# **INSTRUCTION MANUAL**

# DEWALLS

**DW713-XE** 

254 mm (10") COMPOUND MITER SAW

# **TABLE OF CONTENTS**

DOUBLE INSULATION
SAFETY INSTRUCTIONS FOR ALL TOOLS2
ADDITIONAL SAFETY RULES2
ELECTRICAL SAFETY4
UNPACKING YOUR SAW4
FAMILIARIZATION4
SPECIFICATIONS4
ACCESSORIES5
OPTIONAL ACCESSORIES
BENCH MOUNTING6
CHANGING OR INSTALLING A NEW SAW BLADE6
TRANSPORTING THE SAW6
ADJUSTMENTS6
MITER SCALE ADJUSTMENT6
MITER POINTER ADJUSTMENT
BEVEL SQUARE TO TABLE
BEVEL POINTER7
BEVEL STOP
FENCE ADJUSTMENT7
GUARD ACTUATION AND VISIBILITY7
AUTOMATIC ELECTRIC BRAKE7
MITER LOCK ADJUSTMENT8
BRUSHES8
OPERATION8
SWITCH8
CUTTING WITH YOUR SAW8

	CROSSCUTS	8
	BEVEL CUTS	8
	QUALITY OF CUT	8
	BODY AND HAND POSITION	8
	CLAMPING THE WORKPIECE	9
	SUPPORT FOR LONG PIECES	9
	CUTTING PICTURE FRAMES, SHADOW BOXES AND OTHER FOUR SIDED PROJECTS	9
	CUTTING TRIM MOLDING AND OTHER FRAMES	9
	CUTTING COMPOUND MITERS	. 10
	MITER SCALE	. 10
	VERNIER SCALE	10
	WHEN MITERING TO THE RIGHT	. 10
	WHEN MITERING TO THE LEFT	. 10
	CUTTING BASE MOLDING	. 11
	CUTTING CROWN MOLDING	. 12
SPE	CIAL CUTS	. 13
MAI	INTENANCE	. 13
REF	PAIRS	. 13
WA	RRANTY	. 13
TRO	DUBLESHOOTING GUIDE	. 14
CON	MPOUND MITER CUT REFERENCE CHART	15

# **Definitions: Safety Guidelines**

The definitions below describe the level of severity for each signal word. Please read the manual and pay attention to these symbols.

**ADANGER:** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

**AWARNING:** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

**ACAUTION:** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

**CAUTION:** Used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.



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

# READ ALL INSTRUCTIONS

#### Double Insulation

Double insulated tools are constructed throughout with two separate layers of electrical insulation or one double thickness of insulation between you and the tool's electrical system. Tools built with this insulation system are not intended to be grounded.

**NOTE:** Double insulation does not take the place of normal safety precautions when operating this tool. The insulation system is for added protection against injury resulting from a possible electrical insulation failure within the tool.

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

## Safety Instructions For All Tools

This miter saw accepts the DEWALT worklight and laser attachments.

AWARNING: To reduce the risk of eye injury, ALWAYS use eye protection when operating the miter saw.

- . KEEP GUARD IN PLACE and in working order.
- REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting
  wrenches are removed from spindle before turning tool on. Tools, scrap pieces, and other debris can be
  thrown at high speed, causing injury.
- . KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
- DO NOT USE THE MACHINE IN A DANGEROUS ENVIRONMENT. The use of power tools in damp or wet
  locations or in rain can cause shock or electrocution. Keep your work area well-lit to avoid tripping or placing
  arms, hands, and fingers in danger.
- KEEP CHILDREN AWAY. All visitors should be kept at a safe distance from work area. Your shop is a
  potentially dangerous environment.
- MAKE WORKSHOP CHILDPROOF with padlocks, master switches, or by removing starter keys. The
  unauthorized start-up of a machine by a child or visitor may result in injury.
- DON'T FORCE TOOL. It will do the job better and be safer at the rate for which it was designed.
- **USE RIGHT TOOL.** Don't force tool or attachment to do a job for which it was not designed. Using the incorrect tool or attachment may result in personal injury.
- WEAR PROPER APPAREL. No loose clothing, gloves, neckties, rings, bracelets, or other jewelry to get
  caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long
  hair. Air vents may cover moving parts and should also be avoided.
- 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
- SECURE THE WORKPIECE. Use clamps or a vise to hold the workpiece on the table and against the fence or when your hand will be dangerously close to the blade (within 6"). It is safer than using your hand and it frees both hands to operate tool.
- DON'T OVERREACH. Keep proper footing and balance at all times. Loss of balance may cause personal injury.

- MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow
  instructions for lubricating and changing accessories. Poorly maintained tools and machines can further
  damage the tool or machine and/or cause injury.
- TURN THE MACHINE "OFF", AND DISCONNECT THE MACHINE FROM THE POWER SOURCE before
  installing or removing accessories, before adjusting or changing set-ups, when making repairs or changing
  locations. An accidental start-up can cause injury. Do not touch the plug's metal prongs when unplugging or
  plugging in the cord.
- REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure that the switch is in the "OFF" position before plugging in the power cord.
- USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. If your product is
  equipped with a cordset, use only 3-wire extension cords that have 3-prong grounding-type plugs and 3-pole
  receptacles that accept the tool's plug. 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 gage. The smaller the gage number, the heavier the cord.

MINIMUM GAUGE FOR CORD SETS							
For Cable length (m):	7.5	15	25	30	45	60	
Use Cable with minimum rating (Amperes)							
Tool Amperes							
0 - 3.4	7.5	7.5	7.5	7.5	7.5	7.5	
3.5 - 5.0	7.5	7.5	7.5	7.5	10	15	
5.1 - 7.0	10	10	10	10	15	15	
7.1 - 12.0	15	15	15	15	20	20	
12.1 - 20.0	20	20	20	20	25	-	

- CHECK for DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should
  be carefully checked to determine that it will operate properly and perform its intended function—check for
  alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions
  that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
  Do not use tool if switch does not turn it on and off.
- USE RECOMMENDED ACCESSORIES. Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may be hazardous when used on another tool. Consult the instruction manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
- 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. Serious injury can result.
- DO NOT OPERATE ELECTRIC TOOLS NEAR FLAMMABLE LIQUIDS OR IN GASEOUS OR EXPLOSIVE ATMOSPHERES. Motors in these tools may spark and ignite fumes.
- STAY ALERT, WATCH WHAT YOU ARE DOING, AND USE COMMON SENSE. DO NOT USE THE MACHINE
  WHEN YOU ARE TIRED OR UNDER THE INFLUENCE OF DRUGS or ALCOHOL. A moment of inattention
  while operating power tools may result in injury.

