

## Diamond Tech

### Studio Pro™ Precision 2000 3 Year Warranty

All Precision 2000™ Band Saw and accessories are manufactured to high quality standards and are serviced by highly qualified technicians.

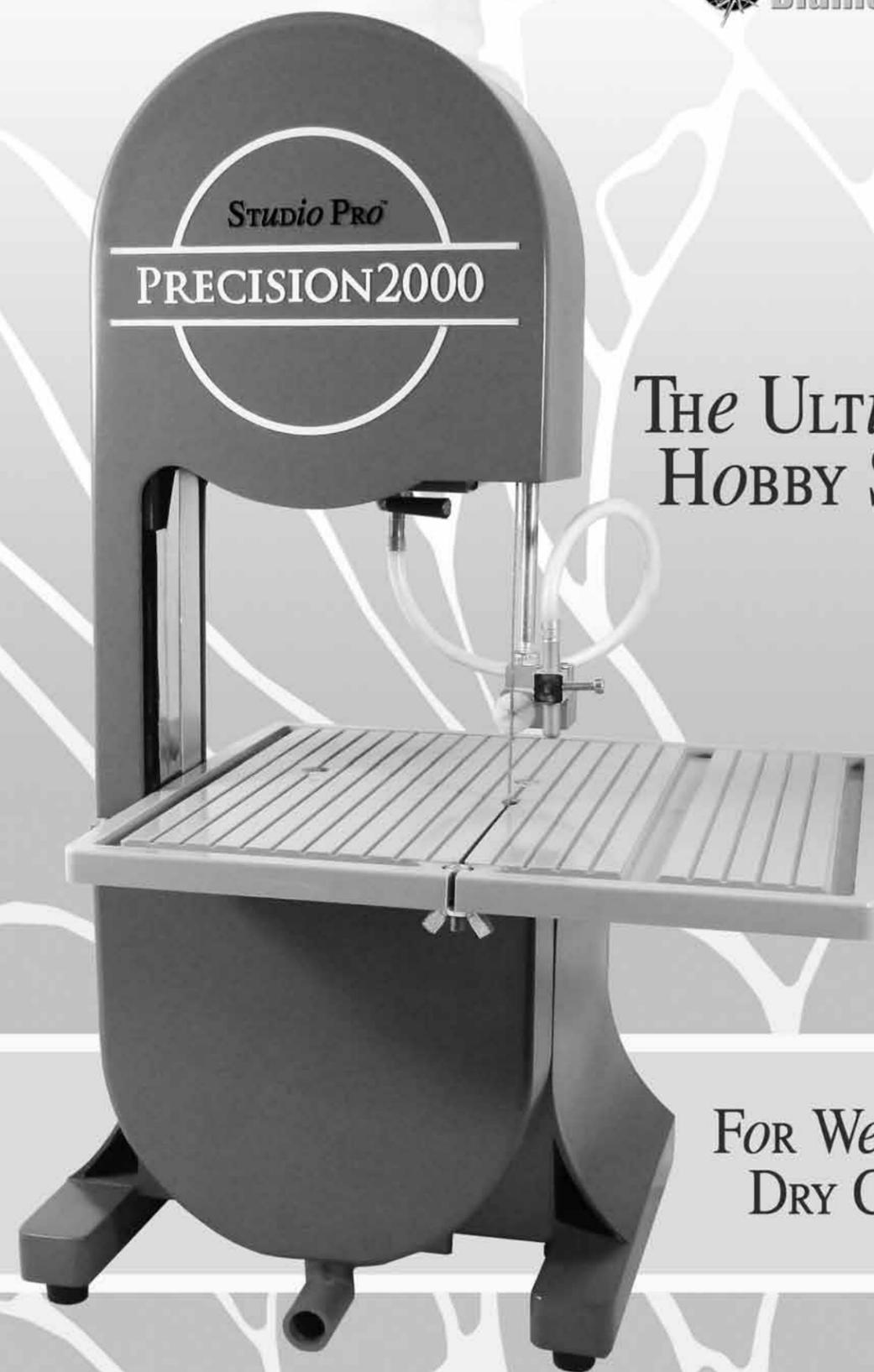
Precision 2000 Band Saw is warranted to the original purchaser for three full years from the original purchase date. During the three year period, if you feel the Precision 2000™ Band Saw is not performing properly and needs to be serviced, contact Diamond Tech at 800-937-9593 or email [info@dtcrafts.com](mailto:info@dtcrafts.com) for a Return Authorization Number. Equipment will not be accepted at Diamond Tech without a Return Authorization Number.

