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New 3/4/9

**INSTRUCTION MANUAL  
GUIDE D'UTILISATION  
MANUAL DE INSTRUCCIONES**

INSTRUCTIVO DE OPERACIÓN, CENTROS DE SERVICIO Y PÓLIZA DE GARANTÍA. ADVERTENCIA: LEÁSE ESTE INSTRUCTIVO ANTES DE USAR EL PRODUCTO.

# DEWALT®

**DW788**

**20" (508 mm) Heavy Duty Variable Speed Scroll Saw**

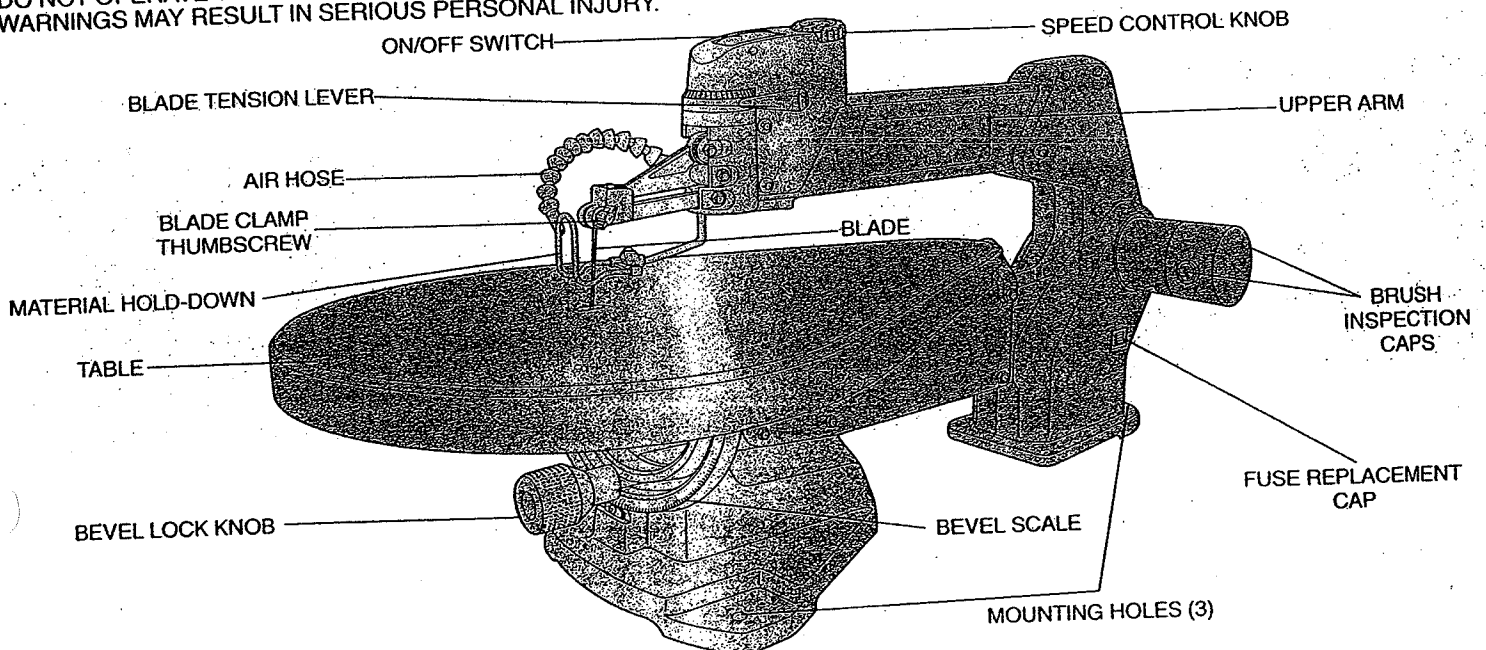
**Scie à découper de service intensif de 508 mm (20 po) à régulateur de vitesse**

