Black s Decker

OWNER'S

assure product SAFETY and RELIABILITY, result, (including brush inspection and replacer ack & Decker Service Centers or other qualificing Black & Decker replacement parts. When is extremely important that only identical replacementy of tool is identical to the original as

COMMERCIAL /INDUSTRIAL USE WARRANTY
Black & Decker warrants this product for one year from date of purchase. \text{repair without charge, any defects due to faulty material or workmanship. return the complete unit, transportation prepaid, to any Black & Decker \text{Scenter or Authorized Service Station listed under "Tools Electric" in the pages. This warranty does not apply to accessories or damage caused repairs have been made or attempted by others.

COMPANY MANUFACTURING THE BLACK AND DECKER M TOWSON, MARYLAND 21204 No. 724330

(Feb

INSULATED

DOUBLE

Drill. Well balanced for masonry drilling and use 10" per minute with 1/2" bit in $1 \cdot 2 \cdot 4$ concrete. ected from abrasive dust. Exclusive positive shift hammer action. Depth gauge and side handle are tool.

Hammer I ill. Drills 1 n is protect drill to ha

Heavy duty lightweight Ha as a ½" heavy duty drill. Hammering mechanism is collar shifts easily from di interchangeable to either s

operation of End Handle Hammer Drill, please instructions in this booklet. Don't forget to send

Thank you for buying Black & Decker!

rsonal safety and proper II of the safety rules and Owner Registration card.

No.

Hammer Cat.

Hammer Drill Cat. No.

HEAVY

LAMMER

5036-10

5035-10

SAFETY RULES FOR POWER TOOLS

- 1. KNOW YOUR POWER TOOL Read owner's manual carefully. Learn its applications and limitations as well as the specific potential hazards peculiar to this tool.
- 2. GROUND ALL TOOLS UNLESS DOUBLE-INSULATED. If tool is equipped with three-prong plug, it should be plugged into a three-hole electrical receptacle. If adapter is used to accommodate two pronged receptacle, the adapter wire must be attached to a known ground. Never remove third prong.
- 3. KEEP GUARDS IN PLACE and in working order.
- 4. KEEP WORK AREA CLEAN. Cluttered areas and benches
- 5. AVOID DANGEROUS ENVIRONMENT. Don't expose power tools to rain. Don't use power tool in damp or wet locations. And keep work area well lit.
- 6. KEEP CHILDREN AWAY. All visitors should be kept safe distance from work area.
- 7. STORE IDLE TOOLS. When not in use, tools should be stored in dry, high or locked-up place - out of reach.of
- 8. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
- 9. USE RIGHT TOOL. Don't force small tool or attachment to do the job of a heavy duty tool.
- 10. WEAR PROPER APPAREL. No loose clothing or jewelry to get caught in moving parts. Rubber gloves and footwear are recommended when working outdoors.
- 11. USE SAFETY GLASSES with most tools. Also face or dust mask if cutting operation is dusty.
- 12. DON'T ABUSE CORD. Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil
- 13. SECURE WORK. Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to
- 14. DON'T OVERREACH. Keep proper footing and balance at all times.
- 15. MAINTAIN TOOLS WITH CARE, Keep tools sharp at all times, and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- 16. DISCONNECT TOOLS. When not in use, before servicing; when changing accessories such as blades, bits, cutters,
- 17. REMOVE ADJUSTING KEYS AND WRENCHES, Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- 18. AVOID ACCIDENTAL STARTING: Don't carry plugged-in tool with finger on switch. Be sure switch is "OFF" when plugging in.
- 19. OUTDOOR USE EXTENSION CORDS When tool is used outdoors, use only extension cords suitable for use outdoors and so marked.
- 20. DO NOT OPERATE portable electric tools in gaseous or explosive atmospheres. Motors in these tools normally spark, and the sparks might ignite fumes.

HAMMER DRILL SAFETY RULES

- 1. Wear safety goggles or other eye protection.
- 2. Wear ear protectors when hammering for extended periods.
- Always use side handle supplied with the tool. Keep a firm
- grip on the tool when it is operating. Don't overreach. Maintain a firm, balanced working stance. When necessary, use only properly positioned, safe plat-
- forms, ladders and scaffolds, to do the job SAFELY!
- 5. Bits get hot in operation. Wear gloves when touching them.
- 6. Regularly check tightness of all external screws.

DOUBLE-INSULATION

Your tool is DOUBLE-INSULATED to give you added safety. This means that it is constructed throughout with TWO separate "layers" of electrical insulation or one DOUBLE thickness of insulation between you and the tool's electrical system.

Tools built with this improved insulation system are not intended to be grounded. As a result, your tool is equipped with a two-prong plug which permits you to use any conventional 120 volt electrical outlet without concern for maintaining a ground connection.

NOTE: DOUBLE-INSULATION does not take the place of normal safety precautions when operating this tool. The improved insulation system is for added protection against injury resulting from a possible electrical insulation failure within the tool.

