Safety Instructions for All Tools

Drive

• DO NOT OVERHEAT. Keep proper footing and balance at all times. Loss of balance may result in loss of control of the tool, possible injury to persons in the area.

• MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow manufacturer’s instructions for tool adjustment or maintenance.

• POORLY MAINTAINED TOOLS AND MACHINES can further damage the tool or machine and/or cause injury.

• TURN OFF THE "OFF" POSITION AND DISCONNECT THE MACHINE FROM THE POWER SOURCE before installing or removing accessories, before adjusting or changing set-ups, when clearing jams, repairing, or making any adjustments. An accidental start-up can cause serious injury.

• USE THE "OFF" POSITION in a hazardous environment. 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. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord can cause a serious drop in voltage resulting in loss of power and possible overheating of the cord and/or tool. See "Electrical Requirements" table in the Specifications section of this manual for the correct size to use depending on cord length and nameplate amperage rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the wire.

• 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 before reassembly and use.

• USE ONLY RECOMMENDED ACCESSORIES. Use only accessories recommended by the manufacturer for your model. Accessories that may be suitable for one tool may be hazardous when used on another tool. The use of accessories may cause injury to persons.

• NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool becomes pinioned.

• NEVER LEAVE TOOL RUNNING UNATTENDED. TURN OFF POWER. Do not leave tool unattended.

• DO NOT USE ELECTRIC TOOLS NEAR FLAMMABLE LIQUIDS OR IN GASEOUS ATMOSPHERES. In these atmospheres, electrostatic discharges may ignite flammable fumes or vapor.

• STAY ALERT, WATCH WHAT YOU ARE DOING, AND USE COMMON SENSE. Do not operate power tool when you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious injury.

Additional Safety Rules For Miter Saws

• ALWAYS USE THE KERF PLATE AND REPLACE THE PLATE WHEN DAMAGED. The kerf is the small gap caused by a metal-toothed blade. When this gap is damaged, it can cause parts or the workpiece to be thrown at high speeds.

• CLEAN THE BLADE AND BLADE CLAMPS. The metal-toothed blade can come apart and pieces can be thrown at high speeds, causing serious injury. Replace any damaged blade or blade clamp.

• NEVER CHOOSE A BLADE. Check the blade to see if it runs true and is free from nicks or cracks. Do not use cracked or damaged blades.

• SECURE THE MACHINE TO A STABLE SUPPORTING SURFACE. Do not use the saw on a table with flimsy supports. The saw must be secured in place to prevent tipping and causing serious injury.

• NEVER CROSS ARMS IN FRONT OF BLADE. Serious injury is very likely if the tool is tipped or if the tool is operated with an arm in the path of the blade.

• DO NOT OPERATE ON ANYTHING OTHER THAN THE DESIGNATED VOLTAGE FOR YOUR TOOL. Using a tool at a voltage higher or lower than specified may cause severe injury.

• DO NOT WEDGE ANYTHING AGAINST THE FAN to hold the motor shaft. Damage to tool may occur.

• DO NOT FORCE TOOL. It will do the job better and safer at the feed rate for which it was designed.

• ALWAYS USE THE KERF PLATE AND REPLACE THIS PLATE WHEN DAMAGED. The kerf plate prevents the blade from rubbing against the saw frame. If the kerf plate is damaged, the blade may contact the saw frame causing severe injury.

• DO NOT OPERATE TOOL IN POOR LIGHTING CONDITIONS. A dull or a vibrating blade can cause damage to the machine and/or serious injury.

• 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.

• MAKE CERTAIN the blade is properly mounted and in working order. A dull or a vibrating blade can cause damage to the machine and/or serious injury.

• DO NOT ALLOW THE ARM TO TOUCH THE TABLE. Do not use the saw with the arm in contact with the table. The arm can easily be pinioned and cause injury.

• NEVER LEAVE THE MACHINE "OFF", AND DISCONNECT THE MACHINE FROM THE POWER SOURCE before installing or removing accessories, before adjusting or changing set-ups, when clearing jams, repairing, or making any adjustments. An accidental start-up can cause serious injury.

• DO NOT TOUCH ANY PART OF THE MACHINE OR BLADE and/or serious injury.

• DO NOT USE ABRASIVE WHEELS. Abrasive wheels may explode and cause injury.

