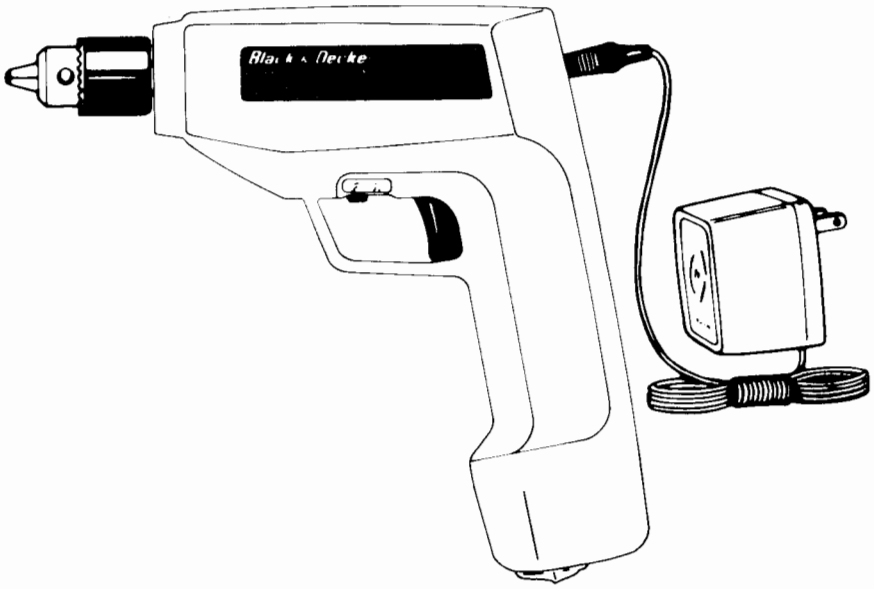
BLACK & DECKER

OWNER'S MANUAL



Your new CORDLESS Drill is as versatile as any corded 1/4" or 3/8" Drill. It offers the ultimate in convenience and electrical safety. You can forget the electric outlet, and forget the cord. You can take your Cordless Drill anywhere, and use it in a wide variety of applications.

For safe and efficient operation of this Drill, please read all safety rules and instructions carefully. Don't forget to send in your owner registration card.

THANK YOU for buying BLACK & DECKER!

IMPORTANT!
To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment should be performed by Black & Decker Service Centers or other qualified service organizations, always using Black & Decker replacement parts.

9020 CORDLESS 3/8" DRILL

AND 2 SPEED REVERSING SCREWDRIVER. INCLUDES 3 HOUR CHARGER.

IMPORTANT SAFETY INSTRUCTIONS (FOR ALL TOOLS)

WARNING: When using Electric Tools, basic safety precautions should be followed to reduce the risk of fire, electric shock and personal injury, including the following:

READ ALL INSTRUCTIONS

1. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite injuries.
2. **CONSIDER WORK AREA ENVIRONMENT.** Don't expose power tools to rain. Don't use power tools in damp or wet locations. Keep work area well lit.
3. **GUARD AGAINST ELECTRIC SHOCK.** Prevent body contact with grounded surfaces. For example: pipes, radiators, ranges, refrigerator enclosures.
4. **KEEP CHILDREN AWAY.** All visitors should be kept away from work area. Do not let visitors contact tool or extension cord.
5. **STORE IDLE TOOLS.** When not in use, tools should be stored in dry, high or locked-up place — out of reach of children.
6. **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was intended.
7. **USE RIGHT TOOL.** Don't force small tool or attachment to do the job of a heavy-duty tool. Don't use tool for purpose not intended, for example, don't use circular saw for cutting tree limbs or logs.
8. **DRESS PROPERLY.** Do not wear loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and nonskid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
9. **USE SAFETY GLASSES.** Also use face or dustmask if cutting operation is dusty.
10. **DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
11. **SECURE WORK.** Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
12. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safe performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and if damaged have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean and free from oil and grease.
13. **DISCONNECT TOOLS.** When not in use, before servicing and when changing accessories, such as blades, bits, cutters.
14. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
15. **AVOID UNINTENTIONAL STARTING.** Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.
16. **OUTDOOR USE EXTENSION CORDS.** When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
17. **STAY ALERT.** Watch what you are doing. Use common sense. Do not operate tool when you are tired.
18. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual. Have defective switches replaced by authorized service centers. Do not use tool if switch does not turn it on and off.
19. **DO NOT OPERATE** portable electric tools near flammable liquids or in gaseous or explosive atmospheres. Motors in these tools normally spark, and the sparks might ignite fumes.

