

# OPERATING INSTRUCTIONS, PARTS LIST & USER MANUAL



**#PEB1431 14" CORE CUTTING SAW**  
**C/W 3 H.P., 230 VOLTS, 60 HZ., 1 PHASE MOTOR**

## CORE CUTTING PROCEDURE

(ELECTRIC MOTOR)  
(#PEB1431 - 14" CORE CUTTING SAW)

- A) MOUNT SAW BLADE SO IT TURNS IN DIRECTION OF ARROW.
- B) LOWER BLADE SO CUTTING EDGE IS BELOW THE OPEN SLOT IN THE CORE CUTTING BRACKET AND LOCK CARRIAGE WITH HANDLE AT REAR.
- C) TURN SAW SWITCH TO ON POSITION.
- D) TURN WATER ON BY TURNING VALVE IF DIRECT WATER SUPPLY IS USED. IF WATER PUMP IS USED, PUMP WILL START WHEN SAW MOTOR IS TURNED ON. (IF PUMP IS PLUGGED INTO SIDE OF 60 CYCLE MOTOR)
- E) PLACE CORE INTO CUTTING BRACKET AND PUSH CART THROUGH THE BLADE UNTIL CORE IS CUT COMPLETELY IN HALF.
- F) **CAUTION:** DO NOT ATTEMPT TO OVERFEED THE CORE THROUGH THE SAW BLADE, ESPECIALLY WHEN CUTTING HARD CORE. IF OVERFEEDING OCCURS, MOTOR WILL OVERHEAT AND POWER DOWN, AND MAY CAUSE THE WINDINGS TO BURN OUT.
- G) AT END OF DAY, CLEAN ALL CUTTINGS FROM SAW, PUMP AND HOSE.
- H) **WARNING:** ALWAYS MAKE SURE SAW IS CONNECTED TO A PROPERLY GROUNDED ELECTRICAL OUTLET. FAILURE TO COMPLY WITH THIS WARNING COULD RESULT IN SERIOUS BODILY INJURY.
- I) **CAUTION:** GOOD MOTOR PERFORMANCE IS DEPENDENT ON PROPER VOLTAGE. EXTENSION CORDS THAT ARE TOO LONG AND/OR SMALL REDUCE AVAILABLE VOLTAGE TO MOTOR UNDER LOAD. VOLTAGE AND AMPERAGE SHOULD BE TESTED AT THE MOTOR. USE EXTENSION CORDS NO SMALLER THAN INDICATED BELOW:

MOTOR HP	15' CORD	25' CORD	50' CORD
	230V	230V	230V
3 HP	#12/3	#10/3	#10/3

- J) SINGLE PHASE 60 HERTZ MOTORS ARE EQUIPPED WITH MANUAL RESET OVERLOADS. WHEN OVERLOAD TRIPSTURN SWITCH TO OFF POSITION AND ALLOW 10 MINUTES TO COOL. PUSH THE RESET BUTTON AND TURN SWITCH TO ON.
- K) A 30 OR 40 AMP CIRCUIT SHOULD BE DESIGNATED SOLELY FOR THE SAW. THE 3 H.P. MOTOR, WHEN ON 230 VOLTS, DRAWS ALMOST **15 AMPS** WHEN RUNNING, BUT REQUIRES **DOUBLE** THE AMPS FOR STARTING.

**IF THE MOTOR DOES NOT GET ENOUGH AMPS, IT WILL EVENTUALLY BURN UP THE START WINDINGS AND FAIL.**

## **APPLICATION CHART FOR CORE CUTTING BLADES**

### **MODEL #VHC24 SEGMENTED**

USED FOR CUTTING VERY HARD CORE, SUCH AS CHERT, JASPERITE, QUARTZITE, HARD GRANITES, ETC. IF YOU USE THIS BLADE FOR CUTTING SOFTER CORE, IT MAY WEAR OUT PREMATURELY.

### **MODEL #HC44 SEGMENTED OR #CCRB14P CONTINUOUS RIM**

USED FOR CUTTING HARD CORE, SUCH AS RHYOLITE, GRANITE, SILICIFIED VOLCANICS, ETC. IF YOU USE THIS BLADE FOR CUTTING SOFTER / ABRASIVE CORE, IT MAY WEAR OUT PREMATURELY.

### **MODEL #CC34 SEGMENTED (#SCQ14) OR #CCRB14 CONTINUOUS RIM**

USED FOR CUTTING REGULAR CORE SUCH AS BASALT, DIORITE, DIABASE, GABRO, DOLOMITE, WEATHERED GRANITE, SERPENTINE, AND PERIDOTITE. IF YOU USE THIS BLADE FOR CUTTING SOFTER/ABRASIVE CORE, IT MAY WEAR OUT PREMATURELY. IF YOU USE THIS BLADE FOR HARDER CORE, IT MAY GO DULL AND NOT WANT TO CUT.

