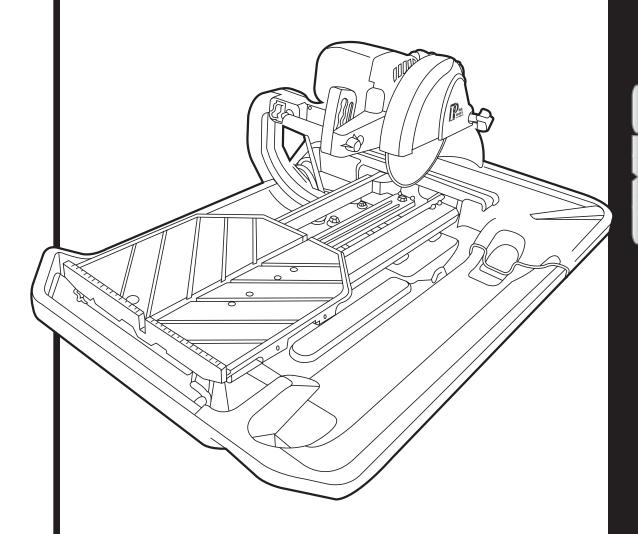
# PEARL CO-ACTION

MODEL CX10 TILE SAW OWNER'S/OPERATOR'S MANUAL



# SERIAL NUMBER -

You should record the Serial Number of your Tile Saw on this Owner's/ Operator's Manual and on the Warranty Card. The Warranty Card must be sent back with all the required pertinent information for the warranty to take effect.

Caution! Read Safety and General Instructions carefully before using saw for the first time.

> Covered by one or more of the following US Patents: 6,080,041; 6,119,676; 6,272,990; 6,460,533; and D458,282

PEARL ABRASIVE

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## i. GENERAL SAFETY RULES FOR ALL POWER TOOLS

WARNING! Read all instructions. As with all machinery there are certain hazards involved with operation and use of the machine. The following basic safety precautions should be followed at all times to reduce the risk of fire, electric shock and serious personal injury to you or others. Keep these important operating instructions with this product.



- 1. Know your power tool read owner's/operator's manual carefully. Learn its applications and limitations as well as the specific potential hazards unique to this tool.
- 3. Ground all tools if tools are equipped with three prong plug, it should be plugged into a three-hole electrical receptacle. If an adapter is used to accommodate a two-prong receptacle, the adapter lug must be attached to a known ground. Never remove the third prong.



Remove wrenches - Form a habit of checking to see that adjusting wrenches are removed from tool before turning it "on".



5. Keep work area clean. Cluttered areas and benches invite accidents.

2. Keep guards in place - and in working order.

6. Do not use in dangerous environment. Do not use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted. Do not use tool in the presence of flammable liquids or gasses.



- 7. Keep children and visitors away. All children and visitors should be kept at a safe distance from work area.
- 8. Make workshop childproof with padlocks, master switches or by removing starter keys.
- 9. Do not force tool. It will do the job better and be safer at the rate for which it was designed.
- **M**
- 10. Use right tool. Do not force tool or attachment to do a job for which it was not designed.
- 11. Wear proper apparel. Do not wear loose clothing, gloves, neckties, rings, bracelets or other jewelry that may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.



12. **Always use safety glasses.** Wear safety glasses (must comply with ANSI Z87.1) at all times. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses. Use face or dust mask if cutting operation is dusty, and ear protectors (plugs or muffs) during extended periods of operation.



13. Do not overreach. Keep proper footing and balance at all times.



14. Maintain tools in top condition. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and if damaged, have repaired by authorized service facility.



- 15. Disconnect tools. When not in use, before servicing, and when changing accessories, such as blades, bits, cutters.
- 16. Avoid accidental starting. Make sure switch is in "off" position before plugging in power cord.
- 17. Use recommended accessories only. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
- 18. Never stand on tool. Serious **injury** could occur if the tool is tipped or if the cutting tool is accidentally contacted.



19. Check Damaged Parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform it's intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect it's operation. A guard or part that is damaged should be properly repaired or replaced.



20. Never leave tool running unattended. Turn power "off". Do not leave tool until it comes to a complete stop.

- 21. Extension cords. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Extension cord tables (refer to page 21) show the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage numbers the heavier the cord.
- 22. Do not abuse cord. Never carry tool by cord or pull it to disconnect from receptacle, Keep cord from heat, oil, and sharp edges.
- 23. Guard against electric shock. Prevent body contact with grounded surfaces. For example, pipes, radiators, ranges and refrigerator enclosures.
- 24. Outdoor use extension cords. When tool is used outdoors, use only extension cords intended for use outdoors and so marked.



- 25. Stay alert. Watch what you are doing. Use common sense. Do not operate tool when you are tired.
- 26. Drugs, alcohol, medication. Do not operate tool while under the influence of drugs, alcohol or any medication.
- 27. Store idle tool. When not in use, tool should be stored in a dry and locked place, out of reach of children.

WARNING! <u>CALIFORNIA PROPOSITION 65:</u> Sawing and drilling generates dust. Excessive airborne particles may cause irritation to eyes, skin and respiratory tract. To avoid breathing impairment always employ dust controls and protection suitable to the material being saw or drilled in accordance with OSHA (29 CFR Part 1910.1). Diamond blades improperly used are dangerous. Comply with ANSI Safety Code B7.1 and OSHA covering speed, safety guards, flanges, mounting procedures, general operating rules, handling, storage and general machine condition.

## ii. SYMBOLS



KEEP GUARD IN PLACE



DIAMOND BLADE



BLADE CUTTING DEPTH



**ELECTRIC SWITCH OFF** 



**ELECTRIC SWITCH ON** 



**ELECTRICAL HAZARD** 



**REMOVE TOOLS** 



PAY EXTREME ATTENTION



REPAIRS TO BE DONE



MACHINE HAZARD



FLAMMABLE



READ INSTRUCTIONS CAREFULLY



WARNING



**FRAGILE** 



KEEP DRY



DO NO STEP ON



WEAR HEARING PROTECTION



WEAR EYE PROTECTION



WEAR BREATHING PROTECTION



WEAR HARD HAT



WEAR PROTECTIVE CLOTHING



WEAR SAFETY SHOES



WELL VENTILATED



NO NON-WORKING PERSONNEL

#### iii. FEATURES

The Pearl CX10 is a portable professional tile saw. Lightweight and compact it has innovative built in features that enable it to cut larger format tiles. The unique coaction movement of the cutting head and main table allow the saw to increase its cutting capacity whenever needed. The main table and extension carriage are supported by low friction, self cleaning, adjustable guide wheels. Water flow to the blade is provided by two (2) nozzles that direct the water to both sides of the blade. The rugged powder coated metal and aluminum frame sets in a removable water tray for easy clean up.

