

TCUT10UL

2.5 HP 10" Tile Saw

Assembly & Operating Instructions



READ ALL INSTRUCTIONS AND WARNINGS BEFORE USING THIS PRODUCT.

This manual provides important information on proper operation and maintenance. Every effort has been made to ensure the accuracy of this manual. We reserve the right to change this product at any time without prior notice.

STOP! DO NOT RETURN THIS PRODUCT TO THE RETAILER.

Questions? Problems? CONTACT BUFFALO TOOLS.

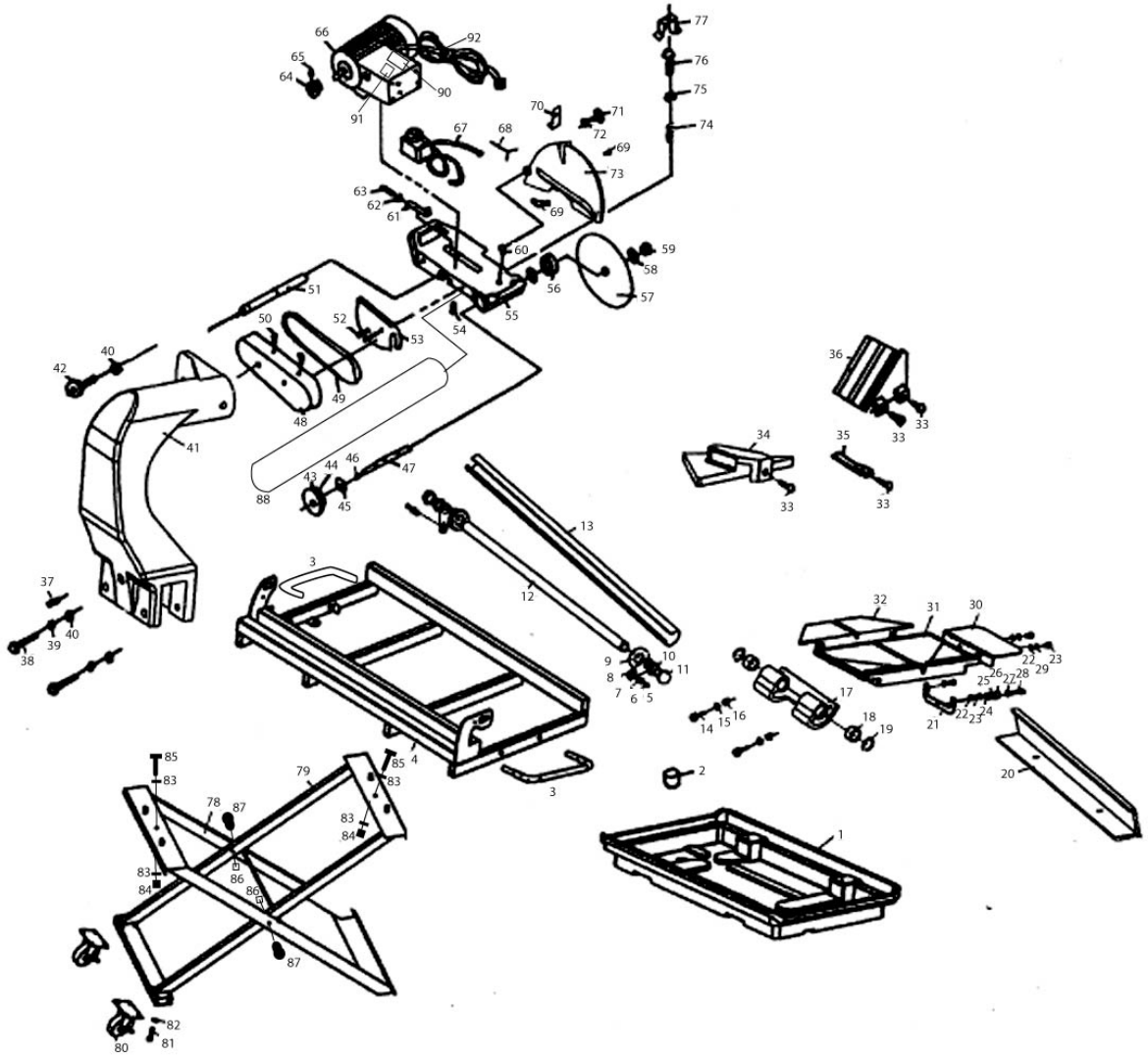
If you experience a problem or need parts for this product, visit our website <http://www.buffalotools.com> or call our customer help line at **1-800-568-6657, Monday-Friday, 8 AM - 4 PM Central Time**. A copy of the sales receipt is required.

