



# **Instruction Manual**

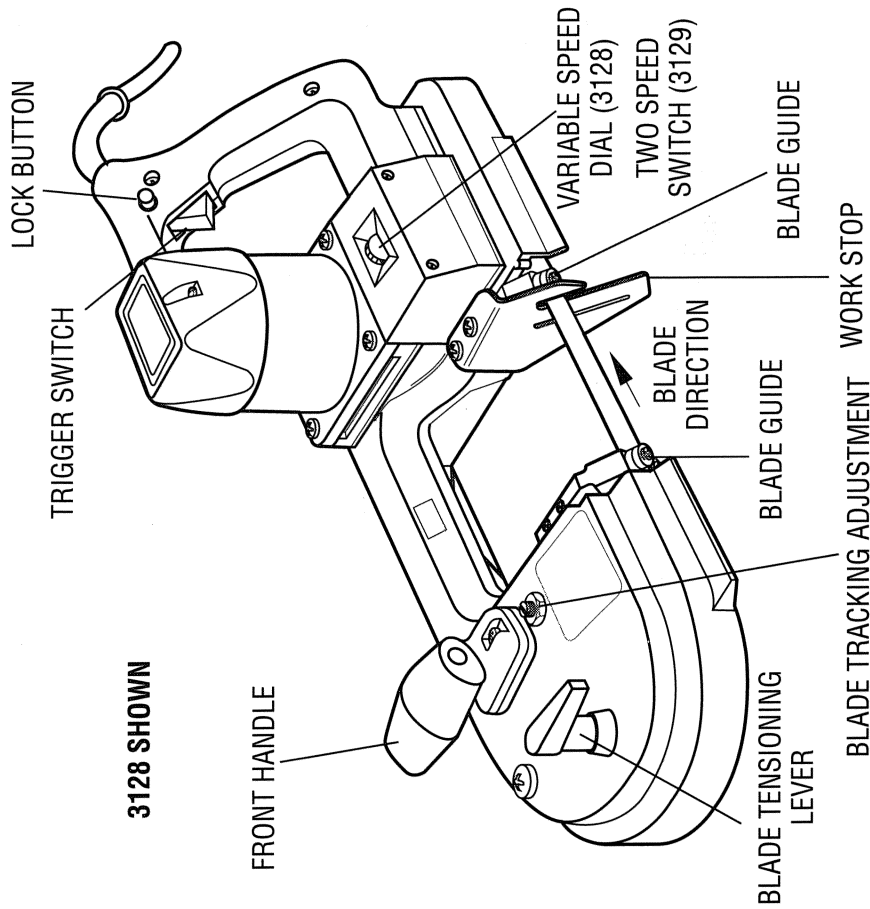
## **3128 Variable Speed Band Saw**

## **3129 Two Speed Band Saw**

## Getting the most out of your tool.

Please take time to read this manual and pay particular attention to the safety rules we've provided for your protection. If you have any questions about your tool please call:

**1-800-9-BD TOOL**  
**(1-800-923-8665)**



# IMPORTANT SAFETY INSTRUCTIONS

**IMPORTANT:** Please make certain that the person who is to use this equipment carefully reads and understands these instructions before starting operations.

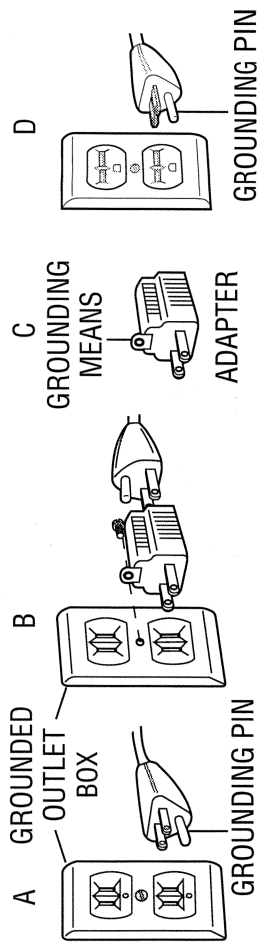
**WARNING:** When using electric tools, basic safety precautions should always be followed to reduce risk of fire, electric shock, and personal injury, including the following:

## READ AND FOLLOW ALL INSTRUCTIONS

### Grounding Instructions

This tool should be grounded while in use to protect the operator from electric shock. The tool is equipped with a 3-conductor cord and 3-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 intended for use on less than 150 V, it has a plug that looks like that shown in sketch A. If it is for use on 150 to 250 V, it has a plug that looks like that shown in sketch B. An adapter, sketches B and C, is available for connecting sketch A type plugs to 2-prong receptacles. The green-colored rigid ear, lug, or the like, extending from the adapter must be connected to a permanent ground, such as a properly grounded outlet box. No adapter is available for a plug as shown in sketch D. **ADAPTER SHOWN IN FIGURES B and C IS NOT FOR USE IN CANADA.** Use only 3-wire extension cords that have 3-prong grounding-type plugs and 3-pole receptacles that accept the tool's plug. Replace or repair damaged cords.

In all cases make sure the receptacle in question is properly grounded. Never remove grounding prong from power plug.



## Safety Instructions For All Tools

- **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite injuries.
- **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. Avoid chemical or corrosive environment. Do not use tool in presence of flammable liquids or gases.
- **GUARD AGAINST ELECTRIC SHOCK.** Prevent body contact with grounded surfaces. For example; pipes, radiators, ranges, and refrigerator enclosures.
- **KEEP CHILDREN AWAY.** Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.
- **STORE IDLE TOOLS.** When not in use, tools should be stored in dry, and high or locked-up place — out of reach of children.
- **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was intended.
- **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 — do not use a circular saw for cutting tree limbs or logs.
- **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.
- **USE SAFETY GLASSES.** Also use face or dust mask if operation is dusty. All persons in the area where power tools are being operated should also wear safety glasses and face or dust mask.
- **DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges. Have damaged or worn power cord and strain relief replaced immediately. **DO NOT ATTEMPT TO REPAIR POWER CORD.**
- **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.
- **DON'T OVERREACH.** Keep proper footing and balance at all times.
- **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safer 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.

- **DISCONNECT OR LOCK OFF TOOLS** when not in use, before servicing, and when changing accessories, such as blades, bits, cutters.
- **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- **AVOID UNINTENTIONAL STARTING.** Don't carry tool with finger on switch. Be sure switch is off when plugging in.

- **EXTENSION CORDS.** Use only three-wire extension cords which have three prong grounding-type plugs and three-pole receptacles which accept the tool's plug. Replace or repair damaged or worn cord immediately. **DO NOT ATTEMPT TO REPAIR POWER CORD.** Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The following table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

### Minimum Gage for Cord Sets

Volts	Total Length of Cord in Feet	
120V	0-25	51-100
240V	0-50	101-200
		201-300

### Ampere Rating

More Than	Not more Than	AWG
0	6	18
6	10	16
10	12	16
12	16	14
		12
		Not Recommended

- **OUTDOOR USE EXTENSION CORDS.** When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
- **STAY ALERT.** Watch what you are doing. Use common sense. Do not operate tool when you are tired.
- **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.

## **SAVE THESE INSTRUCTIONS**

### **Additional Safety Rules - Portable Band Saws**

1. **DISCONNECT PLUG** from power supply before changing blades, inspecting, cleaning or when saw is not being used.
2. **KEEP HANDS AWAY** from cutting area.
3. **WHEN SAWING** never reach underneath the material for any reason.
4. **KEEP BLADE SHARP**. Dull blades may cause the saw to swerve or stall under pressure.
5. **IF YOU DROP THE SAW**, unplug it first; then check all external parts including blade and blade guard. Repair or replace damaged parts before using saw.
6. **KEEP BLADE GUARD** in place and in working order.
7. **ALWAYS USE WORKSTOP**.
8. **NEVER OPERATE BAND SAW WITHOUT HOLDING IT WITH BOTH HANDS**.
9. **MAKE SURE** that material to be cut is firmly held to prevent movement.
10. **STAY CLEAR** of end pieces that may fall after cutting off.
11. **NEVER USE** liquid coolants with portable band saws.
12. **WARNING:** Exercise extreme caution when cutting blind into conduit and pipe. Be sure the object being cut does not contain electrical wires, gases, or water, etc., which could create hazardous conditions causing personal injury and property damage.
13. **WEAR EAR PROTECTION** to safeguard against possible hearing loss.
14. **CAUTION:** Wear safety glasses while using compressed air.