- Powerful Motor 2 hp.
- The cutting is done over the pan and drip trays contain the water run off.
- The table travels 50% less than conventional saws.
- Being able to work in smaller spaces.
- Chopping Action plunge feature allows the user to make quick plunge cuts with the spring loaded cutting head.
- Tracking System 8-sealed metal roller bearings and stainless steel rails allow the table to roll smoothly, ensuring accurate cuts. Long life.
- Lightweight only 60 lbs.
- Circuit breaker protects your saw from power surges and overheating.
- High Impact ABS Water Tray.
- · Adjustable Cutting Head allows user to alight saw at any time.
- Blade Capacity 10".
- Diagonal cut up to 18" tiles and rip cut up to 24" in length.

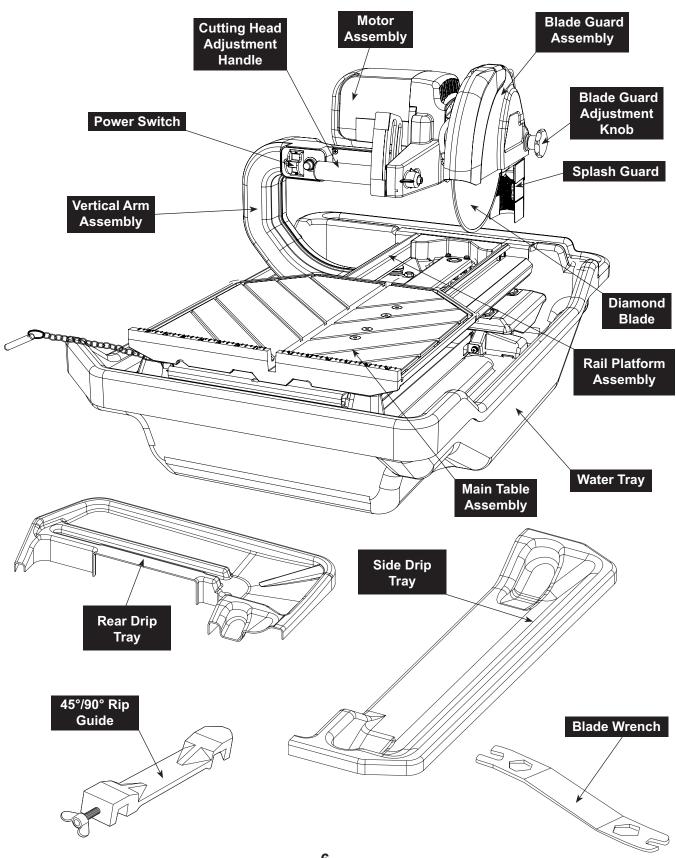
The heavy duty, cast to last construction and quality components were designed to meet the highest demands of the professional.

Read this manual completely and then let the Pearl CX10 take your cutting capabilities to new dimensions.

#### iv. SPECIFICATIONS

#### **PEARL CX10 TILE SAW** ARBOR SHAFT MAX. BLADE **MOTOR** WEIGHT **DIMENSIONS** ROTATION **CAPACITY** 2 HP Counter-5/8" arbor blade, 60 lbs Width: 23-1/2" Clockwise 10" Blade 115 v, 60 Hz, Length: 35-1/2" Single phase

# v. GETTING TO KNOW YOUR SAW



# vi. BLADE INSTALLATION

- Carefully raise the cutting head to its highest position and secure it into place by tightening the cutting head adjustment knob located in the front of the saw, to the right of the power switch.
- 2. Raise the blade guard to the highest position and tighten the blade guard adjustment knob.
- 3. Remove the blade shaft nut and outer flange.
- 4. Place the blade onto the shaft making sure that the directional arrows are pointing in the direction of rotation.
- 5. After making sure that the blade is firmly placed against the inner flange, secure it into place with the outer flange and blade shaft nut. Make certain the nut is firmly tightened with the wrench provided, but do not over tighten!
- 7. Lower the blade guard and tighten the adjustment knob.
- 8. Slightly loosen the cutting head adjustment knob and lower the cutting head to its lowest position, and then tighten the adjustment knob firmly to hold the cutting head in place.

WARNING: Setting the blade too high may cause the blade to grap the material being cut, causing damage and possibly injury.

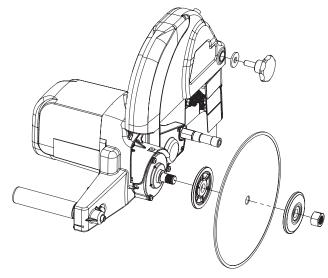


Figure 1

#### vii. SAFE OPERATING PRACTICES FOR TILE SAW

WARNING! For your own safety and the safety of others do not attempt to operate this saw until you have read and understand the general safety rules for all power tools and the following additional safety precaution unique to this saw.

 Use safety equipment - wear safety approved hearing, eye, head and respirator protection.

WARNING! The dust generated by cutting of tile, marble, stone, bricks etc. can be injurious to your health. Always operate machinery in well ventilated areas and provide proper dust removal. Always wear a dust mask approved for respiratory protection against these types of dusts and mists.

2. Read and understand the symbol definitions contained in this manual.



- 3. Read and understand all warnings and instructions on the machine.
- Read all safety materials and instructions that accompany any blade or accessory used with this machine.
- Establish a training program for all operations of this machine.
- Always provide a copy of this manual to the equipment user. If you need extra copies call our Customer Service Department at 1-800-969-5561.
- 7. Always select a diamond blade according to the manufacturers recommendation suitable for the material to be cut. Never use a blade having a maximum operating speed lower than the "No load R.P.M." marked on the tool nameplate. Do not operate any saw without safety guards in place or with a blade diameter larger than the maximum



saw blade capacity.

 Before mounting a blade on the saw clean and inspect the arbor shaft, blade flanges and the diamond blade for uneven wear or damage. If it appears to be damaged, <u>Do not operate the tool.</u> Have it serviced by a qualified service technician.