2.5 HP 10" Tile Saw TCUT10UL Assembly and Operating Instructions

Parts List

Part #	Description	Qty	Part #	Description	Qty	Part #	Description	Qty
1	Water Tank	1	33	Knob	1	65	Screw	1
2	Drain Plug	1	34	Mitre Block	1	66	Motor	1
3	Handle	2	35	45°, 90° Rip Guide	1	67	Pump	1
4	Frame Assembly	1	36	Mitre Block	1	68	Three Way Pipe	1
5	Phillip Screw	2	37	Screw	1	69	Two Way Pipe	1
6	Spring Washer	2	38	Bolt	2	70	Fixed Bracket	1
7	Flat Washer	2	39	Spring Washer	2	71	Locking Knob	1
8	Fix Block	2	40	Flat Washer	3	72	Flat Washer	1
9	Insert Plate	2	41	Support Arm	1	73	Cover	1
10	Flat Washer	2	42	Adjustment Knob	1	74	Spring	1
11	Bolt	2	43	Pulley	1	75	Open Ring	1
12	Table Guide Bar	1	44	Screw	1	76	Break Shaft	1
13	Protection Sleeve	1	45	Bearing	1	77	Bracket	1
14	Bolt	2	46	Rail	1	78	Large Leg	1
15	Spring Washer	2	47	Bush	1	79	Small Leg	1
16	Flat Washer	2	48	Pulley Cover	1	80	Caster	2
17	Table Supporter	1	49	V-Belt	1	81	Bolt	8
18	Bush	2	50	Screw	2	82	Nut	8
19	Ring	2	51	Adjustment Shaft	1	83	Lock Washer	4
20	Water Tank Rail	1	52	Screw	2	84	Large Bolts	2
21	Bracket	1	53	Cover	1	85	Large Nuts	2
22	Flat Washer	1	54	Bolt	4	86	Small Bolts	2
23	Bolt	6	55	Body	1	87	Locking Knob	2
24	Nut	1	56	Inner Flange	1	88	Motor Brace	1
25	Flat Washer	1	57	Blade	1	89	Fence	1
26	Roller	1	58	Out Flange	1	90	Power Switch	1
27	Flat Washer	1	59	Nut	1	91	Circuit Breaker	1
28	Bolt	1	60	Rubber Insert	1			
29	Spring Washer	1	61	Tension Plate	1		Wrench	1
30	Ext. Table	1	62	Flat Washer	1		Small Allen Wrench	1
31	Working Table	1	63	Bolt	1		Med. Allen Wrench	1
32	Ext. Table	1	64	Pulley	1		Large Allen Wrench	1

Assembly Diagram



COMMON SENSE AND CAUTION ARE FACTORS WHICH CANNOT BE BUILT INTO ANY PRODUCT. THESE FACTORS MUST BE SUPPLIED BY THE OPERATOR. PLEASE REMEMBER:

1. **Keep the work area clean.** A cluttered work area may cause accidents. Make sure the work area is well lit.
2. **Never use tools near flammable liquids or gasses.**
3. **Prevent electrical shock.** Keep the power cord away from heat, oil, and sharp edges. Do not operate if power cord is frayed or damaged.
4. **Never allow children to operate tools without responsible adult supervision.** When operating this tool, keep children at a safe distance from the work area.
5. **Store tools in a safe place.** Tools that are not being used must be stored in a secure dry place. The storage area should be lockable and out of the reach of children.
6. **Do not force tile into the cutting blade.** This machine performs better and safer at the rate for which it was designed. Damage caused by forcing the tool is not covered by the warranty.
7. **Use a tool designed for the job being performed.** Do not use low-powered tools for heavy-duty operations. Never use the machine for other than its intended purpose.
8. **Wear suitable clothing.** Do not wear loose clothing or jewelry. They may get caught in moving parts. Never wear rings with protruding parts. Wear a hat over long hair. Wear rubber footwear.
9. **Always wear safety goggles and ear protection** when using the machine. Wear a dust mask when the work is dusty.
10. **Never carry the tool by the power cord.** Do not pull the power cord to remove the plug from sockets. Keep the power cord away from heat, oil and sharp edges.
11. **Never hold small pieces of tile with your hand.** Always use a jigs, push stick or pliers.
12. **Do not reach over the cutter while tool is active.** Be sure of your footing and balance at all times.
13. **Maintain the tool with care.** This tool works best and safest if it is kept clean. Observe the instructions for maintenance and changing accessories. Keep the tool dry and free of oil and grease.
14. **Disconnect the machine when you are not using it,** before cleaning it and when changing accessories or parts.
15. **Before starting the machine, be sure to remove wrenches and other tools.**
16. **Never move the machine while it is plugged into an electrical outlet.** Make sure the switch is in the "OFF" position when the power cord is plugged-in.
17. **When working outdoors, use extension cords marked and rated for outdoor use.** When using machines with a ground connection, an extension cord with a grounded connection should be used and connected to a grounded outlet.
18. **Stay alert.** Do not use tools when impaired by medicine, drugs, or alcohol. Watch what you are doing and use common sense for your safety.

19. **Before starting the machine check that all safety devices and parts operate smoothly and efficiently.** Make sure that all moving parts are in good working order. Check the machine for any broken parts. Make sure all parts are fitted properly and any other conditions that might affect the proper functioning of the machine are correct. If not stated otherwise in this manual, damaged safety devices, switches and machine parts must be repaired or replaced by a recognized service center. Do not use the machine when it cannot be switched on or off.
20. **For your own safety, use only accessories recommended in this manual.**
21. **Tool service must be performed by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk or injury.
22. **When servicing a tool, use only identical replacement parts.** Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.
23. **Never attempt to remove material stuck in the moving parts of the Tile Saw while the tool is turned on,** plugged in, or running.
24. **Make sure the Tile Saw is located on a flat, level, sturdy surface** capable of supporting the weight of the Tile Saw.
25. **Use the Tile Saw only for cutting ceramic tile,** quarry tile, marble, terra cotta, and slate with a maximum thickness on 1 inch, Never use the Tile Saw to cut metal or curves.
26. **Before using the Tile Saw, make sure the blade is properly mounted, balanced and not cracked or bent.**
27. **The blade will become hot while cutting.** Allow the blade to cool completely before handling.
28. **Allow the blade to spin to full speed before feeding a work piece into it.** When turning off the Tile Saw allow the blade to spin down and stop on its own. Do not press against the blade to stop it from spinning.
29. **Never attempt to cut freehand.** Make sure the tile to be cut is pressed firmly against the fence.
30. **Always arrange a drip loop in the power cord connecting the Tile Saw to a 120 Volt, grounded, electrical outlet.** A drip loop is that part of the power cord below the level of the outlet, (or the connector if using an extension cord), to prevent water from traveling along the power cord and coming in contact with the outlet. If the power plug or electrical outlet does become wet, do not unplug the power cord. Disconnect the fuse or circuit breaker that supplies power to the outlet. Then unplug and examine the outlet for presence of water in the outlet.
31. **Stand on a dry, insulated surface such as a rubber mat while using the Tile Saw.**

IF THERE IS ANY QUESTION ABOUT A CONDITION BEING SAFE OR UNSAFE, DO NOT OPERATE THE TILE SAW!

SAVE THE RECEIPT, WARRANTY AND THESE INSTRUCTIONS. IT IS IMPORTANT THAT YOU READ THE ENTIRE MANUAL TO BECOME FAMILIAR WITH THIS PRODUCT BEFORE YOU BEGIN USING IT.

Specifications

Model	TCUT10UL	Frequency	60Hz
Current Draw Full Load	15 Amps	No Load Speed	3450 RPM
Input Voltage	120V	Motor	Single Phase 2.5 HP
Weight	118 LBS	Work Table Dimensions	16 ½" x 21 ¼"
Blade Specs	5/8" Arbor	2700 RPM	10" Dia./ .005" Thick
Max Rip Cut Length	24"	Max Diagonal Cut	16"
Maximum Cutting Depth	3 inches		
Weight	118 LBS	Maximum Pump Flow	20 Liters per Minute
Water Tray Dimensions	34 1/7" x 18 1/5" x 3 3/4" (outside)		
Overall Dimensions	40 1/2"L x 27 1/5"W x 48 1/2"H		
Work Table Dimensions	16 1/2" x 21 1/4"		

Grounding / Voltage Warning

Warning: Before using this tool, make sure that the power cord will be plugged into an outlet which has a three-prong ground, is 120V AC, and is protected by a 15 Amp. Be sure the circuit breaker and has a Ground Fault Circuit Interrupter (GFCI).