• ALWAYS ADJUST THE GUIDE RAIL, FENCE, AND OTHER GUIDE DEVICES so that they do not interfere with the operation of the blade. Improperly adjusted guide rails, fences, or other guide devices may cause the blade to walk, slide, or tip over, causing serious injury.

• ALWAYS USE CROSSCUT SAW BLADES recommended for miter saws. For best results, do not use a crosscut saw blade to make an angle cut of 7 degrees. Do not use a crosscut saw blade on a table saw. This will deflect the blade and cause the wrench to cut the kerf plate. The kerf plate should be changed when the kerf is damaged.

• ALWAYS ADJUST A GUIDE DEVICE TO THE THICKNESS OF THE SAWBLADE. Misadjustment may cause the blade to walk, slide, or tip over, causing serious injury.

• NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool becomes pinioned.

• ALWAYS USE THE KERF PLATE AND REPLACE THE PLATE WHEN DAMAGED. The kerf is the small gap caused by a metal-toothed blade. When this gap is damaged, it can cause parts or the workpiece to be thrown at high speeds.

• KEEP BLADE AND BLADE CLAMPS in good working order. Clear the blade and blade clamps of sawdust and chips. Clean the blade area to prevent clogging.

• KEEP MACHINE CLEAN: Clean work area. Remove chips and sawdust. Clogged motor air slots can cause overheating, damage to the motor, and/or a fire hazard. Blow out the slots with compressed air. Do not use water to clean the motor. Water can damage the motor windings and cause an electrical hazard.

• KEEP WORK AREA CLEAN: Dust and chips are a workplace hazard. Do not leave chips and chips on the floor.

• KEEP ELECTICAL CONNECTIONS CLEAN: Dust and chips can get to the electrical connections and cause a fire hazard.

• KEEP TOOLS SHARP AND CLEAN: A dull tool is more difficult to control and is more likely to cause a kickback.

• USE ONLY BLADE CLAMPS SPECIFIED FOR THIS TOOL to prevent damage to the blade and/or machine. A tool manufacturer may specify a particular type of blade clamp to use with its tool.

• CLEAN THE MACHINE AIR SLOTS of chips and sawdust. Clogged motor air slots can damage the motor. Keep these slots in good working order to prevent a fire hazard.

• KEEP ARMS, HANDS, AND FINGERS AWAY FROM THE BLADE to prevent severe cuts, injuries, and to prevent tools from being misused. Keep hands away from the blade area.

• NEVER LEAVE THE SWITCH IN THE "ON" POSITION. Serious personal injury may result. Turn the switch OFF when changing blades or when performing any maintenance, or before cleaning the machine or area.

• USE ONLY BLADES WITH A CORRECT EDGE. A blade with a chip or damage may cause the blade to break and debris to fly or the workpiece to be thrown at high speeds, causing serious injury.

• USE ONLY RECOMMENDED ACCESSORIES. Use only accessories recommended by the manufacturer for your model. Accessories that may be suitable for one tool may be hazardous when used on another tool. The use of accessories may cause injury to persons.

• NECESSARY PRECAUTIONS related to personal injury

• ONE COMMON PROBE of chips and sawdust. Clogged motor air slots can damage the motor. Keep these slots in good working order to prevent a fire hazard.

• KEEP WRENCHES, SCREWS, AND SCREW NUTS on the tool and out of the work area to prevent accidental contact with the power source. Also, keep work area and walkways clear of trash, debris, and other obstructions to prevent accidents. Keep work area clean.

• NECESSARY PRECAUTIONS related to personal injury

• KEEP TOOLS SHARP AND CLEAN: A dull tool is more difficult to control and is more likely to cause a kickback.

• Use safety glasses when operating the saw. Always use safety glasses while operating the saw. Safety glasses will protect your eyes from debris and dust.

• Use the correct tool for the job. Do not use miter saws to cut metal or concrete. Use the correct tool for the job. Do not use miter saws to cut metal or concrete.

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PROPERLY SECURE BRACKET WITH BOTH SCREWS BEFORE USE.

ON GUARD:
ALWAYS ADJUST FENCE PROPERLY
ON MOVING FENCES:
ALWAYS USE PROPER EYE AND RESPIRATORY PROTECTION.

WHEN SERVICING, USE ONLY IDENTICAL RE PLACE MENT PARTS.

