



BLACK & DECKER®

Instruction Manual
2 Speed Cut-Saw™
3103-04

Thank you for buying a Black & Decker Cut-Saw

If you already own a Black & Decker Power Tool you know the pleasures a high quality, high performance power tool can deliver.

Your new Cut-Saw has been carefully engineered and built to Black & Decker's high standards of quality and dependability. It's built to last for many years of tough, trouble-free service and high quality performance.

So take a few minutes and thoroughly read this instruction manual. Pay particular attention to the Safety Rules we've provided for your protection.

We want you to enjoy your Cut-Saw, and the more you know about it, and its capabilities, the happier you'll be with it.

Thank you for selecting Black & Decker.

And don't forget to mail in your owner's registration card.

IMPORTANT INFORMATION SAFETY RULES FOR POWER TOOLS

1. **KNOW YOUR POWER TOOL** — Read owner's manual carefully. Learn its applications and limitations as well as the specific potential hazards peculiar to this tool.
2. **GROUND ALL TOOLS** — UNLESS DOUBLE-INSULATED. If tool is equipped with three-prong plug, it should be plugged into a three-hole electrical receptacle. Never remove third prong.
3. **KEEP GUARDS IN PLACE** and in working order.
4. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
5. **AVOID DANGEROUS ENVIRONMENT.** Don't expose power tools to rain. Don't use power tool in damp or wet locations. Keep work area well lit.
6. **KEEP CHILDREN AWAY.** All visitors should be kept safe distance from work area.
7. **STORE IDLE TOOLS.** When not in use, tools should be stored in dry, high or locked-up place — out of reach of children.
8. **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was designed.
9. **USE RIGHT TOOL.** Don't force small tool or attachment to do the job of a heavy duty tool.
10. **WEAR PROPER APPAREL.** No loose clothing or jewelry to get caught in moving parts. Rubber gloves and footwear are recommended when working outdoors.
11. **USE SAFETY GLASSES** with most tools. Also face or dusk mask if cutting operation is dusty.
12. **DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges.
13. **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.
14. **DON'T OVERREACH.** Keep proper footing and balance at all times.
15. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp at all times, and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **DISCONNECT TOOLS.** When not in use, before servicing; when changing accessories such as blades, bits, cutters, etc.
17. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
18. **AVOID ACCIDENTAL STARTING.** Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.
19. **OUTDOOR USE EXTENSION CORDS** — When tool is used outdoors, use only extension cords suitable for outdoors and so marked.
20. **DO NOT OPERATE** portable electric tools in gaseous or explosive atmospheres. Motors in these tools normally spark, and the sparks might ignite fumes.

DOUBLE-INSULATION

Your tool is DOUBLE-INSULATED to give you added safety. This means that it is constructed throughout with TWO separate "layers" of electrical insulation or one DOUBLE thickness of insulation between you and the tool's electrical system.

Tools built with this insulation system are not intended to be grounded. As a result, your tool is equipped with a two-prong plug which permits you to use any conventional 120 volt electrical outlet without concern for maintaining a ground connection.

NOTE: DOUBLE-INSULATED does not take the place of normal safety precautions when operating this tool. The insulation system is for added protection against injury resulting from a possible electrical failure within the tool. **CAUTION:** When servicing Double-Insulated Tools, **USE ONLY IDENTICAL REPLACEMENT PARTS.** Replace or repair damaged cords.

MOTOR

Your Black & Decker tool is powered by a B&D-built motor. Be sure your power supply agrees with the nameplate marking.

120 volts 50/60 Hz or "AC only" means your tool must be operated only with alternating current and never with direct current.

Voltage variation 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.

EXTENSION CORDS

Double-insulated tools have 2 wire cords, and can be used with 2 wire or 3 wire extension cords. Only round jacketed extension cords should be used. 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. (The letters "W" on the cord jacket indicate that the cord is suitable for outdoor use.)

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, 14 gauge has more capacity than 16 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:

NAMEPLATE RATING — AMPS*	CHART FOR MINIMUM WIRE SIZE (AWG) OF EXTENSION CORDS								
	TOTAL EXTENSION CORD LENGTH — METRES								
	10	15	20	30	35	45	50	60	
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 CSA Certified for outdoor use.

*If the input rating of a Tool is given in watts rather than in amperes, the corresponding ampere rating is to be determined by dividing the wattage rating by the voltage rating — for example:

$$\frac{1250 \text{ watts}}{125 \text{ volts}} = 10 \text{ amperes}$$

SAVE THESE INSTRUCTIONS

ADDITIONAL SAW SAFETY RULES

1. **KEEP HANDS AWAY** from cutting area. Never reach underneath the material for any reason.

