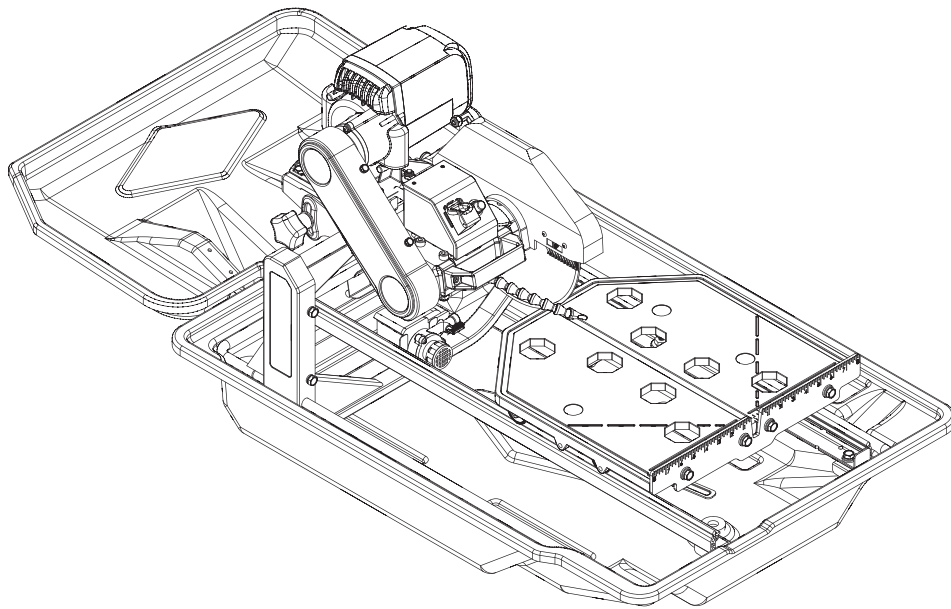


OWNERS MANUAL



Wet Tile Saw
MODEL:
CTC1020XL

FORM <<CTC1020XL rev B 7/2009



WARRANTY

Norton warrants all products manufactured by it against defects in workmanship or materials for a period of one (1) year from the date of shipment to the customer.

The responsibility of Norton under this warranty is limited to replacement or repair of defective parts at Norton's Stephenville, Texas factory, or at a point designated by it, of such part as shall appear to us upon inspection at such point, to have been defective in material or workmanship, with expense for transportation borne by the customer.

In no event shall Norton be liable for consequential or incidental damages arising out of the failure of any product to operate properly.

Integral units such as gasoline engines, electric motors, batteries, tires, transmissions, etc., are excluded from this warranty and are subject to the prime manufacturer's warranty.

This warranty is in lieu of all other warranties, expressed or implied, and all such other warranties are hereby disclaimed.

Important: Before placing equipment in operation, record the following information.

MODEL: _____ **SERIAL NO.** _____

PURCHASE FROM: _____

ADDRESS: _____

CITY _____ **STATE** _____ **ZIP** _____

TELEPHONE NO. _____

Before using this equipment, make sure that person using it read and understand the instructions in this owner's manual.

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Health Warning



Dust and Silica Warning

Grinding/cutting/drilling of masonry, concrete, metal and other materials can generate dust, mists and fumes containing chemicals known to cause serious or fatal injury or illness, such as respiratory disease, cancer, birth defects or other reproductive harm. If you are unfamiliar with the risks associated with the particular process and/or material being cut or the composition of the tool being used, review the material safety data sheet and/or consult your employer, the material manufacturer/supplier, governmental agencies such as OSHA and NIOSH and other sources on hazardous materials and make certain to comply with all product warnings and instructions for the safe and effective use of the material being cut. California and some other authorities, for instance, have published lists of substances known to cause cancer, reproductive toxicity, or other harmful effects.

Control dust, mist and fumes at the source where possible. In this regard use good work practices and follow the recommendations of the manufacturer/supplier, OSHA/NIOSH, and occupational and trade associations. Water should be used for dust suppression when wet cutting is feasible. When the hazards from inhalation of dust, mists and fumes cannot be eliminated through engineering controls such as either vacuum and/or water mist, the operator and any bystanders should always wear a respirator approved by NIOSH/MSHA for the material being cut.