15. **WARNING:** EXERCISE EXTREME CARE TO PREVENT HANDS FROM CONTACTING THE BLADE.

16. **CAUTION:** Do not operate your tool on a current on which the voltage is not within correct limits. Do not operate tools rated A.C. only on D.C. current. To do so may seriously damage the tool.

## **SAVE THESE INSTRUCTIONS**

**CAUTION:** When being used on job sites where arc or resistance welding is being performed, the cord set on this tool could be damaged by heavy welding currents using the cord as a parallel return path. To maintain the protection the ground wire provides, the cord should be inspected frequently and replaced as necessary. Avoid unnecessary contact between the metallic exterior of the tool and grounded conductive surfaces.

## **Motor**

Be sure your power supply agrees with the voltage marked on the nameplate. Volts AC 60Hz means alternating current only. Volts AC/DC 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 line for blown fuses and the plug and receptacle for proper contact.

**CAUTION:** Do not operate your tool on a circuit on which the voltage is not within correct limits. To do so may seriously damage the tool.

## **READ AND FOLLOW ALL INSTRUCTIONS**

There are certain applications for which this tool was designed. Black & Decker strongly recommends that this tool NOT be modified and/or used for any application other than for which it was designed. If you have any questions relative to its application, DO NOT use the tool until you have call Black & Decker (1-800-9-BD TOOL) and we have advised you.

This band saw is designed to cut various types of material up to 4-3/4" diameter or 4-1/2" x 4-3/4" rectangular shape.

## Starting the Saw (3128)

Your portable band saw is equipped with a variable speed switch for greater versatility.

Turn the speed dial, shown in Figure 1, to select the desired speed.

To turn the tool ON, squeeze the trigger switch shown in Figure 1. To turn the tool OFF, release the trigger switch. A lock button, Figure 1, is provided to keep the saw running without holding the switch trigger "ON." To lock the switch trigger "ON," squeeze the trigger as far as it will go and push in the lock button and release trigger.

See page 4 "TOOL SPEED AND BLADE SELECTION CHART" for additional information.

## Starting the Saw (3129)

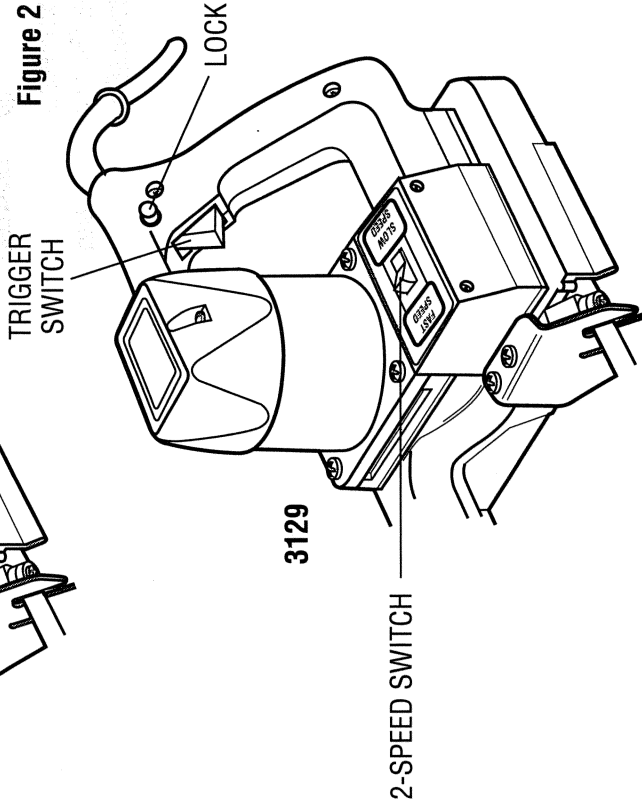
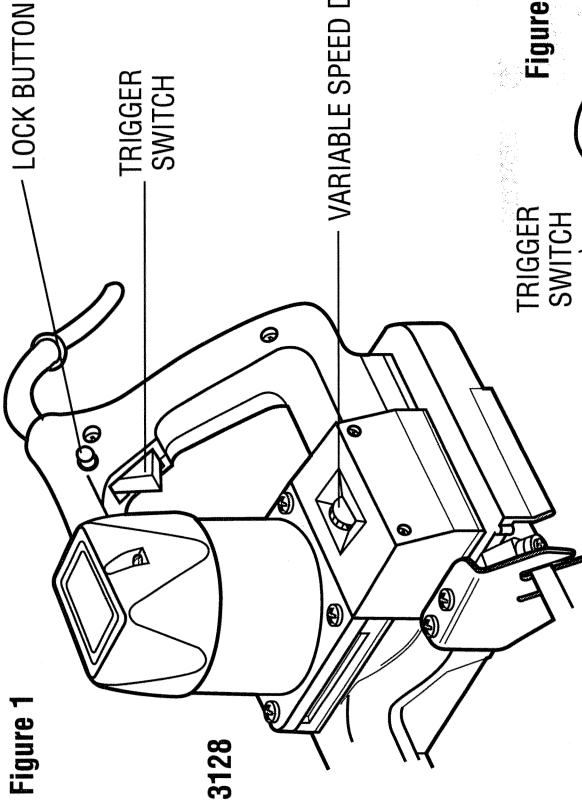
Your portable band saw has a two speed switch that allows you to select either high speed or low speed depending upon the job you will be performing. The chart on page 4 tells you which speed is best for various materials. To select high speed, turn off the saw and push the switch toward "high" and for low speed, push the switch to "low".

