



Operator Controls- Electric Models

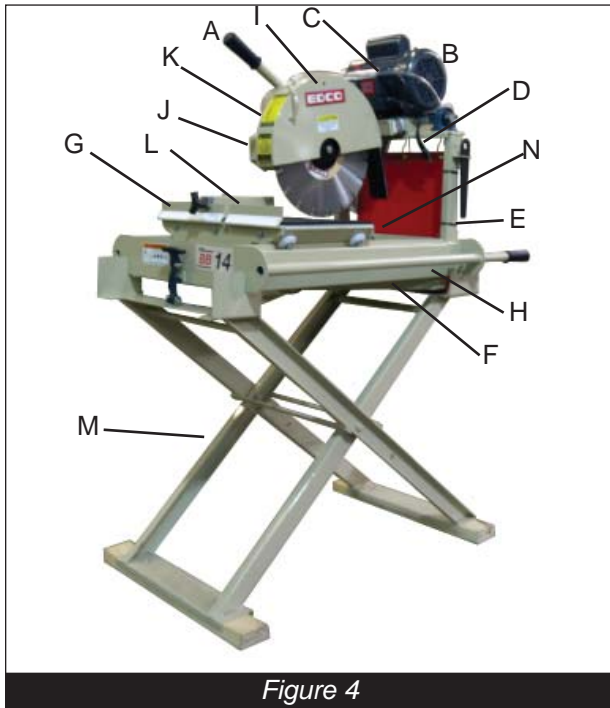


Figure 4

BB14 Electric (Figure 4)

- A. Operating Handle
- B. Motor
- C. Reset Button
- D. Power Cord
- E. Water Pick Up Hose
- F. Water Tray Plug
- G. Rolling Table
- H. Welded Steel Frame/Water Tray
- I. Blade Guard
- J. Drive Belt Guard
- K. Blade Guard Lock
- L. Cutting Angle Lock
- M. Optional Folding Table
- N. Submersible Water Pump

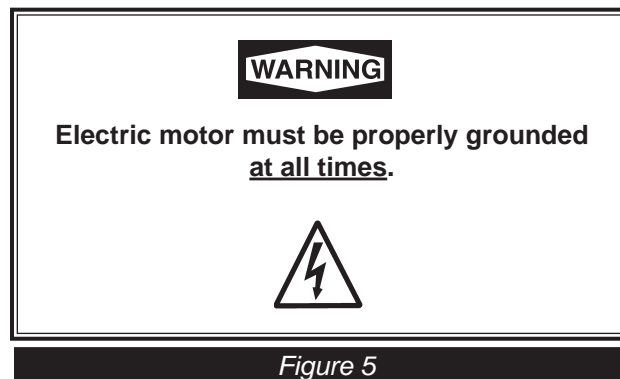


Figure 5



Read and understand this *Operator's Instruction Manual*,
and the *Engine Manufacturer's Owner's Manual*
before operating this equipment.
Death of serious injury can result if this machine is used improperly.



Safety Guidelines



Eye and ear protection must be worn at all times while the saw is in use. During normal operation, sound pressure levels exceed 85dBA. Use only ANSI approved safety glasses to help prevent eye injury. Standard eyeglasses have only impact resistant lenses; they are NOT safety glasses.



Operator must wear appropriate clothing and footwear. Do not wear loose clothing or jewelry that can get tangled in moving parts. Footwear should provide sure footing and protection from debris that may be dropped. Take steps to insure hair will not be caught in moving parts. If necessary, tie it back.

•When loading or unloading the saw, use caution. Make sure rolling table is locked so that the blade will not be damaged. Do not move the saw while the engine is running.

- Never exceed the maximum operating speed of the blade. Match the blade speed rating with the arbor shaft speed. (See page 11)
- Never leave the saw running unattended.
- Never operate this saw under the influence of drugs, alcohol or when taking medications that impair the senses or reactions, or when excessively tired or under stress.
- Do not lend or rent this equipment without including the Operator's Instruction Manual and the Engine Manufacturer's Manual.
- Make sure all safety decals can be clearly read and understood. Replace damaged or missing decals immediately.

For Electric Models:

- Electric motor must be properly grounded at all times. Check the outlet box to be sure the electrical service is properly grounded and that adequate power is available. Insufficient power will cause motor to overheat and burn out. Use only grounded extension cords correctly sized for the current draw and voltage drop (amp rating and length). Never use frayed, damaged, taped or under rated extension cords. Electrical shock could result in death or serious injury and damage to the equipment.