# Additional Safety Rules For Miter Saws

**AWARNING:** 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.
- STABILITY. Make sure the miter saw is placed on a secure supporting surface and does not slip or move during use. If the mobility kit is installed, raise the moveable caster(s) so saw is in its stationary position.
- 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.
- ALWAYS USE A SHARP BLADE. Check the blade to see if it runs true and is free from vibration. A dull or a vibrating blade can cause damage to the machine and/or serious 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.
- . DO NOT force cutting action. Stalling or partial stalling of motor can cause damage. To the machine or blade and/or serious injury.
- ALLOW THE MOTOR TO COME TO FULL SPEED prior to starting cut. Starting the cut too soon may cause damage to the machine or blade and/or serious injury."
- . 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. 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.
- DO NOT PERFORM FREE-HAND OPERATIONS (workpiece not supported by table and fence). Hold the work firmly against the fence and table. Free-hand operations on a miter saw could cause the workpiece to be thrown at high speeds, causing 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 miter saws. For best results, use only zero-degree or negative hook angles when using carbide-tipped blades. 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 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.
- 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.
- . KEEP ARMS, HANDS, AND FINGERS away from the blade to prevent severe cuts. Clamp all workpieces that would cause your hand to be within 6" of the saw blade.
- NEVER LOCK THE SWITCH in the "ON" position. Severe personal injury may result.
- TURN OFF THE MACHINE and allow the blade to come to a complete stop before raising the arm and prior to cleaning the blade area, removing debris in the path of the blade, before servicing or adjusting tool. A moving blade can cause serious injury.
- PROPERLY SUPPORT LONG OR WIDE WORKPIECES. Loss of control of the workpiece can cause injury.
- Never cross arms in front of blade while using tool. Always make a dry run (unpowered) before making a finish cut so that you can check the path of the blade or severe personal injury may result.

 ADDITIONAL INFORMATION regarding the safe and proper operation of power tools (i.e. a safety video) is available from the Power Tool Institute. 1300 Sumner Avenue. Cleveland. OH 44115-2851 (www. powertoolinstitute.com). Information is also available from the National Safety Council. 1121 Spring Lake Drive, Itasca, IL 60143-3201, Please refer to the American National Standards Institute ANSI 01.1 Safety Requirements for Woodworking Machines and the U.S. Department of Labor OSHA 1910.213 Regulations.

AWARNING: 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.

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

ACAUTION: Do not connect unit to electrical power source until complete instructions are read and understood.

ACAUTION: Wear appropriate personal hearing protection during use. Under some conditions and duration of use, noise from this product may contribute to hearing loss.

A WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known 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 timber (CCA).

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.

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

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

#### ON MOTOR HOUSING:

WARNING: FOR YOUR OWN SAFETY. READ INSTRUCTION MANUAL BEFORE OPERATING SAW.

WHEN SERVICING. USE ONLY IDENTICAL REPLACEMENT PARTS.

ALWAYS WEAR EYE PROTECTION.

DO NOT EXPOSE TO RAIN OR USE IN DAMP LOCATIONS.

#### ON MOVING FENCE:

ALWAYS ADJUST FENCE PROPERLY BEFORE USE. Clamp small pieces before cutting. See manual.

#### ON GUARD:

DANGER – KEEP AWAY FROM BLADE.



ALWAYS ADJUST FENCE PROPERLY BEFORE USE. CLAMP SMALL PIECES BEFORE CUTTING. SEE MANUAL. CAMP SMALL FIECES BEFORE COTTING, SEE MANDAL. AJUSTE LA GUÍA DEBIDAMENTE ANTES DE UTILIZAR LA HERRAMIENTA. ASEGURE LAS PIEZAS PEQUEÑAS ANTES DE CORTARLAS. CONSULTE EL MANUAL.

TOUJOURS RÉGLER LE GUIDE AVANT L'UTILISATION. FIXER LES PETITS OBJETS AVANT DE LES SCIER. CONSULTER LE GUIDE D'UTILISATION.

ON UPPER GUARD:

PROPERLY SECURE BRACKET WITH BOTH SCREWS BEFORE USE.

## ON TABLE: (2 PLACES)

WARNING: FOR YOUR OWN SAFETY READ INSTRUCTION MANUAL BEFORE OPERATING MITER SAW.

KEEP HANDS OUT OF PATH OF SAW BLADE.

DO NOT OPERATE SAW WITHOUT GUARDS IN PLACE.

CHECK LOWER GUARD FOR PROPER CLOSING BEFORE EACH USE.

ALWAYS TIGHTEN ADJUSTMENT BEFORE USE. DO NOT PERFORM ANY OPERATION FREEHAND.

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.

DISCONNECT POWER BEFORE CHANGING BLADE OR SERVICING.

TO REDUCE THE RISK OF INJURY. ALLOW SAW TO RETURN TO THE FULL UP POSITION AFTER EACH OPERATION. THINK! YOU CAN PREVENT ACCIDENTS.



# **Electrical Safety**

The electric motor has been designed for one voltage only. Always check that the power supply corresponds to the voltage on the rating plate. 230 V AC means your tool will operate on alternating current. As little as 10% lower voltage can cause loss of power and can result in overheating. All DEWALT tools are factory tested; if this tool does not operate, check the power supply. Your DEWALT tool is double insulated, therefore no earth wire is required.

- Young children and the infirm. This appliance is not intended for use by young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with this appliance.
- Replacement of the supply cord. If the supply cord is damaged, it must be replaced by the manufacturer or an authorised DEWALT Service Centre in order to avoid a hazard.

# **Unpacking Your Saw**

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

- 1. One No. DW713 miter saw with blade.
- 2. One blade wrench in wrench pocket shown in Figure 2.
- 3. One No. DW7053 Dust Bag.

## **Familiarization**

Your miter saw is fully assembled in the carton. Open the box and lift the saw out by the convenient carrying handle, as shown in Figure 1.

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

Examine Figures 2 and 3 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.

ACAUTION: 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.

