

DEWALT®

Definitions: Safety Alert Symbols and Words

This instruction manual uses the following safety alert symbols and words to alert you to hazardous situations and your risk of personal injury or property damage.





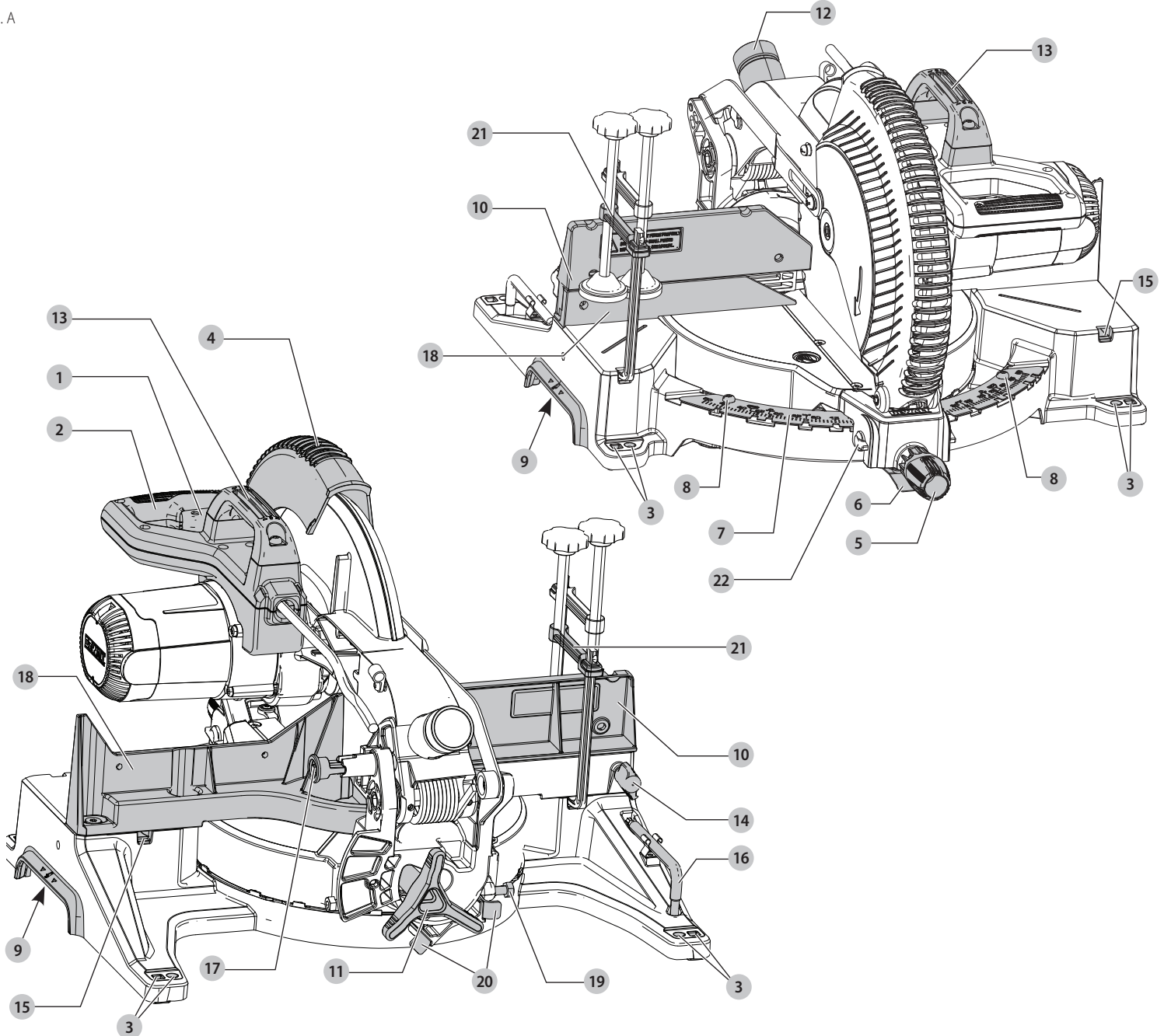


-  **DANGER:** Indicates an imminently hazardous situation which, if not avoided, **will** result in **death or serious injury**.
-  **WARNING:** Indicates a potentially hazardous situation which, if not avoided, **could** result in **death or serious injury**.
-  **CAUTION:** Indicates a potentially hazardous situation which, if not avoided, **may** result in **minor or moderate injury**.
-  (Used without word) Indicates a safety related message.
- NOTICE:** Indicates a practice **not related to personal injury** which, if not avoided, **may** result in **property damage**.

Fig. A



- | | | |
|----------------------|------------------------|--------------------------------------|
| 1 Trigger switch | 9 Hand indentations | 17 Head lock knob |
| 2 Operating handle | 10 Sliding fence | 18 Base fence |
| 3 Mounting holes | 11 Bevel lock knob | 19 0° bevel stop adjustment screw |
| 4 Lower guard | 12 Dust port | 20 0°/45° bevel stop override levers |
| 5 Mitre lock knob | 13 Carrying handle | 21 Clamp |
| 6 Mitre detent latch | 14 Fence lock knob | 22 Mitre detent override switch |
| 7 Mitre scale | 15 Clamp mounting hole | |
| 8 Mitre scale screws | 16 6 mm hex wrench | |

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

 **WARNING:** To reduce the risk of injury, read the instruction manual.

If you have any questions or comments about this or any DEWALT tool, call us toll free at: 1-800-4-DEWALT (1-800-433-9258).

GENERAL POWER TOOL SAFETY WARNINGS



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.

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.

1) Work Area Safety

- Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, 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.

2) Electrical Safety

- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter 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 ground fault circuit interrupter (GFCI) protected supply.** Use of a GFCI reduces the risk of electric shock.

3) 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 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 jewelry. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewelry 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.

4) 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 the 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 the battery pack 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. 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 and 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 situations.
- 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.

5) 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 100 mm 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.
- 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 100 mm 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 fence 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

WARNING: Do not allow familiarity (gained from frequent use of your saw) to replace safety rules. Always remember that a careless fraction of a second is sufficient to inflict severe injury.

- **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.
- **FOLLOW ALL WIRING CODES** and recommended electrical connections to prevent shock or electrocution. Protect electric supply line with at least a 15 ampere time-delay fuse or a circuit breaker.
- **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 arbor screw is tightened securely. Loose or improper blade clamping may result in damage to the saw and possible personal injury.
- **DO NOT OPERATE ON ANYTHING OTHER THAN THE DESIGNATED VOLTAGE** for the saw. Overheating, damage to the tool and personal injury may occur.
- **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** or masonry. Either of these can cause the carbide tips to fly off the blade at high speeds causing serious injury.
- **NEVER PLACE HANDS CLOSER THAN 4" (100 mm) FROM THE BLADE.**
- **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 CROSSCUT SAW BLADES** recommended for mitre saws. For best results, do not use carbide tipped blades with hook angles in excess of 7 degrees. Do not use blades with deep gullets. These can deflect and contact the guard, and can cause damage to the machine and/or 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.
- **DO NOT** use lubricants or cleaners (particularly spray or aerosol) in the vicinity of the plastic guard. The polycarbonate material used in the guard is subject to attack by certain chemicals.
- **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.

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.

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: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

- **Avoid prolonged contact with dust from power sanding, sawing, grinding, drilling, and other construction activities. Wear protective clothing and wash exposed areas with soap and water.** Allowing dust to get into your mouth, eyes, or lay on the skin may promote absorption of harmful chemicals.

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: 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.

- **Air vents often cover moving parts and should be avoided.** Loose clothes, jewelry or long hair can be caught in moving parts.

The label on your tool may include the following symbols. The symbols and their definitions are as follows:

V	volts	~ or AC.....	alternating current
Hz	hertz	⎓ or AC/DC.....	alternating or direct current
min	minutes	⊞.....	Class II Construction (double insulated)
— — — or DC.....	direct current	n ₀	no load speed
Ⓢ.....	Class I Construction (grounded)	n	rated speed
.../min.....	per minute	Ⓧ.....	earthing terminal
BPM	beats per minute	⚠.....	safety alert symbol
IPM	impacts per minute	⚠.....	visible radiation
RPM	revolutions per minute	☉.....	wear respiratory protection
sfpm	surface feet per minute	☉.....	wear eye protection
SPM	strokes per minute	☉.....	wear hearing protection
A	amperes	📖.....	read all documentation
W	watts		

For your convenience and safety, the following warning labels are on your mitre saw.