Hold front of saw by grasping the contoured gripping area. Do not insert fingers or thumb into the vicinity of the reciprocating blade and blade clamp.

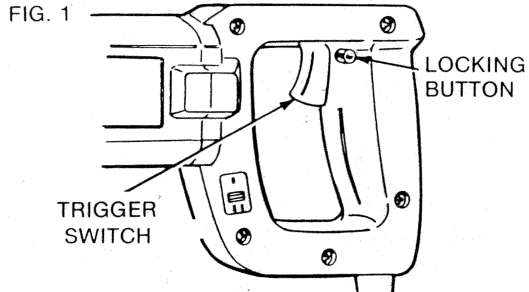
Do not stabilize saw by gripping the shoe.

2. **KEEP BLADE SHARP.** Dull blades may cause the saw to swerve or stall under pressure.

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 Cut Saw only by its plastic handle to prevent electric shock if you should saw into a "live" wire.

SWITCH (ON-OFF) (FIG. 1)

Depress the Trigger Switch to turn tool "ON". Releasing the trigger turns tool "OFF". To lock the trigger switch in the "ON" position for continuous operation, depress the trigger, push in locking button on left side of handle and then release the trigger. To release locking mechanism, depress trigger fully, then release it.

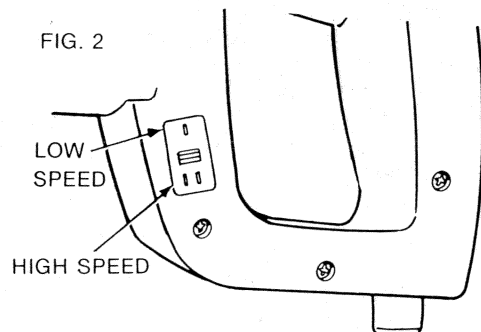


TWO-SPEED (DUAL RANGE) SWITCH (FIG. 2)

The 2-Speed Heavy-Duty Cut-Saw offers a choice of speeds for greatly improved cutting rates in various materials. Note that the High-Speed setting is more efficient in softer materials such as wood, while the Low-Speed is best for cutting metals.

LOW SPEED (Move slide switch to show (I) bar). For cutting sheet metal, metal pipe, metal conduit, etc.

HIGH SPEED (Move slide switch to show (II) bar). For cutting wood, plastic, composition boards and other similar materials.



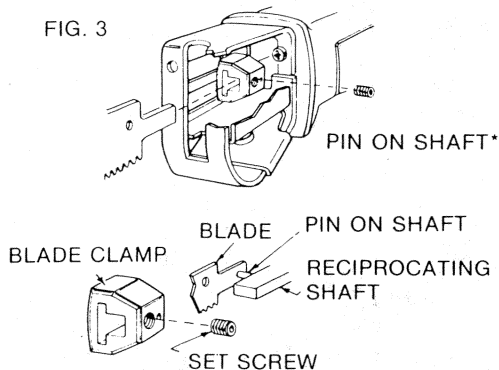
BLADE CLAMPING (FIG. 3)

To install blade into saw:

1. Loosen set screw.
2. Insert blade shank from the front between the reciprocating shaft and the blade clamp. Locate hole in blade over pin on reciprocating shaft.
3. Tighten set screw.

If the blade should break off and the shank does not come out of the clamp, be sure the set screw is loose and eject the shank with a nail or pointed object.

NOTE: A special pin holds the blade clamp on the reciprocating shaft to prevent the clamp from coming off when set screw is loosened.



FLUSH-TO CUTTING (FIG. 4)

The exclusive, compact design of the Cut-Saw motor housing and spindle housing permits extremely close cutting to floors, corners and other difficult areas.

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 tool only by the plastic handle and housing to prevent electric shock if you saw into a "live" wire.

CAUTION: Always wear eye protection while operating this Black & Decker power tool.

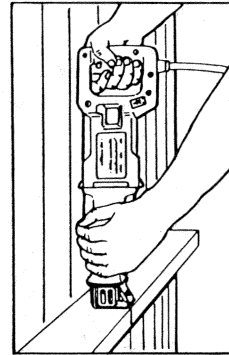


FIG. 4

WOOD CUTTING (FIG. 5)

Before cutting any type of wood, be sure it is firmly anchored or clamped to prevent slipping. Check blade chart on next page for type and length of blade necessary for best results. Place blade lightly against work to be cut, switch on saw motor and allow it to obtain maximum speed before applying pressure. Always hold saw firmly with both hands while cutting. Whenever possible, the saw shoe must be held firmly against the material being cut. This will prevent the saw from jumping or vibrating and minimize blade breakage.

