

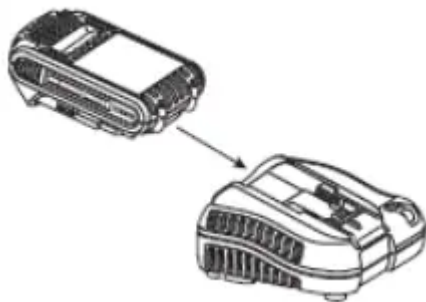
## Chargers

Your tool uses a DEWALT charger. Be sure to read all safety instructions before using your charger. Consult the chart at the end of this manual for compatibility of chargers and battery packs.

### Charging Procedure (Fig. 1)

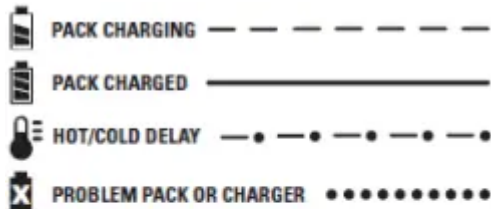
1. Plug the charger into an appropriate outlet before inserting the battery pack.
2. Insert the battery pack into the charger, as shown
3. The completion of charge will be indicated by the red light remaining ON continuously. The pack is fully charged and may be used at this time or left in the charger.

FIG. 1

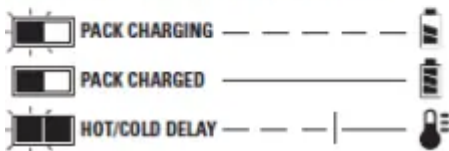


### Indicator Light Operation

DCB101, DCB102, DCB103



DCB107, DCB112, DCB113, DCB115



## Charge Indicators

This charger is designed to detect the red light flashing at a fast rate. If this occurs, re-insert the battery pack into the charger. If the problem persists, try a different battery pack to determine if the charger is working properly. If the new pack charges correctly, then the original pack is defective and should be returned to a service center or other collection site.



for recycling. If the new battery pack elicits the same trouble indication as the original, have the charger and the battery pack tested at an authorized service center.

### **HOT/COLD DELAY**

DCB101, DCB102, DCB103

These chargers have a hot/cold delay feature. When the charger detects a battery that is too hot or too cold, it automatically starts a delay, suspending charging. The red light flashes long, then short while in the hot/cold delay mode.

Once the battery has reached an optimum temperature, the charger will automatically resume the charging procedure. This feature ensures maximum battery life.

DCB107, DCB112, DCB113, DCB115

These chargers have a hot/cold delay feature. When the charger detects a battery that is too hot or too cold, it automatically starts a delay, suspending charging. The red light will continue to blink, but a yellow indicator light will be illuminated during this suspension.

Once the battery has reached an optimum temperature, the yellow light will turn off and the charger will automatically resume the charging procedure. This feature ensures maximum battery life.

### **LEAVING THE BATTERY PACK IN THE CHARGER**

The charger and battery pack can be left connected with the charge indicator showing Pack Charged.

**WEAK BATTERY PACKS:** Weak batteries will continue to function but should not be expected to perform as much work.

**FAULTY BATTERY PACKS**

DCB101, DCB102, DCB103

These chargers will not charge a faulty battery pack. The charger will indicate faulty battery pack by refusing to light or by displaying problem pack or charger.

**NOTE:** This could also mean a problem with a charger.

DCB107, DCB112, DCB113, DCB115

These chargers will not charge a faulty battery pack. The charger will indicate faulty battery pack by refusing to light.

**NOTE:** This could also mean a problem with a charger.

### **Wall Mounting**

DCB107, DCB112, DCB113, DCB115

These chargers are designed to be wall mountable or to sit upright on a table or work surface. If wall mounting, locate the charger within reach of an electrical outlet. Mount the



charger securely using drywall screws at least 1" (25.4 mm) long, screwed into wood to an optimal depth leaving approximately 7/32" (5.5 mm) of the screw exposed.

### Important Charging Notes

1. Longest life and best performance can be obtained if the battery pack is charged when the air temperature is between 65 °F and 75 °F (18°-24 °C). DO NOT charge the battery pack in an air temperature below +40 °F (+4.5 °C), or above +104 °F (+40 °C). This is important and will prevent serious damage to the battery pack.
2. The charger and battery pack may become warm to the touch while charging. This is a normal condition, and does not indicate a problem. To facilitate the coding of the battery pack after use, avoid placing the charger or battery pack in a warm environment such as in a metal shed or an uninsulated trailer.
3. A cold battery pack will charge at about half the rate of a warm battery pack. The battery pack will charge at that slower rate throughout the entire charging cycle and will not return to maximum charge rate even if the battery pack warms.
4. If the battery pack does not charge properly:
  - a. Check operation of receptacle by plugging in a lamp or other appliance:
  - b. Check to see if receptacle is connected to a light switch which turns power off when you turn out the lights:
  - c. Move the charger and battery pack to a location where the surrounding air temperature is approximately 65 °F-75 °F (18°-24 °C);
  - d. If charging problems persist, take the tool, battery pack and charger to your local service center.
5. The battery pack should be recharged when it fails to produce sufficient power on jobs which were easily done previously. DO NOT CONTINUE to use under these conditions. Follow the charging procedure. You may also charge a partially used pack whenever you desire with no adverse effect on the battery pack.
6. Foreign materials of a conductive nature such as, but not limited to, grinding dust, metal chips, steel wool, aluminum foil, or any buildup of metallic particles should be kept away from charger cavities. Always unplug the charger from the power supply when there is no battery pack in the cavity. Unplug the charger before attempting to clean.
7. Do not freeze or immerse the charger in water or any other liquid.