Recommended accessories for use with your tool are available for purchase from your local DEWALT Industrial Tool Co., 701 East Joppa Road, Baltimore, MD 21286, call 1-800-4-DEWALT (1-800-433-9258) or visit our website: www.dewalt.com.

This product is a tool that 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.

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 MITER SAW.
WHEN SERVICING, USE ONLY IDENTICAL REPLACEMENT PARTS.
DO NOT EXPOSE TO RAIN OR USE IN CLAMP LOCATIONS.
ALWAYS USE PROPER EYE AND RESPIRATORY PROTECTION.

ON MOVING FENCES:
ALWAYS ADJUST FENCE PROPERLY BEFORE USE. CLAMP SMALL PIECES BEFORE CUTTING, SEE MANUAL.
ON GUARD:
MAKER-KEEP AWAY FROM BLADE.
ON UPPER GUARD,
PROPERLY SECURE BRACKET WITH BOTH SCREWS BEFORE USE.

Electrical Connection
Do not allow your power supply agrees with the nameplate marking. 120 volts, AC means that your saw will operate on alternating current. The switch is susceptible to failure if direct current is used. A voltage decrease of 10 percent or more will cause a loss of power and overheating. All DYNILT tools are factory tested. If this tool does not operate, check the power supply.

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

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

Optional Accessories (Fig. 1)
The following accessories 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.

Extension Work Support (DW7098)
Used to support long overhanging workpieces, the work support is user assembled. Your saw base is designed to accept two work supports, one on each side.

Adjustable Length Stop: DW7051
Requires the use of one Extension Work Support (DW7098) (refer to Figure 1). It is used to make repetitive cuts of the same length from 0 to 42” (107 cm).

Clamp: DW7052
(similar model included)
Used for firmly clamping workpieces to the saw table for precise cutting.

Dust Bag: DW7053 (included with some models)
Equipped with a zipper for easy emptying, the dust bag will capture the majority of the sawdust produced.

Crown Molding Fence: DW7064
Used for precise cutting of crown molding.

SAW BLADES: ALWAYS USE 12” (305 mm) SAW BLADES WITH EITHER 1” (25.4 mm) OR 1/2” (12.7 mm) ARBOR HOLES. SPEED RATING MUST BE AT LEAST 4500 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 hooks angles in excess of 7°.

BLADE DESCRIPTIONS

<table>
<thead>
<tr>
<th>APPLICATION</th>
<th>DEPTH OF CUT</th>
<th>TEETH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cutting Crown Molding</td>
<td>1” (25.4 mm)</td>
<td>40</td>
</tr>
<tr>
<td>General Purpose</td>
<td>1” (25.4 mm)</td>
<td>60</td>
</tr>
<tr>
<td>45° rfter</td>
<td>1” (25.4 mm)</td>
<td>60</td>
</tr>
<tr>
<td>Woodworking Saw Blades</td>
<td>1” (25.4 mm)</td>
<td>80</td>
</tr>
</tbody>
</table>

Woodworking Saw Blades provide smooth, clean cuts.

NOTE: For cutting non-fusible materials, use only saw blades with TCG (Triple Chip Grind) teeth designed for this purpose.

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 DW7098 miter saw
1 DW7051 12” (305 mm) diameter saw blade
1 Blade wrench
1 DW7053 dustbag
1 Material clamp

Specifications

CAPACITY OF CUT
30° miter left, 60° miter right, 45° bevel left and right

Your saw is capable of cutting baseboard moldings held vertically 0.8” (20 mm) thick by 6.75” (171 mm) tall on a 45° left or right miter, when using the blade lock lever (Fig. 7).
Familiarization
Your miter saw is fully assembled in the carton. Open the box and lift the saw out by the convenient lifting handle, as shown in Figure 2.
Place the saw on a smooth, flat surface such as a workbench or strong table. Examine Figure 4 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 operating handle when pulling the handle down. The lower guard will move up as the operating handle is pulled down, which could cause pinch injury. The operating handle is placed close to the guard for space conservation.

Pass down lightly on the operating handle and pull out the lock down pin. Gently release the downward pressure and hold the operating handle, allowing it to rise to its full height. Use the lock down pin when carrying the saw from one place to another. Always use the lifting handle to transport the saw, or use the handle indentations shown in Figure 4.