For Gasoline Models:

- Poisonous exhaust gas. Do not operate gasoline powered equipment without adequate ventilation. Carbon monoxide is an invisible, odorless gas that can kill. NEVER REFUEL AN ENGINE WHILE IT IS HOT OR AN ENGINE WHILE IT IS RUNNING. Only refuel in a well-ventilated area and only refuel after the engine has cooled completely. Thoroughly cleanup any spilled fuel before starting the engine.



Dry cutting creates a large volume of airborne dust. For health reasons, the operator should wear an applicable respirator. The dust may contain chemicals known to cause serious illnesses, including Silicosis - a fatal disease of the lungs. Check the chemical properties of the material to be cut and follow all EPA/OSHA regulations.

Safety warnings and guidelines do not by themselves eliminate danger.
They are not substitutes for proper accident prevention procedures and good judgement.



Operating Instructions

Before Starting:

- **Read and understand the instructions supplied by the engine manufacturer.**
- Familiarize yourself with all engine and saw controls. (Figure 2)
- Visually inspect the entire machine for damage or wear. Look for signs of oil or fuel leaks. Remove excess dirt or debris. Check that all nuts, bolts and screws are tight. Check for proper alignment of moving parts, possible binding of moving parts, breakage of parts, loose mounting brackets, and any other condition that might affect operation.
- Inspect diamond blade and arbor shaft. Check blades for cracks, loose segments, worn or out-of-round arbor holes. Do not use warped, twisted, out-of-balance blades or any blade of questionable condition. Refer to *Rx for Diamond Blades*.
- Install back splash shield (Figure 6 and 7).



Figure 6

On Gasoline Models:

- Gasoline models are shipped from the factory dry, meaning without oil or gasoline. Both will need to be added before the unit is used. Check the *Engine Manufacturer's Owner's Manual* for instructions on break-in, servicing and proper use of engine.
- Check engine oil. Make sure that it is at the proper level and that it is clean.
Note: Some engines have an Oil Alert System that will automatically stop the engine before the oil level falls below the safe limit. To avoid an unexpected shut down, check the oil level regularly during operation.
- Check the fuel level. Do not over fill fuel tank and ***never refuel a hot engine***. If refueling is necessary during operation, allow engine to cool down first.



Figure 7

On Electric Models:

- Electric masonry saws are shipped with a grounded, male plug attached to the machine. Verify that any extension cord that is used is sized appropriately for the electrical load and that it is properly grounded. Use only 3 wire (single phase), grounded electrical cables that are marked U.L. and/or C.S.A. approved.



- Inspect the power and extension cords for damage. Do not use if either cord is frayed or showing signs of wear.
- Identify the electrical power requirements of the saw. The voltage requirements of the motor can be found on the motor data plate.
- Verify that the power switch is in the off position before plugging machine into the power source.



When Wet Cutting:

- Secure the drain plug and fill the tray with clean water.

On Gasoline Models:

- To engage water pump loosen the black knob and lightly push top of water pump to the left with constant pressure and tighten black knob. (Figure 9 & 12)
- Prime the pump using the priming bulb. Pump the bulb until water fills the clear plastic coolant hose from the tray to the pump.

On Electric Models:

- Plug submersible pump into the special outlet on the motor (circled). (Figure 10)

CAUTION

This outlet is intended for the water pump only pictured in (Figure 11). **Do not** use it for any other purpose.

Shows BB14E Water Pump Outlet



Figure 10



Figure 11



Figure 9

- To engage water pump loosen the black knob and lightly push top of water pump to the left with constant pressure and tighten black knob. (Figures 9 & 12) Use the priming bulb shown in (Figure 13) to prime the water pump.

CAUTION

DO NOT LET THE WATER PUMP RUN DRY.

On All Models:

- The water in the tray must be kept clean. Running dirty water through the system will cause damage.
- To change the water, turn off the saw, remove the plug in the bottom of the tray to drain water and dispose of properly. Do not drain onto the surface being worked on or other maintained surface because staining will occur. Flush any loose grit and dirt out of the tray. Replace drain plug and refill with clean water. If water flow to the blade seems to be low, check that strainer is clean and the water pump pulley is properly engaged.



When Dry Cutting:

- Drain and flush any water or debris in the tray and dispose of properly.

On Gasoline models:

- To disengage water pump loosen the black knob and push top of water pump to the right with constant pressure and tighten black knob. (Figures 9 & 12)

On Electric Models:

- Unplug the submersible pump from the water pump outlet on the motor.

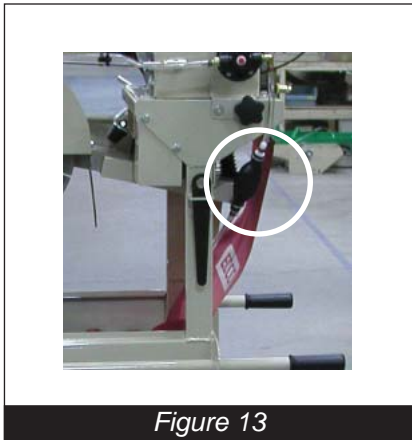


Figure 13



Figure 12

- To disengage water pump loosen the black knob and push top of water pump to the right with constant pressure and tighten black knob (Figures 9 & 12).

