WARNING
For your own safety read your Owner’s Manual before operating your Dremel Scroll Saw.

MODEL 1671 TYPE 2 SCROLL SAW
assembly • operation • safety instructions

DREMEL
4915 - 21st Street | Racine, Wisconsin 53406, U.S.A.
For Your Safety...

**WARNING** READ ALL INSTRUCTIONS Failure to follow the safety rules listed below and other basic safety precautions may result in serious personal injury.

**Work Area**

- KEEP WORK AREAS CLEAN. Cluttered areas and benches invite accidents.
- AVOID DANGEROUS ENVIRONMENTS. Don't use power tools in damp or wet locations. Keep work area well lit. Do not expose power tools to rain. Do not use tool in presence of flammable liquids or gases.
- KEEP CHILDREN AWAY. Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.
- MAKE WORKSHOP CHILD-PROOF—with padlocks, master switches, or by removing starter keys.

**Personal Safety**

- STAY ALERT. Watch what you are doing. Use common sense. Do not operate tool when you are tired.
- KEEP GUARDS IN PLACE, in working order, and in proper adjustment and alignment.
- DON'T OVERREACH. Keep proper footing and balance at all times.
- DISCONNECT TOOLS. When not in use; before servicing; when changing blades, bits, cutters, etc.
- REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.
- AVOID ACCIDENTAL STARTING. Don't carry plugged-in tool with finger on switch. Be sure switch is OFF when plugged in.
- USE RECOMMENDED ACCESSORIES. Consult the owner's manual for recommended accessories. Follow the instructions that accompany the accessories. The use of improper accessories may cause hazards.
- 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.
- 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.

**Tool Use**

- 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. Have defective switches replaced. Do not use tool if switch does not turn it on or off.
- DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
- USE THE 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.
- SECURE WORK. Use clamps or a vise against the direction of rotation of the blade or cutter only.
- NEVER LEAVE TOOL RUNNING UNATTENDED. Turn power off. Don't leave tool until it comes to a complete stop.

**Tool Care**

- DO NOT ALTER OR MISUSE TOOL. These tools are precision built. Any alteration or modification not specified is misuse and may result in a dangerous condition.
- AVOID GASEOUS AREAS. Do not operate electric tools in gaseous or explosive atmospheres. Motors in these tools normally spark, and the sparks might ignite fumes.
- 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.

**WARNING** Before connecting the tool to a power source (receptacle, outlet, etc.), be sure voltage supplied is the same as that specified on the nameplate of the tool. A power source with voltage greater than that specified for the tool can result in SERIOUS INJURY to the user, as well as damage to the tool. If in doubt, DO NOT PLUG IN THE TOOL. Using a power source with voltage less than the nameplate rating is harmful to the motor.

"SAVE THESE INSTRUCTIONS"
Tool Safety Rules

**WARNING** For your own safety, do not attempt to operate your scroll saw until it is completely assembled and installed according to the instructions... and until you read and understand the following:

- **GENERAL SAFETY RULES** .................. See Page 2
- **TOOL RULES** .............................. See Page 3
- **GETTING TO KNOW YOUR SAW** ............ See Page 5
- **OPERATIONS** ............................... See Page 10
- **ADJUSTMENTS** ............................. See Pages 6, 7, 8
- **MAINTENANCE** ............................. See Page 12

Stability of Saw
- Your scroll saw must be bolted securely to a stand or workbench. In addition, if there is any tendency for the scroll saw to tip over or move during certain operations, such as cutting long, heavy boards, bolt your scroll saw stand or workbench to the floor.

Location
- This scroll saw is intended for indoor use only.