 Before each use of the saw, inspect the diamond blade for hairline fatigue cracks. If such a crack or flaw is evident, discard the blade. <u>Using a</u> <u>damaged blade may cause injury to the operator</u> or others.

10. Be sure that the blade arbor hole matches the blade adapter flange supplied with the saw. Use only blade adapter flanges that came on your saw. Never use damaged or worn blade adapter flanges.



11. Installing the blade, install the blade with the arrow pointing the same direction as the rotation of the arbor shaft or the arrow on the blade guard. Be sure to tighten the blade shaft arbor nut with the wrench provided. Be careful not to over tighten.

WARNING! Not dressing the blade frequently or setting the blade too high will cause it to grab the tile possibly causing injury to the operator and the saw.

- 12. Check that the blade tracks near the center of the channel in the main table, and that the table moves freely from front to back.
- 13. Sometimes the material being cut is not abrasive enough to expose new diamonds on the blade. If the blade is not sharpened, it will rub against the surface resulting in heat build up in the core. To prevent this, it is necessary to dress the blade. To dress the blade simply cut something that is very abrasive such as a piece of cement block. Indications that the blade needs dressing includes:
  - The diamond in the matrix appear shiny because they are worn flat.
  - The blade stops cutting or noticeably slows down.

Blade dressing stones are available from your local Pearl Warehouse.

- 14. Before using the saw fill the water tub enough to submerge the water pump with clean water only. Replenish as necessary and clean the water tub frequently. Do not operate a wet cutting blade without adequate water flow to both sides of the blade. Never run the pump dry.
- 15. When cutting, always hold the material firmly lying flat, supported by the main table with one edge resting against the main table backstop.



- Do not attempt to cut pieces too small to safely hold down on the main table.
- Never use the side of the blade to cut or grind with, only cut in a straight line.
- Keep all parts of your body away from the blade and all other moving parts.
- Never touch or try to stop a moving blade with your hand.
- 16. When cutting dry always unplug the water pump first. *Never run the pump dry.* 
  - Do not use a wet cutting blade for dry cutting.
     Select the proper dry cutting blade for your application.
  - Never make long continuous cuts with dry cutting blades. To avoid heat build up, allow the blade to cool, remove the tile and allow the blade to run freely for a few minutes.

IMPORTANT - If there is any tendency for the saw to move during certain operations, such as when cutting large heavy tile; the saw must be securely fastened to a supporting table.

- 17. Make certain all adjusting knobs or locks are tight and engaged in their detents and that movable parts not intended to move during operation are securely locked before making a cut. <u>Be careful</u> not to over tighten.
- 18. Before connecting the machine to a power source check to see that the "On/Off" switch is in the "off" position.
  - Make sure the blade is not contacting anything before connecting to a power source and starting the motor.
  - Know how to stop the machine quickly in case of an emergency.





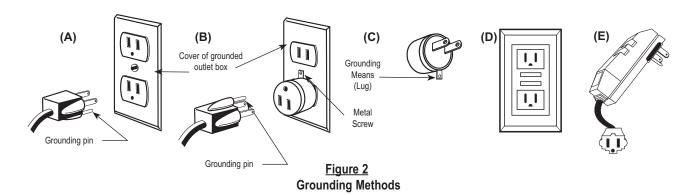












#### 19. Grounding Instructions



- In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.
- Do not modify the plug provided if it will not fit the outlet, have the proper outlet installed by a qualified electrician.
- Improper connection of the equipment grounding conductor can result in a risk of electric shock.
- Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.
- Use only 3 wire extension cords that have 3 prong grounding plugs and 3 pole receptacles that accept the tool's plug.

#### Repair or replace damaged or worn cord immediately.

This tool is intended for use on a circuit that has an outlet that looks like the one illustrated in Figure 2. The tool has a grounding plug that looks like the plug illustrated in Figure 2(A). A temporary adapter, which looks like the adapter illustrated in Figure 2(B) and 2(C), may be used to connect this plug to a 2 pole receptacle as shown in Figure 2(B) if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green-colored rigid ear, lug, and the like, extending from the adapter must be connected to permanent ground such as a properly grounded outlet box.

# NOTE - Use of a Temporary Adapter is not permitted in Canada

Additionally, water pump requires the use of a Ground Fault Circuit Interrupter. Therefore, when using the water pump receptacle, this tool must be plugged into a properly installed Ground Fault Circuit Interrupter outlet. See Figure 2(D). If a Ground Fault Circuit Interrupter outlet is not available, Pearl Abrasive Co. has it available as an accessory item. A plugin Ground Fault Circuit Interrupter may be plugged into a properly installed and grounded 3-pole outlet. Refer to Figure 2(E).

#### 20. Position of the Tile Saw

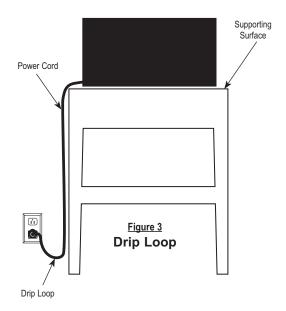
- To avoid the possiblity of the appliance plug or receptacle getting wet, position tile saw to one side of a wall mounted receptacle to prevent water from dripping onto the receptacle or plug. The user should arrange a "drip loop" in the cord connecting the saw to a receptacle. The "drip loop" is that part of the cord below the level of the receptacle, or the connector if an extension cord is used, to prevent water traveling along the cord and coming in contact with the receptacle. See Figure 3.
- If the plug or receptacle does get wet, <u>Do</u>
   <u>not unplug the cord</u>. Disconnect the fuse or
   circuit breaker that supplies power to the tool.
   Then unplug and examine for presence of
   water in the receptacle.



To reduce the risk of electrocution, keep all connections dry and off the ground. Do not touch plug with wet hands.

#### 21. Extension Cords

 Use only extension cords that are intended for outdoor use. These extension cords are indentified by a marking "Acceptable for use with outdoor appliances; store indoors while not in use." Use only extension cords having an electrical rating not less than the rating of the product. Refer to chart on page 21. Do no use damaged extension cords. Examine extension cord before using and replace if damaged. Do no abuse extension cords and do not pull on any cord to disconnect. Keep cord away from heat and sharp edges. Always disconnect the extension cord from the receptacle before disconnecting the saw from the extension cord. Ground Fault Circuit Interrupter (GFCI)
protection should be provided on the circuit(s)
or outlet(s) to be used for the tile saw.
Receptacles are available having built-in
GFCI protection and may be used for this
measure of safety.