Bench Mounting
Hold screws are provided in all 4 feet to facilitate bench mounting, as shown in Figure 4. (Two different-sized holes are provided to accommodate different sizes of screws. Use either hole, if it is not too small to allow moisture to enter your saw.) Always mount your saw to a stable surface 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 setup or moved to other jobsites and relocated even more easily.

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 fit flush against the support block. 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 interfere with the proper operation of the saw.

CAUTION: To prevent sliding 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 settles on the mounting surface.

IMPORTANT SAFETY INSTRUCTIONS
Changing or Installing a New Saw Blade (Fig. 3)

WARNING: To reduce the risk of serious personal injury, turn the tool off 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 (metal containing iron or steel) or masonry or fiberglass cement products with this miter saw.

Removing the Blade (Fig. 3)

1. Unplug the saw.
2. Raise the arm to the upper position and raise the lower guard (A) as far as possible.
3. Be sure to remove guard bracket screws (B) until the bracket can be raised far enough to access the blade screws (C).
4. Depress the spindle lock button (D) while carefully rotating the saw blade by hand until the lock engages.
5. Keep the button depressed, use the other hand and the wrench provided (C) to loosen the blade screw. (Turn clockwise, left-hand threads.)
6. Remove the blade screw (E), outer clamp washer (F), blade (G) and blade adapter (H). Lubricate. The inner clamp washer (J) 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 (H) is not used.

Installing a Blade (Fig. 3)

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 clamp blade with the teeth at the bottom of the blade pointing toward the back of the saw.
3. Assemble the outer clamp washer onto the spindle.
4. Insert the blade screw and, engaging the spindle lock, screw the saw firmly with 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. The separate blade adapter is not available on all models.
5. Return the guard bracket to its original position and tighten the guard bracket screw to hold it in place.

WARNING:
• The guard bracket must be returned to its original position and the guard bracket screw tightened before activating the saw.

Transporting the Saw

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 rail lock knob, miter lock knob, bevel lock handle, lock down pin and fence adjustment knobs before transporting saw.

In order to conveniently carry the miter saw from place to place, a lifting handle has been included on the top of the saw arm and hand indentations in the base, as shown in Figure 4.

FEATURES AND CONTROLS

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.

METER CONTROL (Fig. 5)
The meter lock handle and meter latch button allow you to miter your saw to 60º right and 50º left. To miter the saw, lift the meter latch button, push the meter latch button and set the meter angle desired on the base scale. Push down on the meter lock handle to lock the meter angle.

TRIGGER SWITCH (Fig. 4)
The trigger switch turns your saw on and off. A hold is provided in the trigger for insertion of a padlock to secure the saw.

METER LATCH OVERRIDE (Fig. 5)
The meter latch overrides allow your saw to override the common stop angles. To override the common stop angles, push the meter latch button and flip the meter latch override to the vertical position.

BEVEL LOCK KNOB (Fig. 4)
The bevel lock knob allows you to bevel the saw from 45º left to 45º right. To adjust the bevel setting, turn the knob counterclockwise. The saw head base is set to the left or to the right once the 0º bevel override knob is pulled. To tighten, turn the bevel lock knob clockwise.

0º BEVEL OVERRIDE (Fig. 4)
The bevel stop override allows you to bevel the saw to the right past the 0º mark.
When engaged, the saw will automatically stop at 0º when brought up from the left. To temporarily move past 0º to the right, pull the bevel lock knob. Once the knob is released, the override will be reengaged.

45º BEVEL STOP OVERRIDE (Fig. 4)
There are two stops on the bevel scale. The lower stop is located on one side of each saw face. To bevel the saw, lift left, past 45º, then pull the 45º bevel override lever downward. When in the released position, the saw can bevel past those stops. When the 45º stops are reached, the 45º bevel override lever locks.

CROWN BEVEL PAVELS (Fig. 6)
When cutting to a mitered or beveled flat, your saw is equipped to accurately and rapidly cut a crown, stop, left or right (refer to Instructions for Cutting Crown Molding Laying Flat and Using the Compound Features). The crown bevel Pavel can be rotated to contact the crown adjustment knob. The crown bevel Pavel is factory set to be used for flatwork in North America (50º/50º), but can be reversed to cut non-typical (45º/45º) crown. To reverse the crown bevel Pavel, remove the retaining screws, the 22.5º bevel Pavel and the 33.88º crown bevel Pavel. For the crown bevel Pavel to be engaged, the saw face is facing up. Reattach the screw to secure the 22.5º bevel Pavel and the crown bevel Pavel. The secondary setting will not be affected.
22.5° BEVEL PAWS (FIG. 6)

Your saw is equipped to rapidly and accurately set a 22.5° bevel, left or right. The 22.5° bevel paw can be rotated to contact the crown molding adjustment screw.

