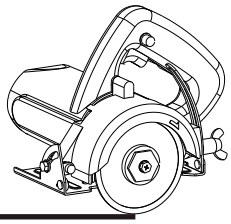
SDT-410 Hand Held Saw

Owner's Manual • English • Espanol



SawMaster Diamond Tools, Inc.
11614 Sterling Ave. Suite 103 • Riverside, CA 92503 • USA
Phone 909-688-2358 • Fax 909-688-0228

Thank you for buying wet tile/concrete hand held saw.

To ensure your safety and satisfaction. Carefully read through this owner's manual before using the product.

English

SPECIFICATIONS

Wheel diameter	110 mm (4-5/16") - 125 mm (5")	
Wheel arbor diameter	20 mm (25/32")	
Max. Cutting capacities	at 45°	at 90°
With 4-1/2"(110 mm) blade	13/16"(21 mm)	1-3/8"(34 mm)
With 5"(125 mm) blade	1"(26 mm)	1-5/8"(41.5 mm)
Input	1,000 W	
No load speed	12,000 min^{-1}	
Overall dimensions	204 X 220 X 157 mm (8-1/16" X 8-1/2" X 6-3/16")	
Net weight	2.9 kg (6.4 lbs)	

UNPACKING

Open the container, carefully lift the hand held saw by the handles and place it on a flat, level working area. Be certain that you have the following items before you discard the container.

- Saw
- Universal Wrench
- Water Tube Assembly
- Ø4-1/2" Saw Blade
- Owners Manual

SAFETY PRECAUTIONS

- Never use the machine improperly or work in an unsafe manner.
- Always wear safety goggles, dust mask, and ear protection while operating the saw (to comply with ANSI-Z87.1).
- Always remain alert when the saw is in use. Failure to pay attention on the operator's part may lead to serious injury.
- Before you start working, familiarize yourself with the work site and its surroundings. Take notice of circumstances which may impede working or traffic, observe soil conditions (good bearing or not), and take measures to ensure safety (i.e. the shielding of roadworks from public traffic).
- 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 operating in the intended locations.
- 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.
- In the case of a malfunction stop the machine immediately and secure it. Fix the problem as soon as possible.
- For starting and stopping the machine follow the operating instruction steps and observe any indicator lights.
- Before switching the machine on make sure that the activated machine will be of no danger to anyone.

INSTRUCTIONS FOR SAFE HANDLING

1. Make sure that the tool is only connected to the voltage marked on the name plate.
2. Never use the tool if its cover or any bolts are missing. If the cover or bolts have been removed, replace them prior to use. Maintain all parts in good working order.
3. Always secure tools when working in elevated positions.
4. Never touch the blade or other moving parts during use.
5. Never start a tool when its rotating component is in contact with the work piece.
6. Never lay a tool down before its moving parts have come to a complete stop.
7. ACCESSORIES: The use of accessories or attachments other than those recommended in this manual might present a hazard.
8. REPLACEMENT PARTS: When servicing use only identical replacement parts.

Switch *Figure 1*

- The saw is activated by pressing the trigger(1), to deactivate the saw release the trigger.
- To keep the saw on, press the lock button (2) while pressing the trigger. Press the trigger again to deactivate the lock.