# viii. USING THE CUTTING TABLE

#### Features:

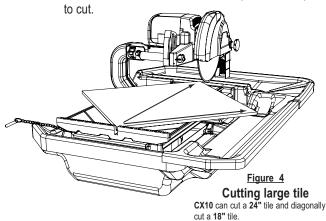
- Cutting table marked in inches for precision cuts.
- 14" cutting table provides more support during larger cutting jobs than the standard 11" cutting tables.

#### Using 90° Rip Guide:

- 1. Set the rip guide by positioning it on the desired dimension and tighten the threaded knob. Make sure that the rip guide is firmly tightened to avoid slippage. The rip guide can be used for 90° rip cuts from both the left and right side.
- 2. After the rip guide is positioned for the desired cut, place material flat against the rip guide and the table measurement rail.
- Simply line-up the material being cut with the appropriate pre-marked lines on the cutting table surface.
- 4. Now you are ready to make your cut.

# Making Miter Cuts (Using Optional Miter Block):

- For miter cuts, place the lip of the miter block on the measurement rail, with the threaded knobs facing you.
- 2. Tighten the threaded knobs to secure the miter block in place.
- 3. Place material onto miter block and you are ready



# xix. CARE AND MAINTENANCE

MARNING! For your safety before performing any maintenance on the saw turn off the power switch and unplug the power cord.

The Pearl CX10 requires very little maintenance. However, keeping your saw clean and properly adjusted will ensure optimum performance. Take great care not to get water into the motor. Do no use pressure washer to clean motor area.

#### 1. Cleaning

- Form a habit of cleaning your saw after each use. To clean the water tub, remove drain plug provided in bottom of tub. Remove saw including water pump from tub. Remove residual water and clean tub using soap and water only. Reinstall saw with pump into tub.
- To increase water pump life remove tile grit by purging water. Pump with fresh water after each use.
- With a damp cloth or sponge wipe clean the guide rails and all other surfaces on the saw where dust and debris has accumulated.

NOTE - Do not lubricate the guide rails. The presence of oil or grease will cause an accumulation of dust and dirt.

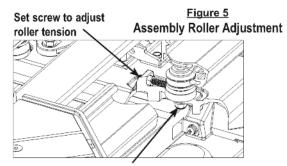
#### 2. Transporting

 Unplug the power cord and store it in the empty, dry water tub. For convenience and safety, the saw should be transported with the main table locked, motor in upper position and all adjustment knobs tightened.

#### 3. Sliding Vertical Arm Assembly Adjustment

- · Make sure that all rails and rollers are clean.
- If the vertical arm assembly does not slide smoothly, it will require tension adjustment as follows:
- A. Locate the two tension rollers mounted onthe black base of the vertical arm assembly furthest from the arm. Use a wrench to loosen the nyloc nut directly below each roller. Use another wrench to prevent the bolt on top from turning. See Figure 5.
- B. Use the horizontal set screw to adjust roller tension against the rails. The rollers should roll free but without side movement.

C. Tighten nyloc nut when finished to secure rollers in place. Be sure not to overtighten.

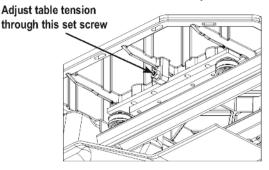


Nyloc nut is found under the base

#### 4. Table Roller Adjustment

- A. Loosen (4) hex screws on table top.
- B. Adjust tension on rollers by turning set screw (on outside of table) until desired tension is achieved. DO NOT OVERTIGHTEN. See Figure 6.
- C. Re-tighten the (4) hex screws on table top. Check table movement and re-adjust if necessary. Table should roll free but without side movement.

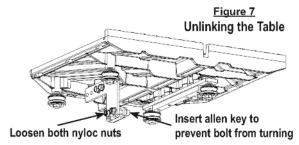
#### <u>Figure 6</u> Table Roller Adjustment



NOTE - Whenever making tension adjustments to rollers on the vertical arm assembly or table, the stainless steel wire linking the two components together should be disconnected first. Otherwise, it will not be possible to determine which rollers will require adjustment. See Section 5 for steps.

#### 5. Unlinking Coaction Wire

- A. Remove the wire shield located between the rails by removing the screws at both ends.
- B. Loosen the nyloc nuts on the wire anchor underneath the table so that the wire can pass freely through the bolt. Be sure to use an allen key to prevent the bolt from turning. Failure to do so may cause the wire to break. See Figure 7.



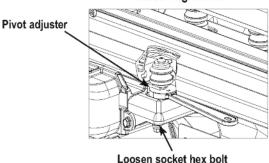
- C. Perform the necessary adjustments. Proceed to next step once completed.
- D. Move the table towards the user, such that the forward-most roller touches the rubber stopper at the end of the rail. Then move the vertical arm assembly to the opposite end, while leaving a small gap between the rearmost roller and frame.
- E. Tighten the nyloc nuts on the wire anchor, while preventing the bolts from turning.
- F. Replace the wire shield.

#### 6. Aligning the Blade to the Table

- While cutting, the material being cut must move in a straight line parallel to the saw blade. If the blade is out of plane it will bind at one end of the cut. To align the blade, perform the following:
- A. Locate the pivot adjuster on the black base of the vertical arm assembly next to the arm. Loosen the socket hex bolt directly below the adjuster. See Figure 8.
- B. Turn pivot adjuster using a wrench either clockwise (putting the roller into the rail) or counterclockwise (pulling the roller away from the rail). While the pivot adjuster determines blade alignment, the rollers on the opposite side of the assembly base (see Section 3) must also be adjusted simultaneously so that they run parallel to the rollers closest to the vertical arm. Do not apply excessive force when turning the pivot adjuster.

Resistance encountered while turning the pivot adjuster indicates that rollers are being forced against the rail. Lower roller tension before proceeding.

Figure 8 Blade Alignment



- C. Tighten lower socket hex bolt when finished. With the pivot adjuster secured, adjust the remaining rollers to obtain proper tension against the rails. See Section 3.
- D. Check alignment by placing an L-shaped straight edge on the table with the short arm resting flat against the table back stop. The long arm should rest against the blade with the cutting head completely lowered. Check to see if there are any gaps between the leading or trailing edges of the blade and the straight edge. If gaps exist, then repeats steps A C until alignment is attained. See Figure 9.