**WARNING:** Shock hazard. Don't allow any liquid to get inside the charger. Electric shock may result.

**WARNING:** Burn hazard. Do not submerge the battery pack in any liquid or allow any liquid to enter the battery pack. Never attempt to open the battery pack for any reason. If the plastic housing of the battery pack breaks or cracks, return to a service center for recycling.

## Storage Recommendations

1. The best storage place is one that is cool and dry, away from direct sunlight and excess heat or cold.
2. For long storage, it is recommended to store a fully charged battery pack in a cool dry place out of the charger for optimal results.

**NOTE:** Battery packs should not be stored completely depleted of charge. The battery pack will need to be recharged before use.

## SAVE THESE INSTRUCTIONS FOR FUTURE USE

### 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 DCS361 miter saw

1 DEWALT 7-1/4" (184 mm) diameter saw blade 1 1/4" (6.35 mm) hex and 730 torx blade wrench 1 Charger (Kit only)

1 Battery (Kit only)

In bag:

1 IXist bag 1 Material clamp

### INTENDED USE

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

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

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

### Specifications

#### CAPACITY OF CUT

	Height	Width
0° Miter / 0° Bevel	2" (50.8mm)	8" (209.5 mm)
45° Miter / 0° Bevel	2" (50.8mm)	5.75" (146 mm)
48° Miter / 0° Bevel	2" (50.8mm)	6" (152.4 mm)
45° Bevel - Left / 0° Miter	1.5" (38.1 mm)	8" (203 mm)
Crown Nested	9/16" x 3-5/8" (14.3 x 92 mm)	
Base molding	5/8" x 3-1/2" (15.8 x 89 mm)	

**NOTE:** Your saw is capable of cutting the following once a special setup procedure is followed. Refer to Special Cuts.

Limits to Bevel Angle	
Maximum Miter Angle	Max Bevel Angle at Which Cut Can Be Completed
48° Left Side	Left Bevel: 40°
48° Right Side	Left Bevel: 42.5°

Limits to Miter Angle	
AT Maximum Bevel Angle	Max Miter Angle at Which Cut Can Be Completed
48° Left Side	Left Miter: 31.6°
	Right Miter: 35°

### Familiarization (Fig. 2, 3)

Your miter saw is fully assembled in the carton. Open the box and lift the saw out either by using the tilting handle (O) or by the hand indentations (J) in the base of the saw (Fig. 2)

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

**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 pinching. The operating handle is placed close to the guard for special cuts.

Press down lightly on the operating handle (B) and pull out the lock down pin (W). 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 hand indentations (J) to transport the saw as seen in figure 3.

FIG. 2



### Bench Mounting (Fig. 3)

Holes <C> are provided in all 4 feet to facilitate bench mounting, as shown in Figure 3. (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 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 support or moved to other job sites and re-clamped.

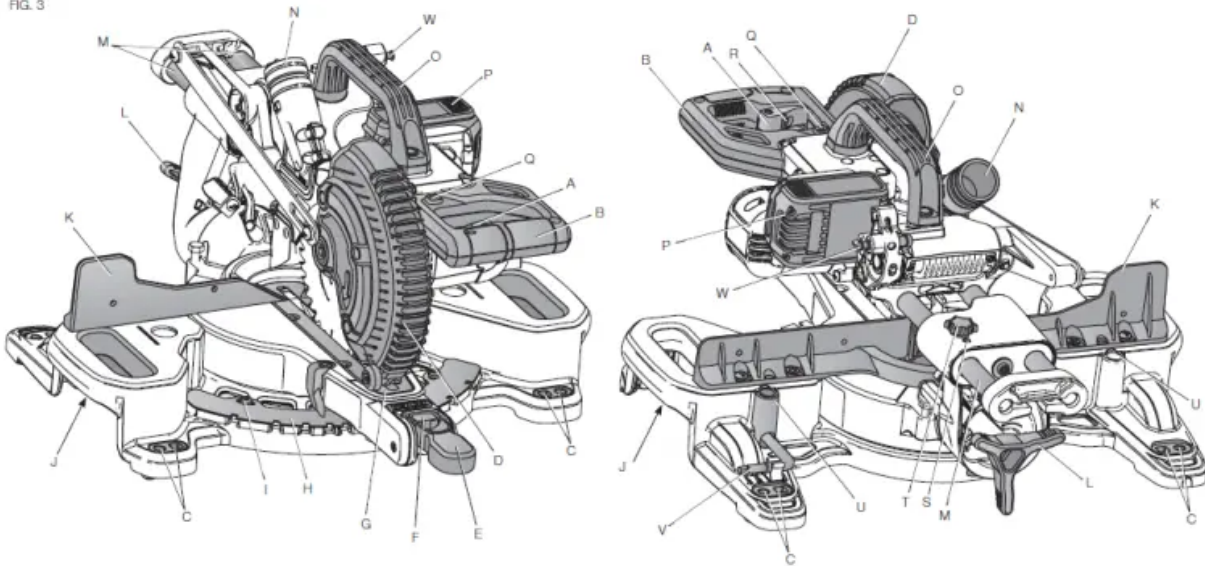
**NOTE:** If you elect to mount your saw to a piece of plywood, make sure that the mounting screws don't protrude from the bottom of the wood. The plywood must sit flush on the work support. When clamping the saw to any work surface, clamp only on the damping bosses where the mounting screw holes are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

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

### COMPONENTS (Fig. 3)

A. Trigger switch	I Miter scale screws	Q. XPS™ worklight momentary switch
B Operating handle	J Hand indentations	R. Lock off lever
C Mounting holes	K Fence	S. Rail adjustment screw
D Lower guard	L Bevel lock knob	T. Rail lock knob
E Miter lock knob	M Flails	U. Clamp mounting hole
F Miter latch button	N Dust port	V. Blade wrench
G Kerf plate	O Ufting hande	W. Lock down pin
H Miter scale	P Battery pack	

FIG. 3



### Changing or Installing a New Saw Blade (Fig. 4)

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

**WARNING:** To reduce the risk of serious personal injury, turn tool off and remove the battery pack before transporting, making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

**CAUTION:**

- Never depress the spindle lock button (AF) while the blade is under power or coasting.
- Do not cut metal, masonry or fiber cement product with this miter saw.

