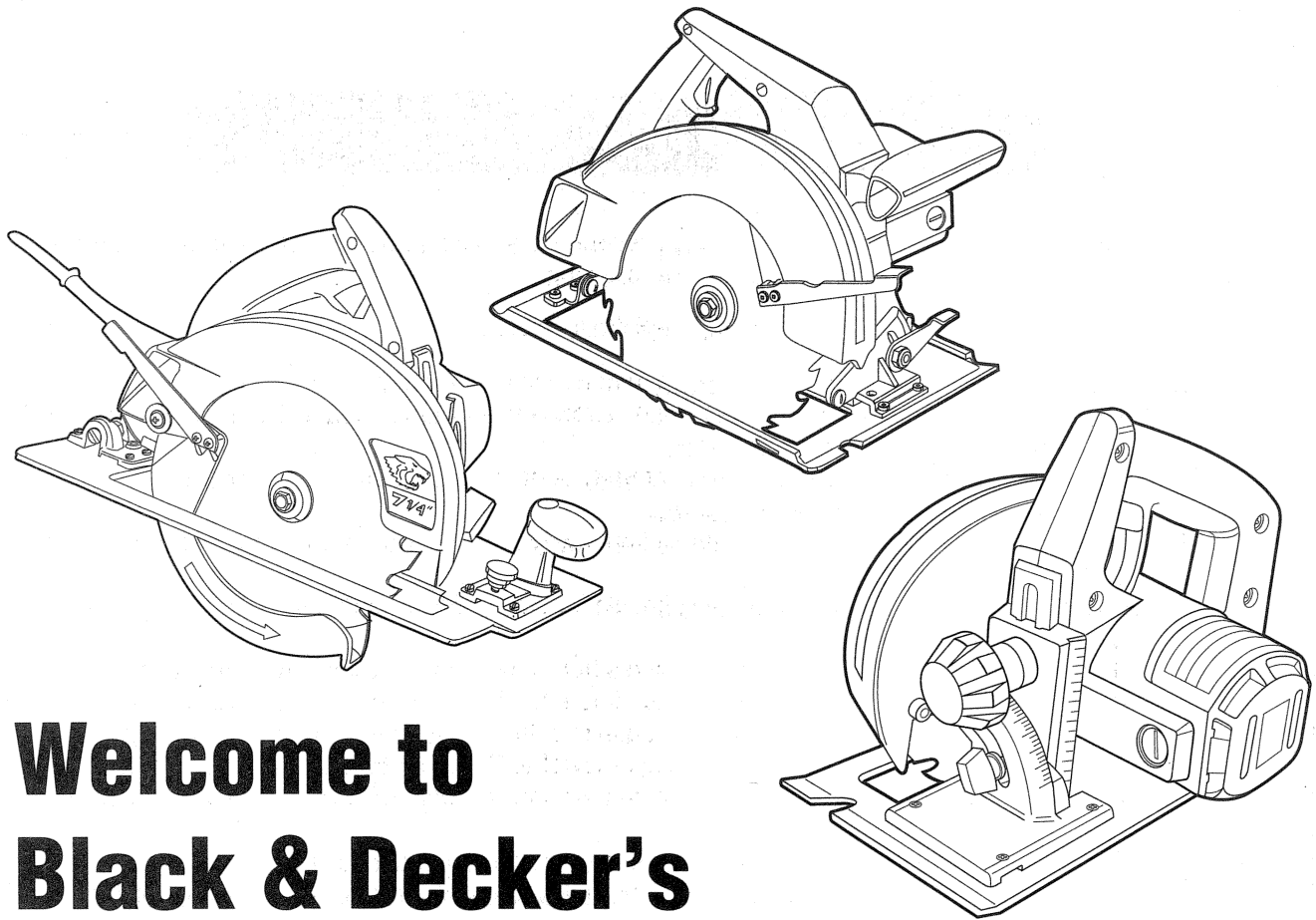




Instruction Manual

Circular Saws



Welcome to Black & Decker's World of Circular Saws

Your new Circular Saw is designed and built to those same standards of quality that have made Black & Decker the world leader in power tools for over 75 years.

Cross-cutting, ripping and pocket cutting are made fast and easy.

We know you will enjoy your saw and the more you know about it the happier you'll be.

Please take the time to thoroughly read this instruction manual and pay particular attention to the safety instructions we've provided for your protection.

Don't forget to send in your owner's registration card.

Thanks for buying Black & Decker.



BLACK & DECKER®

Important Safety Instructions (For All Tools)

WARNING: When using Electric Tools, basic safety precautions should always be followed to reduce risk of fire, electric shock, and personal injury, including the following:

READ ALL INSTRUCTIONS

1. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite injuries.
2. **CONSIDER WORK AREA ENVIRONMENT.** Don't expose power tools to rain. Don't use power tools in damp or wet locations. Keep work area well lit.
3. **GUARD AGAINST ELECTRIC SHOCK.** Prevent body contact with grounded surfaces. For example: pipes, radiators, ranges, refrigerator enclosures.
4. **KEEP CHILDREN AWAY.** All visitors should be kept away from work area. Do not let visitors contact tool or extension cord.
5. **STORE IDLE TOOLS.** When not in use, tools should be stored in dry, and high or locked-up place - out of reach of children.
6. **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was intended.
7. **USE RIGHT TOOL.** Don't force small tool or attachment to do the job of a heavy-duty tool. Don't use tool for purpose not intended, for example, don't use circular saw for cutting tree limbs or logs.
8. **DRESS PROPERLY.** Do not wear loose clothing or jewelry. They can be caught in moving parts. rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
9. **USE SAFETY GLASSES.** Also use face or dustmask if cutting operation is dusty.
10. **DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
11. **SECURE WORK.** Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
12. **DON'T OVERREACH.** Keep proper footing and balance at all times.
13. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safe performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and if damaged have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean, and free from oil and grease.
14. **DISCONNECT TOOLS.** When not in use, before servicing, and when changing accessories, such as blades, bits, cutters.
15. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
16. **AVOID UNINTENTIONAL STARTING.** Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.
17. **OUTDOOR USE EXTENSION CORDS.** When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
18. **STAY ALERT.** Watch what you are doing. Use common sense. Do not operate tool when you are tired.
19. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is defective should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual. have defective switches replaced by authorized service center. Do not use tool if switch does not turn it on and off.
20. **DO NOT OPERATE** portable electric tools near flammable liquids or in gaseous or explosive atmospheres. Motors in these tools normally spark, and the sparks might ignite fumes.

SAVE THESE INSTRUCTIONS FOR FUTURE USE.