# Figure 9 Table Roller Adjustment

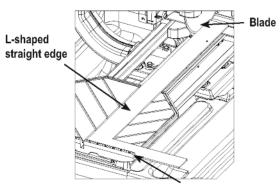
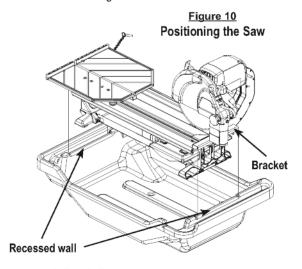


Table back stop

#### 7. Positioning the Saw in the Tub

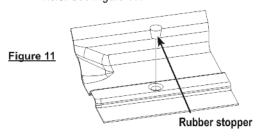
- A. Orient the saw such that the front is pointing towards the short side of the tub with the beveled corner.
- B. While lowering the saw into the tub, ensure that brackets at both ends of the saw frame

fit over the recessed portions of the tub wall. See Figure 10.

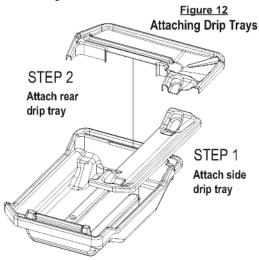


## 8. Tub & Tray

A. Insert the large rubber stopper in the drain hole. See Figure 11.



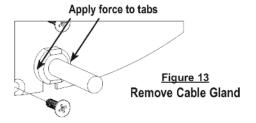
B. The saw must be properly seated inside the tub before the drip trays can be attached. See Figure 12.



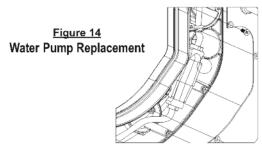
#### 9. Replacing the Water Pump

- In the event of a water pump failure, replace the pump by performing the following steps:
- A. Use a bent-nose plier to remove the cable

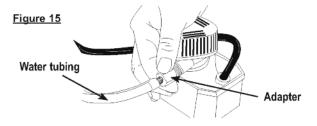
gland from the shield by squeezing the cable gland tabs together. Once removed, detach the cable gland from the power cable. See Figure 13.



B. Remove screws from the vertical arm shield, then remove the shield. See Figure 14.



- C. Unplug the water pump power cable from the receptacle within the vertical arm.
- D. Remove the water pump underneath the rails and install a new one in its place. Remove the water tube and adapter from the failed pump.
- E. Plug the water pump power cable into the receptacle within the vertical arm.
- F. Install shield onto vertical arm using screws.
- G. Gently extract excess cable stored within vertical arm; some slack is ideal. <u>Tugging</u> the cable may dislodge or disconnect critical electrical components. Attach cable gland onto the power cable and install it into the shield using a bent-nose plier.
- H. Attach the adapter to the pump and hand tighten. <u>Do not use a wrench</u> as it can strip the thread.
- I. Connect clear tubing to male section of the adapter until it fits securely. See Figure 15.



## x. CUTTING DEPTH

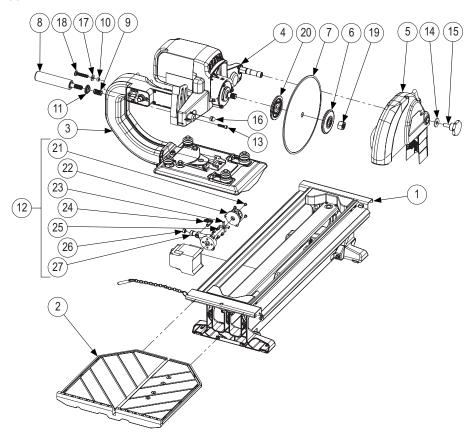
The recommended cutting depth is 1/4" below the cutting table surface. To adjust the cutting depth, loosen the cutting head adjustment handle and set it to the lowest position, so that the blade is 1/4" below the top of the table surface.

BLADE DIAMETER	CUTTING DEPTH		
10 inch	2-1/4 inch		

WARNING: Setting the blade too high may cause the blade to grab the material being cut, possibly causing injury to the operator and the saw.

# xi. REPLACEMENT PARTS LIST

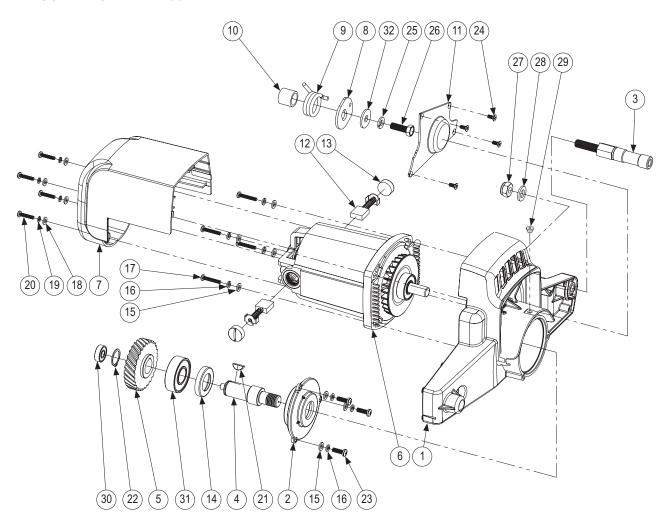
#### MAIN ASSEMBLY



	PART NAME	PART NUMBER
1	Rail Platform Assembly	CX38001
2	Table Assembly	CX38002
3	Vertical Arm Assembly	CX38003
4	Cutting Head Assembly	CX38004
5	Blade Guard Assembly	CX38005
6	Dia 5/8" (15.9mm) Outer Flange	CX38006
7	10" (254mm) Cont. General Purpose Blade	DTL10HPXL
8	D30 X 120L Handle	CX38007
9	Spring	CX38008
10	Slip Collar	CX38009
11	Interlock Washer	CX38010
12	Water Pump	CX38011
13	M6 X 1.0 X 25L Socket Head Hex Bolt	CX38012
14	M10 Narrow Washer	CX38013

	PART NAME	PART NUMBER
15	Male M10 X 1.5 X 25L Knob	CX38014
16	M8 X 1.25 Acorn Nut	CX38015
17	M8 Narrow Washer	CX38016
18	M8 X 1.25 X 35L Cross Screw	CX38017
19	5/8" - 11 Hex Nut	PSV00004
20	Dia 5/8" (15.9mm) Inner Flange	CX38018
21	Intake Screen Screw	CX38019
22	Intake Screen	CX38020
23	Impeller	CX38021
24	Valve Lever	CX38022
25	Volute Screw	CX38023
26	Tube Retention Ring	CX38024
27	Volute	CX38025

