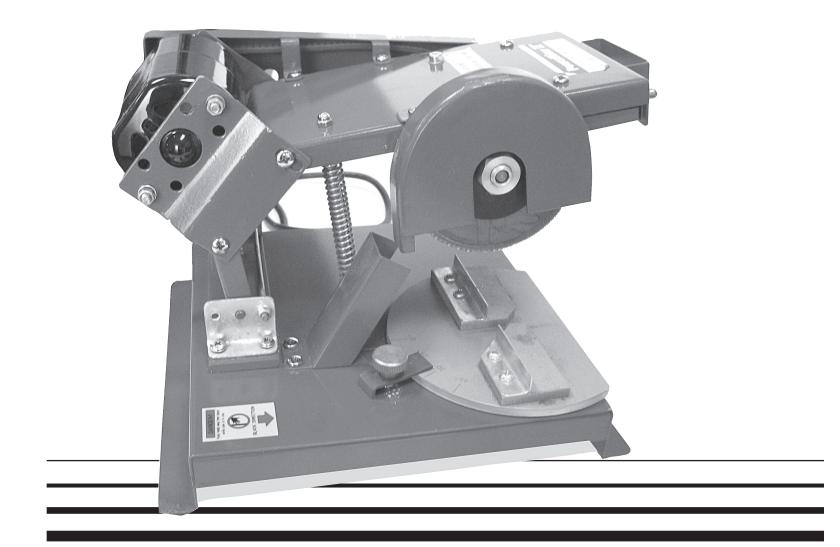
# **Innovations For Creativity**



# Power Miter II

**CHOP SAW** 

**OPERATIONS MANUAL** 

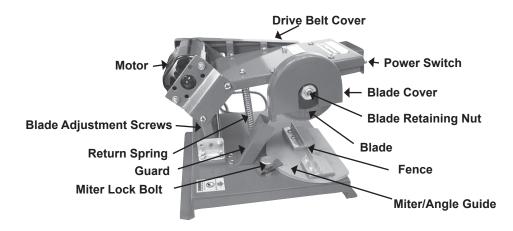
# **Before You Begin**

### Read and follow all instructions carefully.

- Unpack and inspect all components. Assemble chop saw on a firm level surface to prevent saw from tilting and rocking.
- Always disconnect chop saw from electrical outlet before setting up or servicing.
- Be sure the power switch is in the OFF position before plugging in the chop saw.
- Wear proper apparel. Never wear loose fitting clothes, neckties, jewelry and gloves that may get caught in moving parts.
- Remove all wrenches before using chop saw. Leaving wrenches or loose items on the saw while operating this tool may result in damage to the machine and/or operator.
- Always wear safety glasses. Everyday eyeglasses have only impact resistant lenses; they are not safety glasses.
- Make sure blade is sharp, undamaged and properly aligned.
- · Always hold material being cut firmly on cutting table.
- To reduce the risk of fire never use the chop saw near flammable liquids, vapor or gasses.
- · Keep out of reach of children.
- Never leave saw unattended while plugged in to an outlet. Unplug from outlet when not in use.
- Do not operate while under the influence of medication or alcohol.
- · Keep Guards in place and in working condition.
- Keep work area clean. Cluttered areas and benches invite injuries.
- 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 all
  instructions for lubricating and changing accessories.

WARNING: Some dust created by power sanding, sawing, grinding and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm e.g. lead from lead came. To reduce exposure to these chemicals: work in a well ventilated area and work with approved safety equipment such as dust masks that are specially rated for this type of work. Do not eat or drink while working. Wash hands immediately after use.

# **Saw Diagram**



## **Contents**

Your Power Miter II<sup>™</sup> has been shipped fully assembled. Carefully remove saw and accessories from the packaging.

- 1- Power Miter II Saw Body
- 2- Oil Dispenser
- 3- 1/2 ounce of oil
- 4- Hex Wrenches