Circular Saw Safety Instructions

1. Disconnect plug from power supply before changing blades, making cutting depth or cutting angle adjustments. inspecting, cleaning or when saw is not used.
2. Keep guards in place and in working order. Never wedge or tie lower guard open. Check operation of lower guard before each use. Do not use if lower guard does not close briskly over saw blade. CAUTION: If saw is dropped, lower guard may be bent restricting full return.
3. KEEP BLADES CLEAN AND SHARP. Sharp blades minimize stalling and kick back.
4. DANGER: KEEP HANDS AWAY FROM CUTTING AREA. Keep hands away from blades. do not reach underneath work while blade is rotating. Do not attempt to remove cut material when blade is moving. CAUTION: Blades coast after turn off.
5. SUPPORT LARGE PANELS. Large panels must be supported as shown in FIGURES 15 & 16 to minimize the risk of blade pinching and kick back. When cutting operation requires the resting of the saw on the workpiece, the saw shall be rested on the larger portion and the smaller piece cut off.
6. USE RIP FENCE. Always use a fence or straight edge guide when ripping.
7. GUARD AGAINST KICK BACK. Kick back occurs when the saw stalls rapidly and is driven back towards the operator. Release switch immediately if blade binds or saw stalls. Keep blades sharp. Support large panels as shown in FIGURES 15 & 16. Use fence of straight edge guide when ripping. Don't force tool. Stay alert, exercise control. Don't remove saw from work during a cut while the blade is moving.

8. LOWER GUARD. Raise lower guard with the retracting handle.
9. ADJUSTMENTS. Before cutting be sure depth and bevel adjustments are tight.
10. USE ONLY CORRECT BLADES IN MOUNTING. Do not use blades with incorrect size holes. Never use defective or incorrect blade washers or bolts.
11. AVOID CUTTING NAILS. Inspect for and remove all nails from lumber before cutting.

CAUTION: When sawing into walls, floors or wherever "live" electrical wires may be encountered, DO NOT TOUCH ANY METAL PARTS OF THE TOOL! Hold the Saw only by its plastic handle to prevent electric shock if you saw into a "live" wire.

SAVE THESE INSTRUCTIONS

Electric Brake

(3047-09 & 3048-09 Super Sawcats. Only)

Your Super Sawcat has an automatic electric brake which stops the blade from coasting in less than a second after you release the trigger switch. It is useful when making certain cuts in wood where a coasting blade would result in a wide, imprecise cut.

Motor

Your Black & Decker tool is powered by a B&D-built motor. Be sure your power supply agrees with nameplate marking. Volts 50/60 Hz means Alternating Current ONLY. Volts DC-60 Hz means it will also operate on direct current. Voltage decrease of more than 10% will cause loss of power and overheating. All B&D tools are factory-tested; if this tool does not operate, check the power supply.

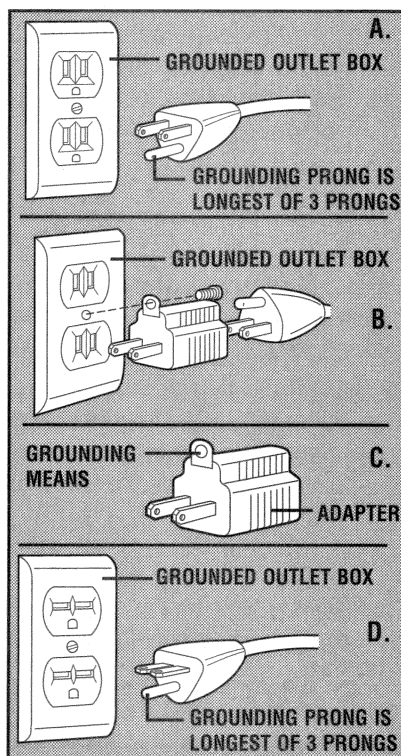
Brushes

Inspect carbon brushes regularly by unplugging tool, removing the Brush Inspection Cap and withdrawing the brush assembly. Keep brushes clean and sliding freely in their guides. Carbon brushes have varying symbols stamped into them,

and if the brush is worn down to the line closest to the spring, they must be replaced. New brush assemblies are available at Black & Decker Service Centers.

Grounding

This tool should be grounded while in use to protect the operator from electric shock. The tool is equipped with an approved three-conductor cord and three prong grounding type plug to fit the proper grounding type receptacle. The green (or green and yellow) conductor in the cord is the grounding wire. Never connect the green (or green and yellow) wire to a live terminal. If your unit is for use on less than 150 volts, it has a plug like that shown in Figure A. If it is for use on 150 to 250 volts, it has a plug like that shown in Figure D. An adapter, Figures B and C, is available for connecting Figure A plugs to two-prong receptacles. The green-colored rigid ear, lug, etc., must be connected to a permanent ground such as a properly grounded outlet box. No adapter is available for a plug as shown in Figure D. ADAPTER SHOWN IN FIGURES B & C IS NOT FOR USE IN CANADA.



Attaching & Removing Blades

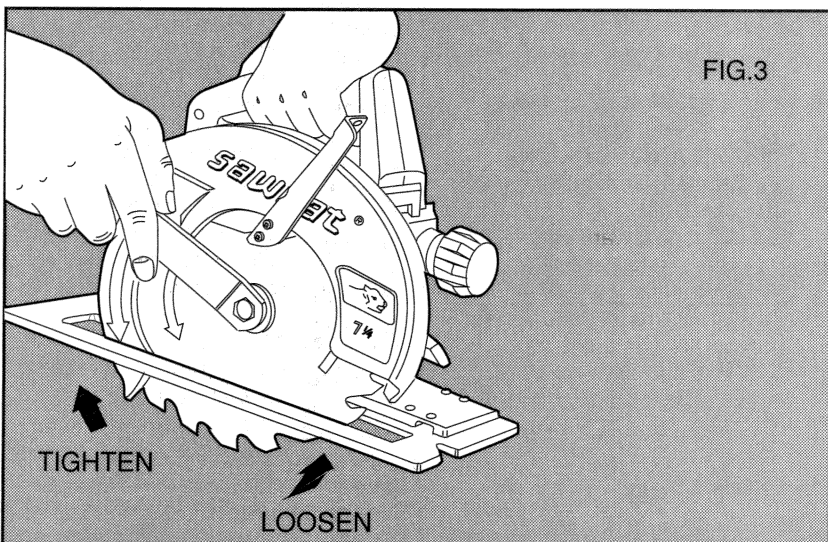
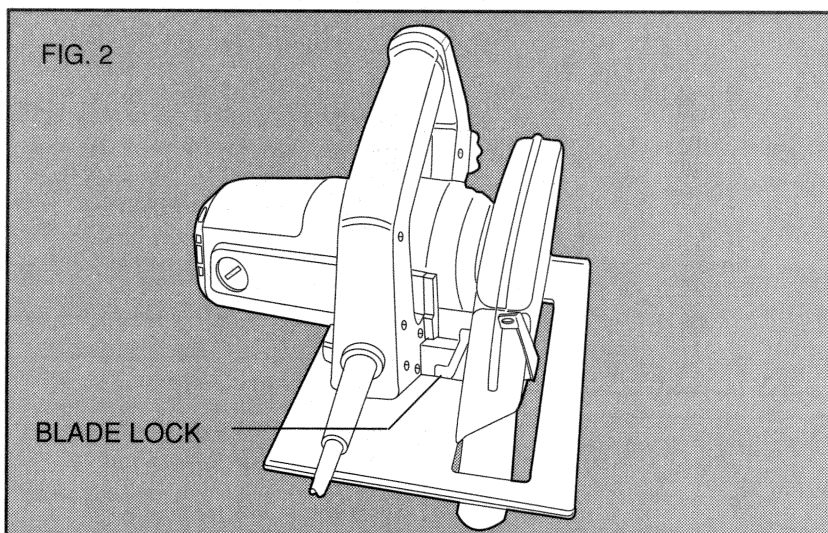
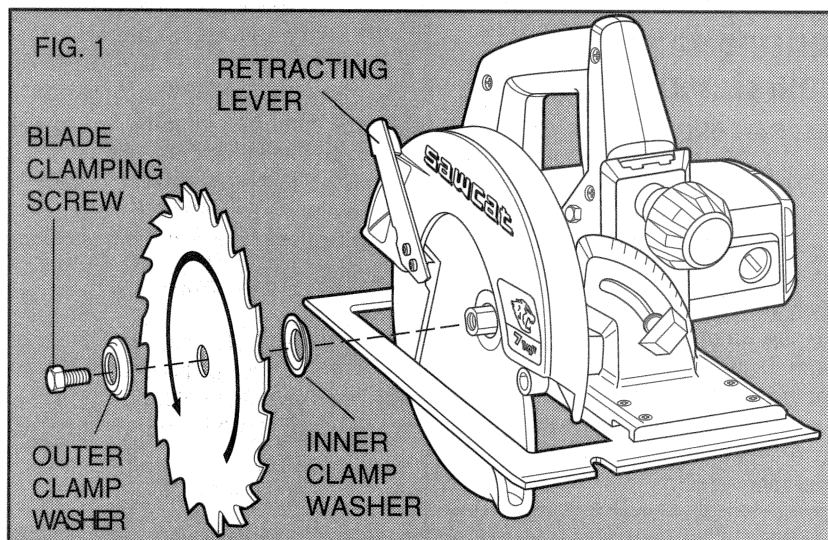
DISCONNECT PLUG FROM POWER SUPPLY.

