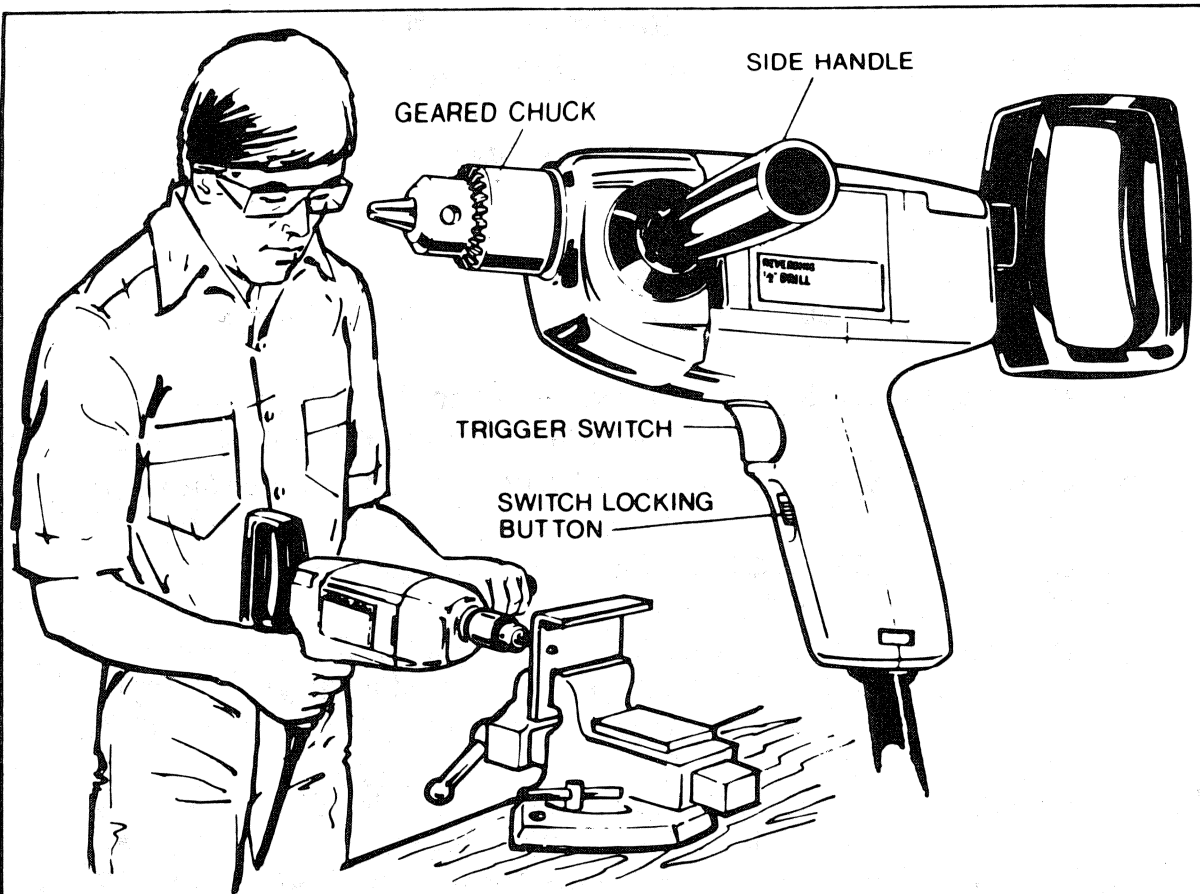


BLACK & DECKER® INSTRUCTION MANUAL



Your new drill offers you top value, plus years of time-saving convenience and service. You can drill holes up to 1/2" in steel, 1/2" in masonry, and 1" in wood with this new Drill. You can use Hole Saws up to 2 1/2" in diameter for cutting holes in wood or composition boards up to 3/4" thick. All this power and performance comes to you in a Drill that is light in

weight and very comfortable to handle. Because of its high torque, or twisting power, it is strongly recommended that you hold the Drill with both hands whenever possible. Please read all of the safety rules and instructions carefully, and 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 (including brush inspection and replacement) should be performed by Black & Decker Service centers or other qualified organizations, always using Black & Decker replacement parts. When servicing Double-Insulated Tools, USE ONLY IDENTICAL REPLACEMENT PARTS.