### **MODEL SC54 SEGMENTED**

USED FOR CUTTING SOFT/ABRASIVE CORE SUCH AS CONGLOMERATES, SHALES, LIMESTONE, SILICA AND SULPHIDES. IF YOU USE THIS BLADE FOR CUTTING HARDER CORE, IT MAY GO DULL AND NOT WANT TO CUT.

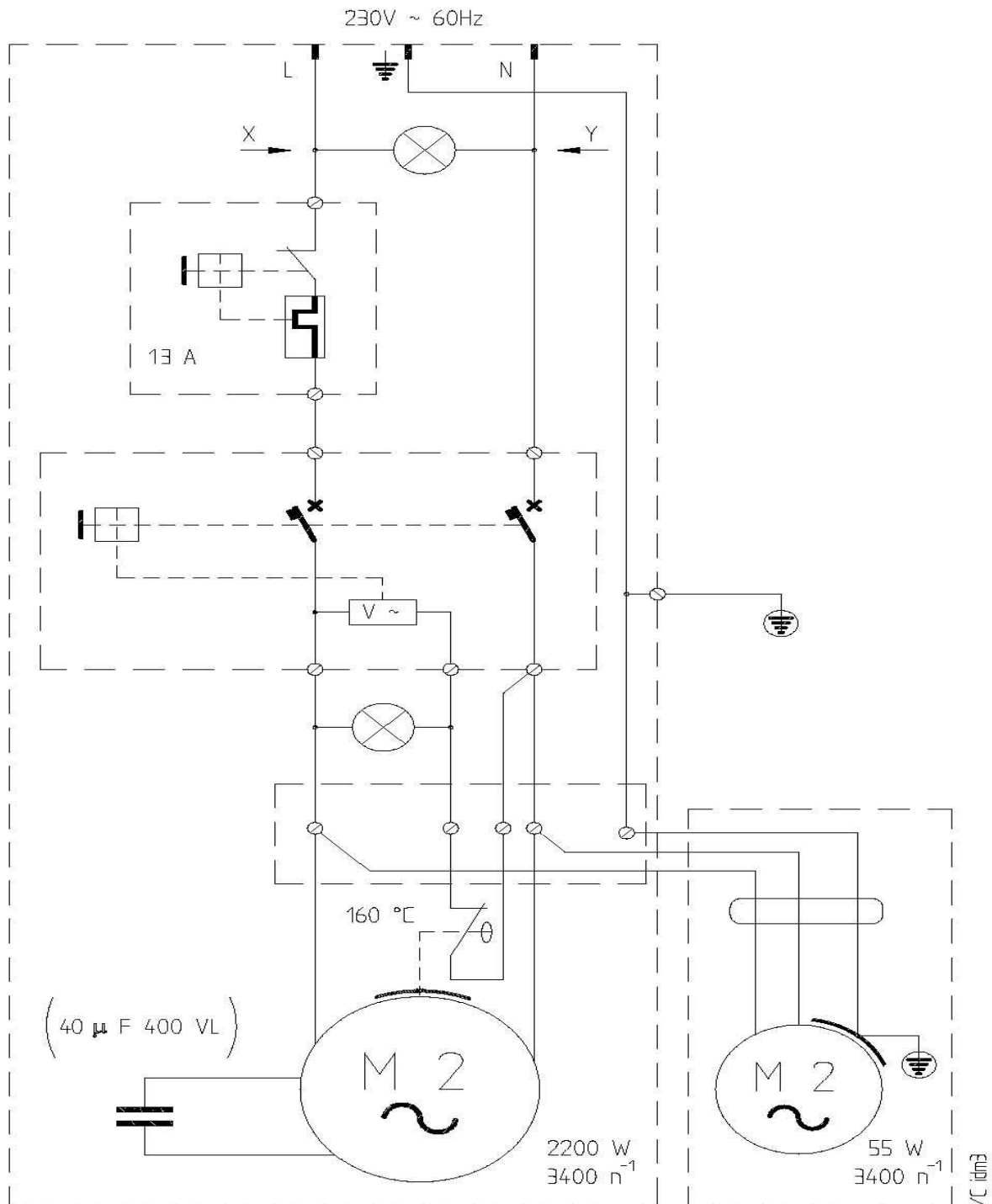