If returning the Band Saw for evaluation or repair, be sure to include your Name, Address, Daytime Phone Number with Area Code and a letter explaining the specific problem you are encountering. You will be contacted if any necessary parts or service are not covered under the warranty.

Date of purchase \_\_\_ / \_\_\_ / \_\_\_

Mark the Return Authorization Number clearly on every package! DO NOT SEND THIS PRODUCT BACK WITHOUT SUCH PRIOR AUTHORIZATION! Return postage and insurance are the responsibility of the consumer. Diamond Tech will return your equipment postage paid and insured if it is under warranty. Any Band Saw no longer under warranty will be returned at the owner's expense. Diamond Tech reserves the right to repair or replace faulty equipment at its discretion. The Precision 2000™ Band Saw is warranted against defective materials or workmanship. If the Precision 2000™ Band Saw suffers damage due to customer modifications and/or is used for any application other than that for which it was designed, this warranty is void. This warranty does not include damage due to: (A) neglect (B) accident (C) unreasonable use (D) improper maintenance (E) any other causes not attributed to defects in material or workmanship. This warranty specifically excludes the Precision 2000™ Band Saw blades and/or guides. Any implied or otherwise explicit guarantees made through merchandiser of this product are not covered in this warranty coverage agreement and are expressly disclaimed.

**IMPORTANT NOTE:** This machine was designed for certain applications only. Diamond Tech strongly recommends that this machine NOT be modified and/or used for any application other than that for which it was designed. If you have any questions relative to its application, please contact us and we will advise as to its proper use.



*The Ultimate  
HOBBY Saw!*

*FOR Wet AND  
DRY CUTS!*

**Diamond Tech, USA**  
5600 Airport Blvd. Suite C, Tampa, Florida 33634  
Tech Support: 800-937-9593 (U.S.A., Canada) 813-806-2923 (International)  
Fax: 800-299-3313, Email: [info@dtcrafts.com](mailto:info@dtcrafts.com)  
[www.DiamondTechCrafts.com](http://www.DiamondTechCrafts.com) | [www.DiamondTechGlass.com](http://www.DiamondTechGlass.com)

2/2012

**OPERATIONS MANUAL**  
CUTS WOOD | GLASS | PLASTIC | SOFT TILE | PLEXIGLASS AND MUCH MORE!

## BEFORE YOU BEGIN

**WARNING:** This product contains small parts that may be a choking hazard to small children.  
KEEP OUT OF REACH OF CHILDREN.

### READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY.

- After unpacking all components, assemble band saw on a firm level surface to prevent saw from tilting or rocking.
- Be sure the power switch is in the OFF position before plugging in the band saw.
- Always disconnect band saw from electrical outlet before setting up or servicing.
- Use a properly grounded and tested outlet. Under no circumstances should you ever modify the plug.
- Wear proper apparel. Never wear loose fitting clothes, neckties, jewelry and gloves that may get caught in the saws moving parts.
- Remove all wrenches from the work surface before using band saw. Leaving wrenches attached while operating this tool may result in damage to the machine and/or injury to the operator.
- Always wear safety glasses. Everyday eyeglasses have only impact resistant lenses; they are not safety glasses.
- Wear dust mask when cutting with wood or metal blade.
- Never turn on band saw while glass or working materials are touching the blade.
- Always hold material being cut firmly against cutting table.
- Feed materials at a slow easy pace into the blade. Avoid sudden twisting of the blade; which may cause kinking or breaking.
- Never leave saw running unattended. Turn power OFF when not in use.
- Do not operate while under the influence of medication or alcohol.
- To ensure top performance keep band saw properly maintained.

## CONTENTS

Your **PRECISION 2000™** has been shipped partially assembled. Carefully remove saw and parts from their packaging.