ON GUARD:

DANGER—KEEP AWAY FROM BLADE.

ON UPPER GUARD:

PROPERLY SECURE BRACKET WITH BOTH SCREWS BEFORE USE.

ON TABLE: (2 PLACES)

WARNING: TO REDUCE THE RISK OF INJURY, USER MUST READ INSTRUCTION MANUAL BEFORE OPERATING Mitre SAW. KEEP HANDS AND BODY OUT OF THE PATH OF THE SAW BLADE. CONTACT WITH BLADE WILL RESULT IN SERIOUS INJURY. DO NOT OPERATE SAW WITHOUT GUARDS IN PLACE. CHECK LOWER GUARD FOR PROPER CLOSING BEFORE EACH USE. ALWAYS TIGHTEN ADJUSTMENT KNOBS BEFORE USE. DO NOT PERFORM ANY OPERATION FREEHAND. CLAMP SMALL PIECES BEFORE CUTTING. NEVER REACH IN BACK OF SAW BLADE. NEVER CROSS ARMS IN FRONT OF BLADE. TURN OFF TOOL AND WAIT FOR SAW BLADE TO STOP BEFORE MOVING WORKPIECE, CHANGING SETTINGS OR MOVING HANDS. REMOVE BATTERY PACK BEFORE ADJUSTING, CHANGING BLADE OR SERVICING. TO REDUCE THE RISK OF INJURY, RETURN CARRIAGE TO THE FULL REAR POSITION AFTER EACH CROSSCUT OPERATION. THINK! YOU CAN PREVENT ACCIDENTS.

ON TABLE: (2 PLACES)

**DANGER
PELIGRO**
KEEP AWAY
FROM BLADE
MANTENERS ALEJADO
DE LA HOJA
S'ÉLOIGNER DE LA LAME



Electrical Connection

Be sure your power supply agrees with the nameplate marking. 220-240 volts, AC means that your saw will operate on alternating current only. A voltage decrease of 10 percent or more will cause a loss of power and overheating. All DeWALT tools are factory tested. If this tool does not operate, check the power supply.

Specifications

Capacity of cut

50° mitre left and right

48° bevel left: 3° right

Baseboard vertically against fence

Max. Height 5.5" (140 mm)

Max. Width 1" (25 mm)

0° mitre

Max. Height 3-5/8" (92 mm)

Resulting Width 6-1/4" (159 mm)

Max. Width 7-7/8" (200 mm)

Resulting Height 2-5/16" (59 mm)

45° mitre

Max. Height 3-5/8" (92 mm)

Resulting Width 4-5/16" (110 mm)

Max. Width 5-1/2" (140 mm)

Resulting Height 2-5/16" (59 mm)

45° bevel - Left

Max. Height 2-1/2" (64 mm)

Resulting Width 6-1/4" (159 mm)

Max. Width 7-7/8" (200 mm)

Resulting Height 1-5/16" (33 mm)

31.6° mitre and 33.9° bevel

Max. Width 6-11/16" (170 mm)

Resulting Height 2" (51 mm)

Drive

220-240 Volt motor

1600 Watts (Max. in)

4000 RPM

Cut helical gears with roller and ball bearings

Carbide tooth blade

Unpacking Your Saw

Check the contents of your mitre saw carton to make sure that you have received all parts. In addition to this instruction manual, the carton should contain:

- 1 DWS715 mitre saw
- 1 DeWALT 12" (305 mm) dia. saw blade
- 1 6 mm hex wrench
- 1 Dust bag
- 1 Mitre lock knob
- 1 Vertical material clamp
- 1 Instruction manual

COMPONENTS (FIG. A)

WARNING: Never modify the power tool or any part of it. Damage or personal injury could result.

Refer to Figure A at the beginning of this manual for a complete list of components.

Intended Use

This heavy duty mitre saw is designed for professional wood cutting applications.

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

This mitre saw is a professional power tool. **DO NOT** let children come into contact with the tool. Supervision is required when inexperienced operators use this tool.

Familiarization (Fig. A, B)

Open the box and lift the saw out by the convenient carrying handle **13**, as shown in Figure B.

The mitre lock knob **5** is not assembled for shipping. Remove the mitre lock knob from the packaging and screw onto the saw. Refer to Figure A for position.

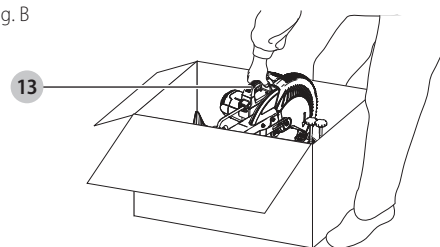
Place the saw on a smooth, flat surface such as a workbench or strong table.

Examine Figure A to become familiar with the saw and its various parts. The section on adjustments will refer to these terms and you must know what and where the parts are.

CAUTION: Pinch Hazard. To reduce the risk of injury, keep thumb underneath the handle when pulling the handle down. The lower guard will move up as the handle is pulled down which could cause pinching. The handle is placed close to the guard for special cuts.

Press down lightly on the operating handle **2** and pull head lock knob **17** and rotate a quarter turn. Gently release the downward pressure and allow the arm to rise to its full height. Use the lock down pin when carrying the saw from one place to another. To lock the arm, rotate head lock knob a quarter turn and press down on the arm until the arm locks in place. Always use the carrying handle **13** to transport the saw or the hand indentations **9** shown in Figure A.

Fig. B



Bench Mounting (Fig. A)

Mounting holes **3** are provided in all four feet to facilitate bench mounting, as shown in Figure A. There are round countersunk holes for use with screws and square holes for use with the mitre saw stand "carriage bolt" or M8 (5/16") or maller bolts. Use either hole, it is not necessary to use both.) Always mount your saw firmly to prevent movement. To enhance the tool's portability, it can be mounted to a piece of 1/2" (12.7 mm) or thicker plywood which can then be clamped to your work support or moved to other job sites and reclaimed.

NOTE: If you elect to mount your saw to a piece of plywood, make sure that the mounting screws don't protrude from the bottom of the wood. The plywood must sit flush on the work support. When clamping the saw to any work surface, clamp only on the clamping bosses where the mounting screw holes are located. Clamping at any other point will surely interfere with the proper operation of the saw.

CAUTION: To prevent binding and inaccuracy, be sure the mounting surface is not warped or otherwise uneven. If the saw rocks on the surface place a thin piece of material under one saw foot until the saw sits firmly on the mounting surface.

IMPORTANT SAFETY INSTRUCTIONS

Transporting the Saw (Fig. A)

WARNING: To reduce the risk of serious personal injury, turn off the tool and disconnect it from the power source before attempting to move it, change accessories or make any adjustments.

WARNING: To reduce the risk of serious personal injury, ALWAYS lock the mitre lock knob **5**, bevel lock knob **11**, head lock knob **17**, and fence lock knob **14** before transporting saw.

WARNING: The mitre lock knob should be used only when carrying or storing the saw. NEVER use the lock knob for any cutting operation.

In order to conveniently carry the mitre saw from place to place, a carrying handle **13** has been included on the top of the saw arm and hand indentations **9** in the base, as shown in Figure A. To transport the saw, lower the arm and rotate the head lock knob **17** a quarter turn. It will snap into the lock position.

ASSEMBLY AND ADJUSTMENTS

WARNING: To reduce the risk of serious personal injury, turn unit off and disconnect it from power source before making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

NOTE: Your mitre saw is fully and accurately adjusted at the factory at the time of manufacture. If readjustment due to shipping and handling or any other reason is required, follow the steps below to adjust your saw.

Once made, these adjustments should remain accurate. Take a little time now to follow these directions carefully to maintain the accuracy of which your saw is capable.

Changing or Installing a New Saw Blade (Fig. A, C-E)

WARNING: To reduce the risk of serious personal injury, turn off the tool and disconnect it from the power source before attempting to move it, change accessories or make any adjustments.

CAUTION:

- Never depress the spindle lock button while the blade is under power or coasting.
- Do not cut ferrous metal (containing iron or steel) or masonry or fiber cement product with this mitre saw.