Use Approved:



Eye Protection



Hearing Protection



Respiratory Protection



Head Protection

Safety Precautions

WARNING

- A. Saw blade should be inspected daily for excessive wear, core cracks and arbor damage. Replace any blade that shows signs of damage.
- B. To mount the blade, clean the arbor and outer flanges, and tighten the nut securely.
- C. DO NOT place any portion of your body in line with the blade while it is rotating.
- D. Wet cutting blades MUST be used with water.
- E. To reduce the risk of electrical shock, use a GFCI and refer servicing to a qualified professional.
- F. When operating the saw, always wear approved proper safety gear, such as safety glasses, dust mask, and hearing protection. A hard hat is also recommended.



- G. Never use the machine improperly or work in an unsafe manner.
- H. Maintain alertness while operating the machine. Failure to maintain attention, by the operator, may lead to serious injury.
- I. Keep work area clean.
- J. Before you start working, familiarize yourself with the work site and its surroundings. Take notice of circumstances which may impede work or traffic, observe soil conditions (good bearing or not) and take measures to ensure safety (e.g. the shielding of roadworks from public traffic).
- K. Take measures to ensure that the machine is in a safe and trouble-free condition prior to usage. Use the machine only when all protective devices (i.e. guards, noise absorbers, emergency-off devices) are in place and in working order.

- L. A visual check of the machine must be made at least once a shift to ensure that visible damages or faults are recognized. Any changes (including changes in the performance or behavior of the machine) must be reported to the supervisor. If necessary, stop the machine at once and secure it.
- M. In the case of a malfunction, stop the machine immediately and secure it. Fix the problem as soon as possible.
- N. To operate the machine read and understand the section of this manual titled “Installation and Operation”.
- O. Keep out of reach of children. Before operating machine, be sure the activated machine will be of no danger to anyone.
- P. Be sure to connect the plug to a properly grounded receptacle to reduce the risk of electric shock.
- Q. Wear proper apparel. Do not wear loose clothing or accessories. Keep hair and body parts away from openings and moving parts.
- R. If cord/plug is damaged do not operate.
- S. Make sure power switch is in “off” position before plugging in power cord to prevent any accidental activation.
- T. When machine is plugged in do not leave it unattended. Unplug prior to servicing, when changing accessories, and when not in use.
- U. Never carry machine by cord. Do not pull cord to unplug. Keep cord away from heat, sharp edges and oil.
- V. Do not operate the machine when you are tired or while under the influence of drugs, alcohol or any medication.
- W. Never operate this unit when flammable materials or vapors are present. Electrical devices produce sparks or arcs which can cause a fire or explosion.
- X. When using an extension cord, make sure it is in good condition and heavy enough to carry the current drawn by the machine. Refer to the extension cord table in the “Electrical Specifications” section for the correct gauge depending on the desired cord length and the machine’s horse power and voltage.

Features

Drip Tray

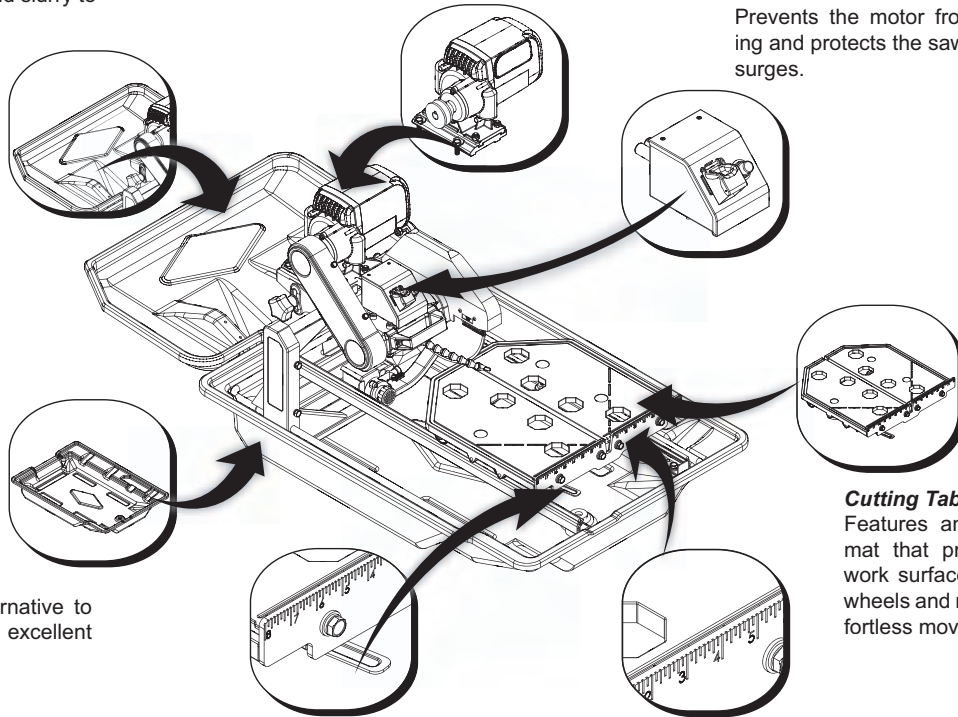
Rear drip tray increases the surface area for collecting water and slurry to prevent spillage.