To turn the saw ON, squeeze the trigger switch shown in Figure 2. To turn the tool OFF, release the trigger switch.

## Speed Selection

When cutting copper, brass, bronze, aluminum, plastic pipe, cast iron, angle iron, and mild steel, use high speed. Rotate the speed dial to position number 6 when using the 3128 saw, and switch to the "High" position if you are using the 3129.

When cutting tougher steels, chrome steel, tungsten steel and other problem



materials, use low speed. Rotate the speed dial to position number 4 when using the 3128 saw, and switch to the "Low" position if you are using the 3129.

### Blades

The portable band saw uses only blades that are .020" thick, 1/2" wide and 44-7/8" long.

**CAUTION:** The use of any other blade or accessory might be hazardous. DO NOT use any other type of accessory with your band saw. Blades used on stationary band saws are of different thickness. Do not attempt to use them on your portable unit.

### Blade Selection

In general, first consider the size and shape of the work, and the type of material to be cut. Remember, for the most efficient cutting, the coarsest tooth blade possible should be used in a given application, because the coarser the tooth, the faster the cut. And, as a rule of thumb, soft materials usually require coarse tooth blades, while hard materials require fine tooth blades.

For thick materials, coarse tooth blades work best because the large gullets allow room for the long chips. You'll avoid the chip welding that fine tooth blades cause when the material is too thick.

For thin materials or sections, at least two teeth should be in the cut. So use fine tooth blades in these applications such as tubing, pipe, thin flat stock, extrusions with thin webs.

Where a smoother finish is important, select one of the finer tooth blades.

TOOL SPEED AND BLADE SELECTION CHART

Material thickness or wall thickness	Copper, Brass Bronze, Aluminum, Plastic, Pipe, Cast Iron, Mild Steel, Angle Iron	Tougher Steels, Chrome & Tungsten Steel, Other Problem Materials
5/16" and larger	10 tooth blade Use High Speed*	10 tooth blade Use Low Speed*
5/32" to 1/2"	14 tooth blade Use High Speed	14 tooth blade Use Low Speed
1/8" to 3/8"	18 tooth blade Use High Speed	18 tooth blade Use Low Speed
3/32" to 3/16"	24 tooth blade Use High Speed	24 tooth blade Use Low Speed

\*When using the variable speed saw, select number 4 on the speed dial for low speed. select number 6 for high speed.

