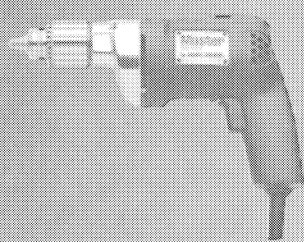
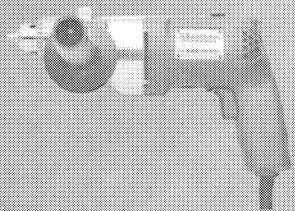


**Master**  
SERIES  
by BLACK&DECKER.

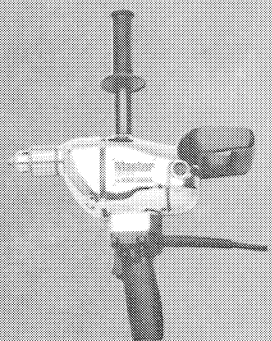
**5111 Holgun® 3/8" VSR Drill:** Premium quality 3/8" variable speed reversing pistol grip drill designed for long life in heavy-duty professional use. The drill performs well in a wide variety of metals, wood, masonry and composite materials.



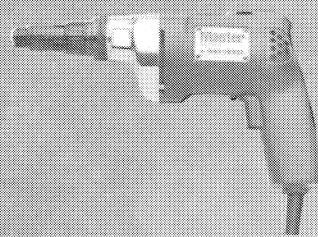
**5130 Holgun® 1/2" VSR Drill:** Premium quality 1/2" variable speed reversing pistol grip drill with a maximum of power for its compact size. The extremely versatile drill is especially designed for drilling larger diameter holes. The triple gear reduction provides a no-load speed of 600 RPM with very high torque.



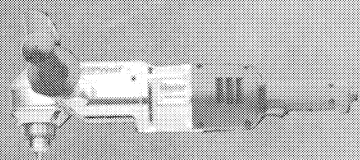
**5140 1/2" Spade Handle Drill:** Premium quality spade handle drill designed to meet the heaviest industrial and construction demands. It is often used to mix mud in drywall and plastering applications.



**5274 Versa-Clutch® Scrugun® VSR Screwdriver:** A premium quality adjustable clutch screwdriver designed to drive a wide variety of fastener sizes to perfect tightness in the most demanding situations. The exclusive Versa-Clutch feature allows the user to override the selected torque by varying the pressure applied to the tool.



**5158 TimberWolf® 1/2" Right Angle Drill:** Premium quality 1/2" right angle drill designed specifically for plumbers and electricians who need to drill large diameter holes through studs and joists while working in extremely tight quarters.



**5159 TimberWolf® 1/2" Right Angle Drill Kit:** The same high quality 1/2" right angle drill with a metal kit box.

**Black & Decker (U.S.) Inc.**  
10 North Park Drive  
P.O. Box 798  
Hunt Valley, Maryland  
21030-0798

Form No. 741347

Printed in U.S.A.

