

Hammergun®

Instruction Manual

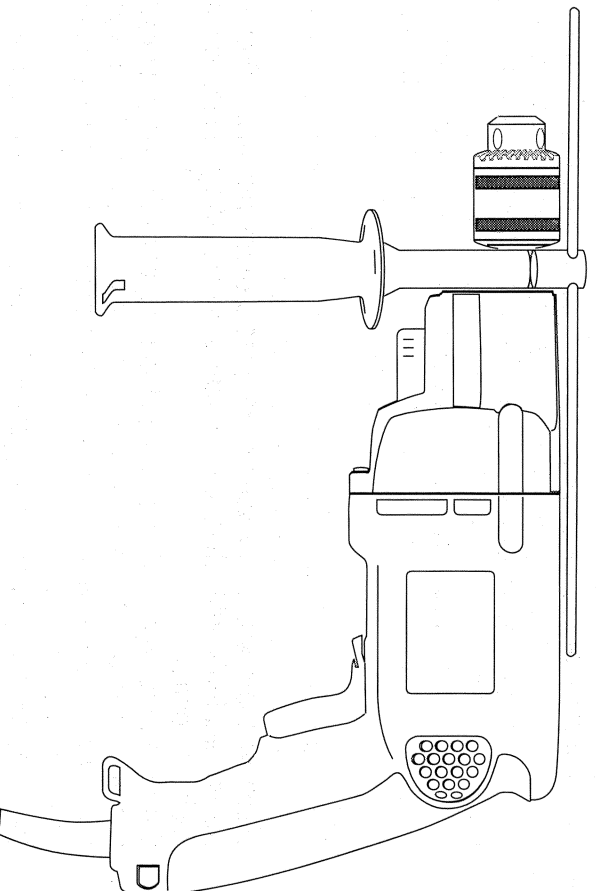
5075

1/2" (13mm) Dual Speed Range VSR Hammerdrill

Getting the most out of your tool.

Please take time to read this manual and pay particular attention to the safety rules we've provided for your protection. If you have any questions about your tool please call:

1-800-9-BD TOOL
(1-800-923-8665)



General Safety Rules

WARNING! READ AND UNDERSTAND ALL INSTRUCTIONS. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

SAVE THESE INSTRUCTIONS

WORK AREA

- **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
- **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
- **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control.

ELECTRICAL SAFETY

- **Double insulated tools are equipped with a polarized plug (one blade is wider than the other.) This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.** Double insulation eliminates the need for the three wire grounded power cord and grounded power supply system.
- **Grounded tools must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded.** If the tools should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.
- **Avoid body contact with grounded surfaces such as pipes, radiators,**

ranges and refrigerators. There is an increased risk of electric shock if your body is grounded.

- **Don't expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **Do not abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately.** Damaged cords increase the risk of electric shock.
- **When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W."** These cords are rated for outdoor use and reduce the risk of electric shock. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The following table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

Minimum Gage for Cord Sets

Volts	Total Length of Cord in Feet			
120V	0-25	26-50	51-100	101-150
240V	0-50	51-100	101-200	201-300
Ampere Rating	AWG			
More Than	Not more Than			
0 -	6	18	16	14
6 -	10	18	16	14
10 -	12	16	16	12
12 -	16	14	12	Not Recommended

PERSONAL SAFETY

- **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose

clothing, jewelry, or long hair can be caught in moving parts.

- **Avoid accidental starting. Be sure switch is off before plugging in.** Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.
- **Remove adjusting keys or switches before turning the tool on.** A wrench or key that is left attached to a rotating part of the tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.
- **Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

TOOL USE AND CARE





- **Use clamps or other practical way to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to a loss of control.
- **Do not force tool. Use the correct tool for your application.** The correct tool will do the job better and safer and the rate for which it is designed.
- **Do not use tool if switch does not turn it on or off.** Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventative safety measures reduce the risk of starting the tool accidentally.
- **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
- **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools, with sharp cutting edges are less likely to bind and are easier to control.
- **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
- **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool, may become


hazardous when used on another tool.

SERVICE

- **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
- **When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual.** Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury.
- **Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.
- **Keep handles dry, clean, free from oil and grease.** It is recommended to use rubber gloves. This will enable better control of the tool.
- **DO NOT TOUCH ANY METAL PARTS OF THE TOOL when drilling or driving into walls, floors or wherever live electrical wires may be encountered!** Hold the tool only by insulated grasping surfaces to prevent electric shock if you drill or drive into a live wire.
- The label on your tool may include the following symbols:

Additional Safety Rules

- Vvolts
- Aamperes
- Hzhertz
- Wwatts
- minminutes
- alternating current
- direct current
- no load speed
- Class II Construction

/minrevolutions or reciprocation per minute
.....earthing terminals
BPMbeats per minute