**Sierra caladora de 508 mm (20") con velocidad variable para trabajo pesado**

IF YOU HAVE ANY QUESTIONS OR COMMENTS ABOUT THIS OR ANY DEWALT TOOL, CALL US TOLL FREE AT:  
1-800-4-DEWALT (1-800-433-9258)

**⚠ WARNING:** FOR YOUR OWN SAFETY, READ INSTRUCTION MANUAL BEFORE OPERATING SAW • DO NOT WEAR GLOVES, NECKTIES, JEWELRY OR LOOSE CLOTHING • CONTAIN LONG HAIR • ALWAYS WEAR EYE PROTECTION • INSTALL BLADE WITH TEETH POINTING DOWNWARD TOWARD THE TABLE BEFORE OPERATING SAW • MAINTAIN PROPER ADJUSTMENT OF BLADE TENSION BLADE GUARD BEFORE OPERATING SAW • ALWAYS ADJUST MATERIAL HOLD-DOWN SO THAT IT JUST CLEARS WORKPIECE • KEEP FINGERS A SAFE DISTANCE FROM BLADE • MAINTAIN CONTROL OF WORKPIECE AT ALL TIMES - HOLD FIRMLY AGAINST THE TABLE • NEVER REMOVE JAMMED OR CUT-OFF PIECES UNTIL POWER IS OFF AND BLADE HAS STOPPED • DO NOT EXPOSE TO RAIN OR USE IN DAMP LOCATIONS • SECURE TOOL PROPERLY TO PREVENT UNEXPECTED MOVEMENT • DO NOT OPERATE THIS MACHINE WHILE UNDER THE INFLUENCE OF ALCOHOL OR DRUGS • FAILURE TO COMPLY WITH THESE WARNINGS MAY RESULT IN SERIOUS PERSONAL INJURY.

English



**⚠ WARNING:** For your own safety read instruction manual before operating tool.

## Grounding Instructions

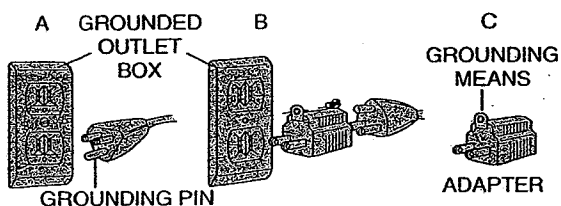
In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances. Do not modify plug provided—if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug.

Repair or replace damaged or worn cords immediately.



This tool is intended for use on a circuit that has an outlet that looks like the one illustrated in Figure A. The tool has a grounding plug that looks like the plug illustrated in Figure A. A temporary adapter, which looks like the adapter illustrated in Figures B and C, may be used to connect this plug to a 2-pole receptacle as shown in Figure B if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green-colored rigid ear, lug, and the like, extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box.

## Important Safety Instructions

- **KEEP GUARDS IN PLACE** and in working order.
- **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite injuries.
- **DON'T USE IN DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
- **KEEP CHILDREN AWAY.** All visitors should be kept safe distance from work area.
- **MAKE WORKSHOP KID PROOF** with padlocks, master switches, or by removing starter keys.
- **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was designed.
- **USE RIGHT TOOL.** Don't force tool or attachment to do a job for which it was not designed.
- **USE PROPER EXTENSION 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.

- **OUTDOOR USE EXTENSION CORDS.** When tool is used outdoors, use only extension cords intended for use outdoors and so marked.

Minimum Gage for Cord Sets	
Volts	Total Length of Cord in Feet
120V	0-25 26-50 51-100 101-150
Ampere Rating	AWG
More Than	Not more Than
0	6 18 16 16 14

- **WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
- **ALWAYS USE SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
- **DON'T OVERREACH.** Keep proper footing and balance at all times.
- **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for best and safest performance. Follow instructions for changing accessories.
- **DISCONNECT TOOLS** before servicing; when changing accessories, such as blades, bits, cutters, and the like.
- **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure switch is in off position before plugging in.
- **USE RECOMMENDED ACCESSORIES.** Consult the instruction manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
- **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
- **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.

- **NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop.