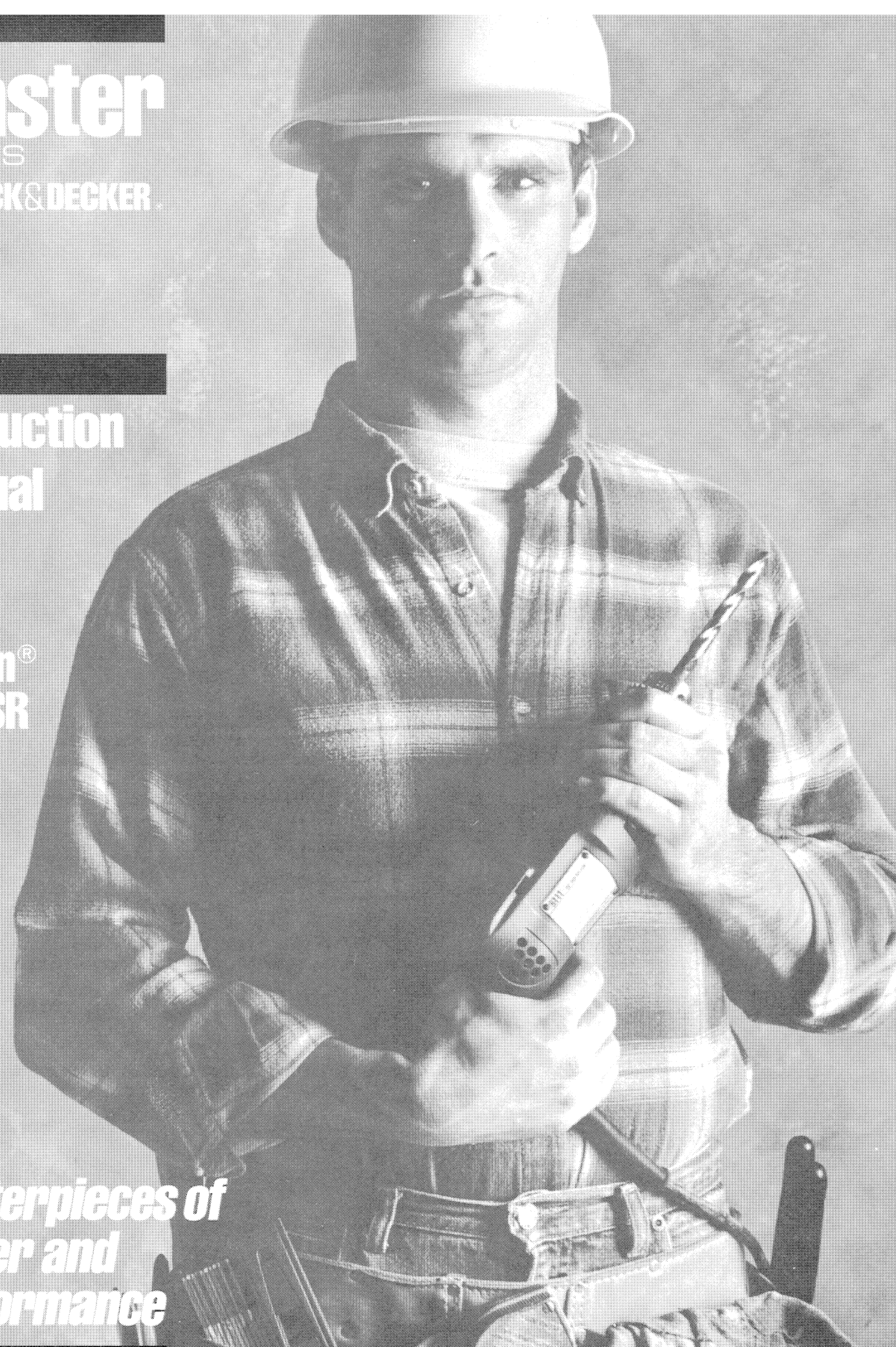
(APR87-CD-2) The Black & Decker Corporation ©1987