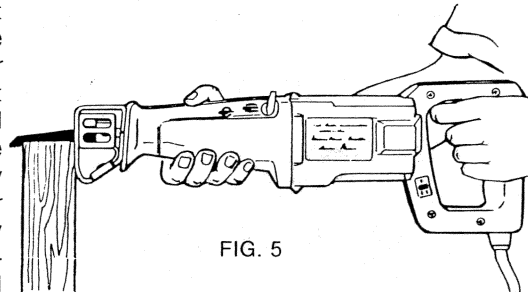


FIG. 5

METAL CUTTING (FIG. 6)

This unit has different metal cutting capacities depending upon type of blade used and on the metal to be cut. Please check Blade Chart on next page for better blade selection. Use a finer blade for ferrous metals and a coarse blade for non-ferrous materials. In thin gage sheet metals it is best to clamp wood to both sides of sheet. This will insure a clean cut without excess vibration or tearing of metal. Always remember not to force cutting blade as this reduces blade life and causes costly blade breakage.

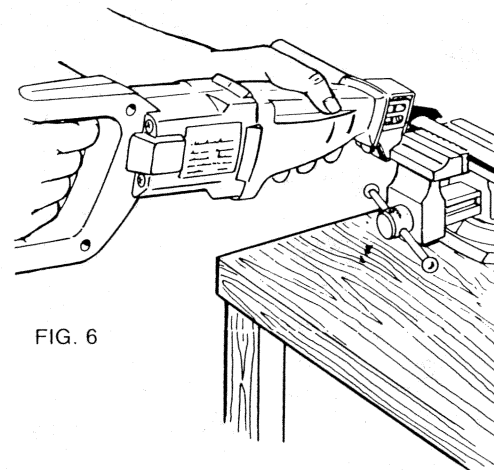


FIG. 6

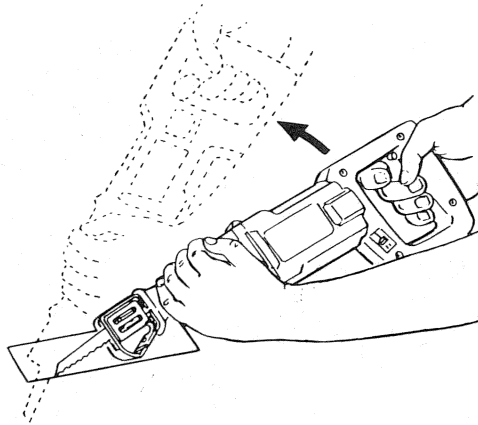
NOTE: It is generally recommended that when cutting metals you should spread a thin film of oil or other coolant along the line ahead of the saw cut for easier operation and longer blade life. For cutting aluminum, kerosene is preferred.

POCKET CUTTING (FIG. 7) (WOOD ONLY)

The initial step in pocket cutting is to measure the surface area to be cut and mark clearly with a pencil, chalk or scribe. Insert pocket cutting blade in blade clamp, and tighten blade clamp securely. Next, tip the saw backward until the back edge of the shoe is resting on the work surface. Now switch motor on, always permitting blade to attain maximum speed. Grip handle steadily and begin a slow, deliberate upward swing with the handle of the saw. Blade will begin to feed in to material. Always be sure blade is completely through material before continuing with pocket cut.






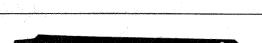




NOTE: In areas where blade visibility is limited, use the edge of the saw shoe as a guide. Lines for any given cut should be extended beyond edge of cut to be made.









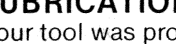
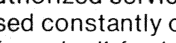