### **NOTE :**

**ENSURE BLADES ARE MOUNTED ON SAW SO THEY TURN IN THE CORRECT DIRECTION.**

### **CAUTION :**

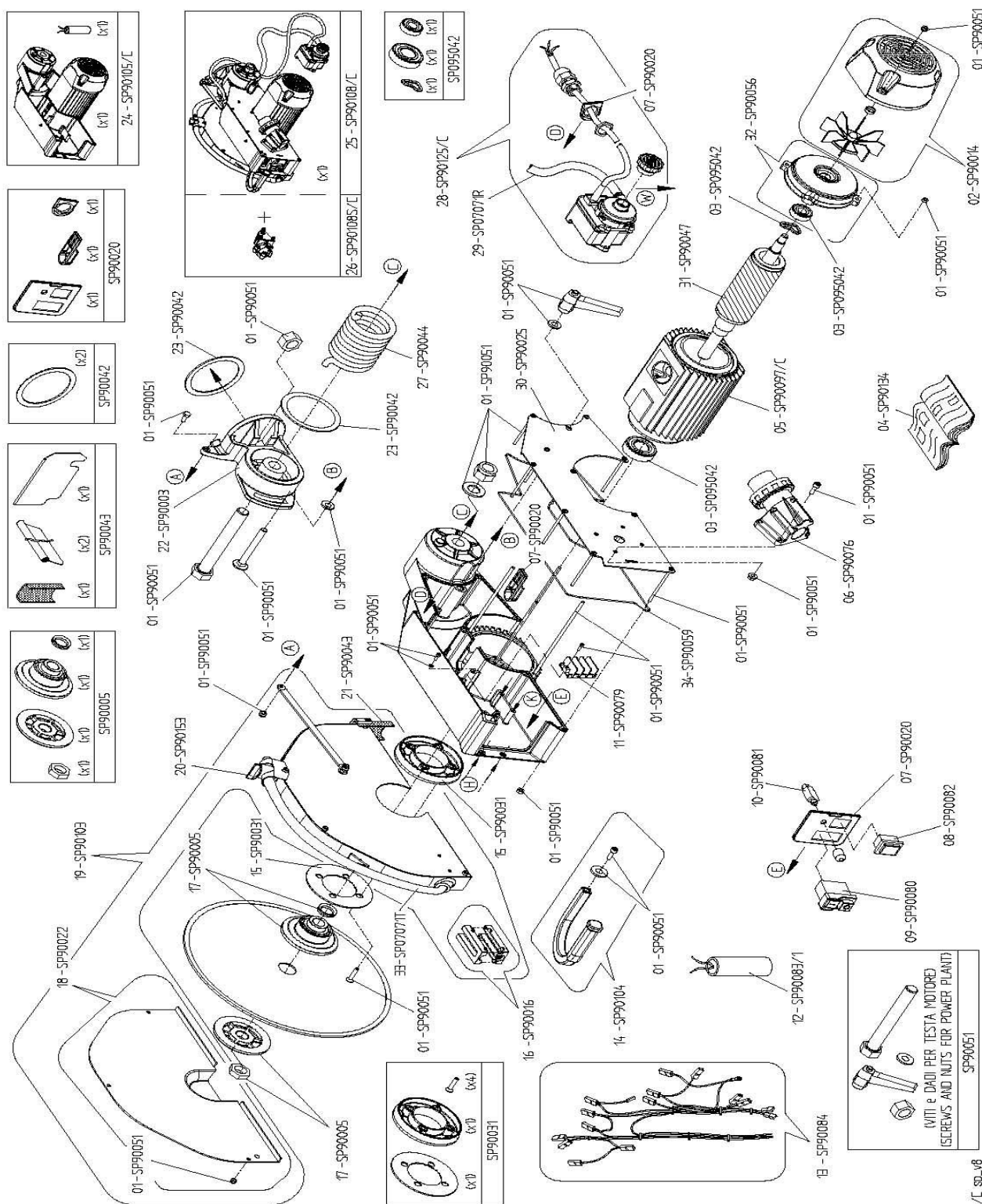
**WHEN SAWING, EASE CORE INTO BLADE, AFTER CONTACT HAS BEEN MADE, THEN APPLY PRESSURE.**