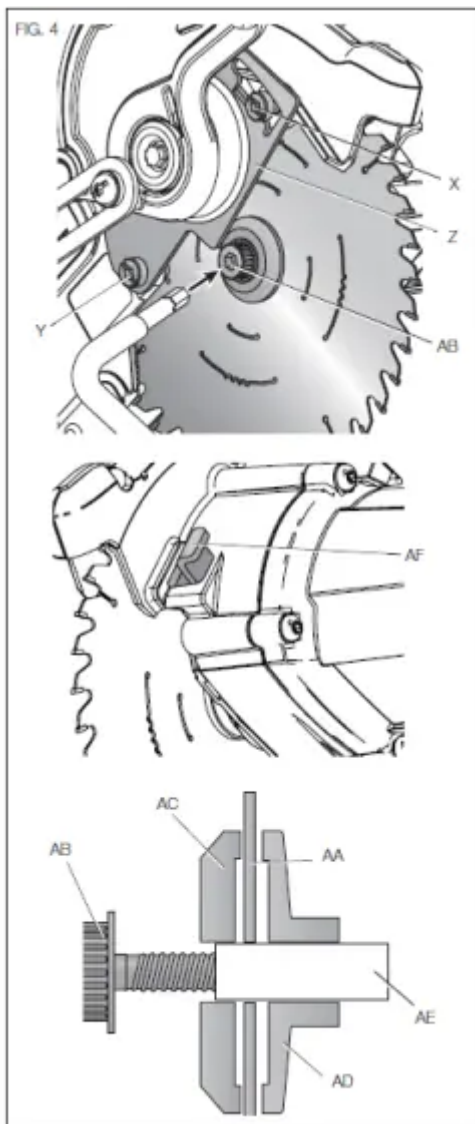
### Removing the Blade (Fig. 3, 4)

1. Remove battery pack (P) from the saw.
2. Raise the arm to the upper position and raise the lower guard (D) as far as possible.
3. Loosen, but do not remove the guard bracket rear screw (Y) by four revolutions.
4. Loosen, but do not remove the guard bracket front screw (X, Fig. 4) until the bracket can be raised far enough to access the blade screw (AB). Lower guard will remain raised due to the position of the guard bracket screw.
5. Depress the spindle lock button (AF) while carefully rotating the saw blade (AA) by hand until the lock engages.
6. Keeping the button depressed, use the other hand and the 1/4" hex side of the wrench provided (V) to loosen the blade screw (AB). (Turn clockwise, left-hand threads.)
7. Remove the blade screw (AB) using the 1/4" hex side of the wrench provided, the outer clamp washer (AC) and blade (AA). The inner clamp washer (AD) may be left on the spindle (AE).



## Installing a Blade (Fig. 3, 4)

1. Remove battery pack (P) from the saw.
2. With the arm raised, the lower guard (D) held open and the guard bracket 0 raised, place the blade (AA) on the spindle (AE) and against the inner blade clamp (AD) with the teeth on the blade pointing in the direction of rotation as marked on the saw.
3. Assemble the outer clamp washer (AC) onto the spindle (AE).
4. Install the blade screw (AB) and, engaging the spindle lock (AF), tighten the screw (AB) firmly with wrench (V) provided (turn counterclockwise, left-hand threads).
5. Return the guard bracket 0 to its original full down position and firmly tighten both guard bracket screws (X, Y) to hold bracket in place.



**WARNING:** The guard bracket must be returned to its original full down position and the guard bracket screws tightened before activating the saw. Failure to do so may prevent the guard from closing or may allow the guard to contact the spinning saw blade resulting in damage to the saw and severe personal injury.

## Transporting the Saw (Fig. 3)

**WARNING:** To reduce the risk of serious personal injury, turn tool off and remove the battery pack before transporting, making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

**WARNING:** To reduce the risk of serious personal injury, ALWAYS lock the rail lock knob, miter lock handle, bevel lock handle and lock down pin, and remove the battery before transporting saw.

In order to conveniently carry the miter saw from place to place, a lifting dandle (O) has been included on the top of the saw arm and hand indentations (J) in the base, as shown in Figure 3. Do not lift or carry by the operating handle (B).

## FEATURES AND CONTROLS

**WARNING:** To reduce the risk of serious personal injury, turn tool off and remove the battery pack before transporting, making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

### Use of XPS™ LED Worklight System (Fig. 3)

**CAUTION:** Do not stare into worklight. Serious eye injury could result.

**NOTE:** The battery must be charged and connected to the miter saw.

The XT'S™ LED Worklight System can be turned on by the momentary switch (Q). The light will automatically turn off within 20 seconds if the saw is not in use. The light is also activated automatically every time the tool's main trigger (A) is pulled.

