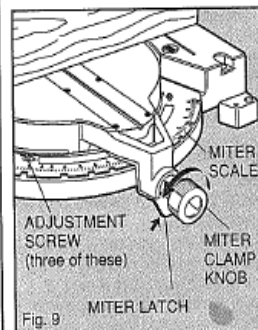
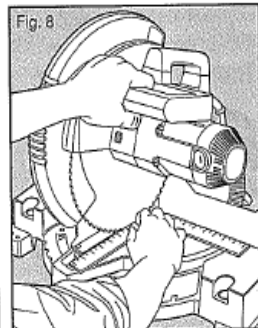


MITER SCALE ADJUSTMENT –

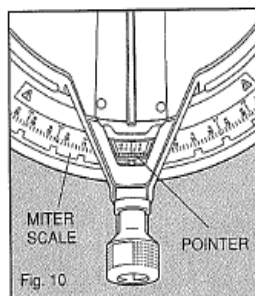
Place a square against the saw's fence and blade, as shown in Figure 8. (Do not touch the tips of the blade teeth with the square. To do so will cause an inaccurate measurement.) Loosen the miter clamp knob (see Fig. 9) and swing the miter arm until the miter latch locks it at the 0 miter position. Do not tighten the clamp knob. 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. 9) 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 time.



MITER POINTER ADJUSTMENT –

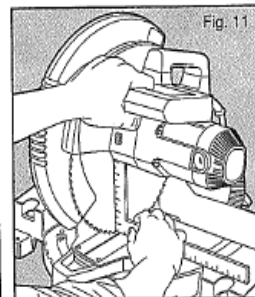
Loosen the Miter Clamp Knob and squeeze the Miter Latch to move the Miter Arm to the zero position, as shown in Figure 9. With the Miter

Clamp Knob loose allow the Miter Latch 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 10. If the pointer does not indicate exactly zero, gently pry it left or right using a flat bladed screwdriver.



BEVEL STOP ADJUSTMENT –

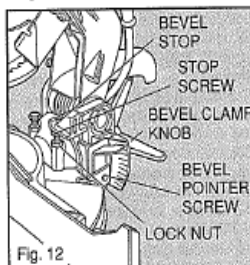
Lower the saw arm so that the blade just slightly goes through the kerf plate. Place a square against the table and the blade, as shown in Figure 11. NOTE: Do not touch the tip of any blade teeth with the square; to do so will cause an inaccurate measurement.



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 zero degrees bevel to the table. If the Bevel Arm needs adjustment, loosen the lock nut on the right side Bevel Stop as shown in Figure 12, and adjust the Stop Screw as necessary. Hold the Stop Screw in place and tighten the lock nut.

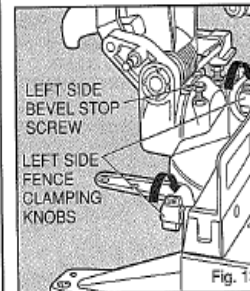
If the Bevel Pointer does not indicate zero, loosen the screw that

holds it in place and move the pointer as necessary. SUGGESTION: The Bevel Pointer is quite thick and for accuracy's sake, set the pointer so that its top edge aligns with zero. This way all readings will be on the top edge of the pointer.



Loosen the Left Side Fence Clamping Knobs, as shown in Figure 13 and slide the Left Side Fence as far as it will go to the left. Move the Bevel Arm to the left to the 45 degree setting.

If the Bevel Pointer does not indicate exactly 45 degrees, the Bevel Arm is out of adjustment. To adjust the arm, loosen the lock nut on the left side Bevel Stop Screw as shown in Figure 13. Adjust the stop screw up or down as necessary until the pointer indicates 45 degrees with the Bevel Arm resting against the left side Bevel Stop Screw. Hold the screw stationary while you firmly tighten the lock nut. DO NOT ADJUST THE BEVEL POINTER.