Carbon Brush Motor

Generates more torque and is physically smaller and lighter than similarly rated induction motors.

Thermal Overload Protection

Prevents the motor from overheating and protects the saw from power surges.



ABS Water Tray

ABS is a lightweight alternative to stainless steel and offers excellent durability.

Cutting Table

Features an injection mold rubber mat that provides a firm, durable work surface while the ball bearing wheels and rollers ensure smooth effortless movement.

Table Lock

The Table Lock secures the cutting table when transporting the CTC1020XL.

Ruler Guide

The guide allows convenient measurements and promotes precision cuts.

Specifications

CTC1020XL TILE SAW					
Motor	Max. Blade Capacity	Cutting Length	Cutting Depth	Weight	Dimensions
2 HP, 115 V/60 Hz, 3000 RPM	10" blade with 5/8" arbor	24", Diagonally cut 16" tile	3 1/2"	65 lbs	Length: 36.5" Width: 26" Height: 20.4"

* Dimensions do not include drip tray.

Unpacking

Open the container and carefully lift the saw by the foam packaging and place it on a flat, level working area. Be sure that you have the following items before you discard the container:

- Saw
- Plastic water tray
- Rear drip tray
- 10" saw blade
- Universal wrench
- Water pump
- Rip guide
- Owner's manual
- Drain plug

See also page 23 for additional optional accessories.

Set Up

Proceed to the following section to complete the assembly of the saw:

1. Slide water pump onto U-shaped bracket located at the bottom of the frame. **(see figure 1 or figure 4)**

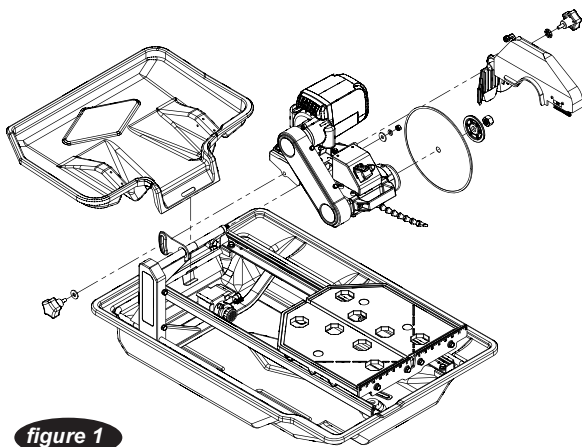


figure 1

2. Slide cutting head onto the post. Secure cutting head to the shaft using the provided flat washer, lock washer and nut. Then attach cutting depth control knob and washer to the cutting head through the slot located underneath the belt guard.
3. Mount blade guard onto shaft protruding from the side

of the cutting head. Secure the blade guard in place using the provided serrated washer and blade guard knob.