(Super Sawcats)

1. TO REMOVE BLADE CLAMPING SCREW (FIG. 1)
 - a. On saws without blade attached: Turn screw counter-clockwise with blade wrench provided. It may be necessary to tap the outer edge of the blade wrench with a piece of wood to free the screw and outer clamp washer.
 - b. On saws with blade attached: Using the retracting lever, retract the lower blade guard and place the saw on a piece of scrap lumber to prevent the blade from turning. Using the wrench, turn the blade clamping screw counter-clockwise.

(Builders Sawcats)

1. Lightly depress the blade lock (FIG. 2) while turning the spindle until the blade lock seats. Turn the blade lock screw counterclockwise using the blade wrench.
2. To attach the blade, retract lower blade guard and place inner clamp washer and blade on saw spindle with printed side of blade out (teeth at bottom of blade pointing forward) (FIG. 1). The hole in the blade must fit over the raised portion of the inner blade clamp. The larger surfaces of both washers must face blade. Thread on clamping screw firmly by hand to hold washer in position. Engage the blade lock (Builders Sawcats) or retract the lower blade guard and place the saw on a piece of scrap lumber to prevent the blade from turning (Super Sawcats). Tighten clamping screw (clockwise) firmly with the blade wrench (FIG. 3).



Cutting Depth Adjustment

2680 SAW ONLY

DISCONNECT PLUG FROM POWER SUPPLY.

Hold the Saw firmly as shown in Figure 4. Loosen the Depth Adjustment Lever and hold the saw shoe firmly with one hand while moving the saw up or down with your other hand, Figure 5. To decrease cutting depth pull up on handle, to increase cutting depth push down. Make sure Lever has been retightened before operating saw.

FIG. 4

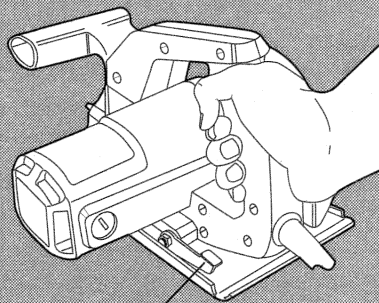
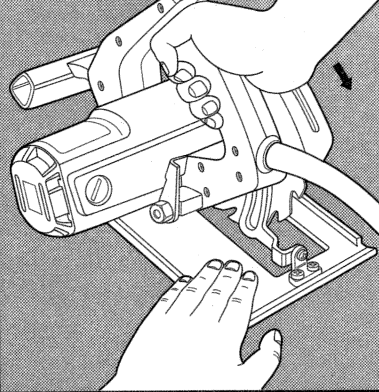


FIG. 5



BUILDER'S SAWCATS DEPTH ADJUSTMENT

DISCONNECT PLUG FROM POWER SUPPLY.

Hold the Saw with both hands as shown in Figure 6. Loosen the Depth Adjustment Knob (Figure 7), and without releasing the Knob, raise the handle. Tighten the knob when desired height is reached.

NOTE: Screw in Depth Scale Pointer permits adjusting the Pointer for accuracy if necessary.

FIG. 6

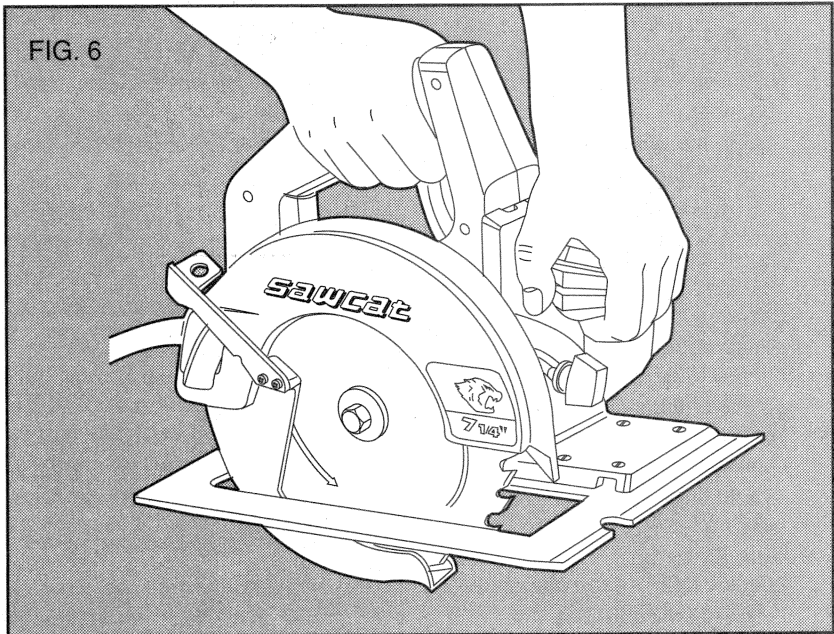
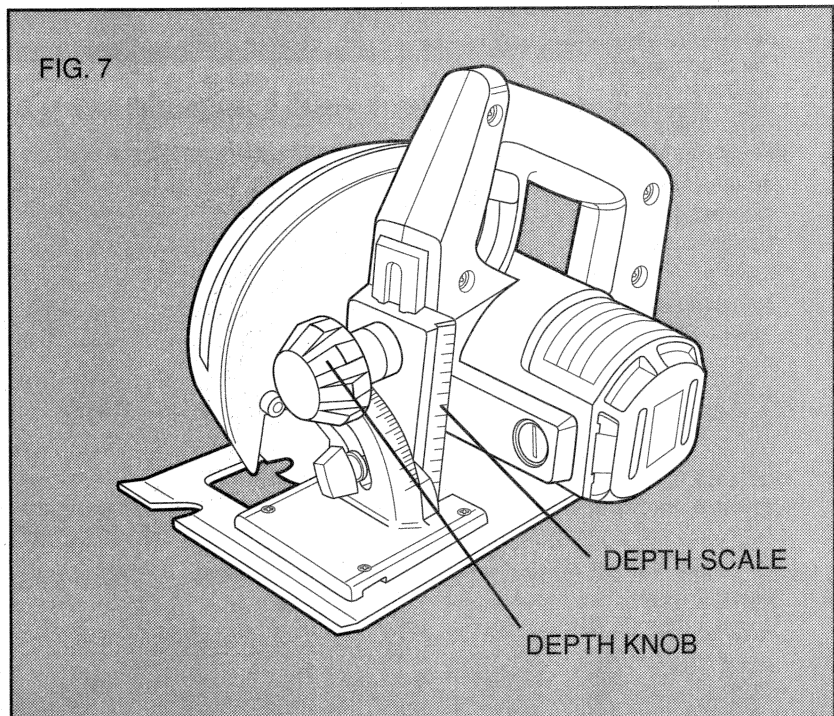