DRILL SAFETY RULES

1. Be aware that this tool is always in an operating condition, because it does not have to be plugged into an electrical outlet.

DRILL SAFETY RULES (Cont'd.)

2. 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 DRILL! Hold the Drill only by the plastic handle to prevent shock if your drill into a "live" wire.

CHARGER & DRILL SAFETY RULES

1. Use only the charger supplied when charging your 9020-04 Drill. The use of any other charger could damage the drill or create a hazardous condition.
2. Use only one charger when charging.
3. Do not attempt to open the charger or the drill. There are no customer serviceable parts inside. Return to any authorized Black & Decker Service Center.
4. DO NOT store the Drill in locations where the temperature may reach or exceed 120° F (such as outside sheds or metal buildings in summer).
5. Charge only when temperature is BETWEEN +40° F and +105° F. This is very important for proper charging.
6. DO NOT incinerate the Drill or battery packs even if they are severely damaged or completely worn out. The batteries can explode in a fire.
7. A small leakage of liquid from the Battery cells may occur under extreme usage or temperature conditions. This does not indicate a failure. However, if the outer case seal is broken and this leakage get on your skin —
   (a) Wash quickly with soap and water.
   (b) Neutralize with a mild acid such as lemon juice or vinegar.
   (c) If battery liquid gets into your eyes, flush them with clear water for a minimum of 10 minutes and seek immediate medical attention. (Medical Note: The liquid is a 25-35% solution of potassium hydroxide.)
8. The charger is designed to operate on standard household electrical power (120 volts, 50/60 HZ). Do not attempt to use it on any other voltage!

SAVE THESE SAFETY RULES FOR FUTURE USE.

CHARGING THE BATTERIES

IMPORTANT CHARGING NOTES

1. **Your batteries must be charged for 3 hours to obtain a full charge.**
2. Longest life and best performance can be obtained if the batteries are charged when the air temperature is about +75° F. DO NOT charge the batteries in an air temperature below +40° F or above +105° F. This is important and will prevent serious damage to the batteries.
3. When you charge your Drill for the first time, or after prolonged storage, it will only accept about an 80% charge. However, after several charge and discharge cycles, the batteries will come up to full capacity.
4. While charging, the Charger may hum and become warm to touch. This is a normal condition and does not indicate a problem.
5. If the batteries do not charge properly—(1) Check current at receptacle by plugging in a lamp or other appliance. (2) Check to see if receptacle is connected to a light switch which turns power off when you turn out the lights. (3) Move Charge and Drill to a surrounding air temperature of approximately 75° F. (4) If the receptacle and temperature are o.k., and you do not get proper charging, take or send the tool and charger to your local Black & Decker Service Center. See "TOOLS ELECTRIC" in yellow pages.
6. The Drill should be recharged when it fails to produce sufficient power on jobs which were easily done previously. DO NOT CONTINUE to use under these conditions. Repeat the charging procedure.
7. **Unplug your tool's charger from the power supply before disconnecting the charger from the tool. Under certain conditions, with the charger plugged in to the power supply, the exposed charging plug can be shorted by foreign material and may cause a fire. Foreign materials of a conductive nature, such as but not limited to, steel wool, aluminum foil, or any buildup of metallic particles should be kept away from the charging plug. Unplug the charger before attempting to clean.**

TRIGGER SWITCH & CONTROL SWITCH

The drill is turned "ON" and "OFF" by pulling and releasing the Trigger Switch shown in **Figure 1.** The Control Switch, shown in **Figures 1 & 2**, switches the drill's direction from forward to reverse.

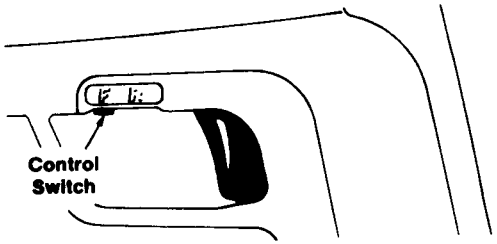
TWO SPEED OPERATION

Your Drill is equipped for two speed drilling. To operate at LOW speed, squeeze the Trigger Switch halfway. This will produce a speed of approximately 170 RPM to be used for driving screws and starting holes without a centerpunch. Squeezing the Trigger Switch all the way will produce a speed of approximately 400 RPM for NORMAL drilling operations.

