

# OPERATION MANUAL



## **BM-CC1200 SAW**

Your Model # : \_\_\_\_\_

Your Serial # : \_\_\_\_\_

---

## SAFETY WARNINGS

### PERSONAL SAFETY

**Warning: Read and understand instructions before operating saw !**

- Always wear safety approved hearing *eye* head and respiratory protection.
- Sturdy boots with nonslip soles aid in providing proper footing. Use of steel-toed safety boots are 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 blade and all other moving parts.
- Use caution and follow instructions when loading and unloading saw.

### BLADE SAFETY

Examine cutting blades before each use. Blade should have no crack snicks 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.

Use only reinforced abrasive blades or steel centered diamond blades manufactured for use on concrete saws. 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.

- The ignition governor is designed to limit the maximum engine speed in a no-load condition. Speeds in excess of that may cause the blade to exceed the maximum safe- allowable speed. Do not operate the unit if you suspect it of exceeding this speed
- Always keep guards in place and do not allow blade exposure on the guard to exceed 180 degrees. Avoid getting into direct line with the blade.
- Make sure the blade does not make contact with the ground or any other surface when transporting the saw. Use only dry cutting diamond blades with the optional water tank kit as the water source for dust suppression. Do not use conventional abrasive blades with water.

---

## GENERAL SAW SAFETY

- Saw must not be left unattended while the engine is running
- Always remember to keep both hands on the handles when the engine is running.
- Do not operate the machine if there is a fuel leak. Have the fuel leak fixed first.

## CUTTINGWORK AREA SAFETY

**Warning: 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. 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.

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

**WARNING! The engine exhaust from this product contains chemicals known to cause cancer birth defects or other reproductive harm.**

## CONCRETE SAW OPERATING INSTRUCTIONS

### ASSEMBLY

1. Raise the handle to the desired height and secure in place by installing both lock pins.
2. Be certain to check engine and transmission oil levels and service before using. Refer to engine manual for detailed information.
3. On electric saw models the proper size power cord must be provided by the purchaser for wiring motor starter to power source. Refer to chart on inside of starter box cover for recommended wire gauge.

---

## GENERAL INSTRUCTIONS

1. Be certain you have the correct diamond or abrasive blade. 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 flange and arbor must be inspected for damage and cleaned before mounting blade. 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 blade shaft arbor using the wrench provided. Make sure the arrow on both the blade and the blade guard are pointing in the same direction of rotation. The lock pin in the outer blade flange must go completely through the blade and into the matching hole in the inside blade flange. Tighten blade flange nut very securely. (Approximately 50 .lb.). Note that the blade shaft nut on the right hand side has left hand threads which tightens by turning counter-clockwise. Some models the blade shaft nut on the left hand side has right hand threads which tightens by turning clockwise.
4. **WARNING: DO NOT operate without proper blade guard in place. Do not operate with front of blade guard raised. Blade exposure cannot exceed 180 degrees when cutting.**
5. The front pointer must be checked for alignment with blade. It must be in line with a blade mounted on the blade shaft. Use a chalk line or long straight edge to verify alignment.
6. **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.**
7. Saw in a straight line. Mark the cutting line clearly so the saw operator can follow the line without difficulty. The saw should not be twisted from side to side trying to force the blade back on line.
8. 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. Step cut in increments of two inches for best results.

---

## **TO STARTSAW**

1. Fill the fuel tank and check the engine oil level.Refer to the engine manual for details
2. Start engine. Follow procedure in engine manual
3. Let engine warm up at half throttle.
4. All sawing is done at full throttle. Governor is factory set for correct engine speed.

## **TO MANEUVER SAW**

1. Raise blade as high as possible so blade will not strike pavement when maneuvering by one of the following methods depending on the model of the saw:
  - A. Ratchet lock raise/lower control: Squeeze hand grip lever on handle bar and push down to raise blade. Release hand grip lever to lock at desired height.
  - B. Screw feed raise/lower control : Pull up on the depth control handle and turn counter-clockwise.