CAUTION: When servicing Double Insulated Tools, USE ONLY IDENTICAL REPLACEMENT PARTS. Replace or repair damaged cords.

EXTENSION CORD

When using the tool at a considerable distance from power source, an extension cord of adequate size must be used to prevent loss of power and over-heating. Use the table below to determine the power wire size required in an extension cord.

Before using cords, inspect them for loose or exposed wires and damaged insulation. Make any needed repairs or replacement before using your power tool.

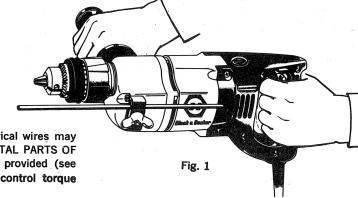
Ampere rating	0 to	2.10 to	3.5 to	5.10 to	7.10 to	12.1 to
(on nameplate)	2.0	3.4	5.0	7.0	, 12.0	16.0
Ext. Cable length	,	Wire Size (A.W.G.)				
25 ft.	18	18	18	18	16	14
50 ft.	18	18	18	16	14	12
75 ft.	18	18	16	14	12	10
100 ft.	18	16	14	12	10	
150 ft.	16	14	12	12	-	-
200 ft.	16	14	12	10		

MOTOR

Your Black & Decker tool is powered by a B&D-built motor. Be sure your power supply agrees with the nameplate marking.

Volts 50/60 Hz or "AC only" means your tool must be operated only with alternating current and never with direct current. Volts DC-60Hz or AC/DC means your tool may be operated with either alternating or direct current.

Voltage decrease of more than 10% will cause loss of power and overheating. All B&D tools are factory tested; if this tool does not operate, check the power supply.



CAUTION: When drilling into walls, floors or wherever "live" electrical wires may be encountered, DO NOT TOUCH THE CHUCK OR ANY FRONT METAL PARTS OF THE TOOL! Hold the Tool only by the insulated gripping handles provided (see Fig. 1). Always use side handle provided in order to properly control torque (twisting action) of the tool.

SWITCHES

Pulling the Trigger Switch turns the tool "ON"; releasing the trigger turns the tool "OFF."

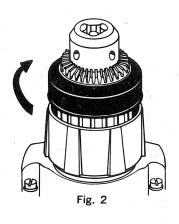
A switch locking button permits locking the trigger in the full "ON" position for continuous operation: To lock trigger in "ON" position depress trigger and push in locking pin (locate next to trigger). To release locking mechanism, depress and release trigger.

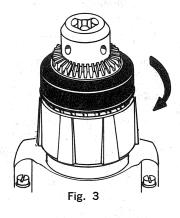
OPERATION

CAUTION: Always unplug the tool when making tool adjustments or changing accessories.

TO HAMMER—Turn collar in direction of arrow until it is close to gear case as shown in Fig. 2. This is the position to be taken when using Percussion type Carbide-tipped Bits for drilling in tile, masonry, brick, porcelain, etc. (see Accessories on back page).

TO DRILL—Turn collar in direction of arrow until it is raised from gear case as shown in Fig. 3. This position is for drilling in metal with drill bits, in wood with wood augers or when using hole saws for cutting wood, metal or composition materials.





DRILLING INSTRUCTIONS

- Open chuck jaws by turning collar with fingers and insert shank of bit about ³/₄" into chuck. Tighten chuck collar by hand. Place chuck key in each of the three holes, and tighten in clockwise direction. It's important to tighten chuck with all three holes. To release bit, turn chuck key counter clockwise in just one hole, then loosen chuck by hand.
- Use sharp drill bits only. For WOOD, use twist drill bits, power auger bits, or hole saws. For METAL, use high-speed steel twist drill bits or hole saws. For MASONRY, such as brick, cement, cinder block, etc., use carbide-tipped bits.
- Be sure the material to be drilled is anchored or clamped firmly. If drilling thin material, use a wood "back-up" block to prevent damage to the material.
- Always apply pressure in a straight line with the bit. Use enough pressure to keep drill biting, but do not push hard enough to stall the motor or deflect the bit.
- 5. Hold drill firmly to control the twisting action of the drill.
- 6. IF DRILL STALLS, it is usually because it is being overloaded or improperly used. RELEASE TRIGGER IMMEDIATELY, remove drill bit from work, and determine cause of stalling. DO NOT CLICK TRIGGER OFF AND ON IN AN ATTEMPT TO START A STALLED DRILL—THIS CAN DAMAGE THE DRILL.
- To minimize stalling on breaking through the material, reduce pressure on drill and ease the bit through the last fractional part of the hole.
- Keep the motor running when pulling the bit back out of a drilled hole. This will help prevent jamming.

MOTOR BRUSHES

CAUTION: Disconnect tool from power source before inspection or servicing.

