



DIAMOND
PRODUCTS
OPERATOR'S MANUAL
CORE CUT
MASONRY SAW

MODEL:
CC800M

SAFETY WARNINGS

PERSONAL SAFETY

- Read and understand instructions before operating saw.
- Do not operate the saw under the influence of drugs or alcohol.
- Always wear safety-approved hearing, eye, head and respiratory protection.
- Sturdy boots with non-slip soles aid in providing proper footing. Use of steel-toed safety boots is recommended.
- 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 the blade at all times.
- Wear work gloves to avoid contact with concrete slurry, which can cause serious skin irritation.

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 blades. 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.

GENERAL SAW SAFETY

- Never leave saw unattended when running.
- Keep guards in place and in good condition when saw is in operation.
- Use caution and follow instructions when transporting, lifting, and setting up saw. Always tie down the machine when transporting.
- Do not use saw or blade if damaged. Do not use a blade that has been dropped.
- Never operate gas engine in enclosed areas without proper ventilation.
- Establish a training program for all operators of this machine and blade.

CUTTING/WORK AREA SAFETY

- Never operate the saw in any application or job where you are not trained or supervised.
- Never operate gas engine in enclosed areas without proper ventilation.
- Keep bystanders and or animals out of the work area.
- Before refueling saws with gas engines, shut off engine and allow it to cool. Do not smoke while handling fuel. Make sure that the gas cap on the saw and fuel can are tight before starting the saw.
- Do not operate the saw in areas of combustible material or fumes. Sparks may occur from the blade that could cause a fire or explosion.
- Know the material and work area you are sawing. Hazardous conditions such as live electrical, water or gas lines can be concealed in the material.

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

! WARNING: !

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

OPERATING INSTRUCTIONS:

BLADE MOUNTING:

1. Be certain that you have the correct diamond blade for the application. Contact your authorized service 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 the wrench provided, remove the outer flange. If there is any damage replace the bad parts immediately. Inspect the blade for damage to the 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 the blade shaft. Make sure the arrow on the blade is pointing in the proper direction of rotation. 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. Blade exposure cannot exceed 180 degrees when cutting.

WARNING: Never operate the saw without proper blade guard in place!

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.

SAW OPERATION:

1. Place the saw frame on a sturdy, level surface. Check to make sure that the saw does not tilt or cannot fall over.

WARNING: Be certain that saw frame would not tilt or fall over. Failure to do so may result in bodily injury.

..., The cutting operation:

a) To cut wet:

Electric motor - Fill water tub within one inch of top. Place pump in water tub so that intake is fully submerged at all times. Plug pump into receptacle in motor capacitor box. Pump will run whenever motor is switched on. Do not allow pump to run dry to avoid damaging it. Open water valve fully on blade guard, and check water flow before cutting. Water should flow at 2 - 5 GPM (gallons per minute) to adequately cool wet cutting blades.

Gas engine - Engage water pump on cutting head. Open water valve fully before cutting. Water should flow at 2 - 5 GPM (gallon per minute) to adequately cool wet cutting blades.

b) To cut dry:

Electric motor - Disconnect pump plug from motor outlet while motor is switched OFF. Close water valve on blade guard.

Gas engine - Disengage water pump on cutting head. Close water valve on blade guard.

WARNING: Only cut dry with adequate ventilation and proper respiratory protection.

c) *For Saws With Electric Motors:*

Connect motor to a properly grounded outlet. Motor may be operated on 230 or 460 volts. Set motor capacitor housing to match desired voltage. Plug on motor cord must also be changed to match correct voltage.

WARNING: Always make sure that motor is connected to a properly grounded outlet. Failure to do so may result in serious bodily injury or death. Do not operate motor on low voltage. It may cause power loss, overheating, or burn out motor windings. Check voltage at motor while operating. Comply with all local electrical codes. If you are unsure, check with an electrician.