Protection: Eyes, Hands, Face, Ears, Body
- Wear safety goggles and a face shield if operation is dusty. Wear ear plugs or muffs during extended periods of operation. Do not wear gloves... roll long sleeves above the elbow.
- Do not cut pieces of material too small to hold by hand. HINT: When making a very small cutout, always secure the workpiece to a scrap piece of plywood with double-faced tape. This way, the work is supported and your fingers are away from the blade.
- Avoid awkward hand positions where a sudden slip could cause a hand to move into the blade.
- Never turn your scroll saw on before clearing the table of all objects (tools, scraps of wood, etc.) except for the workpiece and related feed or support devices for the operation planned.
- ALWAYS adjust the drop foot and blade guard to just clear the workpiece to protect the operator, keep blade breakage to a minimum and provide maximum support for blade.
- Always adjust blade tension correctly.
- Make sure blade teeth run downward toward table.
- When cutting a large piece of material, make sure it is supported at table height.
- Hold the work firmly against the table.
- Do not feed the material too fast while cutting. Only feed the material fast enough so that the blade will cut. Keep fingers away from the blade.
- Use caution when cutting off material which is irregular in cross section — it could pinch the blade before the cut is completed. A piece of molding, for example, must lay flat on the table and not be permitted to rock while being cut.
- Use caution when cutting off round material such as dowel rods or tubing. They have a tendency to roll while being cut, causing the blade to "bite"
- Never leave the scroll saw running unattended. Turn the saw OFF, make sure the saw has come to a complete stop, and then remove plug from power supply before leaving the work area.
- Do not perform layout, assembly or setup work on the table while the cutting tool is operating.
- Turn saw off and remove plug from power supply outlet before installing or removing an accessory attachment.
- Should any part of this scroll saw be missing, bend or fail in any way, or any electrical component fail to perform properly, shut off power switch and remove plug from power supply outlet. Replace damaged, missing, and/or failed parts before resuming operation.

Think Safety
- Safety is a combination of operator common sense and alertness whenever the scroll saw is in operation.

**WARNING** Do not allow familiarity (gained from frequent use of your scroll saw) to become carelessness. Always remember that a care-less fraction of a second is sufficient to inflict severe injury.

The operation of any power tool can result in foreign objects being thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields before commencing power tool operation. We recommend Wide Vision Safety Mask for use over spectacles or standard safety glasses.
**Grounding Instructions**

### Grounded Tools With Three-Prong Plugs

**WARNING** Improper grounding can shock, burn or electrocute.

Grounding of tools is necessary while in use to protect you from electric shock or electrocution. This tool is equipped with an approved three-conductor cord and three-prong grounding-type plug to fit the proper grounding-type receptacle. Do not remove grounding prong from the three prong grounding-type plug. 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. Your unit is for use on less than 150 volts and it has a plug that looks like Fig. "A".

An adapter, Fig. "B" and "C" is available for connecting Fig. "A" plugs to two-prong receptacles. The green colored rigid ear, lug, etc., extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box.

### Extension Cords

**WARNING** Use of damaged cords can shock, burn or electrocute.

Replace damaged or worn cords immediately. The table shows the correct size to use, depending on cord length and nameplate amperage rating of tool. If in doubt, use the next heavier gauge. An undersized cord will cause a drop in line voltage, resulting in loss of power and over-heating. **NOTE:** The smaller the gauge number, the heavier the cord.

Use only three-wire extension cords with three-hole receptacles which accept the plug and have three-prong grounding-type plugs. Three-wire extension cords are available.

#### Recommended Minimum Gauge for Cord Extensions for Portable Electric Tools

<table>
<thead>
<tr>
<th>Name Plate Amps</th>
<th>120V</th>
<th>25</th>
<th>50</th>
<th>100</th>
<th>150</th>
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<tbody>
<tr>
<td>3-6</td>
<td>18</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>14</td>
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<tr>
<td>6-8</td>
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<td>16</td>
<td>14</td>
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<td>9-10</td>
<td>16</td>
<td>16</td>
<td>14</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>10-12</td>
<td>16</td>
<td>14</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-16</td>
<td>14</td>
<td>12</td>
<td>Not Recommended</td>
<td></td>
<td></td>
</tr>
</tbody>
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**Dremel Limited Warranty**

Your Dremel product is warranted against defective material or workmanship for a period of one year from date of purchase. In the event of a failure of a product to conform to this written warranty, please take the following action:

1. DO NOT return your product to the place of purchase.
2. Carefully package the product by itself, with no other items, and return it freight prepaid, along with:
   - A copy of your dated proof of purchase (please keep a copy for yourself).
   - A written statement about the nature of the problem.
   - Your name, address and phone number to:

**UNITED STATES**
Dremel Service Center
4915 Twenty-First Street
Racine, Wisconsin 53406

OR
Dremel Service Center
4631 E. Sunny Dunes
Palm Springs, CA 92264

**EASTERN CANADA**
Giles Tool Agency
6520 Lawrence av. east,
Scarborough, Ont.
Canada M1C 4A7

**WESTERN CANADA**
Tonti Tools
3851 Main st.
Vancouver, B.C.
Canada V5V 3P1

We recommend that the package be insured against loss or damage in transit, for which we cannot be responsible.

This warranty applies only to the original registered purchaser.

**Note:** This warranty gives you specific legal rights and you may also have other rights which vary from state to state. The obligation of the warrantor is solely to repair or replace the product. The warrantor is not liable for any incidental or consequential damages due to any such alleged defect. Some states do not allow the exclusion or limitations of incidental or consequential damages, so the above limitations or exclusion may not apply to you.