4. Attach rear drip tray to the water tray.

Installation and Operation

SAW STAND SETUP

1. Remove the optional folding stand from its box.
2. While holding the stand upright, spread both sets of legs apart and swing the workbench over and on top of the legs.
3. Seat the saw securely onto the stand. **(see figure 2)**

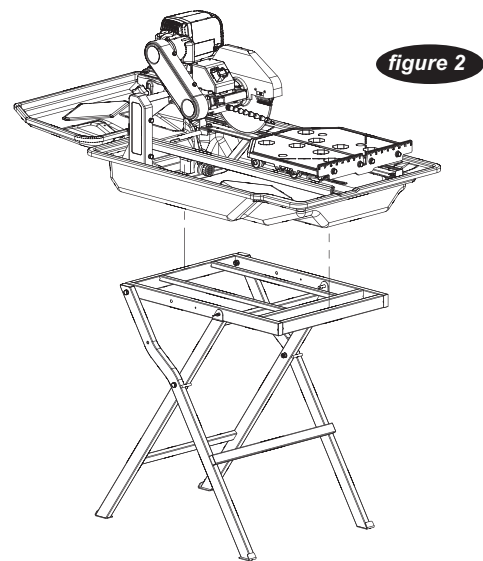


figure 2

BLADE INSTALLATION

1. Loosen blade guard adjustment knob located at the rear of the blade guard. Raise the blade guard to the highest position and retighten the knob.
2. Remove the blade shaft nut and outer flange. **(see figure 3)** If a blade has been mounted, hold the blade with one hand and use the other hand to loosen the nut with the universal wrench. Remove existing blade.
3. Install the new blade, but make certain the directional arrow on the blade matches the rotation direction of the blade shaft.

4. Attach outer flange and blade shaft nut. Hold the blade with one hand and use the other hand to tighten the nut with the universal wrench. Make certain the flanges are pressed flush against the blade and that the nut is firmly tightened, but do not over tighten.
5. Loosen blade guard adjustment knob, lower the blade guard and retighten the knob.

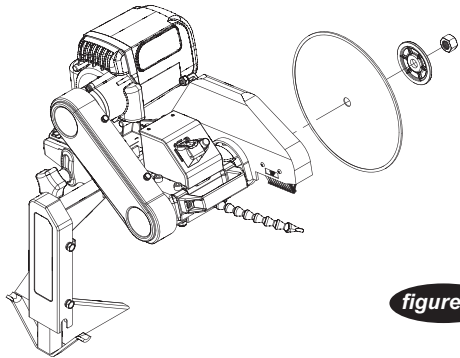


figure 3

WATER PUMP INSTALLATION

1. Remove the water pump from the box and check that it is not damaged.
2. Slide the pump onto the U-shaped bracket located at the bottom of the frame. The pump should be oriented such that the water outlet is horizontal. (see figure 4)
3. Connect water hose from the bearing housing located on the underside of the cutting head to the water pump. Plug the pump's power cord into the connector leading from the switch box.
4. Fill the water tray so that the water intake is fully immersed. Proper water level must be maintained at all times during saw operation.

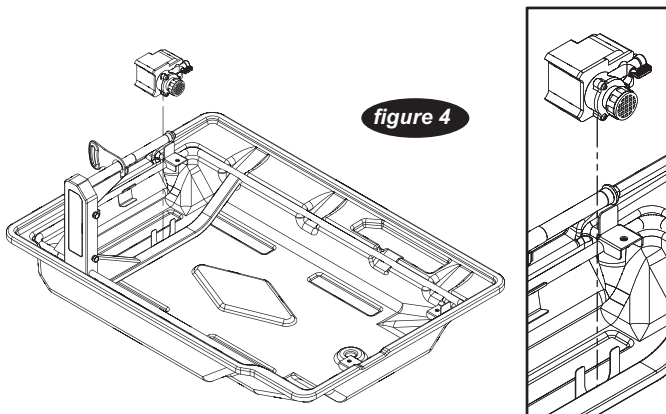


figure 4

⚠ WARNING:

Disconnect the water pump from any electrical supply before handling the water pump. Never operate the water pump without water in the tray.

USING THE CUTTING TABLE

- The ruler guide has inches marked along the front to allow convenient measurements and precision cuts. (see figure 5)
- The cutting table dimensions are approximately 16" x 16". When the optional side extension table is installed, the working area of the cutting table increases to 25" x 16", which provides greater support for handling larger materials.
- Cutting table is covered by a vibration reducing rubber mat that provides a firm, durable work surface, and helps to prevent the material from slipping while cutting.
- The rip guide should be used with the cutting table to ensure precise, straight cuts.