- d) Proper voltage is critical for proper motor performance. Extension cords, which are too long and/or too small of a gauge, will prevent motor from receiving full voltage. Follow extension cord recommendations below:

CORD	5 HP	7.5HP
LENGTH	230V	230V
50 FT.	# 14	# 14
75 FT.	# 14	#14
100 FT.	#14	# 12

- e) Turn switch to "ON" position to start electric motor. If motor overheats, the manual reset thermal overload will trip. Turn motor off. wait 5-10 minutes for motor to cool. and push reset button on capacitor housing. Button clicks to indicate that motor is reset.
For saws with gas engines: Check engine oil level before starting. Start engine and allow it to warm up according to engine manual instructions. After engine warms up, all sawing is done at full throttle.

3. To cut material, either:

- a) Pull cutting head down by handle to desired cutting depth. It is best to use the entire diamond segment height to cut. Tighten handle on depth lock to keep cutting head at set height.

CAUTION: Take care not to saw conveyor cart in half. Cutting head pivot range allows the operator to "use up" an abrasive blade, but allows the risk of cutting conveyor cart. CAUTION: Do not allow material being cut to rub against blade flanges. This will damage them and they will need to be replaced.

- b) Clamp or hold material firmly against the conveyor can measuring stop.

CAUTION: If material being cut is allowed to slip, blade may bind, damaging it. Do not cock, jam, wedge or twist the blade in the cut. Do not grind on the side of the blade.

- c) Push conveyor cart through blade at a reasonable even rate that allows the blade to cut efficiently, but doesn't bog down the engine or overload the motor.

WARNING: Keep hands and all other body parts away from blade when pushing conveyor cart through cut. and at all times saw is running.

Or plunge cut. . .

- a) Clamp or hold material firmly against the conveyor cart measuring stop.

CAUTION: If material being cut is allowed to slip, blade may bind, damaging it. Do not cock, jam, wedge or twist the blade in the cut. Do not grind on the side of the blade.

- b) Pull cutting head down by handle and hold, making a few passes with the conveyor cart, increasing the depth of cut with each pass. Important: Near the end of cut. slow cart feeding down and slightly hold the cart back.

CAUTION: If cart is not held back at end of cut, blade may draw material in so fast that blade damage will occur.

4. When finished sawing, turn the motor or engine off. (Note: Allow gas engine to cool down. See engine manual.)

WARNING: Never leave the saw unattended when running.

MAINTENANCE:

1. Clean water tub once a day - twice a day during heavy cutting - and refill with clean water. If sludge accumulates, it can damage water pump and shorten blade life.
2. Clean saw each night after use. Flush pump and hoses with clean water.
3. Lubricate blade shaft and pivot shaft bearings daily. When cutting dry, grease bearings once or twice daily. Grease provides an added protective seal for bearings. Use only premium Lithium 12 based grease conforming to NLGI grade #2 consistency, without Molybdenum Disulfide. Replace damaged or noisy bearings immediately. Grease blade shaft bearings while saw is running. Grease bearings at end of job and before saw is stored.
4. Between jobs or extended periods of storage, clean saw with a wire brush to remove dried sludge. Clean and thoroughly lubricate all moving parts. Check to make sure all fasteners are tight.
5. Ensure that extension cord gauge matches its length, as shown in chart. Undersize extension cords may damage motor. Use 230 volts. Inspect cord for cuts, nicks, or exposed wires. Replace cord if damaged.
6. If you experience any problems with your electric motor or gas engine, contact Diamond Products for the nearest Authorized Service Center. If motor or engine is serviced by an unauthorized service center, the warranty will be voided.
7. When transporting saw, remove cutting head from frame. Vibration during transport could cause the cutting head to pound in the frame, causing the head to come out of alignment. Always remove the blade when transporting.
8. Make sure that V-belts are always tensioned properly. Replace worn belts in sets.
9. Slots in cutting head are provided to keep blade aligned horizontally and vertically with cut line on conveyor cart. Loosen lock nuts on blade shaft bearings and tilt shaft towards appropriate direction. Tighten lock nuts when blade is properly aligned with conveyor cart.
10. Blade should mount snugly on arbor. If blade fits loosely on arbor, or if arbor shoulder is grooved, the inner flange must be replaced. Otherwise, blade life will be shortened dramatically.
11. Blade flanges must have minimum outside diameter of 3 7/8". Replace worn flanges immediately because they can shorten blade life or cause blade to break.
12. Frequently inspect conveyor cart. Replace wood insert and wheels often.
13. Replace bronze bearing in blade guard pivot plate if blade guard does not pivot properly.
14. Clean air cleaner daily on saws with gas engine. See engine manual for maintenance instructions.
15. For additional engine care, see engine manual.

