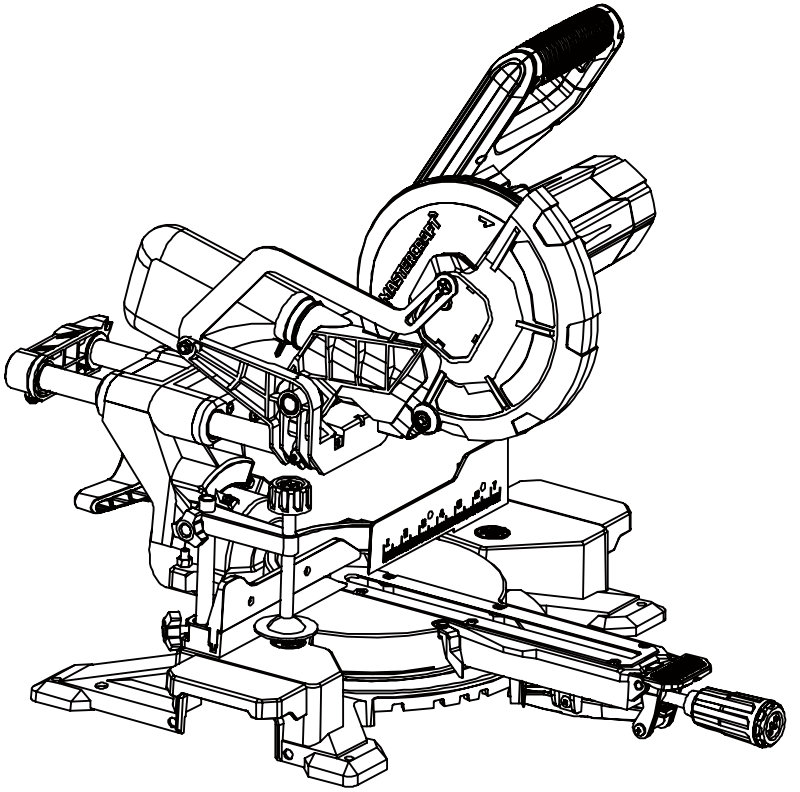
MASTERCRAFT™

7 1/4” (18.4 cm) SLIDING COMPOUND MITRE SAW



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

INSTRUCTION MANUAL

model no. 055-6920-4

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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.

SPECIFICATIONS

Motor	120 V 60 Hz 9.5A
Speed	5000 RPM (no load)
Blade	7 1/4" (18.4 cm) 24-tooth carbide-tipped
Blade Bore Size	5/8" (15.9 mm)
Max. Mitre Angle	47° left and 47° right
Max. Bevel Angle	45° left
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
Dust-port Size	1 1/4" (32 mm)
Weight	23 lb 2 oz (10.5 kg)

GENERAL POWER TOOL SAFETY WARNINGS

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

WORK AREA SAFETY

- **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- **Do not operate power tools in explosive atmosphere, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
- **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

ELECTRICAL SAFETY

- **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adaptor plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **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 or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- **If operating a power tool in a damp location is unavoidable, use a RESIDUAL CURRENT DEVICE (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.

PERSONAL SAFETY

- **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- **Use personal protective equipment. Always wear eye protection.** Protective equipment such

WARNING!

Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

- **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.
- **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
- **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

POWER TOOL USE AND CARE

- **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- **Do not use power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- **Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
- **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
- **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- **Use the power tool, accessories, tool bits, etc., in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.
- **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

SERVICE

- **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

SAFETY INSTRUCTIONS FOR MITRE SAWS

- **Mitre saws are intended to cut wood or wood-like products; they cannot be used with abrasive cut-off wheels for cutting ferrous material such as bars, rods, studs, etc.** Abrasive dust causes moving parts such as the lower guard to jam. Sparks from abrasive cutting will burn the lower guard, the kerf insert and other plastic parts.
- **Use clamps to support the workpiece whenever possible. If supporting the workpiece by hand, you must always keep your hand at least 4" (10 cm) from either side of the saw blade. Do not use this saw to cut pieces that are too small to be securely clamped or held by hand.** If your hand is placed too close to the saw blade, there is an increased risk of injury from blade contact.
- **The workpiece must be stationary and clamped or held against both the fence and the table. Do not feed the workpiece into the blade or cut "freehand" in any way.** Unrestrained or moving workpieces could be thrown at high speeds, causing injury.
- **Push the saw through the workpiece. Do not pull the saw through the workpiece. To make a cut, raise the saw head and pull it out over the workpiece without cutting, start the motor, press the saw head down and push the saw through the workpiece.** Cutting on the pull stroke is likely to cause the saw blade to climb on top of the workpiece and violently throw the blade assembly towards the operator.
- **Never cross your hand over the intended line of cutting either in front or behind the saw blade.** Supporting the workpiece "cross handed", i.e., holding the workpiece to the right of the saw blade with your left hand or vice versa is very dangerous.
- **Do not reach behind the fence with either hand closer than 4" (10 cm) from either side of the saw blade, to remove wood scraps, or for any other reason while the blade is spinning.** The proximity of the spinning saw blade to your hand may not be obvious and you may be seriously injured.
- **Inspect your workpiece before cutting. If the workpiece is bowed or warped, clamp it with the outside bowed face toward the fence. Always make certain that there is no gap between the workpiece, fence and table along the line of the cut.** Bent or warped workpieces can twist or shift and may cause binding on the spinning saw blade while cutting. There should be no nails or foreign objects in the workpiece.
- **Do not use the saw until the table is clear of all tools, wood scraps, etc., except for the**

workpiece. Small debris or loose pieces of wood or other objects that contact the revolving blade can be thrown with high speed.

- **Cut only one workpiece at a time.** Stacked multiple workpieces cannot be adequately clamped or braced and may bind on the blade or shift during cutting.
- **Ensure the mitre saw is mounted or placed on a level, firm work surface before use**. A level and firm work surface reduces the risk of the mitre saw becoming unstable.
- **Plan your work. Every time you change the bevel or mitre angle setting, make sure the adjustable fence is set correctly to support the workpiece and will not interfere with the blade or the guarding system.** Without turning the tool "ON" and with no workpiece on the table, move the saw blade through a complete simulated cut to assure there will be no interference or danger of cutting the fence.
- **Provide adequate support, such as table extensions, saw horses, etc., for a workpiece that is wider or longer than the table top.** Workpieces longer or wider than the mitre saw table can tip if not securely supported. If the cut-off piece or workpiece tips, it can lift the lower guard or be thrown by the spinning blade.
- **Do not use another person as a substitute for a table extension or as additional support.** Unstable support for the workpiece can cause the blade to bind or the workpiece to shift during the cutting operation pulling you and the helper into the spinning blade.
- **The cut-off piece must not be jammed or pressed by any means against the spinning saw blade.** If confined, i.e., using length stops, the cut-off piece could get wedged against the blade and thrown violently.
- **Always use a clamp or a fixture designed to properly support round material such as rods or tubing.** Rods have a tendency to roll while being cut, causing the blade to "bite" and pull the work with your hand into the blade.
- **Let the blade reach full speed before contacting the workpiece.** This will reduce the risk of the workpiece being thrown.
- **If the workpiece or blade becomes jammed, turn the mitre saw off. Wait for all moving parts to stop and disconnect the plug from the power source and/or remove the battery pack. Then work to free the jammed material.** Continued sawing with a jammed workpiece could cause loss of control or damage to the mitre saw.
- **After finishing the cut, release the switch, hold the saw head down and wait for the blade to stop before removing the cut-off piece.** Reaching with your hand near the coasting blade is dangerous.
- **Hold the handle firmly when making an incomplete cut or when releasing the switch before the saw head is completely in the down position.** The braking action of the saw may cause the saw head to be suddenly pulled downward, causing a risk of injury.