## Additional Safety Rules for Scroll Saws

- **MATERIAL HOLD-DOWN** must be properly set according to these instructions and remain in position during use.
- **NEVER** reach under the table when operating or make any adjustments when it is running.
- **SECURE** saw to work bench or stand with clamps or mounting hardware. Secure work bench or stand to floor.
- **DO NOT** use the upper arm as a lifting point.
- **MAKE SURE** blade tension is properly adjusted.
- **AVOID** awkward hand positions where a sudden slip could cause a hand to move into a saw blade or cutting tool. **DO NOT PLACE FINGERS OR HANDS IN PATH OF THE SAW BLADE.**
- **WHEN REMOVING** short workpieces, or cleaning up around the table, be sure the saw is in the OFF position and blade has stopped moving.
- **NEVER** turn the saw ON before clearing the table of all tools, wood scraps, etc., except the workpiece and related feed or support devices for the operation planned.
- **CHECK** for proper blade size and type.
- **DO NOT** attempt to saw stock that does not have a flat surface, unless a suitable support is used.
- **HOLD** material firmly against table and feed into blade teeth at a moderate speed.
- **TURN OFF** motor if the material resists being backed out of an uncompleted cut. Use appropriate speed for applications.
- **MAKE** "relief" cuts before cutting long curves.
- **⚠ CAUTION:** Some wood contains preservatives such as copper chromium arsenate (CCA) which can be toxic. When cutting these materials, extra care should be taken to avoid inhalation and to minimize skin contact.

- **USE** a dust mask and safety glasses when sawing.
- **KEEP GUARDS** in place and working order.
- **MAKE SURE** your fingers do not contact the terminals of the power cord when installing or removing the plug to or from the line power source.
- **NEVER** overfeed or force work into the blade.

**WARNING:** Do not allow familiarity (gained from frequent use of your saw) to replace following safety rules. Always remember that a careless fraction of a second is sufficient to inflict severe injury.

**WARNING:** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects, or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber (CCA).

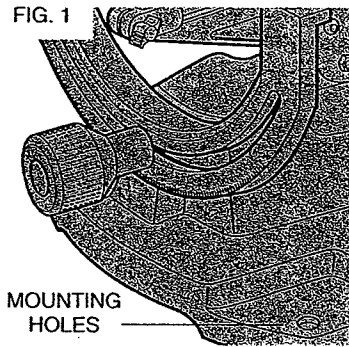
Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

- Avoid prolonged contact with dust from power sanding, sawing, grinding, drilling, and other construction activities. Wear protective clothing and wash exposed areas with soap and water. Allowing dust to get into your mouth, eyes, or lay on the skin may promote absorption of harmful chemicals.

## SAVE THESE INSTRUCTIONS

### Mounting

Three holes are provided in the base of the scroll saw to facilitate mounting to a table or bench (Figure 1). Always mount your saw firmly to prevent movement.



### Assembly

Your scroll saw comes fully assembled except for the table and blade. To install the table, first insert the pin at the back of the arm into the hole in the back of the table (Figure 2). Push the table until its back surface is flush against the arm and the pin is fully inserted in the table (Figure 3).

Using the hex wrench packed with your scroll saw, securely attach the table to the bevel scale by tightening the bolts shown in Figure 4.