- 1 - Band Saw Body with Water Bottle and Lower Wheel Reservoir
- 2 - Cutting Table
- 3 - Miter Gauge
- 4 - Electrical Cord
- 5 - Adjusting Wrenches
- 6 - Studio Pro™ Diamond Blade
- 7 - The “Chopper” Wood Blade
- 8 - Additional Blade Guide
- 9 - Drain Tubing



### PRECISION 2000™ DELUXE ALSO INCLUDES

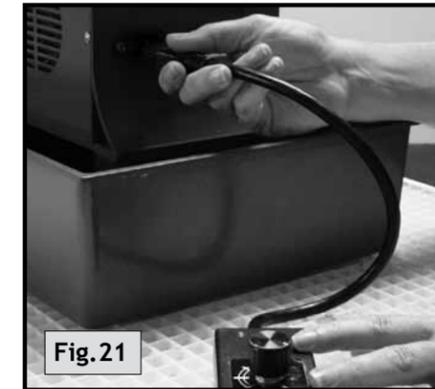
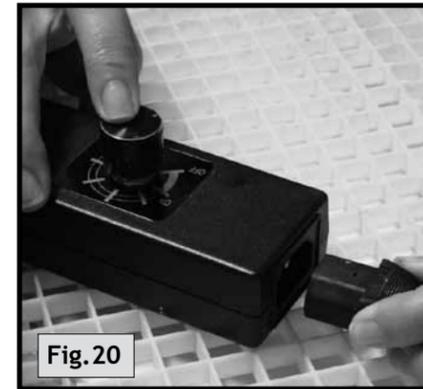
- 1 - Rubber Tubing
- 2 - Multispeed Rheostat
- 3 - Adjustable Recirculating Water Pump
- 4 - Reservoir Tray



### C. Rheostat Installation

Use of Rheostat allows blade speed to slow down for intricate or delicate cuts. Slowing the speed will also prevent glass from heating too rapidly, which may cause glass to glow red or crack.

- 1) Remove the power cord from the saw. Plug rheostat into power cord outlet located on the right side of the saw underneath the ON/OFF switch (Fig.20).
- 2) Plug the saw power cord into the rheostat (Fig.21).
- 3) Plug both the pump and rheostat into a dedicated power strip with an on/off toggle switch. Using a power strip will allow you to turn the pump and saw on and off safely at the same time.



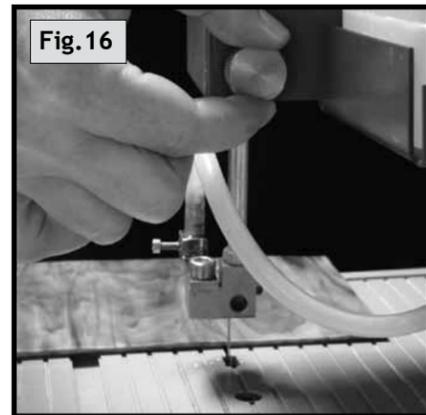
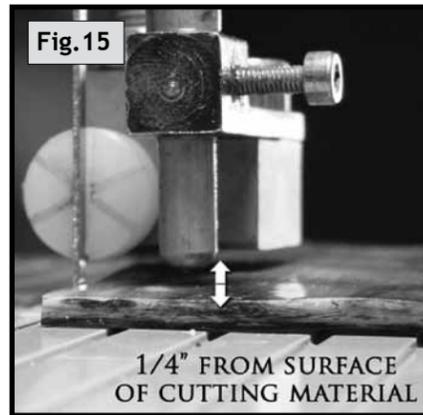
### QUICK TIPS

- 1) Do not force materials into the blade. Ease the materials into the blade, turning as you go to create your pattern. Avoid twisting the blade on tight curves.
- 2) To back out of a cut, turn the saw off and ease the material away from the blade.
- 3) Clean band saw after each use with lukewarm water.
- 4) When storing for extended periods of time, remove blade and drain water supply system.
- 5) Use a waterproof pen to mark your pattern on the material. For added protection allow the ink to dry and use a Chap Stick™ or rubber cement over line before cutting.
- 6) When cutting material the highest blade speed will usually result in the fast and smoothest cutting. Use a slower speed when working with delicate materials or making very tight turning radius.
- 7) When cleaning the wood blade, it is best to avoid using abrasive cleaners, as they can scratch the surface of the blade which may affect performance. Additionally, scratches in the surface of the blade will fill with pitch, making it more difficult to clean the next time. To clean blades, soak with oven cleaner.
- 8) Should the blade jam in material being cut, immediately turn OFF power switch and wait until all moving parts have stopped. Gently free work materials, holding blade against the blade guides to prevent it from stretching or badly twisting. Back out of the cut if needed. Inspect blade for kinks and ensure there is no remaining debris in the blade path which may have caused the jam.