Press down lightly on the operating handle and pull out the lock down pin, as shown in Figure 4. 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. Always use the carrying handle to transport the saw or the hand indentations shown in Figure 3.



#### CAPACITY OF CUT

50 degree miter left and right

48 degree bevel left: 3 degree right

0 degree miter

Max. Height 88.9 mm (3.5") Result Width 88.9 mm (3.5")
Max. Width 154.9 mm (6.1") Result Height 31.8 mm (1.25")

45 degree miter

Max. Height 88.9 mm (3.5") Result Width 61.0 mm (2.4")
Max. Width 106.7 mm (4.2") Result Height 31.8 mm (1.25")

45 degree bevel

Max. Height 58.4 mm (2.3") Result Width 88.9 mm (3.5") Max. Width 154.9 mm (6.1") Result Height 19.0 mm (0.75")

31.62 degree miter and 33.85 bevel

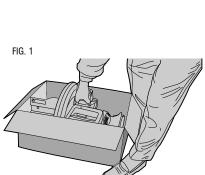
Max. Width 33.4 mm (5.25") Result Height 22.9 mm (0.9")

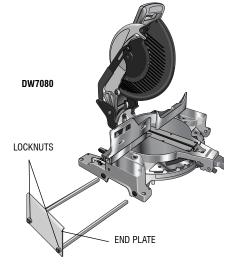
#### DRIVE

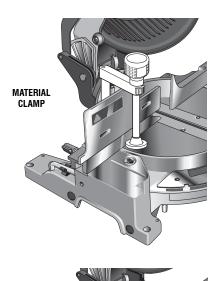
#### 230 Volt Motor

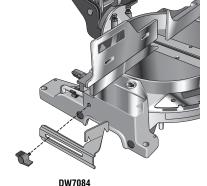
1600 Watts Cut Helical Gears with Roller and Ball Bearings 5000 RPM Automatic Electric Brake

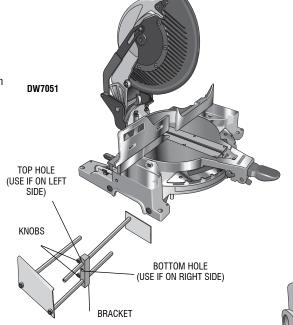
Carbide Tooth Blade







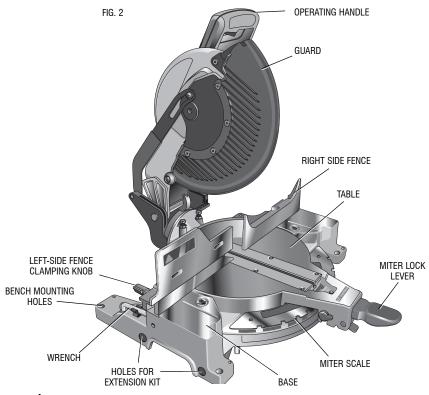












#### Accessories

AWARNING: 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.

If you need any assistance in locating any accessory, please contact: DEWALT Industrial Tool Co., 20 Fletcher Road, Mooroolbark, VIC 3138 Australia, call 1800 654 155 or 5 Te Apunga Place, Mt Wellington, Auckland, New Zealand, call 09 259 1111.

# Optional Accessories

The accessories on page 4, designed for your saw, may be helpful. In some cases, other locally obtained work supports, length stops, clamps, etc., may be more appropriate. Use care in selecting and using accessories.

# Laser Guide System: DW7187

Powered by the saw, the bright laser line delivers enhanced visibility in low and high light locations. Easy to install. Read and follow all directions for safe installation and use.

#### Miter Saw LED Worklight System: DWS7085

Lighting used for greater visibility and cutting alignment during operation. Easy to install.

#### Extension, Work Support: DW7080

Used to support long overhanging workpieces, the work support is user assembled. Your saw table is designed to accept two work supports; one on each side.

#### Adjustable Length Stop: DW7051

Requires the use of one work support. It is used to make repetitive cuts of the same length from 0 to 1067 mm (42").

#### **Material Clamp**

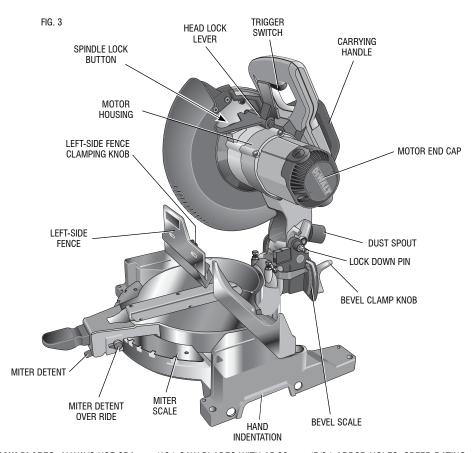
Used for firmly clamping workpiece to the saw fence for precision cutting.

#### Crown Molding Fence: DW7084

Used for precision cutting of crown molding.

#### Miter Saw Replacement Kerf Plate: DW7055

This durable plastic uncut plate limits blade tear out.



**SAW BLADES**: ALWAYS USE 254 mm (10") SAW BLADES WITH 15.88 mm (5/8") ARBOR HOLES. SPEED RATING MUST BE AT LEAST 5500 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 5°.

DEWALT BLADE RANGE	NO. OF TEETH	BLADE DESC.	APPLICATION	TYPE OF CUT
Series 20 Construction	40	Thin Kerf Yellow Rim Coating	Gen. Purpose (Trim, Decking, Framing)	Smooth, Splinter Free
Series 20 Construction	60	Thin Kerf Yellow Rim Coating	Fine Trim Molding	Very Smooth, Splinter Free
Series 40 Woodworking	40	Laser Cut Body Large Carbide Teeth	Gen. Purpose (Trim, Decking, Framing)	Smooth, Splinter Free
Series 40 Woodworking	60	Laser Cut Body Large Carbide Teeth	Fine Trim, Molding	Very Smooth, Splinter Free
Series 40 Woodworking	80	Laser Cut Body Large Carbide Teeth	Fine Trim Molding Decorative Hardwood & Plywood	Ultra Smooth, Splinter Free
Series 40 Woodworking	80	Laser Cut Body Large Carbide Teeth, Special Tooth Geometry	Melamines, Veneers, Laminates	Ultra Smooth, Chip/Splinter Free
Series 40 Woodworking	60	Laser Cut Body Special Tooth Geometry	Plastics and other solid surface materials	Very Smooth, Chip Free
Series 40 Woodworking	80	Laser Cut Body Special Tooth Geometry	Non-ferrous metals (aluminum, copper, brass, etc.)	Very Smooth, Burr Free

# **Bench Mounting**

Holes are provided in all four feet to facilitate bench mounting, as shown in Figure 2. (Two different sized holes are provided to accommodate different sizes of screws. 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 12.7 mm (1/2") or thicker plywood which can then be clamped to your work support or moved to other job sites and reclamped.