### Installing the Blade

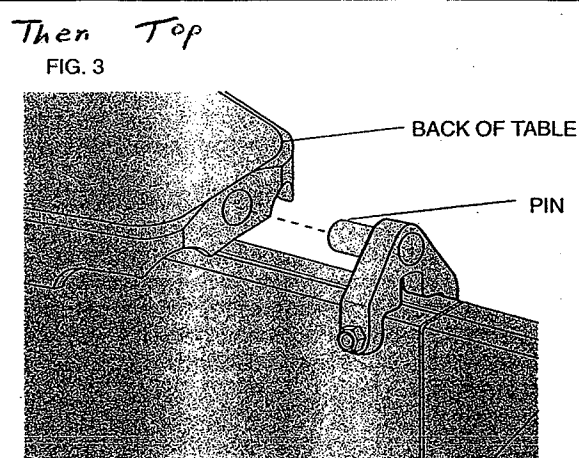
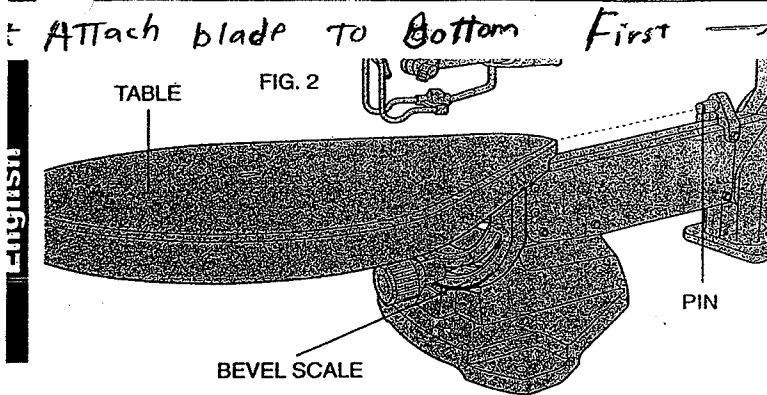
**BEFORE INSTALLING A BLADE, UNPLUG THE SCROLL SAW.**

The blade is held in place by the thumbscrew blade clamps attached to the top and bottom arms of the scroll saw (Figure 5).

Before installing a blade, make sure the blade tension lever is moved fully to the right as shown in Figure 6. Next, loosen, but do not unscrew, the top and bottom thumbscrews (Figure 5). Thread the blade through the hole in table, with the teeth facing toward the front of the saw. **NOTE:** Scroll saws cut on the downstroke, so it is essential that teeth face forward and down.

Insert the blade into the bottom blade clamp and securely tighten

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the thumbscrew. Next, insert the top of the blade into the top blade clamp and securely tighten the top thumbscrew.

Properly adjust the tension of the blade before operating your scroll saw. (See: Blade Tension Lever section of this manual.)

### Blade Tension Lever

Move the blade tension lever (Figure 6) to the left to increase tension on the blade.

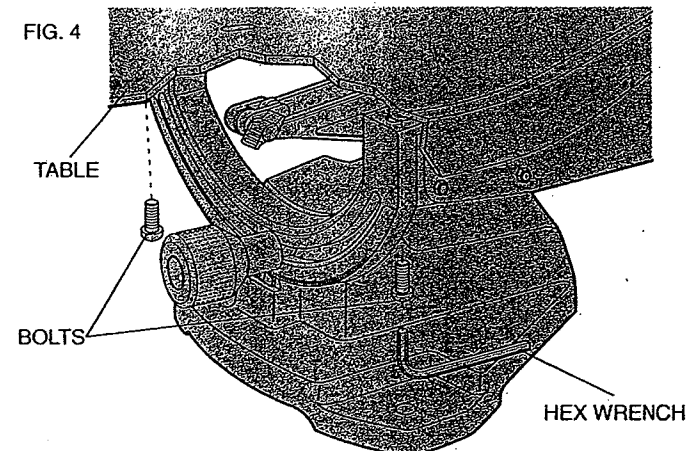
The proper degree of tension varies with different blade sizes. If you are frequently breaking blades, decrease tension on the blade.

As you become more accustomed to operating your scroll saw, you will become more proficient in fine-tuning blade tension. Practice on scrap material when possible.

Remove the blade or release tension on the blade when not using your scroll saw for an extended period.

