

## INSTRUCTIONS

**Black & Decker**

**DOUBLE INSULATED**

7004

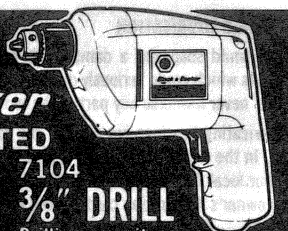
**1/4" DRILL**

Drilling capacity:  
metal — 1/4"; hardwood — 1/2"

7104

**3/8" DRILL**

Drilling capacity:  
metal — 3/8"; hardwood — 3/4"



Power supply: 120 volts, 50/60 Hz (normal house current)

### IMPORTANT SAFETY INSTRUCTIONS

**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 non-skid 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.

### SAVE THESE SAFETY RULES FOR FUTURE USE

**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.

**Your Drill is DOUBLE-INSULATED** for added protection against injury resulting from a possible electrical insulation failure within the tool. **CAUTION:** When servicing, use only identical replacement parts. Replace or repair damaged tool cord or extension cord.

**EXTENSION CORDS** Double insulated tools have 2 wire cords, and can be used with 2 wire 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 out side, 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 the cord 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:

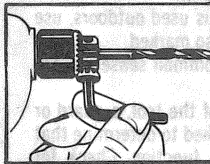
CHART FOR MINIMUM WIRE SIZE (AWG) OF EXTENSION CORDS

NAMEPLATE RATING-AMPS	TOTAL EXTENSION CORD LENGTH - FEET						
	25	50	75	100	125	150	175
0-10.0	18	18	16	16	14	14	12
10.1-13.0	16	16	14	14	14	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.

OVER

## CORRECT USE OF CHUCK

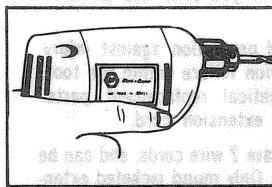


**UNPLUG DRILL!** Turn collar to open chuck jaws. Insert accessory shank into chuck as far as it will go. Tighten chuck collar first by hand, and then with chuck key, using all three holes. To release shank, turn chuck key counter-clockwise in just one hole, then loosen chuck by hand.

## 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 (located below the trigger), then gently release trigger. To release locking mechanism, depress trigger fully, then release it.

**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. Be sure to release the switch locking button before disconnecting the plug from the power supply. Failure to do so will cause the tool to start immediately the next time it is plugged in. Damage or injury could result.



## DRILLING

1. 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, 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.
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 material.
4. 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."
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 motor or deflect bit. To minimize stalling on breaking through the material, reduce pressure on drill and ease the bit through last part of hole.
6. Hold drill firmly to control the twisting action of the drill.
7. THE DRILL STALLS if 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 ATTEMPT TO START A STALLED DRILL.
8. Keep motor running when pulling bit back out of a drilled hole. This will help prevent jamming.
9. Use a cutting lubricant when drilling metals. The exceptions are cast iron and brass which should be drilled dry. The cutting lubricant that works best is sulphurized cutting oil. Aluminum is best drilled with kerosene.

## CLEANING & LUBRICATION

Use only mild soap and a damp cloth to clean the tool. Other cleaners contain chemicals which could seriously damage the plastic. 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 your drill should ever require service, take or send it to your local Black & Decker Service Center. Service center addresses are listed on the owner's registration card packed with your tool.

## 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 service organizations, always using Black & Decker replacement parts.

## ACCESSORIES

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

- BITS, METAL DRILLING—Up to 1/4" with 1/4" DRILL; up to 3/8" with 3/8" DRILL.
- BITS, MASONRY DRILLING—Up to 1/2" with 1/4" DRILL; up to 3/4" with 3/8" DRILL.
- BITS, WOOD DRILLING—Up to 1/2" with 1/4" DRILL; up to 3/4" with 3/8" DRILL.
- HOLE SAWS—Up to 1-1/8" with 1/4" DRILL; up to 1-1/2" with 3/8" DRILL.
- WIRE BRUSHES—Up to 3" diameter.
- GRINDING WHEELS—Type 1 only; up to 2" diameter; up to 1/2" thick.
- BUFFING WHEELS—Up to 4" diameter.
- BACKING PADS—4-5/8" diameter. SANDING DISC & POLISHING BONNETS up to 5" diameter. Use any Black & Decker consumer drill accessories whose recommended speed is 3200 RPM or higher.

## HOME USE WARRANTY

### (A FULL ONE-YEAR WARRANTY)

Black & Decker warrants this product for one year 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). The unit may also be 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.

**FOR SERVICE**—Black & Decker service centers are nationwide. See "Tools - Electric" in the yellow pages for the nearest location.

**BLACK & DECKER (U.S.) INC., Consumer Power Tools Division**  
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