ANGULAR TILE DRILL

DAD2

OPERATING MANUAL



daltile®

daltool

CAUTION

Carefully read and understand all Safety and Operating Procedures prior to using the DALTOOL® Angular Tile Drill DAD2.

Keep this Manual in a safe place for future reference.

Enter the Serial Number of your new DALTOOL® Angular Tile Drill DAD2 in the box below. The Serial Number is located on the machine housing

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DALTOOL® SAFETY

It is extremely important that you read and understand all of the safety instructions, the operating instructions and the maintenance instructions. If these instructions are not followed, serious injuries and/or death could occur to you or to others. Also, failure to read and follow the enclosed maintenance instructions can lead to equipment failure, damage to the equipment or reduced lifetime of the equipment.

SAFETY MESSAGES:

Safety messages are used to inform the person(s) using this equipment of the potential hazards that could lead to equipment damage, serious injury or even death. The safety messages within this manual will be followed by one of the following (3) three words that identify the severity of the damage.

⚠DANGER

It is important that all instructions within this manual be followed. If the instructions are not followed serious injuries will occur as well as death.

⚠WARNING

It is important that all instructions within this manual be followed. If the instructions are not followed it is possible that serious injuries could occur as well as death.

⚠CAUTION

It is important that all instructions within this manual be followed. Failure to follow these instructions can lead to irreparable damage.

DAMAGE PREVENTION AND INFORMATION MESSAGES:

A Damage Prevention Message is to inform the user of important information and/or instructions that could lead to equipment or other property damage if not followed. Information Messages convey information that pertains to the equipment being used. Each message will be preceded by the word NOTE, as in the example below.

NOTE:
Equipment and/or property damage may result if these instructions are not followed.

GENERAL SAFETY PRECAUTIONS AND HAZARD SYMBOLS:

In order to prevent injury, the following safety precautions and symbols should be followed at all times!

SAFETY PRECAUTIONS:

- REMOVE ADJUSTING TOOLS.

The machine is supplied with some adjusting tools for equipment maintenance. It is important that the user of the machine makes sure that all tools are removed or in their proper storage area before the machine is turned on.

DALTOOL® SAFETY

- KEEPING THE WORK AREA CLEAN.
  It is important that the working area be clean so as to avoid potential accidents or injuries.

- DO NOT USE THE EQUIPMENT IN DANGEROUS ENVIRONMENTS.
  It is important that power tools not be used in wet environments. The equipment should never be used in the rain. Also, it is advisable to keep the working area well lit.

- CHILDREN SHOULD BE KEPT AWAY FROM THE WORKING AREA.
  Only the operator of the equipment should be in the working area. All other people especially children should be kept away at a safe distance.

- KEEP THE WORKING AREA CHILDPROOF.
  It is important to keep the working area child proof. This can be done by using locks on the equipment, plastic plugs for the electrical outlets and possibly even master switches on the equipment.

- DO NOT DRY DRILL WITH THE MACHINE

  The machine is not intended for dry drilling use. Always use sufficient water to wet drill tile, brick or natural stone. Dry drilling will result in dangerous dust levels (See also California Proposition 65 message) and can damage the equipment. Any damaged equipment that is returned due to dry drilling will be repaired or replaced totally at the customers expence. There will be no warranty claim.

- FORCING THE TOOL.
  The equipment was designed to do a certain job. Do not force the equipment to do something that it wasn't designed to do.

- CLOTHING.
  It is important that the operator does not wear loose clothing that can potentially get caught in moving parts of the equipment. It is recommended to wear non-slip shoes along with a hair covering to keep hair away from the moving parts.

- SAFETY GLASSES, GLOVES AND HEARING PROTECTION.

  It is important to wear safety glasses and hearing protection when operating any type of equipment. Be sure that the safety glasses you wear are impact resistant.

- SECURE WORK
  Make sure your work piece is secured in such a way that it will not rotate in the event the diamond drill bit locks.