**Master**  
SERIES  
by BLACK&DECKER.

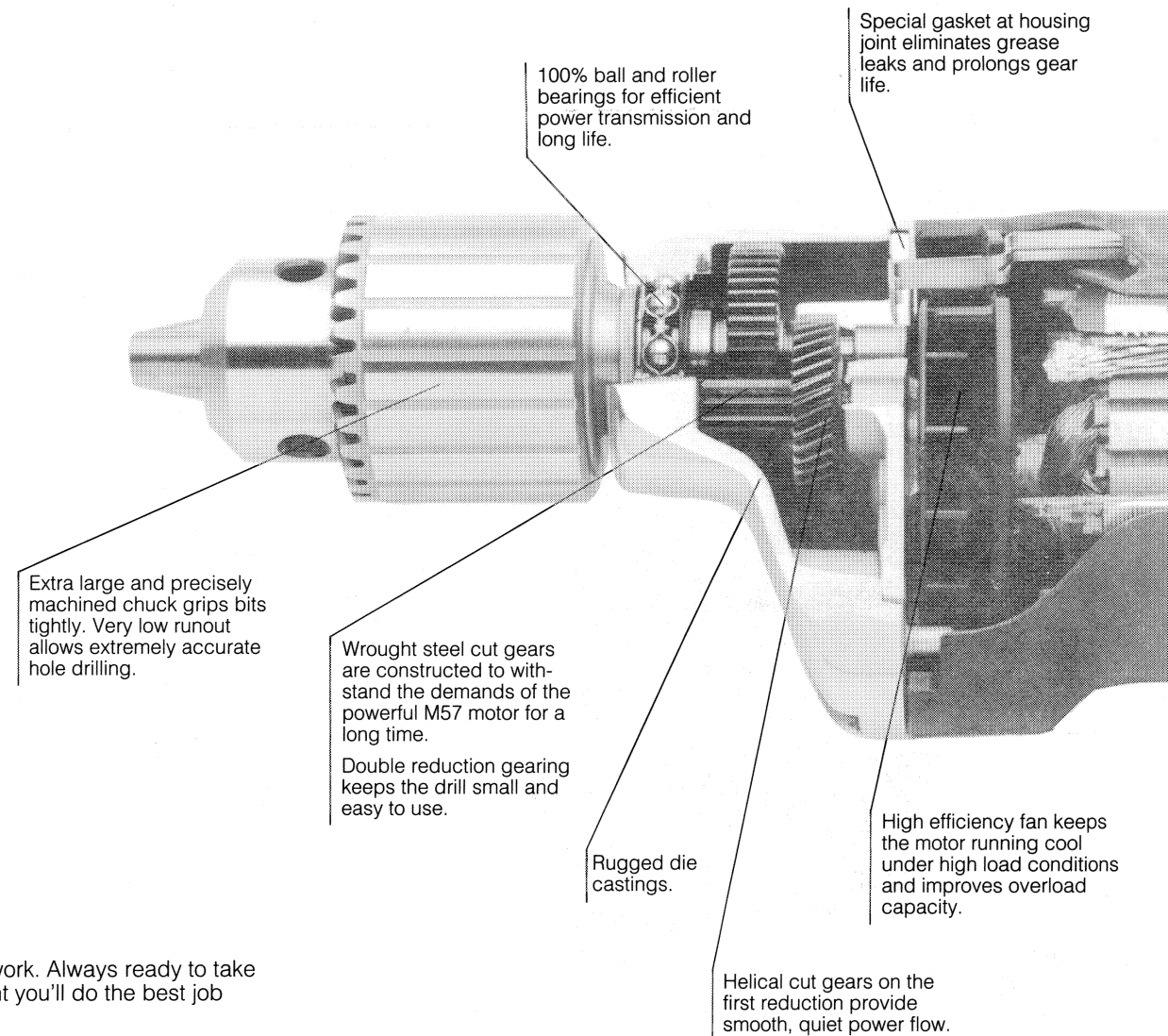
## Instruction Manual

### 5111 Holgun® 3/8" VSR Drill

*Masterpieces of  
Power and  
Performance*



# Finally, a drill designed to improve upon perfection.



**You're a pro.** Proud of your work. Always ready to take on a new challenge. Confident you'll do the best job possible.

With the new Master Series™ drill you can count on doing the job even better. Because your new drill is better than any you've used before.

This drill was developed by Black and Decker with your demands in mind. The Master Series gives you more of what you want. More power. More durability. More performance. And it's better. Better design. Better parts. Better service.

You get lots of power from the 5-amp M57 motor without sacrificing the lightweight, compact design.

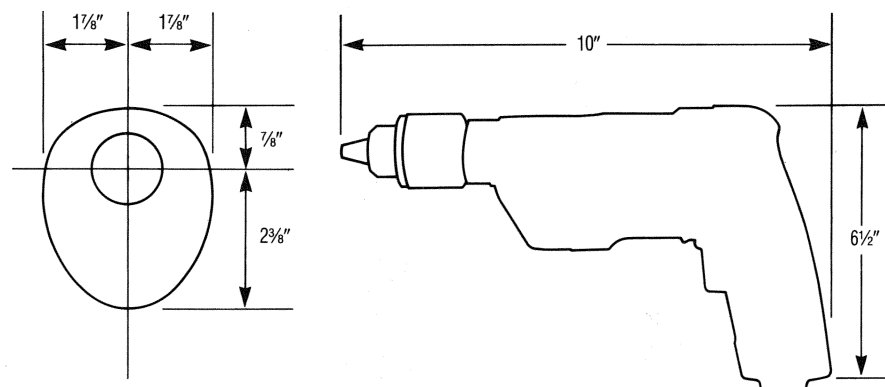
You get more durability from the 100% anti-friction bearings and wrought steel cut gears that withstand the highest loads.