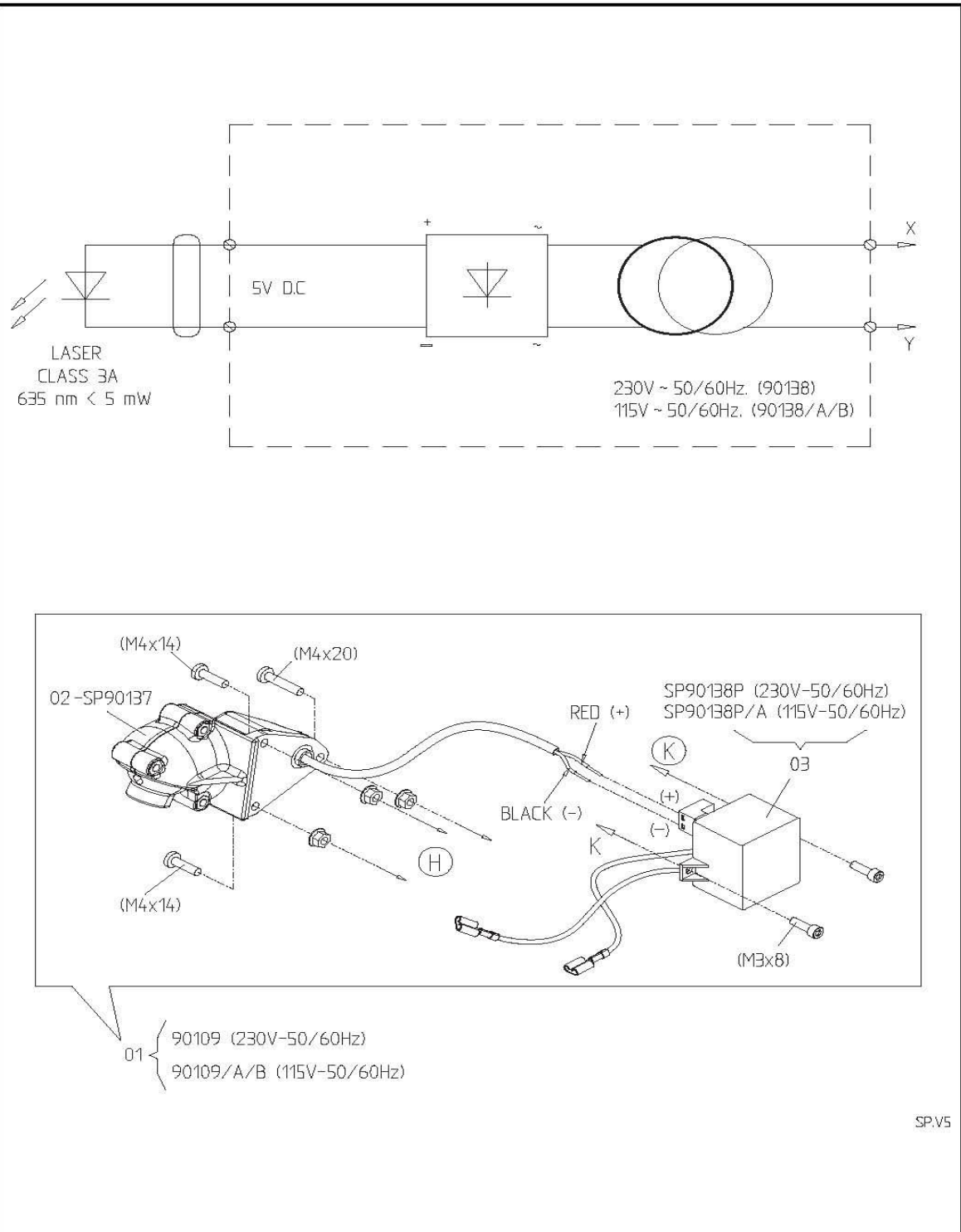
**ENSURE THAT CORE IS SECURED SO AS NOT TO MOVE WHILE BEING CUT. IF CORE MOVES AND BLADE IS BENT SIDEWAYS, LOSS OF SEGMENTS COULD OCCUR.**