Removing the Blade

1. Unplug the saw.
2. Raise the arm to the upper position and raise the lower guard **4** as far as possible.
3. Loosen, but do not remove guard bracket screw **36** until the bracket can be raised far enough to access the blade screw **23**. Lower guard will remain raised due to the position of the guard bracket screw.
4. Depress the spindle lock button **24** while carefully rotating the saw blade by hand until the lock engages.
5. Keeping the button depressed, use the other hand and the 6 mm hex wrench provided **16** to loosen the blade screw. (Turn clockwise, left-hand threads.)

Fig. C

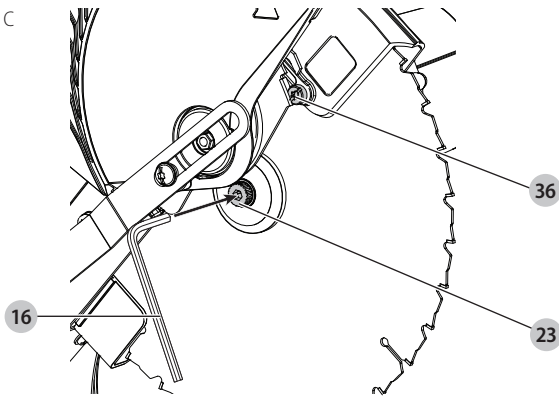
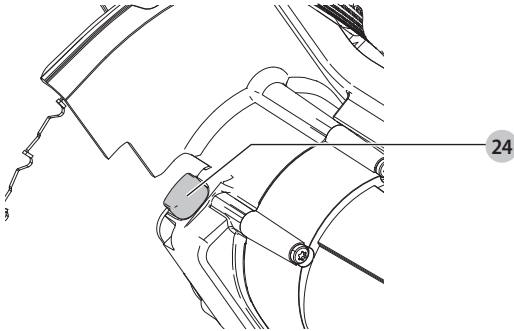
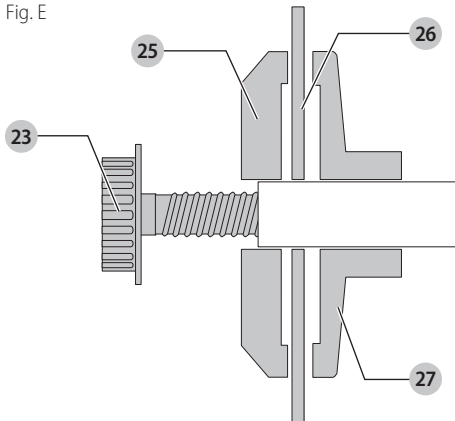


Fig. D



6. Remove the blade screw **23**, outer blade clamp **25**, and blade **26**. The inner blade clamp **27**, and if used, the 1" (25.4 mm) blade adapter, may be left on the spindle.
NOTE: For blades with a blade hole of 5/8" (15.88 mm), the 1" (25.4 mm) blade adapter is not used.

Fig. E



Installing a Blade

1. Unplug the saw.
2. With the arm raised, the lower guard held open and the guard bracket raised, place the blade on the spindle, onto the blade adapter [if using a blade with a 1" (25.4 mm) diameter blade hole] and against the inner blade clamp with the teeth at the bottom of the blade pointing toward the back of the saw.
3. Assemble the outer blade clamp onto the spindle.
4. Install the blade screw **23** and, engaging the spindle lock, tighten the screw firmly with the 6 mm hex wrench provided. (Turn counterclockwise, left-hand threads.)
NOTE: When using blades with a 5/8" (15.88 mm) diameter blade hole, the blade adapter will not be used and should be stored in a safe place for future use.
5. Return the guard bracket to its original position and firmly tighten the guard bracket screw **36** to hold bracket in place.



WARNING:

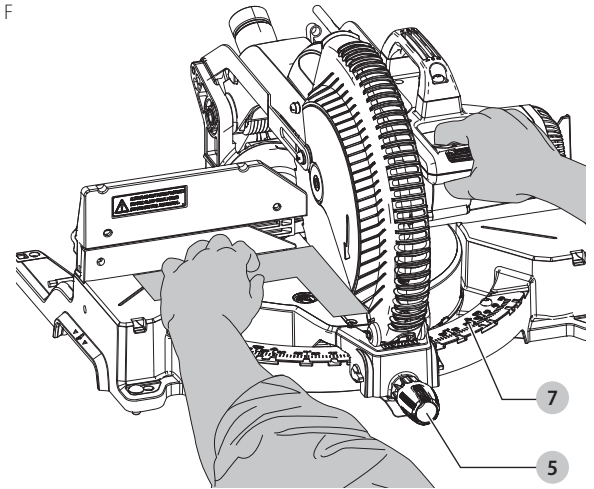
- The guard bracket must be returned to its original position and the screw tightened before activating the saw.
- Failure to do so may allow the guard to contact the spinning saw blade resulting in damage to the saw and severe personal injury.

Mitre Scale Adjustment (Fig. F)

Place a square against the saw's fence and blade. (Do not touch the tips of the blade teeth with the square. To do so will cause an inaccurate measurement.) Unlock mitre lock knob **5** and swing the mitre arm until the mitre detent latch locks it at the 0° mitre position. Do not lock mitre lock knob. If the saw blade is not exactly perpendicular to the base fence **18**, loosen the three mitre scale screws **8** that hold the mitre scale **7** to the base and move the scale/mitre arm

assembly left or right until the blade is perpendicular to the fence, as measured with the square. Retighten the three screws. Pay no attention to the reading of the mitre pointer at this point.

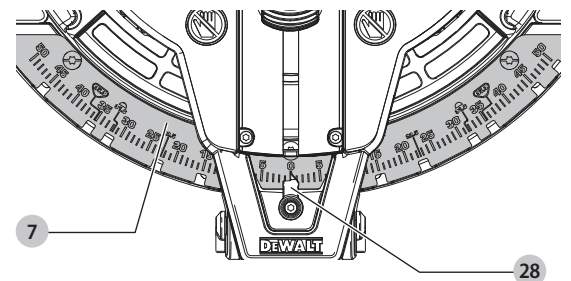
Fig. F



Mitre Pointer Adjustment (Fig. A, F, G)

Unlock mitre lock knob **5** and squeeze the mitre detent latch **6** to move the mitre arm to the zero position. Unlock the mitre lock knob to allow the mitre detent latch to snap into place as you rotate the mitre arm toward zero. Observe the pointer **28** and mitre scale **7** through the viewing opening shown in Figure G. If the pointer does not indicate exactly zero, loosen the pointer screw, adjust the pointer to 0° and retighten.

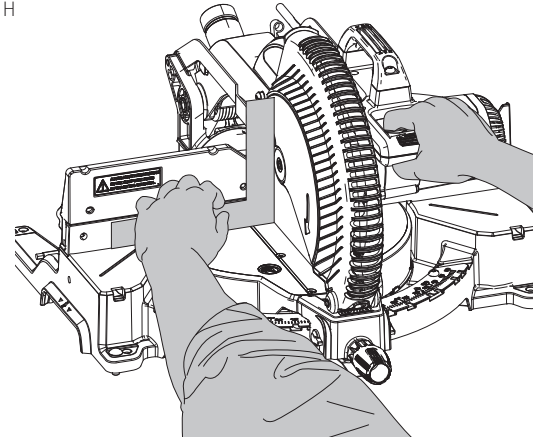
Fig. G



Bevel Square to Table (Fig. A, H)

To align the blade square to the rotary table, lock the arm in the down position. Place a square against the blade taking care to not have the square on top of a tooth. Loosen the bevel lock knob **5** and ensure the arm is firmly against the 0° bevel stop. Move the 0° bevel stop adjusting screw **19** as necessary so that the blade is at 0° bevel to the table. Ensure the bevel override levers are pushed inward to obtain an accurate adjustment.

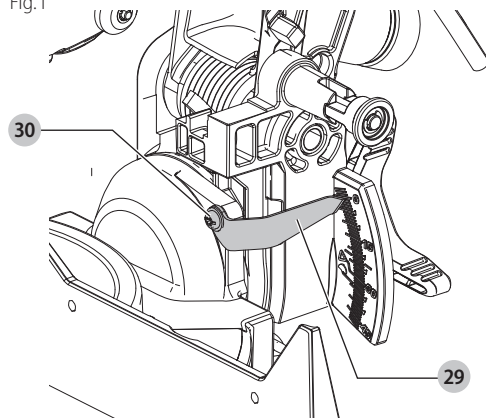
Fig. H



Bevel Pointer (Fig. I)

If the bevel pointer **29** does not indicate zero, loosen the screw **30** that holds it in place and move the pointer as necessary. Do not remove the steel plate in front of the bevel pointer. This plate prevents wood resin from accumulating on the bevel scale during use.