For prices and warranty fulfillment in the continental United States, contact your local Dremel distributor.
Getting to know your scroll saw

This versatile heavy-duty scroll saw is great for making toys, puzzles, games, fretwork, and jewelry, and because of its cutting capacity, is a handy do-it-yourself tool. It cuts wood up to 2 inches thick as well as plastics and metals.

**BLADE STORAGE CASE**... Your scroll saw is equipped with a blade storage area located on the side of the saw. The blade storage area conveniently stores the blade adapters, wrench and both pin and plain end blades.

**SAWDUST BLOWER**... Keeps workpiece clean for more accurate scroll cuts. For best results, always direct air flow from brass tube at blade and workpiece. To adjust, loosen set screw in the foot assembly, position tube and tighten screw. CAUTION: To prevent brass tube from collapsing DO NOT OVERTIGHTEN.

**DROP FOOT**... The foot should always be lowered until it just rests on top of the workpiece to prevent workpiece from lifting, but not so much that the workpiece drags.

**DROP FOOT LOCK KNOB**... Allows you to raise or lower the foot and lock it at desired heights.

**BLADE GUARD**... Should always be lowered over the blade during cutting operation.

**BLADE TENSION KNOB**... Allows you to loosen or tighten the blade tension by rotating the knob.

**TABLE LOCK KNOB**... Allows you to tilt the table and lock it at desired angle up to 45 degrees.

**DEGREE SCALE**... Shows the degree the table is tilted.

**TWO-SPEED SWITCH**... Your scroll saw is equipped with a high/low switch for greater versatility. To increase speed, push switch to high; to decrease speed, push switch to low. 890 SPM Low, 1790 SPM High.

**ON/OFF SWITCH**... Has holes provided by the switch for a lock (not included). THIS FEATURE IS INTENDED TO PREVENT UNAUTHORIZED AND POSSIBLY HAZARDOUS USE BY CHILDREN AND OTHERS. To turn saw on, push switch to the "on" position; to turn saw off, push switch to the "off" position.

**BLADE ADAPTER**... Allows you to use plain end blades.

**BLADE ADAPTER GAUGE**... Used for attaching the blade adapters at the proper length for operation.

**TABLE INSERT**... Should always be in place and flush with table during cutting operation.
**Adjustments**

**SETTING THE TABLE FOR HORIZONTAL OR BEVEL CUTTING**

1. Loosen the table lock knob, and the saw table can be tilted to the left and locked at any angle from 0 degree horizontal cutting position up to 45 degrees for bevel cutting. (Fig 2).

2. A degree scale is also provided under the work table as a convenient reference for setting the approximate table angle for bevel cutting. When greater precision is required, make practice cuts and adjust the table as necessary for your requirements.

3. NOTE: When cutting at extreme angles, the drop foot should be lifted off the work piece, as it will impede cutting. Hold the work piece against the table. The drop foot may be disassembled when thick materials are cut at extreme angles.

**ALIGNING THE DEGREE SCALE POINTER**

1. Loosen the table lock knob and move the table until it is approximately perpendicular, or at a right angle to the blade.

2. Place a small square on the table next to the blade as shown in (Fig. 3) to check if the table is 90 degrees to the blade. If adjustment is needed, raise or lower the table until table is approximately 90 degrees to the blade and securely tighten the table lock knob.

3. Loosen the screw holding the degree scale pointer, as shown in (Fig. 3), move pointer to the 0 degree mark and securely tighten screw. Remember, the degree scale is a convenient guide but should not be relied upon for precision. Make practice cuts in scrap wood to determine if your angle settings are correct.
Removing and installing blades

BLADES
Your new scroll saw accepts 5 inch pin type blades. Your saw is also equipped with blade adapters that allow you to use a variety of 5 inch plain-end blades (See Accessories on page 11).

WARNING To prevent personal injury always disconnect the plug from power source before changing blades or making adjustments.

