

# **Instruction Manual**

**Cut-Saws  
2-Speed  
Variable Speed**

# IMPORTANT SAFETY INSTRUCTIONS (FOR ALL TOOLS)

**WARNING:** When using Electric Tools, basic safety precautions should always be followed to reduce the 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. **REMOVING 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 damaged 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.

## 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" electric 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 saw into a "live" wire.

3. Some wood contains preservatives such as copper chromium arsenate (CCA) which can be toxic. When cutting or sanding these materials extra care should be taken to avoid inhalation and minimize skin contact.

### SAVE THESE INSTRUCTIONS



**BLACK&DECKER®**

### Double Insulation

DOUBLE-INSULATED tools are 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 extension cords without concern for maintaining a ground connection.

**NOTE:** DOUBLE INSULATION 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 insulation failure within the tool.

**CAUTION:** When servicing all tools, **USE ONLY IDENTICAL REPLACEMENT PARTS.** Repair or replace damaged cords.

### 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, 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. The letters "WA" 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 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.

## SAVE THESE INSTRUCTIONS

### 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.

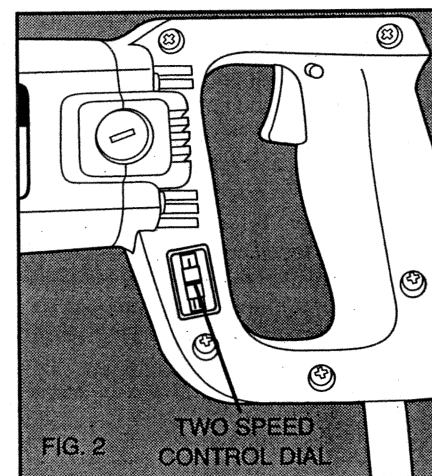
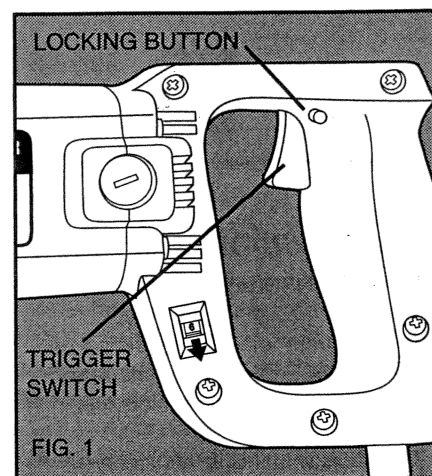
### Switch (Variable Speed)

The Variable Speed Trigger Switch will give you added versatility. The further the trigger is depressed the higher the speed of the Cut-Saw. To turn the tool "OFF" release the trigger. To lock the Trigger Switch in the "ON" position for continuous operation, depress the trigger, push in the Lock Button on the left side of the handle and then release the trigger. To release Locking mechanism, depress trigger fully, then release it.

**CAUTION:** Use of very slow speed is recommended only for beginning a cut. Prolonged use at very slow speed may damage your Black & Decker Cut-Saw.

### Switch Two-Speed (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.

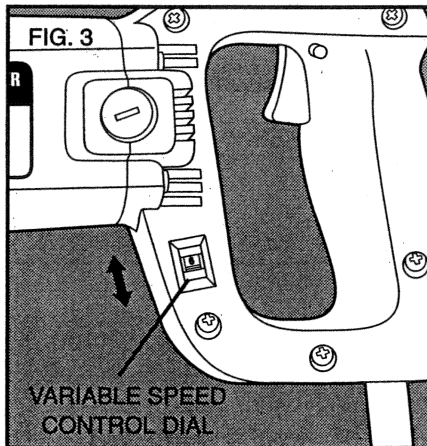
**HIGH SPEED** (Move slide switch to show (II) bar). For cutting wood plastic, composition boards and other similar materials.

### Variable Speed Control Dial (Fig. 3)

The Variable Speed Control Dial on your saw sets the upper limit for the variable speed trigger switch described above (the lower limit is always 0). The range of selection is from a maximum of 1700 strokes per minute to a maximum of 2400 strokes per minute.

The numbers 1 through 6 appear on the outer rim of the dial to serve as reference points. The numbers are not indicative of any speed except that the number 6 represents the highest maximum speed (2400) and the number 1 represents the lowest maximum speed (1700).

Rotate the dial to set the maximum speed desired. When the trigger switch is squeezed all the way, the speed that you have set with the dial is the maximum speed of the tool.



Remember that speed control is still the function of the trigger switch. No matter what limit you set with the dial the variable speed trigger switch will operate from 0 to the maximum.