Common household current is 110-120V. As long as the outlet used with the Tile Saw is rated from 110-120V there will be no complications using it with household receptacles. Plug the tool into a 110-120V properly grounded outlet protected by a 15 Amp, dual element time delay or circuit breaker.

NEVER try to plug a 110-120V tool into a 220-240V circuit, or serious complications and possible injury to the operator may occur. The plugs have different shapes to prevent this. This tool has a three-prong plug. The third round prong is the ground. Cutting off the ground will result in a safety hazard and void warranty.

If the outlet you are planning to use is the two-prong type, do not remove or alter the grounding prong in any way. Use an adapter and always connect the ground plug to a known grounding source. It is recommended that you have a qualified electrician replace the two-prong outlet with a properly grounded three-prong outlet.

Extension Cords

Your tool has a three-prong plug; therefore you must use a three-prong extension cord. Only use rounded jacket extension cords listed by the UL. Improper use of extension cords may cause inefficient operation of your tool that can result in overheating. Be sure your extension cord is rated to allow sufficient current flow to the motor. If you are using the tool outdoors, use an extension cord rated for outdoor use (signified by "WA" on the jacket).

Unpacking

When unpacking, check to make sure all parts listed on page 2 are included. If any parts are missing or broken, please call Buffalo Tools at 1-800-568-6657.

Know Your Saw

Before using this saw, read the instructions completely. Pay particular attention to all safety rules. Practice the maintenance instructions to ensure your machine always operate efficiently and safely.

Prior to operating this machine, familiarize yourself with the controls and make sure you know how to stop it quickly if needed.

Special Safety Instructions Before Using The Machine

Check the following points:

1. The motor and the supply voltage (120V AC, 60HZ) match. Use only grounded 3 wire receptacles. Do not attempt to defeat the grounding feature. The power cord and the plug are in good condition. -
2. Avoid using long extension cords.
3. Always place the cutting machine on a flat surface to prevent instability.

Special Safety Instructions While Using The Machine

1. Never use a cracked diamond saw blade. Change worn blades before using.
2. Make sure the switch is in the "OFF" position before connecting the machine to the main voltage.
3. Always keep the cord away from moving parts of the machine.
4. Do not apply side-pressure to the saw blade. It can break.
5. Do not saw tiles that are too small to lead through.
6. Lower the saw blade protector over the saw blade after use.
7. Disconnect from power supply source before you open the machine.

Saw Assembly

1. Slide the Water Tank into the frame, being sure the Water Tank fits underneath the braces connected to the Frame Assembly. The Water Tank Rail should be running parallel to the Table Guide Bar, and the Water Tank Drain opposite the Saw Blade.
2. Mount the Motor to the Tile Saw Frame by sliding the Motor Shaft Brace into the hole on the Support Arm. Secure Motor to Support Arm using Adjustment Knob provided.
3. Next, attach the Blade Guard to the Motor using the Locking Knob provided. Please see the section "Changing/ Installing the Blade" for instructions on how to properly install a new Blade.
4. Plug the end of the Pump Hose into the Compression Fitting on the Back of the Blade Guard, and attach the Pump to the Water Tank using the four suction feet on the bottom of the Pump.
5. Secure the Handles to both ends of the Frame Assembly using Bolts and Washers provided.