Fig. I

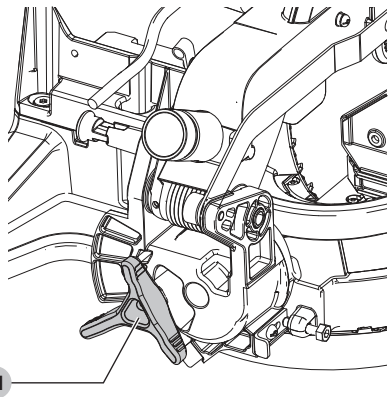


Adjusting the Bevel Stop to 45° Left (Fig. A, I, J)

NOTE: Adjust the 45° bevel angle only after performing the 0° bevel angle and pointer adjustment. Ensure the 45° bevel override levers **20** are pushed inward to obtain an accurate adjustment.

To adjust the left 45° bevel stop, first loosen the bevel lock knob **11** and tilt the head to the left. If the bevel pointer **29** does not indicate exactly 45°, turn the left bevel stop screw until the pointer reads 45°.

Fig. J



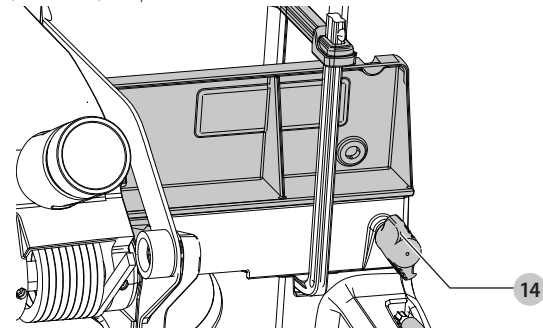
Fence Adjustment (Fig. K)

WARNING: To reduce the risk of serious personal injury, turn off the tool and disconnect it from the power source before attempting to move it, change accessories or make any adjustments.

In order that the saw can bevel to a full 48° left, the fences can be adjusted to provide clearance. To adjust a fence, loosen the fence lock knob **14**, and slide the fence outward. Make a dry run with the saw turned off and check for clearance. Adjust the fence to be as close to the blade as practical to provide maximum workpiece support, without interfering with arm up and down movement. Tighten knob securely. When the bevel operations are complete, don't forget to relocate the fence.

NOTE: The guide groove of the fences can become clogged with sawdust. If the guide groove becomes clogged, use a stick, low pressure air or a vacuum to clear.

Fig. K



Guard Actuation and Visibility (Fig. L)

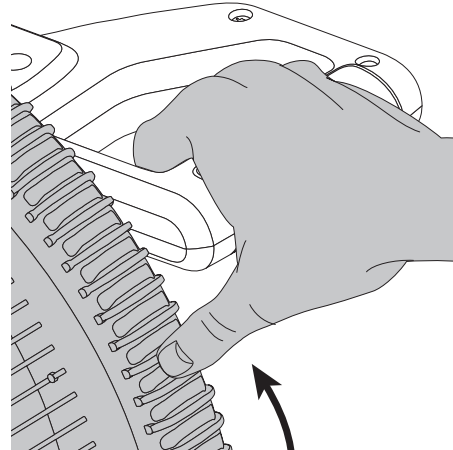
CAUTION: Pinch Hazard. To reduce the risk of injury, keep thumb underneath the handle when pulling the handle down. The lower guard will move up as the handle is pulled down which could cause pinching.

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.

NOTE: Certain special cuts of large material will require that you manually raise the guard. The front section of the guard is louvered for visibility while cutting. Although the louvers dramatically reduce flying debris, there are openings in the guard and safety glasses should be worn at all times. Refer to **Cutting Large Material** under **Special Cuts**.

Fig. L



Controls

Your compound mitre saw has several main controls, which will be discussed briefly here. For more information on these controls, see the respective sections later in the manual.

Mitre Control (Fig. A)

The mitre lock knob **5** and mitre detent latch **6** allow you to mitre your saw 50° left and right. To mitre the saw, unlock mitre lock knob **5** by rotating the knob counterclockwise, squeeze the mitre detent latch **6** and set the mitre angle desired on the mitre scale. Lock mitre lock knob by rotating clockwise until tight. Override the mitre detent latch by unlocking the mitre lock knob and pushing the mitre detent override switch **22** downward. To exit the override, push the mitre detent override switch upward.

Bevel Lock (Fig. J)

The bevel lock knob **11** allows you to bevel the saw 48° left and 3° to the right. To loosen the handle and adjust the bevel setting, turn the handle counterclockwise, the saw head bevels easily to the left. To tighten, turn the handle clockwise. Bevel degree markings are on the bottom front of the saw arm (Fig. H).

0°/45° Bevel Stop Overrides (Fig. A)

The bevel stop overrides **20** are held secure with their attachment screw to prevent inadvertent movement. Use the bit on the blade wrench to loosen the attachment screw. This allows the slides, to be pulled outward and the saw head to pivot past the 0°/45° mark. Be sure to retighten the attachment screw when finished.

Head Downlock Pin (Fig. A)

To lock the saw head in the down position, push the head down, rotate head lock knob **17** 90° and the spring loaded pin will lock in and release the saw head. This will hold the saw head safely down for moving the saw from place to place. To release, pull out the head lock knob and rotate 90°.

OPERATION

WARNING: To reduce the risk of serious personal injury, turn unit off and disconnect it from power source before making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

WARNING: Always use eye protection. All users and bystanders must wear eye protection that conforms to ANSI Z87.1 (CAN/CSA Z94.3).

Plug the saw into any household 60 Hz power source. Refer to the nameplate for voltage. Be sure the cord will not interfere with your work.

Body and Hand Position (Fig. M1–M4)

WARNING: To reduce the risk of serious personal injury, ALWAYS use proper hand position as shown.

WARNING: To reduce the risk of serious personal injury, ALWAYS hold securely in anticipation of a sudden reaction.

Proper positioning of your body and hands when operating the mitre saw will make cutting easier, more accurate and safer. Never place hands near cutting area. Place hands no closer than 4" (100 mm) from the blade. Hold the workpiece tightly to the table and the fence when cutting. Keep hands in position until the trigger has been released and the blade has completely stopped. ALWAYS MAKE DRY RUNS (UNPOWERED) BEFORE FINISH CUTS SO THAT YOU CAN CHECK THE PATH OF THE BLADE. DO NOT CROSS ARMS, AS SHOWN IN FIGURE M3.

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

Fig. M1

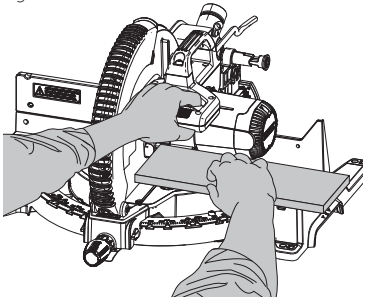


Fig. M2

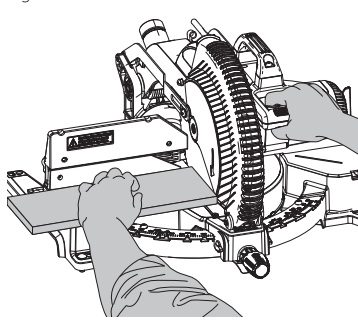


Fig. M3

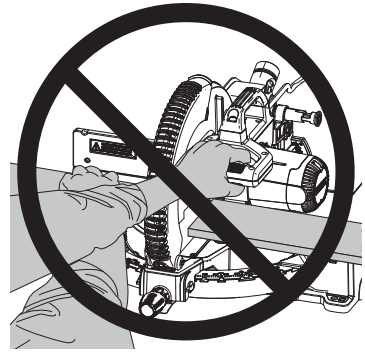
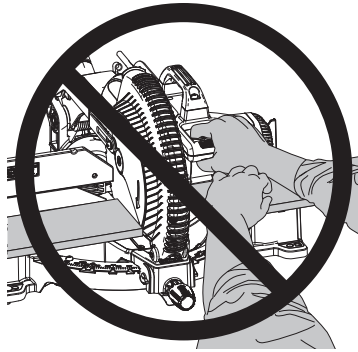


Fig. M4

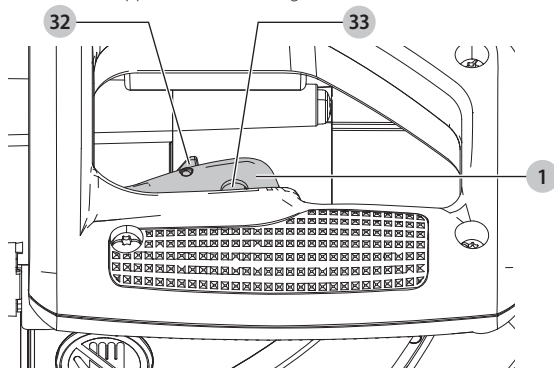


Trigger Switch (Fig. N)

To turn the saw on, push the lock-off lever **32** to the left, then depress the trigger switch **1**. The saw will run while the switch is depressed. Allow the blade to spin up to full operating speed before making the cut. To turn the saw off, release the switch. Allow the blade to stop before raising the saw head. There is no provision for locking the switch on. A hole **33** is provided in the trigger for insertion of a padlock to lock the switch off.