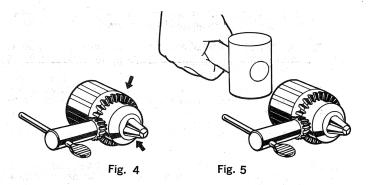
Your tool uses the B&D "Checkpoint" Brush System. This insures that the tool will stop when the brushes wear out. This prevents damage to the motor. Brushes should be regularly inspected for wear if your tool has exterior brush inspection caps. When the cap is unscrewed, the spring and brush assembly may be withdrawn from the tool. Keep brushes clean and sliding freely in their guides. Inspection should be made every two to six months, depending upon usage.

DRILLING IN METAL

Use a cutting lubricant when drilling metals. The exceptions are cast iron and brass which should be drilled dry. The cutting lubricants that work best are sulphurized cutting oil or lard oil; bacon grease will also serve the purpose. Aluminum is best drilled with kerosene.

DRILLING IN WOOD

Holes in wood can be made with the same twist drills used for metal. These bits may overheat unless pulled out frequently to clear chips from the flutes. For larger holes, use power drill wood bits. Work that is apt to splinter should be backed up with a block of wood.



CHUCK CARE

The geared chuck is a precision instrument, designed for accurate work. Like any good mechanism, it should not be abused. Keep chuck clean and free of rust.

First, always bottom the drill bit in the chuck. This permits the chuck jaws to grip the shank fully and prevents cocking the jaws. Second, use all three holes in the chuck body to tighten as much as possible. Only one hole is needed to release the bit. Third, use only a chuck key to tighten or loosen the chuck jaws (See Fig. 4.) If you lose the chuck key, order one at once.

To obtain maximum life from the jaw assembly, lock your chuck firmly with the key to prevent drill slippage, and when the chuck is not in use leave it with the jaws open.

REMOVING THE CHUCK: Place the chuck key in the chuck and strike key a sharp blow using a hammer or other object in the same direction that tool normally runs (See Fig. 5.) This will loosen the chuck so that it can be easily unscrewed by hand.

CLEANING

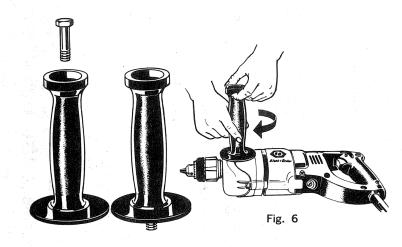
With the tool motor running, blow dirt and dust out of all air vents with dry air at least once a week.

LUBRICATION

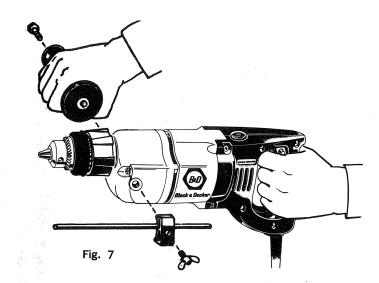
Your tool was properly lubricated before leaving the factory. In from two to six months, depending upon use, take or send your tool to Black & Decker Service Center, or Authorized Service Station, for a complete cleaning, inspection and relubrication.

Tools used constantly on production or heavy duty jobs or exposed to heat may require more frequent lubrication. Tools "out of service" for long periods should be relubricated before being put back into service.

ATTACHING SIDE HANDLE



Drop the hexagon head bolt into the handle. Several threads will protrude thru the handle. Engage these threads into the threaded hole in the tool and turn clockwise until tight (Fig. 6). During tightening, the hexagonal head of the bolt is seated into a socket within the handle. The Handle/Bolt when assembled properly will remain intact when moving the side handle to the opposite side of the tool.



DEPTH ROD

Assemble depth rod as shown in (Fig. 7) into either side of gear cast. Adjust rod so drill bit projects as far beyond end of rod as depth of hole desired, tighter wing screw. When drilling with depth rod, stop when end of rod reaches surface of material.

ACCESSORIES

Recommended accessories for your tool are shown in this manual and in B&D Industrial Catalog.

CAUTION: The use of any other accessory or attachment might present a hazard.

PERCUSSION-TYPE CARBIDE TIPPED BITS:

Used for drilling holes in masonry, tile, brick, porcelain, etc.



Catalog Number	Bit Diameter	Length		
51060	4 "	4"		
51780	%6″	4"		
51781	%3"	4"		
51061	%2" %6"	4"		
51062	%"	4"		
51782	%"	12"		
51063		ੌ ē ″		
51361	71.6″ 1 5 3.2″	6" 6"		
51064	732 1/2"	ě"		
51065	% ² ″	6" 6" 6"		
51066		ĕ"		
51067	%" 11/."	6 "		
51068	*716 34"	6"		

REPLACEMENT CHUCK & CHUCK KEY

Hammer Drill	Chuck & Key	Chuck Key Only		
Cat. No.	B&D No.	B&D No.		
5035-10	23230	4794-1		