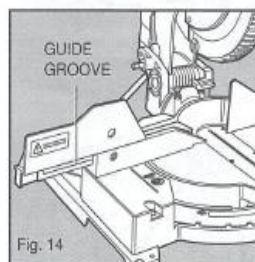
To achieve 3° right bevel or 48° left bevel, the stop screws must be adjusted to allow the bevel arm to move as necessary. Re-adjust the bevel stops when the cuts are finished.

FENCE ADJUSTMENT

Turn Off and Unplug the Miter Saw

In order that the saw can bevel to a full 48 degrees left, the left side of the fence can be adjusted to the left to provide clearance. To adjust the fence, loosen the two plastic knobs 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 workplace support, without interfering with arm up & down movement. Tighten both knobs securely. When the bevel operations are complete, don't forget to relocate the fence to the right.

NOTE: The guide groove, shown in Figure 14, of the left side fence can become clogged with sawdust. If you notice that it is becoming clogged, use a stick or some low pressure air to clear the guide groove.



GUARD ACTUATION AND VISIBILITY

The blade guard on your saw has been designed to automatically raise and 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 page 14- Cutting Base Molding up to 3 7/8" High Vertically Against the Fence.)

The front section of the guard is lowered for visibility while cutting. Although the louvers dramatically reduce flying debris, there are openings in the guard and safety glasses should be worn at all times when viewing through the louvers.

AUTOMATIC ELECTRIC BRAKE

Your saw is equipped with an electric blade brake which stops the saw blade within 5 seconds of trigger release. This is automatic and requires no adjustment.

Occasionally, under certain conditions, the brake will not function properly and won't stop the saw in the 5 seconds as discussed above. If this condition occurs, turn the saw on and off four or five times. If the brake still does not stop the blade in about 5 seconds, the problem may be worn brushes. Replace the brushes as described below and try the saw again. If the problem still persists, have the tool serviced at a Black & Decker Service Center or company authorized service facility.

Brushes

DISCONNECT PLUG FROM POWER SUPPLY

Inspect carbon brushes regularly by unplugging tool, removing the Brush Inspection Cap (Figure 3) and withdrawing 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 the line closest to the spring, they must be replaced. Use only identical Black & Decker brushes. 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).

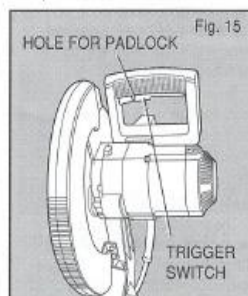
While "running in" DO NOT TIE, TAPE, OR OTHERWISE LOCK THE TRIGGER SWITCH ON. HOLD BY HAND ONLY.

Operation

Plug the saw into any 120 volt 60 Hz power source. Be sure the cord will not interfere with your work.

SWITCH

To turn the saw on, depress the trigger switch as shown in Figure 15. 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

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 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 as shown in Figure 15.

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 degrees for making corners, but can be set anywhere from zero to 48 degrees left or right. After selecting the desired miter angle, be sure to tighten the miter clamp knob. 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 as you did under "Bevel Stop Adjustment".) Once the desired bevel angle has been set, tighten the bevel clamp knob firmly.

Bevel angles can be set from 3 degrees right to 45 degrees left and can be cut with the miter arm set between zero and 45 degrees right or 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 molding and other precision work, a sharp (60 tooth carbide) blade and a slower, even cutting rate will produce the desired results.

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

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

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

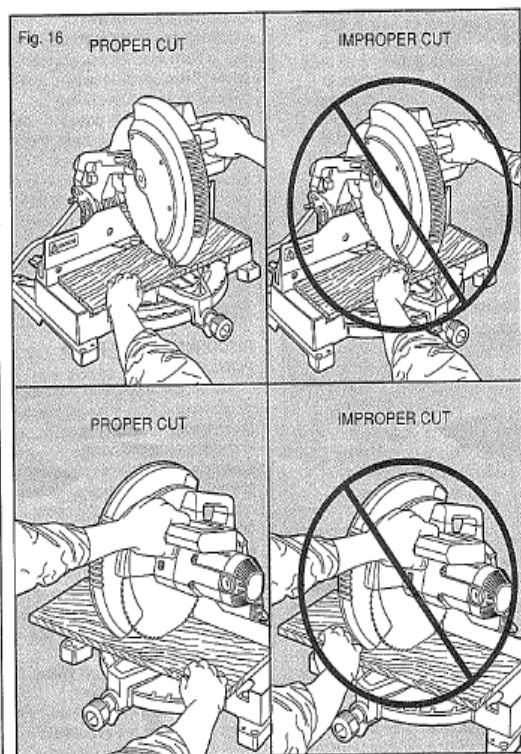
BODY AND HAND POSITION (SEE FIG. 16)

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 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 BELOW.