FIG. 7



SUPER SAWCATS DEPTH ADJUSTMENT

DISCONNECT PLUG FROM POWER SUPPLY

Place the saw on a flat surface as shown in Figure 9. Loosen the Depth Adjustment Knob (Figure 9). Hold the shoe flat by pressing down on the front knob handle, while you move the main handle backward to decrease cutting depth, or forward to increase cutting depth (Figure 9). when you read the depth you want at the top of the Depth Scale (Figure 9A), retighten Knob firmly. When a very accurate cutting depth is desired, make a trial cut using a piece of scrap lumber to check exact depth setting.

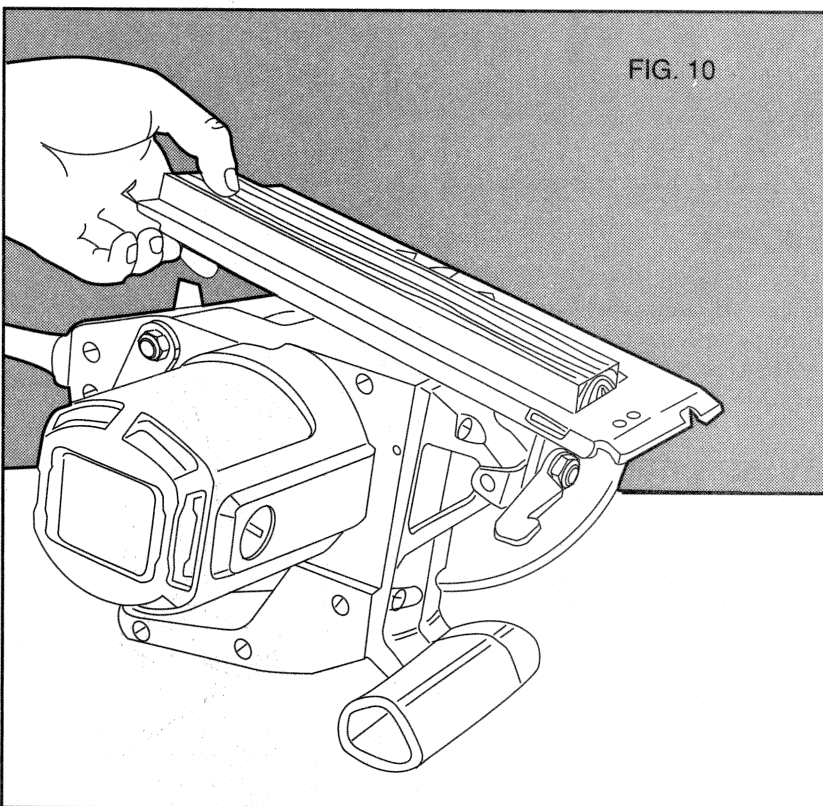
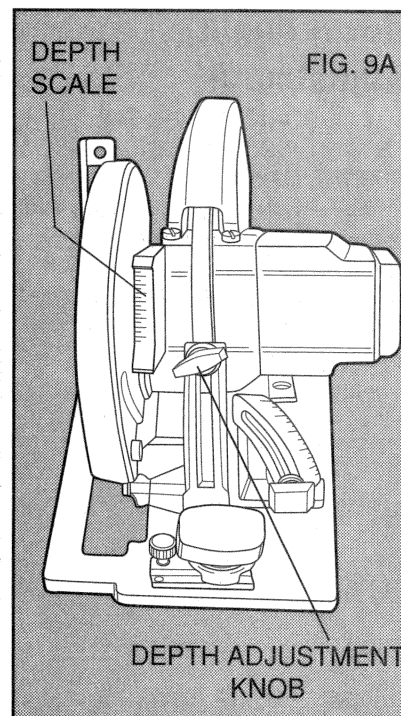
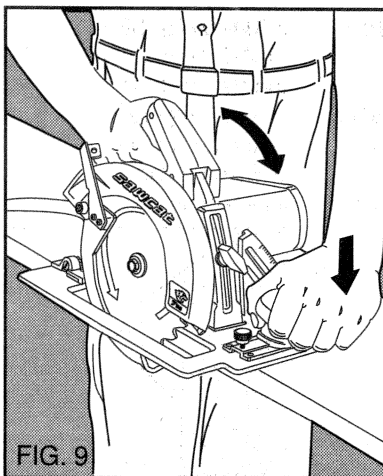
DEPTH ADJUSTMENT ALL SAWS

DISCONNECT PLUG FROM POWER SUPPLY.

For the most efficient cutting action, set the Depth Adjustment so that one tooth of the blade will project below the material to be cut. This distance is from the tip of the tooth to the bottom of the gullet in front of it. This keeps blade friction at a minimum, removes sawdust from the cut, and results in cooler, faster sawing.

A method for checking for correct cutting depth is shown in Figure 10. Note that one tooth of the blade projects above a scrap piece of the lumber to be cut.

NOTE: When using Carbide-Tipped Blades, make an exception to the above rule and allow only one-half of a tooth to project above the material to be cut.



Bevel Angle Adjustment

DISCONNECT THE SAW FROM THE POWER SUPPLY BEFORE MAKING THIS, OR ANY OTHER ADJUSTMENT! On the front of the saw is a bevel angle adjustment device (Figure 12) consisting of calibrated quadrant and a knob. To set the saw for a bevel cut, loosen knob and tilt shoe to angle desired. Retighten knob firmly.

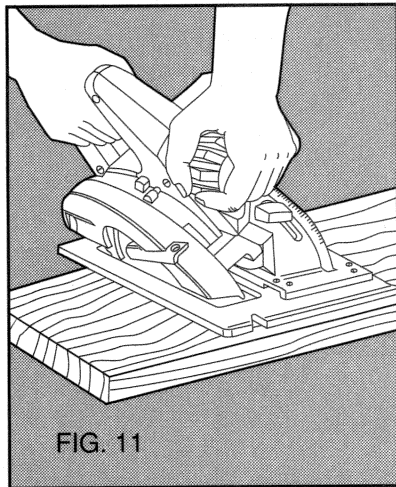


FIG. 11

Switch

Pull the trigger switch to turn the motor "ON". Releasing the trigger instantly turns the motor "OFF". This tool has no provision to lock the switch in the "ON" position.