### Material Hold-down

The material hold-down (Figure 7) should contact the surface of the



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TOP THUMBSCREW

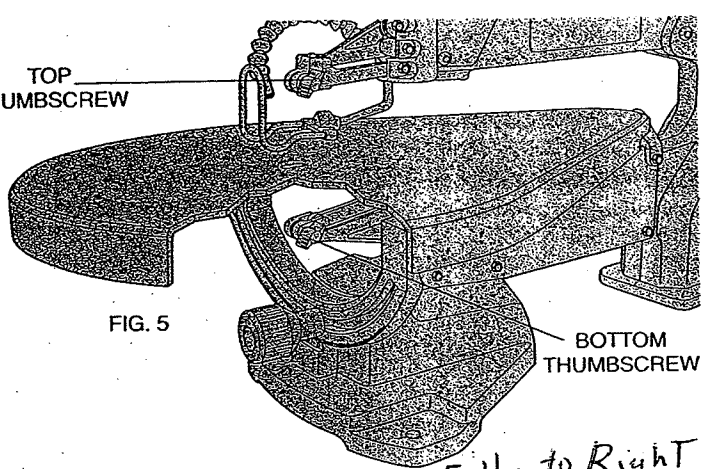


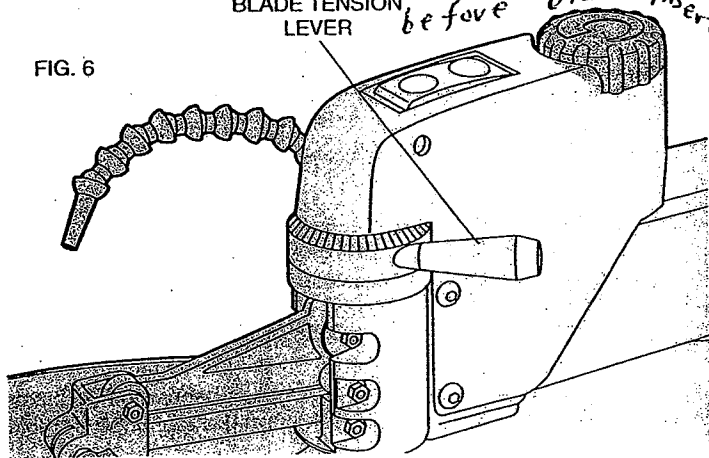
FIG. 5

BOTTOM THUMBSCREW

BLADE TENSION LEVER

Fully to Right before blade insertion

FIG. 6



workpiece. To adjust the material hold-down, loosen the thumbscrew (Figure 7) and move the rod up or down. The material hold-down must be beveled when the table is beveled. To bevel the material hold-down, loosen the allen screw shown in Figure 7 and bevel the material hold-down until it is parallel to the table. Retighten the material hold-down before cutting.

**NOTE:** When cutting, ensure the material hold-down does not contact the bottom arm of the scroll saw. Your scroll saw has a maximum thickness capacity of 2". Do not cut material thicker than 2". NEVER remove the material hold-down since it also functions as a barrier between fingers and blade.

### Air Hose

Your scroll saw features an adjustable air hose to keep your work area free from dust and debris. Be sure to position the air hose properly: it should blow saw dust away from the operator.

### On/Off Switch

To turn the scroll saw on, press the front of the switch as shown in Figure 8. The saw locks on automatically. To turn the tool off, press the back of the switch. A hole is provided in the switch for insertion of a padlock to lock the saw off (Figure 8).

### Speed Control Knob

Your scroll saw features a variable speed control, from 400 to 1,750 strokes per minute. To operate the variable speed feature, turn the speed control knob (Figure 8) with the saw running.

To increase the speed, turn the knob clockwise. The numbers on the speed control knob represent speed ranges. One is the minimum speed, 8 is the maximum speed.

Slower speeds are recommended for metals, plastics, harder woods and very thin materials.