### ADDITIONAL PARTS

Item	Item Number	Item	Item Number
PRECISION 2000™ DIAMOND BLADE	#22	PRECISION 2000™ FUSE HOLDER	#P654
PRECISION 2000™ “THE CHOPPER” WOOD BLADE	#WB0450	PRECISION 2000™ ANGLE GUIDE	#P656
PRECISION 2000™ BLADE GUIDES	#513	PRECISION 2000™ UPPER WHEEL	#P674
PRECISION 2000™ MOTOR	#P650	PRECISION2000™ LOWER WHEEL	#P675
PRECISION 2000™ FUSE	#P653	PRECISION 2000™ WATER BOTTLE	#P911

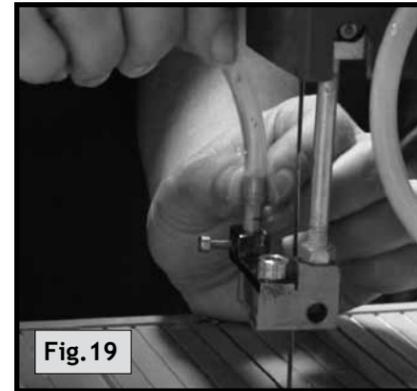
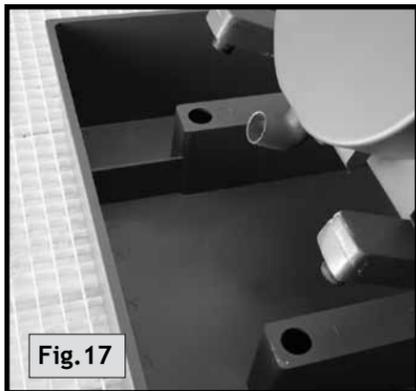
Diamond Tech offers a Diamond Blade repair service should a blade break with ample diamond remaining. Return blade to Diamond Tech, Blade Repair Service, 5600 Airport Blvd., Suite C, Tampa, FL 33634. When returning a blade for repairs, make sure you include your name, address, daytime phone number @ area code, saw model and type of payment. Blade repair service does not cover wood or metal cutting blades. For International and special handling, please include extra postage and shipping instructions Blade Repair Fees (U.S. Dollars):  
 Precision 2000, DL1000, DL3000, DL3000XL, Speedster, SpeedsterXL.....\$25.00  
 DL5000..... \$45.00



## PRECISION 2000 DELUXE ASSEMBLY INSTRUCTIONS

### A. Reservoir Installation

- 1) Place reservoir on a firm level surface, to prevent saw from tilting or rocking. The small compartment of the reservoir should be on the left side of the saw.
- 2) Lift saw and insert feet into the 4 openings in the reservoir base (Fig. 17).



### B. Recirculating Water System

The durable recirculating water pump and reservoir tray collects and recycles water.

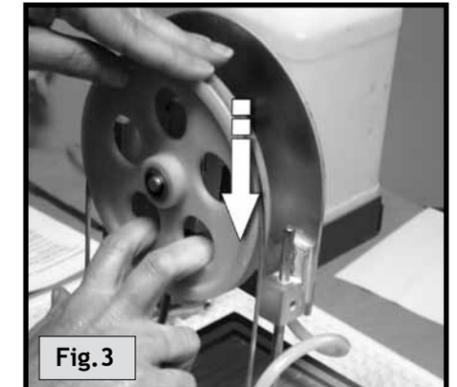
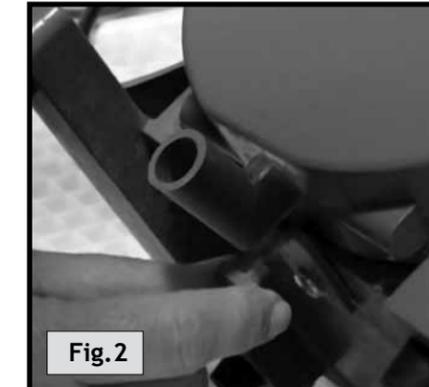
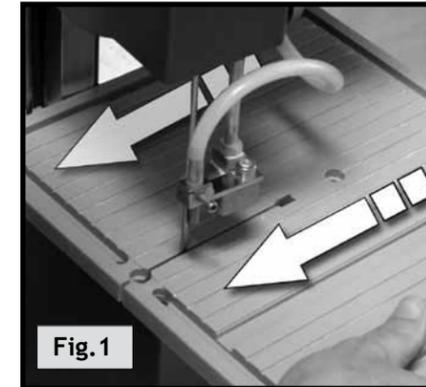
- 1) Remove water bottle and tubing from the saw and set aside.
- 2) Place the PRECISION 2000™ with the reservoir on a solid level work surface, flat-side facing forward.
- 3) Insert pump valve into the top of the recirculating water pump. Place pump in the left rear compartment of the reservoir (Fig.18). Press down on the pump to activate the suction cups, securing pump to the bottom of the reservoir.
- 4) Connect the plastic tubing to the top of the pump. Note: Running the plastic tubing under warm water will make it easier to insert into the stem. Next, connect the opposite end into the top of the brass water nozzle on the upper guide assembly (Fig.19). Plug pump's electrical connector into an outlet or power strip.
- 5) Fill the reservoir with approximately 2" of water (Approximately 3 quarts) before use.
- 6) To test pump, the saw must be turned on. Be sure the blade has been properly installed and there are no obstructions that may interfere with its operation and blade movement. DO NOT attempt to touch the blade or blade wheels while the machine is turned on.
- 7) Test pump and water flow by turning machine on at a slow speed. Water should begin to flow freely from the water nozzle mounted on the upper blade guide assembly. If necessary, adjust position of nozzle so water flow is directed at the front of the blade (See Fig.8).
- 8) If large pockets of air appear in the hose line, this may stop the flow of water to the blade. If this should occur, turn the saw off. Remove the hose from the pump nozzle without removing the pump from the water and let the hose drain. Reattach the hose and start the saw again. Small air bubbles may persist in the line, but these will not interfere with sufficient flow to the blade.