**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.

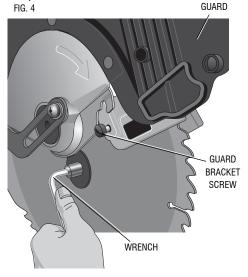
# IMPORTANT SAFETY INSTRUCTIONS

Changing or Installing a New Saw Blade (Fig. 3, 4, 5)

AWARNING: 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 accept as written in laser adjustment instructions.

#### A 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 miter saw.



# Removing the Blade

- 1. Unplug the saw.
- Raise the arm to the upper position. Depress the head lock lever (Fig. 3) to release the lower guard and raise the lower guard as far as possible.
- Loosen, but do not remove guard bracket screw until the bracket can be raised far enough to access the blade screw. The lower guard will remain raised due to the position of the guard bracket screw.
- Depress the spindle lock button (Fig. 3) while carefully rotating the saw blade by hand until the lock engages.

- Keeping the button depressed, use the other hand and the wrench provided to loosen the blade screw. (Turn clockwise, left-hand threads)
- Remove the blade screw, outer blade clamp, and blade. The 25.4 mm (1") blade adapter, if used, and the inner blade clamp, may be left on the spindle.

OUTER
CLAMP
WASHER

BLADE

BLADE

BLADE

INNER CLAMP
WASHER

**NOTE:** For blades with a blade hole of 15.88 mm (5/8"), the 25.4 mm (1") blade adapter is not used.

# 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 25.4 mm (1") 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.
- Install the blade screw and, engaging the spindle lock, tighten the screw firmly with wrench provided. (Turn counterclockwise, left-hand threads)

**NOTE:** When using blades with a 15.88 mm (5/8") diameter blade hole, the blade adapter will not be used and should be stored in a safe place for future use.

Return the guard bracket to its original position and firmly tighten the guard bracket screw to hold bracket in place.

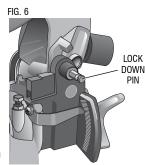
# **AWARNING**:

- 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.

# Transporting the Saw

AWARNING: 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 accept as written in laser adjustment instructions.

In order to conveniently carry the miter saw from place to place, a carrying handle has been included on the top of the saw arm, as shown in Figure 3. To transport the saw, lower the arm and depress the lock down pin shown in Figure 6.



## Adiustments

AWARNING: 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 accept as written in laser adjustment instructions.

**NOTE:** Your miter 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.

#### MITER SCALE ADJUSTMENT

Place a square against the saw's fence and blade, as shown in Figure 7. (Do not touch the tips of the blade teeth with the square. To do so will cause an inaccurate measurement.) Unlock miter lock lever (see Fig. 8) and swing the miter arm until the miter detent locks it at the 0° miter position. Do not lock miter lock lever. If the saw blade is not exactly perpendicular to the fence, loosen the three screws that hold the miter scale to the base (shown in Fig. 8) and move the scale/miter 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 miter pointer at this point.

#### MITER POINTER ADJUSTMENT

Unlock miter lock lever and squeeze the miter detent to move the miter arm to the zero position, as shown in Figure 8. Unlock the miter lock lever to allow the miter detent to snap into place as you rotate the miter arm past zero. Observe the pointer and miter scale through the viewing opening shown in Figure 9. If the pointer does not indicate exactly zero, loosen the pointer screw, adjust the pointer to 0° and retighten.

#### **BEVEL SQUARE TO TABLE**

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, as shown in Figure 10B. Loosen the Bevel Clamp Knob so that you can move the Bevel Arm. Move the Bevel Arm as necessary so that the blade is at 0° bevel to the table. If the Bevel Arm needs adjustment, loosen the lock nut on the right side Bevel Stop as shown in Figure 11, and adjust the stop screw as necessary. Hold the stop screw in place and tighten the lock nut.

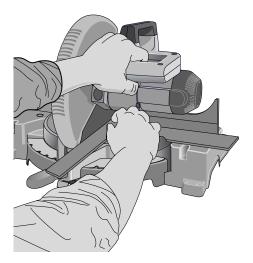


FIG. 8

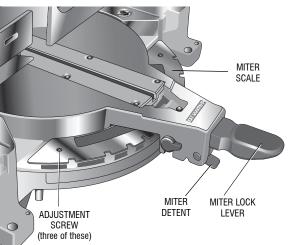
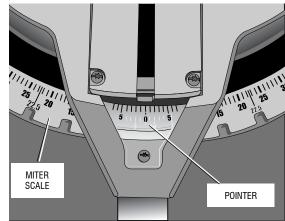


FIG.9



#### **BEVEL POINTER**

If the bevel pointer does not indicate zero, loosen the screw that holds it in place and move the pointer as necessary.

SUGGESTION: For accuracy, set the top edge so that it aligns with zero.

#### BEVEL STOR

To set the 45° bevel stop shown in Figure 12, first loosen the left side fence clamping knob (counterclockwise) and slide the left side fence as far as it will go to the left. Move the arm to the left until it stops on the left bevel stop screw. If the bevel pointer does not indicate exactly 45°, loosen the left side bevel stop lock nut and turn the screw downwards. Move the arm to the left and tighten the bevel clamp knob firmly when the bevel pointer indicates exactly 45°. Adjust the left side bevel stop screw upwards until it firmly touches the bevel stop. Retighten the nut while holding the screw from turning.

To achieve 3° right bevel or 48° left bevel, the stop screws must be adjusted to allow the arm to move to the desired location. The bevel stops will need readjustment to the zero and 45° positions after cuts are made.

#### FENCE ADJUSTMENT

AWARNING: 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 accept as written in laser adjustment instructions.

Turn the left side fence clamping knob (Fig. 13) counterclockwise to loosen. Move the sliding fence to desired position then tighten the clamping knob by turning clockwise.