## Changing Blades

1. Turn off and unplug the saw.
2. Rotate the blade tensioning lever clockwise until it stops, as shown in Figure 3, to release tension in blade.
3. Turn the saw over and place it on a workbench or table with the cord to the left, as shown in Figure 4.
4. Remove the blade from the pulleys first and then from the blade guides. **SAW BLADES ARE SHARP. USE CARE IN HANDLING THEM.**
5. Inspect the blade guides, shown in Figure 5 and remove any large chips which may be lodged in them. Lodged chips can prevent rotation of the roller guides and cause flat spots on the rollers.
6. Wipe any chips from the rubber tires on the pulleys. This will extend tire life and keep the blade from slipping.
7. Install the new blade as follows:

- A. Position the blade so that the teeth are on the bottom and angled toward the work stop, as shown in Figure 6.
- B. Slip the blade into the blade guides, as shown in Figure 7.
- C. Holding the blade in the guides, place it around both pulleys and through the guard, as shown in Figure 8.
- D. Make sure that the blade is fully inserted into the blade guides (against the back edge support rollers shown in Figure 9), and positioned squarely against the rubber tires.
- E. Gently turn the saw over so that the pulleys rest on your work bench or table and rotate the blade tensioning lever counterclockwise until it stops, as shown in Figure 10. Make sure the teeth on the left side of machine point to the rear (motor end) of the bandsaw.
- F. Turn the saw ON and OFF a few times to ensure that the blade is seated properly.

Figure 3

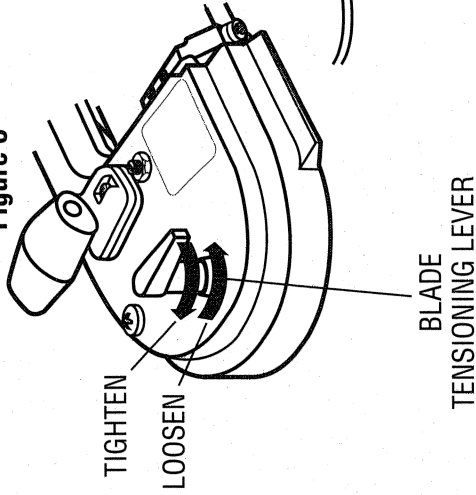


Figure 4

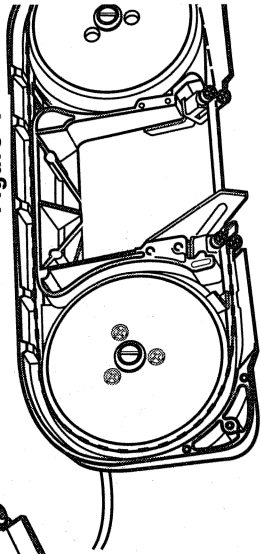


Figure 5

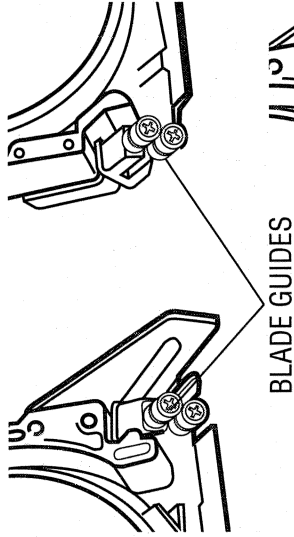
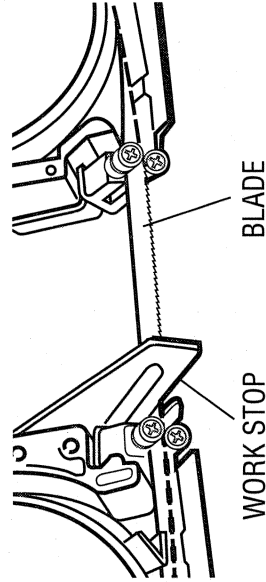


Figure 6



## Blade Tracking

Your band saw is equipped with an adjustable blade tracking mechanism which assures proper blade tracking at all times. The back edge of a properly aligned blade will run lightly against one or both of the back up rollers in the blade guides. (The pressure between the edge of the blade and the roller will be very slight and will not damage either the blade or the roller.)

To adjust the blade tracking follow the steps listed below.