REMOVING AND INSTALLING (Pin Type Blades)
1. Rotate the blade tension knob counter-clockwise to release blade tension.
2. Remove table insert and remove blade from the inner upper and lower blade holders by pulling forward on blade and then lifting the blade through the access hole in the table. Slight downward pressure against the upper holder may be helpful when removing blade from upper holder.
3. Look at the blade holders closely and notice the blade slots and pin recesses in the blade holders. The blade holders are made so you can position the blade for cutting from the front or from one side of the saw as shown in (Fig. 4). Cutting from the side of the saw will be necessary when your work piece exceeds 16 inches in length. It allows your scroll saw to cut like a band saw. For 0 degree horizontal cutting only.
4. In order to cut, and avoid uncontrollable lifting of the work piece, the teeth of the blade used on the scroll saw should always point downward as shown in (Fig. 4) when installed.
5. Install the blade by inserting one end of the blade through the access hole in the table and hook the blade pin in the pin recess in the inner lower blade holder. Slide the top blade pin into the pin recess of the inner upper blade holder. You may need to press down lightly on the upper blade holder to install the blade.
6. Carefully tighten the blade by rotating the blade tension knob clockwise just until you feel the slack in the blade removed. Double check to see that the pins are properly located in the blade holder. Then turn the blade tension knob ONE full turn clockwise. This amount of blade pressure should do well for most cutting operations and blades.
ATTACHING THE BLADE ADAPTERS TO PLAIN-END BLADES (Straight Cutting)
1. Adjust one set screw on each adapter until it covers approximately half the hole, as shown in (Fig. 5).
2. Loosen the other set screws just enough to slide one adapter onto each end of blade, flush with end of blade as shown in (Fig. 6). (If blade touches pin, it can’t be attached to blade holder).
3. Place the blade and adapters into the gauge to set the blade to the proper length as shown in (Fig. 7), and securely tighten the other set screw with the wrench provided.

ATTACHING BLADE ADAPTERS TO PLAIN-END BLADES (Side Cutting)
1. Remove both set screws from each blade adapter, thread them into the opposite holes in the blade adapter perpendicular to the attachment pin, as shown in (Fig. 8), and repeat steps 1, 2, and 3 of above with the blade in the side cutting position.

Cutting from the side of the saw will be necessary when your work piece exceeds 16 inches in length. It allows the scroll saw to cut like a band saw.

REMOVING AND INSTALLING (Plain-End Blades)
1. Rotate the blade tension knob counter-clockwise to release blade tension (Fig. 9).
2. Remove table insert and remove blade from outer section of the upper and lower blade holders by pulling forward and lifting the blade and adapter through the access hole in the table. Slight downward pressure against the upper blade holder may be helpful when removing blade from upper blade holder.
3. Install the blade by inserting one end of the blade and adapter through the access hole in the table, and hooking the blade adapter onto the outer section of the lower blade holder. Slide top adapter onto pin recess between adapter guard and outer section of the upper blade holder. You may need to press down lightly on the upper blade holder to install the blade.
4. In order to cut, and avoid uncontrollable lifting of the work piece, the teeth of the blade used on the scroll saw should always point downward when installed, as shown in (Fig. 9).
5. Carefully tighten the blade by rotating the blade tension knob clockwise just until you feel the slack in the blade removed. Double check to see that the adapters are properly positioned in the blade holder. Then turn the blade tension adjustment knob one full turn clockwise and then replace the table insert. This amount of pressure should do well for most cutting operations and blades.

[Diagram of attachment process]

ADAPTER GUARD
ADAPTER PIN
PIN RECESS
SLIGHT PRESSURE HERE
UPPER OUTER BLADE HOLDER
TABLE TILT ED FOR PICTURE CLARITY
LOW ER OUTER BLADE HOLDER
BLADE ADAPTER GAUGE
BLADE ADAPTER
BLADE TENSION KNOB
LOOSE N
TIGHT EN
WARNING  Do not attempt to cut a bevel with the blade positioned for side cutting.

Page 8
Mounting the scroll saw to a bench

1. When mounting this saw to a workbench, a solid bench is preferred over a plywood bench where noise and vibration will be more noticeable.

2. Hardware to mount this saw to a workbench is NOT SUPPLIED with the saw. However, we recommend the hardware used be no smaller than the following:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>4</td>
<td>Hex Head Screws, 1/4-20 Length Required</td>
</tr>
<tr>
<td>4</td>
<td>Flat Washers, 9/32 I.D.</td>
</tr>
<tr>
<td>4</td>
<td>Lockwasher, 9/32 I.D.</td>
</tr>
<tr>
<td>8</td>
<td>Hex Nuts, 1/4-20</td>
</tr>
</tbody>
</table>

3. Soft foam pad to place between your scroll saw and workbench is NOT supplied with the saw. However, we highly recommend the use of such a pad to reduce noise and vibration.

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Soft foam pad, such as carpet padding, 24” x 12” x 1/2”</td>
</tr>
</tbody>
</table>

Do NOT overtighten mounting bolts - leave some cushion in the foam pad for absorbing noise and vibration.