FIGURE 1

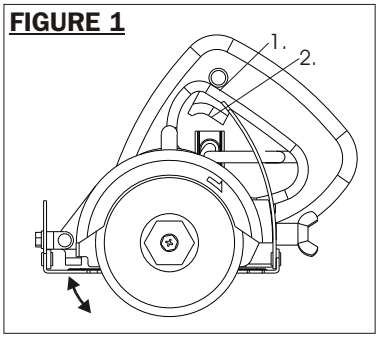


FIGURE 2

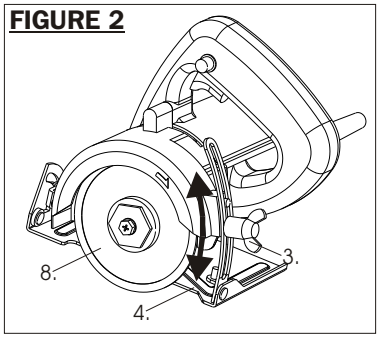
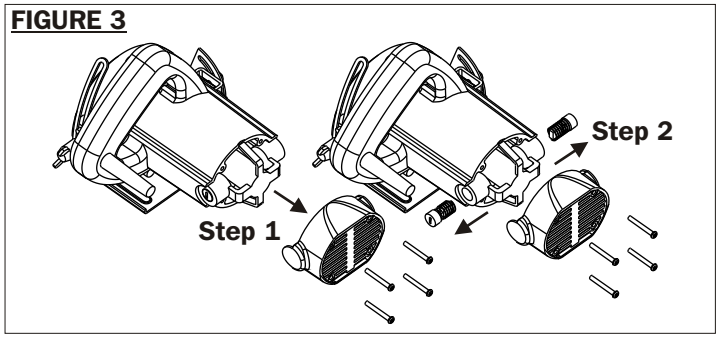


FIGURE 3



Adjusting the Cutting Depth *Figure 2*

1. To adjust the saw's cutting depth, loosen the bolt (3).
2. Move the base plate (4) to the desired depth and tighten the bolt.
3. The distance that the blade (8) protrudes from the base of the saw is the saw's cutting depth.

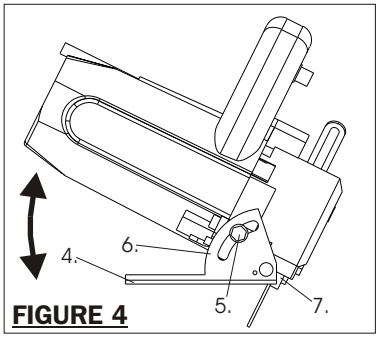


FIGURE 4

Carbon Brush Replacement *Figure 3*

1. Loosen 4 screws from rear of Carbon Brush Motor and remove the black plastic cover.
2. Loosen the cap counter clockwise from each side of the Carbon Brush Housing, then remove the used Spring carbon brushes and replace with new carbon brush.
3. Reverse the unpacking procedure after you install the new carbon brush and tighten the housing brush cap.

Adjusting the Cutting Angle *Figure 4*

1. The saw can be adjusted to cut at angle between 0° and 45°.
2. Loosen the nut (5) of the scale (6) and tilt the base plate (4) to the desired angle.
3. At the desired angle, re-tighten the nut so the position is secure.

NOTE: Adjustments to the saw should not be made while the saw is running!

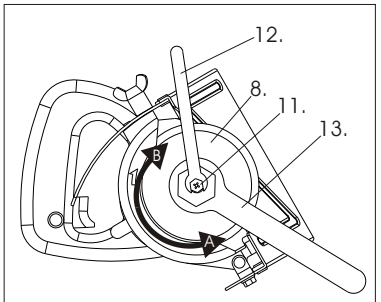


FIGURE 5

Replacing the Diamond Blade *Figure 5*

1. Loosen the bolt (11) with the wrench set provided (12), and remove the outside flange.
2. Remove the blade (8) from the inside flange and drive shaft.
3. Place the new blade so that it is against the inside flange on the driving shaft.
4. Now place the outside flange against the blade and tighten the bolt firmly with the wrench set (12). (Direction A is to tighten, while direction B is to loosen the bolt.)

NOTE: The machine should be unpowered during this operation (unplugged)! The blade markings should be visible from the outside.

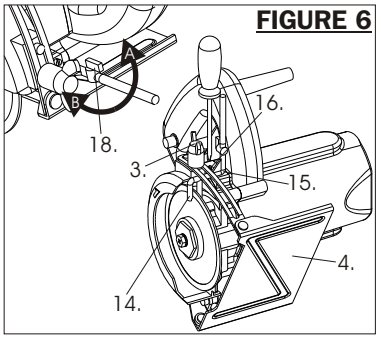


FIGURE 6

Mounting the Watering Device *Figure 6*

1. Loosen the bolt (3), and lower the base plate (4) as far as possible and tighten the bolt.
2. Set the water-device (15) with the provided screws (16).
3. Connect the end of the provided pipe to a water source (tap).
4. Turn on the tap to water the blade.
5. Use the adjustment lever (18) to adjust the amount of water. Position "A" is open and "B" is closed.

