



daltile®

ANGLE GRINDERS DG4 1/2 DG5



DALTILE ANGLE GRINDER OPERATING MANUAL V09/2005R1

OPERATING MANUAL

CAUTION

Carefully read and understand all Safety and Operating Procedures prior to using the Daltile® Angle Grinder

Keep this Manual in a safe place for future reference.

Enter the Serial Number of your new Daltile® Angle Grinder in the box below. The Serial Number is located on the machine housing

TABLE OF CONTENTS



1. DALTOOL SAFETY

Safety Messages	4
Damage Prevention and Information Messages	4
General Safety Precautions and Hazard Symbols	4
California Proposition 65 Message	8
Machine Specifications	9

2. OPERATING INSTRUCTIONS

Installing the grinding disk	10
Grinding process	10
Caution after use	10

3. REPAIR AND MAINTENANCE

Replacement of grinding disk	11
Inspection of screws	11
Inspection of carbon brushes	11
Motor	11
Keep ventilation slots clean	11
Storage	11
Failure and repair	11



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.
- **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 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**
Clamps or a vise should be used to hold your work whenever practical. Keeping your hands free to operate the machine is safer.
- **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 overreaching, 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 parts 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.

- **NEVER LEAVE A TOOL RUNNING UNATTENDED – TURN POWER OFF**

It is important never to leave a tool running when not in use.



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 and hearing protection when operating the machine
- **DO NOT SPRAY WATER ON THE MACHINE**
 Avoid direct water spray on motor and switch housing when cleaning.
- **TURN OFF BEFORE PLUGGING IN**
 It is important to make sure that the switch is in the OFF position before plugging in 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.
- **DO NOT REMOVE BLADE GUARD**
 It is important that all machines guards remain in place and in proper working condition. This is to prevent serious injury, death or damage to the equipment.



DALTOOL SAFETY

WARNING

The use of this machine generates dust. Excessive airborne particles may cause irritation to eyes, skin and the respiratory tract. To avoid breathing impairment, always use dust controls and protection suitable to the material being mixed.

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.

MACHINE SPECIFICATIONS



Technical Data:

		DG4^{1/2}	DG5
Voltage	[V/Hz]	115/60	115/60
Motor	[W/HP/A]	750/1/7	1200/1,5/10
No Load Speed	[RPM]	10,000	10,000
Spindle Lock	--	yes	yes
Spindle Thread	[Inch]	5/8 - 11	5/8 - 11
Spindle Arbor	[Inch]	7/8	7/8
Blade Capacity	[Inch]	4 1/2	5
Weight	[lbs]	3,9	5,6
Machine Length	[Inch]	10 1/2	16

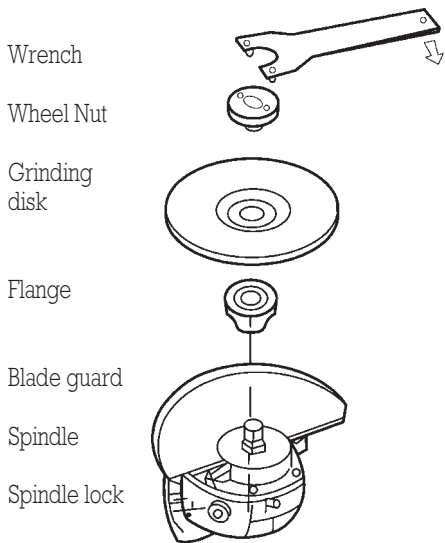


OPERATING INSTRUCTIONS

1. INSTALLING THE GRINDING DISK

Turn off and unplug the machine before mounting or replacing the grinding disk. Never use a grinding disk with a lower RPM than that of your angle grinder (See specifications).

- 1) Turn the machine over with the spindle facing upward and mount the flange. Rotate the flange until you feel it locking.
- 2) Mount the grinding disk.
- 3) Screw the wheel nut onto the spindle by hand
- 4) Lock the spindle and tighten the wheel nut using the wrench
- 5) To remove the grinding disk follow these procedures in reverse order.

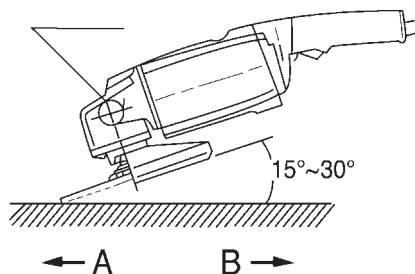


2. GRINDING PROCESS

1. Grinding pressure

Apply only a little pressure to grinding disk. Excessive pressure on the grinding disk will decrease grinding speed and cause a rough surface finish and may cause overheating of the motor and machine failure.

2. Grinding angle



Do not apply the total surface of the grinding disk to work material. Efficient grinding is achieved by keeping the angle between cutting blade and work material at 15° to 30° as shown in the picture.

3. CAUTION AFTER USE

Immediately turn off the machine after finishing your work and store it in a safe place. Do not let the machine run freely in a dust filled space. Dust may end up in the motor and cause damages.

Grinding disks may damage on impact. Always inspect grinding disks after impact and replace when damaged.

⚠ CAUTION

Always use the blade guard and safety goggles when operating this machine



WARNING

Always unplug the machine before attempting any maintenance.

1. Replacement of grinding disk

Grinding disks should be replaced when worn to the following values:

- Ø4 1/2" reduced to Ø3".
- Ø5" reduced to Ø3".

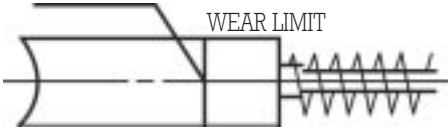
2. Inspection of screws

Periodically inspect the screws for safer operation. Tighten loose screws firmly to prevent hazardous situations.

3. Inspection of carbon brushes

Worn carbon brushes may cause motor failure. Replacement of the carbon brushes is recommended when the brushes have reached their wear limit. Always keep the brush holders clean so that the brushes can move freely.

CARBON BRUSH



Use original spare parts only and have the machine serviced at authorized Service Centers. Non original parts may lead to damage to the machine or hazardous situations.

4. Motor

The rotor and stator in the motor are the core of the machine. Do not scratch the surface of the windings in the motor, and never apply oil or water on it.

5. Keep ventilation slots clean

Ventilation slots should be kept open and clean at all times. Clogged slots prevent proper cooling of the motor and will lead to damages.

Penetration of dust into the motor will lead to machine failure. The motor should be cleaned after every 50 hrs of operation by blowing compressed air through the ventilation slots while the machine is running at no load speed.

6. Storage

Store the machine in a dry place and out of reach of children.

7. Failure and repair

Do not attempt to repair the machine yourself, this may lead to unrepairable damages or injuries. Repair and maintenance should be performed by qualified personell only.



DALTOOL ANGLE GRINDERS