

**DIAMOND**  
PRODUCTS

**CONCRETE SAW**  
**OPERATOR'S MANUAL**

**MODEL**  
**CC8000**

(Revised 10-15-2002)

**BLANK**

## **SAFETY WARNINGS:**

### **PERSONAL SAFETY:**

- Read and understand instructions before operating saw.
- Always wear safety approved hearing, eye, head and respiratory protection.
- Wear sturdy boots with nonslip soles to aid in providing proper footing. Use of steel-toed safety boots is recommended.
- Wear work gloves to avoid contact with concrete slurry, which can cause serious skin irritation.
- Under certain conditions, sparks may fly so never wear clothes of flammable material.
- Know how to stop saw quickly in case of emergency.
- Keep all parts of your body away from blade and all other moving parts.
- Do not use hands to search for hydraulic fluid leaks. Fluid escaping under pressure can penetrate skin and cause severe personal injury. If any fluid is injected into skin, seek medical attention immediately to prevent gangrene.

### **BLADE SAFETY:**

- Examine cutting blades before each use. Blade should have no cracks, nicks, or flaws. Center hole should be undamaged. Use only the blades recommended for your model.
- This saw should cut only material that is specified on each cutting blade. Read the instructions which are on each blade to determine which material the blade is designed to cut.
- Inspect blade flanges for damage, excessive wear and cleanliness before mounting blade. Blade should fit snugly on clean, undamaged shaft.
- Use only blades marked with a maximum operating speed greater than the blade shaft speed.
- Always operate the blade shaft speed at the proper RPM as indicated on the saw. Make slow, gradual changes when adjusting blade shaft speed and bring to a complete stop before changing rotation direction.
- Always keep guards in place and do not allow blade exposure on the blade guard to exceed 180 degrees. A damaged blade guard must be replaced to protect the operator.
- Make sure the blade does not make contact with the ground or any other surface when transporting the saw.

### **GENERAL SAW SAFETY:**

- Saw must not be left unattended while the engine is running.
- Always remember to keep a hand on the steering wheel when the engine is running.
- Do not use damaged equipment, blades, guards or personal protection devices.
- Do not operate the machine if there is a fuel leak. Have the fuel leak fixed first.
- Use extreme caution and slow speed when moving the saw up or down ramps or when loading or unloading from trucks or trailers.
- Always relieve all pressure before disconnecting hydraulic hoses. Do not apply pressure to damaged hose or fitting.
- Do not use the saw as a vehicle for transporting personnel or equipment.

### **CUTTING/WORK AREA SAFETY:**

- Never operate the saw in any application or job where you are not trained or supervised.
- Operate only in well ventilated areas. Engine exhaust contains carbon monoxide which can cause loss of consciousness and possible death.
- Keep bystanders and/or animals out of the work area.
- Observe all safety regulations for the safe handling of fuel. Handle fuel in safety containers. Shut off the engine and allow it to cool before refueling. Wipe the saw dry if fuel is spilled on it. Always move away from the fueling area before starting the engine.
- Do not operate the saw in areas of combustible material or fumes. Sparks may occur from saw that could cause a fire or an explosion.
- Know the material and work area you are sawing. Hazardous conditions such as live electrical wires or gas lines can be concealed in the material.

**WARNING: Failure to comply with preceding warnings could result in serious bodily injury!**

## OPERATING INSTRUCTIONS:

### BLADE MOUNTING:

1. Be certain you have the correct diamond blade for the application. Contact your authorized servicing dealer for the correct specification. Getting the correct blade will make a tremendous difference in your blade costs and performance.
2. The blade shaft flanges and arbor must be inspected for damage and cleaned before mounting blade. Using wrench provided, remove blade shaft bolt and outer flange. If damaged, replace bad parts. Inspect blade for damage to arbor hole and flange area before attempting to mount blade.
3. Mount the blade solidly and firmly on the outer flange arbor and then to blade shaft. Make sure the arrow on the blade is pointing in the proper direction of rotation. The drive pin in the outer blade flange must go completely through the blade and into the matching hole in the inner blade flange. Using the wrench provided, **tighten blade shaft bolt very securely!** (Approximately 50 foot pounds.) Note that the blade shaft bolt has left hand threads, which tightens by turning counter-clockwise.