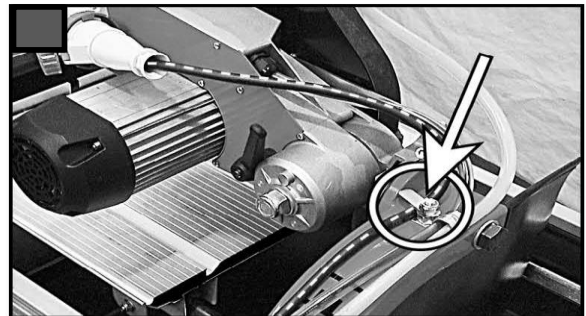
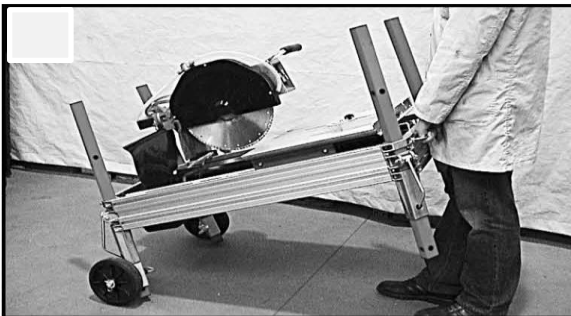
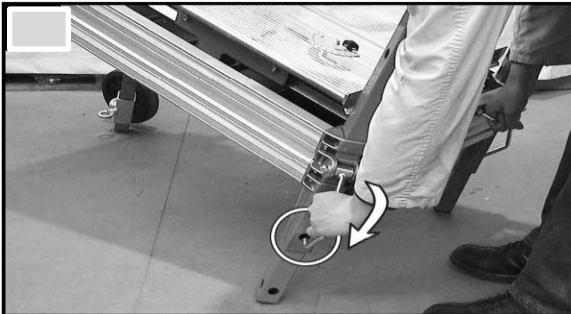
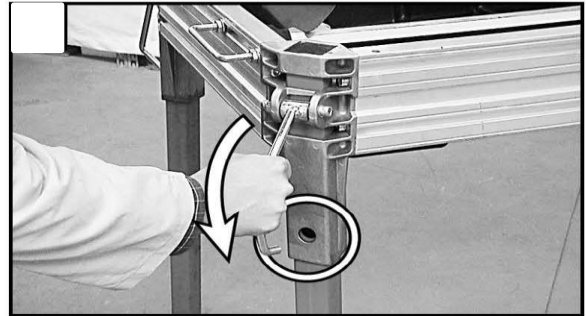
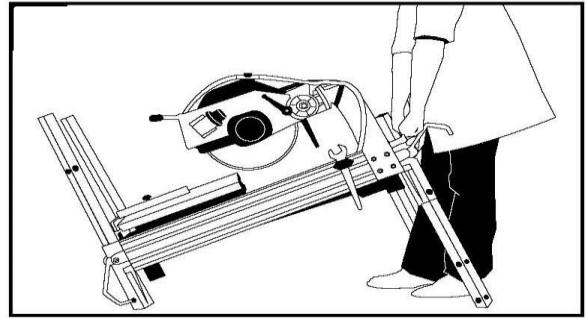
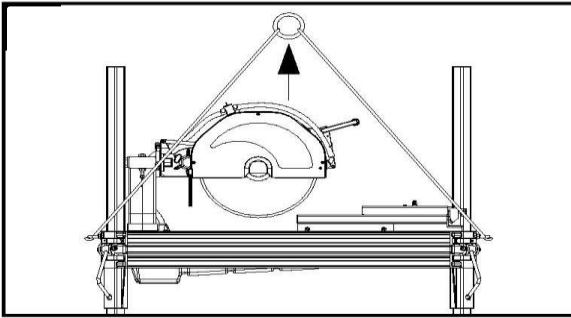






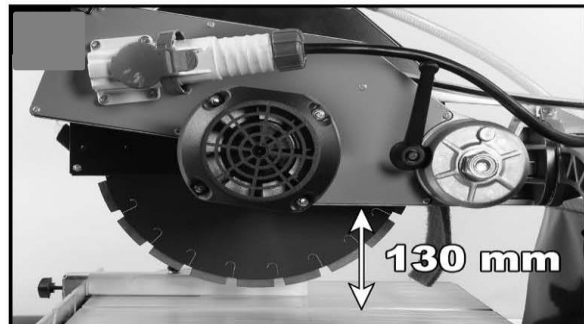
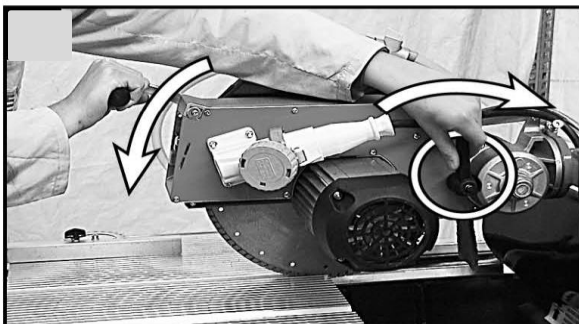
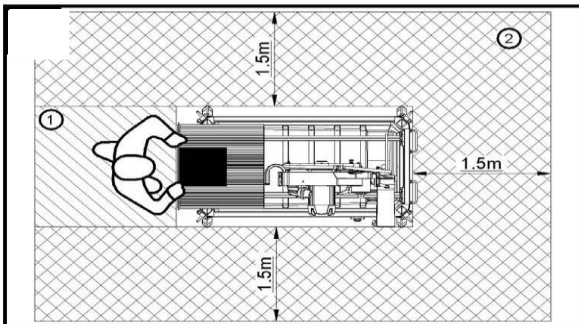
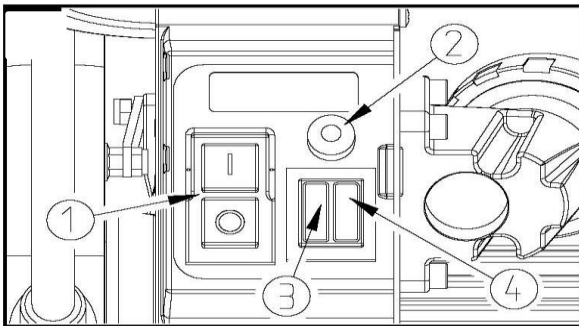
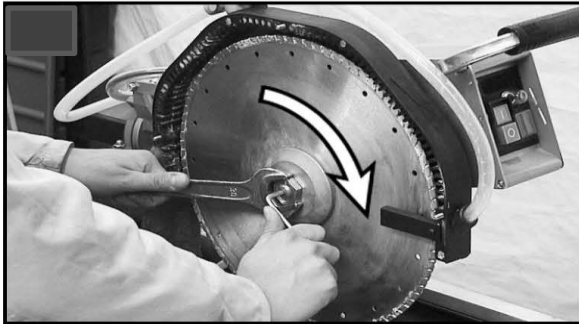