RAIL LOCK KNOB (FIG. 4)
The rail lock knob allows you to lock the saw head firmly to keep it from sliding on the rails. This is necessary when making certain cuts or when transporting the saw.

DEPTH STOP (FIG. 4)
The depth stop allows the depth of cut of the blade to be limited. The stop is useful for applications such as groove and slot vertical cuts. Rotate the depth stop forward and adjust the depth adjustment screw to set the desired depth of cut. To secure the adjustment, tighten the wing nut. Rotating the depth stop to the rear of the saw will increase the depth stop pressure. If the depth adjustment screw is too tight to loosen by hand, the provided blade wrench can be used to loosen the screw.

LOCK DOWN PIN (FIG. 4)

WARNING: The lock down pin should be used ONLY when saving or storing the saw. NEVER use the lock down pin for any cutting operation.

To lock the saw head in the down position, push the saw head down, push the lock down pin and release the saw head. This will hold the saw head solidly down. To move the saw from place to place. To release, press the saw head down and pull the pin out.

SLIDE LOCK LEVER (FIG. 7)

This slide lock lever places the saw in a position to manually cut base molding when cutting workpieces as shown in Figure 15.

AUTOMATIC ELECTRIC BRAKE

Your saw is equipped with an automatic electric 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. If a delay or "slipping" 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.

OPERATION

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: 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.

The light does not need to be on in order to operate the saw.

The Miter Saw must be connected to a power source.

NOTE: Refer to the Operations section for important information about the lower guard before cutting.

CROSSCUTS

A crosscut is made by cutting wood across the grain at any angle. A straight crosscut is made with the miter arm at the zero degree position. Set and lock the miter arm at zero, hold the work firmly to the fence. The angle of the miter arm will determine where the blade will appear on the wood. This shadow line represents the material that the blade will remove when performing a cut. To correctly locate your cut to the pencil line, align the pencil line with the edge of the blade’s shadow. Keep in mind that you may have to adjust the miter or bevel angles in order to match the pencil line exactly.

Cutting With Your Saw

If the blade shaft is not used, ensure the saw head is pushed back as far as possible and the rail lock is tightened. This will prevent the saw from sliding along its rails as the workpiece is engaged.

NOTE: Although this saw will cut wood and many non-farmous materials, we will limit our detailed discussion to the cutting of wood only. The same guidelines apply to the other materials.

DO NOT CUT FERROUS IRON AND STEEL MATERIALS ON THIS MITER SAW.

Never use any abrasive blades.

NOTE: Refer to Guard Actuation and Visibility in the Adjustments section for important information about the lower guard before cutting.

NOTE: This saw is equipped with a blade guard system that covers the lower guard when the blade is not in use.

Always use a work clamp to maintain control and reduce the risk of workpiece damage and personal injury. If your hands are required to be within 6” (152 mm) of the blade during a cut, this system will not cover the lower guard.

NOTE: To provide greater crosscut capacity with reduced stroke, the blade on the DW786 versus other blades as the maximum. As a result, a greater lifting force on the workpiece may be experienced during the cut. A work clamp always works better here. To control and reduce the risk of workpiece damage and personal injury, if your hands are required to be within 6” (152 mm) of the blade during a cut, this system will not cover the lower guard.

NOTE: The rail lock knob shown in Figure 4 must be loose to allow the saw to slide along its rails. Miter crosscuts are made with the miter arm at some angle other than zero. This angle is often 45º, 30º, or 22.5º. For more information on making crosscuts, refer to the section for detailed instructions on the miter system.

In general, the bevel angle can be set from 45º to 90º left or 90º to 45º right. A typical bevel angle is 5º left or 5º right.

NOTE: Refer to Adjustments in the Adjustments section for important information about the lower guard before cutting.

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 smooth crosscuts are desired for molding and other precision work, a sharp 60º tooth carbide blade and a slower, even cutting rate will produce the desired results.