1. TURN OFF AND UNPLUG THE BAND SAW!
2. Use a 9/16" wrench to loosen the adjustment locking nut, shown in Figure 10 by turning it one or two turns counterclockwise.
3. Use a screwdriver to turn the tracking screw 1/4 turn. Turning the screw clockwise will move the blade up toward the blade guide rollers. Turning the screw counterclockwise will move the blade down away from the rollers.

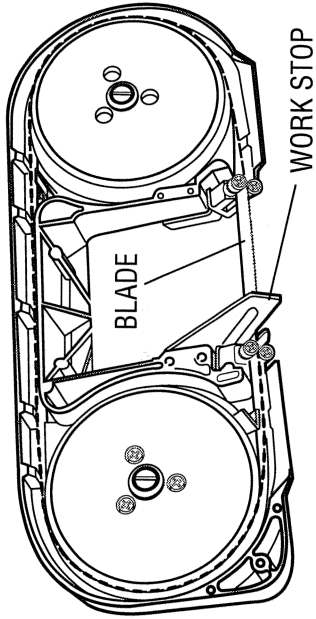


Figure 7

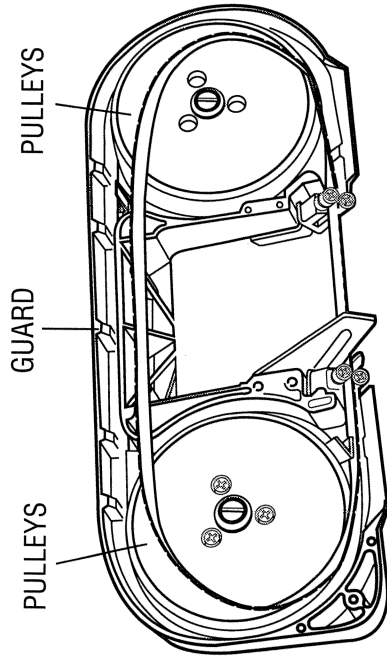


Figure 8

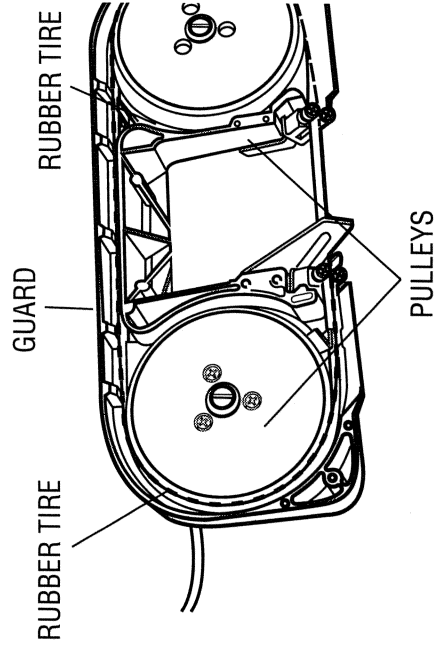


Figure 9

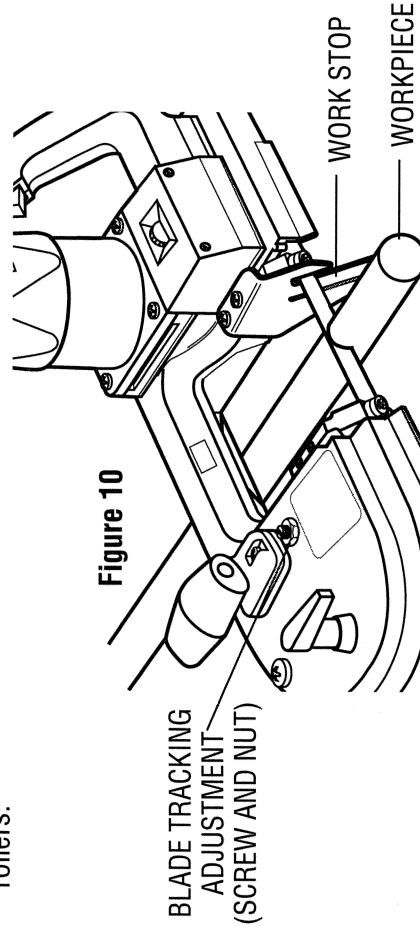
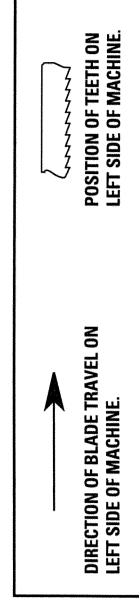


Figure 10





- Adjust so that the back edge of the blade lightly touches the rollers and securely tighten the locking nut. (It will be necessary to plug the saw in and run it to observe the tracking.)
- Observe blade tracking between runs and repeat steps 1 through 5 as necessary to achieve proper blade tracking.