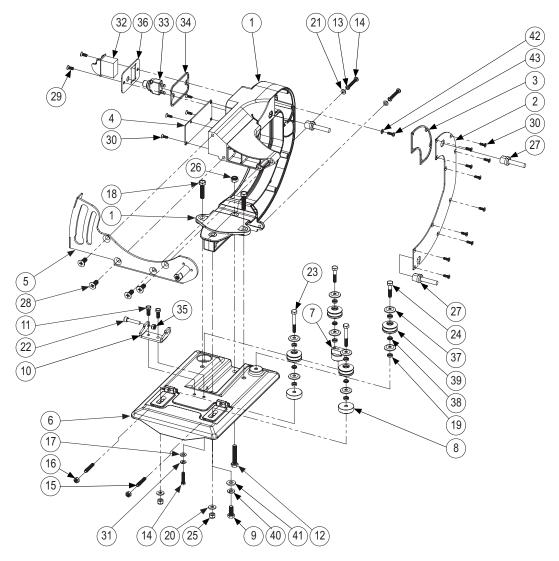
# **CUTTING HEAD ASSEMBLY**



	PART NAME	PART NUMBER
1	Cutting Head	CX38027
3	Gear Cap	CX38028
3	Blade Guard Shaft	CX38029
4	Blade Shaft	CX38030
5	Helical Gear	CX38031
6	R0151 Brush Motor	CX38032
7	Fan Cover	CX38033
8	Spring Tension Plate	CX38034
9	Torsional Spring	CX38035
10	Spring Spacer	CX38036
11	Spring Housing Cover	CX38037
12	17mm X 7mm Carbon Brush (Set of 2)	CX38038
13	Carbon Brush Cap (Set of 2)	CX38039
14	D40 d24 Oil Seal	CX38040
15	M5 Narrow Washer	CX38041
16	M5 Spring Washer	CX38042

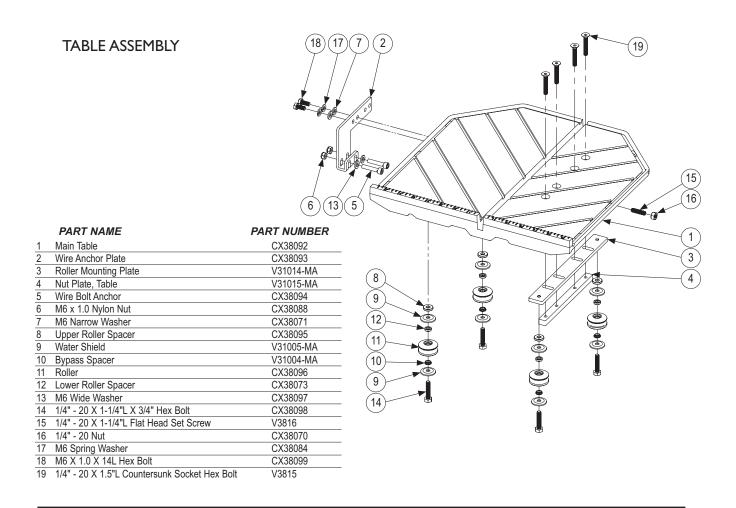
	PART NAME	PART NUMBER
17	M5 X 0.8 X 25L Cross Screw	CX38043
18	M4 Narrow Washer	CX38044
19	M4 Spring Washer	CX38045
20	M4 X 0.7 X 20L Cross Screw	CX38046
21	5mm X 16mm Woodruff Key	CX38047
22	M20 External C-Clip	CX38048
23	M5 X 0.8 X 15L Cross Screw	CX38049
24	M4 X 0.7 X 10L Countersunk Cross Screw	CX38050
25	M8 Spring Washer	CX38051
26	M8 X 1.25 X 20L Hex Bolt	CX38052
27	M10 X 1.5 Nut	CX38053
28	M10 Narrow Washer	CX38013
29	D6 Circular Rubber Stop	CX38054
30	D22 d8 608 LLU Radial Bearing	CX38055
31	D47 d20 6204 LLU Radial Bearing	CX38056
32	M8 Regular Washer	CX38057