You get more performance with helical cut gears on the first reduction that make your drill run smoother and last longer.

The polished metal housings guarantee you superior quality inside and out.

Look at the other special features of your new drill as pictured in the cut-away view we've provided. Once you use your new Master Series drill, we think you're going to agree Master Series tools are masterpieces of power and performance.

## Size and dimensional clearances:



## Warranty

Black & Decker (U.S.) Inc. warrants this product for one year from date of purchase. We will repair without charge, any defects due to faulty material or workmanship. Please return the complete unit, transportation prepaid, to any Black & Decker Service Center or Authorized Service Station listed under "Tools Electric" in the yellow pages. This warranty does not apply to accessories or damage caused where repairs have been made or attempted by others.

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



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



## Notes

Advanced design M57 motor provides very high power in a light, compact drill.

High load capacity brush gear with the Check Point™ feature that prevents commutator damage when the brushes eventually wear out.

Molded polymer housings resist high impact, high temperature, and damage from most common industrial solvents.

The switch is tightly sealed to protect against dust and securely mounted to protect it from damage when dropped or knocked.

Reverse switch conveniently located above the power trigger is useful for backing out self-feed bits.

Removable cord protector allows for easy cord replacement.

10 foot rubber power cord provides extra length and stays flexible at low temperatures.

Double insulated construction with a 3-conductor grounded power cord for your safety.

Variable speed gives you control when you need it:

- Drilling in hard materials without a center punch
- Starting on a curved surface
- Working on a surface that could be marred by bit walk

### Specifications:

Chuck capacity (inches)	0-3/8
Current rating @ 120V AC (amps)	5.0
No load speed (rpm)	0-1200 rpm
Maximum power output (watts/horsepower)	470/0.6
Maximum torque output (ft. lbs.)	18
Power output @ rated current (watts/horsepower)	270/.36
Torque output @ rated current (ft. lbs.)	2
Speed @ rated current (rpm)	920
Drilling capacity (inches):	
Twist bit in cold rolled steel	3/8
Spade bit in oak	1 1/4
Hole saw in cold rolled steel	2
Auger bit in oak	3/4
Masonry bit in concrete	3/16
Overall gear reduction ratio	22.91:1
Spindle thread	1/2-20
Weight w/o cord (lbs.)	3.4
Shipping weight (lbs.)	5.4

### Standard equipment:

Chuck key and chuck key holder

### Commonly used service parts' numbers:

Power supply cord	36480-98
Separable cord protector	24288-00
Switch	450270-00
Brushes (2 required)	445861-01
Brush springs (2 required)	445860-00
Armature	450969-31
Field	449888-71
Chuck key	4794-01
Chuck key holder	34519-00
Chuck (includes chuck key)	23229-00

### Regulatory agency listing and compliance

The 5111 Holgun® is U.L. listed and in compliance with OSHA.



## 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 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.

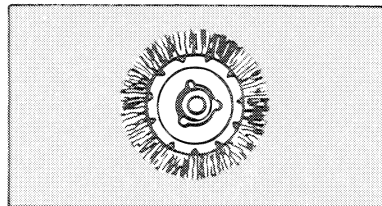
**SAVE THESE INSTRUCTIONS FOR FUTURE USE.**

**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 handle to prevent shock if you drill into a "live" wire.

## Notes

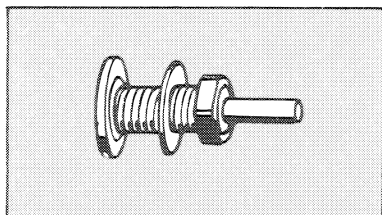
## Wire Wheel Brushes

Use in cleaning and removing rust, scale, old paint. 4" Fine Brush, crimped; Maximum safe RPM—4,500  
4" Coarse Brush, crimped; Maximum safe RPM—4,500



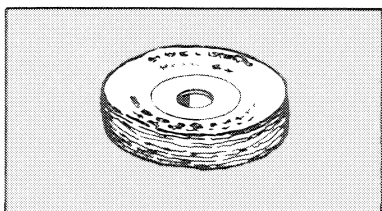
## Wheel Arbors

Carry wire wheel brushes and buffing wheels. 1/4" Arbor (1/2" dia., 1/4" shank). 1/2" Arbor (1/2" dia., 1/2" shank).