7224
1/2" DOUBLE
INSULATED
DRILL

IMPORTANT SAFETY INSTRUCTIONS (FOR ALL TOOLS)

WARNING: When using Electric Tools, basic safety precautions should always 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, and 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. **DON'T OVERREACH.** Keep proper footing and balance at all times.
13. **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.
14. **DISCONNECT TOOLS.** When not in use, before servicing, and when changing accessories, such as blades, bits, cutters.
15. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of

checking to see that keys and adjusting wrenches are removed from tool before turning it on.

16. **AVOID UNINTENTIONAL STARTING.** Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.
17. **OUTDOOR USE EXTENSION CORDS.** When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
18. **STAY ALERT.** Watch what you are doing. Use common sense. Do not operate tool when you are tired.
19. **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 center. Do not use tool if switch does not turn it on and off.
20. **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.

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 DRILL!** Hold the Drill only by the plastic handles to prevent electric shock if you drill into a "live" wire.

DOUBLE INSULATION

Your Drill 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 Drill is equipped with a two-pronged 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

Double insulated tools have 2 wire cords, and can be used with 2 or 3 wire extension cords. Only round jacketed extension cords should be used, and we recommend that they be listed by Underwriters Laboratories (U.L.). If the extension will be used outside, the cord must be

suitable for outdoor use. Any cord marked as outdoor can also be used for indoor work. The letters "WA" on the cord jacket indicate that it is suitable for outdoor use.

An extension cord must have adequate wire size (AWG or American Wire Gauge) for safety, and to prevent loss of power and overheating. The smaller the gauge number of the wire, the greater the capacity of the cable, that is 16 gauge has more capacity than 18 gauge. When using more than one extension to make up the total length, be sure each individual extension contains at least the minimum wire size.

To determine the minimum wire size required, refer to the chart below:

CHART FOR MINIMUM WIRE SIZE (AWG) OF EXTENSION CORDS								
Nameplate Rating - Amps	Total Extension Cord Length - Feet							
	25	50	75	100	125	150	175	200
0 - 10.0	18	18	16	16	14	14	12	12
10.1 - 13.0	16	16	14	14	14	12	12	12
13.1 - 15.0	14	14	12	12	12	12	12	—

Before using an extension cord, inspect it for loose or exposed wires, damaged insulation, and defective fittings. Make any needed repairs or replace the cord if necessary. Black & Decker has extension cords available that are U.L. listed for outdoor use.

SAVE THESE INSTRUCTIONS

SIDE HANDLE

Drop the hexagon-head bolt into the handle and shake the handle if necessary until the bolt threads protrude at the bottom. Grasp the threads with two fingers and pulling down, twist the bolt until it will no longer turn (there is a hexagon-shaped recess inside the handle and the bolt head should fit down into it to keep the bolt from turning).

Place the Drill on its side as shown in Figure 3 and, holding the bolt down with a pencil or screwdriver, turn the handle clockwise to thread it completely firmly into the threaded hole in the Drill.