### Operation

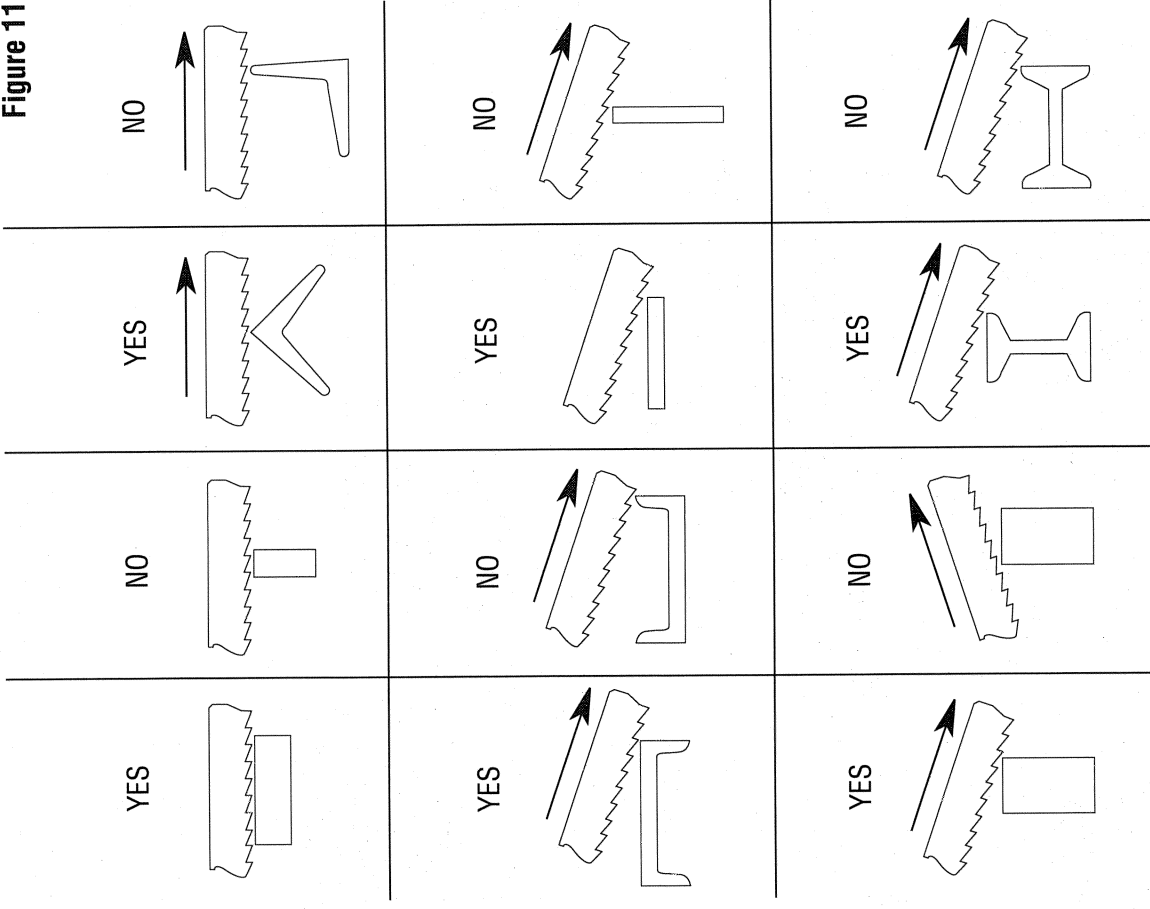
- Mount the material to be cut solidly in a vise or other clamping device.
- Turn the saw ON before lowering blade onto work. This will help prevent tooth breakage. Always start cutting with the work piece back against the work stop (Figure 10). Normally, blade direction and cutting force will keep the work against the work stop where it belongs.
- Watch the blade while cutting so that you can guide the saw to cut straight. Any twisting or cocking of the blade in the cut increases the risk of blade damage.
- The tool's own weight provides the most efficient downward cutting pressure. Added operator pressure slows the blade and reduces blade life.
- End pieces, which would be heavy enough to cause injury when they drop, after cut-off, should be supported. Safety shoes are strongly recommended. End pieces may be hot.
- Hold the saw firmly in both hands so that the saw does not fall against clamped or supported material when the cut is completed. **DON'T MAKE ANY SPEED CHANGES UNLESS TOOL HAS BEEN TURNED OFF.**