Guide Edge

The front of the saw shoe has a guide edge (Figure 12) for vertical and bevel cutting. This edge enables you to guide the saw along cutting lines penciled on the material being cut. The edge lines up with the left (inner) side of the saw blade, which makes the slot or "kerf" cut by the moving blade fall to the right of the edge. Guide along the penciled cutting line so that the kerf falls into the waste or surplus material - See Figure 13.

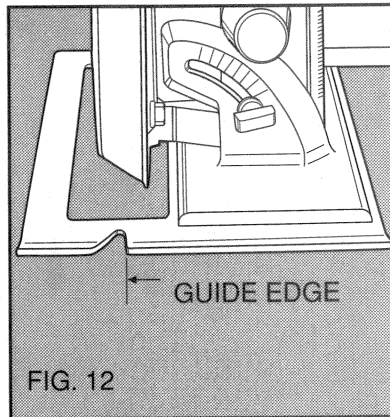


FIG. 12

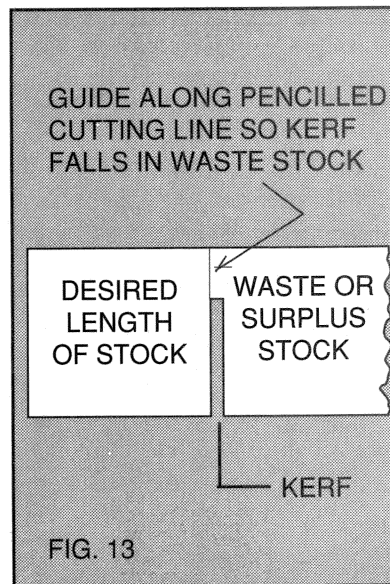
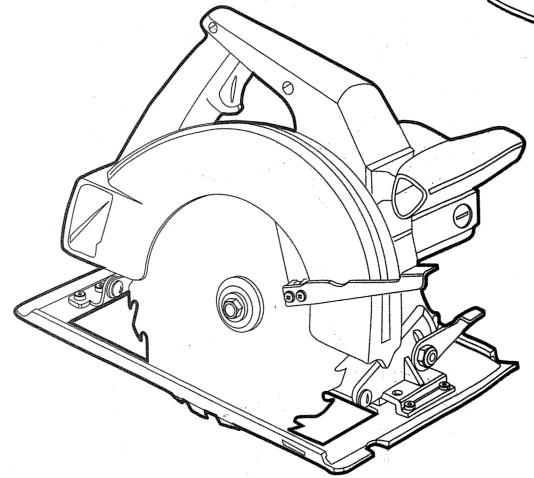


FIG. 13



Operation

Figure 14 shows proper sawing position. Note that hands are kept away from cutting area, and power cord is kept clear of cutting area and positioned so that it will not be caught on the work piece while cutting.

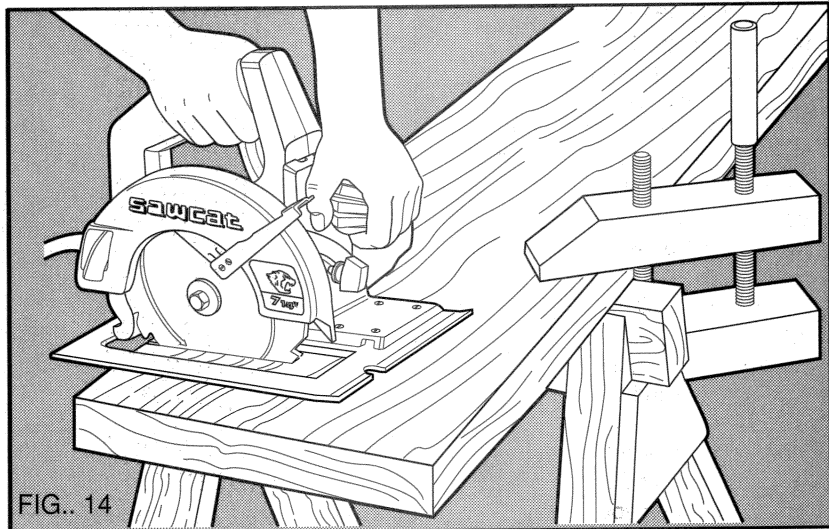
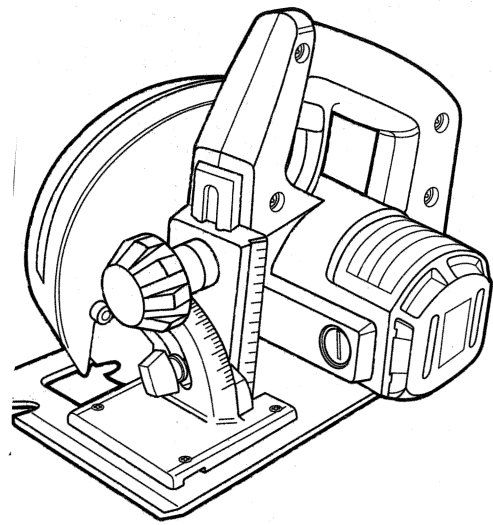
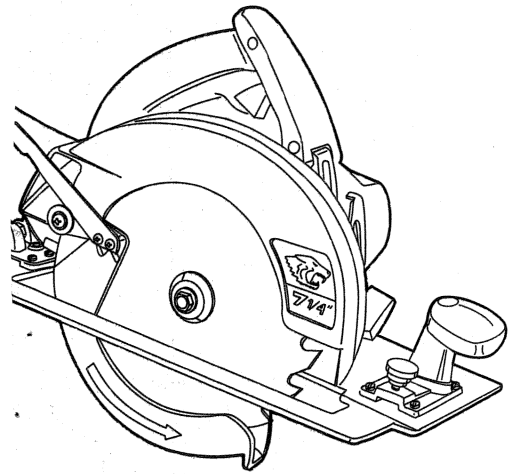


FIG. 14



Support the work so that the cut will be on your right. Place the wider portion of the saw shoe on that part of the work piece which is solidly supported, not on the section that will fall off when the cut is made. As examples, Figure 17 illustrates the RIGHT way to cut off the end of a board, and Figure 18 the WRONG way. If the work is short or small, clamp it down. Don't try to hold short pieces by hand!

Draw the required guide lines. Then rest the front of the saw shoe on the work with the guide edge lined up with the drawn guide line. Before starting the motor, push the blade lightly against the edge of the work and then back it off about 1/4". Now start the motor, and when the blade gains full speed, push the saw forward to start the cut. As you begin cutting, the lower blade guard will automatically begin to telescope into the upper blade guard. This telescoping action will continue as you advance the saw until it reaches the position shown in Figure 17.