# **Initial Setup**

# A. Inspect and adjust Power Miter II Chop Saw.

- 1) Place chop saw on a firm level work surface. Do not plug saw in to an electrical outlet at this point.
- 2) Inspect saw for any damages that may have occurred during shipping.
- 3) The blade teeth should be pointing downward at the front of the saw. If necessary tighten the blade retaining nut at this time.
- 4) Occasionally the path of the blade will shift out of alignment during shipping. Test alignment with miter/angle guide:
  - 1. Unplug saw from the outlet.
  - 2. Loosen the miter lock bolt. (Fig. 1)
  - 2. With the miter/angle guide set at 0° pull the blade handle down as far as possible.
  - 3. If the saw falls perfectly into the gap (Fig. 2) of the fence return the blade to the top position.
  - 4. Turn the miter/angle guide to 45° and pull the blade handle down as far as possible.
  - 5. If the blade still falls perfectly into the gap, the saw is adjusted properly. If during either test the blade hits the fence, continue with step 6.
  - 6. Using an adjustable wrench loosen the blade adjustment screws (Fig. 2) located under the motor on the back of the saw.
  - 7. With the miter/angle guide set at 0°, grasp the handle and move the blade arm either left or right until the blade clears the fence. Repeat this with the miter/angle guide set at 45°.
  - 8. After the blade has been adjusted to clear the fence, retighten the blade adjustment screws.

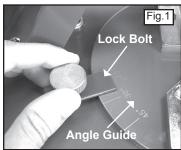
### **B.** Lubrication

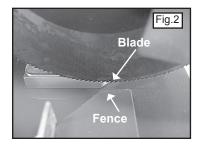
- 1) Blade drive shafts should be lubricated daily before use. To lubricate blade drive shafts, locate the two lube ports (oil ports) at the top of the saw near the handle (Fig. 4).
- 2) Using the provided oil and oil dispenser, add 2-3 drops of oil to each port before use (Fig. 5).

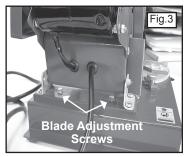
## **C. Material Clamping and Supporting**

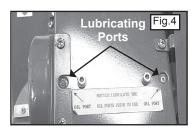
1) Long pieces need extra supports. The supports should be placed along the work piece so the work piece does not sag. Your hand holding the work piece should be positioned 4" or more from the blade path. The support should let the work piece lie flat on the base and work able during the cutting operation.













# **Operations and Use of Chop Saw**

The powerful motor of the Power Miter II Chop Saw is designed to cut hardened lead, zinc, wood, copper and brass came or framing.

WARNING: This machine is NOT designed for cutting ferrous metals (steel, iron and iron based metals.) Use this miter saw to cut only thin wood, or soft metals like aluminum, brass or zinc. Other materials may shatter, bind on the blade, or create other dangers.

### **A. Cutting Instructions**

- 1) Plug saw into power outlet.
- 2) Adjust the fence to the desired angle, by lining up the degree mark on the miter angle guide with the alignment mark on the base of the Chop Saw. Alignment mark is located under the cutting arm and behind the miter angle guide. Once aligned, tighten the humb screw (miter angle bolt), locking the angle guide into place.
- Insure the material being cut is flat against the fence. Secure lengthy materials with supports (see section C of *Initial Setup*, page 2).
- 4) With the left hand holding the material at least 4" from the blade, place the right hand on the cutting arm and depress the start button with thumb to activate the saw.
- 5) Bring cutting arm down using just enough force to cut the material. Allow the blade to do the cutting. Excessive force will cause a reduction in cutting efficiency.
- 6) When cutting is complete, remove thumb from power switch and raise arm.
- 7) Do not remove materials from the fence until blade has come to a complete stop.
- 8) Unplug saw from outlet when material cutting is complete.

# **Chop Saw Maintenance**

To assure chop saw safety and reliability, repairs, maintenance and adjustments should be performed regularly.

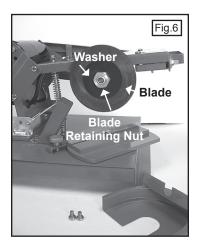
### A. Removing and Installing Blade

- 1) Unplug the chop saw from the outlet.
- 2) Loosen and remove the screws holding the blade cover in place. Place screws and blade cover aside.
- To remove worn blade, place a wrench on the hex nut behind the blade. Using a second wrench, loosen the blade retaining nut (hex nut) on the front of the blade by turning the hex nut counter-clockwise.
- 4) Completely remove the blade retaining nut and washer. Install new blade with the teeth in a downward position. Please note: there are two washers securing the blade in place, a front washer and a rear washer. Should the rear washer come off during blade installation, place it back into position before installing the blade, front washer and blade retaining nut (hex nut).
- 5) Securely tighten blade retaining nut (hex nut).
- 6) After Blade installation check miter/angle guide alignment (see section A, step 4 of *Initial Setup*, page 2).