   WARNING: Always remove the plug from power source before making any adjustments on your saw.

   ATTENTION: When inserting the front right hex head screw, it will be necessary to remove 5 screws and remove the fan box cover.

4. Example of mounting this scroll saw to workbench:

   ![Diagram of scroll saw mounted to workbench]

   ATTACHING THE MAGNIFIER LAMP TO YOUR SCROLL SAW (Available as Accessory)

   To install, simply insert round end of lamp base into the hole provided at the rear of saw as shown in (Fig. 12).

   ![Diagram of magnifier lamp attachment]

   ▶️ WARNING Always be sure to position the cord away from cutting area.
Operation

PLEASE, read and understand the following items about your scroll saw before attempting to use the saw.

1. The saw does not cut wood by itself. You allow the saw to cut wood by guiding the wood into the blade as it moves.
2. The blade teeth cut ONLY on the down stroke.
3. The drop foot should always be lowered until it just rests on top of the workpiece.
4. The blade guard should always be lowered over the blade during cutting operation.
5. You must feed the wood into the blade slowly because the teeth of the blade are very small and they can only remove wood when they are on the down stroke. The blade will flex backwards when applying feed pressure. Too much feed pressure will cause blade breakage.
6. There is a learning curve for each person who wants to use this saw. During that period of time it is expected that some blades will break until you learn how to use the saw and receive the greatest benefit from the blades.
7. Best results are achieved when cutting wood less than one inch thick.
8. When cutting wood thicker than one inch the user must feed the wood very slowly into the blade and take extra care not to bend or twist the blade while cutting in order to maximize blade life.
9. Teeth on the scroll blades wear out and as such must be replaced frequently for best cutting results. Scroll saw blades generally stay sharp for ½ hour to 2 hours of cutting.
10. To get accurate cuts be prepared to compensate for the blade's tendency to follow the wood grain as you are cutting.
11. When choosing a blade to use with your scroll saw consider the following carefully:
   - Very fine, narrow blades should be used to scroll cut in thin wood (¼ inch thick or less).
   - To cut wood over ¼ inch thick, use wider blades.
   - Most blade packages state the size or thickness of wood which that blade is intended to cut, and the radius (size of curve) which can be cut with that blade.
   - Wider blades can't cut curves as tight or small as thinner blades.
   - Narrower blades work well only on thinner wood material.
12. This saw uses 5 inch long, pin or plain-end type blades only (See Accessories on page 11).
13. Blades wear faster when cutting plywood, which is very abrasive; when sawing wood which is thicker than the ¾ inch blade stroke; and when sawing hardwood, or when side pressure is placed on the blade.
14. When cutting precious and non-ferrous metals, the blades must be used at very slow speeds. They perform well on machines that have variable speed capability and should be lubricated with beeswax, or a light machine oil.

MAKING INTERIOR SCROLL CUTS
1. One of the features of this saw is that it can be used to make scroll cuts on the interior of a board without breaking or cutting into the outline or perimeter of the board.

WARNING TO AVOID ACCIDENTAL STARTING, ALWAYS TURN SWITCH “OFF” AND REMOVE PLUG FROM POWER SOURCE BEFORE REMOVING OR REPLACING THE BLADE.

2. To make interior cuts in a board, remove the scroll blade as explained on pages 7 and 8.
3. Drill a ¾ inch hole in the board you will use to make interior cuts.
4. Place the board on the saw table with the hole in the board over the access hole in the table.
5. Insert blade through hole in board, install blade and adjust blade tension.
6. Lower drop foot until it just rests on top of the workpiece, lower blade guard and you’re ready to begin cutting.
7. When finished making the interior scroll cuts simply remove the blade from the blade holders, as described on pages 7 and 8 and remove the board from the table.
Scroll Saw Accessories

Leg Set

<table>
<thead>
<tr>
<th>Cat No.</th>
<th>Description</th>
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<tbody>
<tr>
<td>16435</td>
<td>Scroll Saw Stand</td>
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</tbody>
</table>

Portable Magnifier Lamp

Multi-purpose magnifier with adjustable arm and 39° reach. 40 watt incandescent bulb and 4" diameter, 3 diopter lens. Includes standard two-conductor cord set and 4-way mounting bracket. (black only)

<table>
<thead>
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<th>Description</th>
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<tbody>
<tr>
<td>1304</td>
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</tbody>
</table>

Blade Adapter

Provides capability for changing back and forth between all sizes of plain end blades. Additional blade holders are recommended for quick change between blades.