Always be sure the blade has stopped before removing it from the kerf.

Fig. N



Dust Extraction (Fig. O)

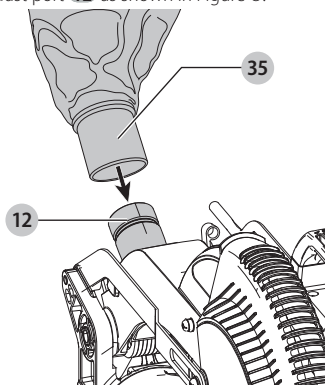
WARNING: To reduce the risk of serious personal injury, turn unit off and disconnect it from power source before making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

Your saw has a built-in dust port **12** that allows either the supplied dust bag **35** or a shop vacuum system to be connected.

To Attach the Dust Bag

1. Fit the dust bag **35** to the dust port **12** as shown in Figure O.

Fig. O



To Empty the Dust Bag

1. Remove dust bag **35** from the saw and gently shake or tap the dust bag to empty.
2. Reattach the dust bag back onto the dust port **12**.

You may notice that all the dust will not come free from the bag. This will not affect cutting performance but will reduce the saw's dust collection efficiency. To restore your saw's dust collection efficiency, depress the spring inside the dust bag when you are emptying it and tap it on the side of the trash can or dust receptacle.

CAUTION: Never operate this saw unless the dust bag or DeWALT dust extractor is in place. Wood dust may create a breathing hazard.

Cutting with Your Saw

NOTE: Although this saw will cut wood and many non-ferrous materials, we will limit our discussion to the cutting of wood only. The same guidelines apply to the other materials. **DO NOT CUT FERROUS (IRON AND STEEL) MATERIALS OR MASONRY WITH THIS SAW.** Do not use any abrasive blades.

Crosscuts

Cutting of multiple pieces is not recommended but can be done safely by ensuring that each piece is held firmly against the table and fence. A crosscut is made by cutting wood across the grain at any angle. A straight crosscut is made with the mitre arm at the zero degree position. Set the mitre arm at zero, hold the wood on the table and firmly against the fence. Turn on the saw by squeezing the trigger.

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

When the saw comes up to speed (about 1 second) lower the arm smoothly and slowly to cut through the wood. Let the blade come to a full stop before raising arm.

Mitre crosscuts are made with the mitre arm at some angle other than zero. This angle is often 45° for making corners, but can be set anywhere from zero to 50° left or right. After selecting the desired mitre angle, be sure to lock mitre lock knob. Make the cut as described above.

To cut through an existing pencil line on a piece of wood, match the angle as close as possible. Cut the wood a little too long and measure from the pencil line to the cut edge to determine which direction to adjust the mitre angle and recut. This will take some practice, but it is a commonly used technique.

Bevel Cuts (Fig. A)

A bevel cut is a crosscut made with the saw blade at a bevel to the wood. In order to set the bevel, loosen the bevel lock knob **11** and move the saw to the left as desired. (It is necessary to move the fence to allow clearance). Once the desired bevel angle has been set, tighten the bevel clamp knob firmly.

Bevel angles can be set up to 48° left and can be cut with the mitre arm set between zero and 50° right or left. At some extreme angles, the left side fence might have to be removed. To remove the left fence, unscrew the fence locking knob **14** several turns and slide the fence out.

Quality of cut

The smoothness of any cut depends on a number of variables. Things like material being cut, blade type, blade sharpness and rate of cut all contribute to the quality of the cut.

When smoothest cuts are desired for molding and other precision work, a sharp (60 tooth carbide) blade and a slower, even cutting rate will produce the desired results.

Ensure that material does not creep while cutting, clamp it securely in place. Always let the blade come to a full stop before raising arm.

If small fibers of wood still split out at the rear of the workpiece, stick a piece of masking tape on the wood where the cut will be made. Saw through the tape and carefully remove tape when finished.

For varied cutting applications, refer to the list of recommended saw blades for your saw and select the one that best fits your needs. Refer to **Saw Blades** under **Accessories**.

Clamping the Workpiece (Fig. A)

WARNING: To reduce the risk of serious personal injury, turn off the tool and disconnect it from the power source before attempting to move it, change accessories or make any adjustments.

WARNING: A workpiece that is clamped, balanced and secure before a cut may become unbalanced after a cut is completed. An unbalanced load may tip the saw or anything the saw is attached to, such as a table or workbench. When making a cut that may become unbalanced, properly support the workpiece and ensure the saw is firmly bolted to a stable surface. Personal injury may occur.

WARNING: The clamp foot must remain clamped above the base of the saw whenever the clamp is used. Always clamp the workpiece to the base of the saw—not to any other part of the work area. Ensure the clamp foot is not clamped on the edge of the base of the saw.

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

If you cannot secure the workpiece on the table and against the fence by hand, (irregular shape, etc.) or your hand would be less than 4" (100 mm) from the blade, a clamp or other fixture must be used.

For best results use the clamp **21** provided with your saw. Additional DW7090 clamps can be purchased at your local retailer or DeWALT service center.

Other aids such as spring clamps, bar clamps or C-clamps may be appropriate for certain sizes and shapes of material. Use care in selecting and placing these clamps. Take time to make a dry run before making the cut. The sliding fence 10 will slide from side to side to aid in clamping

To Install Clamp (Fig. A)

1. Insert the clamp 21 into one of the four locations 15 on the base.
2. Lifting up on the arm of the clamp can rapidly adjust the height, then use the fine adjust knob to firmly clamp the workpiece.

NOTE: Place the clamp on the opposite side of the base when beveling. ALWAYS MAKE DRY RUNS (UNPOWERED) BEFORE FINISH CUTS TO CHECK THE PATH OF THE BLADE. ENSURE THE CLAMP DOES NOT INTERFERE WITH THE ACTION OF THE SAW OR GUARDS.

WARNING: A workpiece that is clamped, balanced and secure before a cut may become unbalanced after a cut is completed. An unbalanced load may tip the saw or anything the saw is attached to, such as a table or workbench. When making a cut that may become unbalanced, properly support the workpiece and ensure the saw is firmly bolted to a stable surface.

WARNING: The clamp foot must remain clamped above the base of the saw whenever the clamp is used. Always clamp the workpiece to the base of the saw—not to any other part of the work area. Ensure the clamp foot is not clamped on the edge of the base of the saw.

Support for Long Pieces

WARNING: To reduce the risk of serious personal injury, turn off the tool and disconnect it from the power source before attempting to move it, change accessories or make any adjustments.

ALWAYS SUPPORT LONG PIECES.

Never use another person as a substitute for a table extension; as additional support for a workpiece that is longer or wider than the basic mitre saw table or to help feed, support or pull the workpiece.

For best results, use the DWX723, DWX724, DWX725B or DWX726 mitre saw stand to extend the table width of your saw. These are available from your dealer at extra cost.

Support long workpieces using any convenient means such as sawhorses or similar devices to keep the ends from dropping.