NOTE: Make sure the water outlet (14) is not touching the blade.

Operating *Figure 7*

To make precise cuts, pencil the desired cuts and follow the line using the edge (19) of the base plate to follow the line. To initiate the cut, place the saw so that blade does not yet touch the work piece and activate the saw. When the blade reaches its apparent maximum rpm, push the machine forward to begin the cut. The machine should be pushed with uniform and even pressure while performing the cut.

NOTE: While cutting, be sure to wear rubber gloves and insulated foot wear to prevent electric shocks.

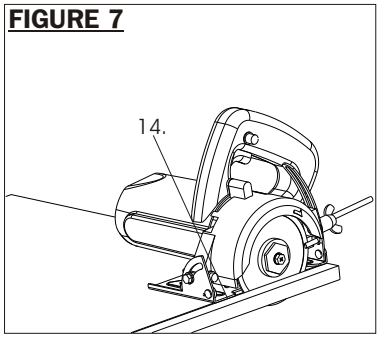


FIGURE 7

Continue Next Page...

MAINTENANCE

1. After use, check the tool to make sure that it is in top condition.
2. Adjustments should not be made while the motor is running.
3. Always disconnect the power cord from the outlet before changing removable or expandable parts (blade, bit, sanding paper, etc.), lubricating or working on the unit.

Warning: To ensure safety and reliability, all repairs should be performed by an AUTHORIZED SERVICE CENTER or other QUALIFIED SERVICE ORGANIZATION.

WARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
- **Lead from lead-based paints,**
- **Crystalline silica from bricks and cement and other masonry products, and**
- **Arsenic and chromium from chemically-treated lumber.**

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter tout microscopic particles.

Espanol

ESPECIFICACIONES

Diametro de rueda	110 mm (4-5/16") - 125 mm (5")	
Diametro del soporte de la rueda	20 mm (25/32")	
Max capacidad de corte	at 45°	at 90°
Con rueda 4-1/2"(110 mm)	13/16"(21 mm)	1-3/8"(34 mm)
Con rueda 5"(125 mm)	1"(26 mm)	1-5/8"(41.5 mm)
Entrada	1,000 W	
Velocidad sin carga	12,000 min $^{-1}$	
Dimensiones totales	204 X 220 X 157 mm (8-1/16" X 8-1/2" X 6-3/16")	
Net weight	2.9 kg (6.4 lbs)	

DESEMPAQUE

Abra el empaque cuidadosamenta y levante la sierra usando las asas del armazon depositandola en terreno plano y nivelado en el area de trabajo. Asegurese de que usted cuenta con los siguientes componentes antes de desechar el empaque:

- Sierra
- Llave Universal
- Conjunto deTubo de Agua
- Ø4 1/2" Cuchilla de la Sierra
- Manual de Propietario

PRECAUCIONES Y SEGURIDAD

- Nunca use la maquina de una manera impropia o trabaje de una manera insegura.
- Siempre use gafas de seguridad, mascarilla para el polvo, y proteccion para los oidos cuando se encuentre operando la sierra (cumpliendo con ANSI-287.1).
- Permanezca siempre alerta cuando la sierra este en uso. La falta de atencion por parte del operador podria conducir a daños serios.
- Antes de empezar a trabajar, familiarizese usted mismo con el lugar de trabajo y sus alrededores, tomando en cuenta las circunstancias que pudieran impedir el trabajo o la circulacion libre. Observe la condiciones del terreno (buen apoyo o no), y tome medidas que garantizan la seguridad por ejemplo el correcto aislamiento de los accesos al trabajo de la circulacion publica.
- Tomo medidas para garantizar que la maquina este en condiciones seguras, y libre de problemas antes de usarla. Use la maquina solamente cuando todos los dispositivos de proteccion esten operando en la forma indicada, por ejemplo: cubiertas, silenciadores, y dispositivos de desactivacion.
- Una revision visual debera hacerse al menos una vez cada turno para asegurar que los daños visibles o fallas sean localizadas. Cualquier cambio debera ser reportado al supervisor, incluyendo cambios en le rendimiento o comportamiento de la maquina; si es necesario apaguela y asegurela.
- En caso de malfuncionamiento apague la maquina inmediatamente y asegurela. Arregle el problema lo mas pronto posible.
- Para prender y apagar la maquina siga las instrucciones de operacion, y observe la luces indicadoras.
- Antes de encender la maquina este seguro de que la misma no sera de ningun riesgo para alquien.