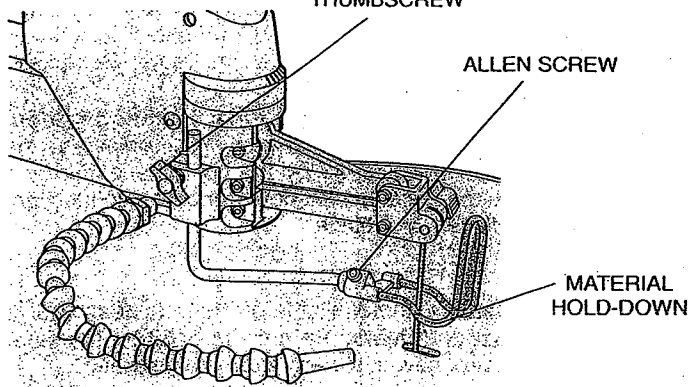
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FIG. 7

MATERIAL HOLD-DOWN THUMBSCREW

ALLEN SCREW

MATERIAL HOLD-DOWN

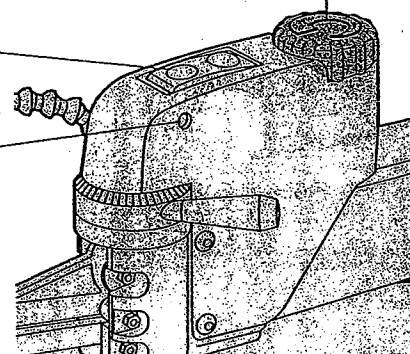


SPEED CONTROL KNOB

FIG. 8

ON/OFF SWITCH

PADLOCK HOLE



### Sawing

Hold material firmly against table. Always feed material toward the blade. Feed the workpiece fast enough to allow the blade to cut, but do not force material into the blade too quickly.

### Beveling

The table of your scroll saw bevels 45° left and right. A detent is set at 0°. To bevel the scroll saw table, loosen the bevel lock knob (Figure 9), and bevel the table to the desired setting, indicated by the bevel pointer.

**NOTE:** Before tilting the table for bevel cuts of 45°, check the clearance around the lower thumbscrew. To facilitate an accurate 45° cut the thumbscrew and setscrew may need to change places. On the setscrew side, sufficient clearance is available.

### Fretwork

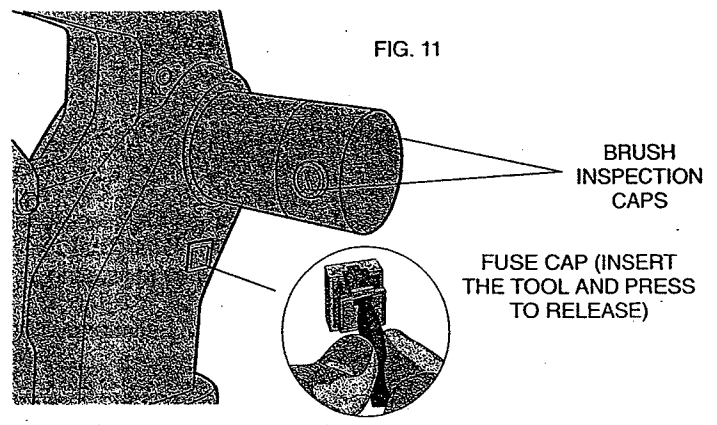
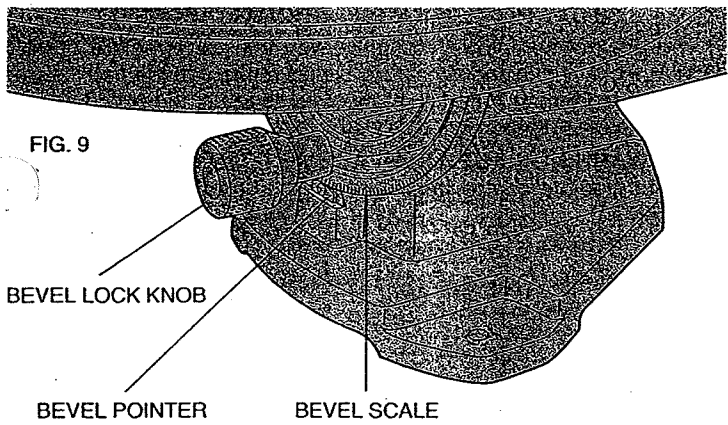
#### INSIDE CUTS

Your scroll saw is ideal for making inside cuts for detail work. To make an inside cut:

1. Drill a pilot hole in your workpiece.
2. Make sure the blade tension lever is moved fully to the right
3. Loosen the top thumbscrew blade clamp.
4. Leaving the blade held in place by the bottom blade clamp the top arm of the scroll saw, as shown in Figure 10. Thread saw blade through the pilot hole in your workpiece and reattach the blade by tightening the top thumbscrew.
5. Readjust the blade tension and begin the inside cut.