ADDITIONAL SAFETY RULES FOR MITRE SAWS

- **DO NOT OPERATE THIS MACHINE** until it is completely assembled and installed according to the instructions. A machine incorrectly assembled can cause serious injury.
- **OBTAIN ADVICE** from your supervisor, instructor, or another qualified person if you are not thoroughly familiar with the operation of this machine. Knowledge is safety.
- **MAKE CERTAIN** the blade rotates in the correct direction. The teeth on the blade should point in the direction of rotation as marked on the saw.
- **TIGHTEN ALL CLAMP HANDLES,** knobs and levers prior to operation. Loose clamps can cause parts or the workpiece to be thrown at high speeds.
- **BE SURE** all blade and blade clamps are clean, recessed sides of blade clamps are against blade and arbour screw is tightened securely. Loose or improper blade clamping may result in damage to the saw and possible personal injury.
- **DO NOT WEDGE ANYTHING AGAINST THE FAN** to hold the motor shaft. Damage to tool and possible personal injury may occur.
- **NEVER CUT FERROUS METALS** (those with any iron or steel content) or masonry. Either of these can cause the carbide tips to fly off the blade at high speeds causing serious injury.
- **DO NOT USE ABRASIVE WHEELS OR BLADES.** The excessive heat and abrasive particles generated by them may damage the saw and cause personal injury.
- **NEVER HAVE ANY PART OF YOUR BODY IN LINE WITH THE PATH OF THE SAW BLADE.** Personal injury will occur.
- **NEVER APPLY BLADE LUBRICANT TO A RUNNING BLADE.** Applying lubricant could cause your hand to move into the blade resulting in serious injury.
- **DO NOT** place either hand in the blade area when the saw is connected to the power source. Inadvertent blade activation may result in serious injury.
- **NEVER REACH AROUND OR BEHIND THE SAW BLADE.** A blade can cause serious injury.
- **DO NOT REACH UNDERNEATH THE SAW** unless it is unplugged and turned off. Contact with saw blade may cause personal injury.
- **SECURE THE MACHINE TO A STABLE SUPPORTING SURFACE.** Vibration can possibly cause the machine to slide, walk, or tip over, causing serious injury.
- **USE ONLY BLADES OF THE CORRECT SIZE AND TYPE** specified for this tool to prevent damage to the machine and/or serious injury.
- **INSPECT BLADE FOR CRACKS** or other damage prior to operation. A cracked or damaged blade can come apart and pieces can be thrown at high speeds, causing serious injury. Replace cracked or damaged blades immediately.
- **CLEAN THE BLADE AND BLADE CLAMPS** prior to operation. Cleaning the blade and blade clamps

allows you to check for any damage to the blade or blade clamps. A cracked or damaged blade or blade clamp can come apart and pieces can be thrown at high speeds, causing serious injury.

- **DO NOT USE WARPED BLADES.** Check to see if the blade runs true and is free from vibration. A vibrating blade can cause damage to the machine and/or serious injury.
- **KEEP GUARD IN PLACE** and in working order.
- **ALWAYS USE THE KERF PLATE AND REPLACE THIS PLATE WHEN DAMAGED.** Small chip accumulation under the saw may interfere with the saw blade or may cause instability of workpiece when cutting.
- **USE ONLY BLADE CLAMPS SPECIFIED FOR THIS TOOL** to prevent damage to the machine and/or serious injury.
- **CLEAN THE MOTOR AIR SLOTS** of chips and sawdust. Clogged motor air slots can cause the machine to overheat, damaging the machine and possibly causing a short which could cause serious injury.
- **NEVER LOCK THE SWITCH IN THE "ON" POSITION.** Severe personal injury may result.
- **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
- **NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop.
- **TO REDUCE THE RISK OF INJURY,** return the saw head to the full rear position after each crosscut operation.
- **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.
- **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.
- **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.
- **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** 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.
- **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 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.
- **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.

WARNING!

Cutting plastics, sap-coated wood, and other materials may cause melted material to accumulate on the blade tips and the body of the saw blade, increasing the risk of blade overheating and binding while cutting.

Minimum Gauge for Cord Sets

Ampere rating of the tool (120 V circuit only)		Total length of cord			
		25' (7.6 m)	50' (15 m)	100' (30 m)	150' (46 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 recommended	

- **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 also.

WARNING!

Always wear proper personal hearing protection that conforms to ANSI S12.6 (S3.19) during use. Under some conditions and duration of use, noise from this product may contribute to hearing loss.

WARNING!

ALWAYS use safety glasses. Everyday eyeglasses are NOT safety glasses. Also use face or dust mask if cutting operation is dusty. ALWAYS WEAR CERTIFIED SAFETY EQUIPMENT:
ANSI Z87.1 eye protection (CAN/CSA Z94.3).
ANSI S12.6 (S3.19) hearing protection.
NIOSH/OSHA/MSHA respiratory protection.

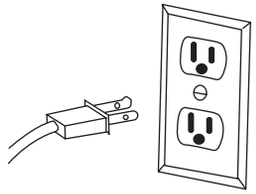
WARNING!

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

WARNING!

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

DOUBLE-INSULATED TOOLS



- **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.

GLOSSARY OF WOODWORKING TERMS

- **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

CAUTION!

WHEN SERVICING, USE ONLY IDENTICAL REPLACEMENT PARTS. Repair or replace damaged cords.

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.

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.

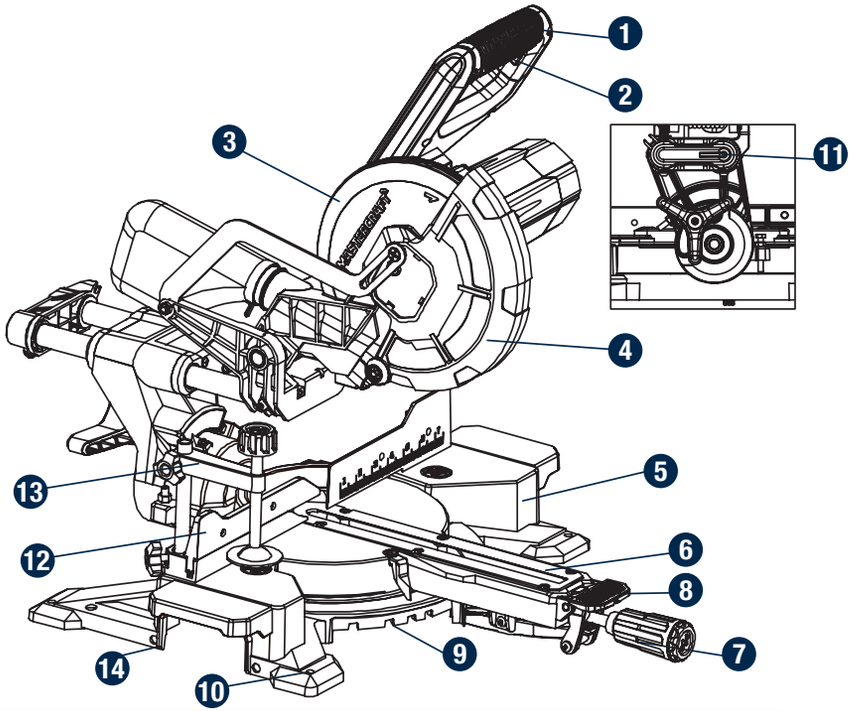
SYMBOLS

Some of the following symbols may be used on this tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and more safely.

V	Volts	Voltage (potential)
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
n_o	No load speed	Rotational speed at no load
.../min	Revolutions or reciprocation per minute	Revolutions, strokes, surface speed, orbits, etc., per minute
~	Alternating current	Type or a characteristic of current
	Class II Construction	Designated double-insulated construction tools
	Read the Instruction Manual	To reduce the risk of injury, user must read instruction manual.
	Wear hearing protection	
	Wear eye protection	Always wear hearing/eye/breathing protection when operating this product.
	Wear breathing protection	
	Warning symbol	Alerts user to warning messages.
	Safety certification	This symbol designates that this tool is listed by the Intertek Testing Services, to United States and Canadian standards.
	Warning symbol	Never place hands near the cutting area.