  Clamps or a vise should be used to hold your work whenever practical. Keeping your hands free to operate the machine is safer. When securing the material to be cut by hand, be sure your hands stay as far away as possible from the rotating diamond Bit

- PROPER FOOTING
  It is important to keep proper footing and balance at all times when operating equipment. If proper footing is not observed by doing such things as over reaching, serious injury may occur.

DALTOOL® SAFETY

- TOOL MAINTENANCE.
  It is important to keep tools clean and in good working order. This will result in optimal performance of the machine. Always follow the maintenance instructions for proper tool maintenance.

- REDUCING ACCIDENTAL STARTING OF MACHINE

  It is important to be sure that the switch is in the OFF position before plugging in the machine.

- EQUIPMENT ACCESSORIES.
  It is important that you refer to the owner's manual for determining what are the recommended accessories to use with this type of equipment. Using accessories that are not recommended in the owner's manual may increase the risk of personal injury and/or to people that are within close proximity of the machinery.

- CHECKING THE EQUIPMENT FOR DAMAGED PARTS.
  It is important to inspect the power tool before using it to check for damaged parts. Any part of the machinery that is damaged should be checked carefully to determine whether or not it should be used and whether or not it can function properly for its intended use.
  It is important to check all the moving of the machinery for proper alignment and/or possible binding. All broken or damaged parts should be properly repaired or replaced. If these parts are not repaired or replaced the proper operation of the machine could be negatively affected. Damaged bits should be replaced immediately.

- NEVER LEAVE A TOOL RUNNING UNATTENDED – TURN POWER OFF
  It is important never to leave a tool running when not in use. Also never leave the tool until the drill has come to a complete stop. It is important to always turn the power tool OFF when leaving the work area or when a hole is finished.

DALTOOL® SAFETY


READ MANUAL CAREFULLY BEFORE USE


WEAR SAFETY GEAR


DO NOT SPRAY WATER ON MOTOR



TURN OFF SAW BEFORE PLUGGING IN


USE GROUND FAULT CIRCUIT INTERRUPTOR


KEEP AWAY FROM MOVING PARTS

HAZARD SYMBOLS

- READ MANUAL CAREFULLY BEFORE USE



Carefully read and understand this operating manual and the enclosed safety instructions prior to using the machine.

- WEAR SAFETY GEAR



Always wear safety glasses, gloves and hearing protection when operating the machine

- DO NOT SPRAY WATER ON TILE DRILL



Avoid direct water spray on motor and switch housing when cleaning.

- TURN OFF DRILL BEFORE PLUGGING IN



It is important to make sure that the switch is in the OFF position before plugging in the machine to prevent accidental starting of the machine.

- ELECTRICAL SHOCK



It is important to never touch electrical components of the machine while the machine is in operation.

- KEEP AWAY FROM MOVING PARTS



It is important to keep hands, feet, hair and clothing away from all moving parts to prevent injury. It is also important to be sure that covers and guards are always in their proper position. If not, serious injury can occur.

DALTOOL® SAFETY

⚠WARNING

The use of saws and drills generates dust. Excessive airborne particles may cause irritation to eyes, skin and the respiratory tract. To avoid breathing impairment, always us dust controls and protection suitable to the material being sawed or drilled;
See OSHA (19 CFR Part 1910.1200). Diamond Blades improperly used are dangerous. Comply with American National Standards Institute Safety Code, B7.1 and, Occupational Safety and Health Act covering speed, Safety Guards, Flanges, Mounting Procedures, General Operating Rules, Handling, Storage and General Machine Conditions.

CALIFORNIA PROPOSITION 65 MESSAGE:

⚠WARNING

Some dust created by power sanding, sawing, grinding and other construction activities contain chemicals known [to the State of California] 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
- Arsenic and chromium, from chemically treated lumber

For Further information, consult the following sources:

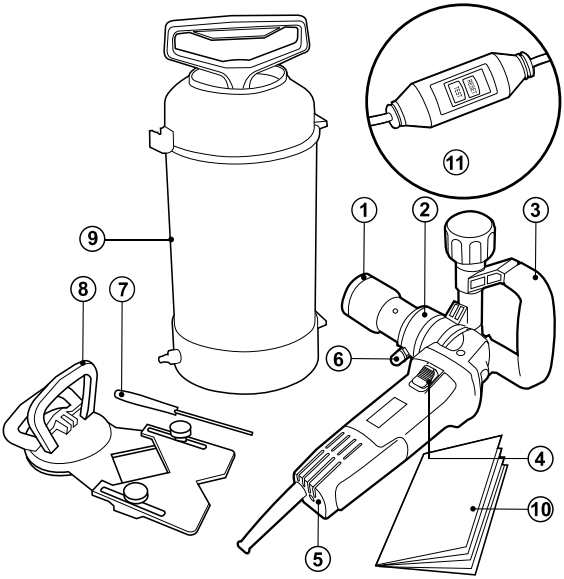
http://www.osha-slc.gov/sltc/sillicarystalline/index.html
http://www.oehha.org/prop65/out_of_date/6022kLstA.html

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 dust masks that are specially designed to filter out microscopic particles.

TILE DRILL SPECIFIC WARNINGS:

- Do not touch the diamond bit during operation.
- Do not leave the machine turned "ON" when not in use.
- Unplug the machine before changing tools or performing maintenance.
- Always use coolant water.

MACHINE SPECIFICATIONS

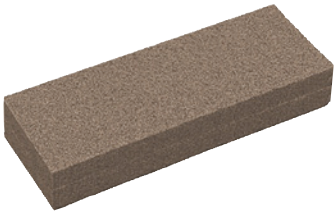


1. Diamond Tile Bit
2. Water Injection Head
3. Side Grip
4. Main Switch
5. Speed Control
6. Water Connection
7. Socket Head Screw Driver 3 mm
8. Drilling Guide
9. Water Tank
10. Operating Manual
11. GFCI Switch
12. Carrying Case (not shown)

Technical Data:

Voltage	[V/Hz]	115/60
Motor	[W/HP]	750/1
No Load Speed (stageless)	[RPM]	3,000 - 10,000
Bit Capacity	[Inch]	1/4" - 2 5/8"
Spindle Lock	--	yes
Weight	[lbs]	10

Accessories:



Dress Stick	Part # 9999 546429
Diamond Tile Bits	see page 12

OPERATING PROCEDURES

CHECK BEFORE USE:

- **Unpacking:**

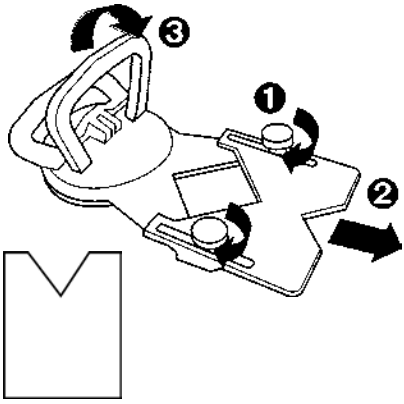
  Unpack the tile drill and check for missing or damaged parts.

- **Power Supply:**

  Make sure that the power supply corresponds with the information on the machine.

OPERATING PROCEDURES

- Use the machine only in combination with the supplied water tank (9) or direct connection to the main water supply .
- Always use the drill guide. (8)

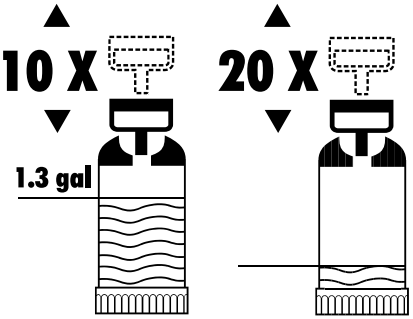


It is impossible to drill without a drill guide. (see page 9). You can improvise a drill guide using a piece of wood or plastic. Make a V-shaped insertion like illustrated and tape or clamp the guide onto the tile in the desired position.