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

If the saw begins to "chatter," switch it off and allow the blade to spin up to full operating speed before making the cut. Release the trigger switch and allow the blade to stop before removing the saw head. If there is no provision for locking the switch on, use a lock to prevent the start of a cut.

If the workpiece is not held firmly against the fence, the blade tends to follow the guide line of the workpiece instead of the line of the milling fence.

Always be sure that your body is clear of the saw blade before attempting to move it, change accessories or make any adjustments.

NOTE: Refer to Guard Actuation and Visibility in the Adjustments section for important information about the lower guard before cutting.

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.

OPERATION

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: 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.
and pull the 0° bevel stop to override the 0° bevel stop. When the saw is fully to the right, if the bevel pointer does not indicate exactly 90°, turn the right 45° bevel adjustment screw until the bevel pointer reads 90°. Make the same adjustment on the left side of the saw.

NOTE: Adjustments can be made on the opposite side of the base when beveling. ALWAYS MAKE DRY RUNS (UNPOWERED BEFORE FINISH CUTS TO CHECK THE PATH OF THE BLADE). INSURE THE BLADE鮮AND MITER Scale INTERFERE WITH THE ACTION OF THE SAW OR GUARDS.

Adjustments

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MITER SCALE ADJUSTMENT (FIG. 5, 10)

Unlock the miter lock handle and swing the miter arm until the miter latch button locks it at the 0° angle (FIG. 5). Slide the zero miter stop against the saw's fences and blade, as shown. Do not touch the tips of the black teeth with the square. To do so will cause an inaccurate reading. With the zero miter stop in place, slide the zero miter stop over the fence and under the fence until the saw's fences are in line with the zero miter stop. Loosen each screw that holds each miter pointer in place. If the miter pointer and miter scale shown in Figure 5. If the pointer does not indicate exactly zero, loosen the screw that holds the miter pointer to the zero miter stop and rotate the pointer to the right or left. Tighten the screw to lock the pointer in place.

BEVEL SCALE TO TABLE ADJUSTMENT (FIG. 4, 11)

To align the blade square to the table, the lock in the down position with the lock down pin. Place a piece of wood along the edge of the cut or trim molding along the edge of the cut. Unlock the bevel lock handle and loosen the bevel adjustment screw contacting the pawl with a 7/16" (10 mm) wrench until the bevel pointer reads 0°. Rotate the 0° bevel adjustment screw clockwise gradually while sliding the saw head back and forth. Reduce play while maintaining zero bevel adjustment. Rotate the 0° bevel adjustment screw until the bevel pointer reads 0°. The wood was positioned with the broad flat side against the table and the narrow edge against the fence. The cut could also be mitered right and left from the power source before attempting to move it, change accessories or make any adjustments.

THE CLAMP DOES NOT INTERFERE WITH THE ACTION OF THE SAW OR GUARDS.

To install clap, turn off the saw and hold the saw by the front end and hold the tool in place. Turn the saw on, allow the blade to reach full speed and lower the arm smoothly through the cut.

Cutting Compound Miters (FIG. 15)

A compound mitre is a cut made using a miter angle and a bevel angle at the same time. This is the only time to the bevel lock knob and the miter lock handle are securely locked. These must be locked after making any changes in bevel or miter.

The chart at the end of this manual (Table 1) will assist you in selecting the proper bevel and miter settings. The chart shown in Figure 14 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.

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Cutting Base Molding (Fig. 16)

To adjust the kerf plates, loosen the screws holding the kerf plates in place. Adjust so that the kerf plates are as close as possible without interfering with the blade's movement. As the kerf plates open, the bevel lock knob securely locks in place. The kerf plates are wedged against the miter lock handle. The blade must be angled to make a 45° cut.

The two sketches in Figure 14 are for four-sided objects only. If a zero kerf width is desired, adjust the kerf plates as close to each other as possible. They can be adjusted to the same thickness. The kerf plates shown in Figure 15 are for a 4-sided box with 26º exterior angles (Angle A, Fig. 15). This is the only time to the bevel lock knob and the miter lock handle are securely locked. These must be locked after making any changes in bevel or miter.

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</tbody>
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Dust Duct Cleaning
Depending on your cutoff environment, dust duct can do the duct and prevent dust from flowing away from the cutoff area. Properly installed and the saw dust housed, fully, low pressure air or a large diameter dowel rod can be used to clear the dust out of the duct.