REGLAS DE TRABAJO

1. Verifique que la herramienta este enchulada en una alimentacion cuyo voltaje corresponde al voltaje indicado en la placa de indentificacion.
2. No utilice la herramienta en ningun caso si faltara la tapa de proteccion o alguna de las tuercas. Si se ha retirado la tapa de proteccion o las tuercas, coloquelas nuevamente en su lugar antes de utilizar la maquina. Controle que todos los elementos esten en perfectas condiciones de utilizacion.
3. Sujete siempre firmemente su maquina si debe trabajar en un sitio elevado.
4. No toque, en ningun caso, la cuchilla, la fresa, la muela o cualquier, otro elemento en rotacion.
5. En ningun caso ponga en marcha la herramienta cuando el elemento de corte (el que trabaja en rotacion) esta en contacto con la pieza que va a trabajar.
6. No suelte la maquina hasta que todas sus piezas moviles se hayan detenido completamente.
7. ACCESORIOS: La utilizacion de accesorios o de equipos que no figuren en las recomendaciones de este manual puede resultar peligrosa.
8. PIEZAS DE REPUESTO: En caso de necesitar una reparacion, utilice exclusivarnente piezas de repuesto identicas a las de la maquina.

Gatillo *Figure 1*

1. Esta herramienta puede arrancar y parar apretando y soltando el gatillo (1).
2. Para hacerlo funcionar continuamente, oprima el boton del seguro (2) Mientras mantiene apretado el gatillo. Apriete nuevamente para soltar el seguro.

Adjuste de la Profundidad de Corte *Figure 2*

1. Para ajustar la profundidad de corte, afloje el perno (3).
2. Desclice la place base (4) a la profundidad deseada y vuelva a apretar firmiente el perno.
3. La distancia en que sobresale (8) la sierra deside la base es la Profundidad del corte.

Cepillo de Carbon Reemplazar *Figure 3*

1. Afloje los 4 tornillos dela parte de atras del cepillo de carbon en el motor y remueva la cubierta de plastico negra.
2. Afloje la tapadera en contra de las manesillas del reloj de cada lado del alojamiento del cepillo de carbon, despues remueva el resorte del cepillo de cabon y reemplacelo con el nuevo cepillo de carbon.
3. Para empacar haga el mismo proceso pero en reversa despues de que instalo el nuevo cepillo de cabon y apreto, la tapadera del alojamiento del cepillo.

Adjuste del angulo de Corte *Figure 4*

1. La sierra puede ajustarse para cortar angulo entre 0º y 45º.
2. Afloje la tuerca (5) de la escala (6) e incline la placa de la base (4) al angulo deseado.
3. Al angulo deceado reajuste la tuerca para asegurar la sierra.

NOTA: Esta absolutamente probido hacer ajustar con el motor en marcha. Ajuste el angulo de corte sin que se vea afectado el ajuste de profundidad de corte. De lo contrario la brida exterior (7) puede tocar la pieza trabajada.

Cambio de la Rueda *Figure 5*

1. Afloje el perno (11) con la llave (13)y desmonte la brida exterior (7).
2. Remueva la cuchilla (8) del borde interior en el eje propulsor(9).
3. Instale la nueva cuchilla contra el borde interior el el eje propulsor (10).
4. Ahora ponga el borde exterior en contra de la cuchilla y apriete la tuerca firmemente con la llave.

Precaucion: Las marcas de rueda deben estar visibles desde afuera.

NOTA: Lamaquina debera estar apagada haciendo esta operacion (Desconectela)! Las marcas de la cuchilla deberan ser visibles por afuera.

Instalacion del Suministro de Agua *Figure 6*

1. Afloje el perno de ajuste (3) y baje completamente la placa de la base (4) y apriete con el perno de ajuste.
2. Instale el tapon de agua (15) con el tornillo (16).
3. Instale el conector (17) del suministro de agua en el grifo.
4. Abra el grifo y moje la rueda.
5. Utilice la palanca de ajuste (18) para ajustar la cantidad de agua. Esta abierta en la posicion “A” y cerrada en la posicion “B”.