Motor

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

OPERATION

Side Handle

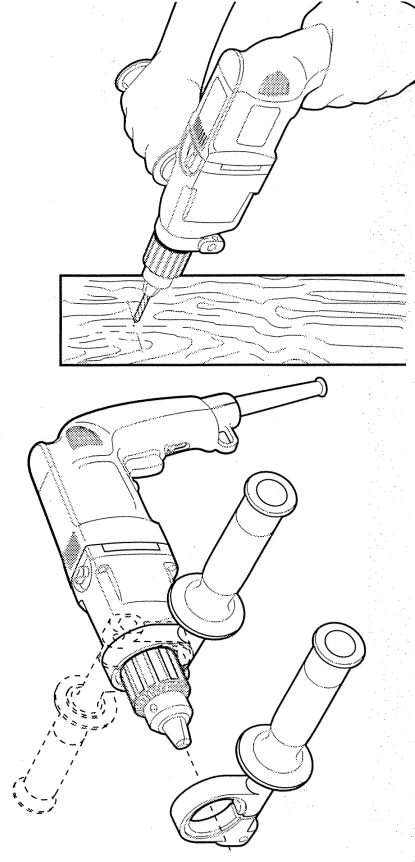
CAUTION: Always use side handle when provided and hold hammerdrill with both hands. A side handle is supplied with this hammerdrill. It clamps to the front of the gear case as shown in Figure 1 and can be rotated 360° to permit right or left hand use.

Switch

To start hammerdrill, depress the trigger switch (Figure 2). To stop hammerdrill, release the switch. To lock the trigger switch in the ON position for continuous operation, depress the trigger switch and push up the **locking button**. The tool will continue to run. To turn the tool OFF, from a locked ON condition, squeeze and release the trigger once. Before using the tool (each time), be sure that the locking 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 button is for use only when the hammerdrill is mounted in a drill press stand or other

Figure 1



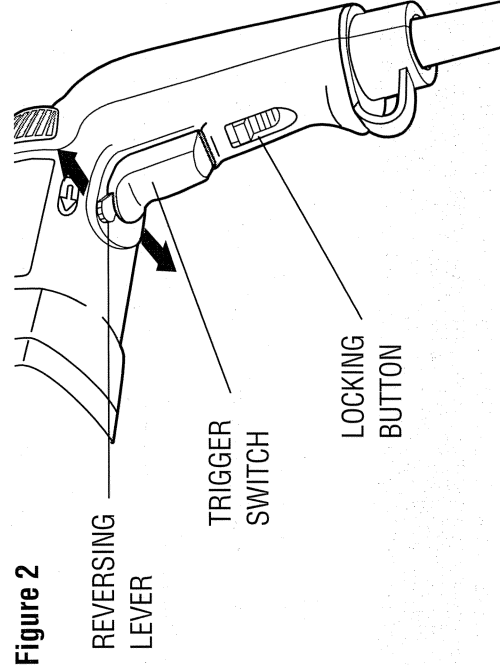
wise held stationary. Be sure to release the locking mechanism before disconnecting the plug from the power supply. Failure to do so will cause the hammerdrill to start immediately the next time it is plugged in. Damage or injury could result.

The **variable speed trigger switch** permits speed control. The farther the trigger switch is depressed, the higher the speed of the hammerdrill.

NOTE: Use lower speeds for starting holes without a centerpunch, drilling in metal, plastics or ceramics, or driving screws. Higher speeds are better for drilling in wood and composition board and for using abrasive and polishing accessories.

The **reversing lever** is used to reverse the hammerdrill for backing out screws or jammed bits. It is located above the trigger, shown in Figure 2. To reverse the hammerdrill, turn it OFF and push the reversing lever to the left (when viewed from the chuck end). To position the lever for forward operation, turn the hammerdrill OFF and push the lever to the right.

Figure 2



High/Low Speed Operation

The two speed gear drive in the dual range hammer drill permits effective operation over an extended range of applications with greater selection of accessories.

For LOW SPEED operation, the shift knob (see Figure 3) located on the underside of the hammerdrill should be rotated so the “low speed” number is toward the front of the tool.

For HIGH SPEED operation, should be rotated so the “high speed” number is toward the front of the tool.

The gear train has been designed for shifting only when the unit is off. It may be necessary however, to rotate the chuck slightly by hand to align the gears while turning the shift knob. **DO NOT ATTEMPT TO CHANGE SPEEDS** by turning the shift knob when the tool is running. Doing so will damage the gear train.