Brushes

- **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**: Do not use boring brushes regularly by unplugging tool, removing the motor endcap (Fig. 6), lifting the brush spring and withdrawing the brush assembly. Keep brushes clean and slide 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 brushes are worn down to approximately 1/2 (12.7 mm), the springs will no longer exert pressure and they must be replaced. Use only identical DOWALT brushes. Use of the incorrect grade of brush is essential for proper operation of electrical brake. New brush assemblies are available at DOWALT service centers. The tool should be run "as is" at no load for 10 minutes before use to seal new brushes. The electric brake may be erratic in operation until the brushes are properly seated. Always replace brushes after inspection or servicing the brushes.

- **CAUTION**: NEVER TOP, TABLE, OR OTHERWISE LOCK THE TRIGGER SWITCH/ON, HOLD BY HAND ONLY.

Service Information
Please follow the following information available for all sale services:

- Model Number __________________
- Serial Number _____________________________________
- Date and Place of Purchase ____________________________

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

Three Year Limited Warranty

DOWALT will repair, without charge, any defects due to faulty materials or workmanship for three years from the date of purchase. The warranty does not cover parts damaged by normal wear or abuse. For further detail of warranty coverage and warranty repair information, visit www.dewalt.com or call 1-800-4-DEWALT (1-800-433-9258). This warranty does not apply to accessories or damage caused where repairs have been made or attempted by others. This warranty gives you specific legal rights and you may have other rights which vary in certain states or provinces.

- **CAUTION**: With blade removed from saw, clean pitch and build-up from blade. Pitch and debris can accumulate.

- **CAUTION**: Clean pitch and debris from blade. Pitch and debris can accumulate.

- **CAUTION**: Periodically clean all dust and wood chips from around AND UNDER the base and the motor. The motor plate casting until the proper tension is achieved. Tighten the four screws securely and replace the belt cover.

- **CAUTION**: Brushes

- **CAUTION**: Keep brushes clean and slide 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 brushes are worn down to approximately 1/2 (12.7 mm), the springs will no longer exert pressure and they must be replaced. Use only identical DOWALT brushes. Use of the incorrect grade of brush is essential for proper operation of electrical brake. New brush assemblies are available at DOWALT service centers. The tool should be run "as is" at no load for 10 minutes before use to seal new brushes. The electric brake may be erratic in operation until the brushes are properly seated. Always replace brushes after inspection or servicing the brushes.

Special Cuts

- **CAUTION**: This is extremely important when making angle cuts.

- **CAUTION**: CAUTION: DUST COLLECTION AND EXHAUST SYSTEMS: The sections below are for all standard (U.S.) crown molding with 52° and 38° angles.

- **CAUTION**: SPECIAL SET-UP FOR WIDE CROSSCUTS (FIG. 24, 25)

- **CAUTION**: OTHERWISE HOLD THE GUARD OPEN WHEN OPERATING THIS SAW.

- **CAUTION**: Periodically clean all dust and wood chips from around AND UNDER the base and the motor. The motor plate casting until the proper tension is achieved. Tighten the four screws securely and replace the belt cover.

- **CAUTION**: Belt, remove the belt cover screws. Remove the belt cover. Inspect the ribs of the belt for wear or accumulation.

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Troubleshooting Guide

TABLE 1: COMPOUND MITER CUT

POSITION WOOD WITH BROAD FLAT SIDE ON THE TABLE AND THE NARROW EDGE AGAINST THE FENCE.