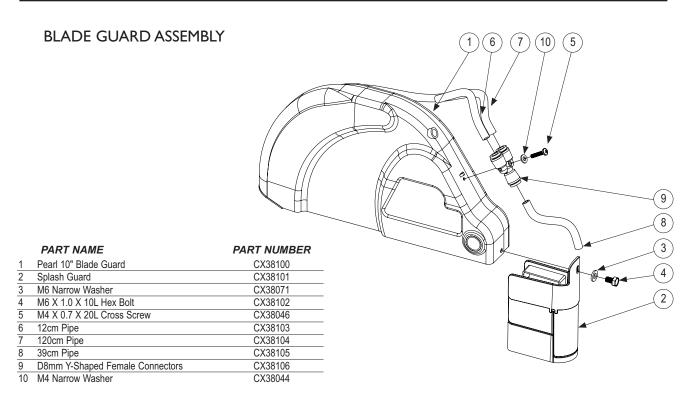
# **VERTICAL ARM ASSEMBLY**

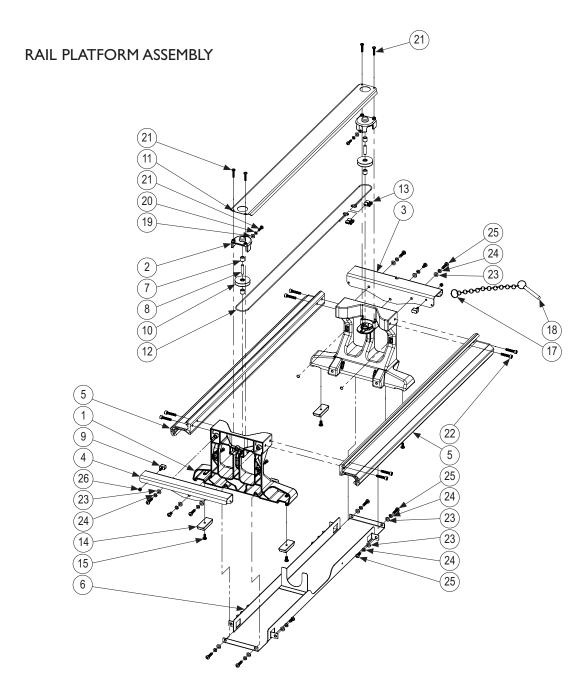


	PART NAME	PART NUMBER
1	Post	CX38058
2	Post Electrical Access Plate	CX38059
2 3 4 5 6	Rubber Gasket	CX38060
4	Plate	CX38061
5	Cutting Head Mounting Bracket	CX38062
	Post Base	CX38063
7 8 9	Roller Adjustment Mount	CX38064
8	Roller Mount	CX38065
9	M8 X 1.25 X 20L Hex Bolt	CX38052
10	Wire Anchor Bracket	CX38066
11	M6 X 1.0 X 15L Hex Bolt	CX38067
12	M8 X 1.25 X 45L Hex Bolt	CX38068
13	M5 Spring Washer	CX38042
14	M5 X 0.8 X 15L Cross Screw	CX38049
15	1/4" - 20 X 1/2"L Flat Point Set Screw	CX38069
16	1/4" - 20 Nut	CX38070
17	M6 Narrow Washer	CX38071
18	M8 X 1.25 X 35L Hex Bolt	CX38072
19	Lower Roller Spacer	CX38073
20	1/4" Narrow Washer	CX38074
21	M5 Narrow Washer	CX38041
22	Wire Tension Adjustment Bolt	CX38075

	PART NAME	PART NUMBER
23	1/4" - 20 X 2"L X 3/4" Cap Hex Bolt, B7 Grade	CX38076
24	1/4" - 20 X 1-1/4"L X 3/4" Cap Hex Bolt, B7 Grade	e CX38077
25	1/4" - 20 Nylon Nut	CX38078
26	M8 X 1.25 Nylon Nut	CX38079
27	16 Gauge Cable Gland	CX38080
28	M8 X 1.25 X 20L Countersunk Cross Screw	CX38081
29	M5 X 0.8 X 16L Countersunk Cross Screw	CX38082
30	M4 X 0.7 X 13L Countersunk Cross Screw	CX38083
31	M6 Spring Washer	CX38084
32	20A 125V/12A 250V Toggle Switch	CX38085
33	15A Circuit Breaker	CX38086
34	Power Switch Gasket	CX38087
35	M6 X 1.0 Nylon Nut	CX38088
36	Power Switch Plate	CX38089
37	Water Shield	V31005-MA
38	Bypass Spacer	V31004-MA
39	Type 5 Guide Roller	CX38090
40	M8 Spring Washer	CX38051
41	M8 Narrow Washer	CX38016
42	M4 Narrow Washer	CX38044
43	M4 X 0.7 X 8L Cross Screw	CX38091



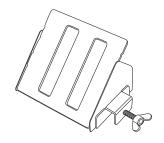




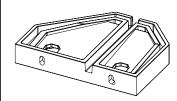
	PART NAME	PART NUMBER
1	Rail Platform	CX38107
2	Pulley Mount and Cap	CX38108
3	Front Platform Anchor	CX38109
4	Rear Platform Anchor	CX38110
5	Rail	CX38111
6	Skid Plate	CX38112
7	Shaft Spacer	CX38113
8	Shaft	CX38114
9	Rubber Bumper	CX38115
10	Wire Pulley Assembly	CX38116
11	Wire Shield	CX38117
12	D2 Stainless Steel Wire (1417mm)	CX38118
13	Screw Driven Wire Clamp Assembly (Set of 4)	CX38119

	PART NAME	PART NUMBER
14	Rubber Feet	CX38120
15	M5 X 0.8 X 10L Cross Screw	CX38121
16	Chain	CX38122
17	D21 Ring	CX38123
18	D8 X 45L Quick Release Pin	CX38124
19	M4 Narrow Washer	CX38044
20	M4 Spring Washer	CX38045
21	M4 X 0.7 X 10L Cross Screw	CX38125
22	1/4" - 20 X 5/8"L Socket Head Hex Bolt	V3808
23	M5 Narrow Washer	CX38041
24	M5 Spring Washer	CX38042
25	M5 X 0.8 X 10L Cross Screw	CX38121
26	M4 X 0.7 Nut	CX38126

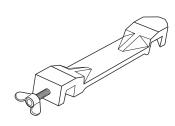
# xii. ACCESSORIES/PARTS



Optional Name (Qty.) Miter Block (1) Part Number S1000-34



Optional
Name (Qty.)
Side Extension Table (1)
Part Number

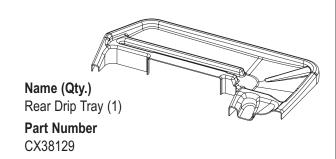


Name (Qty.) 45°/90° Rip Guide (1) Part Number V35000



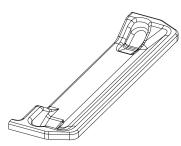
Optional Name (Qty.) Knob for Rip Guide and Miter Block (1) Part Number V35016

V38008

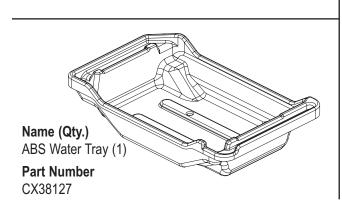


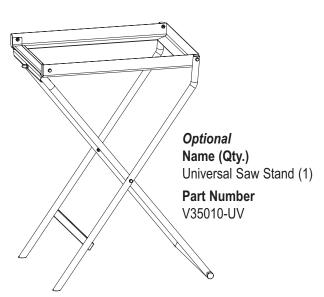


Name (Qty.) Drain Plug (1) Part Number V35015



Name (Qty.) Side Drip Tray (1) Part Number CX38128





# xiii.THE RIGHT BLADE DOES THE RIGHT JOB

For the most effective cutting and blade life always use the recommended Pearl Abrasive Co. blade.

PEARL BLADE	APPLICATION						
SERIES	CERAMIC TILE	EXTRA HARD CERAMIC	PORCELAIN	MARBLE	GRANITE	HARDSTONE	GLASS TILES
HPXL Series	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	
DTLB19 Series	$\odot$						
HP Series		$\odot$	$\odot$		$\odot$		
Glass Blade							$\odot$
SH Series	$\odot$			$\odot$			_
Pro-V Series	$\odot$	$\odot$	$\odot$				

## xiv. HOW TO ORDER PARTS

Please have the following information ready before calling:

- · Serial Number of your Tile Saw
- · Model Number of the Tile Saw
- · When purchased and where
- Part Description

All parts listed may be ordered from your Local warehouses. If the part is not stocked locally, call our Corporate office and ask for our Customer Service Department. For Technical Support call **1-800-969-5561**. In <u>Canada</u> call **1-800-387-0008**. There is a \$25.00 minimum order.