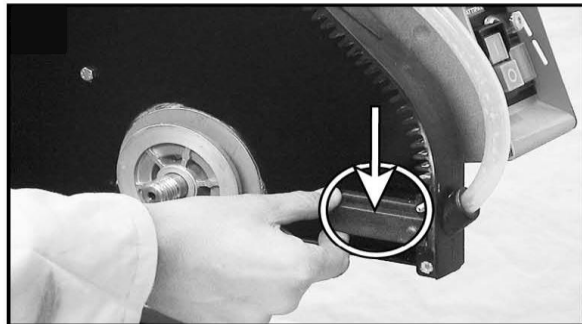
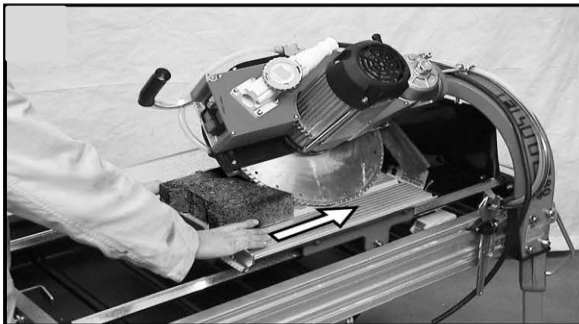
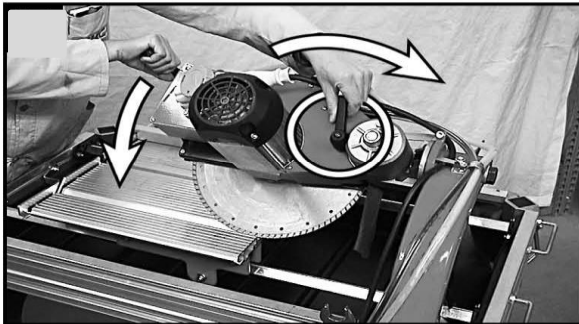
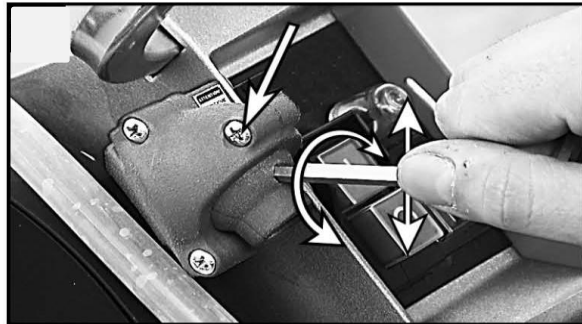
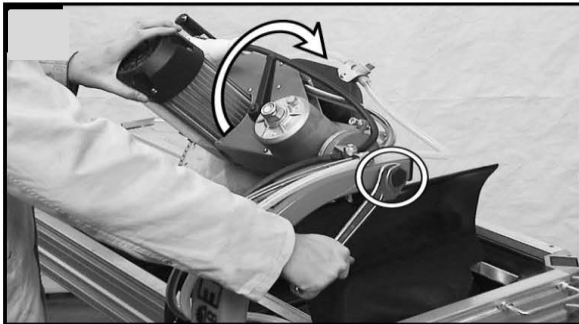
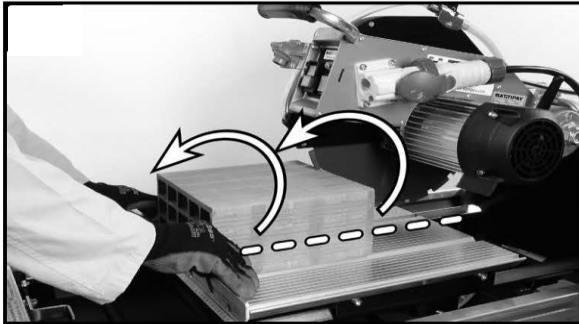
POTHIER