**WARNING:** Never operate saw if there is insufficient water at the point of cutting, as this will cause damage to the blade.

## ASSEMBLY INSTRUCTIONS

### A. Table Installation

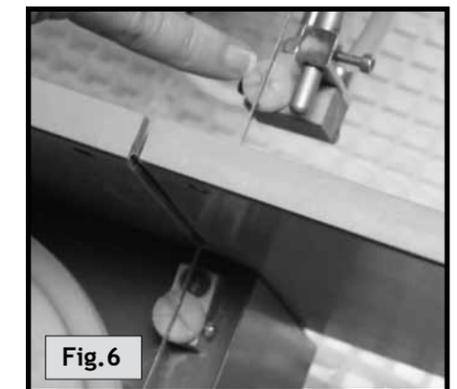
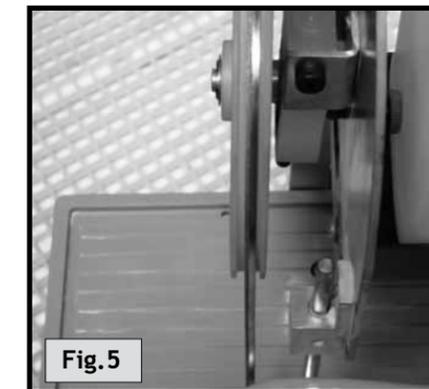
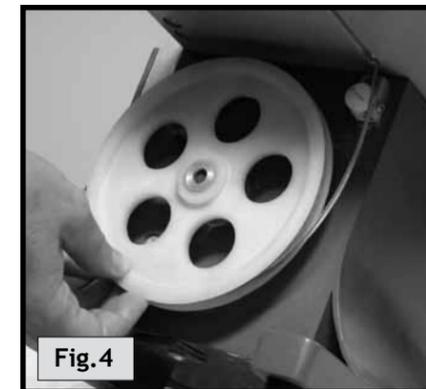
- 1) Remove table mounting bolts located directly behind the blade with a hex wrench. Loosen and remove the table alignment screw, washer and wing nut, on the front of the cutting table.
- 2) While holding the table with the slot opening directly behind the blade, carefully slide the diamond blade through the slot (Fig.1).
- 3) Secure cutting table to the saw body with the table mounting bolts. Return alignment screw, washer and wingnut to the front of the cutting table and tighten.



### B. Blade Removal and Installation

Studio Pro™ Diamond, Wood or Metal blades are installed and removed in the same fashion. A Diamond Blade comes pre-installed, however should it become loose in shipment or if you need to replace a blade, follow these instructions.

- 1) Remove cutting table alignment screw, washer and wingnut from the front of the table.
- 2) Loosen brass thumb screws, located on the left side and on the back of the saw, until upper cover slides up and off easily.
- 3) Tilt saw backwards and loosen screw located underneath the lower cover. Rotate plastic tab away from the base of the cover (Fig.2) and slide cover off.
- 3) With the upper and lower blade wheels exposed, place a hand on the top of the upper blade wheel and press down firmly (Fig.3). Slide worn blade off the wheel.