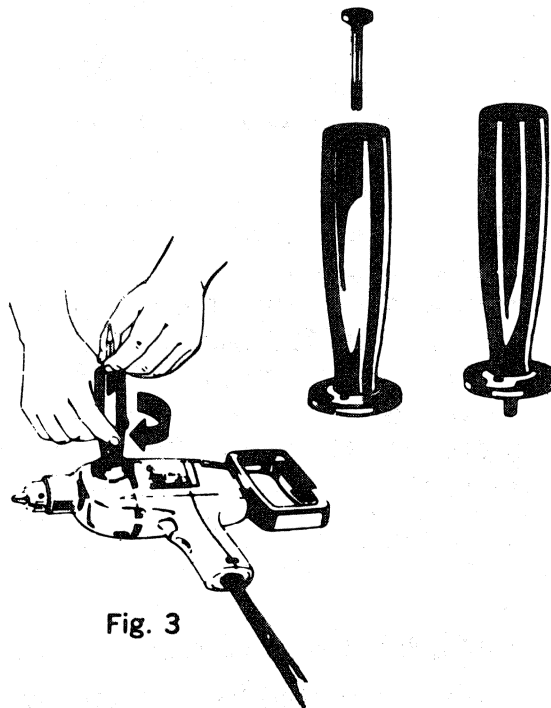


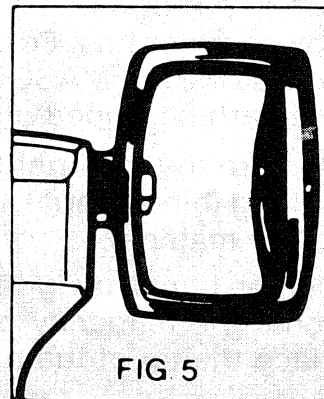
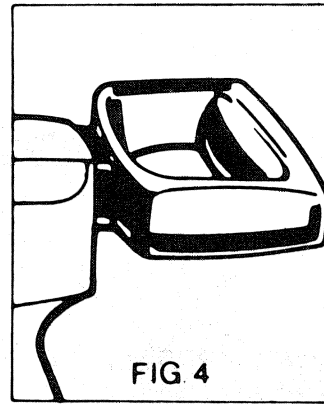
Fig. 3

CAUTION: Always use and hold firmly the Auxiliary Side Handle if there is any chance of the bit binding or locking up in the hole. This is a high-torque Drill — always hold it with both hands when operating.

SPADE HANDLE

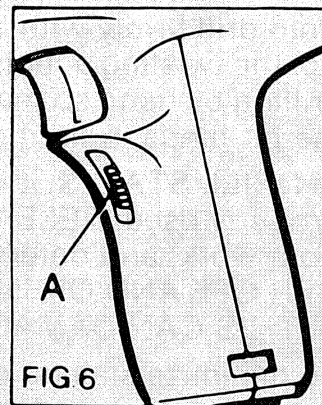
For comfortable handling, or for needed working clearance, you can attach the Spade Handle either horizontally (Figure 4) or vertically (Figure 5). To change the handle position, loosen the holding screw to the point where you can pull back on the handle and rotate it 90°. Then push handle forward and retighten screw.

NOTE: Either the Spade Handle or the Auxiliary Handle can be completely removed from the tool if working clearance is needed. **CAUTION:** Both handles should not be removed at the same time as two hands should always be used when operating this Drill.



SWITCH

To start Drill, depress trigger switch; to stop Drill, release trigger. To lock trigger in "ON" position for continuous operation, depress trigger and push up locking button ("A" Figure 6), then gently release trigger. To release locking mechanism, depress trigger fully, then release it. Before using the tool (each time) be sure that the lock button release mechanism is working freely.

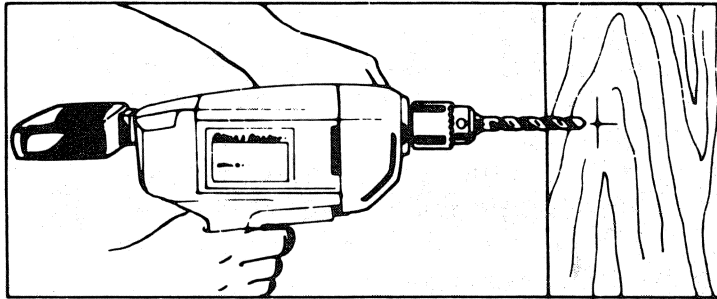


REVERSING SWITCH

For removing screws or easing drill bits out of tight holes, slide the Reversing Switch, Figure 7, toward "R" to reverse the drill motor. The trigger switch should be released to the "OFF" position before moving the reversing switch. After any reversing operation, return switch to the forward, "F" position.



DRILLING



1. Always unplug the Drill when attaching or changing bits or accessories.
2. Use sharp drill bits only. For WOOD, use twist drill bits, spade bits, power auger bits. 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.
3. 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.
4. Center-punch an indentation at the point to be drilled. This will overcome the tendency of the bit to slip around on a smooth surface. Place the tip of the bit in the indentation and turn motor "ON".
5. 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.
6. Hold drill firmly with both hands, using the side handle to help control the twisting action of the drill. **Do not lock** the switch "ON" when drilling by hand so that you can instantly release the trigger switch if the bit binds in the hole.
7. 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.**
8. To minimize stalling on breaking through the material, reduce pressure on drill and ease the bit through the last fractional part of the hole.
9. Keep the motor running when pulling the bit back out of a drilled hole. This will help prevent jamming.
10. 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.
11. 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.