Alternately, you can loosen the bottom thumbscrew blade clamp in step 3 above, and thread the blade through the top of the workpiece.

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**NOTE:** Do not lift saw by upper arm. Damage will occur.

### Overload Protector

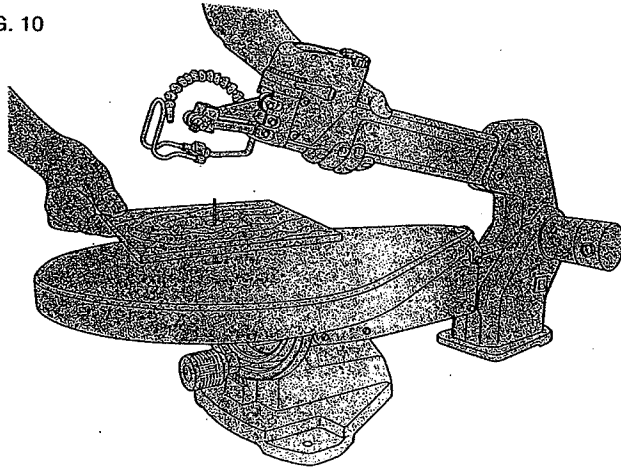
Your scroll saw is equipped with a 3 amp overload protection fuse. If your scroll saw becomes overloaded and stops operating, turn off the scroll saw, check for a blown fuse by removing the fuse cap (Figure 11). Your scroll saw uses fuse #3AG Fast Acting, 1 1/4" long x 1/4" diameter.

### Maintenance

#### BRUSHES

Inspect carbon brushes regularly by unplugging tool, removing the brush inspection cap (Figure 11) and withdrawing the brush assembly. Keep brushes clean and sliding freely in their guides. Always replace a used brush in the same orientation in the holder as it was prior to its removal. If the brush is worn down to 3/8", it must be replaced. Use only identical DeWALT brushes. New brush assemblies are available

FIG. 10



at Black & Decker service centers. The tool should be allowed to "run in" (run at no load) for 10 minutes before use to seat new brushes.

#### TABLE

Keep the table clean and free from oil, grease and pitch. Treat the table with paste wax to help maintain its smooth finish.

### Accessories

Use only 5" plain end scroll saw blades. Recommended accessories for use with your tool are available at extra cost from your local dealer or authorized service center. If you need assistance in locating any accessory for your tool, contact:

DeWALT Industrial Tool Co., 701 East Joppa Road, Baltimore, MD 21286 1-800-4-DeWALT

**CAUTION:** The use of any other accessory not recommended for use with this tool could be hazardous.

### Repairs

To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment (including brush inspection and replacement) should be performed by authorized service centers or other qualified service organizations, always using identical replacement parts.

### Full Warranty

DeWALT heavy duty industrial tools are warranted for one year from date of purchase. We will repair, without charge, any defects due to materials or workmanship. For warranty repair information, call 1-800-4-DeWALT. This warranty does not apply to accessories or damage caused where repairs have been made or attempted by others. This warranty gives you specific legal rights and you may have other rights which vary in certain states or provinces.

In addition to the warranty, DeWALT tools are covered by our:

### 30 DAY NO RISK SATISFACTION GUARANTEE

If you are not completely satisfied with the performance of your DeWALT heavy duty industrial tool, simply return it to the participating seller within 30 days for a full refund. Please return the complete unit, transportation prepaid. Proof of purchase may be required.

**FREE WARNING LABEL REPLACEMENT:** If your warning labels become illegible or are missing, call 1-800-4-DeWALT for a free replacement.

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