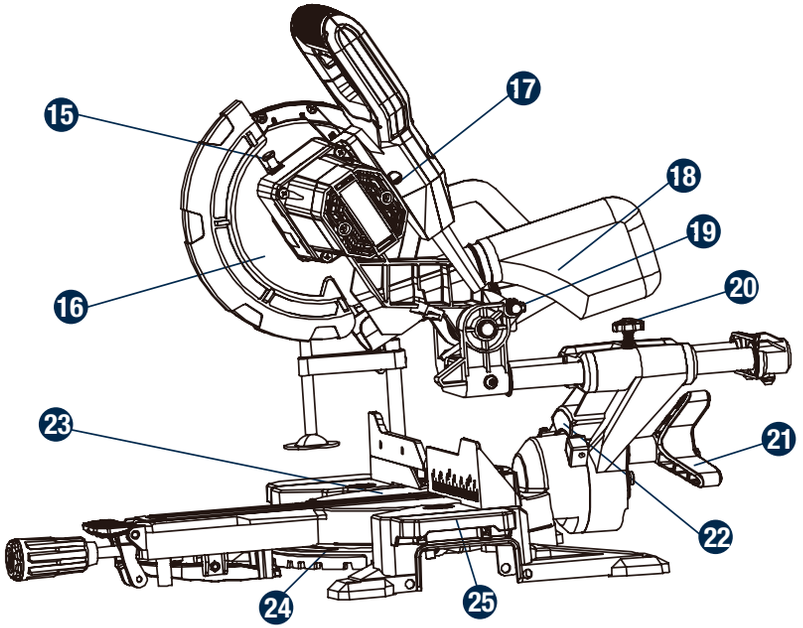
No.	Description
1	Switch handle
2	Trigger switch with lock-off lever
3	Upper blade guard
4	Lower blade guard
5	Base
6	Table insert
7	Mitre handle

No.	Description
8	Mitre latch button
9	Positive mitre stop
10	Mounting hole
11	Hex key for blade
12	Fence
13	Work clamp
14	Handhold for transportation



No.	Description
15	Spindle lock
16	Blade
17	Motor
18	Dust bag
19	Lock-down pin
20	Sliding carriage lock knob

No.	Description
21	Bevel lock knob
22	Bevel scale
23	Table
24	Mitre scale
25	Extension table



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

WARNING!

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 the tool.

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 is not in use. Disconnecting the saw will prevent accidental starting, which could cause serious personal injury.

WARNING!

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.

INTENDED USE

This mitre saw is designed for wood cutting applications.

DO NOT use under wet conditions or in presence of flammable liquids or gases.

DO NOT let children come into contact with the tool. Supervision is required when inexperienced operators use this tool.

BENCH MOUNTING (Fig. 1)

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. Two different sized holes are provided to accommodate different sizes of bolts. Use either hole; it is not necessary to use both. Securing to a stable surface will help prevent tipping and possible injury.

INSTALLING THE WORK CLAMP (Fig. 2)

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 knob and insert work clamp into the desired hole behind the fence.
- Rotate the clamp toward the front of the mitre saw.
- Tighten the locking knob to hold the work clamp.
- Rotate the work clamp knob to move it up or down as needed to secure the workpiece.

NOTE: Place the clamp on the opposite side of the base when bevelling. Ensure the clamp does not interfere with the action of the saw or guards.

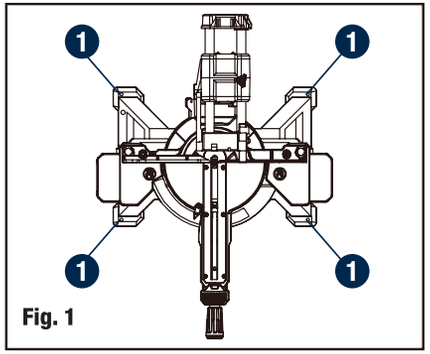


Fig. 1

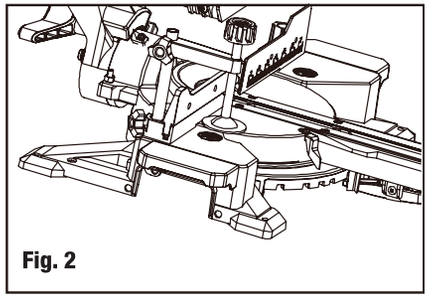


Fig. 2

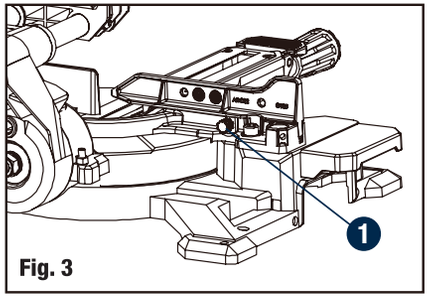


Fig. 3

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!

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.

INSTALLING SLIDING FENCE (Fig. 3)

- Loosen the fence lock knob (1), to clear fence slots.
- Install the sliding fence. Lower fence into fence slot and slide it from the side of fixed fence to inside.
- Tighten fence lock knob securely.

INSTALLING EXTENSION TABLES (Fig. 4)

Extension tables have been provided for both the left and the right side of the saw.

To install extension tables:

- Remove the screws (1) from the base.
- Install the extension tables and tighten screws to secure the extension tables in place. Be sure the extension tables are on the same level as the main table.

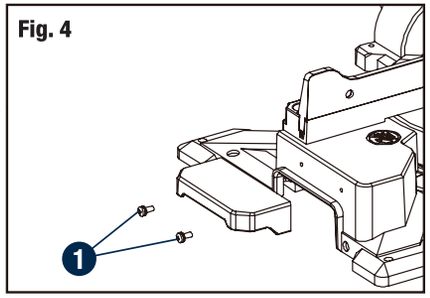


Fig. 4

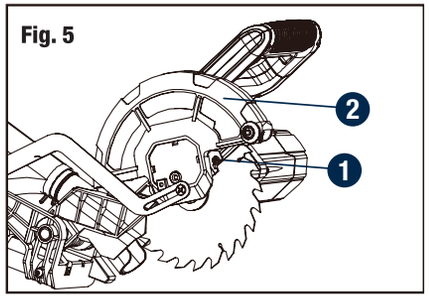


Fig. 5

REMOVING AND INSTALLING THE BLADE

Removing blade (Fig. 5 to 8)

- Unplug the tool from the power source.
- Adjust the lock-down pin to raise the cutting head and raise the lower guard (2) as far as possible.
- Loosen the guard bracket screw (1) about 4 turns with a cross-head screwdriver. Do not remove this screw from the tool. Lower guard will remain raised due to the position of the guard bracket screw.

NOTE:

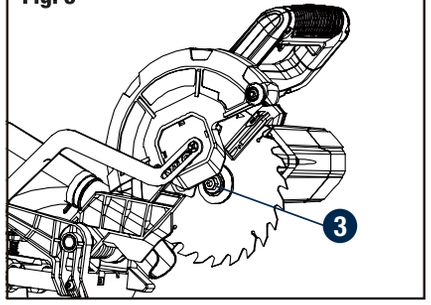
Pay attention to the pieces being removed, noting their position and the direction they face. Wipe the blade collar clean of any sawdust before installing a new blade.

WARNING!

- Before operating the tool, make sure that the upper and lower fences are secured firmly.
- 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.
- Always use extension tables to support a long workpiece so it is level with the top surface of the main table for an accurate cut and to prevent dangerous loss of control.