<table>
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<th>Description</th>
</tr>
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<tr>
<td>16436</td>
<td>Blade Adapter</td>
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Saw Blades

Dremel offers both plain and pin end 5 inch blades.

Pin end

Pin and blades are easier to take in and out of the machine.

<table>
<thead>
<tr>
<th>Cat No.</th>
<th>Purpose</th>
<th>Width</th>
<th>Thick</th>
<th>TPI</th>
<th>Speed</th>
</tr>
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<tbody>
<tr>
<td>16411</td>
<td>For tight radius cutting in hard</td>
<td>.110</td>
<td>.018</td>
<td>15</td>
<td>High/Low</td>
</tr>
<tr>
<td>16412</td>
<td>and soft wood.</td>
<td>.110</td>
<td>.018</td>
<td>10</td>
<td>High/Low</td>
</tr>
<tr>
<td>16413</td>
<td></td>
<td>.070</td>
<td>.010</td>
<td>18.5</td>
<td>High/Low</td>
</tr>
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</table>

Plain end

The pin type blades, while somewhat easier to put in and take out of the machine, do not always produce the same controlled cutting action provided with the plain end blade. The 1671 Scroll Saw was designed to accept both.

<table>
<thead>
<tr>
<th>Cat No.</th>
<th>Purpose</th>
<th>Width</th>
<th>Thick</th>
<th>TPI</th>
<th>Speed</th>
</tr>
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<tbody>
<tr>
<td>16440</td>
<td>For extremely tight radius cutting</td>
<td>.022</td>
<td>.010</td>
<td>28</td>
<td>High</td>
</tr>
<tr>
<td>16443</td>
<td>in wood, plastic and fibrous</td>
<td>.029</td>
<td>.012</td>
<td>20</td>
<td>High</td>
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<tr>
<td>16446</td>
<td>materials.</td>
<td>.038</td>
<td>.016</td>
<td>12.5</td>
<td>High</td>
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<tr>
<td>16448</td>
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<td>.045</td>
<td>.017</td>
<td>11.5</td>
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<td>16453</td>
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<td>.062</td>
<td>.020</td>
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</table>

Spiral

Saws in all directions without turning the work piece.

<table>
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<th>Purpose</th>
<th>Kerf</th>
<th>TPI</th>
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<td>16461</td>
<td>For wood, plastic and abrasive</td>
<td>.028-030</td>
<td>46</td>
<td>High/Low</td>
</tr>
<tr>
<td>16463</td>
<td>materials.</td>
<td>.034-036</td>
<td>41</td>
<td>High/Low</td>
</tr>
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</table>

Metal piercing

For cutting precious and non-ferrous metals; these must be used at very slow speeds. They perform well on machines that have variable speed capability and should be lubricated with beeswax, or a light machine oil.

<table>
<thead>
<tr>
<th>Cat No.</th>
<th>Purpose</th>
<th>Width</th>
<th>Thick</th>
<th>TPI</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>16479</td>
<td>Metals and other hardwood</td>
<td>.024</td>
<td>.012</td>
<td>48</td>
<td>Low</td>
</tr>
<tr>
<td>16483</td>
<td>materials.</td>
<td>.033</td>
<td>.016</td>
<td>36</td>
<td>Low</td>
</tr>
<tr>
<td>16485</td>
<td></td>
<td>.041</td>
<td>.019</td>
<td>30</td>
<td>Low</td>
</tr>
</tbody>
</table>
**Maintenance Information**

**WARNING**

FOR YOUR OWN SAFETY, TURN SWITCH "OFF", AND REMOVE PLUG FROM POWER SOURCE BEFORE LUBRICATING OR DOING ANY MAINTENANCE ON YOUR SAW.

**GENERAL**

An occasional coat of paste wax on the work table will allow the wood being cut to glide smoothly across the work surface.

**ARM BEARINGS**

Lubricate the arm bearings with oil after 10 hours of use. Re-oil after every 50 hours of use or whenever there is a squeak coming from the bearings.

**TO LUBRICATE**

1. Turn saw on its side as shown in (Fig. 12).
2. Squirt a generous amount of SAE 20 oil around the shaft end and bronze bearing.
3. Let the oil soak in overnight in this condition.
4. Next day repeat the above procedure for the opposite side of the saw.

**CAUTION:**

Any servicing of this tool should be performed by an authorized service representative.

**IMPORTANT!** Use of any accessories or attachments other than those supplied by Dremel may be hazardous.

**Trouble Shooting**

**WARNING**

For your own safety, turn switch "OFF" and remove plug from power source outlet before trouble shooting.