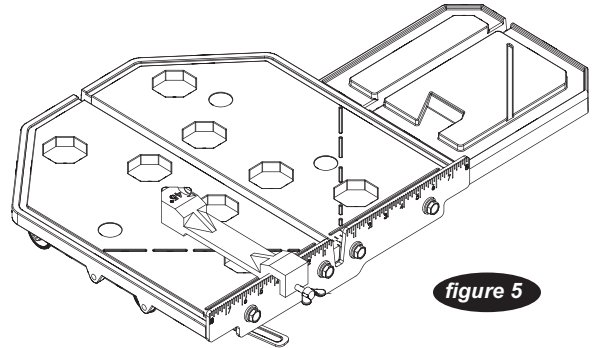


figure 5

USING THE RIP GUIDE

1. Set the rip guide at the desired location on the ruler guide and tighten the threaded knob. Make sure that the rip guide is firmly tightened to avoid slippage. The rip guide can be used for 45° and 90° cuts.
2. After the rip guide is positioned for the desired cut, place material flat against the rip guide and the ruler guide.
3. Now you are ready to make your cut.

PERFORMING DIAGONAL CUTS

1. Remove threaded knob from the end of the rip guide

with the horizontal groove and insert it into the other end with the diagonal groove.

2. Set the rip guide onto the ruler guide, such that the top edge of the rip guide is aligned with the diagonal groove to the left of the vertical channel in the cutting table. Tighten threaded knob once in place.
3. Place one corner of the material being cut in the vertical slot of the ruler guide and rest the adjoining edge flat against the rip guide.
4. Now you are ready to make your cut.

PERFORMING MITER CUTS

To make miter cuts, an optional miter block must be purchased.

1. Place the lip of the miter block on the ruler guide with the threaded knob facing you.
2. Position the miter block so that the tile lays flat against the block. Rest its left-most edge within the vertical channel of the cutting table. Tighten the threaded knob to secure the miter block in place.
3. Place material onto miter block and you are ready to cut.

SETTING THE CUTTING DEPTH

The recommended cutting depth is $\frac{1}{4}$ " below the cutting table surface. To adjust the cutting depth, loosen the cutting depth control knob and set the cutting head such that the lowest point of the blade is $\frac{1}{4}$ " below the table surface.

Blade Diameter	Cutting Depth
7"	$1\frac{3}{4}$ "
10"	$3\frac{1}{2}$ "

WARNING:

Setting the blade too low may damage the cutting table and if set too high, the blade may grab the material being cut, possibly causing injury to the operator and the saw.

CLEANING THE WATER TRAY

1. Remove the rear drip tray.

2. Lift the saw up from inside the water tray.
3. Remove the drain plug and drain any water left inside the water tray.
4. Flush water into the tray while holding it upright to remove any sludge buildup.
5. Replace the saw back into the water tray.
6. Attach the rear drip tray. (see figure 6)

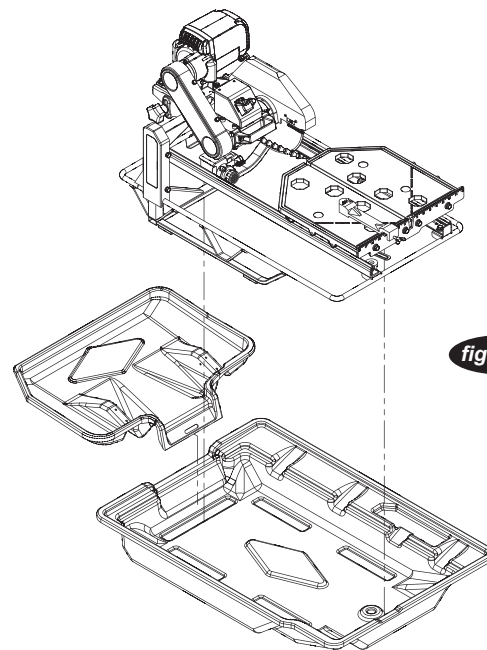


figure 6

TRANSPORTING THE SAW

1. Ensure that the water tray is empty and dry.
2. Unplug the power cord and store it in the water tray.
3. Secure the cutting table to the front of the saw using the table lock device.
4. Tighten the cutting depth control knob.
5. The rear drip tray can be removed and set in the water tray for better handling.