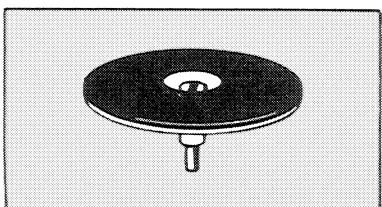
## Buffing Wheels

3" x 3/8" x 1/2" Cotton Buff.



## Rubber Backing Pad

4 3/4" Rubber Backing Pad with plain shank.



## Extension Cords

Tools that have 3-wire cords requiring grounding must only be used with extension cords that have 3-prong grounding type plugs and 3-pole receptacles. Only round jacketed extension cords should be used, and we recommend that they be listed by Underwriters Laboratories (U.L.) (C.S.A. in Canada). 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 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.

NAMEPLATE RATING-AMPS	CHART FOR MINIMUM WIRE SIZE (AWG) OF EXTENSION CORDS							
	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. (C.S.A. in Canada) listed for outdoor use.

## SAVE THESE INSTRUCTIONS

## Lubrication

All ball bearings used are factory lubricated to last the life of the bearings. All needle bearings used receive their lubrication from the grease in the gear case. Clean and re-lubricate gear case yearly or whenever servicing requires the gear case to be removed. Use type and quantity of grease shown on Parts Bulletin packed with your tool.

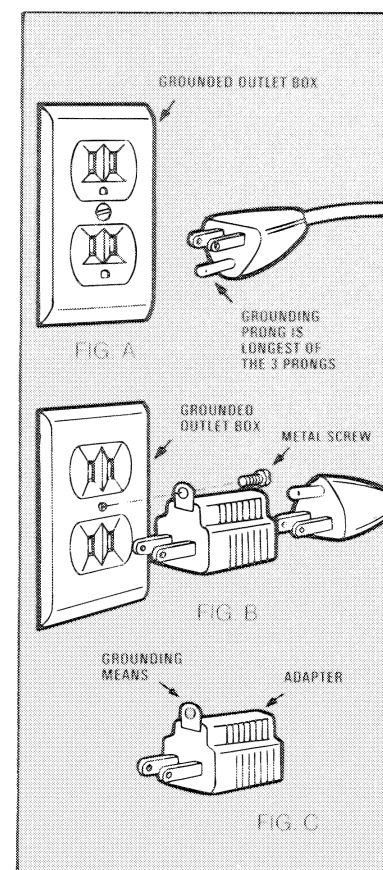
Gear case is removed by removing the three screws from the front of the tool. If the chuck is too large to permit removal of the two top screws, see instructions for chuck removal.

## Grounding

This tool should be grounded while in use to protect the operator from electric shock. The tool is equipped with an approved three-conductor cord and three prong grounding type plug to fit the proper grounding type receptacle. The green (or green and yellow) conductor in the cord is the grounding wire. Never connect the green (or green and yellow) wire to a live terminal. Your unit is for use on less than 150 volts, it has a plug like that shown in Figure A. An adapter, Figure B and C, is available for connecting Figure A plugs to two-prong receptacles. The green-colored rigid ear, lug, etc., must be connected to a permanent ground such as a properly grounded outlet box.

**ADAPTER SHOWN IN FIGURES B & C IS NOT FOR USE IN CANADA.**

**CAUTION:** When servicing all tools, **USE ONLY IDENTICAL REPLACEMENT PARTS.** Repair or replace damaged cords.



## Motor Brushes

Your Drill uses the B&D "Checkpoint" brush system. The tool will stop when the brushes wear out. This prevents damage to the motor.