FIG. 7
ROCK TOOL UP TO NORMAL
CUTTING POSITION AFTER BLADE
HAS CUT THROUGH MATERIAL



STARTING POSITION FOR POCKET CUTTING

CUT-SAW BLADE SELECTION CHART

BLADE TYPE	LENGTH	TEETH PER INCH	APPLICATION	AMOUNT PER PKG.	
ALL PURPOSE WOOD & COMPOSITION BLADES					
	GENERAL PURPOSE	6"	7	General roughing in. Resists nails. Cuts heavy gauge, non-ferrous metal tubing. Ideal for tree pruning.	10 5
	SKIPTOOTH	6"	3	Cuts up to 3/4" plywood, plastics. Extra space for chip clearance.	10 5
	FAST WOOD CUTTING	12"	3		
	DELUXE FAST-CUTTING	6"	6	Fast roughing-in wood without nails. Long blade life.	10
	FLEXIBLE-BACK WOOD AND COMPOSITION	6"	6	Cuts wood without nails, plaster, asphalt, "Transite," and cast aluminum. For inaccessible flush cuts in wood, use 12" blade.	10 5
	NAIL EMBEDDED WOOD CUTTING	4" 6"	10 10	Cuts nail embedded wood, asbestos, plaster, plywood and insulating wool.	10 10
	DOWN CUTTING	6"	10	For down cutting in wood with nails where smooth edges are required.	10
	FINE WOOD	4"	18	Useful for opening wood boxes and crates with nails. Removing 10 wood siding and shingles.	10
	POCKET CUTTING	4 3/32"	6	Pocket cuts in wood, plaster and similar materials.	10
SCROLL CUTTING WOOD & COMPOSITION BLADES					
	FAST CUTTING SCROLL	3 5/8"	6	Fast cutting small radius holes, irregular cuts in wood, plaster and similar materials. Long life high speed steel blade.	10

	WOOD AND COMPOSITION SCROLL CUTTING	AND 3 5/8"	6	Makes small radius holes and irregular cuts in wood, plaster and similar materials.	10
HIGH SPEED STEEL/METAL CUTTING BLADES					
	FAST METAL CUTTING	2 3/4"	14	Cuts metals heavier than 1/8" (barstock, angles, fiber "Transite", hand rubber, etc.)	10
	METAL CUTTING	4"	14		10
	FAST METAL CUTTING	6"	14		10
	FAST METAL CUTTING	2 3/4"	18	Cuts metals heavier than 18 gauge (pipe conduit, channels, tubing, etc.)	10
	METAL CUTTING	4"	18		10
	METAL CUTTING	6"	18		10
	FAST METAL CUTTING	4"	24	Cuts metals lighter than 18 gauge (sheet, tubing, trim, etc.)	10
	FAST METAL CUTTING	6"	24		10
	FAST METAL CUTTING	4"	32	Cuts very light gauge metals (sheet, tubing, trim, etc.)	10
	FAST SCROLL METAL CUTTING	3"	14	Cuts irregular contours in sheet metal heavier than 18 gauge.	10
		3"	18		10
		3"	32		10
BI-METAL BLADES (COLOUR CODED WHITE)					
	BI-METAL	6"	7	Roughing-in wood cutting. Fast cutting and longer life when cutting heavy gauge metal.	10
		4"	10		10
		4"	14		10
		4"	18		10
		4"	24		10
		6"	14		10
		6"	18		10

LUBRICATION

Your tool was properly lubricated before leaving the factory. In from two to six months, depending upon use, take or send your tool to a Black & Decker Service Centre or authorized service station, for a complete cleaning, inspection and lubrication. Tools used constantly on production jobs will need relubrication more often. Also, tools "out of service" for long periods should be relubricated before being put back to work.

ACCESSORIES

The accessories listed in this manual are available at extra cost from your local Black & Decker Service Centre. A complete listing of service centres is included on the depot listing card packed with your tool.

If you need assistance in locating any accessory, please contact: User Services, Black & Decker Canada Inc., 100 Central Ave., Brockville, Ont. K6V 5W6.

CAUTION: The use of any other accessory or attachment other than those recommended in this manual may be hazardous.

CAUTION

To assure product SAFETY and RELIABILITY, repairs, maintenance (excluding brush inspection and replacement) and adjustment should be performed by BLACK & DECKER Service Centres or other qualified service organizations, always using BLACK & DECKER replacement parts.

ONE YEAR WARRANTY — PROFESSIONAL

Black & Decker warrants for one year from date of purchase to correct by repair or parts replacement without charge, any product defect due to faulty material or workmanship in professional heavy-duty and air tools, home workshop tools used in commercial service, professional stationary tools, or tools used in rental service. Simply return the complete unit, transportation prepaid to any Black & Decker Service Center or Authorized Service Station. Black & Decker assumes no responsibility for damage or faulty performance caused by misuse, careless handling, or where repairs have been made, or attempted by others. No other warranties, written or verbal, are authorized.

Note: This warranty and related provisions set out above may not be applicable in certain provinces.

BLACK & DECKER CANADA INC., BROCKVILLE, ONTARIO K6V 5W6

Form No. 3027225100

(JUL89-CD-1) ©1989 Black & Decker Printed in U.S.A.