Cutting Picture Frames, Shadow Boxes and Other Four-Sided Projects (Fig. P)

To better understand how to make the items listed here, we suggest that you try a few simple projects using scrap wood until you develop a "FEEL" for your saw. Your saw is the perfect tool for mitring corners like the one shown in Figure P. Sketch A in Figure P shows a joint made by using the bevel adjustment to bevel the edges of the two boards at 45° each to produce a 90° mitre corner. For this joint the mitre arm was locked in the zero position and the bevel adjustment was locked at 45°. The wood was positioned with the broad flat side against the table and the narrow edge against the fence. The cut could also be made by mitring right and left with the broad surface against the fence.

Cutting Trim Molding and Other Frames (Fig. P)

Sketch B in Figure P shows a joint made by setting the mitre arm at 45° to mitre the two boards to form a 90° corner. To make this type of joint, set the bevel adjustment to zero and the mitre arm to 45°. Once again, position the wood with the broad flat side on the table and the narrow edge against the fence.

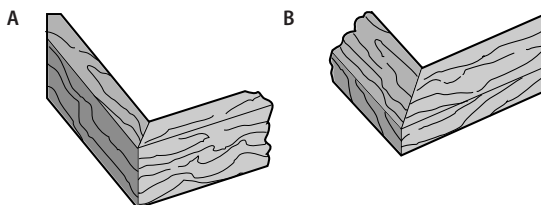
The two sketches in Figure P are for four sided objects only.

As the number of sides changes, so do the mitre and bevel angles. The chart below gives the proper angles for a variety of shapes. The chart assumes that all sides are of equal length. For a shape that is not shown in the chart, use the following formula. 180° divided by the number of sides equals the mitre or bevel angle.

EXAMPLES

No. Sides	Angle Mitre or Bevel
4	45°
5	36°
6	30°
7	25.7°
8	22.5°
9	20°
10	18°

Fig. P



Cutting Compound Mitres (Fig. Q, R)

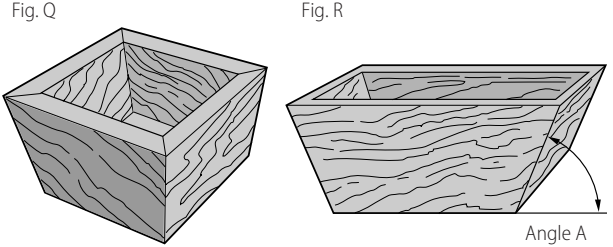
A compound mitre is a cut made using a mitre angle and a bevel angle at the same time. This is the type of cut used to make frames or boxes with slanting sides like the one shown in Figure Q.

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

The chart (Table 1) will assist you in selecting the proper bevel and mitre settings for common compound mitre cuts. To use the chart, select the desired angle "A" (Figure R) of your project and locate that angle on the appropriate arc in the chart. From that point follow the chart straight down to find the correct bevel angle and straight across to find the correct mitre angle.

Set your saw to the prescribed angles and make a few trial cuts. Practice fitting the cut pieces together until you develop a feel for this procedure and feel comfortable with it.

EXAMPLE: To make a 4 sided box with 26° exterior angles (Angle A, Figure R), use the upper right arc. Find 26° on the arc scale. Follow the horizontal intersecting line to either side to get mitre angle setting on saw (42°). Likewise, follow the vertical intersecting line to the top or bottom to get the bevel angle setting on the saw (18°). Always try cuts on a few scrap pieces of wood to verify settings on saw.



When Mitring to the Right

To increase the mitre angle when mitring to the right, move the arm to align the appropriate vernier mark with the closest mark on the mitre scale to the right. To decrease the mitre angle when mitring to the right, move the arm to align the appropriate vernier mark with the closest mark on the mitre scale to the left.

When Mitring to the Left

To increase the mitre angle when mitring to the left, move the arm to align the appropriate vernier mark with the closest mark on the mitre scale to the left. To decrease the mitre angle when mitring to the left, move the arm to align the appropriate vernier mark with the closest mark on the mitre scale to the right.

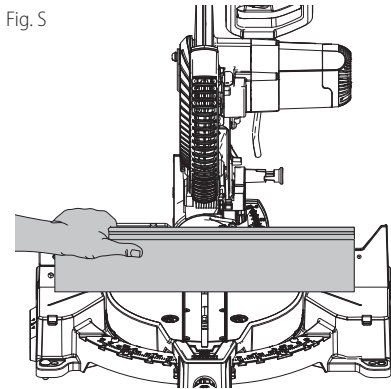
Cutting Base Molding (Fig. S)

ALWAYS MAKE A DRY RUN WITHOUT POWER BEFORE MAKING ANY CUTS.

Straight 90° cuts:

Position the wood against the fence and hold it in place as shown in Figure S. Turn on the saw, allow the blade to reach full speed and lower the arm smoothly through the cut.

Fig. S



Cutting Base Molding up to 1" (25.4 mm) Thick by Up to 3-5/8" (91 mm) Wide Vertically Against the Fence (Fig L, S)

Position molding as shown in Figure S.

All cuts made with the back of the molding against the fence and bottom of the molding against the base.

	Inside corner	Outside corner
Left side	1. Mitre left 45° 2. Save left side of cut	1. Mitre right 45° 2. Save right side of cut
Right side	1. Mitre right 45° 2. Save right side of cut	1. Mitre left 45° 2. Save right side of cut

Material up to 3-5/8" (91 mm) can be cut as described above. For boards [up to 5-1/2" (140 mm)] several minor concessions must be made:

When cutting a board between 3-5/8" (91 mm) and 5-1/2" (140 mm), the roller on the tip of the guard will hang up on the workpiece. If this occurs, simply place your right thumb on the upper side of the guard and roll the guard up just enough to clear the workpiece, as shown in Figure L. Once you have cleared the workpiece, you can release the guard and it will continue to open as the cut progresses.

When mitring to the right side of a base molding 3-5/8" (91 mm) standing vertically against the fence as in Figure S, the saw can only cut through the board up to 1" (25.4 mm) from the end of the board. Trying to cut more than an inch will cause the saw's gear case to interfere with the workpiece. If you want to cut base molding between 3-5/8" (91 mm) and 5-1/2" (140 mm)

vertically follow the directions on this page.

Cutting Base Molding up to 1" (25.4 mm) Thick by 3-5/8"-5-1/2" (91 mm-140 mm) Wide Vertically Against the Fence

Position molding as shown in Figure S.

All cuts made with the back of the molding against the fence

	Inside corner	Outside corner
Left side*	<ol style="list-style-type: none"> 1. Position molding with bottom of molding against the base of the saw 2. Mitre left 45° 3. Save left side of cut 	<ol style="list-style-type: none"> 1. Position molding with bottom of molding against the base of the saw 2. Mitre right 45° 3. Save left side of cut
Right side	<ol style="list-style-type: none"> 1. Position molding with bottom of the molding resting on the base of the saw 2. Mitre right 45° 3. Save right side of cut 	<ol style="list-style-type: none"> 1. Position molding with bottom of the molding against the base of the saw 2. Mitre left 45° 3. Save right side of cut

* NOTE: If the cut must be made somewhere other than 1" (25.4 mm) from the end of the molding: cut off the molding at 90° approx. 1" (25.4 mm) longer than your final length then make the mitre cut as described above.

Cutting Base Molding up to 1.8" (45 mm) Thick by up to 7-11/16" (195.6 mm) Wide Laying Flat and Using the Bevel Feature

All cuts made with the saw set at 45° bevel and 0 mitre.

All cuts made with back of molding laying flat on the saw.

	Inside corner	Outside corner
Left side	<ol style="list-style-type: none"> 1. Position molding with top of molding against the fence 2. Save left side of cut 	<ol style="list-style-type: none"> 1. Position molding with bottom of the molding against the fence 2. Save right side of cut
Right side	<ol style="list-style-type: none"> 1. Position molding with bottom of the molding against the fence 2. Save right side of cut 	<ol style="list-style-type: none"> 1. Position molding with top of molding against the fence 2. Save right side of cut

Cutting Crown Molding

Your mitre saw is better suited to the task of cutting crown molding than any tool made. In order to fit properly, crown molding must be compound mitred with extreme accuracy.

The two flat surfaces on a given piece of crown molding are at angles that, when added together, equal exactly 90°. Most, but not all, crown molding has a top rear angle (the section that fits flat against the ceiling) of 52° and a bottom rear angle (the part that fits flat against the wall) of 38°.

Your mitre saw has special pre-set mitre latch points at 31.6° left for cutting crown molding at the proper angle and bevel stop pawl at 33.9° left. There is also a mark on the bevel scale at 33.9°.

