





150mm BENCH GRINDER

BT3600

GENERAL SAFETY RULES

⚠ WARNING: Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term “power tool” in all of the warnings listed below refers to your mains operated (corded) power tool or battery operated (cordless) power tool.

SAVE THESE INSTRUCTIONS

1. Work area

- a. Keep work area clean and well lit.** Cluttered and dark areas invite accidents.
- b. 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.
- c. Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

2. Electrical safety

- a. Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- b. Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- c. Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d. Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- e. When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.

⚠ WARNING: If the supply cord is damaged, it must be replaced by the manufacturer, an authorized Black & Decker Service Centre or an equally qualified person in order to avoid a hazard. If the supply cord is replaced by an equally qualified person, but not authorized by Black & Decker, the warranty will lose effect.

3 Personal safety

- a. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- b. Use safety equipment. Always wear eye protection.** Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c. Avoid accidental starting. Ensure the switch is in the off position before plugging in.** Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.
- d. Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e. Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- f. Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- g. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of these devices can reduce dust related hazards.

4. Power tool use and care

- a. Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- b. Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

- c. **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d. **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
- e. **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
- f. **Use the tool in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

5. Service

- a. **Have your power tool serviced by a qualified repair person using only identical replacement parts.**

This will ensure that the safety of the power tool is maintained.

6. Labels on tool

The label on your tool may include the following symbols:



Read Instructions Manual



Use Eye Protection



Use Ear Protection

V Volts

A Amperes

Hz Hertz

W..... Watts

min..... minutes

~ Alternating Current

== Direct Current

n_0 No-Load Speed

..... Class II Construction

..... Earthing Terminal

..... Safety Alert Symbol

.../min.... Revolutions or Reciprocation per minute

ADDITIONAL SAFETY RULES FOR BENCH GRINDERS

- Value of the thickness limit of wear of the work rest is 1 mm.
- Always use proper guard with grinding wheel. A guard protects operator from broken wheel fragments.
- Accessories must be rated for at least the speed recommended on the tool warning label. Wheels and other accessories running over the rated speed can fly apart and cause injury.
- Before using, inspect recommended accessory for cracks or flaws. If such a crack or flaw is evident, discard the accessory. **DO NOT USE A GRINDING WHEEL THAT IS CRACKED OR FLAWED IN ANY WAY.**
- When starting the tool, let it run for one minute. Never start the tool with a person in line with the wheel. This includes the operator.
- Do not grind on the sides of grinding wheels unless they are specifically designed for that purpose.
- Do not overtighten wheel clamp nut. This may crack the grinding wheel.
- Clean the cavity around the grinding wheel periodically.

⚠ 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. (CCA)

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 out microscopic particles.

- Wear protective glasses;
- Do not use damaged or misshapen wheels or brushes
- The adjustment of the spark arrestor shall be made frequently, so as to compensate the wear of the wheel, keeping the distance between the guard and the wheel as small as possible, but in any case not greater than 2mm;
- The adjustment of the work rest shall be done gradually so as to compensate the wear of the wheel, keeping the distance between the work rest and the wheel as small as possible, but in any case not greater than 2mm;

BENCH MOUNTING

1. The grinder should be unplugged.
2. Position grinder on workbench. Check for the availability of power for the grinder. Mark location of holes for drilling.
3. Drill appropriate sized holes.
4. Insert ¼" (6mm) Hex head bolts through washers and the holes. You may want to use washers on the underside of the bench as well.
5. Tighten the nuts. Do not overtighten. Allow the rubber feet to absorb the vibration when the grinder is running.

INSTALLING EYE SHIELDS (FIG.1)

Turn off tool and disconnect from power supply. Adjust the eye shields so they are between the wheels and your eyes.
NOTE: Eye shields are not designed to replace safety glasses.

INSTALLING TOOL RESTS

Turn off power and disconnect from power supply. Use the bolts, washers, spacers and lock nuts from the plastic bag to secure the brackets and tool rests in place.

CAUTION: Use the washers and screws supplied. Longer screws may interfere with the movement of the grinding wheel.

OPERATION

Never use a bench grinder if it is not firmly fastened to a work bench or rigid frame. Before turning the grinder on, put on safety glasses. Turn on the grinder and allow it to reach full speed (2950 rpm) . Hold the workpiece firmly and against the tool rest. Hold very small pieces with pliers or other suitable clamps. Feed the work smoothly and evenly into the grinding wheel. Move the work slowly and avoid jamming the work against the wheel. As the wheel tends to slow down you should occasionally release the pressure to let the wheel return to full speed. Grind only on the face of the grinding wheel and never on the side. (Some wheels are designed for side grinding and will say so on their instruction sheets).

CAUTION: Prolonged grinding will cause most materials to become hot. Handle them with pliers.