- 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 hex key to turn the threaded blade bolt (3) clockwise to remove the threaded blade bolt.
- Remove the outer flange (5) and the blade (6). Wipe the flanges and spindle to remove any dust and debris.

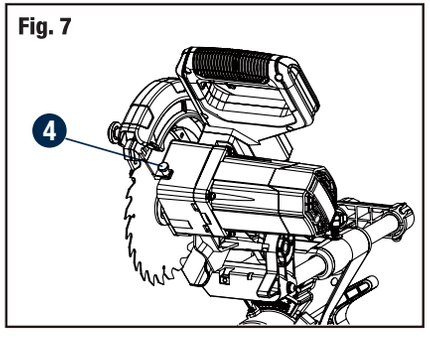
Fig. 6



Installing blade (Fig. 5 to 8)

SAW BLADES: ONLY USE 7 1/4" (184 mm) SAW BLADES WITH 5/8" (15.9 mm) ARBOUR HOLES AND A MAXIMUM KERF OF 3.0 mm. SPEED RATING MUST BE AT LEAST 5000 RPM. Never use a different diameter blade. It will not be guarded properly. Use crosscut blades only!

Fig. 7



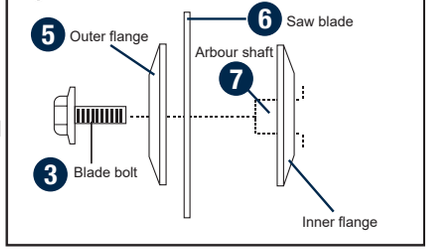
- Unplug the mitre saw before changing/installing the blade.
- With the arm raised, and the lower guard raised, place the blade onto the arbour shaft (7). Match the arrow on the blade with the arrow on the upper blade guard. Make sure that the blade teeth are pointing downward.
- Place the outer flange against the blade and on the arbour. Thread the blade bolt onto the arbour in a counter-clockwise direction.
- Place the hex key onto the blade bolt.
- Press the spindle lock button, holding it in firmly while turning the blade counter-clockwise. When spindle lock engages, continue to press it in while tightening the blade bolt securely.
- Return the guard bracket to its original position and firmly tighten the guard bracket screw to hold bracket in place.
- 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 outer flange are engaged with the flats on the arbour shaft. Also, the flat side of the outer flange collar must be placed against the blade.

CAUTION!
The guard bracket must be returned to its original position and the screw tightened before activating the saw. Failure to do so may allow the guard to contact the spinning saw blade resulting in damage to the saw and severe personal injury.

WARNING!
To avoid injury, use only saw blades that are marked with a speed equal or higher than the speed marked on the tool.

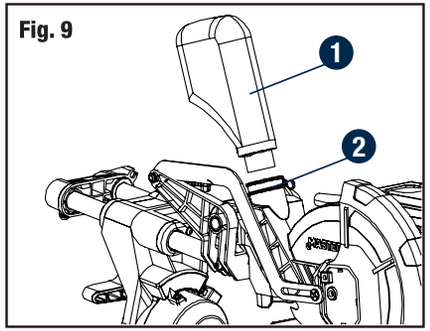
Fig. 8



INSTALLING THE DUST BAG (Fig. 9)

Insert the dust bag (1) into the exhaust port (2) on the mitre saw. Fit the connecting tube of dust bag and the exhaust port together.

Fig. 9



TRANSPORTING THE SAW

In order to conveniently carry the mitre saw from place to place, hand indentations have been provided in the two sides of base.

IMPORTANT:
Check bag frequently and empty it before it gets full.

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.

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

WARNING!
To reduce the risk of serious personal injury, ALWAYS lock the slide carriage lock knob, mitre handle, bevel lock knob, lock down pin and fence adjustment knobs before transporting saw.

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

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.

MITRE SCALE (Fig. 10)

The sliding compound mitre saw scale can be easily read, showing mitre angles from 0° to 47° to the left, and 0° to 47° 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.

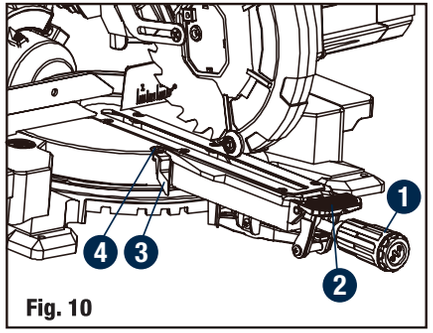


Fig. 10

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) counter-clockwise.
- Move the table while pressing the mitre latch button (2) to align the indicator (3) to the desired degree measurement.
- If the desired angle is one of the nine positive stops, release the mitre latch button, 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.

Mitre Angle Pointer Adjustment (Fig. 10)

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

ADJUSTING FENCE SQUARENESS (Fig. 11)

- Loosen the fence lock knob and then pull out the upper sliding fence.
- 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.

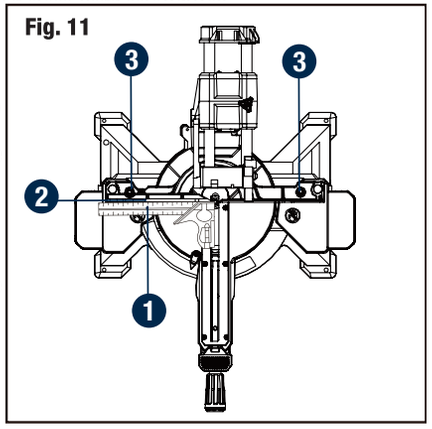


Fig. 11

- 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. 12)

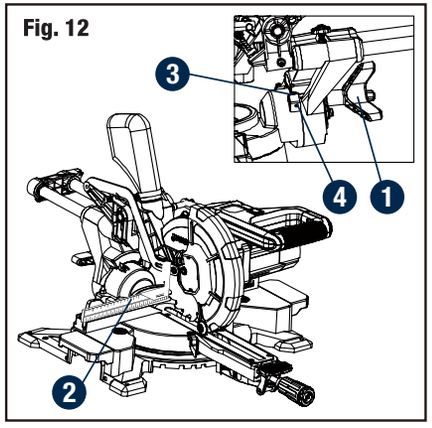


Fig. 12

- 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.
- 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. 13)

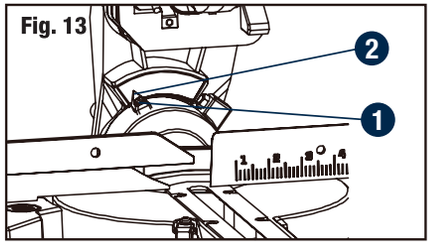


Fig. 13

- When the blade is exactly 90° to the table, loosen the bevel indicator screw (1) using a cross-head screwdriver.
- Adjust bevel indicator (2) to the “0” mark on the bevel scale and retighten the screw.

45° Bevel Adjustment (Fig. 14)

- 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.

CUTTING DEPTH ADJUSTMENT (Fig.15)

The depth stop limits the downward travel of the blade when cutting grooves and other non-through cuts.

To use the depth stop:

- Unplug the saw.
- If the saw is in the storage or transport position, release (pull out) the head assembly lock pin and allow the head assembly to rise fully.
- Grip the main handle and push the head assembly down while watching the depth-of-cut bolt contact the top surface of the depth-stop (Fig. 15).
- Turn the head of the depth-of-cut bolt (1) (while the threaded end is in contact with the depth stop) and watch the bottom of the saw blade move. This adjustment sets the depth of cut.
- See “Cutting Grooves” for additional instructions.