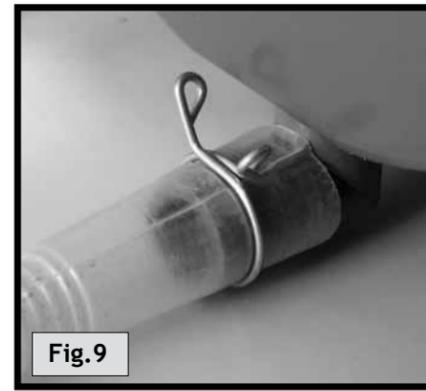
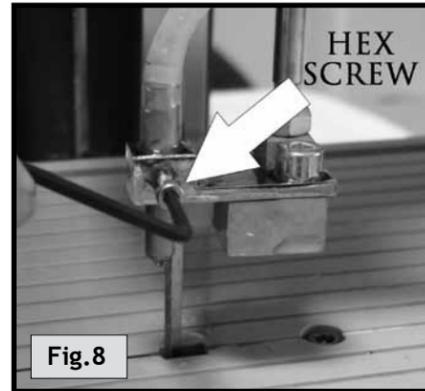
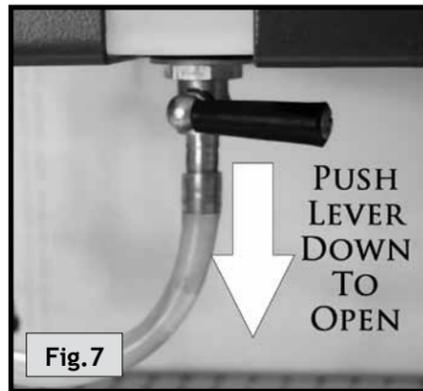
- 4) To install a new blade, slide new blade through the opening in the table and wrap blade around lower wheel with the diamond or teeth facing you and away from the saw (Fig.4). When installing a wood blade, install with the teeth pointing downward. Place a hand on the top of the upper blade wheel, press down firmly. Once upper wheel is in the downward position, center new blade on the upper wheel (Fig.5), then slowly release the wheel.
- 5) The blade should be centered on both the upper and lower blade guide grooves (Fig.6), refer to Blade Guide Adjustment and Blade Tracking, page 3. The wood blade will track differently than the diamond blade. The wood blade will ride center on the bottom and towards the back of the upper wheel, never in the center or front.
- 6) Once the blade is properly installed, reinstall upper and lower covers, table alignment screw, washer and wing nut.

### C. Water Systems

The **PRECISION 2000™** comes equipped with brass water supply nozzle and large capacity water bottle, offering better water flow to the front of the blade for increased cooling and lubrication.

- 1) Remove water bottle cap and fill with approximately 24 oz. of water. Replace cap but do not screw lid on tightly. A moderately loose lid will prevent a vacuum from occurring.
- 2) When ready to cut, open water valve on the bottom of the bottle by pushing the lever downward (Fig.7). Water should begin to flow freely from the water nozzle mounted on the blade guide assembly. Water nozzle is factory set to flow on the front of the blade. However, some movement may have occurred during shipment. To adjust position of the nozzle, loosen the hex screw on the side of the blade guide assembly (Fig.8) and adjust the brass nozzle into proper position so the water flows to the front of the blade, retighten screw.
- 3) The water should drain off the work surface, through the 2 holes on the left side of the table, draining into the lower wheel cover which acts as a reservoir.
- 4) The **PRECISION 2000™** is equipped with a large drainage spout at the base of the saw (Fig.9). Connect tubing to this spout and secure with locking clip. Place the open end of tube into a collection tray, bucket or sink.

**WARNING:** When using a Diamond Blade, never operate saw if there is insufficient water at the point of cutting, as this will cause damage to the blade.



## USE AND MAINTENANCE

### A. Blade Guide Adjustment

The **PRECISION 2000™** comes with lower and upper blade guides. Correct alignment of these guides is essential to proper glass cutting and extending blade life.

- 1) The blade should pass through the grooves of the upper and lower blade guides with the back edge of the blade resting slightly inside the grooves. To adjust, use a small hex wrench and loosen the set screw located on the right side of the lower (Fig.10) or upper blade guide assembly (Fig.11). Slide the blade guide back or forward to achieve proper positioning. The blade should pass vertically through the guides when viewed from the side. The **PRECISION 2000™** blade guides can be rotated 3 times for extended guide wear.