ACCESSORIES

Recommended accessories for use with your Drill are listed below. (CAUTION: The use of any other accessory or attachment might be hazardous). For safety in use, the following accessories should be used only in the sizes specified below:

BITS, METAL DRILLING—Up to 1/2" diameter.

BITS, MASONRY DRILLING—Up to 1/2" diameter.

BITS, WOOD DRILLING—Up to 1" diameter.

HOLE SAWS—Up to 2 1/2" diameter, 3/4" thick in wood.

GRINDING WHEELS—Type I only; up to 2" diameter; up to 1/2" thick.

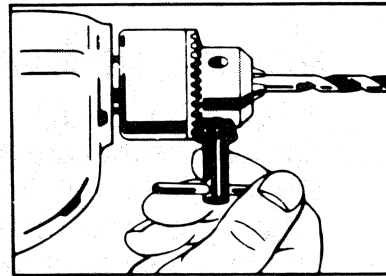
Use any Black & Decker consumer drill accessories whose recommended speed is 3200 RPM or higher.

The accessories listed in this manual are available at extra cost from your local dealer or Black & Decker Service Center. A complete listing of service centers is included with your tool.

If you need assistance in locating any accessory, please contact: Black & Decker (U.S.) Inc., Consumer Service Department, 626 Hanover Pike, P.O. Box 618, Hampstead, MD 21074-0618.

CHUCK

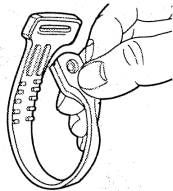
UNPLUG DRILL. Open chuck jaws by turning collar with fingers and insert shank of bit about 3/4" into chuck. Tighten chuck collar by hand. Place chuck key in each of the three holes, and tighten in clockwise direction. It's important to tighten chuck with all three holes. To release bit, turn chuck key counterclockwise in just one hole, then loosen chuck by hand.



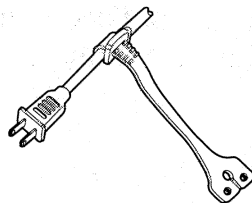
CHUCK KEY HOLDER

1. Push double-hole end of holder through slot in other end of holder (Sketch A).
2. Slip loop over electric plug and draw loop tight around cord (Sketch B).
3. Push end of chuck key handle through two holes in end of holder (Sketch C).

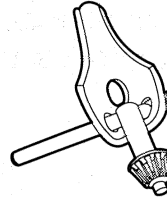
Sketch A



Sketch B



Sketch C



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 into a liquid.

Self-lubricating bearings are used in the tool and periodic relubrication is not required. In the unlikely event that this drill should ever require service, take or send it to your local Black & Decker Service Center. Service center addresses are packed with your tool.

Black & Decker's Full Two Year Home Use Warranty states that, in case of defect, you may return the tool to the place of purchase for a free replacement (if it is a participating retailer) or you may take it to a Black & Decker Service Center.

HOME USE WARRANTY (A FULL TWO YEAR WARRANTY)

Black & Decker (U.S.) Inc. warrants this product for two years against any defects that are due to faulty material or workmanship. Please return the complete unit, transportation prepaid, to the seller (if a participating retailer) for free replacement (proof of purchase may be required). This unit may also returned to a Black & Decker Service Center or Authorized Service Station, listed under "Tools Electric" in the yellow pages for free replacement or repair at our option. This warranty does not apply to accessories. This warranty gives you specific legal rights and you may have other rights which vary from state to state. Should you have any questions, contact your nearest Black & Decker Service Center Manager.

Every Black & Decker tool is of the highest quality. If you wish to contact us regarding this product, please call toll free between 8:00 a.m. and 8:00 p.m. ET, seven days a week.
1-800-762-6672

Like most Black & Decker tools, your Drill is listed by Underwriters' Laboratories to ensure that it meets stringent safety requirements.

This symbol on the nameplate means the product is Listed by Underwriters' Laboratories, Inc.



See 'Tools-Electric'
—Yellow Pages—
for Service & Sales

BLACK & DECKER (U.S.) INC.
U.S. Power Tools Group
701 E. Joppa Road • Towson, MD 21286