Fig. 14

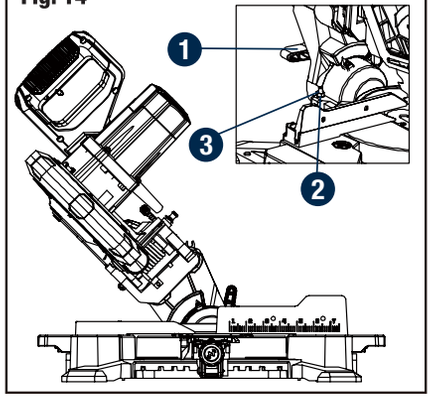
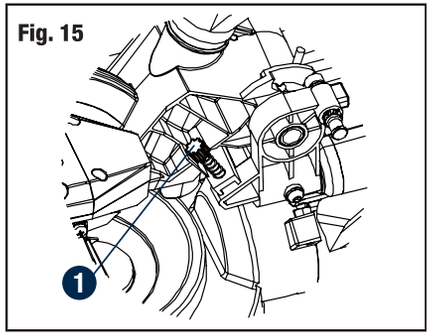


Fig. 15



NOTICE: When making normal, full-depth cuts, adjust the depth-of-cut bolt until it does not touch the depth stop when the head assembly is fully lowered.

GUARD ACTUATION AND CHECKING

The blade guard on your saw has been designed to automatically raise when the arm is brought down and to lower over the blade when the arm is raised.

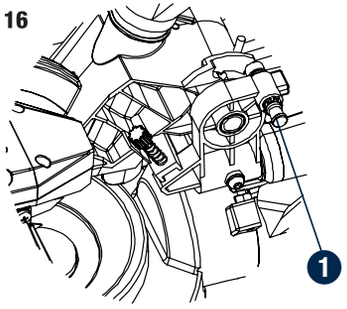
The guard can be raised by hand when installing or removing saw blades or for inspection of the saw. NEVER RAISE THE BLADE GUARD MANUALLY UNLESS THE SAW IS TURNED OFF.

UNLOCKING AND LOCKING THE CUTTING HEAD (Fig. 16)

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.

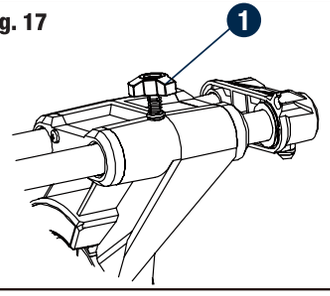
Fig. 16



UNLOCKING THE SLIDE CARRIAGE (Fig. 17)

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.

Fig. 17



TRIGGER SWITCH (Fig. 18)

To turn the saw on, push the lock-off lever (1) to the left, then depress the trigger switch. To turn the tool off, release the switch. There is no provision for

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.

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.

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.

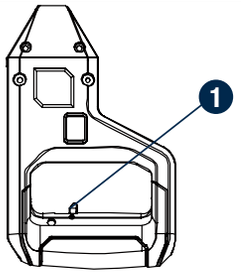
MITRE CUT (Fig. 19)

- When a mitre cut is required, unlock the table by turning the mitre handle (1) counter-clockwise.
- While holding the mitre handle, press the mitre latch button (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 mitre latch button 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. 20)

- 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°.

Fig. 18



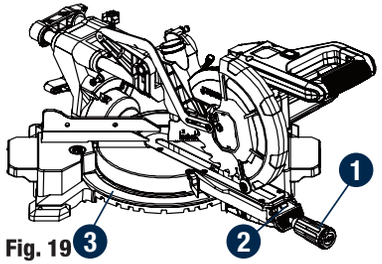
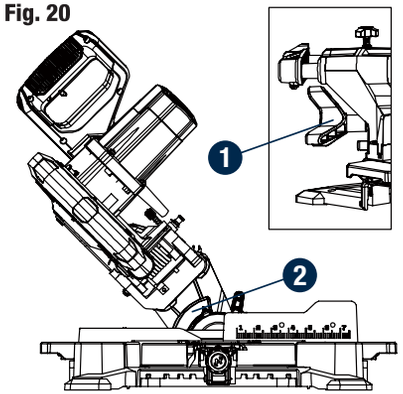


Fig. 19

Fig. 20



COMPOUND CUT (Fig. 21)

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). Press the mitre latch button (3) and position the table at the desired angle. Release the mitre latch button and lock the mitre handle.

SLIDING CARRIAGE SYSTEM (Fig. 22)

- 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.

SLIDE CUTTING WIDE BOARDS UP TO 8" (20.3 cm) WIDE

To avoid injury:

- Let the blade reach full speed before cutting. This will help reduce the risk of a thrown workpiece.
- Do not make crosscuts by lowering the blade and pulling the cutting head through the wood toward you.

To Slide Cut Wide Boards (Fig. 23)

- Unlock the carriage lock knob (1) and allow the cutting head assembly to move freely.

Fig. 21

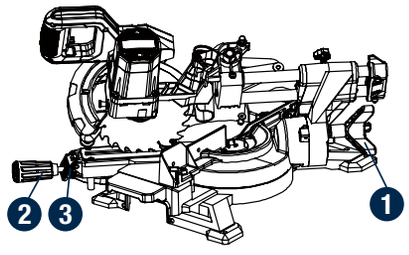


Fig. 22

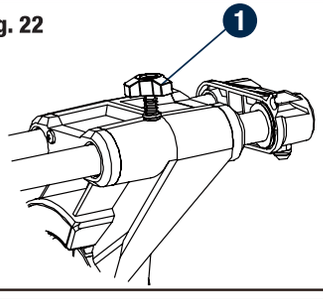
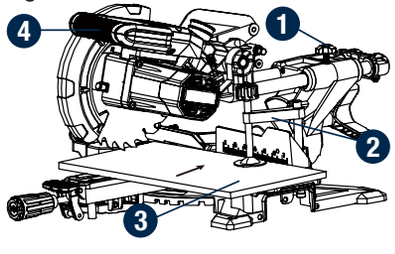


Fig. 23



WARNING!

- 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:

- It may be necessary to adjust or remove the sliding fence to ensure proper clearance prior to making the bevel cut and compound cut.
- Always tighten the mitre table lock handle before performing every cutting operation.

- 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.

CUTTING GROOVES (Fig. 24)

- 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.
- See “CUTTING DEPTH ADJUSTMENT” to set the desired depth of cut.
- 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.

Fig. 24

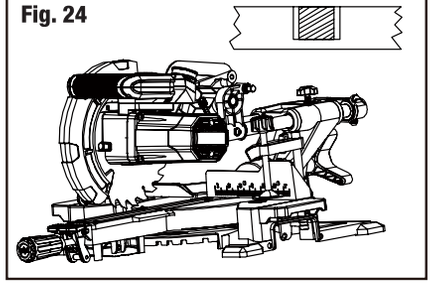
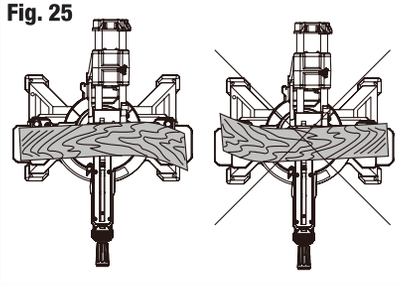


Fig. 25



CUTTING WARPED MATERIAL (Fig. 25)

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.

CAUTION!

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

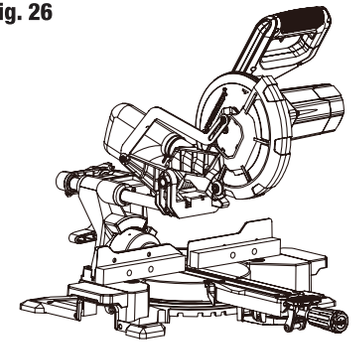
CAUTION!

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

AUXILIARY WOOD FENCE (Fig. 26)

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.

Fig. 26



CUTTING BASE MOULDING (Fig. 27)

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.