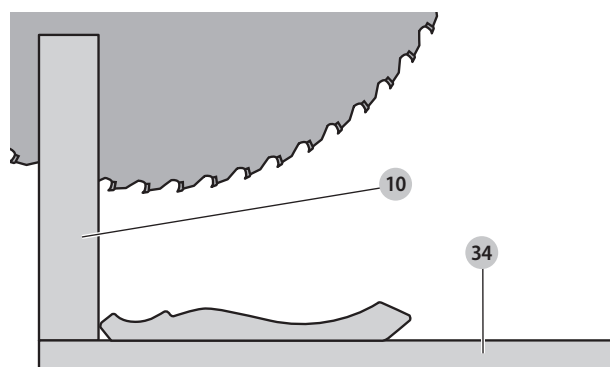
The **Bevel Setting/Type of Cut** chart gives the proper settings for cutting crown molding. (The numbers for the mitre and bevel settings are very precise and are not easy to accurately set on your saw.) Since most rooms do not have angles of precisely 90°, you will have to fine tune your settings anyway.

PRETESTING WITH SCRAP MATERIAL IS EXTREMELY IMPORTANT!

Instructions for Cutting Crown Molding Laying Flat and Using the Compound Features (Fig. A, T)

1. Molding laying with broad back surface down flat on saw table 34 (Fig. T).

Fig. T



2. The settings below are for All Standard (U.S.) crown molding with 52° and 38° angles.

BEVEL SETTING	TYPE OF CUT
33.9°	LEFT SIDE, INSIDE CORNER
	<ol style="list-style-type: none"> 1. Top of molding against fence 2. Mitre table set right 31.6° 3. Save left end of cut
	RIGHT SIDE, INSIDE CORNER
33.9°	<ol style="list-style-type: none"> 1. Bottom of molding against fence 2. Mitre table set left 31.6° 3. Save left end of cut
	LEFT SIDE, OUTSIDE CORNER
	<ol style="list-style-type: none"> 1. Bottom of molding against fence 2. Mitre table set left 31.6° 3. Save right end of cut
33.9°	RIGHT SIDE, OUTSIDE CORNER
	<ol style="list-style-type: none"> 1. Top of molding against fence 2. Mitre table set right 31.6° 3. Save right end of cut

When setting bevel and mitre angles for all compound mitres, remember that:

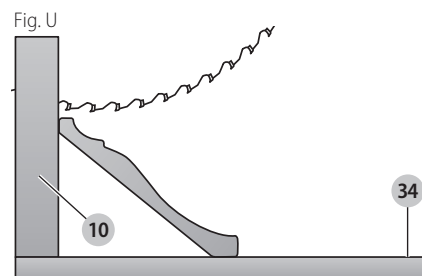
The angles presented for crown moldings are very precise and difficult to set exactly. Since they can easily shift slightly and very few rooms have exactly square corners, all settings should be tested on scrap molding.

PRETESTING WITH SCRAP MATERIAL IS EXTREMELY IMPORTANT!

Alternative Method for Cutting Crown Molding (Fig. U)

Place the molding on the table at an angle between the sliding fence 10 and the saw table 34, as shown in Figure U. Use of the crown molding fence accessory (DW7084) is highly recommended because of its degree of accuracy and convenience. The crown molding fence accessory is available for purchase from your local dealer.

The advantage to cutting crown molding using this method is that no bevel cut is required. Minute changes in the mitre angle can be made without affecting the bevel angle. This way, when corners other than 90° are encountered, the saw can be quickly and easily adjusted for them. Use the crown molding fence accessory to maintain the angle at which the molding will be on the wall.



Instructions for Cutting Crown Molding Angled Between the Fence and Base of the Saw for All Cuts

1. Angle the molding so the bottom of the molding (part which goes against the wall when installed) is against the fence and the top of the molding is resting on the base of the saw, as shown in Figure U.
2. The angled "flats" on the back of the molding must rest squarely on the fence and base of the saw.

	Inside corner	Outside corner
Left side	<ol style="list-style-type: none"> 1. Mitre right 45° 2. Save right side of cut 	<ol style="list-style-type: none"> 1. Mitre left 45° 2. Save right side of cut
Right side	<ol style="list-style-type: none"> 1. Mitre left 45° 2. Save left side of cut 	<ol style="list-style-type: none"> 1. Mitre right 45° 2. Save left side of cut

Special Cuts

NEVER MAKE ANY CUT UNLESS THE MATERIAL IS SECURED ON THE TABLE AND AGAINST THE FENCE.

Aluminum Cutting (Fig. A, V, W)

ALWAYS USE THE APPROPRIATE SAW BLADE MADE ESPECIALLY FOR CUTTING ALUMINUM. These are available at your local DEWALT retailer or DEWALT service center. Certain workpieces, due to their size, shape or surface finish, may require the use of a clamp or fixture to prevent movement during the cut. Position the material so that you will be cutting the thinnest cross section, as shown in Figure V. Figure W illustrates the wrong way to cut these extrusions. Use a stick wax cutting lubricant when cutting aluminum. Apply the stick wax directly to the saw blade **26** before cutting. Never apply stick wax to a moving blade.

The wax, available at most hardware stores and industrial mill supply houses, provides proper lubrication and keeps chips from adhering to the blade.

Be sure to properly secure workpiece.

Refer to **Saw Blades** under **Accessories** for correct saw blade.

Fig. V

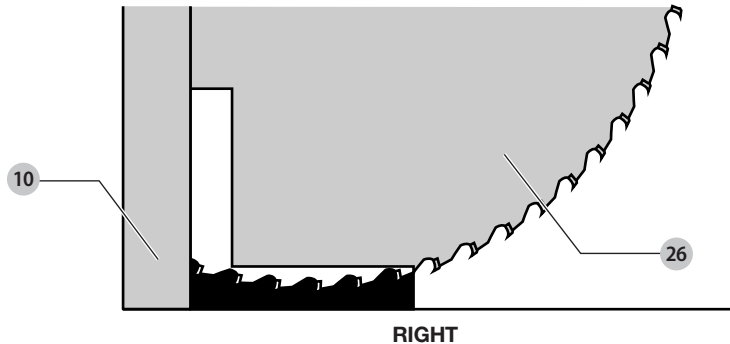
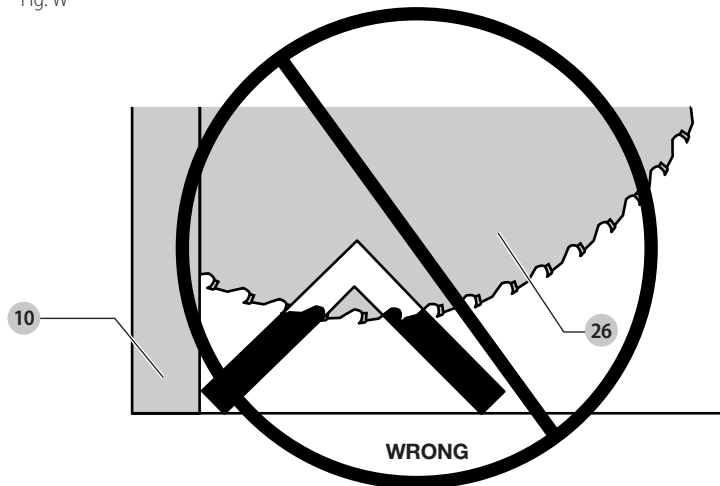


Fig. W



Bowed Material (Fig. X, Y)

When cutting bowed material always position it as shown in Figure X and never like that shown in Figure Y. Positioning the material incorrectly will cause it to pinch the blade near the completion of the cut.

Fig. X

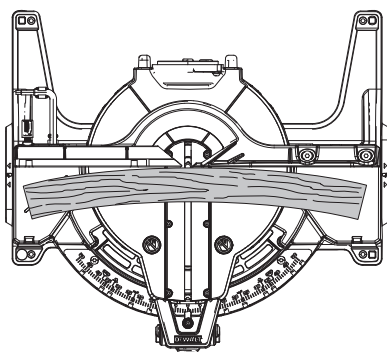
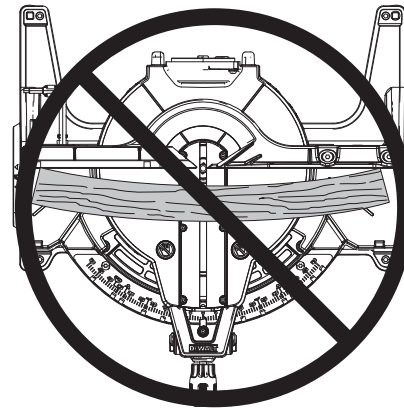


Fig. Y



Cutting Plastic Pipe or Other Round Material

Plastic pipe can be easily cut with your saw. It should be cut just like wood and **CLAMPED OR HELD FIRMLY TO THE FENCE TO KEEP IT FROM ROLLING**. This is extremely important when making angle cuts.