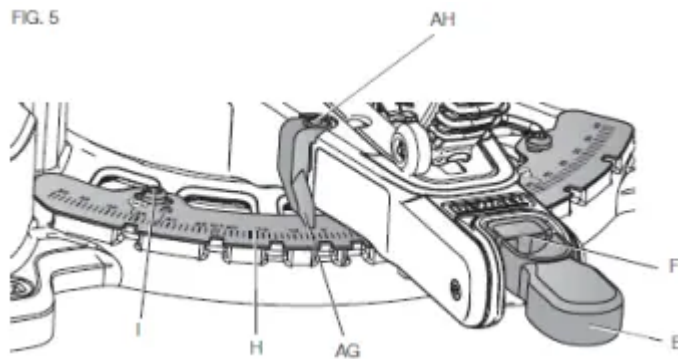
To cut through an existing pencil line on a piece of wood, turn on the XPS™ worklight system using the momentary switch (Q) (not with the main trigger), then pull down on the operating handle (B) to bring the saw blade close to the wood. The shadow of the blade will appear on the wood. This shadow line 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.

Your saw is equipped with a battery fault feature. The XPS™ worklight begins to flash when the battery is near the end of its useful charge, or when the battery is too hot. Charge the battery prior to continuing cutting applications. Refer to Charging Procedure under Important Safety Instructions for All Battery Packs for battery charging instructions.

### Miter Control (Fig. 5)

The miter lock knob (E) and miter latch button (F) allow you to miter your saw to 48° right and 48° left. The miter latch will automatically locate at 10°, 15°, 22.5°, 31.62° and 45° both left and right. To miter the saw, unlock the miter lock mechanism by pulling up on the miter

lock knob (E). Push the miter latch button (F) down, and set the miter angle desired on the miter scale (H). Lock the miter lock knob by pushing it down.



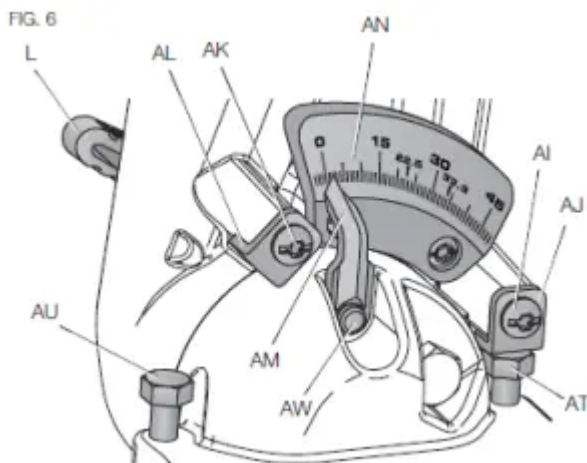
### Bevel Lock Knob (Fig. 3, 6)

The bevel lock allows you to bevel the saw 48° to the left. To adjust the bevel setting, turn the bevel lock knob (L) counterclockwise to loosen. To tighten, turn the bevel lock knob clockwise.

**CAUTION:** Pinch hazard. Be sure to tighten bevel lock knob before adjusting overrides.

### Bevel Stop Override (Fig. 6)

The bevel stop override allows you to bevel the saw up to 3° to the right. Loosen the 0° bevel stop override screw (AI) until the 0° bevel stop override bracket (AJ) can freely rotate. Turn the 0° bevel stop override bracket to allow the saw to rotate past the zero bevel position, then retighten the override screw. FIG. 6 yyy



### 45° Bevel Stop Override (Fig. 6)

The bevel stop override allows you to bevel the saw up to 48° to the left. Loosen the 45° bevel stop override screw (AK) until the 45° stop override bracket (AL) can freely rotate. Turn the 45° bevel stop override bracket (AL) to allow the saw to rotate past the 45° bevel position, then retighten the override screw.

### Rail Lock Knob (Fig. 3)



The rail lock knob (T) 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.

### Lock Down Pin (Fig. 3)

**WARNING:** The lock down pin should be used ONLY when carrying 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 (W) in and release the saw head. This will hold the saw head safely down for moving the saw from place to place. To release, press the saw head down and pull the pin out.

## OPERATION

**WARNING:** To reduce the risk of serious personal injury, turn tool off and remove the battery pack before transporting, making any adjustments or removing /installing attachments or accessories. An accidental start-up can cause Injury.

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

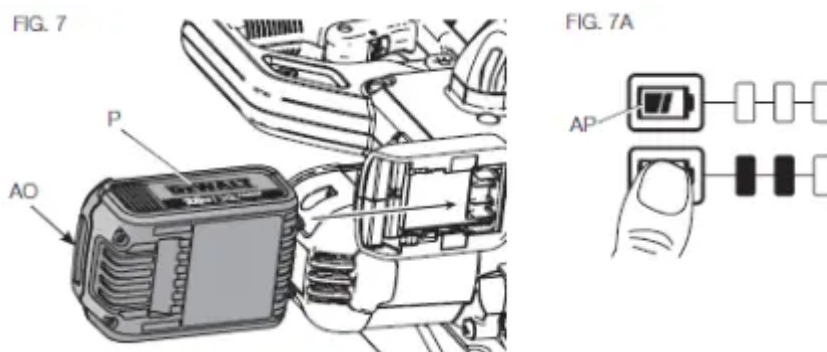
**WARNING:** To ensure the blade path is clear of obstructions, always make a dry run of the cut without power before making any cuts on the workpiece.

### Installing and Removing the Battery Pack (Fig. 7)

NOTE: For best results, make sure your battery pack is fully charged.