Precaucion: Compruebe que rueda esta centrada entre las salidas (14).

NOTA: Este seguro que la salida del agua no toque la cuchilla.

Funcionamiento *Figure 7*

1. Cuando corte la pieza trabajada, mueva la herramienta por la linea dibujada para el corte, utilizando el borde (19) de la place de la base.
2. Primero apoye solo la parte delantera de la placa de la base sobre la pieza trabajada a cortar (para que la rueda no toque todavia el trabajo) y apriete el gatillo.
3. Cuando la rueda alcance su velocidad maxima, empuje la maquina hacia adelante para empezar a cortar. Siga empujando la maquina con una fuerza uniforme y pareja hasta competar el corte.

NOTA: Cuando este cortando asegurese de usar guantes de plastico y zapatos de insulacion para prevenir electro Cutacion.

Mantenimiento

1. Luego de utilizarla, revise la herramienta para controlar que se encuentre en perfecto estado de funcionamiento.
2. No effectu ninguna regulacion mientras el motor este en marcha.
3. Desenchufe el cable de alimentacion del receptaculo, antes de cambiar las piezas removibles o que no sean reutilizables (cuchilla, fresa, papel de lija, etc.),y antes de lubricar o de efectuar cualquier manipulacion con la unidad.

SPECIFIC SAFETY RULES:

1. DANGER! Keep hands away from cutting area and blade. If both hands are holding the saw, they cannot be cut by the blade.

Keep your body positioned to either side of the saw blade, but not in line with the saw blade. KICKBACK could cause the saw to jump backwards.

Do not reach underneath the work. The guard can not protect you from the blade below the work.

General Safety and Rules

WARNING: Read and understand all instructions. Failure to follow all instructions listed below, may result in electrical shock, fire and/or serious personal injury.

Work Area

Keep your work area clean and well lit. Cluttered benches and dark areas are prone to accidents.

Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.

Keep bystanders, children, and visitors away while operating a power tool. Distractions can cause you to loose control.

Electrical Safety

Double insulated tools are equipped with a polarized (one blade is wider than the other.) This plug will fit in a polarized outlet only one way. If the plug does not fully fit in the outlet, reverse the plug. If it still does not fit, contact a qualified technician to install a polarized outlet. Do not change the plug in any way. Double insulation eliminates the need for the three wire ground power cord and ground power supply system.

Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electrical shock if your body is grounded.

Don't expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electrical shock.

Do not abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges, or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.

When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W". These cords are rated for outdoor use and reduce the risk of electric shock.

Personal Safety

Stay alert, carefully watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol or medication. The lack of attention while operating power tools may result in serious personal injury.

Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothing, jewelry, or long hair can be caught in moving parts.

Avoid accidental starting. Be sure switch is off before plugging in. Carrying tools with your finger on the switch or plugging in tools that have the switch are extremely dangerous and prone to accidents.

Remove adjusting keys or switches before turning the tool on. A wrench or a key that is left attached a rotating part of the tool may result in personal injury.

Keep proper footing and balance at all times and do not overreach. Proper footing and balance enables better control of the tool in unexpected situations.

Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

TOOL USE AND CARE:

Use clamps or other practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.

Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.

Do not use the tool if switch does not turn on or off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.

Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.

Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.

Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools with sharp cutting edges are less likely to bind and are easier to control.

Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.

SERVICE:

Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.

When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance instructions may create a risk of electrical

SPECIFIC SAFETY RULES AND SYMBOLS:

DANGER! Keep hands away from cutting area and blade. If both hands are holding the saw, they cannot be cut by the blade.

Keep your body positioned to either side of the saw blade, but not in line with the saw blade.

Do not reach underneath the work. The guard cannot protect you from the blade below the work.

NEVER hold the piece being cut in your hands or across your leg. It is important to support the work properly to minimize body exposure, blade binding, or loss of control.

Always use blades with correct size and shape arbor holes. Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.

Never use damaged or incorrect blade washers or bolts. The blade washers and bolt were specially designed for your saw. for optimum performance and safety of operation.