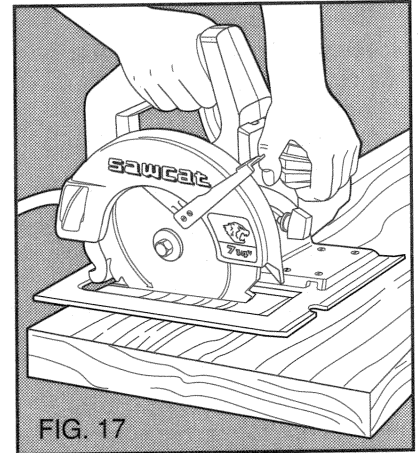


FIG. 17

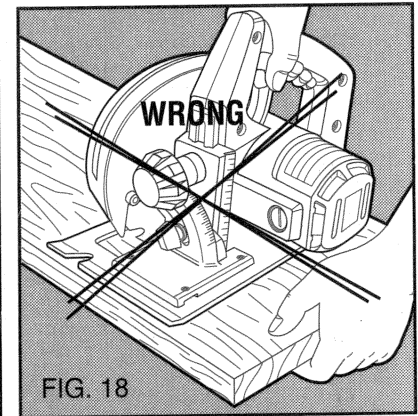


FIG. 18

To avoid kickback, DO support board or panel NEAR the cut, Figure 15. DON'T support board or panel away for the cut, Figure 16.

When operating the saw, keep the cord away from the cutting area and prevent it from becoming hung up on the work piece.

WARNING: It is important to support the work properly and to hold the saw firmly to prevent loss of control which could cause personal injury;. Figure 14 illustrates typical hand support of the saw.

ALWAYS DISCONNECT SAW BEFORE MAKING ANY ADJUSTMENTS! Place the work with its "good" side - the one on which appearance is most important - down. The saw cuts upward, so any splintering will be on the work face that is up when you saw it.

FIG. 15

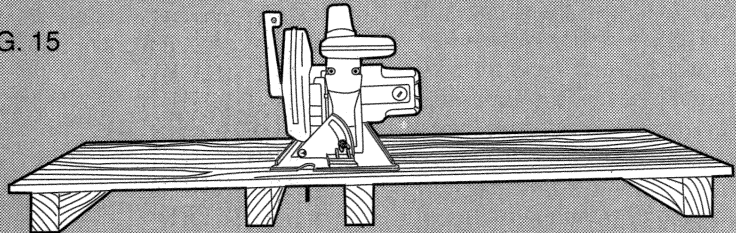
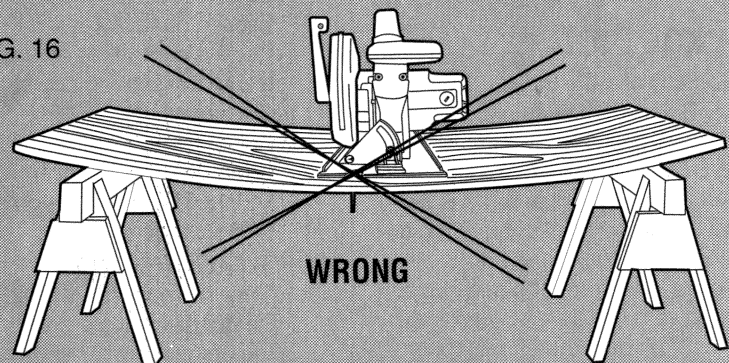


FIG. 16



WRONG

Push the saw forward at a speed which allows the blade to cut without laboring. Hardness and toughness can vary even in the same piece of material, and knotty or damp sections can put a heavy load on the saw. When this happens, push the saw more slowly, but hard enough to keep it working without much decrease in speed. Forcing it beyond this makes for rough cuts, inaccuracy and overheating of the motor.

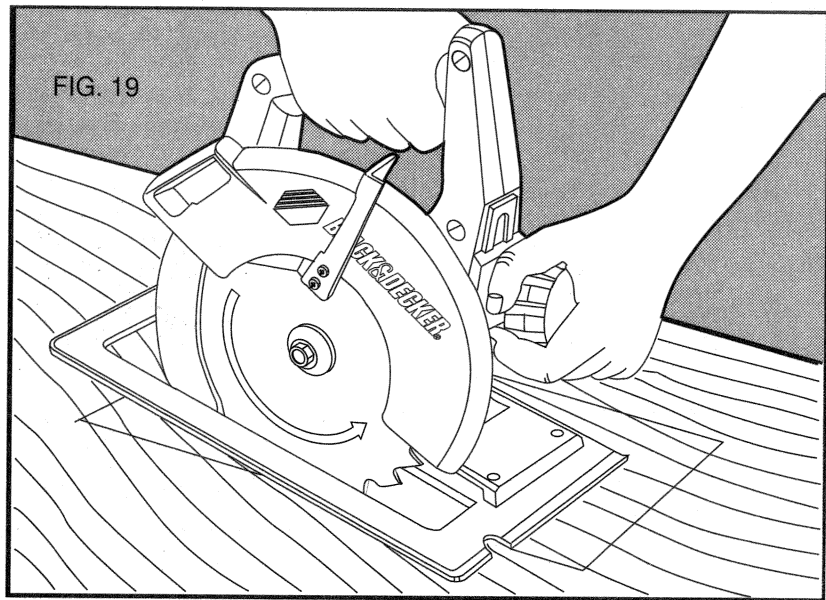
Should your cut begin to go off the line, don't try to force it back on. Release the switch and allow blade to come to a complete stop. Then you can withdraw the saw, sight anew, and start a new cut a trifle inside the wrong one. In any event, withdraw the saw if you must shift the cut. Forcing a correction inside the cut can stall the saw and perhaps spoil the work. **IF SAW STALLS, RELEASE THE TRIGGER AND BACK THE SAW UNTIL IT IS LOOSE. BE SURE BLADE IS STRAIGHT IN THE CUT BEFORE RESTARTING.**

As you finish a cut, release the trigger and allow the blade to stop before lifting the saw from the work. As you lift the saw, the spring-tensioned telescoping guard will automatically close under the saw. Remember the blade is exposed until this occurs, never reach under the work for any reason whatsoever. When you have to retract the telescoping guard manually (as is necessary for starting pocket cuts) always use the retracting lever.

Pocket Cutting

DISCONNECT PLUG FROM POWER SUPPLY BEFORE MAKING THIS OR ANY OTHER ADJUSTMENT. Adjust saw shoe so blade cuts at desired depth. Tilt saw forward and rest front of the shoe on material to be cut. Using the retracting lever, retract blade guard to an upward position. Lower rear of shoe until blade teeth almost touch cutting line. Now release the blade

guard and its contact with the work will keep it in position to open freely as you start the cut (Figure 19). Start the motor and gradually lower the saw until its shoe rests flat on the material to be cut. Advance saw along the cutting line until cut is completed. Release trigger and allow blade to stop completely before withdrawing the blade from the material. When starting each new cut, repeat as above. Never tie the blade guard in a raised position.