Proper Blade Use

	Dos	Don'ts
Wet Cut Blades	<ul style="list-style-type: none"> • Inspect blades daily for cracks or uneven wear. • Always use appropriate blade for material being cut. • Inspect arbor shaft for uneven wear before mounting blade. • Always use blades with the correct arbor shaft size. • Ensure that blade is mounted in the correct direction. • Use proper safety equipment when operating the saw. • Always have a continuous flow of water on both sides of blade. • Secure the blade to the arbor with a wrench. 	<ul style="list-style-type: none"> • Do not operate the saw without safety guards in position. • Do not operate the saw with blades larger than 10". • Do not cut dry with blades marked "Use Wet". • Do not exceed manufacturer's recommended maximum RPM. • Do not force blade into material. Let blade cut at its own speed.
Dry Cut Blades	<ul style="list-style-type: none"> • In addition to the following, always follow wet recommendations. • Use appropriate blade for material being cut. • Inspect segment blades for segment cracking or loss. • Do not use damaged blades. • Use proper safety equipment when operating the saw. 	<ul style="list-style-type: none"> • In addition to the following, always follow wet recommendations. • Do not make long cuts with dry blades. Allow them to air cool. • Do not use the edge or side of blade to cut or grind. • Do not attempt to cut a radius or curve. • Do not cut too deep or too fast into the material. • Do not cut any material not recommended by blade manufacturer.

Care and Maintenance

⚠ WARNING:

For your safety, before performing any maintenance on the CTC1020XL turn OFF the power switch and UNPLUG the power cord from the power supply.

GENERAL RULES

- Always clean the machine before performing any maintenance/repair.
- Before performing any cleaning/maintenance/repair, the machine must be switched off with the main power switch and disconnected from any power supply.

Steps to Follow When Cleaning:

- Please do not use aggressive cleaners (i.e. containing solvents). Do not use high-pressure water jets, aggressive detergents or solutions and liquids with a temperature exceeding 86°F! Use a soft cloth only.
- Use a cloth which may be lightly moistened only for removing dust and dirt. Hard packed dirt can be removed with a soft brush.
- For the sake of safety, no water/cleaning liquid/vapor may penetrate into the electric motor, connectors/plugs, switches, etc. Cover all apertures and holes in the housing, connectors or plugs, etc. or seal them with adhesive tape!
- Use a soft, low-pressure water jet and a brush to rinse dirt and incrustations away. Be particularly careful when near hazardous parts of the machine (e.g. switch, motor). Clean the motor and switches only by wiping with a moist cloth.
- Do not “rinse” the bearings of the drive elements to prevent them from running dry. The bearings of the CTC1020XL are permanently lubricated and require no additional maintenance.
- After cleaning, remove all covers and adhesive tape! All screws/nuts which you may have loosened must be tightened again!
- After cleaning with water, let the motor and electrical systems dry over night. Before using test the machine

on a power supply equipped with a Ground Fault Circuit Interrupt (GFCI) device or breaker. If the GFCI circuit breaker trips the unit must be inspected by an authorized dealer prior to use!

CLEANING

After every use of the machine:

- Remove dirty water from container.
- Remove dirt and mud from the bottom of the container.
- Rinse the immersion pump with fresh water to prevent the water pump from clogging with residual dirt.

After wet cleaning and before using the machine again:

- Connect the machine to an electric power outlet equipped with a “GFCI” safety power breaker. If the safety power breaker cuts off the electrical power supply, do not try to operate the machine but have it checked by an authorized dealer first.

PROLONGED PERIOD OF NONUSE

Before not using the machine for a prolonged period of time:

- Clean and lubricate all movable parts. NLGI #2, aluminum complex type grease is recommended. However, do not grease the guide rails.

After not using the machine for a prolonged period of time:

- Check that the stand is in safely working order and that all hardware is properly tightened.
- Check that all hardware is properly tightened.
- Check that the cutting table is seated properly on the guide rails and that it moves easily along the entire length of the rails.
- With the saw blade removed, switch on the motor for an instant and switch it off again. If the motor does not run, have the machine inspected by a qualified electrician.
- Check that the water pump works properly by connecting the water pump to the 115v receptacle on the machine, rotate the water control valve to the open po-