To bevel UP TO 48° left, the left side of the fence can be adjusted to the left to provide clearance. To adjust the fence, loosen the knob shown in Figure 13 and slide the fence to the left. 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 to the right.

#### **GUARD ACTUATION AND VISIBILITY**

**A 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 will require that you manually raise the guard. See section on cutting base molding up to 88.9 mm (3.5") high (page 10). The front section of the guard is louvered for visibility while cutting. Although the louvers dramatically reduce flying debris, they are openings in the guard and safety glasses should be worn at all times when viewing through the louvers.

#### **AUTOMATIC ELECTRIC BRAKE**

Your saw is equipped with an automatic electric blade brake which stops the saw blade within 5 seconds of trigger release. This is not adjustable. On occasion, there may be a delay after trigger release to brake engagement. On rare occasions, the brake may not engage at all and the blade will coast to a stop.

FIG. 10A

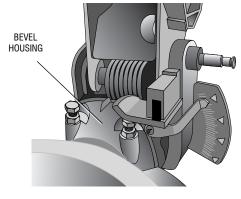


FIG. 10B

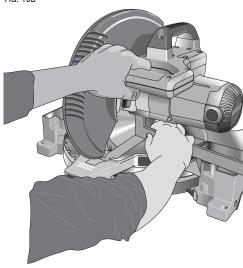
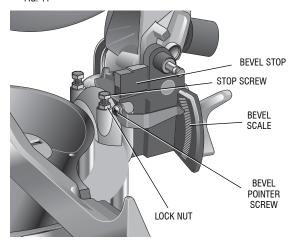


FIG. 11



If a delay or "skipping" occurs, turn the saw on and off 4 or 5 times. If the condition persists, have the tool serviced by an authorized DEWALT service center.

Always be sure the blade has stopped before removing it from the kerf. The brake is not a substitute for guards or for ensuring your own safety by giving the saw your complete attention.

#### **MITER LOCK ADJUSTMENT (FIG. 15)**

The miter lock rod should be adjusted if the table of the saw can be moved when the miter lock handle is locked down. To adjust, put the miter lock handle in the up position. Using a slotted screwdriver, adjust the lock rod in 1/8 clockwise turn increments to increase the lock force. To ensure the miter lock is functioning properly, re-lock miter lock handle to a non-detent miter angle. Tighten set screw. **NOTE:** Some models may have a set screw as shown in Figure 15. Using a 3/32 hex wrench, loosen the set screw on the pivot pin. Tighten set screw after adjustment is complete.

#### Brushes

AWARNING: 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 accept as written in laser adjustment instructions.

Inspect carbon brushes regularly by unplugging tool, removing the motor end cap (Fig. 2), lift the brush spring and withdraw the 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. Carbon brushes have varying symbols stamped into their sides, and if the brush is worn down to approximately 127 mm (1/2"), 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.

### **OPERATION**

Plug the saw into any household 50 Hz power source. Refer to the nameplate for voltage. Be sure the cord will not interfere with your work.

#### SWITCH

To turn the saw on, depress the trigger switch shown in Figure 14. To turn the tool off, release the switch. There is no provision for locking the switch on, but a hole is provided in the trigger for insertion of a padlock to lock the saw off.

#### **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



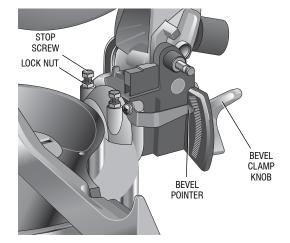


FIG. 13

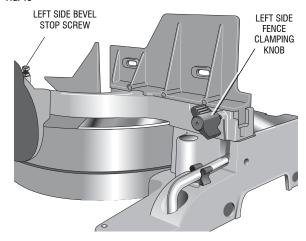
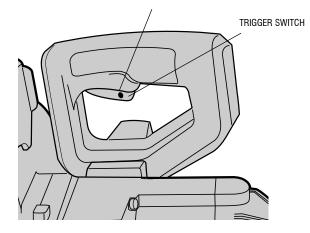
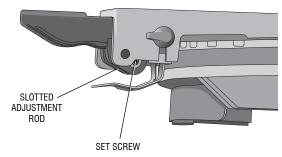


FIG. 14 HOLE FOR PADLOCK







straight crosscut is made with the miter arm at the zero degree position. Set the miter arm at zero, hold the wood on the table and firmly against the fence. Turn on the saw by squeezing the trigger switch shown in Figure 14.

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.

Miter crosscuts are made with the miter 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 miter angle, be sure to tighten the miter lock lever. Make the cut as described above.

#### BEVEL CUTS

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 clamp knob and move the saw to the left as desired. (It is necessary to move the left side of the fence to allow clearance). Once the desired bevel angle has been set, tighten the bevel clamp knob firmly.

Bevel angles can be set from 3° right to 48° left and can be cut with the miter arm set between zero and 50° right or left. Ensure the fence has been adjusted properly. When cutting left bevel, or right miter compound cuts, it will be necessary to remove the adjustable fence.

#### **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 - 80 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, apply a piece of masking tape on the wood where the cut will be made. Saw through the tape and carefully remove tape when the cut is 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. (Pages 5)

## **BODY AND HAND POSITION (FIG. 16)**

Proper positioning of your body and hands when operating the miter saw will make cutting easier, more accurate and safer. Never place hands near cutting area. Place hands no closer than 152.4 mm (6") 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 HANDS. AS SHOWN IN FIGURE 16A.

Keep both feet firmly on the floor and maintain proper balance. As you move the miter 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

#### CLAMPING THE WORKPIECE

AWARNING: 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 accept as written in laser adjustment instructions.

AWARNING: 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.

**AWARNING:** 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.

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 152.4 mm (6") from the blade, a clamp or other fixture should be used.

For best results use the DW7082 clamp made for use with your saw. It is available through your local retailer or DEWALT service center at extra cost

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 left fence will slide from side to side to aid in clamping.

#### SUPPORT FOR LONG PIECES

AWARNING: 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 accept as written in laser adjustment instructions.