Shoe Alignment (All Saws)

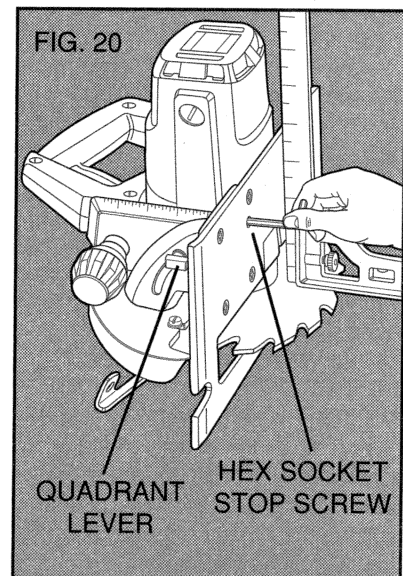
Your saw has been set at the factory for accurate vertical cuts (a 90 degree angle between the bottom of the shoe and the blade). The edge of the shoe has also been set parallel to the blade so that it will not bind when using an edge guide. If the saw should ever need adjusting, it may be done as follows:

Adjusting for 90° Cuts

1. DISCONNECT PLUG FROM POWER SUPPLY.
2. Place saw on blade side (FIG. 20). Retract blade guard.
3. Loosen quadrant lever. FIG. 20. Place a right angle against the blade and shoe to adjust the 90° setting.
4. Adjust the hex socket stop screw with a 5/64" allen wrench so that the shoe will stop at the proper angle.

(SUPER SAWCATS ONLY)

5. It may be necessary to adjust the quadrant angle pointer to line up on "O" after shoe has been adjusted.



Shoe Alignment for Accurate 45 ° Cuts (2680 BUILDER'S SAWCATS ONLY)

(FIG. 21)

1. Loosen quadrant lever. Place a 45 degree angle against the blade & shoe.
2. Adjust the hex screw with a 5/64" allen wrench so that the shoe will stop at proper angle.

Adjusting the Shoe Parallel to the Blade (2680 BUILDER'S SAWCATS)

(FIG. 22)

1. Disconnect plug from power supply.
2. Loosen screws which hold the shoe to the quadrant until the shoe can be moved. Loosen the (2) screws at the adjusting strap at the rear of the blade also.
3. Adjust the shoe until it is parallel to the blade by measuring from the edge of the shoe to the blade, front & rear.
4. When shoe is parallel, tighten all screws.

FIG. 21

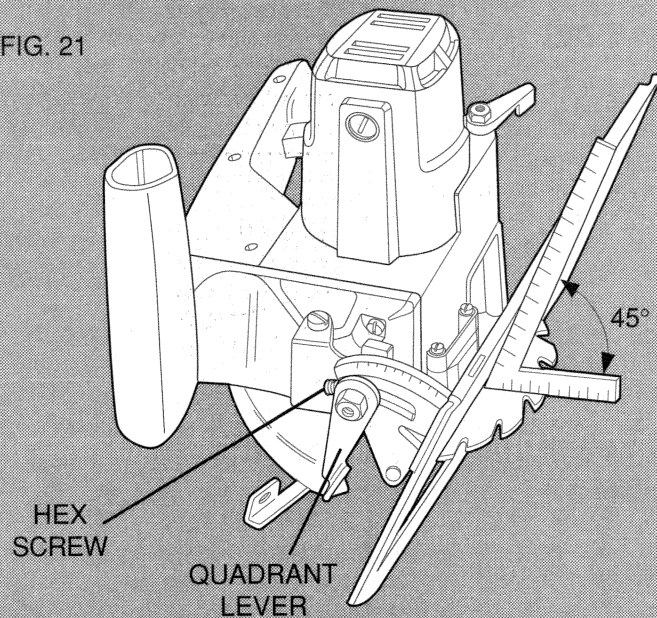
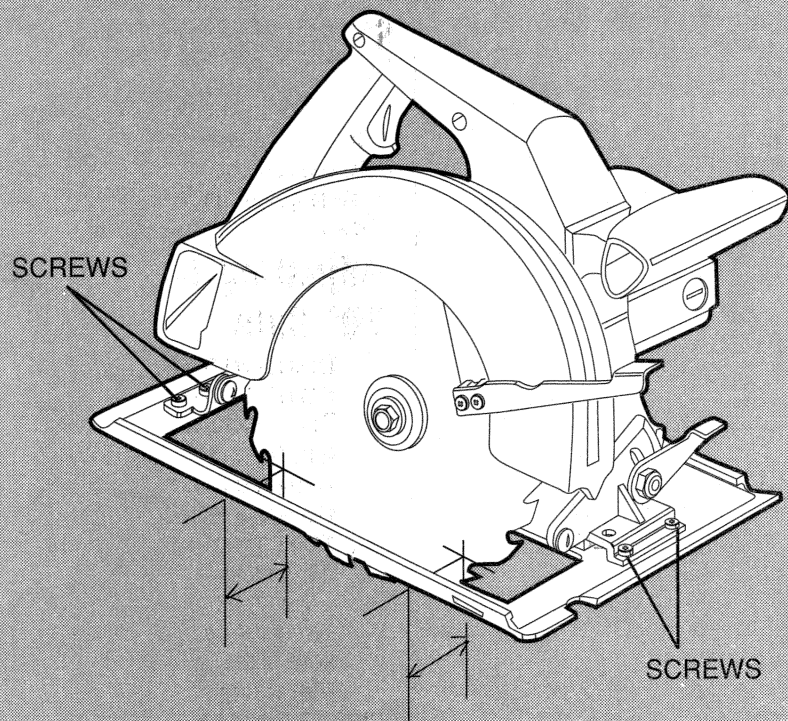