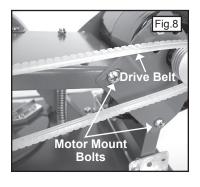
WARNING: Do not attempt to change the Blade while the Chop Saw is plugged into the outlet or the blade is running. For best results use genuine Diamond Tech 4" Power Miter II circular blades.

### **B.** Removing and Installing Blade Drive Belt

- 1) Unplug chop saw from the outlet.
- 2) Loosen and remove the screws holding the drive belt cover in place (FIG 7). Place screws and drive belt cover aside.
- 3) Loosen motor mount screws (FIG 8). Pivot motor forward and remove worn drive belt.
- 4) Replace drive belt and pivot motor back into position, secure with







motor mount screws.

- 5) Check drive belt tension by pressing downward on the drive belt with moderate pressure. There should be 1/4" 3/8" give in the drive belt.
- 6) Secure drive belt cover back into position with screws.

# **Quick Tips**

- 1) If any part of this chop saw is missing, bent, or broken in any way, or any electrical parts don't work, turn the saw off and unplug it. Replace damaged, missing, or failed parts before using the saw again.
- 2) Keep guards in place, in working order, and in proper adjustment.
- 3) Should your chop saw make an unfamiliar noise or vibrates, stop immediately. Turn the saw off, unplug the saw from the outlet, and do not restart until the problem has been corrected.

# **Troubleshooting**

Problem: Blade jams while cutting.

Cause: This may occur if you feed material too rapidly into the blade or make too many start/stops in a short time. May also be attributed to an improper or dull saw blade.

Solution: Release the trigger switch immediately and unplug the saw from the outlet. Check blade to insure it turns freely. Once the blade is free, check the breaker box, if a circuit was tripped simply flip the breaker switch or replace the fuze. Plug saw into the outlet and try to start the motor again.

Problem: The chop saw shakes or vibrates during use.

Cause: The chop saw blade may be loose or damaged. Work piece may be

insecurely clamped.

Solution: Turn off saw and unplug from the outlet. Tighten the blade retaining nut. Clamp

and secure work piece. If the problem persists the blade may be damaged, and will need to be replaced. Replace with a genuine Diamond Tech Power Miter II

Saw Blade.

Problem: Chop saw will not work.

Cause: Fuse may have blown or circuit breaker tripped. Cord could be damaged or the

outlet used may be inactive.

Solution: Replace fuse or reset circuit breaker. Plug into an active outlet. If the chop saw

still does not work you will have to have the cord replaced by Diamond Tech's

repair service technician.

Problem: Saw makes unsatisfactory or rugged cuts.

Cause: The work piece may be incorrectly placed in the saw fence. The blade could be

worn or damaged

Solution: Firmly clamp and support work piece. Replace blade with a genuine Diamond Tech

Power Miter II 4" Circular Saw Blade.

Problem: Does not make accurate cuts.

Cause: The fence may be incorrectly adjusted. An excessive amount of force can cause

inaccurate cuts, due to changes of blade alignment

Solution: Check and adjust blade and fence adjustment (refer to section A of Initial Setup,

page 2). Reduce cutting force, letting the wheel do the cutting.

Problem: Cannot move arm.

Cause: There may be debris/chips in guard. Parts may be damaged.

Solution: Unplug saw. Check and remove any debris or chips that may be jammed in the

guard. Replace or repair damaged parts as needed.

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# **Additional Parts**

Item	Item Number
110V MOTOR	P800
220 - 230V MOTOR	P800A
SWITCH ASSEMBLY	P801
DRIVE BELT SAFETY COVER	P803
BLADE COVER	P805
MITER GUIDE ADJUSTABLE TABLE	P810
BLADE ARBOR	P811M
DRIVE BELT	P812

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# **Diamond Tech**

# Power Miter II Chop Saw - 3 Year Warranty

Diamond Tech's Power Miter II Chop Saw and accessories are manufactured to high quality standards and are serviced by highly qualified technicians.

The **Power Miter II** is warranted to the original purchaser for three full years from the original purchase date. During the three year period, if you feel the **Power Miter II** is not performing properly and needs to be serviced, contact Diamond Tech at 1-800-937-9593 or email info@dticrafts.com for a Return Authorization Number. Equipment will not be accepted at Diamond Tech without a Return Authorization Number.

If returning your 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 chop saw postage paid and insured if under warranty. The **Power Miter II** is warranted against defective materials or workmanship. If the **Power Miter II** 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 Blade and Blade Fence. 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.



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