<table>
<thead>
<tr>
<th>TROUBLE</th>
<th>PROBABLE CAUSE</th>
<th>REMEDY SUGGESTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>BREAKING BLADES</td>
<td>1. Wrong tension.</td>
<td>1. Adjust blade tension.</td>
</tr>
<tr>
<td></td>
<td>2. Over working blade.</td>
<td>2. Reduce feed rate.</td>
</tr>
<tr>
<td></td>
<td>3. Wrong blade application.</td>
<td>3. Use narrow blades for cutting thin wood,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wide blades for thicker wood.</td>
</tr>
<tr>
<td></td>
<td>4. Twisting blade in wood.</td>
<td>4. Avoid side pressure on blade.</td>
</tr>
<tr>
<td></td>
<td>5. Incorrect teeth per inch.</td>
<td>5. Blade should have minimum 3 teeth in</td>
</tr>
<tr>
<td></td>
<td></td>
<td>contact with workpiece.</td>
</tr>
<tr>
<td>MOTOR WILL NOT RUN</td>
<td>Defective cord or plug.</td>
<td>1. Replace defective parts before using saw</td>
</tr>
<tr>
<td></td>
<td>2. Defective motor.</td>
<td>again.</td>
</tr>
<tr>
<td></td>
<td>3. Defective wire connections.</td>
<td>2. Consult Dremel Service. Any attempt to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>repair this motor may create a HAZARD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. unless repair is done by a qualified</td>
</tr>
<tr>
<td></td>
<td></td>
<td>service technician.</td>
</tr>
<tr>
<td>VIBRATION</td>
<td>1. Improper mounting of saw.</td>
<td>1. See mounting instructions in this manual</td>
</tr>
<tr>
<td></td>
<td>2. Unsuitable mounting surface.</td>
<td>for proper mounting technique.</td>
</tr>
<tr>
<td></td>
<td>3. Loose table or table resting against motor.</td>
<td>2. The heavier your work bench is, the less vibration will occur. A plywood workbench will not be as good a work surface as the same size solid lumber. Use common sense in choosing a mounting surface.</td>
</tr>
<tr>
<td></td>
<td>4. Loose motor mounting.</td>
<td>3. Tighten table lock knob.</td>
</tr>
<tr>
<td>BLADE RUNOUT-Blade not in-line with arm motion</td>
<td>1. Blade holders not aligned.</td>
<td>1. Loosen cap screws holding blade to arms. Adjust blade holders positions—retighten screws. (3.5mm allen wrench required).</td>
</tr>
<tr>
<td>CODE NO.</td>
<td>PART NO.</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>----------</td>
<td>----------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>5296183</td>
<td>Blade Box</td>
</tr>
<tr>
<td>2</td>
<td>5296195</td>
<td>Self Tap Screw (8)</td>
</tr>
<tr>
<td>3</td>
<td>9730</td>
<td>Spring Washer (9)</td>
</tr>
<tr>
<td>4</td>
<td>11489</td>
<td>Hex Nut (6)</td>
</tr>
<tr>
<td>5</td>
<td>5296196</td>
<td>Pan Head Screw (8)</td>
</tr>
<tr>
<td>6</td>
<td>5296150</td>
<td>Plate Cover</td>
</tr>
<tr>
<td>7</td>
<td>44549</td>
<td>Spring Washer (2)</td>
</tr>
<tr>
<td>8</td>
<td>5296197</td>
<td>Hex Head Bolt (2)</td>
</tr>
<tr>
<td>9</td>
<td>5296182</td>
<td>Base</td>
</tr>
<tr>
<td>10</td>
<td>5870</td>
<td>Hex Head Bolt (4)</td>
</tr>
<tr>
<td>11</td>
<td>5296747</td>
<td>Housing Left</td>
</tr>
<tr>
<td>12</td>
<td>5296189</td>
<td>Supp. Table</td>
</tr>
<tr>
<td>13</td>
<td>5296177</td>
<td>Indicator</td>
</tr>
<tr>
<td>14</td>
<td>4775</td>
<td>Round Head Screw</td>
</tr>
<tr>
<td>15</td>
<td>5296154</td>
<td>Bracket Tilt</td>
</tr>
<tr>
<td>16</td>
<td>9709</td>
<td>Spring Washer (3)</td>
</tr>
<tr>
<td>17</td>
<td>5296165</td>
<td>Spring</td>
</tr>
<tr>
<td>18</td>
<td>67034</td>
<td>Flat Washer (2)</td>
</tr>
<tr>
<td>19</td>
<td>5296198</td>
<td>Hex Head Bolt</td>
</tr>
<tr>
<td>20</td>
<td>5296749</td>
<td>Spring</td>
</tr>
<tr>
<td>21</td>
<td>5296199</td>
<td>Bolt Tension</td>
</tr>
<tr>
<td>22</td>
<td>5296201</td>
<td>Lower Rocker Arm Assy.</td>
</tr>
<tr>
<td>23</td>
<td>1734</td>
<td>Spring Washer (2)</td>
</tr>
<tr>
<td>24</td>
<td>306064</td>
<td>Hex Head Bolt (2)</td>
</tr>
<tr>
<td>25</td>
<td>5296159</td>
<td>Bearing Flange (4)</td>
</tr>
<tr>
<td>26</td>
<td>5296202</td>
<td>Self Tap Screw (2)</td>
</tr>
<tr>
<td>27</td>
<td>5296217</td>
<td>Cap Head Screw (4)</td>
</tr>
<tr>
<td>28</td>
<td>5296164</td>
<td>Retainer (2)</td>
</tr>
<tr>
<td>29</td>
<td>5296213</td>
<td>Upper Rocker Arm Assy.</td>
</tr>
</tbody>
</table>