#### **ALWAYS SUPPORT LONG PIECES**

Support long workpieces using any convenient means such as sawhorses or similar devices to keep the ends from dropping. For best results, use the DW7080 extension work support to extend the table width of your saw

# CUTTING PICTURE FRAMES, SHADOW BOXES AND OTHER FOUR SIDED PROJECTS

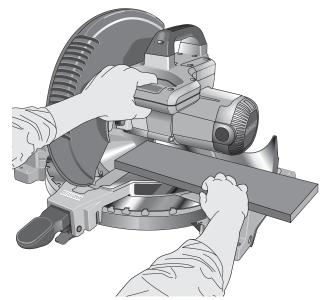
To best understand how to make the items listed here, we suggest that you try a few simple projects using scrap wood until you develop a "FEEL" for your saw.

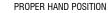
Your saw is the perfect tool for mitering corners like the one shown in Figure 17. Sketch A in Figure 17 shows a joint made by using the bevel adjustment to bevel the edges of the two boards at 45° each to produce a 90 degree corner. For this joint the miter arm was locked in the zero position and the 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 mitering right and left with the broad surface against the fence.

#### **CUTTING TRIM MOLDING AND OTHER FRAMES**

Sketch B in Figure 17 shows a joint made by setting the miter arm at  $45^{\circ}$  to miter the two boards to form a  $90^{\circ}$  corner. To make this type of joint, set the bevel adjustment to zero and the miter arm to  $45^{\circ}$ . Once again,

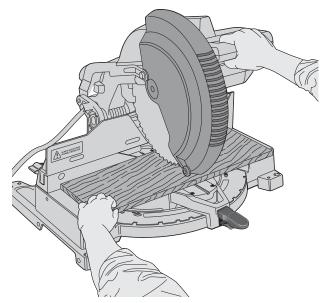
FIG. 16A



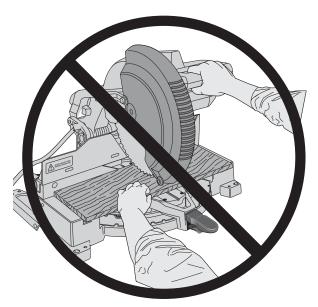




IMPROPER HAND POSITION



PROPER HAND POSITION



IMPROPER HAND POSITION

position the wood with the broad flat side on the table and the narrow edge against the fence.

The two sketches in Figure 17 are for four sided objects only.

As the number of sides changes, so do the miter 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 miter or bevel angle.

- EXAMPLES -					
NO. SIDES	ANGLE MITER OR BEVEL				
4	45°				
5	36°				
6	30°				
7	25.7°				
8	22.5°				
9	20°				
10	18°				

#### **CUTTING COMPOUND MITERS**

A compound miter is a cut made using a miter 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 18.

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

The chart shown on page 15 will assist you in selecting the proper bevel and miter settings for common compound miter cuts. To use the chart, select the desired angle "A" (Figure 19) 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 miter 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 19), use the upper right arc. Find 26° on the arc scale. Follow the horizontal intersecting line to either side to get miter 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.

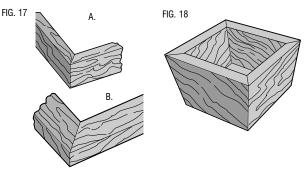
#### MITER SCALE

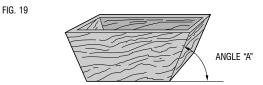
The scale is used when calculating angles. To calculate the proper miter angle, divide 180° by the number of sides of the box or frame. Refer to the chart on above for some examples.

#### **VERNIER SCALE (FIG. 23, 24)**

Your saw is equipped with a vernier scale for added precision. The vernier scale allows you to accurately set miter angles to the nearest  $1/4^{\circ}$  (15 minutes). To use the vernier scale follow the steps listed below. (As an example, let's assume that the angle you want to miter is  $24-1/4^{\circ}$  right).

- 1. Turn off miter saw.
- Set the miter angle to the nearest whole degree desired by aligning the center mark in the vernier scale, shown in Figure 23, with the whole degree number etched in the miter scale. Examine Figure 23 closely; the setting shown is 24° right miter.





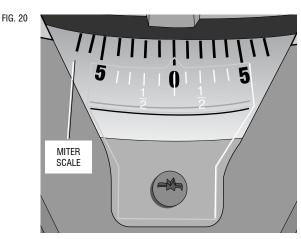


FIG. 21



3. To set the additional 1/4°, squeeze the miter arm lock and carefully move the arm to the RIGHT until the 1/4 degree vernier mark aligns with the CLOSEST degree mark on the miter scale. In our example, the closest degree mark on the miter scale happens to be 25°. Figure 24 shows a setting of 24-1/4° right miter.

For settings that require partial degrees (1/4, 1/2, 3/4°) align the desired vernier mark with the CLOSEST degree mark on the miter scale, as described above. (The plastic vernier plate is inscribed with marks for 1/4, 1/2, 3/4 and 1°. Only the 1/2° is numerically labeled.)

#### WHEN MITERING TO THE RIGHT

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

#### WHEN MITERING TO THE LEFT

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

#### **CUTTING BASE MOLDING**

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

Straight 90° cuts:

Position the wood against the fence as shown in Figure 21. Turn on the saw, allow the blade to reach full speed and lower the arm smoothly through the cut.

# CUTTING BASE MOLDING UP TO 88.9 MM (3.5") HIGH VERTICALLY AGAINST THE FENCE

Position molding as shown in Figure 25.

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

INSIDE CORNER:

Left side

- 1. Miter left 45°
- 2. Save left side of cut

Right side

- 1. Miter Right 45°
- 2. Save right side of cut

OUTSIDE CORNER:

Left side

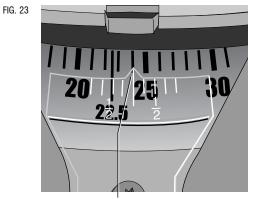
- 1. Miter right at 45°
- 2. Save left side of cut

Right side

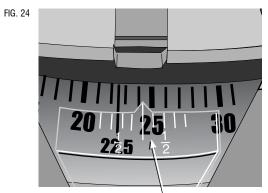
- 1. Miter left at 45°
- 2. Save right side of cut

Material up to 88.9 mm (3.5") can be cut as described above. For wider boards [up to 107.95 mm (4.25")] several minor concessions must be made.