<table>
<thead>
<tr>
<th>TROUBLE</th>
<th>WHAT’S WRONG?</th>
<th>WHAT TO DO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saw will not start</td>
<td>1. Saw not plugged in</td>
<td>Plug in saw.</td>
</tr>
<tr>
<td></td>
<td>2. Fuse blown or circuit breaker tripped</td>
<td>Replace fuse or reset circuit breaker.</td>
</tr>
<tr>
<td></td>
<td>3. Cord damaged</td>
<td>Have cord replaced by authorized service center.</td>
</tr>
<tr>
<td></td>
<td>4. Brushes worn out</td>
<td>Have brushes replaced by authorized service center or replace them yourself. Refer to Brushes.</td>
</tr>
<tr>
<td>Saw makes unsatisfactory cuts</td>
<td>1. No blade</td>
<td>Replace blade. Refer to Changing or Installing a New Saw Blade.</td>
</tr>
<tr>
<td></td>
<td>2. Blade mounted backwards</td>
<td>Turn blade around. Refer to Changing or Installing a New Saw Blade.</td>
</tr>
<tr>
<td></td>
<td>3. Gum or pitch on blade</td>
<td>Remove blade and clean with coarse steel wool and turpentine or household oven cleaner.</td>
</tr>
<tr>
<td></td>
<td>4. Incorrect blade for work being done</td>
<td>Change the blade type. Refer to Saw Blades under Optional Accessories.</td>
</tr>
<tr>
<td>Blade does not come up to speed</td>
<td>1. Extension cord too light or too long</td>
<td>Replace with adequate size cord. Refer to Use Proper Extension Cord under Important Safety Instructions.</td>
</tr>
<tr>
<td></td>
<td>2. Low house current</td>
<td>Contact your electric company.</td>
</tr>
<tr>
<td>Machine vibrates excessively</td>
<td>1. Saw not mounted securely to stand or work bench</td>
<td>Tighten all mounting hardware. Refer to Bench Mounting.</td>
</tr>
<tr>
<td></td>
<td>2. Stand or bench on uneven floor</td>
<td>Reposition on flat level surface. Refer to Familiarization.</td>
</tr>
<tr>
<td></td>
<td>3. Damaged saw blade</td>
<td>Replace blade. Refer to Changing or Installing a New Saw Blade.</td>
</tr>
<tr>
<td>Does not make accurate miter cuts</td>
<td>1. Miter scale not adjusted correctly</td>
<td>Check and adjust. Refer to Miter Scale Adjustment under Adjustments.</td>
</tr>
<tr>
<td></td>
<td>2. Blade is not square to fence</td>
<td>Check and adjust. Refer to Miter Scale Adjustment under Adjustments.</td>
</tr>
<tr>
<td></td>
<td>3. Blade is not perpendicular to table</td>
<td>Check and adjust fence. Refer to Bevel Square to Table Adjustment under Adjustments.</td>
</tr>
<tr>
<td></td>
<td>4. Workpiece moving</td>
<td>Clamp workpiece securely to fence or glue 120 grit sandpaper to fence with rubber cement.</td>
</tr>
<tr>
<td>Material pinches blade</td>
<td>1. Cutting bowed material</td>
<td>Refer to Bowed Material under Special Cuts.</td>
</tr>
</tbody>
</table>

TROUBLE: TROUBLE! WHAT’S WRONG? WHAT TO DO

1. Saw will not start
   1. Saw not plugged in
   2. Fuse blown or circuit breaker tripped
   3. Cord damaged
   4. Brushes worn out

2. Saw makes unsatisfactory cuts
   1. No blade
   2. Blade mounted backwards
   3. Gum or pitch on blade
   4. Incorrect blade for work being done

3. Blade does not come up to speed
   1. Extension cord too light or too long
   2. Low house current

4. Machine vibrates excessively
   1. Saw not mounted securely to stand or work bench
   2. Stand or bench on uneven floor
   3. Damaged saw blade

5. Does not make accurate miter cuts
   1. Miter scale not adjusted correctly
   2. Blade is not square to fence
   3. Blade is not perpendicular to table
   4. Workpiece moving

6. Material pinches blade
   1. Cutting bowed material

TROUBLE: BE SURE TO FOLLOW SAFETY RULES AND INSTRUCTIONS

TROUBLE: TROUBLE! WHAT’S WRONG? WHAT TO DO

1. Saw will not start
   1. Saw not plugged in
   2. Fuse blown or circuit breaker tripped
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   4. Brushes worn out

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   1. No blade
   2. Blade mounted backwards
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   4. Incorrect blade for work being done

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   1. Extension cord too light or too long
   2. Low house current

4. Machine vibrates excessively
   1. Saw not mounted securely to stand or work bench
   2. Stand or bench on uneven floor
   3. Damaged saw blade

5. Does not make accurate miter cuts
   1. Miter scale not adjusted correctly
   2. Blade is not square to fence
   3. Blade is not perpendicular to table
   4. Workpiece moving

6. Material pinches blade
   1. Cutting bowed material