### BEFORE SAWING:

1. After mounting the saw blade, install proper size blade guard and check to see that it is securely mounted. **WARNING:** Never operate the saw without proper blade guard in place! Do not operate with front of blade guard raised! Blade exposure cannot exceed 180 degrees when cutting.
2. Do not use conventional (wet) diamond blades without water! You must have from 2-1/2 to 5 gallons of water per minute flowing over the blade for proper cooling and to get maximum blade life. For wet sawing, be sure the spray holes in the blade guard water tubes are open and that each side of the blade has an adequate supply of water. Test your water supply for pressure and quantity (flow) before starting to saw.
3. The front pointer must be checked for alignment with the saw blade. Use a chalk line or long straight edge to verify alignment.
4. Mark the cutting line clearly so the saw operator can follow the line without difficulty. The saw should not be steered from side to side trying to force the blade back on line. Make only slight gradual changes to steering when sawing.

### TO START SAW:

1. Perform all daily maintenance requirements and fill the fuel tank. (Refer to separate engine manual supplied with saw.) **WARNING:** Never fill fuel tank indoors, with engine running or while engine is hot!
2. Operator must be seated upon the saw, otherwise the engine will not start. Seat position may be adjusted closer or further from foot rest by using lever located under seat. **WARNING:** Never operate the saw without foot rest in place!
3. Always place the Travel Speed Control Lever in the Neutral position before starting the saw! (Refer to separate parts list manual for identification of saw controls and their location.)
4. The Blade Speed Control Lever must be in the Neutral position, otherwise the engine will not start. **IMPORTANT:** This saw is equipped with a Safety Interlock System for your protection. The purpose of this system is to prevent the engine from cranking or starting unless the Blade Speed Control Lever is in the Neutral position. In addition, if the operator leaves the seat while the saw is running, the engine will shut off. **WARNING:** Do not operate the saw if the Interlock System is malfunctioning, because it is a safety device, designed for your protection!
5. Make sure Emergency Stop Button is in the UP position, in order for engine to start.
6. Start engine by following procedure in the engine manual. Let engine warm up at half throttle. All sawing is done at full throttle. Governor is factory set for correct engine speed. Do not change governor setting!

### TO MANEUVER SAW:

1. Raise blade as high as possible so blade will not strike pavement when maneuvering by pressing push button on left side of Travel Speed Control handle. To lower blade, simply press push button on right hand side. (Raise and lower speed may be adjusted by turning the flow control knobs located on the right side of the gauge panel. The upper knob controls the blade raising speed and the lower knob controls the lowering speed. Turn clockwise to decrease speed and counter-clockwise to increase speed.)
2. Grasp the Steering Wheel with your right hand and turn it in the same direction you wish to turn the saw when moving forward.

3. With your left hand gradually move Travel Speed Control Lever forward or backward from the neutral position. This lever permits infinitely variable travel speed (up to 275 feet per minute) in forward and reverse.  
**WARNING:** Look to the rear before and while backing up!
4. When maneuvering, the engine should be running at one-half throttle or more so the hydraulics can operate efficiently. For maximum speed forward or reverse (along with maximum power for raising the blade) the engine must be running at full throttle.