- Always use the GFCI Switch. (11)
- **Mount the Drill Bit:**
- Prior to the installation of the diamond bit it is important that both the machine adapter and the diamond bit are cleaned and greased.
- Mount the bit with the flat side opposing the locking screw.
- Secure the bit using the socket head screwdriver (7)
- Remove the socket head screwdriver.
- Removal of the bit is done in reverse order. After use dry and lubricate the bit before putting it back into the original packing.

Before changing tools always unplug the machine

- **Water Supply:**
- When using the water tank (2): Fill the water tank to the 1.3 gallon level and pressurize by pumping at least 10 times. Connect the water tank and the hose to the drilling unit.



OPERATING PROCEDURES

- **Drilling:**

- Plug in the machine
- Reset the GFCI Switch (11)
- Use the table below as a guideline to select the RPM for your drill bit diameter and start the machine. (note the these may vary with the different materials you are drilling)

Bit Diameter	Position
1/4" - 3/8"	Pos. 4/5
1/2" - 11/16"	Pos. 4
3/4" - 1"	Pos. 3/4
1 3/8" - 1 1/2"	Pos. 3
1 3/4" - 2 5/8"	Pos. 2

- Open the Water Valve until a little water comes out the drill.
- You are now ready to drill
- It is important that you do not push on the drilling machine but let the machine do the work.
- When the drilling performance of the machine starts to decline it is recommended to dress the diamond bit using a dressing stick (see also page 9).
- If the bit locks during the drilling process it is recommended to stop drilling immediately so that the machine and the tile are not damaged.

  Take the drill out carefully by lifting it straight up from the drilling hole and try to start drilling again. Never have the machine rotating when trying to take out the drill. This can damage your machine.

REPAIR & MAINTENANCE

Ventilation openings in the housing of the machine

- The ventilation openings must be free from objects such as Styrofoam, stone or concrete debris. Remove these objects before using the machine. If the ventilation openings are not clear it will mean that the cooling of the motor is diminished and can damage the machine.
- There is a small hole in the water injection head located behind the connecting valve for the water hose. When water comes out this small hole it is recommended that you stop using the machine and to contact your local service center. Continuing to use the machine can result in damage to your machine

Storage after Use

- The machine should be kept in a dry place and kept out of the reach of children

Defects and Faults

- Contact your DALTOOL Distributor for repair work. They can direct you to a service center.

DIAMOND TILE BITS



Description	Metric	Part-Number
DALTOOL® Diamond Tile Bit 3/8”	(4 mm)	**NEW!** 9999 544713
DALTOOL® Diamond Tile Bit 3/8”	(5 mm)	**NEW!** 9999 544714
DALTOOL® Diamond Tile Bit 3/8”	(6 mm)	9999 541874
DALTOOL® Diamond Tile Bit 3/8”	(8 mm)	9999 541875
DALTOOL® Diamond Tile Bit 3/8”	(10 mm)	9999 540956
DALTOOL® Diamond Tile Bit 1/2”	(13 mm)	9999 540957
DALTOOL® Diamond Tile Bit 5/8”	(16 mm)	9999 540958
DALTOOL® Diamond Tile Bit 11/16”	(18 mm)	9999 540959
DALTOOL® Diamond Tile Bit 3/4”	(20 mm)	9999 540960
DALTOOL® Diamond Tile Bit 7/8”	(24 mm)	9999 540961
DALTOOL® Diamond Tile Bit 1”	(26 mm)	9999 540962
DALTOOL® Diamond Tile Bit 1 1/8"	[28 mm]	9999 543466
DALTOOL® Diamond Tile Bit 1 1/4"	[32 mm]	9999 543467
DALTOOL® Diamond Tile Bit 1 3/8”	(35 mm)	9999 540963
DALTOOL® Diamond Tile Bit 1 1/2”	(40 mm)	9999 540964
DALTOOL® Diamond Tile Bit 1 3/4”	(45 mm)	9999 540965
DALTOOL® Diamond Tile Bit 2”	(51 mm)	9999 540966
DALTOOL® Diamond Tile Bit 2 3/8”	(60 mm)	**NEW!** 9999 546438
DALTOOL® Diamond Tile Bit 2 5/8”	(68 mm)	9999 540967