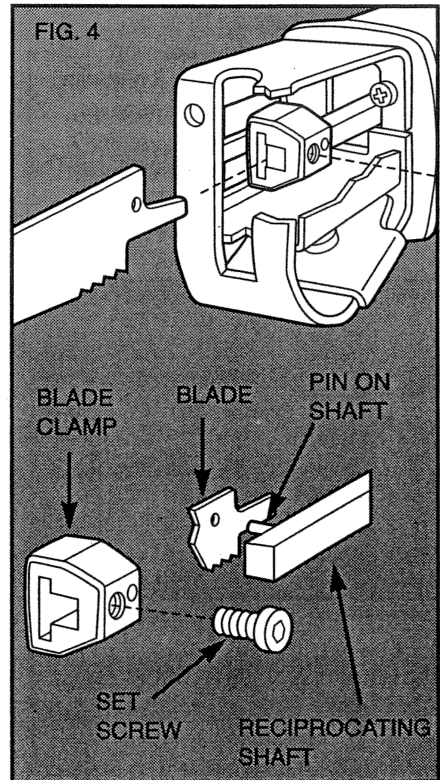
### Blade Clamping (Fig. 4)

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

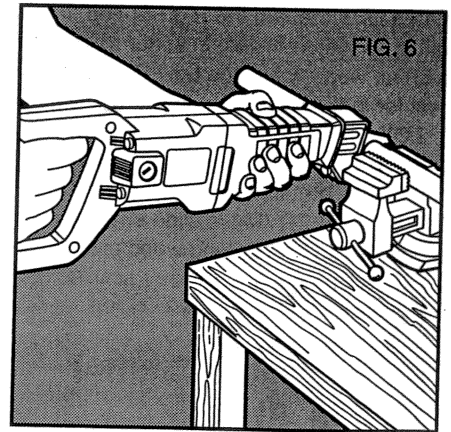
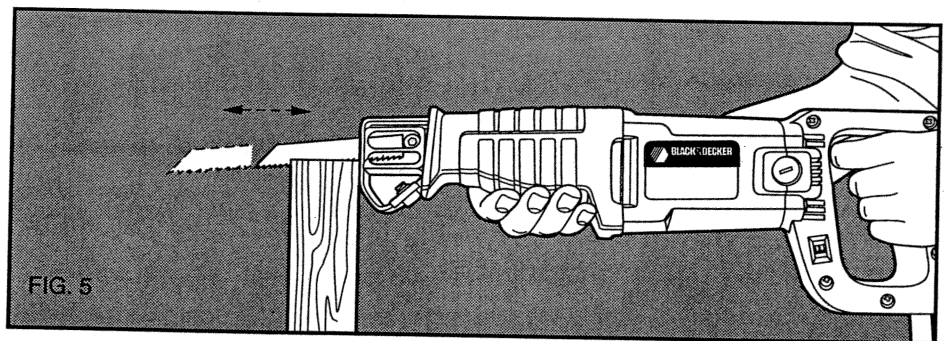
The exclusive, compact design of the Cut-Saw motor housing and spindle housing permit extremely close cutting to floors, corners and other difficult areas.

**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 when operating this Black & Decker power tool.

## Wood Cutting (Fig. 5)

Before cutting any type of wood, be sure it is firmly anchored or clamped to prevent chipping. Check blade chart on page 8 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.



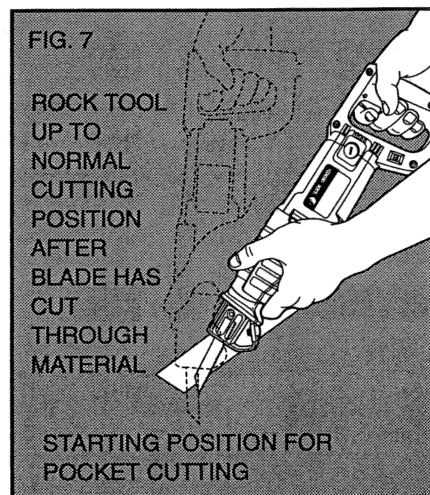
## Metal Cutting (Fig. 6)

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 page 8 for better blade selection. Use a finer blade for ferrous metals and a coarse blade for non-ferrous materials. In thin gauge 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 to avoid forcing cutting blade as this reduces blade life and causes costly blade breakage.

**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 into 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.

## Lubrication

Your tool was properly lubricated before leaving the factory. Once per year take or send your tool to a Black & Decker Service Center, 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.