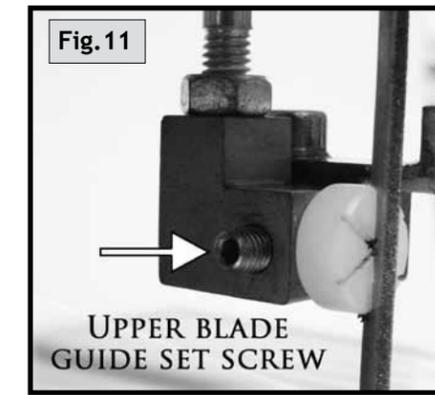
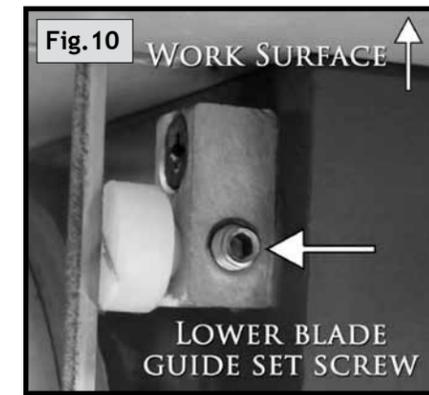
**NOTE:** Blade guides should be inspected and adjusted after approximately 3 hours of use. Frequent replacement of blade guides is recommended to maintain cutting accuracy and extend blade life.

### B. Use of Miter Gauge for straight edge or angle cuts

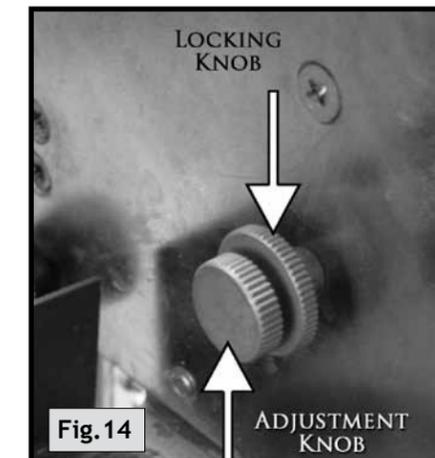
- 1) Set guide at the desired angle by loosening thumb screw and rotating position mark on the silver bar to desired angle.
- 2) Tighten screw to secure setting. Place angle guide into the channel on the work surface.
- 3) Place material against the straight edge guide and feed the material slowly into the blade (Fig.12) pushing back to the guide. The band saw is designed for intricate radius cutting; however the miter gauge will permit straight edge cutting when needed.

### C. Blade Tracking

Each **PRECISION 2000™** is fully tested and adjusted before it is shipped. Occasionally, additional tracking adjustments are necessary due to movement in shipping. Ideally the blade should be positioned 1/8" - 1/16" (3.75 - 1.66 mm) from the back wall of the upperwheel.



- 1) Turn OFF power switch.
- 2) Remove upper and lower covers and water bottle to access tracking/locking knob located behind the upper wheel (Fig.13).
- 3) Loosen the knob closest to the saw, this is the locking mechanism (Fig.14). Loosening this knob will allow for free movement of the wheel.
- 4) If the blade is riding too far forward on the top wheel, tilt it slightly forward by turning the top adjusting knob (See Fig.14) to the right (clockwise). The wheel should then start to tilt slightly forward while the bottom of the wheel will move slightly backwards, towards the saw body. Turn the blade wheels by hand to test alignment. When satisfied with the position, turn locking knob to secure alignment in place. Return the water bottle and wheel covers to their normal operating positions.



- 5) If the blade is riding too far backward against the back, turn the tracking knob to the left (counterclockwise) so the upper wheel tilts slightly towards the saw body while the bottom of the wheel tilts away from the saw body (Fig.15). Turn blade wheel by hand to test adjustment. When satisfied with the position, turn locking knob to secure alignment in place. Replace the water bottle and wheel covers.

### D. Upper Blade Guide Arm

The position of the upper guide assembly should be 1/4" from the top of the material being cut (Fig.15).

- 1) To adjust height of blade guide assembly, loosen tension knob on back of saw and raise or lower the arm assembly (Fig. 16). Once in the desired position, tighten knob.