FIG. 22



Super Sawcats

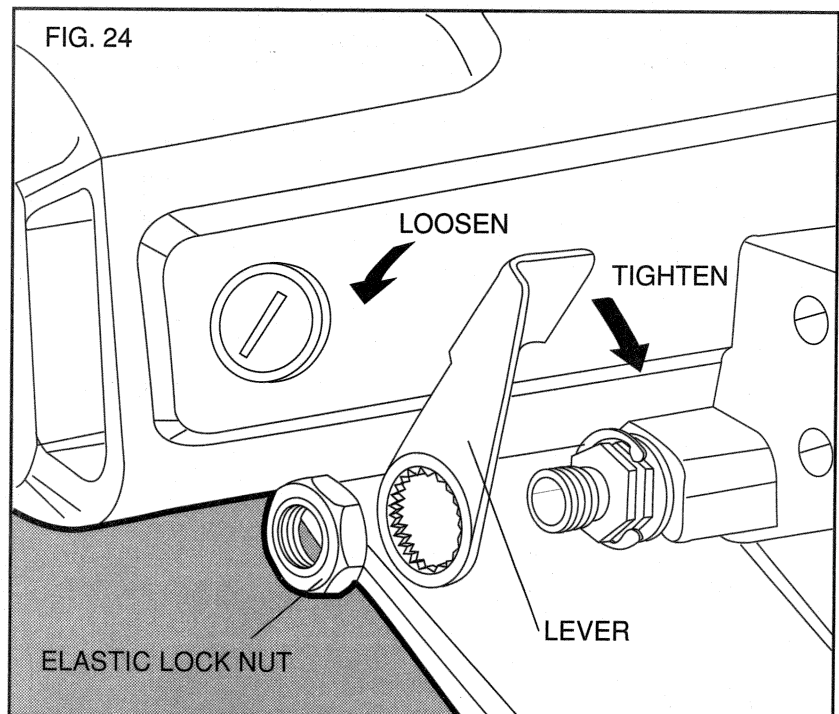
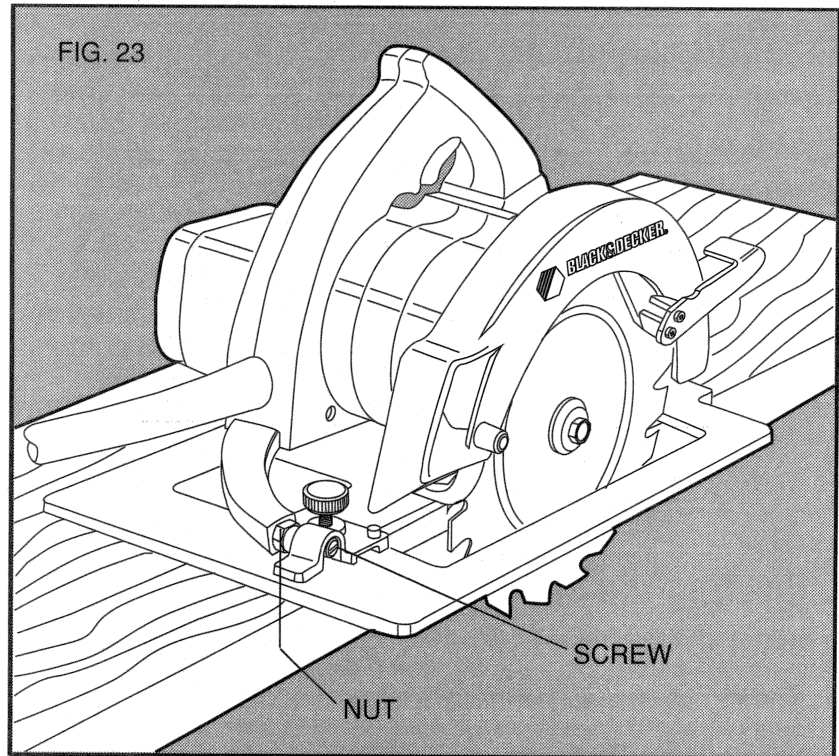
(FIG. 23)

1. Disconnect plug from power supply.
2. Loosen nut and adjust screw until blade is parallel with shoe.
3. Tighten nut against handle support.

Adjusting Depth & Bevel Levers

(FIG. 24)

1. Disconnect plug from power supply.
2. Loosen elastic lock nut.
3. Move lever counter clockwise to next setting on hex nut to tighten. Move clockwise to loosen.
4. Tighten elastic lock nut on lever.



Blades

A dull blade will cause slow, inefficient cutting and an overload on the saw motor. It is a good practice to keep extra blades on hand so that sharp blades are available while the dull ones are being sharpened (See "SAWS-SHARPENING" in the Yellow Pages). In fact, many lower priced blades can be replaced with new ones at very little cost over the sharpening price.

Hardened gum on the blade will slow down the cutting. This gum can best be removed with trichlorethylene, kerosene or turpentine.

Black & Decker manufactures a complete line of saw blades and the following types of blades are available from your dealer.

BLADE TYPE
COMBINATION - For general- purpose ripping and cutting
CROSS-CUT - For smoother, faster cross-cutting
RIPPING - For fast rip cuts
PLYWOOD - For smooth cuts in plywood. Reduce splintering.
FRAMING / RIP - For facing, roofing, siding, sub-flooring, framing, form cutting.
PLANER - For very smooth ripping and cross-cutting.
FRICTION - For cutting corrugated, galvanized sheets.
METAL-CUTTING - For cutting aluminum, copper, lead and other soft metals.
FLOORING - For sawing where nails may be encountered.
CARBIDE-TIPPED - For longest sawing without blade sharpening. Cuts wood, Transite, Cemesto board, Asbestos, Formica, Masonite, and similar materials

The above blades are available in 6 1/2", 7 1/4" & 8" diameters. Use only the sizes identified on the nameplate of your saw.

Accessories

The accessories listed in this manual are available at extra cost from your local dealer or Black & Decker Service Center. A complete listing of service centers is included on the owner's registration card packed with your tool.

If you need assistance in locating any accessory, please contact: Black & Decker (U.S.) Inc., User Services Department, 626 Hanover Pike, P.O. Box 618, Hampstead, MD 21074-0618.

Every Black & Decker tool is of the highest quality. If you wish to contact us regarding this product, please call toll free between 8:00 a.m. and 5:00 p.m. EST, Monday through Friday. 1-800-762-6672

- A. RIP FENCE . . . Attaches to top of Saw shoe. Permits rip cuts without penciled guide line.
- B. SAW PROTRACTOR . . . Guides Saw for accurate cut-off work. Adjusts from 0 to 70 degrees.
- C. CUT-OFF GUIDE . . . For 90 degree or 45 degree cuts.
- D. CARRYING CASE . . . Protects your Saw. Keeps blades, extension cords, etc. handy on the job.

CAUTION: Recommended accessories and saw blades for your Saw are listed in this manual. The use of any other accessory or attachment may be hazardous.

Extension Cords

Tools that have 3 wire cords requiring grounding must only be used with extension cords that have 3-prong grounding type plugs and 3-pole receptacles. Only round jacketed extension cords should be used, and we recommend that they be listed by Underwriters Laboratories (U.L.) (C.S.A. in Canada). If the extension will be used outside, the cord must be suitable for outdoor use. Any cord marked as outdoor can also be used for indoor work.

An extension cord must have adequate wire size (AWG or American wire Gauge) for safety, and to prevent loss of power and overheating. The smaller the gauge number of the wire, the greater the capacity of the cable, that is 16 gauge has more capacity than 18 gauge. When using more than one extension to make up the total length, be sure each individual extension contains at least the minimum wire size.

To determine the minimum wire size required, refer to the chart below:

CHART FOR MINIMUM WIRE SIZE (AWG) OF EXTENSION CORDS

NAMEPLATE RATING-AMPS	TOTAL EXTENSION CORD LENGTH-FEET							
	25	50	75	100	125	150	175	200
0 - 10.0	18	18	16	16	14	14	12	12
10.1 - 13.0	16	16	14	14	14	12	12	12
13.1 - 15.0	14	14	12	12	12	12	12	----

Before using an extension cord, inspect it for loose or exposed wires, damaged insulation, and defective fittings. Make any needed repairs or replace the cord if necessary. Black & Decker has extension cords available that are U.L. (C.S.A. in Canada) listed for outdoor use.

Important!

To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment (excluding maintenance printed in this manual) should be performed by BLACK & DECKER Service Centers or other qualified service organizations, always using BLACK & DECKER replacement parts.

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Commercial/Industrial Use Warranty

Black & Decker (U.S.) Inc. warrants this product for one year from date of purchase. We will repair without charge, any defects due to faulty material or workmanship. Please return the complete unit, transportation prepaid, to any Black & Decker Service Center or Authorized Service Station listed under "tools Electric" in the yellow pages. This warranty does not apply to accessories or damage caused where repairs have been made or attempted by other.



See 'Tools-Electric'
-Yellow Pages-
for Service & Sales



BLACK & DECKER (U.S.) INC., U.S. Power Tools Group, 10 North Park Drive, P.O. 798, Hunt Valley, MD 21030-0798 U.S.A.

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