#### TO START SAWING:

1. Follow all the instructions outlined above.
2. Maneuver saw to align blade with cut.
3. Determine the proper blade operating speed (RPM) by referring to chart stamped on the plate attached to raise/lower arm. Gradually move Blade Speed Control Lever forward for down-cutting or backward for up-cutting. Set lever to the proper RPM by observing the Blade Speed Tachometer.  
**WARNING:** Do not exceed the RPM listed for the size blade you are using!
4. Adjust threaded stop bolts located on each side of Blade Speed Control Lever. Set one for the blade speed setting (RPM) and the other for the neutral stop position. When adjusted properly, these will prevent accidental over-speeding or reversal of saw blade.
5. Fully open Water Control Valve and slowly lower the blade into the cut (never deeper than required) by pressing push button on right side of Travel Speed Control handle. Releasing button will stop blade from lowering.
6. Always make sure the Depth Stop Bolt, located on raise/lower arm, prevents the blade flanges from contacting the pavement!
7. When blade reaches the desired depth, move the Travel Speed Control Lever forward slowly until the desired cutting speed is obtained, allowing the blade to cut and not climb out of the cut or stall.
8. If the saw should stall for any reason, both the Travel and Blade Speed Control Levers must be brought back to the Neutral position before starting engine again.
9. Saw in a straight line and do not oversteer! Make only slight gradual changes to the Steering Wheel for following the previously marked cutting line.
10. When lowering the blade into an existing cut, use caution to be certain the blade is perfectly aligned within the cut before starting to saw again. Do not force blade into material by lowering too fast or by propelling too fast while sawing!
11. Saw only as deep as the specifications and job conditions require. This will save blade life and reduce sawing costs. Sawing excessively deep is wasteful and should be avoided.

#### TO STOP SAWING:

1. Move Travel Speed Control Lever to Neutral position.
2. Raise blade completely out of the cut by pressing push button on the left side of the Travel Speed Control handle. When button is released, the raise will stop and hold in place. Raise blade high enough to clear the pavement.
3. Turn off Water Control Valve.
4. Move Blade Speed Control Lever to Neutral position.
5. Close engine throttle to idle position. Let engine cool down before shutting off!
6. Do not leave the saw until the blade and engine has completely stopped.
7. Make sure to chock wheels to prevent saw from rolling.

#### TO TRANSPORT SAW:

1. Remove saw blade to prevent damage.
2. Lower the blade raise/lower arm completely.
3. Block and chain saw to transport vehicle.
4. Make sure trailer or other transport vehicle is of sufficient load carrying capacity.

**SPECIAL FEATURES: (Angle Cutting)**

1. Shut-off saw and remove blade.
2. Loosen (do not remove) Blade Angle Adjustment Nut.
3. Adjust both leveling screws, located underneath Arm Clevis, by first loosening jam nuts and then turning screws all the way in.
4. Grasp end of Blade Arm and tilt to desired angle and direction. (Maximum angle in either direction is 15 degrees from vertical.)
5. Readjust leveling screws until heads contact Arm Clevis with one screw being further in and the other further out. Retighten jam nuts to maintain set angle.
6. Retighten Blade Angle Adjustment Nut very securely!
7. Reset Depth Stop Bolt, located on raise/lower arm, to prevent blade flange or motor from contacting pavement!  
**WARNING:** Modification of saw for alternative uses is not recommended and may create an unrecognized hazard to the operator!