To install the battery pack (P) into the tool handle, align the battery pack with the rails inside the tool's handle and slide it into the handle until the battery pack is firmly seated in the tool and ensure that it does not disengage.

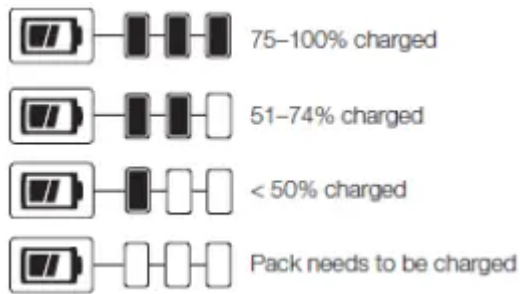
To remove the battery pack from the tool, press the release button (AO) and firmly pull the battery pack out of the tool handle. Insert it into the charger as described in the charger section of this manual.



### FUEL GAUGE BATTERY PACKS (FIG. 7A)

Some DEWALT battery packs include a fuel gauge which consists of three green LED lights that indicate the level of charge remaining in the battery pack.

The fuel gauge is an indication of approximate levels of charge remaining in the battery pack according to the following indicators:



To actuate the fuel gauge, press and hold the fuel gauge button (AP). A combination of the three green LED lights will illuminate designating the level of charge left. When the level of charge in the battery is below the usable limit, the fuel gauge will not illuminate and the battery will need to be recharged.

NOTE: The fuel gauge is only an indication of the charge left on the battery pack. It does not indicate tool functionality and is subject to variation based on product components, temperature and end-user application.

For more information regarding fuel gauge battery packs, please call 1-800-4-DEWALT (1-800-433-9258) .

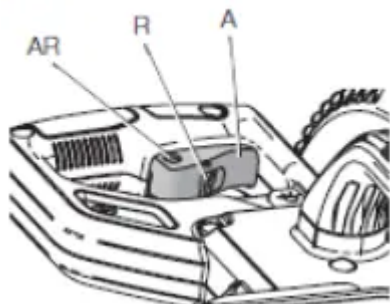
### Trigger Switch (Fig. 8)

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

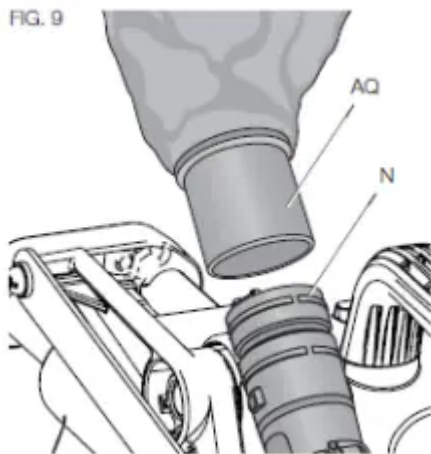
Your saw is not equipped with an automatic electric blade brake, but the saw blade should stop within 5 seconds of trigger release. This is not adjustable. If the stop time repeatedly exceeds 5 seconds, have the tool serviced by an authorized DEWALT service center.

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

FIG. 8



### Dust Extraction (Fig. 3, 9)



**WARNING:** To reduce the risk of serious personal injury, turn tool off and remove the battery pack before transporting, making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

Your saw has a built-in dust port (N) that allows either the supplied dust bag (AQ) or a shop vacuum system to be connected.

#### **TO ATTACH THE DUST BAG**

1. Fit the dust bag (AQ) to the dust port (N) as shown in Figure 9.

#### **TO EMPTY THE DUST BAG**

1. Remove dust bag (AQ) from the saw and gently shake or tap the dust bag to empty.
2. Reattach the dust bag back onto the dust port (N).

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

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

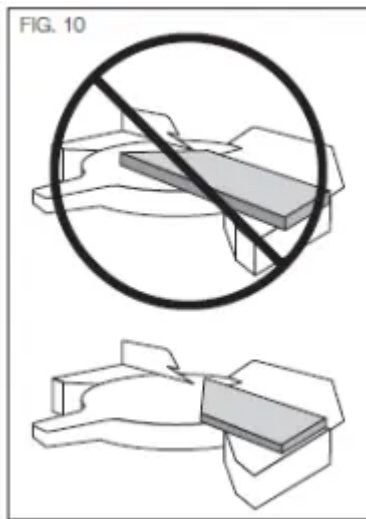
#### **Cutting With Your Saw (Fig. 3)**

If the slide feature is not used, ensure the saw head is pushed back as far as possible and the rail lock knob (T) is tightened. This will prevent the saw from sliding along its rails as the workpiece is engaged.

**NOTE:** DO NOT CUT METALS OR MASONRY WITH THIS SAW. Do not use any abrasive blades.

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

#### **CROSSCUTS (FIG. 3,10)**



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 wood firmly on the table and against the fence. With the rail lock knob (T) tightened, turn on the saw by squeezing the trigger switch (A) shown in Figure 3.

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.

When cutting anything larger than a 2 x 4 (51 x 102), use an out-down-back motion with the rail lock knob (T) loosened. Push the saw out, toward you, lower the saw head down toward the workpiece, and slowly push the saw back to complete the cut. Do not allow the saw blade to contact the top of the workpiece while pulling out. The saw may run toward you, possibly causing personal injury or damage to the workpiece.

**WARNING:** 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 the cut.

**NOTE:** The rail lock knob (T) shown in Figure 3 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 45° for making corners, but can be set anywhere from zero to 45° left or 45° right. Make the cut as described above.

When performing a miter cut on workpieces wider than a 2 x 6 that are shorter in length, always place the longer side against the fence (Fig. 10).