ABOUT DIAMOND BLADES

Diamond Products manufactures diamond blades suited for your specific cutting needs – brick, concrete block, tile, refractory etc. Contact a Diamond Products Customer Service Representative at 1-800-321-5336 or 1-800-421-3157 to help determine what blade is right for your specific needs.

SPECIFICATIONS

Blade Capacity: 20" & 24"

Maximum Depth of Cut: 8" & 10" Respectively

Arbor Size: 1"

Blade Drive: Matched set of 2 premium gripnotch V-belts

Models:

<p>CC850-E 1-20</p> <p>Baldor Electric Motor 5 Hp - 1 Phase, Totally Enclosed Fan Cooled 230 Volts .60 Hz 23 Amps @ 230V 1800 RPM at Motor Output Shaft 2100 RPM at Blade Shaft</p>	<p>CC850-E3-20</p> <p>Baldor Electric Motor 5 Hp - 3 Phase, Totally Enclosed Fan Cooled 230/460 Volts, 60 Hz 13.4 Amps @ 230V / 6.7 Amps @ 460V .1800 RPM at Motor Output Shaft 2100 RPM at Blade Shaft</p>
<p>CC875-E1-20 & CC875-E1-24</p> <p>Baldor Electric Motor 7.5 Hp - 1 Phase. Totally Enclosed Fan Cooled 230 Volts, 60 Hz 32 Amps @ 230V 1800 RPM at Motor Output Shaft 2100 RPM at Blade Shaft</p>	<p>CC875-E3-20 & CC875-E3-24</p> <p>Baldor Electric Motor 7.5 Hp - 3 Phase, Totally Enclosed Fan Cooled 230/460 Volts, 60 Hz 20.4 Amps @ 230V / 10.2 Amps @ 460V 1800 RPM at Motor Output Shaft 2100 RPM at Blade Shaft</p>
<p>CC809H-20</p> <p>Honda Gas Engine 9 Hp @ 4000 RPM Fuel capacity: .95 gallons Oil capacity: .63 quarts Air cleaner: Cyclone 3600 RPM at Engine Output Shaft 2100 RPM at Blade Shaft</p>	<p>CC813H-20 & CC813H-24</p> <p>Honda Gas Engine 13 Hp @ 4000RPM Fuel capacity: .95 gallons Oil capacity: .63 quarts Air cleaner: Cyclone 3600 RPM at Engine Output Shaft 2100 RPM at Blade Shaft</p>
<p>CC875-E3-20-575V</p> <p>Baldor Electric Motor 7.5 Hp - 3 Phase, Totally Enclosed Fan Cooled 575 Volts, 60 Hz 8 Amps @ 575V 1800 RPM at Motor Output Shaft 2100 RPM at Blade Shaft</p>	<p>CC875-E3-24-575V</p> <p>Baldor Electric Motor 7.5 Hp - 3 Phase, Totally Enclosed Fan Cooled 575 Volts, 60 Hz 8 Amps @ 575V 1800 RPM at Motor Output Shaft 2100 RPM at Blade Shaft</p>

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333 Prospect Street, Elyria, Ohio 44035
(440) 323-4616 • (800) 321-5336 • Fax (440) 323-8689
www.diamondproducts.com