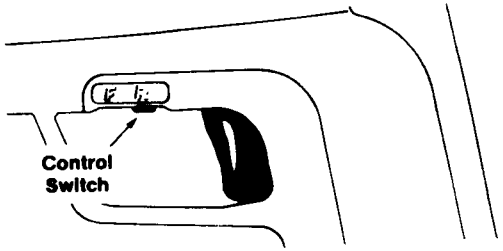
SCREW DRIVING

For driving fasteners, the Control Switch Button should be in the "F" position (**Figure 1**).

Use the "R" position (**Figure 2**)for removing fasteners. When moving from FORWARD to REVERSE, or vise versa, always release the trigger first.



FORWARD
Figure 1

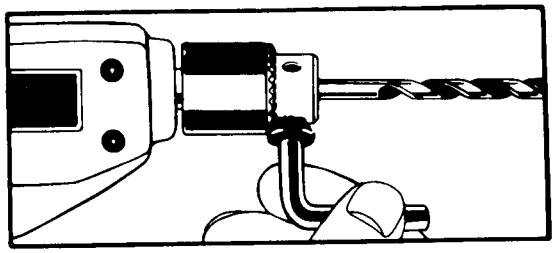


REVERSE
Figure 2

CHUCK & KEY

Turn Chuck Key counterclockwise to open chuck jaws, place bit in chuck as far as it will go and then pull it out far enough so that the chuck does not touch the flutes of the bit. Tighten chuck collar by hand. **Please chuck key in each of the three holes, and tighten in clockwise directions (Figure 3)**. It's important to tighten chuck with all three holes to prevent slippage. To release bit, turn chuck key counterclockwise in just one hole, then loosen chuck by hand.

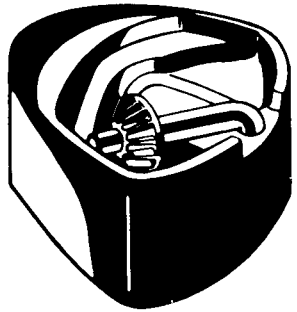
Figure 3



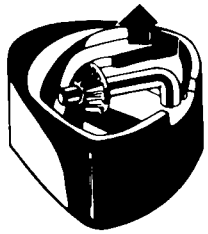
CHUCK & KEY (Continued)

When not in use, the chuck key can be stored in the end of the handle. To remove the key, pull it firmly upward out of its holding socket. To replace key, push key's handle firmly and completely down into the socket (**Figure 4**).

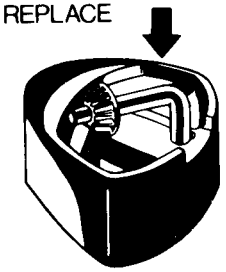
Figure 4



REMOVE



REPLACE



To remove the chuck from the Drill, for using a threaded shank accessory or for chuck replacement, open the chuck and remove screw in bottom of chuck (left hand thread). Insert the key in the chuck and tap it sharply in the direction the tool normally rotates — see at right. This will loosen the chuck shank threads and the chuck may be unscrewed by hand **(See Figure 5)**.

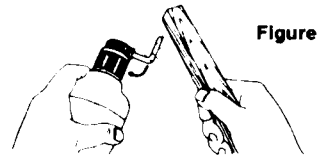


Figure 5

Do not lubricate the three chuck jaws or the inside of the chuck; however, a light film of oil can be applied to the outside of the chuck to prevent any rust from forming.

DRILLING (FIGURE 6)

1. **Use sharp drill bits only.** For WOOD, use twist drill bits, spade bits, power auger bits or hole saws. For METAL, use high-speed steel twist drill bits. For MASONRY, such as brick, cement, cinder block, etc., use carbide-tipped bits.
2. 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 material.
3. Center-punch an indentation at the point to be drilled. This will overcome tendency of bit to slip around on a smooth surface. Place the tip of bit in indentation and turn motor "ON." Holes can be started at low speed without a center-punch.
4. 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 motor or deflect bit. To minimize stalling on breaking through the material, reduce the pressure on drill and ease the bit through last part of hole.
5. Hold drill firmly to control the twisting action of the drill.
6. When drilling larger holes, it is helpful to drill a small pilot hole first.