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

### **BEVEL CUTS (FIG. 3)**

A bevel cut is a crosscut made with the saw blade leaning at an angle to the wood. In order to set the bevel, loosen the bevel lock knob (L), and move the saw to the left as desired. Once the desired bevel angle has been set, tighten the bevel lock firmly.

Refer to the Features and Controls section for detailed instructions on the bevel system.

Bevel angles can be set from 3° right to 48° left.

## **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 mokfrng and other precision work, a sharp (60 tooth carbide Up) 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 let the blade come to a full stop before raising arm.

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

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

## **BODY AND HAND POSITION (FIG. 11A-11D)**

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 6" (152 mm) from the blade. Hold the workpiece tightly to the table and the fence when cutting. Keep hands in position until the trigger has been released and the blade has completely stopped. ALWAYS MAKE DRY RUNS (UNPOWERED) BEFORE FINISH CUTS SO THAT YOU CAN CHECK THE PATH OF THE BLADE. DO NOT CROSS HANDS, AS SHOWN IN FIGURE 11C.

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.

FIG. 11A

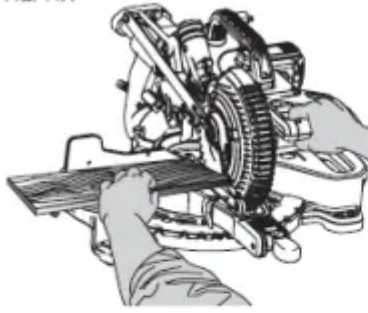


FIG. 11B

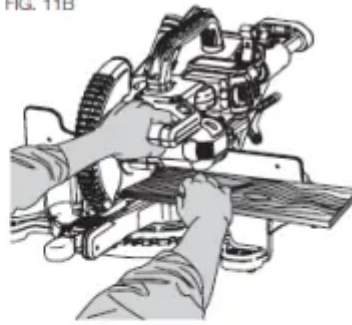


FIG. 11C



FIG. 11D



## CLAMPING THE WORKPIECE

**WARNING:** To reduce the risk of serious personal injury, turn tool off and remove the battery pack before transporting, making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

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

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

**WARNING:** 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 the cut.

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 6" (152 mm) from the blade, a clamp or other fixture must be used.

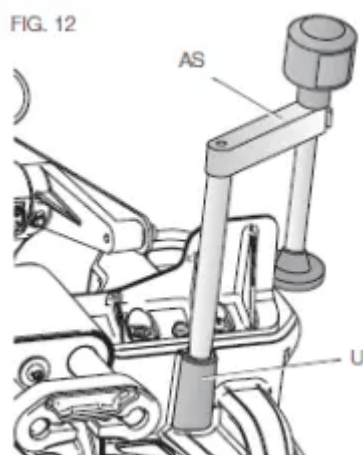
Use the material clamp provided with your saw. To purchase a material clamp, contact your local retailer or DEWALT service center.

Other aids such as spring clamps, bar clamps or C-clamps may be appropriate for certain sizes and shapes of material. Use care in selecting and placing these clamps. Take time to make a dry run before making the cut.

## TO INSTALL CLAMP (FIG. 3,12)

1. Insert the clamp (AS) into the hole (U) behind the fence. The clamp should be facing toward the back of the miter saw. The groove on the clamp rod should be fully inserted into the base. Ensure this groove is fully inserted into the base of the miter saw. If the groove is visible, the clamp will not be secure.
2. Rotate the clamp 180° toward the front of the miter saw.
3. Loosen the knob to adjust the clamp up or down, then use the fine adjust knob to firmly clamp the workpiece.

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



## ADJUSTMENTS

**WARNING:** To reduce the risk of serious personal injury, turn tool off and remove the battery pack before transporting, making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

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 instructions below to adjust your saw.

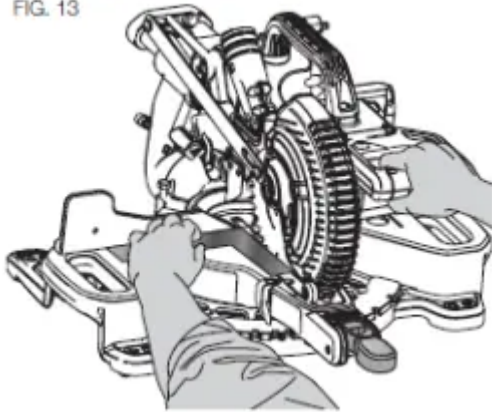
Once made, these adjustments should remain accurate. Take a little time now to follow these directions carefully to maintain the accuracy of which your saw is capable.

### Miter Scale Adjustment (Fig. 5, 13)

Lock the arm in the down position. Unlock the miter lock knob (E) and swing the miter arm until the miter latch button (F) locks it at the 0° miter position. Do not lock the miter lock knob. Place a square against the saw's fence and blade, as shown. (Do not touch the tips of the blade teeth with the square. To do so will cause an inaccurate measurement.) If the saw blade is not exactly perpendicular to the fence, loosen the three screws (I) that hold the miter scale (H) and move the miter lock handle and the scale 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 time.