## **TO START SAWING**

1. Follow all the instructions outlined above.
2. Align blade with cut. For wet sawing open water valve FULL open. Check water to verify full flow then adjust for proper amount of water on blade BEFORE you lower the blade. If water supply is interrupted stop cutting immediately.
3. Lower the blade into the cut (never deeper than required) by one of the following methods depending on the model of the saw:
  - A. Ratchet lock raise/lower control: Squeeze hand grip lever on handle bar and allow weight of the saw to slowly lower blade. Release hand grip lever to lock at desired depth.
  - B. Screw feed raise/lower control : Pull up on the depth control handle and slowly turn clockwise. When the desired depth is reached place handle over front of control panel frame and push down to lock it against the frame.
4. During cutting do not exert excessive side pressure on handles to steer. Use only enough pressure to follow the previously marked line.
5. Use proper forward speed allowing the blade to cut but not stall.
6. If the saw should stall for any reason raise the blade completely out of the cut before starting engine again.
7. When lowering the blade into a partially-made cut use extreme care to be certain the blade is perfectly aligned within the cut before starting to saw again. Do not force blade into material by lowering the blade too fast or by pushing too fast while sawing.

---

## **FINISH OF CUT**

1. Bring the blade out of the cut by method explained under "To Maneuver Saw".  
Raise blade high enough to clear the pavement when maneuvering the saw.
2. Turn off water valve.
3. Close engine throttle to idle position. Let engine cool down before stopping.
4. Do not leave the saw until the blade and saw has completely stopped.

## **MAINTENANCE INSTRUCTIONS**

1. Lubricate blade shaft bearings daily! Note: When cutting dry grease blade shaft bearings two or three times daily. Grease provides an added protective seal for the bearings. Use only a premium lithium-based grease conforming to NLGI No. 2 consistency.  
After a maximum of every 40 hours of operation grease front axle pivot bearings and grease depth control adjustment shaft.
2. Check engine oil daily. Keep oil clean and at proper level. Since the engine often operates at an angle check the oil level (with engine horizontal) frequently to ensure that the oil level never falls below the lower mark in the dipstick. Follow engine manufacturer's recommendation on changing oil.
3. Clean engine air filter. When cutting dry clean air cleaner two or three times a day. See engine manufactures manual for proper care and maintenance.
4. Engine care: See engine manual.
5. Blade shaft V-belts tension: This model concrete saw is equipped with 3VX premium V-belts. These belts are properly tensioned at the factory. Severe damage or even breakage of the crankshaft might occur if the belts are tensioned too tight. Check belt tension as set on the new saw and never set belts beyond original factory tension. Not enough tension will result in poor saw performance and short belt life. Belts should never be allowed to slip. After two hours of use re-tension belts to make up for initial stretch. To re-tension the belts turn engine off. Loosen the four bolts holding the engine. Turn the horizontal tensioning bolt on the left rear of the saw frame clockwise until the belts are tight. Re-tighten the four bolts on the engine.  
Continue to check the belt tension on a regular basis and re-tighten as necessary. To obtain accurate V-belt setting a V-belt tension tester should be used. Check the setting on a single belt of a matched set of V-belts. Apply load at the center of the belt span. Deflection should be 3/16" with a 5 to 6 lb. load.

6. Tighten fasteners regularly. Nuts and bolts may become loose particularly after the first few hours of operation. On some models care must be taken to select the proper tools and fasteners (Metric or English). Most are Metric however a few items use English or Inch fasteners. Damage to the threaded fasteners could occur if incorrect tools or fasteners are used.

**OPTIONAL ITEMS**

**WATER TANK KIT**

Water tank kit is available except electric. Use only for dry cutting! The water tank is designed only to suppress airborne concrete dust.

**WARNING:**

**Do not use conventional (wet) diamond blades with the water tank as the water source because there is not sufficient water flow available to properly cool the blades!**

CUTTING DEPTHS	
BLADE SIZE	MAXIMUM DEPTH
10" (250mm)	2-5/8" (65mm)
12" (300mm)	3-5/8" (90mm)
14" (350mm)	4-5/8" (115mm)
16" (400mm)	5-5/8" (140mm)
18" (450mm)	6-5/8" (165mm)

Maximum blade capacity for this saw is 14" (350mm). Maximum blade capacity for this saw is 18" (450mm).

**GOVERNOR SPEEDS**

It is critical that the governor and throttle on all internal combustion engines are adjusted properly. Engine speed is preset at factory for proper sawing speed. It is not normally necessary to change this setting. It should be periodically verified after saw is placed into service. To change governor sets refer to the engine manual.

**WARNING: Over speeding the engine and blade shaft can cause serious damage to the blade resulting in personal injury to the operator and bystanders. To assure the proper governor adjustment do not exceed the following speeds:**

- :Maximum No Load Blade Shatt RPM (3250)
- Maximum No Load Engine RPM (3900)