Return Policy: Return goods for credit or exchange on the basis of the following terms: (1) They must be current products; (2) Items returned for replacement or refund should be in original cartons and must be accompanied by a packing slip with the following information: Returned Goods Authorization (RGA) number obtainable from Customer Service Department • List of items returned • Reason(s) for return(s) • Copy of original invoice(s); (3) Freight charges must be assumed by sender; (4) Returning goods are subject to a 15% handling charge to cover our cost of repacking and restocking. All Prices are subject to change without notice.

Disclaimer: Pearl Abrasive Co. reserves the right to make changes or improvements on its products without incurring an additional obligation including any obligation to make corresponding changes or improvements to products previously manufactured or sold. Pearl reserves the right to discontinue products at any time without notice.

All illustrations displayed in this manual are the property of Pearl Abrasive Co. and shall not be duplicated or reproduced without the express written consent of Pearl Abrasive Co.

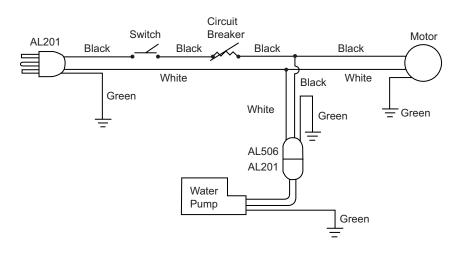
# xv. ELECTRICAL MOTOR SPECIFICATION

	CX10
Horse Power	2 hp
Volts	115 V
Amps	15 amps
Motor RPM	22,000 rpm
Cycle	60 Hz
Phase	1
Class	F
Blade Shaft	3,300 rpm

#### Recommendations:

- It is recommended that a 15 amp circuit be used while operating this saw. This will prevent possible power interruption or loss.
- Always plug saw as close as possible to the power source while operating. This will allow you to receive optimum electricity.

#### CX<sub>10</sub>



## **WARNING:**

To avoid permanent motor damage you must use the correct extension cord. Never use more than one extension cord at a time. Follow the chart below for proper size.

	LENGTH OF CORD
WIRE GAUGE	2 HP 115V
No. 12	25'
No. 10	50'
No. 8	75'
No. 6	-

# xvi. TROUBLESHOOTING

WARNING! For your safety and the safety of others, turn the power switch off and always remove the plug from power source before troubleshooting. Repairs performed by unauthorized personnel could cause serious hazard. We recommend that service to this tool be performed by a qualified service technician with original equipment replacement parts.

**EXCESSIVE NOISE.** Lack of lubrication to the gearbox and or possible bearing wear. Have tool serviced.

**BLADE WILL NOT CUT.** Check for worn out diamond edge. Be sure that the arrow on the blade is rotating the same direction as the motor arbor and/or arrow on the blade guard. Make sure the blade is suitable for the material to be cut. If blade has been used to cut a material that is hard, it may have become dull, dress the blade by cutting a light weight abrasive building block to expose fresh diamonds. Blade dressing stones are available from your local Pearl Warehouse.

**MOTOR WILL NOT START.** Check power supply. If the water pump turns on when the power switch is in the "on" position, but the motor does not, have the motor serviced.

**MOTOR WILL NOT STOP.** The contacts in the switch may have become arched together in the on position, have it serviced.

**MOTOR SHUTS OFF DURING OPERATION.** Check to see that the circuit you are using is not overloaded with lights or other equipment. The fuse or circuit breaker may not have sufficient capacity, use 20-amp power. If you are using an extension cord check the extension cord table to be sure it is heavy enough to carry the current this product will draw. See Page 21 for electric cord reference.

**EXCESSIVE VIBRATION** Check to see that the blade is mounted properly according to safe operating practices section. Blade may be out of balance, try a different blade. Arbor shaft bearings possibly worn, have tool serviced.

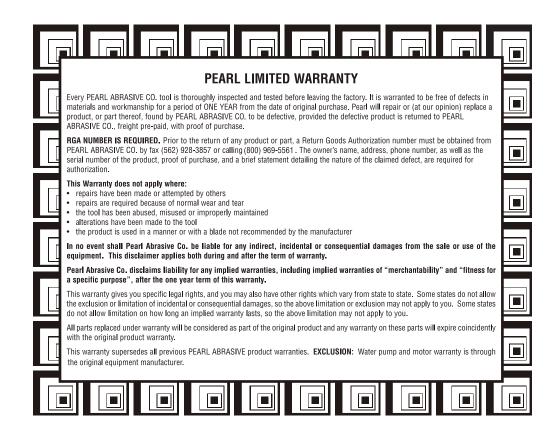
**NOT CUTTING SQUARE.** Check the main table and carriage adjustment as well as the blade alignment procedure located in the care and maintenance section.

**MAIN TABLE DOES NOT MOVE FREELY.** Inspect the guide rails and rollers for build up of tile chips or dry slurry deposits. Clean and check guide roll or adjustments, according to the procedure in the care and maintenance section.

**NO WATER FLOW TO BLADE.** Check the water feed tube for kinks or obstructions. Check the inlet screen to ensure it is not clogged. Remove the pump inlet and turn the impeller to ensure it is not damaged or jammed. Clean the impeller if necessary and apply a drop of light oil to the shaft - be sure the impeller spins freely.

**POOR MACHINE PERFORMANCE WITH LITTLE POWER.** Check cord/extension cable for appropriate length and gage. Check power network for sufficient power and circuit breaker capacity.

**CENTER HOLE IN BLADE OVERSIZE OR WORN.**Saw blade has slipped on shaft while running. Check shaft for damage and replace blade.





**CORPORATE OFFICE: SO. CALIFORNIA • USA** 4900 ZAMBRANO ST., COMMERCE, CA 90040-0031 562-927-5561 • FAX 562-928-3857

Toll Free: 800-969-5561 www.pearlabrasive.com

**GEORGIA • USA** 3950 STEVE REYNOLDS BLVD. NORCROSS, GEORGIA 30093 ONTARIO • CANADA 375-2 PIDO ROAD PETERBOROUGH, ONTARIO K9J-6X7