FIG. 13



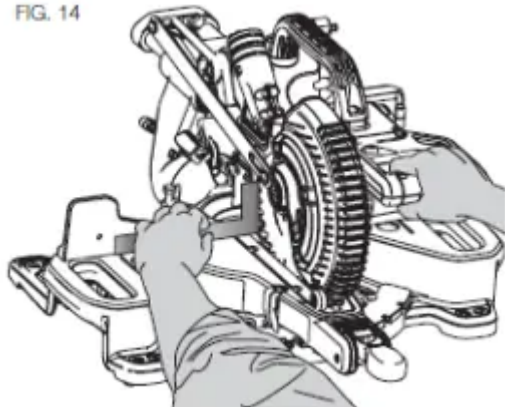
### Miter Pointer Adjustment (Fig. 5)

Unlock the miter lock mechanism by pulling up on the miter lock knob (E). Push the miter latch button (F) down and allow the miter latch to snap into place as you rotate the miter arm to zero. Observe the miter pointer (AG) and miter scale (H) shown in Figure 5. If the pointer does not indicate exactly zero, loosen the miter pointer screw (AH) holding the pointer in place, reposition the pointer and tighten the screw.

### Bevel Square to Table Adjustment (Fig. 3, 6, 14)

To align the blade square to the table, lock the arm in the down position with the lock down pin (W). Place a square against the blade, ensuring the square is not on top of a tooth. Loosen the bevel lock knob (L) and ensure the arm is firmly against the 0° bevel stop. Rotate the 0° bevel adjustment screw (AT) with the 1/2" (12.7 mm) socket (not provided) as necessary so that the blade is at 0° bevel to the table, as measured with the square.

FIG. 14



### Bevel Pointer (Fig. 6)

If the bevel pointer (AM) does not indicate zero, loosen the screw that holds the bevel pointer (AW) in place and move it as necessary. Ensure the 0° bevel is correct and the bevel pointer is set before adjusting any other bevel angle screws.

### Bevel Stop 45° Left Adjustment (Fig. 3, 6)

To adjust the left 45° bevel stop, first loosen the bevel lock knob and tilt the head to the left. If the bevel pointer does not indicate exactly 46°. turn the left 45° bevel adjustment screw (AU) until the bevel pointer reads 45°.

### **Guard Actuation and Visibility (Fig. 3, 23)**

**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 pinching.

The tower guard (D) on your saw has been designed to automatically uncover the blade when the arm is brought down and to cover the blade when the arm is raised.

Before each use or after making adjustments, cycle the arm (unpowered) and make sure the guard opens smoothly and closes fully. It should not contact the blade. With the arm up, raise the guard (unpowered) as shown in Figure 23 and release. The guard should fully close rapidly. Do not operate the saw if the guard does not move freely and fully close rapidly. Never clamp or tie the guard in an open position when operating the saw.

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

**NOTE:** Certain special cuts of large material will require that you manually raise the guard. Refer to Cutting Large Material under Special Cuts

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.

### **Rail Guide Adjustment (Fig. 3)**

Periodically check the rails (M) for any play or clearance. The rails can be cleaned with a dry clean cloth. The right rail can be adjusted with the set screw (S) shown in Figure 3. To reduce clearance, use a 4 mm hex wrench and rotate the set screw clockwise gradually while sliding the saw head back and forth. Reduce play while maintaining minimum slide force.

### **Support for Long Pieces**

**WARNING:** To reduce the risk of serious personal injury, turn tool off and remove the battery pack before transporting, making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

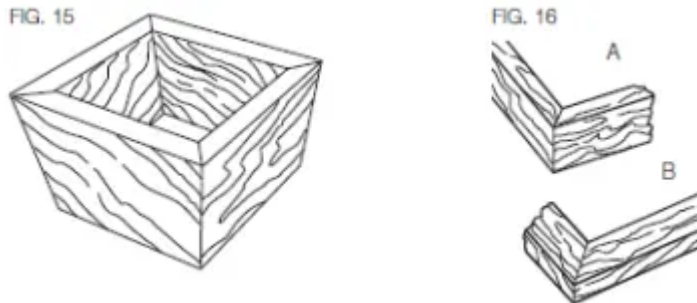
**ALWAYS SUPPORT LONG PIECES.**

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

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

### Cutting Picture Frames, Shadow Boxes And Other FourSided Projects (Fig. 15, 16)

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 comers like the one shown in Figure 15. Sketch A in Rgure 16 shows a joint made by using the bevel adjustment to bevel the edges of the two boards at 45° each to produce a 90s comer. 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 ihe broad surface against the fence.

### Cutting Trim Molding and Other Frames (Fig. 16)

Sketch B in Rgure 16 shows a joint made by setting the miter arm at 45° to miter the two boards to form a 90° oomer. To make this type of joint, set the bevel acjustment to zero and the miter arm to 45°. Onoe again, position the wood with the broad flat side on the table and the narrow edge against the fence.

Figures 15 and 16 am 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.

- EXAMPLES -

NUMBER OF SIDES	MITER OR BEVEL ANGLE
4	45°
5	36°
6	30°
7	25.7°
8	22.5°
9	20°
10	18°

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 (if the material is cut vertically) or bevel angle (if the material is cut laying flat).

### Cutting Compound Miters (Fig. 17)

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 Rgure 17.

NOTE: If the cutting angle varies from cut to cut, check that 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 for common compound miter cuts. To use the chart, select the desired angle A (Fig. 17) 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, Rg. 17), 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 ihe settings on the saw.

FIG. 17



### Cutting Base Molding (Fig. 18)

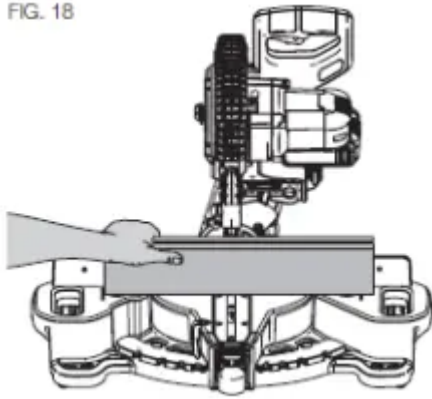
Straight 90° cuts:

Position ihe wood against the fence and hold it in place as shown in Rgure 18. Turn on the saw, allow the blade to reach lull speed and lower the arm smoothly through the cut.