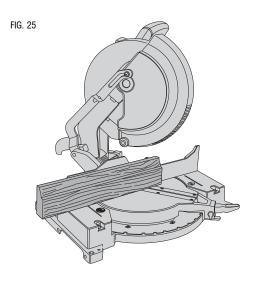
When cutting a board between 88.9 mm (3.5") and 107.95 mm (4.25") in width the roller on the tip of the guard could hang up on the workpiece. If this occurs, simply place your right thumb on the upper side of the guard and roll the guard up just enough to clear the workpiece, as shown in Figure 28. Once you have cleared the workpiece, you can release the guard and it will continue to open as the cut progresses.



CENTER MARK ON VERNIER SCALE ALIGNS WITH DESIRED WHOLE ANGLE ON MITER SCALE (24° RIGHT MITER)



1/4° VERNIER MARK ALIGNS WITH CLOSEST WHOLE DEGREE MARK ON MITER SCALE (24 1/4° RIGHT MITER)



When mitering to the right side of a base molding wider than 88.9 mm (3.5") standing vertically against the fence as in Figure 25, the saw can only cut through the board up to 1 inch 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 88.9 mm (3-1/2") and 107.95 mm (4.25") wide vertically follow the directions below.

# CUTTING 88.9 MM (3.5")— 107.95 MM (4.25") BASE MOLDING VERTICALLY AGAINST THE FENCE

- Position molding as shown in Figure 25.
- All cuts made with the back of the molding against the fence

#### INSIDE CORNER:

#### Left side

- Position molding with bottom of molding against the base of the saw
- 2. Miter left 45°
- 3. Save left side of cut

#### Right side

- Position molding with top of the molding resting on the base of the saw
- 2. Miter left 45°
- 3. Save left side of cut

#### OUTSIDE CORNER:

#### Left side

- Position molding with bottom of molding against the base of the saw
- 2. Miter right 45°
- 3. Save left side of cut

**NOTE:** If the cut must be made somewhere other than 1" 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 miter cut as described above.

# Right side

- 1. Position molding with bottom of the molding against the base of the saw
- 2. Miter left 45°
- 3. Save the right side of cut

A third method of making the cut necessary is to make a zero degree miter, 45° bevel cut. Your saw can cut a bevel 157.5 mm (6.2") wide.

# CUTTING BASE MOLDING LAYING FLAT AND USING THE BEVEL FEATURE

- All cuts made with the saw set at 45° bevel and 0 miter
- All cuts made with back of molding laying flat on the saw as shown in Figures 26.
- Move the left side fence out of the path of the blade before attempting any of the following cuts.

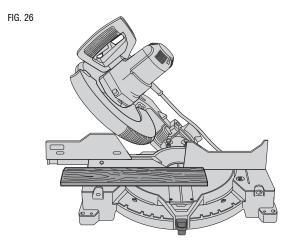
#### INSIDE CORNER:

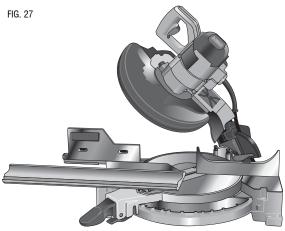
#### Left side

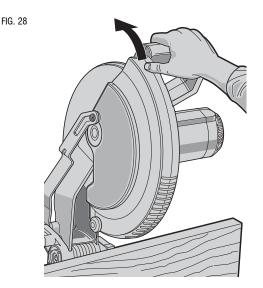
- 1. Position molding with top of molding against the fence
- 2. Save left side of cut

#### Right side

- 1. Position molding with bottom of the molding against the fence
- 2. Save left side of cut







#### OUTSIDE CORNER:

#### Left side

- 1. Position molding with bottom of the molding against the fence
- 2. Save right side of cut

#### Right side

- 1. Position molding with top of molding against the fence
- 2. Save right side of cut

#### **CUTTING CROWN MOLDING**

Your miter 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 mitered 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 miter saw has special pre-set miter detent points at 31.62° left and right for cutting crown molding at the proper angle (Fig. 27). There is also a mark on the Bevel scale at 33.85°.

The chart below gives the proper settings for cutting crown molding. (The numbers for the miter 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!

# FOR CUTTING CROWN MOLDING LAYING FLAT AND USING THE COMPOUND FEATURES

- Move the left side fence out of the path of the blade before attempting any of the following cuts.
- Molding laying with broad back surface down flat on saw table (Fig. 29).
- The settings below are for all Standard (U.S.) crown molding with 52° and 38° angles.

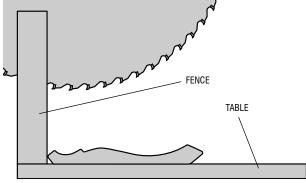
#### BEVEL SETTING

#### TYPE OF CUT

	LEFT SIDE, INSIDE CORNER:
33.85°	1. Top of molding against fence
	2. Miter table set right 31.62°
	3. Save left end of cut
	RIGHT SIDE, INSIDE CORNER:
33.85°	1. Bottom of molding against fence
	2. Miter table set left 31.62°
	3. Save left end of cut
	LEFT SIDE, OUTSIDE CORNER:
33.85°	1. Bottom of molding against fence
	2. Miter table set left 31.62°
	3. Save right end of cut
	RIGHT SIDE, OUTSIDE CORNER:
33.85°	1. Top of molding against fence
	2. Miter table set right 31.62°
	3. Save right end of cut

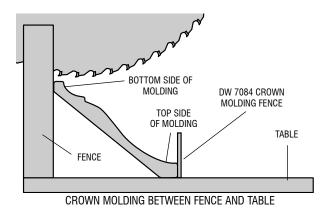
When setting bevel and miter angles for all compound miters, remember that:

FIG. 29



CROWN MOLDING FLAT ON TABLE AND AGAINST FENCE

FIG. 30



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.

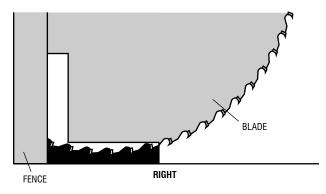
# PRETESTING WITH SCRAP MATERIAL IS EXTREMELY IMPORTANT!

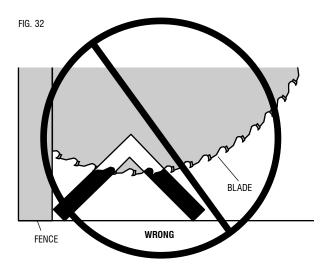
#### ALTERNATIVE METHOD FOR CUTTING CROWN MOLDING

Place the molding on the table at an angle between the fence and the saw table, as shown in Figure 30. 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 at extra cost from your local dealer.