CAUTION

DO NOT LET THE WATER PUMP RUN DRY.

WARNING

Be careful when draining water from tray and dispose of waste away from work area.

Draining the water directly to the ground will cause a potentially serious working hazard including, but not limited to, risk from electric shock if using an electric motor.



Figure 14 (BB14E)



Starting the Engine:

- Be sure blade is clear of item to be cut.
- Determine that the recoil starter assembly turns freely, starter rope pulls easily, and the rope retracts properly.
- Follow the instructions supplied in the *Engine Manufacturer's Owner's Manual* for starting engine.
- Open the throttle and allow engine to reach operating temperature. Open throttle fully, do not use the throttle as a means to match the arbor shaft speed to the specified blade speed requirements.

Be certain to use the proper blade for the machine.

Note: To ensure that the necessary power is transferred to the blade, all cutting must be done at *full throttle*. The governor is factory set for correct speed - altering this setting may damage the machine. Maintain the engine according to factory specifications.



Figure 15 (BB14G)

Starting the Electric Motor:

REMINDER: Motor burnout due to use of improper voltage will void the warranty on the motor.

- Be sure blade is clear of the item to be cut.
- Turn on the motor.
- Listen for motor to reach operating speed. Do not use if motor hums or does not reach operating speed within a few seconds. Motor hum may indicate a malfunction due to:
 - Job site voltage may be too low.
 - An Internal motor problem.
 - The blade may be jammed.

or

 - The belts may be too tight.



Cutting:

- Do not strain the engine/motor while cutting. Do not jam work piece into the blade. Do not twist the work piece while cutting.
- When you have finished cutting:




On Gasoline models: To stop engine, return throttle to idle. Stop the engine by turning the engine mounted stop switch to the OFF position. Do not leave the saw running unattended.

On electric models: Turn the power switch to OFF. Wait until saw comes to a complete stop before performing any type of maintenance.

- Clean dust and debris from machine.

IMPORTANT:

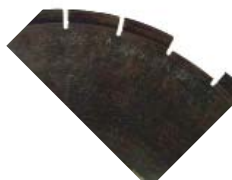
- When actually cutting masonry products, it is important that the blade is at it's maximum RPM. DO NOT force or jam the blade. Forcing the blade will cause the motor to overheat, tripping the overload device or severe motor damage.

-  Do not reach underneath or around work piece while the blade is rotating.
-  Keep stable footing at all times while cutting.
-  Keep hair, clothing, fingers and all body parts away from the blade and any other moving parts.

Model	Diameter Blade	Arbor Shaft Rating	Max. Cutting Depth
BB14E	14 inches	2600 RPM	5 inches
BB14G	14 inches	2600 RPM	5 inches

Figure 17

Possible Diamond Blade Problems



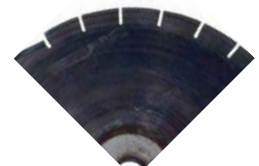
Segment Loss:
Usually insufficient water



Arbor Hole Out-Of-Round
Blade not properly tightened or seated on arbor.



Cracked Segments and/or Core
Wrong Blade for the job.



Blade Will Not Cut:
Blade is glazed or too hard for the job.



Disconnect spark plug lead before performing any maintenance on this machine.



Maintenance

Consult the *Engine Manufacturer's Owner's Manual* for more detailed engine maintenance instructions.

Changing the Blade:

- Inspect the new blade thoroughly before installing. Check for cracks, loose or missing segments, worn or out-of-round arbor holes. Refer to the *Rx for Diamond Blades* pamphlet provided with your blade for more detailed information on inspecting blades. Be sure the blade is appropriate for the job and matches the arbor speed and mounting configuration on this saw. (Figure 17)



Figure 18

- Push the rolling table all the way to the back of the machine.
- Blade guard should be rotated all the way up and tightened into place.
- Remove blade cap and bolt. Carefully remove old blade.
- Inspect arbor shaft, backing plate and blade guard while blade is off. Clean if dirty or replace if damaged or worn.
- Look for "direction of rotation" markings on the blade. (Usually an arrow stamped on the blade.)
- Place new blade on the arbor shaft verifying that once installed the markings on the blade follow the proper direction of rotation.
- Reinstall and tighten bolt (Figure 18) using a SAE 3/4" wrench. Reinstall blade cap.
- Reposition blade guard and tighten. Reconnect spark plug lead. (if applicable)