**MAINTENANCE INSTRUCTIONS:**

1. **Check engine oil daily.** Keep oil clean and at proper level. Follow engine manufacturer's recommendation on changing oil. (Refer to separate engine manual supplied with saw.)
2. **Lubricate blade shaft bearings periodically.** Use only a premium, lithium-based grease, conforming to NLGI No. 2 consistency. Lubricate when sawing is finished for the day.
3. **Check all hydraulic hoses and connections daily.** Any leakage of hydraulic fluid will require immediate retightening or replacement of parts. When replacing hydraulic components, use only parts with the proper pressure ratings. **WARNING:** Before disconnecting hoses, be sure to relieve all pressure! Do not use damaged or non-rated hoses and fittings! Do not use hands to search for leaks! Hydraulic fluid escaping under pressure can penetrate skin and cause severe personal injury! If any fluid is injected into skin, seek medical attention immediately to prevent gangrene!
4. **Check hydraulic fluid level regularly.** If low, add a highest quality, wide temperature, anti-wear, petroleum-based hydraulic oil (ISO grade VG46). Recommended oils meeting this specification are Mobil oil #DTE15M, Shell Tellus oil #T46, Texaco Rando oil #HD-Z46. Fill until level reaches 1/2" below top of Sight Gauge. Change hydraulic fluid after the first 50 hours of operation. Afterward, change every 250 hours.
5. **Hydraulic oil filters:** Replace spin-on elements after the first 50 hours of operation. Afterward, change when filter condition indicator points to red zone or every 250 hours.
6. **Clean hydraulic oil cooler fins.** Do not allow the fan or cooling fins of the oil cooler to become covered or clogged with dust or slurry. This will not allow proper cooling of the hydraulic fluid. The fluid in the reservoir should not exceed 180°F (82°C).
7. **Clean air filter** outer element when the restriction indicator red signal appears. Do not clean inner safety element! Replace inner safety element yearly, or if it becomes damaged.
8. **Lubricate blade raise/lower arm.** On a weekly basis, use a spray lubricant between the sides of the raise/lower Arm and the Arm Clevis. Arm may otherwise bind up and not raise or lower.
9. **Lubricate saw controls periodically.** Use a spray lubricant on both the Travel and Blade Speed Controls along with the Throttle and Steering Controls when response becomes stiff or sluggish.
10. **Tighten fasteners occasionally.** Nuts and bolts may become loose particularly after the first few hours of operation.
11. **Engine care:** See engine manual. Clean cutting dust and slurry from cooling fan daily, or as required, to provide adequate cooling.

**BLADE CUTTING DEPTHS / OPERATING SPEEDS:**

SIZE	MAX DEPTH	RPM
14"	3-3/4"	3000
20"	6-3/4"	2450
26"	9-3/4"	1950
30"	11-3/4"	1650
36"	14-3/4"	1400
42"	16-3/4"	1050
48"	19-3/4"	850
54"	22-3/4"	775

**WARNING:**

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

**WARNING:** Do not exceed blade operating speed!

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## Blade Speed (RPM) Chart Model CC8000 Rider Concrete Saw

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**WARNING:** Do not exceed blade shaft speed (RPM) shown for each blade size. Excessive blade speed control could result in blade breakage and serious personal injury.

Blade Size	No Load RPM	Max. Depth of Cut
14"	3000	3-3/4"
20"	2450	6-3/4"
26"	1950	9-3/4"
30"	1650	11-3/4"
36"	1400	14-3/4"
42"	1050	16-3/4"
48"	850	19-3/4"
54"	775	22-3/4"

**WARNING:** When changing blade size, use chart shown below for selecting items that must be changed.

Blade Size	Blade Guard Assembly	Inner Flange (Flange Size)	Outer Flange (Flange Size)
14"	6010070	6010038 (6")	6010039 (6")
20"	6010072	6010038 (6")	6010039 (6")
26"	6010074	6010038 (6")	6010039 (6")
30"	6010076	6010038 (6")	6010039 (6")
36"	6010260	6010038 (6")	6010039 (6")
42"	6010143	6013017 (8")	6013018 (8")
48"	6010145	6013017 (8")	6013018 (8")
54"	6010183	6013017 (8")	6013018 (8")

## EQUIPMENT AND PARTS WARRANTY

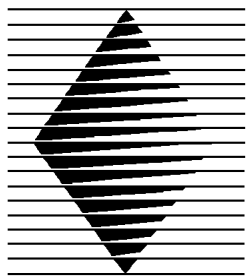
Diamond Products warrants all equipment manufactured by it against defects in workmanship or materials for a period of one (1) year from the date of shipment to Customer.

The responsibility of Diamond Products under this Warranty is limited to replacement or repair of defective parts at Diamond Products' Elyria, Ohio factory, or at a point designated by it, of such parts as shall appear to us upon inspection at such parts, to have been defective in material or workmanship, with expense for transportation and labor borne by Customer.

In no event shall Diamond Products be liable for consequential or incidental damages arising out of the failure of any Product to operate properly.

Integral units such as engines, electric motors, batteries, transmissions, etc., are excluded from this Warranty and are subject to the prime manufacturer's warranty.

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