## Switches

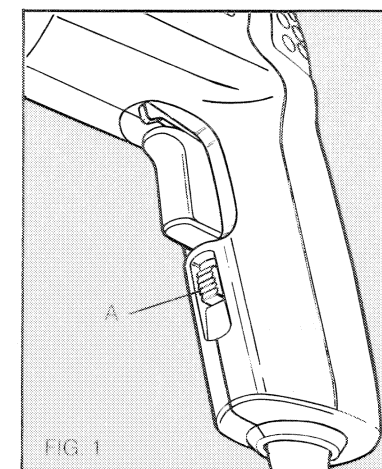
To start Drill, depress trigger switch; to stop Drill, release trigger. To lock trigger in "ON" position for continuous operation, depress trigger and push up locking button "A" Figure 1, then gently release trigger. To release locking mechanism, depress trigger fully, then release it. Before using the tool (each time) be sure that the lock button release mechanism is working freely.

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.

The locking feature is for use only when the tool is firmly mounted in a drill press stand or other stationary frame.

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.

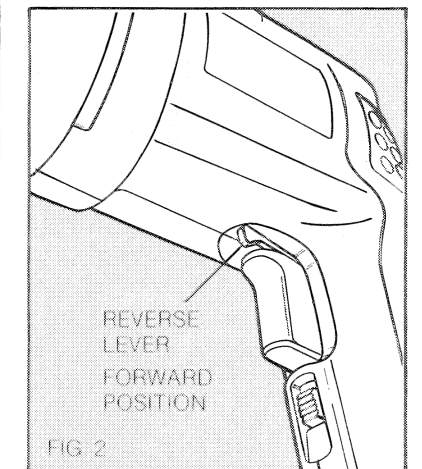
The Variable Speed Trigger Switch permits speed control — the



farther the trigger is depressed, the higher the speed of the Drill. **NOTE:** Use lower speeds for starting holes without a center punch, drilling in metal or plastics, driving screws, drilling ceramics, or mixing paint. Higher speeds are better for drilling wood and composition boards, and for using abrasive and polishing accessories.

The Reversing Switch is used for withdrawing bits from tight holes and removing screws at lower speeds. It is located above the trigger switch (Fig. 2). To reverse the motor, release the trigger **FIRST** and then push the lever to the right. After any reversing operations, return switch to forward position by pushing it to the left.

**NEVER** attempt to actuate the reversing switch when the drill is running or coasting.



## Chuck

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 the chuck by hand.

## Operation

### 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, or hole saws. For METAL, use highspeed 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. 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.**
7. To minimize stalling or breaking through the material, reduce pressure on drill and ease the bit through the last fractional part of the hole.
8. Keep the motor running when pulling the bit back out of a drilled hole. This will help prevent jamming.
9. With Variable Speed Drills there is no need to center punch the point to be drilled. Use a slow speed to start the hole and accelerate by squeezing the trigger harder when the hole is deep enough to drill without the bit skipping out.