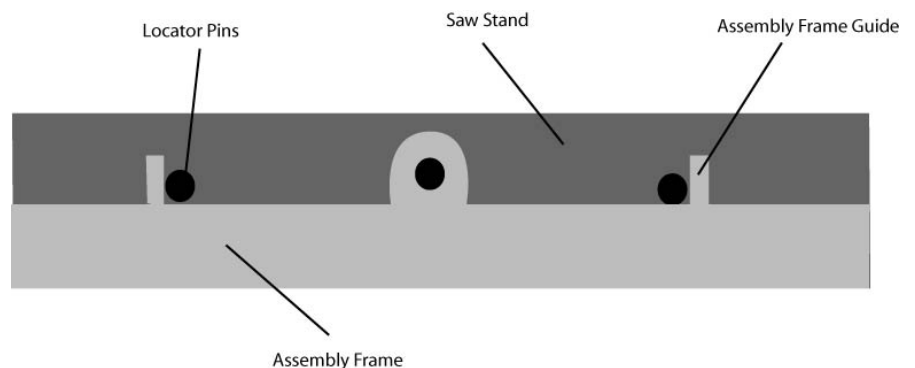
Before operating this tool, assemble the Stand, then securely mount the Tile Saw to the Stand.

Stand Assembly

1. Attach the casters to the smaller leg of the stand with the Bolts, Nuts and Washers provided.
2. Slide the Small Stand Leg through the Large Stand Leg forming an "X" with the legs.
3. Align the holes on both of the Stand Legs and insert a Small Bolt into the Locking Knob and tighten. Repeat on the opposite side.
4. Place the assembled Tile Saw on the top of the Stand, guiding the Locator Pins on the top of the Stand inside the guides on each side of the Saw Frame. Attach the Saw Frame to the Stand using the Large Bolts and Lock Washers provided.



If the stand is not to be used with the tile saw, the saw must be securely mounted onto a flat, level surface capable of supporting the weight of the tile saw in addition to the weight of all work pieces.



Changing/ Installing the Blade

1. Ensure machine is unplugged from electrical source before attempting a blade change.
2. Loosen the locking knob located on the side of the blade guard and raise guard. Tighten the knob to lock the guard in an "up" position.
3. Depress the brake shaft button while turning the blade (or spindle if you have not yet installed a blade) with your hand until the shaft button depresses fully. This will prevent the spindle from spinning while changing the Blade.
4. Unscrew the Nut and Outer Flange holding the Blade onto the Motor.
5. Slide the new blade over the spindle, and refasten the Outer Flange and Nut. Be sure to tighten the Nut fully before use.
6. Lower the blade guard and tighten the locking knob.

Filling The Water Tank

TO PREVENT EXCESSIVE WEAR ON THE BLADE, BE SURE TO MAINTAIN A CONTINUOUS FLOW OF WATER OVER THE BLADE WHILE CUTTING. NEVER *CUT* ANYTHING IF THE WATER FLOW IS NOT CONTINUOUS.

1. Attach the pump as described in Step 4 "Saw Assembly". Position the pump so it will not interfere with the motion of the table while cutting.
2. Stop the drain in the Water Tank with the Drain Stop.
3. Fill the Water Tank with enough water so that the Pump is completely submerged, but not so much water that the Water Tank overflows.

Note: When using the Tile Saw, extreme care must be taken to insure that the saw's power cord is positioned to remain dry and free from water at all times. Severe personal injury or death can occur if the Power Cord or the operator of this Tile Saw should become wet at any time while this tool is in use. CARE AND COMMON SENSE MUST BE USED.

Preparing To Cut

1. Fill the Water Tank with water as described in "Installing the Water Supply" above.
2. Plug the Pump's Power Cord into power unit. Make sure the Pump Power Cord is positioned so it will remain in a dry location once the machine is in use.
3. When it is safe to do so, plug the Tile Saw Power Cord into an appropriate outlet.
4. Put on your ANSI approved eye protection.
5. Flip the Power Switch located on the front of the Motor to the "ON" position.
6. Before operating the Tile Saw, let the Motor run for approximately one minute. Make sure the Blade is rotating at full speed and there are no unusual noises. If you feel the unit is not operating properly, do not use this tool.

IMMEDIATELY SWITCH OFF THE TILE SAW IN CASE OF:

1. Malfunction of the plug, receptacle or damage to power supply cord.
2. Broken switch.
3. Smoke or smell caused by scorched insulation.

Cutting Tile

1. Place your marked tile on the Working Table and brace it against the Fence on the back of the Working Table. Align the cut mark on the tile with the Blade.
2. Once the Tile Saw has been turned on, allow the Blade to spin up to full speed. Watch to be sure that the Pump is supplying a continuous flow of water to the Blade.
3. Keeping your hands clear of the Blade, move the Working Table and tile underneath the blade. Feed the tile underneath the Blade very slowly. Do not force it. If the rotational feed of the Blade slows down significantly, then you are pushing too hard.
4. Attach the Front & Side Table Extensions if working with tile larger than the Working Table Surface.