### CUTTING BASE MOLDING UP TO 3.5" (89 mm) HIGH VERTICALLY AGAINST THE FENCE

Position material as shown in Rgure 18.

FIG. 18



All cuts should be made with the back of the molding against the fence and with the bottom of the molding against the table.

	INSIDE CORNER	OUTSIDE CORNER
Left side	Miter left 45° Save left side of cut	Miter right 45° Save left side of cut
Right side	Miter right 45° Save right side of cut	Miter left 45° Save right side of cut

*Material up to 3.5" (89 mm) can be cut as described above.*

## CUTTING CROWN MOLDING

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 31.6° left and right for cutting crown molding at the proper angle. There is also a mark on the bevel scale at 33.8°.

The Bevel Setting/Type of Cut chart 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.

## MAINTENANCE

**WARNING:** To reduce the risk of serious personal injury, turn tool off and remove the battery pack before transporting, making any adjustments or removing or installing attachments or accessories. An accidental start-up can cause injury.

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

DO NOT use lubricants or cleaners (partially 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.
- The brushes are designed to give you several years of use. If they ever need replacement, return the tool to the nearest service center for repair.

## Cleaning

**WARNING:** Blow dirt and dust out of all air vents and guard mechanisms (inapplicable) with clean, dry air at least once a week. To minimize the risk of eye injury, always wear ANSI Z87.1 approved eye protection when performing this.

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

## CHARGER CLEANING INSTRUCTIONS

**WARNING:** Shock hazard. Disconnect the charger from the AC outlet before cleaning. Dirt and grease may be removed from the exterior of the charger using a cloth or soft non-metallic brush. Do not use water or any cleaning solutions.

## DUST DUCT CLEANING

Depending on your cutting environment saw dust can clog the dust duct and may prevent dust from flowing away from the cutting area properly. With the battery pack removed and the saw head raised fully, low pressure air or a large diameter dowel rod can be used to clear the dust out of the dust duct.

## Accessories

**WARNING:** Since accessories, other than those offered by DEWALT, have not been tested with this product, use of such accessories with this tool could be hazardous. To reduce the risk of injury, only DEWALT recommended accessories should be used with this product. Recommended accessories for use with your tool are available at extra cost from your local dealer or authorized service center. If you need assistance in locating any accessory, please contact DEWALT Industrial Tool Co., 701 East Joppa Road, Towson, MD 21286, call 1-800-4-DEWALT (1-800-433-9258) or visit our website: [www.dewalt.com](http://www.dewalt.com).

## Repairs

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

## Register Online

Thank you for your purchase. Register your product now for:

- **WARRANTY SERVICE:** Registering your product will help you obtain more efficient warranty service in case there is a problem with your product.
- **CONFIRMATION OF OWNERSHIP:** In case of an insurance loss, such as fire, flood or theft, your registration of ownership will serve as your proof of purchase.
- **FOR YOUR SAFETY:** Registering your product will allow us to contact you in the unlikely event a safety notification is required under the Federal Consumer Safety Act.

## Troubleshooting Guide

**BE SURE TO FOLLOW SAFETY RULES AND INSTRUCTIONS**

TROUBLE!	WHAT'S WRONG?	WHAT TO DO
Saw will not start	1. Battery not installed	1. Install battery. Refer to Installing and Removing Battery Pack.
	2. Battery not charged	2. Charge battery. Refer to Charging Procedure
	3. Brushes worn out	3. Have brushes replaced by authorized service center.
Saw makes unsatisfactory cuts	1. Dull blade	1. Replace blade. Refer to Changing or Installing a New Saw Blade.
	2. Blade mounted backwards	2. Turn blade around. Refer to Changing or Installing a New Saw Blade.
	3. Gum or pitch on blade	3. Remove blade and clean with coarse steel wool and turpentine or household oven cleaner.
	4. Incorrect blade for work being done	4. Change the blade type. Refer to Saw Blades under Optional Accessories.
XPS™ worklight is flashing	1. Battery not charged	1. Charge battery. Refer to Charging Procedure
Machine vibrates excessively	1. Saw not mounted securely to stand or work bench	1. Tighten all mounting hardware. Refer to Bench Mounting.
	2. Stand or bench on uneven floor	2. Reposition on flat level surface. Refer to Familiarization.
	3. Damaged saw blade	3. Replace blade. Refer to Changing or Installing a New Saw Blade.
Does not make accurate miter cuts	1. Miter scale not adjusted correctly	1. Check and adjust. Refer to Miter Scale Adjustment under Adjustments.



	2. Blade is not square to fence	2. Check and adjust. Refer to Miter Scale Adjustment under Adjustments.
	3. Blade is not perpendicular to table	3. Check and adjust fence. Refer to Bevel Square to Table Adjustment under Adjustments.
	4. Workpiece moving	4. Clamp workpiece securely to fence or glue 120 grit sandpaper to fence with rubber cement.
	5. Kerf plate worn or damaged	5. Take to authorized service center.
Material pinches blade	1. Cutting bowed material	1. Refer to Bowed Material under Special Cuts.

### Warning

This content is compiled from multiple sources and is provided for reference purposes only. It may not be complete or fully applicable to all situations. If you are unable to resolve your issue, please contact the product manufacturer or an authorized service provider for official support.