## 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.

## Drilling In Wood

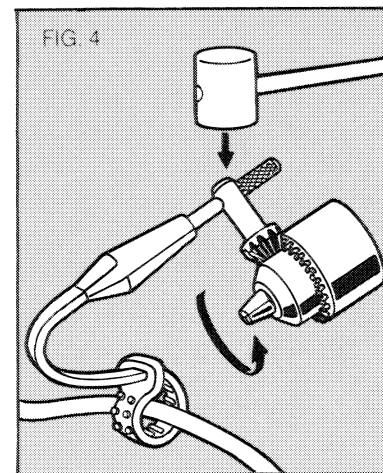
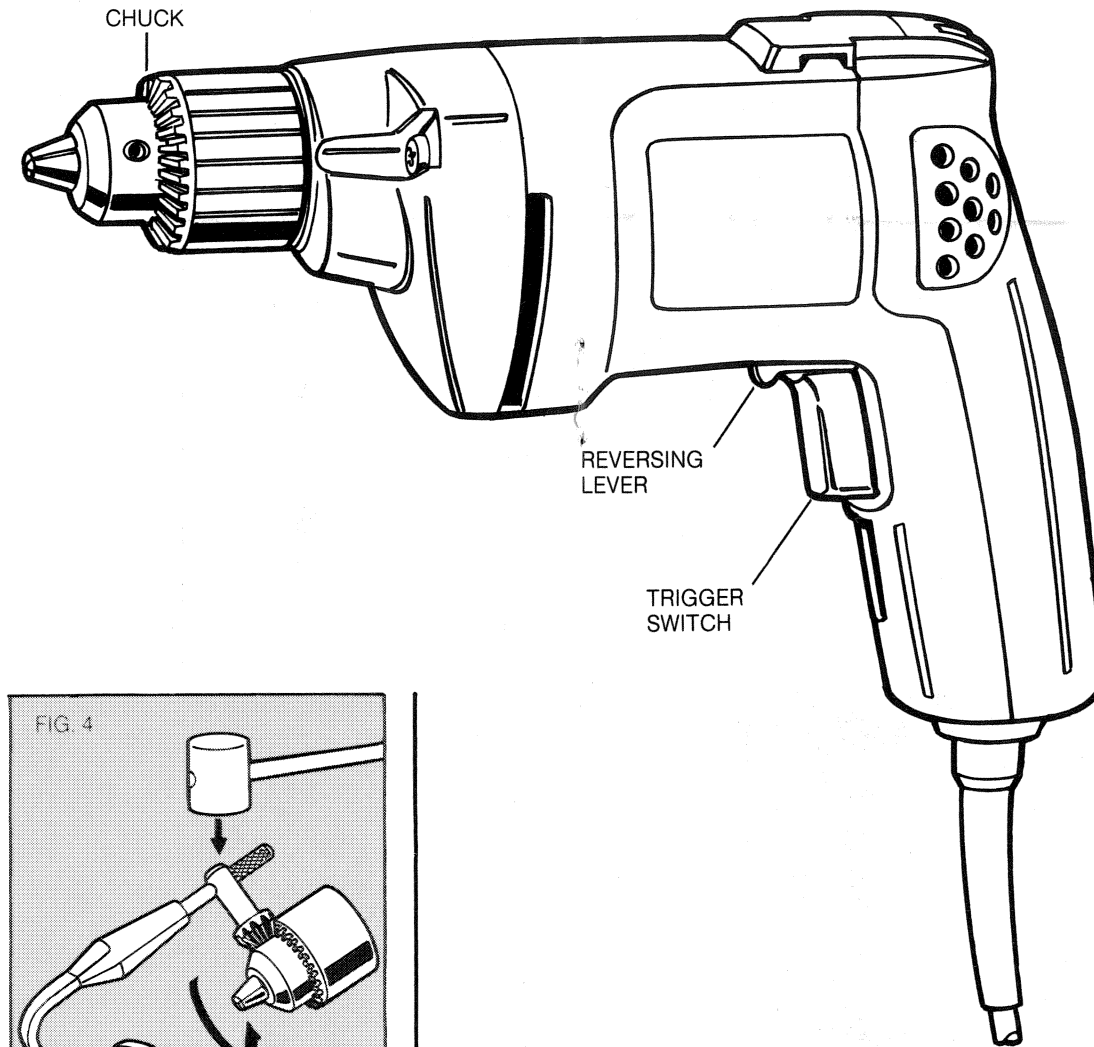
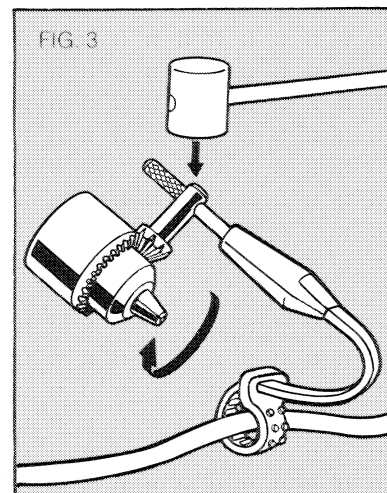
Holes in wood can be made with the same twist drills used for metal. These bits may overheat unless pulled out frequently to clear chips from the flutes. For larger holes, use Power Drill Wood Bits. Work that is apt to splinter should be backed up with a block of wood.

## Drilling In Masonry

Use the carbide tipped masonry bits listed in this manual. Drill at low speeds with firm, but not excessive pressure. Too much force will cause chipping and cracking of these brittle materials. A steady flow of fine dust usually indicates the proper drilling rate.