SWITCH

The switch is located on the front of the grinder, on the base. To turn the tool on depress the side of the rocker switch on the right side, marked "1". To turn off the grinder, depress the left side of the rocker switch, marked " 0 " .

CHANGING ACCESSORIES (FIG. 2)

Turn off the tool and disconnect from power supply. Use only wheels that measure 150mm in diameter. This tool has 12.7mm arbors on both sides. Follow the steps below to remove and replace an accessory.

1. Loosen and pull the tool rest out as far as possible. Do not remove it.
2. Remove the three screws from the side of the wheel cover and remove the cover.
3. Insert a flat bladed screwdriver into the slot in the left end of the grinder's rotor shaft. Hold the screwdriver firmly to keep the shaft from turning as you loosen and remove the hex nut in the center of the grinding wheel or other accessory.
4. Remove the wheel washer and the wheel.
5. Inspect the wheel for cracks, chips or any other visible damage (other than normal wear) and discard if such damage is found. Inspect the blotters for damage. If the blotters are missing or severely damaged, replace them with pieces of thin cardboard or blotter paper cut in the same shape. **NEVER USE A GRINDING WHEEL WITHOUT A BLOTTER ON EACH SIDE OF THE WHEEL.**
6. Install the new wheel or other accessory. Be sure that both wheel washers are in place (concave sides toward wheel). Use only flanges furnished with the grinder.
7. Hold as before and tighten the nut firmly but do not overtighten. **OVERTIGHTENING CAN CRACK A GRINDING WHEEL.**
8. Replace the wheel cover and its screws.
9. Adjust the tool rest to at least 1/16" (1,5mm) from the accessory and tighten securely.

CAUTION: To reduce the risk of fire, use 10 watt max. appliance bulb.

MAINTENANCE

Your tool has been designed to operate over a long period of time with a minimum of maintenance. Continuous satisfactory operation depends upon proper tool care and regular cleaning.

WARNING: Before performing any maintenance, switch off and unplug the tool.

- Regularly clean the ventilation slots in your tool using a soft brush or dry cloth.
- Regularly clean the motor housing using a damp cloth. Do not use any abrasive or solvent-based cleaner.

CLEANING

Blowing dust and grit out of the wheel guards using compressed air is a necessary regular maintenance procedure. Dust and grit containing metal particles often accumulate on interior surfaces and could create an electrical shock hazard if not frequently cleaned out. **ALWAYS WEAR SAFETY GLASSES.**

CAUTION: Never use solvents or other harsh chemicals for cleaning the non-metallic parts of the tool. Use clean, dry rag only.

ACCESSORIES

The performance of your tool depends on the accessory used. Black & Decker and Piranha accessories are engineered to high quality standards and designed to enhance the performance of your tool. By using these accessories you will get the very best from your tool.

Grinding wheels must fit within the confines of the guard and must be rated higher than the recommended speed as marked on the nameplate (2950rpm).

⚠ CAUTION: Strands of wire brushes may break and fly off while in use. Users and others in the area should wear adequate eye, face and body protection. Use only wire brushes that are rated at or greater than the RPM shown on the tool's nameplate. Do not use the spacer with grinding wheels.

⚠ WARNING: To reduce the risk of injury, always use proper guards when grinding and wear eye protection.

⚠ CAUTION: The use of any non-recommended accessory may be hazardous.

PROTECTING THE ENVIRONMENT



Separate collection. This product must not be disposed of with normal household waste. Should you find one day that your Black & Decker product needs replacement, or if it is of no further use to you, do not dispose of it with household waste. Make this product available for separate collection.



Separate collection of used products and packaging allows materials to be recycled and used again. Re-use of recycled materials helps prevent environmental pollution and reduces the demand for raw materials. Local regulations may provide for separate collection of electrical products from the household, at municipal waste sites or by the retailer when you purchase a new product.

SERVICE INFORMATION

Black & Decker offers a full network of company-owned and authorized service locations. All Black & Decker Service Centers are staffed with trained personnel to provide customers with efficient and reliable power tool service. Whether you need technical advice, repair, or genuine factory replacement parts, contact the Black & Decker location nearest you.

SPECIFICATIONS

220V-240~ 50Hz

Power

½HP (373W)

DIMENSION OF GRINDING WHEEL

Diameter 150mm

Thickness 15-17mm

Bore diameter 12.7-12.91mm

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NOTE

- ◆ Black & Decker's policy is one of continuous improvement to our products and, as such, we reserve the right to change product specifications without prior notice.
- ◆ Standard equipment and accessories may vary by country.
- ◆ Product specifications may differ by country.
- ◆ Complete product range may not be available in all countries. Contact your local Black & Decker dealers for range availability.