### Tips for Better Cutting

The following recommendations should be used as a guide. Results may vary with the operator and the particular material being cut.

- AT LEAST TWO TEETH OF THE SELECTED BLADE SHOULD ALWAYS BE ENGAGED IN THE MATERIAL (FIGURE 11). Otherwise, the moving teeth

Figure 11



will tend to grab the material causing tooth breakage and possible blade failure. Thin materials will require fine pitch blades (more teeth per inch).

2. Softer materials require coarser pitch blades (fewer teeth per inch) because the softer materials tend to fill the smaller gullets of fine pitch blades causing blade overheating and possible failure.
3. Harder materials require finer pitch blades (more teeth per inch) because there are more teeth in the blade; each tooth does less work and will stay sharper longer.
4. The finish of the cut on any material will improve by using finer pitch blades (more teeth per inch).
5. The saw will cut faster if a coarser pitch blade (less teeth per inch) is used. However, at least two teeth should be engaged or tooth breakage and blade failure may result.
6. When cutting brass or aluminum, particularly thick sections or solid bars, lube wax is recommended. The lube wax should be applied by light pressure of the wax against the moving blade teeth. The wax should be reapplied intermittently for most efficient cutting. Use extra caution near moving blade.

**NOTE:** Do not use wax excessively as it may adhere to pulley tires and cause blade slippage. Make sure pulley tires and blade are wiped clean of wax after cutting is complete or between cuts if problems occur. Do not use wax excessively.

**CAUTION:** Position hands securely on the handles to prevent sudden movement toward the blade.

## **IMPORTANT!**

To assure product safety and reliability, particularly for double insulated tools, repairs, maintenance and adjustment (excluding maintenance described in this manual) should be performed by B&D service centers or authorized service centers, using identical B&D replacement parts.

## **Accessories**

Recommended accessories for use with your tool are available at extra cost from your distributor or local service center. A complete listing of service centers is in this manual.

**CAUTION:** The use of any non-recommended accessory may be hazardous.

If you need assistance in locating any accessory call **1-800-9-BD TOOL:** (1-800-923-8665) or contact Black & Decker (U.S.) Inc., Consumer Services Department, 626 Hanover Pike, P.O. Box 618, Hampstead, MD 21074.

Every B&D tool is of the highest quality.

If you wish to contact us regarding this product, please call toll free between 8:00am and 8:00pm ET, seven days a week:

**1-800-9-BD TOOL**  
(1-800-923-8665)

## **One Year Free Maintenance**

All B&D tools for Industry and Construction are covered under a one year free maintenance program where B&D will inspect your tool for safety and provide necessary maintenance or repairs, including normal wear and tear parts, for one year, FREE OF CHARGE.

## **Full Warranty**

All B&D tools for Industry and Construction are warranted to be free of any defects in materials or workmanship. Upon thorough examination of tool, B&D will repair or replace, at our option, any product that is determined to be defective.

## **Conditions**

The service/safety check and the warranty do not apply to: repairs made or attempted by anyone other than an authorized B&D service location; misuse, abuse, neglect, improper application of the tool; missing parts; or normal wear and tear (after first year of ownership). Please return the complete unit, transportation prepaid, to any B&D factory owned or B&D authorized service center location (list provided with tool or see yellow pages under "Tools Electric").

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**Black & Decker (U.S.) Inc. • 701 East Joppa Road, Towson, Maryland 21286**

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