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

Turn Off and Unplug Saw

ALWAYS CLAMP WOOD TO THE SAW IF POSSIBLE AND ALWAYS CLAMP IF SIZE OF WORKPIECE REQUIRES YOUR HAND TO BE WITHIN 6" OF BLADE

For best results use the 36802 Clamp made for use with your saw. Available from your dealer at extra cost.

Clamp the workpiece to the fence whenever possible. You can clamp

to either side of the saw blade and remember to position your clamp against a solid, flat surface of the fence.

SUPPORT FOR LONG PIECES

Turn Off and Unplug Saw

ALWAYS SUPPORT LONG PIECES

For best results, use the 36800 Extension Work Support to extend the table width of your saw. Available from your dealer at extra

VERNIER SCALE

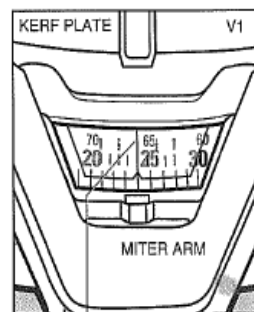
Your saw is equipped with a vernier scale for added precision. The vernier scale allows you to accurately set miter angles to the nearest 1/4 degree (15 minutes). To use the vernier scale follow the steps listed below.

(As an example, let's assume that the angle you want to miter is 24 1/4 degree right).

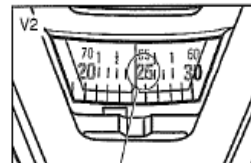
1. Turn off miter saw.
2. Set the miter angle to the nearest whole degree desired by aligning the center mark in the vernier scale, shown in figure V1, with the whole degree number etched in the miter scale. Examine Figure V2 closely; the setting shown is 24 degrees right miter.

3. To set the additional 1/4 degree, 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 degrees. Figure V2 shows a setting of 24-1/4 degrees right miter.

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



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

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

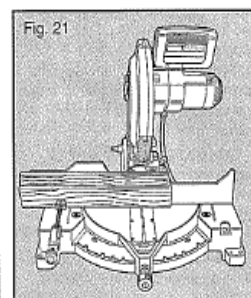
To increase the miter angle when mitering to the left, move the arm to align the appropriate vernier mark with the closest mark on the miter scale to the right. To decrease the miter angle when mitering to the left, move the arm to align the appropriate vernier mark with the closest mark on the miter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

CUTTING BASE MOLDING

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

Straight 90 degree cuts -

Position the wood against the fence and clamp it in place 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 3-7/8" HIGH VERTICALLY AGAINST THE FENCE

Position molding as shown in Figure 22

All cuts 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 3.9" (3-7/8") can be cut as described above. For wider boards [up to 5.5" (5-1/2")] several minor concessions must be made.

When cutting a board between 3.9" (3-7/8") and 5.5" (5-1/2") in width the roller on the tip of the guard will hang up on the workpiece. If this occurs, simply place your right thumb on the upper side of the guard and roll the guard up just enough to clear the workpiece, as shown in Figure 25. Once you have cleared the workpiece, you can release the guard and it will continue to open as the cut progresses.

When mitering to the right side of a base molding wider than 3.9" (3-7/8") standing vertically against the fence as in Figure 22, 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 basemolding between 3-7/8" and 5-1/2" wide vertically follow the directions below.

CUTTING 3-7/8"- 5-1/2" BASE MOLDING VERTICALLY AGAINST THE FENCE

• Position molding as shown in Figure 22

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