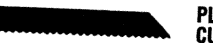
## Accessories

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

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


























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

## Cut-Saw Blade Selection Chart (also see page 9)

BLADE TYPE	LENGTH	TEETH PER INCH	APPLICATION	AMOUNT PER PKG.	COLOR	
<b>ALL PURPOSE WOOD &amp; COMPOSITION BLADES</b>						
	GENERAL PURPOSE	6"	7	General roughing-in. Resists nails. Cuts heavy gauge, non-ferrous metal tubing. Ideal for tree pruning.	10	ALUMINIUM
		12"	7		5	ALUMINIUM
	SKIPTOOTH	6"	3	Cuts up to 3/4" plywood, plastics.	10	PURPLE
	FAST WOOD CUTTING	12"	3	Extra space for chip clearance.	5	PURPLE
	DELUXE FAST-CUTTING	6"	6	Fast roughing-in without nails. Long blade life.	10	BLACK
	FLEXIBLE-BACK WOOD AND COMPOSITION	6"	6	Cuts wood without nails, plaster, asphalt, "Transite," and cast aluminium. For inaccessible flush cuts in wood, use 12" blade.	10	BLACK
		12"	6		5	ORANGE
	NAIL EMBEDDED WOOD CUTTING	4"	10	Cuts nail embedded wood, plaster, plywood and insulating wool. Use 10" blade for flush cutting screws and nails.	10	BLACK
		6"	10		10	BLACK
		10"	10		10	BLACK
	DOWN CUTTING	6"	10	For down cutting in wood with nails where smooth edges are required.	10	BLACK
	FINE WOOD CUTTING	4"	18	Useful for opening wood boxes and crates with nails. Removing wood siding and shingles.	10	BLACK
		6"	18		10	BLACK
	POCKET CUTTING	43/32"	6	Pocket cuts in wood, plaster and similar materials.	10	BLACK
	DOUBLE EDGE	45/16"	6	Pocket cuts in wood, plaster and similar materials, cuts both directions without removing blade from material.	5	ORANGE
	OFFSET FLUSH DOUBLE EDGE	4 1/4"	6	Flush cuts in corners and tight spots in wood, plaster and similar materials.	5	BLACK
	PLASTER CUTTING	6	5	Cuts plaster, plaster board and other abrasive materials.	10	WHITE
		4 1/4"	5		10	WHITE



## Cut-Saw Blade Selection Chart (also see page 8)

BLADE TYPE	LENGTH	TEETH PER INCH	APPLICATION	AMOUNT PER PKG.	COLOR
<b>SCROLL CUTTING WOOD &amp; COMPOSITION BLADES</b>					
	<b>FAST CUTTING SCROLL</b>	3 5/8"	6	Fast cutting small radius holes, irregular cuts in wood, plaster and similar materials. Long life high speed steel blade.	10 BLACK
	<b>WOOD AND COMPOSITION SCROLL CUTTING</b>	3 5/8"	6	Makes small radius holes and irregular cuts in wood, plaster and similar materials.	10 GRAY
<b>HIGH SPEED STEEL/METAL CUTTING BLADES</b>					
	<b>FAST METAL CUTTING</b>	2 3/4"	14	Cuts metals heavier than 1/8" (barstock, angles, fiber "Transite," hand rubber, etc.).	10 RED
		4"	14		10 RED
		6"	14		10 RED
	<b>FAST METAL CUTTING</b>	2 3/4"	18	Cuts metals heavier than 18 gauge (pipe conduit, channels, tubing, etc.).	10 RED
		4"	18		10 RED
		6"	18		10 RED
	<b>FAST METAL CUTTING</b>	4"	24	Cuts metals lighter than 18 gauge (sheet, tubing, trim, etc.).	10 RED
		6"	24		10 RED
	<b>FAST METAL CUTTING</b>	4"	32	Cuts very light gauge metals (sheet, tubing, trim, etc.).	10 RED
	<b>FAST SCROLL METAL CUTTING</b>	3"	14	Cuts irregular contours in sheet metal heavier than 18 gauge.	10 YELLOW
		3"	18		10 RED
		3"	32		10 RED
<b>BI-METAL BLADES</b>					
	<b>BI-METAL</b>	6"	7	Roughing-in wood cutting. Fast cutting and longer life when cutting heavy gauge metal.	10 GOLD
		4"	10		10 GOLD
		4"	14		10 GOLD
		4"	18		10 GOLD
		4"	24		10 GOLD
		6"	14		10 GOLD
	6"	18	10 GOLD		
<b>CARBIDE TIPPED BLADES</b>					
	<b>CARBIDE TIPPED</b>	4"	6	Cuts fiberglass and similar material and all types of wood. Rapid cutting for production.	1 SILVER
		6"	6		1 SILVER
<b>CARBIDE COATED BLADES</b>					
	<b>CARBIDE COATED</b>	4"	Coarse	Cuts fiberglass polyesters, epoxies, melamines, silicones, cement, nail embedded wood and plaster with nails.	10 BLACK
		6"	Coarse		10 BLACK

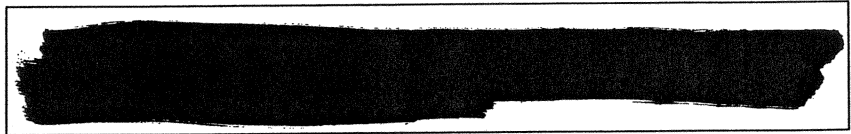
**Notes**

## Caution

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

## 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 others.



Like most Black & Decker products your tool is listed by Underwriters Laboratories to ensure that it meets stringent safety requirements.

This symbol on the nameplate means the product is listed by Underwriters' Laboratories, Inc.



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



Black & Decker (U.S.) Inc., U.S. Power Tools Group, 701 E. Joppa Road, Towson, MD 21286 U.S.A.  
3102/3103/3105/3110/6825

Form No. 446079-05  
Copyright © 1992, 1993 Black & Decker  
(AUG93-CD-11)  
Printed in U.S.A.