## Chuck Removal

1. Place chuck key in chuck as shown in Figure 3. Using a wooden mallet or similar object, strike key sharply in a **CLOCKWISE** direction. This will loosen screw inside chuck (Figure 3).
2. Open chuck jaws fully. Insert screwdriver 3/16" hex wrench into front of chuck between jaws to engage screw head. Remove screw by turning clockwise (left-hand thread).
3. Place key in chuck as shown in Figure 4. Using a wooden mallet or similar object, strike key sharply in a **COUNTER-CLOCKWISE** direction (Figure 4). This will loosen chuck so that it can be unscrewed by hand.



## Drill Accessories

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 on the owner's registration card packed with your tool.

If you need assistance in locating any accessory, please contact: Black & Decker (U.S.) Inc., User Services Department, 10 North Park Drive, P.O. Box 857, Hunt Valley, MD 21030-0857.

Recommended accessories for your Drill are shown in this manual (**CAUTION:** The use of any accessory or attachment might be hazardous.) For safety in use, the following accessories should be used only in sizes up to the maximums shown in column one, page 7.

## Maximum Recommended Capacities

DRILL CAPACITY	3/8"
R.P.M.	0-1200
BITS, METAL DRILLING	3/8"
WOOD, FLAT BORING	1/4"
BITS, MASONRY DRILLING	9/16"
HOLE SAWS	1 1/2"
WIRE WHEEL BRUSHES	4" Dia. Max.
WIRE CUP BRUSHES	3" Dia. Max.
BUFFING WHEELS	3" Dia. Max.
RUBBER BACKING PADS	4 3/4" Dia. Max.

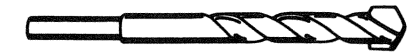
ACCESSORY MUST BE RATED FOR USE AT SPEED EQUAL TO OR HIGHER THAN NAMEPLATE R.P.M. OF TOOL.

## High-Speed Hole Saws Use With Mandrels

SAW OUTSIDE DIAMETER	FOR CONDUIT SIZES	FOR PIPE TAP SIZES
5/8"	5/8" Hole Saw has built-in Mandrel; no separate Mandrel supplied	
3/4"	3/8"	
7/8"	1/2"	
1 5/16"		3/4"
1"		
1 1/16"		
1 1/8"	3/4"	
1 3/16"		1"
1 1/4"		
1 3/8"	1"	
1 1/2"		1 1/4"

## Round-Shank Masonry Bits

These bits are carbide-tipped for top performance and extra-long life in most masonry-drilling applications.

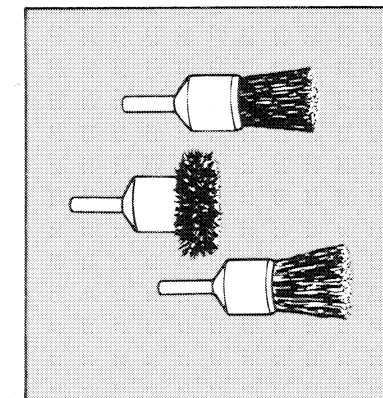


BIT DIAMETER (IN.)	USABLE DRILLING DEPTH (IN.)	SHANK DIAMETER (IN.)
3/16"	1 1/2"	3/16"
1/4"	2"	1/4"
5/16"	2 1/4"	1/4"
3/8"	2 1/2"	1/4"
1/2"	2 1/2"	1/4"
9/16"	4 1/4"	1/4"

## Carbon Removing Brushes

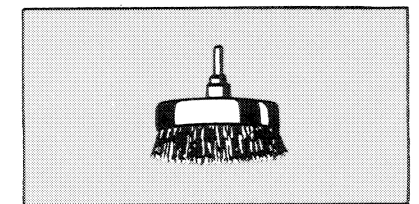
Made of tempered-steel wire; used to remove rust and scale from metals. Leaves a burnished surface.

- A. Heavy-duty solid wire-filled brush.
- B. Side-flare brush for close corner work.
- C. Hollow-core, flare-bottom brush. Small cleaning brush. (Not shown.)



## 3" Wire Cup Brush

Use in cleaning and removing rust, scale, old paint. (Straight chuck shank). Maximum safe RPM—5,000.



## Drill Stop

Capacity 1/4" to 1/2" Governs drilling depth. Drill Stop.