**WRITE FOR CURRENT PRICES - NO C.O.D.'S**

**UNITED STATES**
Dremel Service Center, 4915 Twenty-first St., Racine, WI 53406
Dremel Service Center, 4631 E. Sunny Dunes, Palm Springs, CA 92262

**EASTERN CANADA**
Giles Tool Agency 6520 Lawrence av. east, Scarborough, Ont. Canada M1C 4A7

**OUTSIDE OF CONTINENTAL UNITED STATES**
See your local distributor or write to Dremel,
4915 Twenty-first St., Racine, WI 53406

**WESTERN CANADA**
Totem Tools 3951 Main st. Vancouver, B.C. Canada V5V 3P1
Model 1671 type 1 scroll saw is shipped complete in one carton. Separate all parts from packing materials and check each item with illustration and "TABLE OF LOOSE PARTS" make certain all items are accounted for before discarding any packing material.

If you have any problems with your saw, please call Dremel Customer Service before returning your saw to place of purchase. If Dremel can solve your problem on the phone, this will avoid inconvenience to you and shipping charges.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>TABLE OF LOOSE PARTS</th>
<th>Q'TY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Blades Bag Included:</td>
<td></td>
</tr>
<tr>
<td>A1</td>
<td>Blades</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>(1 Blade Installed on Machine) Total 13</td>
<td></td>
</tr>
<tr>
<td>A2</td>
<td>Blade Adaptors</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>Owner Manual Bag</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Included:</td>
<td></td>
</tr>
<tr>
<td>B1</td>
<td>Owner Manual</td>
<td>1</td>
</tr>
<tr>
<td>B2</td>
<td>Bits of Info</td>
<td>1</td>
</tr>
<tr>
<td>B3</td>
<td>Reg. Card</td>
<td>1</td>
</tr>
<tr>
<td>B4</td>
<td>Parts List</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>Bag Assembly Included:</td>
<td></td>
</tr>
<tr>
<td>C1</td>
<td>Allen Wrench (4mm)</td>
<td>1</td>
</tr>
<tr>
<td>C2</td>
<td>Allen Wrench (2.5mm)</td>
<td>1</td>
</tr>
<tr>
<td>C3</td>
<td>PVC Pipe</td>
<td>1</td>
</tr>
<tr>
<td>C4</td>
<td>Blade Guard Assembly</td>
<td>1</td>
</tr>
</tbody>
</table>
Installing blade guard assembly

1. Loosen the drop foot set scr. (C) and brass pipe set scr. (A) with provided allen wrenches shown in (FIG. 1-1) and remove the set screws (A, C), washer (E), drop foot (D) and brass pipe (B).

2. Place the support rod into it's mounting hole (FIG. 1-2), then locking it with screw knob (F) at available position (FIG. 1-3). (IMPORTANT: Spring is to be installed for supporting guard assembly not to apply pressure to work surface)

3. Insert brass pipe (B) and secured drop foot (D) into the support rod. Hand tighten their set screws and make sure the (B, D) position is correct. Then tighten the set screws with provided wrenches (FIG. 1-3).

(NOTE: After use the provided allen wrenches can be stored in the blade box on the side of the scroll saw).

When mounting or relocating the saw dust blower nozzle, do not over tighten the set screw. Stop tightening when you feel resistance. Over tightening can damage the nozzle.

4. Insert the pvc pipe (H) one side end into the brass pipe (B) and plug housing (G) shown in (FIG. 1-4).