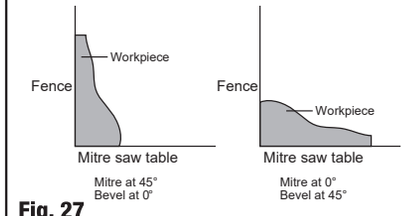


Fig. 27

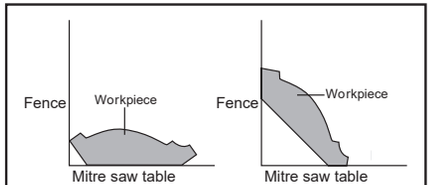


Fig. 28

CUTTING CROWN MOULDING (Fig. 28, 29)

Your compound mitre saw is suited for the difficult task of cutting crown moulding. To fit properly, crown moulding must be compound-mitred with extreme accuracy. The two surfaces on a piece of crown

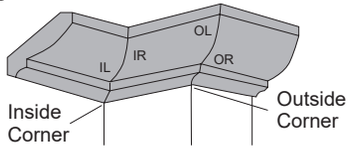
WARNING!

DO NOT USE A DADO BLADE! Use only the standard saw blade for this operation.

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°.

Fig. 29



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 well.

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	1. Position top of moulding against fence. 2. Mitre table set at RIGHT 31.6°. 3. LEFT side is finished piece.
Inside corner — Right side			
IR	33.9°	31.6° Left	1. Position bottom of moulding against fence. 2. Mitre table set at LEFT 31.6°. 3. LEFT side is finished piece.
Outside corner — Left side			
OL	33.9°	31.6° Left	1. Position bottom of moulding against fence. 2. Mitre table set at LEFT 31.6°. 3. RIGHT side is finished piece.
Outside corner — Right side			
OR	33.9°	31.6° Right	1. Position top of moulding against fence. 2. Mitre table set at RIGHT 31.6°. 3. 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 MOULDING		45/45° CROWN 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
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	15.67	19.07	17.86	17.05
132	15.33	18.69	17.48	16.71
133	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

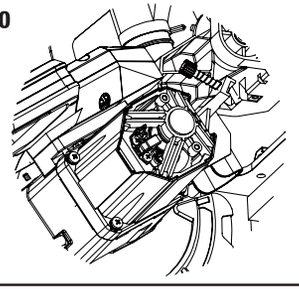
Do not use the saw without the lower blade guard.

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. 30)

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 connects to the holder. Replace it with a new carbon brush. Replace

Fig. 30



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!

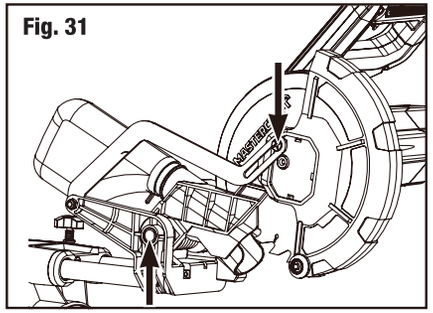
- To avoid fire or toxic reaction, never use gasoline, naphtha acetone, lacquer thinner or similar highly volatile solvents to clean the mitre saw.
- To avoid injury from unexpected starting or electric shock, unplug the power cord before working on the saw.
- For your safety, this saw is double-insulated.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

both brushes at the same time. To reassemble, reverse the procedure. Tighten two screws on the back cover.

LUBRICATION (Fig. 31)

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.

Fig. 31

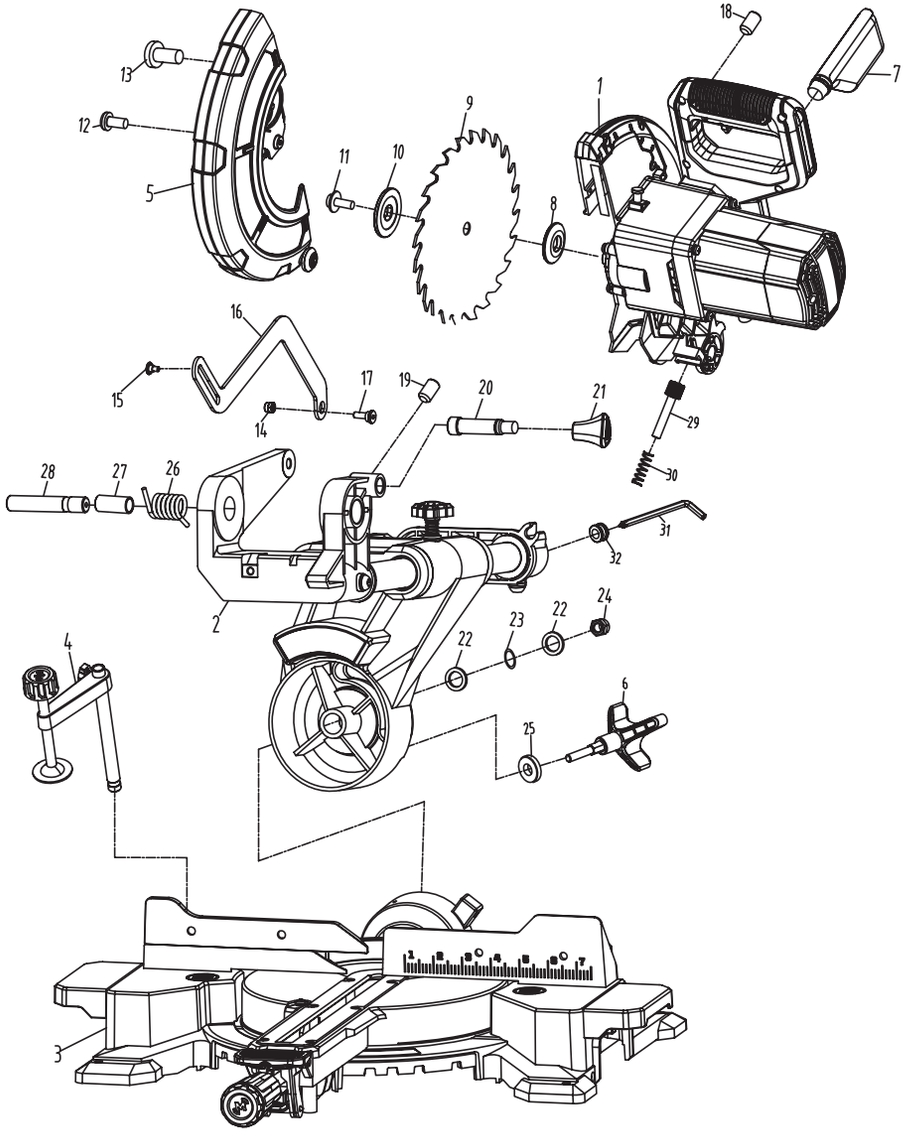


Lubricate the following as necessary:

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
Brake does not stop blade within 10 seconds.	Motor brushes not sealed or lightly sticking.	Inspect/clean/replace brushes.
	Motor brake overheated from use of defective or wrong size blade or rapid ON/OFF cycling.	Use a recommended blade.
	Arbour bolt is loose.	Retighten.
Motor does not start.	Brush worn.	Replace brushes.
	Power source fuse or time delay fuse blown.	Check time delay fuse or circuit breaker.
Angle of cut inaccurate.	Mitre table unlocked.	Rotate the mitre locking handle all the way to the right.
	Too much sawdust under table.	Vacuum or blow out dust while wearing eye protection.
Head assembly cannot fully raise or blade guard cannot fully close.	Parts failure.	Contact service centre.
	Pivot spring not replaced properly after service.	Contact service centre.
	Sawdust build-up.	Clean and lubricate moving parts.
	Lock-down pin not set properly.	Check, adjust and properly set saw-head locking pin.
Blade binds, jams or burns wood.	Improper operation.	See OPERATING INSTRUCTIONS section.
	Dull blade.	Replace or sharpen blade.
	Improper blade.	Replace blade.
	Warped blade.	Replace blade.
Blade hits table.	Misalignment.	See “Assembly and adjustments”.
Brush sparks excessively when switch is released.	Brush worn/damaged.	Replace brushes.
Saw vibrates or shakes.	Saw blade damaged.	Replace blade.
	Saw blade loose.	Tighten black bolt.
	Saw not properly fastened down.	Fasten saw to stand, bench or table.
	Workpiece not properly supported.	Properly support or clamp workpiece.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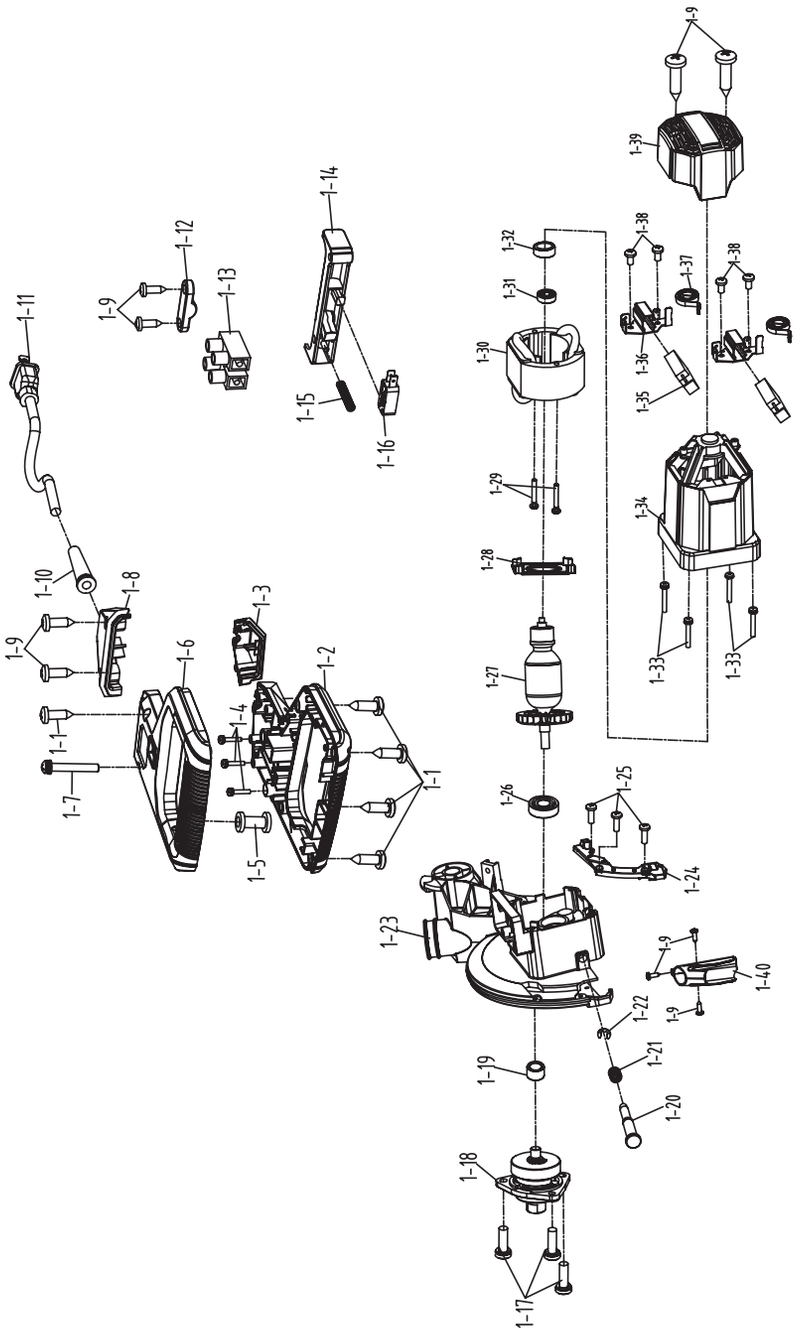
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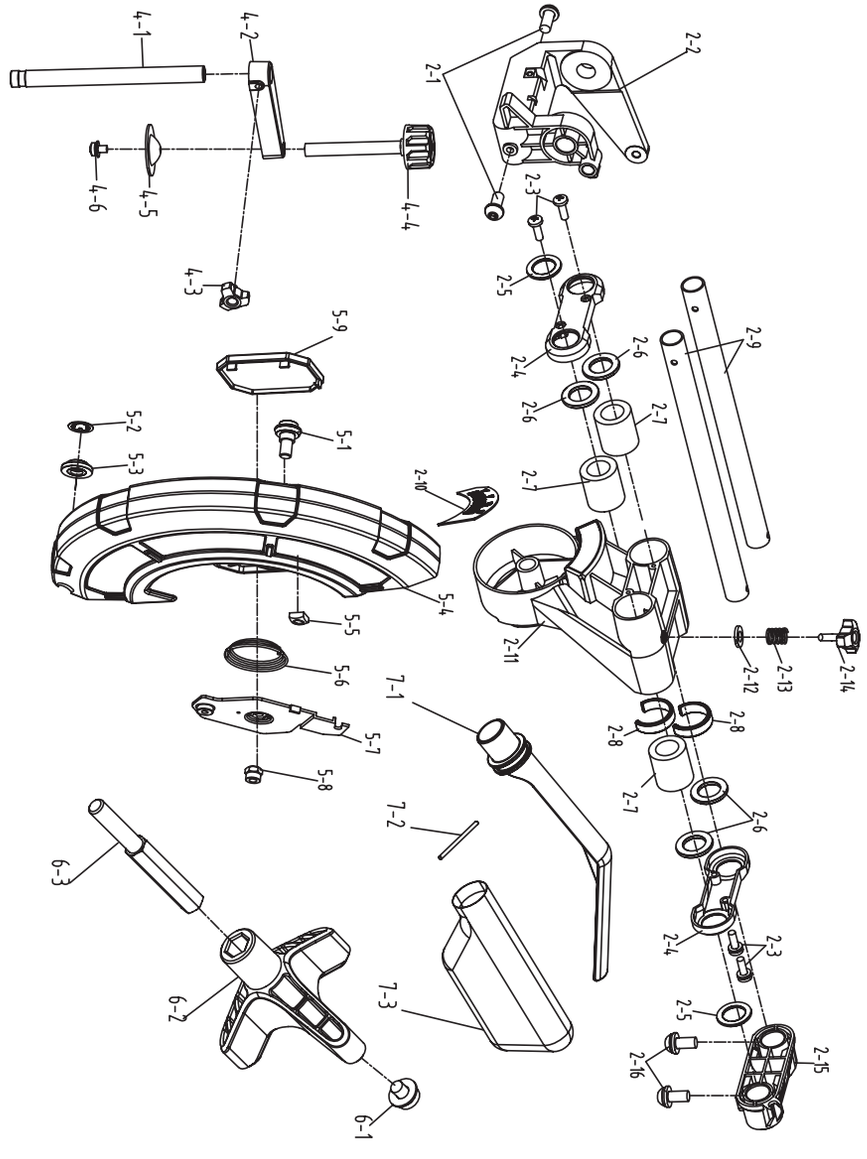
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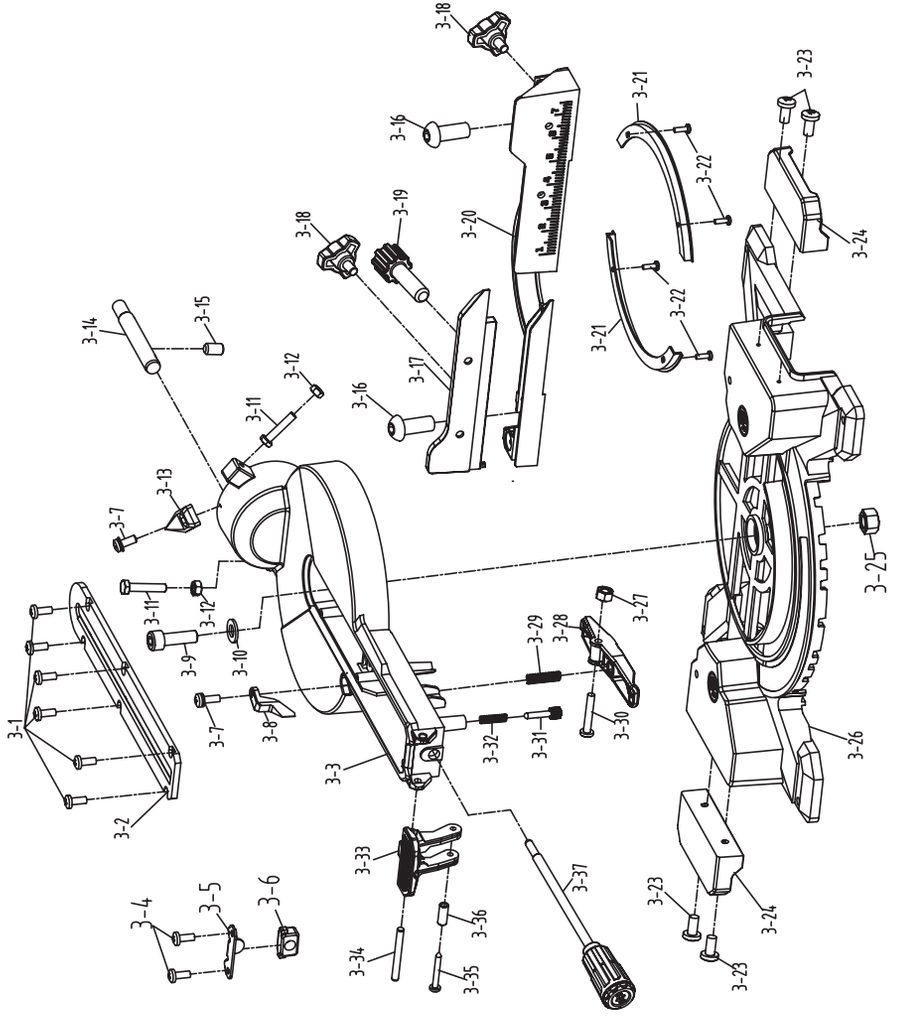
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MASTERCRAFT® 7 1/4" (18.4 cm) SLIDING COMPOUND MITRE SAW