Cutting Large Material (Fig. L)

Occasionally you will encounter a piece of wood a little too large to fit beneath the lower guard. To clear the guard over the wood, with the motor off and your right hand on the operating handle, place your right thumb outside of the upper portion of the guard and roll the guard up just enough to clear the wood, as shown in Figure L. Release the guard prior to starting the motor. The guard mechanism will function properly during the cut. Only do this when necessary. NEVER TIE, TAPE, OR OTHERWISE HOLD THE GUARD OPEN WHEN OPERATING THIS SAW.

MAINTENANCE

! WARNING: To reduce the risk of serious personal injury, turn unit off and disconnect it from power source before making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

! WARNING: To reduce the risk of serious personal injury, DO NOT touch the sharp points on the blade with fingers or hands while performing any maintenance.

DO NOT use lubricants or cleaners (particularly spray or aerosol) in the vicinity of the plastic guard. The polycarbonate material used in the guard is subject to attack by certain chemicals.

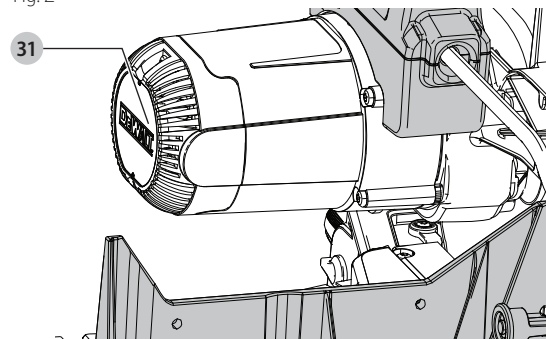
1. All bearings are sealed. They are lubricated for life and need no further maintenance.
2. Periodically clean all dust and wood chips from around AND UNDER the base and the rotary table. Even though slots are provided to allow debris to pass through, some dust will accumulate.
3. The brushes are designed to give you several years of use. To replace the brushes refer to **Brushes** or return the tool to the nearest service center for repair. A list of service center locations is packed with your tool.

Brushes (Fig. Z)

! WARNING: To reduce the risk of serious personal injury, turn off the tool and disconnect it from the power source before attempting to move it, change accessories or make any adjustments.

Inspect carbon brushes regularly by unplugging the tool, removing the motor end cap **31** by removing the two screws that secure it, and removing the brush cap that holds the spring-loaded brush assembly. Keep brushes clean and sliding freely in their guides. Always replace a used brush in the same orientation in the holder as it was prior to its removal. If the brush is worn down to approximately 1/2" (12.7 mm), the spring will no longer exert pressure and they must be replaced. Use only identical DEWALT brushes. Use of the correct grade of brush is essential for proper operation of electric brake. New brush assemblies are available at DEWALT service centers. The tool should be allowed to "run in" (run at no load) for 10 minutes before use to seat new brushes. The electric brake may be erratic in operation until the brushes are properly seated (worn in). Always replace the brush inspection cap after inspection or servicing the brushes. While "running in" DO NOT TIE, TAPE, OR OTHERWISE LOCK THE TRIGGER SWITCH ON. HOLD BY HAND ONLY.

Fig. Z



Cleaning



WARNING: Blow dirt and dust out of all air vents with clean, dry air at least once a week.

To minimize the risk of eye injury, always wear ANSI Z87.1 approved eye protection when performing this procedure.



WARNING: Never use solvents or other harsh chemicals for cleaning the non-metallic parts of the tool. These chemicals may weaken the plastic materials used in these parts. Use a cloth dampened only with water and mild soap. Never let any liquid get inside the tool; never immerse any part of the tool into a liquid.

Accessories



WARNING: Since accessories, other than those offered by DEWALT, have not been tested with this product, use of such accessories with this tool could be hazardous. To reduce the risk of injury, only DEWALT recommended accessories should be used with this product.

Recommended accessories for use with your tool are available at extra cost from your local dealer or authorized service center. If you need assistance in locating any accessory, please contact DEWALT Industrial Tool Co., 701 East Joppa Road, Towson, MD 21286, call 1-800-4-DEWALT (1-800-433-9258) or visit our website: www.dewalt.com.

Optional Accessories (Fig. A)

The following accessories, designed for your saw, may be helpful. Use care in selecting and using accessories.

Clamp

Used for firmly clamping workpiece to the saw fence for precision cutting.

Dust Bag

Included with some models

Equipped with a zipper for easy emptying, the dust bag will capture the majority of the sawdust produced (not shown).

Crown Molding Fence

Used for precision cutting of crown molding.

Mitre Saw Stands

Provides stable and accurate work platform for mitre saws.

SAW BLADES: ALWAYS USE 12" (305 mm) SAW BLADES WITH 1" (25.4 mm) ARBOR HOLES. SPEED RATING MUST BE AT LEAST 4800 RPM. Never use a smaller diameter blade. It will not be guarded properly. Use crosscut blades only! Do not use blades designed for ripping, combination blades or blades with hook angles in excess of 7°.

BLADE DESCRIPTIONS		
APPLICATION	DIAMETER	TEETH
Construction Saw Blades (thin kerf with anti-stick rim)		
General Purpose	12" (305 mm)	40
Fine Crosscuts	12" (305 mm)	60
Woodworking Saw Blades (provide smooth, clean cuts)		
Fine crosscuts	12" (305 mm)	80
Non-ferrous metals	12" (305 mm)	96
NOTE: For cutting non-ferrous metals, use only saw blades with TCG teeth designed for this purpose.		

Repairs



WARNING: To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment (including brush inspection and replacement, when applicable) should be performed by a DEWALT factory service center or a DEWALT authorized service center. Always use identical replacement parts.

Troubleshooting Guide

BE SURE TO FOLLOW SAFETY RULES AND INSTRUCTIONS

TROUBLE!	WHAT'S WRONG?	WHAT TO DO
Saw will not start	Saw not plugged in	Plug in saw.
	Fuse blown or circuit breaker tripped	Replace fuse or reset circuit breaker.
	Cord damaged	Have cord replaced by authorized service center.
	Brushes worn out	Have brushes replaced by authorized service center or replace them yourself. Refer to Brushes .
Saw makes unsatisfactory cuts	Dull blade	Replace blade. Refer to Changing or Installing a New Saw Blade .
	Blade mounted backwards	Turn blade around. Refer to Changing or Installing a New Saw Blade .
	Gum or pitch on blade	Remove blade and clean with turpentine and coarse steel wool or household oven cleaner.
	Incorrect blade for work being done	Change the blade type. Refer to Saw Blades under Accessories .
Blade does not come up to speed	Extension cord too light or too long	Replace with adequate size cord. Refer to Additional Safety Rules for Mitre Saws .
	Low house current	Contact your electric company.
Machine vibrates excessively	Saw not mounted securely to stand or work bench	Tighten all mounting hardware. Refer to Bench Mounting .
	Stand or bench on uneven floor	Reposition on flat level surface. Refer to Familiarization .
	Damaged saw blade	Replace blade. Refer to Changing or Installing a New Saw Blade .
Does not make accurate mitre cuts	Mitre scale not adjusted correctly	Check and adjust. Refer to Mitre Scale Adjustment under Assembly and Adjustments .
	Blade is not square to fence	Check and adjust. Refer to Mitre Scale Adjustment under Assembly and Adjustments .
	Blade is not perpendicular to table	Check and adjust fence. Refer to Bevel Square to Table under Assembly and Adjustments .
	Workpiece moving	Clamp workpiece securely to fence or glue 120 grit sandpaper to fence with rubber cement.
Material pinches blade	Cutting bowed material	Refer to Bowed Material under Special Cuts .

TABLE 1: COMPOUND MITRE CUT
 (POSITION WOOD WITH BROAD FLAT SIDE ON THE TABLE AND THE NARROW EDGE AGAINST THE FENCE)