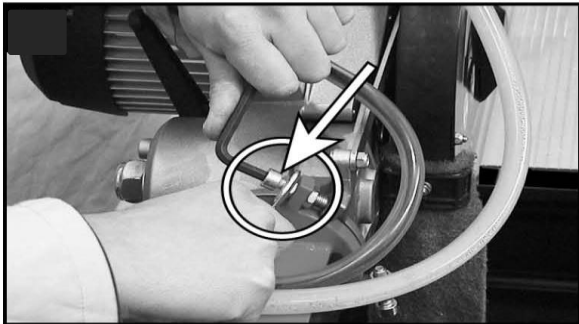
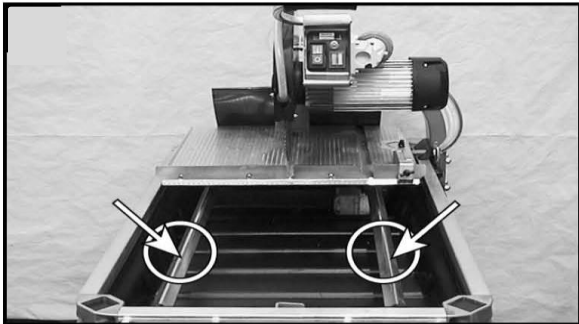
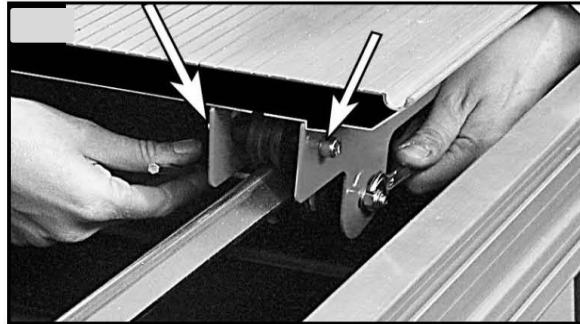


**Wheels are optional.**











## TRANSPORT

The PEB1431 Saw can be easily moved by using the transport handles.

**Before transporting the machine, ensure that:**

- The sliding carriage is fixed by locking the carriage;
- The motor head is completely down by the lever to recovery;
- The legs are in transport position

## POSITIONING

- Place the machine on a stable surface.

To place the machine in working position, proceed as follows:

- **MAKE SURE THAT THE MOTOR HEAD IS LOCKED IN THE LOWERED POSITION BY MEANS OF THE LOCKING LEVER LOCATED ON THE MOTOR SIDE.**
- **MAKE SURE THAT THE SLIDING CARRIAGE IS LOCKED BY MEANS OF THE CARRIAGE LOCKING STOPPER.**

a) put the leg locking pins in release position

b) by means of the transport handles, lift the rear side (motor side) until the working position.

**CAUTION: FOR CORRECT MACHINE POSITIONING, MAKE SURE THAT THE LEG UPPER HOLE MATCHES THE LEG COUPLING HOLE, BEFORE FINALLY LOCKING IT (SEE PICTURE 8).**

c) lock the legs one at a time.

**CAUTION: HOLD THE MACHINE DURING THE LEG LOCKING PHASES.**

d) Repeat the operation for the front side.

**IF THE LEGS ARE COMPLETELY REMOVED, PUT THEM BACK WITH THE 4 HOLES DOWNWARDS AND OUTWARDS.**

## CHECKING BEFORE USE

**THE CORE CUTTING SAW HAS BEEN DESIGNED FOR WORKING WITH WATER.**

- Make sure that the power supply cable does not interfere with the cutting operations.  
Use the cable lock lever to direct its passage.  
Before using the machine, check there is power supply.

## CONNECTING TO POWER SUPPLY

The machine is to be connected to the power supply by a residual current circuit breaker (RCCB) with the following characteristics:

**RCCB In 16 A Id 30 mA**

**Transformer 230 V 60 Hz 4000 W**

**Cont. duty**

**N.B. To ensure correct functioning, periodically check the efficiency of RCCBs by pressing the push-button on the front of the device.**

- Make sure that the section of the power supply cable cores has been measured according to the starting current and its length. For cables up to 50m long, a section of 4 mm<sup>2</sup> is enough.
- Before connecting the machine to the power socket, check that the power supply voltage corresponds to that shown on the plate on the machine.
- The machine must be connected to an effective ground wire.  
In case of doubt, do not connect the machine.



## **BLADE ASSEMBLY / DISASSEMBLY**

**Before performing any operation or adjustment, disconnect the machine from the supply mains.**

Loosen the 5 (five) nuts located on the blade cover guard and remove it.

Remove the blade fixing nut using the 30 mm spanner and the 5 mm Allen wrench.

### **\*\*\* THE BLADE FIXING NUT HAS A LEFT-HAND THREAD.**

- Install the new blade, checking for correct direction of rotation as clearly indicated on the blade.
- Tighten the blade and put the blade cover guard back in position.

## **CONTROL DEVICES**

### **1) START/STOP BUTTON:**

- It is used to start the machine
- It is used to stop the machine

### **2) OVERCURRENT CIRCUIT BREAKER:**

- It intervenes when there is overcurrent, interrupting the machine supply.
- Its intervention is indicated by the expulsion of the manual reset. In case of intervention of the circuit breaker, wait a few minutes and reset it by pressing its central pin.