The advantage to cutting crown molding using this method is that no bevel cut is required. Minute changes in the miter 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 (DW7084) to maintain the angle at which the molding will be on the wall.

FIG. 31





# INSTRUCTIONS FOR CUTTING CROWN MOLDING ANGLED BETWEEN THE FENCE AND BASE OF THE SAW FOR ALL CUTS:

- 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 30.
- 2. The angled "flats" on the back of the molding must rest squarely on the fence and base of the saw.

#### INSIDE CORNER:

#### Left side

- 1. Miter right at 45°
- 2. Save the right side of cut

# Right side

- 1. Miter left at 45°
- 2. Save left side of cut

#### OUTSIDE CORNER:

#### Left side

- 1. Miter left at 45°
- 2. Save right side of cut

Right side

- 1. Miter right at 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

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 31. Figure 32 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 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 pages 5 for correct saw blade.

#### **BOWED MATERIAL**

When cutting bowed material always position it as shown in Figure 33 and never like that shown in Figure 34. Positioning the material incorrectly will cause it to pinch the blade near the completion of the cut.

### **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**

Occasionally you will encounter a piece of wood a little too large to fit beneath the blade guard. A little extra height can be gained by rolling the guard up out of the way, as shown in Figure 28. Avoid doing this as much as possible, but if need be, the saw will operate properly and make the bigger cut. NEVER TIE, TAPE, OR OTHERWISE HOLD THE GUARD OPEN WHEN OPERATING THIS SAW.

## **MAINTENANCE**

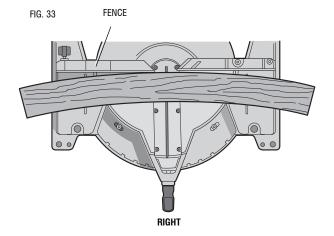
AWARNING: To reduce the risk of serious personal injury, turn off the tool and disconnect it from the power source before attempting to move it, change accessories or make any adjustments accept as written in laser adjustment instructions.

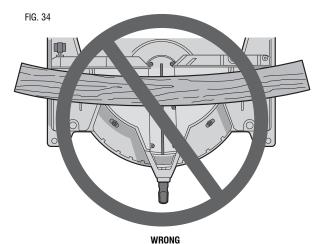
DO NOT use lubricants or cleaners (particularly spray or aerosol) in the vicinity of the plastic guard. The polycarbonate material used in the guard is subject to attack by certain chemicals.

- All bearings are sealed. They are lubricated for life and need no further maintenance.
- 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** on page 8 or return the tool to the nearest service center for repair. A list of service center locations is packed with your tool.

# Repairs

To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustments should be performed by a DEWALT factory service center, a DEWALT authorized service center or other qualified service personnel. Always use identical replacement parts.





#### Guarantee

Applicable to hand held Power Tools, Lasers and Nailers.

# Three Year Limited Warranty

DEWALT will repair, without charge, any defects due to faulty materials or workmanship for three years from the date of purchase. Please return the complete unit, transportation prepaid, to any DEWALT Service Centre, or any authorised service station.

For warranty repair information, call (AUS) 1800 654 155 or (NZ) 09 259 1111.

This warranty does not apply to

- Accessories
- Damage caused where repairs have been made or attempted by others.
- Damage due to misuse, neglect, wear and tear, alteration or modification.

This warranty gives you specific legal rights and you may have other rights under the provisions of the Consumer Guarantee Act 1993 (New Zealand only), Trade Practices Act 1974 and State Legislation (Australia only). In addition to the warranty, DEWALT tools are covered by our:

#### FREE ONE YEAR SERVICE CONTRACT

DEWALT will also maintain the tool for free at any time during the first year of purchase. This includes labour, parts and lubrication required to restore the product to sound mechanical and/or electrical condition. Normal wear parts are not covered in this service. Carbon brushes worn more then 50% will be replaced.

**NOTE:** Three Year Warranty is not applicable to items deemed as consumables. Radial arm saws are covered by a one (1) year warranty only. DEWALT Reserves the right to review its warranty policy prior to launch of any new business development products.

#### **30 DAY NO SATISFACTION GUARANTEE**

If you are dissatisfied with any DEWALT power tool, laser or nailer, for any reason, simply return it to the point of purchase with your sales receipt within 30 days for a replacement unit or a full refund.

FREE WARNING LABEL REPLACEMENT: If your warning labels become illegible or are missing, call (AUS) 1800 654 155 or (NZ) 09 259 1111 for a free replacement.

	TROUBLESHOOTING GUIDE					
BE SURE TO FOLLOW SAFETY RULES AND INSTRUCTIONS						
TROUBLE!	WHAT'S WRONG?	WHAT TO DO				
Saw will not start	1. Saw not plugged in	1. Plug in saw				
	2. Fuse blown or circuit breaker tripped	2. Replace fuse or reset circuit breaker				
	3. Cord damaged	3. Have cord replaced by authorized service center				
	4. Brushes worn out	<ol><li>Have brushes replaced by authorized service center or replace them yourself as instructed on page 8.</li></ol>				
Saw makes unsatisfactory cuts	1. Dull blade	1. Replace blade, see page 6.				
	2. Blade mounted backwards	2. Turn blade around, see page 6.				
	3. Gum or pitch on blade	<ol><li>Remove blade and clean with turpentine and coarse steel wool or household oven cleaner.</li></ol>				
	4. Incorrect blade for work being done	4. Change the blade type, see page 5.				
Blade does not come up to speed	1. Extension cord too light or too long	1. Replace with adequate size cord, see page 2.				
	2. Low house current	2. Contact your electric company				
Machine vibrates excessively	Saw not mounted securely to stand or work bench	1. Tighten all mounting hardware, see page 6.				
	2. Stand or bench on uneven floor	2. Reposition on flat level surface, see page 6.				
	3. Damaged saw blade	3. Replace blade, see page 6.				
Does not make accurate miter cuts	1. Miter scale not adjusted correctly	1. Check and adjust, see page 6.				
	2. Blade is not square to fence	2. Check and adjust, see page 6.				
	3. Blade is not perpendicular to table	3. Check and adjust fence, see page 7.				
	4. Workpiece moving	4. Clamp workpiece securely to fence.				
Material pinches blade	1. Cutting bowed material	1. Position bowed material as shown on page 13.				

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