OPERATION

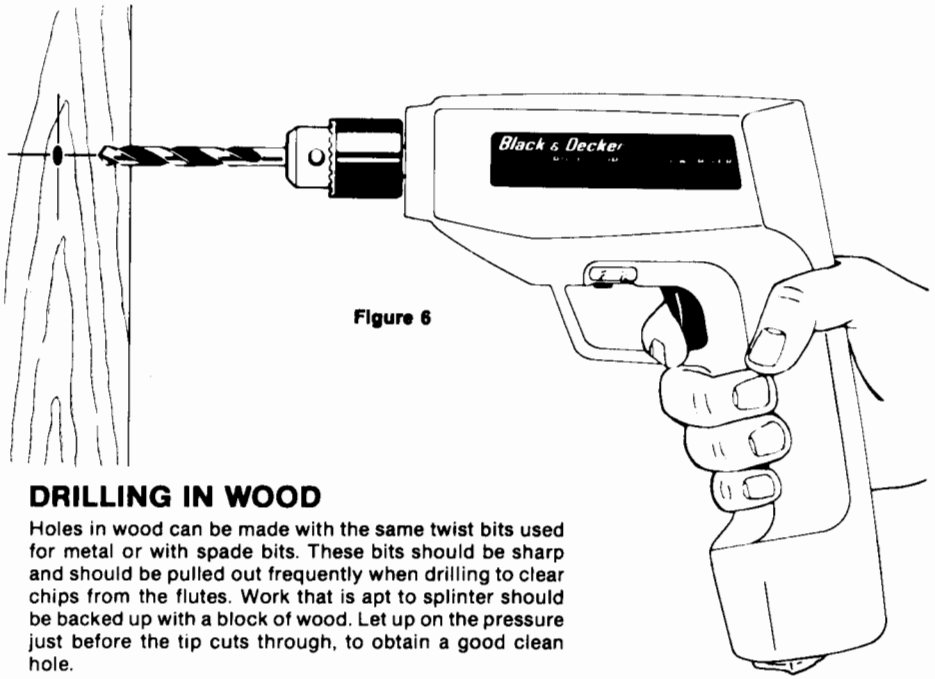


Figure 6

DRILLING IN WOOD

Holes in wood can be made with the same twist bits used for metal or with spade bits. These bits should be sharp and should be pulled out frequently when drilling to clear chips from the flutes. Work that is apt to splinter should be backed up with a block of wood. Let up on the pressure just before the tip cuts through, to obtain a good clean hole.

DRILLING IN METAL

Use a cutting lubricant when drilling ferrous 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.

ACCESSORIES

Recommended accessories for use with your Drill are listed below and in Black & Decker catalogs. (CAUTION: The use of any other accessory might be hazardous.) All types of Bits, Hole Saws, Screw Driving Attachments, Rotary Files & Rasps, Angle Heads, Sanding and Polishing Accessories, etc. are available from your B&D Distributor or local B&D Service Center.

For safety in use, the following accessories should be used only in the sizes specified below:

BITS, METAL DRILLING — Up to 3/8"
BITS, MASONRY DRILLING — Up to 3/8"
HOLE SAWS — Up to 1"

Use any Black & Decker consumer drill accessories whose recommended speed is 3200 RPM or higher.

We strongly recommend that your first purchase be the No. U-2106 Safety Glasses which should be worn when using all drill accessories.

CLEANING & LUBRICATION

Use only mild soap and a damp cloth to clean the tool. Many household cleaners contain chemicals which could seriously damage the plastic. Also, do not use gasoline, turpentine, lacquer or paint thinner, dry cleaning fluids or similar products. Never let any liquid get inside the tool; never immerse any part of the tool in a liquid.

Self-lubricating bearings are used in the tool and periodic relubrication is not required. However, it is recommended that, once a year, you take or send the tool to a B&D Service Center for a thorough cleaning and inspection.

DRILL STORAGE

1. The best storage place is one that is cool and dry—away from direct sunlight, heating pipes and ducts, furnaces, etc.
2. Best storage temperature is approximtely +75°F. Do not store where temperatures may go below +40°F or above +105°F. Avoid storage in outside metal buildings where the temperature could go above +105°F in summer, as this could damage the batteries.
3. Long storage will not harm the Drill, or Charger. Under the proper conditions (given above) they can normally be stored for 3-5 years or more without harm.

SERVICE

At some time in the life of the drill, the batteries will no longer accept a full charge, If this condition cannot be corrected by the procedure outlined under "Charging the Batteries," note 7, the batteries will have to be replaced. Take or send your drill to your local Black & Decker Service Center for battery replacement.