### **3) MAINS PRESENCE WARNING LIGHT (WHITE):**

- On: presence of mains voltage.
- Off: lack of mains voltage.

### **4) MACHINE OPERATION WARNING LIGHT (GREEN):**

- It indicates that the machine is working.

**BEFORE PERFORMING THE CUTTING OPERATIONS, MAKE SURE THAT THE MATERIAL IS PROPERLY PLACED IN THE CORE CUTTING CRADLE.**

**BEFORE STARTING THE CUTTING OPERATIONS, THE OPERATOR MUST MAKE SURE THAT AT LEAST 150 cm ARE LEFT FREE AROUND THE MACHINE.**

**IN ORDER TO WORK IN SAFETY CONDITIONS, DO NOT LET OTHER PEOPLE REMAIN NEAR THE MACHINE DURING THE CUTTING OPERATIONS.**

**THE OPERATOR STANDS IN THE WORKING POSITION (Pos. 1 Picture 13) DURING THE DIFFERENT MACHINE OPERATION PHASES.**

- By means of the locking lever, secure the motor head
- Arrange the piece to be cut in the core cutting cradle.
- Start the machine and wait until cutting blade cooling water comes out, adjusting the necessary amount by means of the water on/off valve located on the blade guard valve located on the blade guard.

## Health & Safety

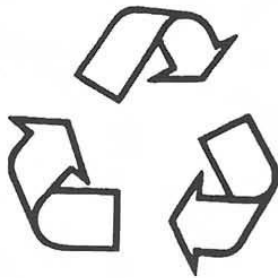
## Safety Precautions

### PRACTICE SAFE MAINTENANCE



- Understand service procedure before doing work. Keep area clean and dry.
- Never lubricate, service or adjust machine while it is moving. Keep hands, feet, and clothing from power-driven parts. Disengage all power and operate controls to relieve pressure. Lower equipment to the ground. Stop the engine. Remove the key. Allow machine to cool.
- Securely support any machine elements that must be raised for service work.
- Keep all parts in good condition and properly installed. Repair damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.
- Disconnect battery ground cable (-) before making adjustments on electrical systems or welding on machine.

### DISPOSE OF WASTE PROPERLY



- Improperly disposing of waste can threaten the environment and ecology. Potentially harmful waste used with equipment includes items such as oil, fuel, coolant, brake fluid, filters, and batteries.
- Use leakproof containers when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them.
- Do not pour waste onto the ground, down a drain, or into any water source.
- Air conditioning refrigerants escaping into the air can damage the Earth's atmosphere. Government regulations may require a certified air conditioning service center to recover and recycle used air conditioning refrigerants.
- Inquire on the proper way to recycle or dispose of waste from your local environmental or recycling center.

**SAFETY DECALS - FOR THE SAFETY OF YOURSELF AND OTHERS REPLACE ANY DAMAGED OR MISSING SAFETY DECALS.**

## Health & Safety

## Safety Precautions

Before using this equipment, study this entire manual to become familiar with its operation. Do not allow untrained or unauthorized personnel, especially children, to operate this equipment. Use only factory authorized parts for service.

When warning decals are destroyed or missing, contact us immediately at **(604) 946-3811** for replacement. For the safety of yourself and others, it is imperative that the following rules are observed. Failure to do so may result in serious injury or death.



This notation appears before warnings in the text. It means that the step which follows must be carried out to avoid the possibility of personal injury or death. These warnings are intended to help the technician avoid any potential hazards encountered in the normal service procedures. We strongly recommend that the reader takes advantage of the information provided to prevent personal injury or injury to others.

### USE COMMON SENSE WHEN HANDLING FUELS



Transport and handle fuel only when contained in approved safety container.

Do not smoke when refueling or during any other fuel handling operation.

Do not refuel while the engine is running or while it is still hot.

If fuel is spilled during refueling, wipe it off from the engine immediately and discard the rag in a safe place.

Do not operate the equipment if fuel or oil leaks exist - repair immediately.

Never operate this equipment in an explosive atmosphere.



Ear protection required when operating this equipment.

## Health & Safety

## Safety Precautions



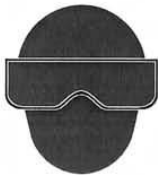
Avoid contact with hot exhaust systems and engines.

Allow engine to cool before performing any repairs.



Never operate unit in a poorly ventilated or enclosed area.

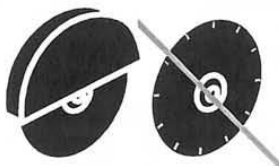
Avoid prolonged breathing of exhaust gases.



Eye protection required when operating this equipment.



Head protection required when operating this equipment.



Never operate this equipment without all guards in place.