When servicing the Mastercraft® 7 1/4" (18.4 cm) 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.

Final assembly

No.	Description	Qty.
1	Motor assembly	1
2	Crank arm and sliding rail assembly	1
3	Base and table assembly	1
4	Work clamping assembly	1
5	Blade guard assembly	1
6	Bevel lock handle assembly	1
7	Dust bag assembly	1
8	Inner flange	1
9	Saw blade	1
10	Outer flange	1
11	Socket screw	1
12	Cross recessed shaft screw	1
13	Socket screw	1
14	Lock nut	1
15	Cross recessed shaft screw	1
16	Linkage	1

No.	Description	Qty.
17	Screw	1
18	Set screw	1
19	A bead screw	1
20	Lock pin	1
21	Lock pin cap	1
22	Washer	2
23	Wave washer	1
24	Lock nut	1
25	Washer	1
26	Spring	1
27	Spring sleeve	1
28	Pivot shaft	1
29	Height adjustment knob	1
30	Compression spring	1
31	Wrench	1
32	Overcoil	1

Motor assembly

No.	Description	Qty.
1-1	Self-tapping screw	5
1-2	Lower handle	1
1-3	Lower handle AC interface	1
1-4	Cross head screw	3
1-5	Wire sleeve	1
1-6	Upper handle	1

No.	Description	Qty.
1-7	Cross head screw	1
1-8	AC interface of upper handle	1
1-9	Self-tapping screw	9
1-10	Cable sheath	1
1-11	Power cord	1
1-12	Cord press plate	1

No.	Description	Qty.
1-13	Terminal	1
1-14	Trigger switch assembly	1
1-15	Spring	1
1-16	Switch	1
1-17	Cross head screw	3
1-18	Arbour assembly	1
1-19	Cross head screw	3
1-20	Spindle lock pin	1
1-21	Spring	1
1-22	E-ring	1
1-23	Upper blade guard	1
1-24	LED cover	1
1-25	Cross head screw	3
1-26	Bearing	2

No.	Description	Qty.
1-27	Armature	1
1-28	Baffle	1
1-29	Self-tapping screw	2
1-30	Stator	1
1-31	Bearing	1
1-32	Bearing sleeve	1
1-33	Cross head screw	4
1-34	Motor housing	1
1-35	Carbon brush	2
1-36	Carbon brush holder	2
1-37	Carbon brusch spring	2
1-38	Self-tapping screw	4
1-39	Motor rear cap	1
1-40	Dust port	1

Crank arm and sliding rail assembly

No.	Description	Qty.
2-1	Hexagon socket with half round head	2
2-2	Bracket	1
2-3	Cross recessed pan head screw	4
2-4	Bearing cover plate	2
2-5	Spring washer	2
2-6	Washer	4
2-7	Linear bearing	3
2-8	Rubber washer	2

No.	Description	Qty.
2-9	Sliding bar	2
2-10	Bevel scale label	1
2-11	Arm	1
2-12	Washer	1
2-13	Spring	1
2-14	Knob	1
2-15	Slide end cap	1
2-16	Hexagon socket with half round head	2

Base and table assembly

No.	Description	Qty.
3-1	Cross head screw	6
3-2	Table insert	1
3-3	Workbench	1
3-4	Cross pan head screw (two combinations)	2
3-5	Locking tab	1
3-6	Nut locking block	1
3-7	Cross head screw	2
3-8	Mitre pointer	1
3-9	Socket screw	1
3-10	Washer	1
3-11	Hex screw	2
3-12	Hex nut	2
3-13	Bevel pointer	1
3-14	Bevel shaft	1
3-15	Set screw	1
3-16	Half round socket screw	2
3-17	Left slding fence	1
3-18	Knob	2
3-19	Knob	1
3-20	Fence	1
3-21	Glide plate	2
3-22	Cross head screw	4
3-23	Cross head screw	4
3-24	Extension table	2
3-25	Lock nut	1
3-26	Base	1
3-27	Lock nut	1
3-28	Location push button	1
3-29	Spring	1
3-30	Cross head screw	1
3-31	Knob	1
3-32	Spring	1
3-33	Button	1
3-34	Pin	1
3-35	Cross head screw	1
3-36	Slip bush	1
3-37	Mitre lock handle assembly	1

Workpiece clamping assembly

No.	Description	Qty.
4-1	Clamp rod	1
4-2	Aluminum connecting rod	1
4-3	Knob	1
4-4	Workpiece clamping button	1
4-5	Clamping plate	1
4-6	Cross recessed pan head screw	1

Blade guard assembly

No.	Description	Qty.
5-1	Shoulder screw	1
5-2	Washer	1
5-3	Wheel	1
5-4	Lower blade guard	1
5-5	Hex nut	1
5-6	Torsion spring	1
5-7	Blade guard support	1
5-8	Lock nut	1
5-9	Shield trim cover	1

Bevel lock handle assembly

No.	Description	Qty.
6-1	Cross head screw	1
6-2	Bevel lock knob	1
6-3	Hex bolt	1

Dust bag assembly

No.	Description	Qty.
7-1	Dust bag support	1
7-2	Tie	1
7-3	Dust bag	1

3-Year Limited Warranty

This Mastercraft product is guaranteed for a period of three (3) years from the date of original retail purchase against defects in workmanship and materials, except for the following component:

Component A: Accessories, which are guaranteed for a period of one (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;

b) 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;

c) 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 reasonable 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.

Made in China

Imported by Mastercraft Canada Toronto, Canada M4S 2B8