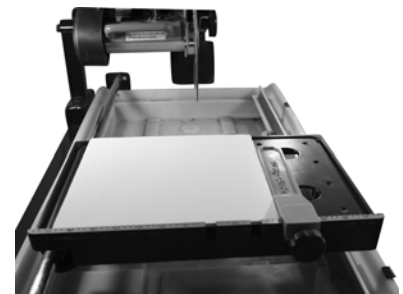
WHILE CUTTING, WATCH TO BE SURE THAT THE BLADE REMAINS WET. IF IT RUNS DRY, CHECK THE ACTION OF THE PUMP AND THE WATER LEVEL OF THE WATER TANK.

IF THE MOTOR STOPS SUDDENLY, FLIP THE POWER SWITCH TO THE "OFF" POSITION. WAIT APPROXIMATELY 15 MINUTES, REMOVE THE CIRCUIT BREAKER CAP LOCATED DIRECTLY ABOVE THE POWER SWITCH, AND PUSH THE RESET BUTTON.

Using The Parallel Guide

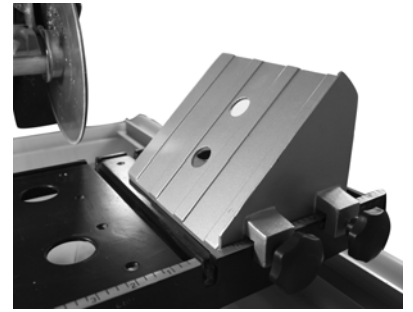
If you have to cut a number of tiles to the same dimension, using the Parallel Guide may save you a significant amount of time.

1. Mark the first tile to the correct dimensions, allowing space for grout.
2. With the Motor turned off, place the marked tile on the Working Table against the Fence. Align the cut mark on the tile with the Blade.
3. Loosen the Locking Knob on the Parallel Guide. Place the hooked portion of the guide over the upturned edge of the table, on the side of the cutting groove where you have placed the part of the marked tile that you intend to keep and use after cutting. The Parallel Guide will be parallel to the tile and perpendicular to the Fence.
4. Slide the Parallel Guide along the Fence until it braces the tile, **KEEP THE CUT MARK ON THE TILE IN LINE WITH THE BLADE.**
5. Tighten the Locking Knob on the Parallel Guide.
6. When you are satisfied that the tile is aligned with the Blade, and the Parallel Guide is in place, turn on the power switch. Cut the tile as described in previous instructions.
7. Check to be sure that the tile has been cut to proper dimensions before using the Parallel Guide to cut your next tile. Periodically test the fit of each tile as you continue cutting to be sure the parallel guide has not moved.



Using the Angle Guide for cutting angled edges on your tiles

1. Attach the Angle Guide to the Fence as you did the Parallel Guide, using the two Locking Knobs to hold the guide in place.
2. Use the cutting groove in the middle of the working Table to brace the edge of your tile as you slide the tile and the table underneath the Blade.



Using the Beveled Edge Guide for cutting beveled edges on your tiles

1. Attach the Beveled Edge Guide to the Fence as you did the Parallel Guide, using the Locking Knob to hold the guide in place.
2. Use the cutting groove in the middle of the working Table to brace the edge of your tile as you slide the tile and the table underneath the Blade.



Maintenance

ALWAYS UNPLUG THE POWER CORD BEFORE SERVICING OR PERFORMING ANY MAINTENANCE.

1. Regularly inspect the Diamond Saw Blade. Using a dull blade will cause excessive wear on the motor, and will not produce a satisfactory cut. Replace with a new blade when needed.
2. Inspect the mounting screws on all safety covers, and the arbor unit on the cutting wheel shaft. Tighten any that appear loose.
3. Protect the motor and electrical components from prolonged or excessive exposure to water or wet conditions. Wipe the unit dry as needed.
4. Periodically apply a light lubricant to the rail cover to keep the Working Table sliding easily.

Note: The Pump is non-serviceable. If it should fail, first try clearing the intake of debris and be sure the opening is not plugged. If the pump still does not work, it must be replaced.