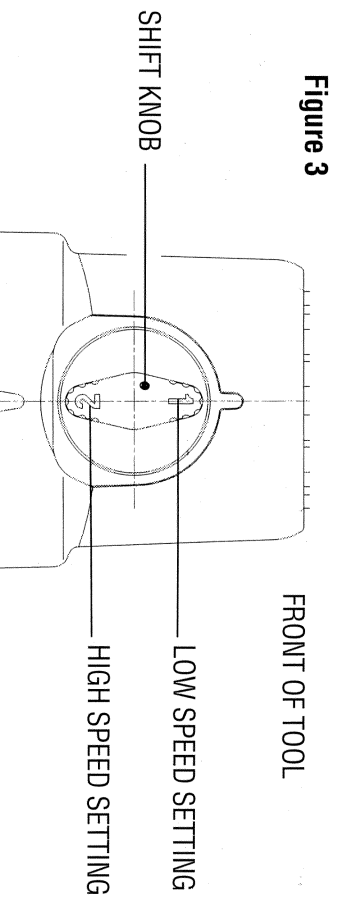


Figure 3

Hammer/Drill Selector

To switch the tool from the drilling mode to the hammering mode (or vice-versa) rotate the dial on the top of the tool, shown in Figure 4, so that the desired position is accomplished. For straight drilling, align the drill bit symbol toward the chuck. For hammering, align the hammer symbol with the chuck, as shown in the figure.

NOTE: The selector must be in either drill or hammer mode at all times. There are no operable positions between the two.

Chuck

To insert bit, 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 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 the low speed setting and twist drill bits, spade bits, power auger bits, or hole saws. For METAL, use the low speed setting and steel twist drill bits or hole saws. For

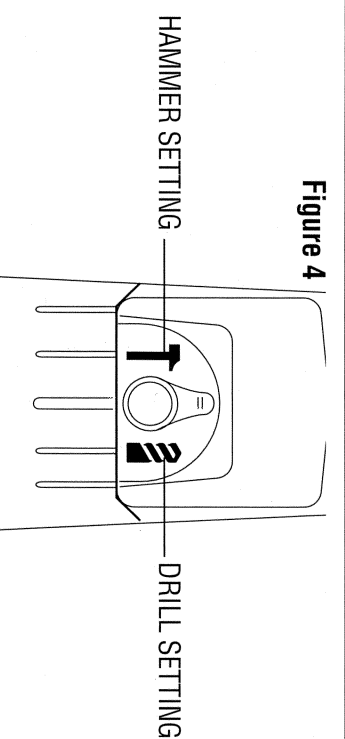


Figure 4

MASONRY, such as brick, cement, cinder block, etc., use carbide-tipped bits rated for percussion drilling. Use low speed for bits greater than 3/8".

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 tool 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 ONLY in the “low speed” gear range. Start drilling with slow speed and increase to full power while applying firm pressure on the tool. A smooth even flow of metal chips indicates the proper drilling rate. 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.

NOTE: Large (5/16" to 1/2") holes in steel can be made easier if a pilot hole (5/32" to 3/16") is drilled first.

DRILLING IN WOOD

USE ONLY in the “low speed” gear range. Start drilling with slow speed and increase to full power while applying firm pressure on the tool. 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

When drilling in masonry, use carbide tipped bits rated for percussion drilling and be certain that the bit is sharp. For holes up to 3/8" diameter use the “high speed” gear range. For holes larger than 3/8", use the “low speed” gear range. Ensure that the hammer mode is selected. Use a constant and firm force on the tool to drill most effectively. A smooth, even flow of dust indicates the proper drilling rate.

Depth Rod

To adjust the depth rod, loosen the handle and move rod so that the distance between the end of the rod and the end of the bit equals the desired drilling depth. When drilling with depth rod, stop when end of rod reaches surface of material.

Important

To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment (including brush inspection and replacement) should be performed by authorized service centers or other qualified service organizations, always using identical replacement parts.

Cleaning & Lubrication

Use only mild soap and damp cloth to clean the tool. 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 service is ever needed, take your tool to an authorized service location.

Accessories

Recommended accessories for use with your tool are available from your local dealer or authorized service center. If you need assistance regarding accessories, please call: **1-800-9-BD TOOL (1-800-923-8665)**

⚠ WARNING: The use of any accessory not recommended for use with this tool could be hazardous.

MAXIMUM RECOMMENDED CAPACITIES

CHUCK CAPACITY	1/2"
R.P.M.	0-1,100 0-2,700
BITS, METAL DRILLING	3/8" – Low speed
WOOD, FLAT BORING	1" – Low speed
BITS, MASONRY DRILLING	3/4" Soft materials – Low speed 1/2" Concrete – Low speed
HOLE SAWS	2-1/8" – Low speed

Every B&D tool is of the highest quality.

If you wish to contact us regarding this product, please call toll free between 8:00am and 8:00pm ET, seven days a week:

1-800-9-BD TOOL
(1-800-923-8665)

One Year Free Maintenance

All B&D tools for Industry and Construction are covered under a one year free maintenance program where B&D will inspect your tool for safety and provide necessary maintenance or repairs, including normal wear and tear parts, for one year, FREE OF CHARGE.

Full Warranty

All B&D tools for Industry and Construction are warranted to be free of any defects in materials or workmanship. Upon thorough examination of tool, B&D will repair or replace, at our option, any product that is determined to be defective.

Conditions

The service/safety check and the warranty do not apply to: repairs made or attempted by anyone other than an authorized B&D service location; misuse, abuse, neglect, improper application of the tool; missing parts; or normal wear and tear (after first year of ownership). Please return the complete unit, transportation prepaid, to any B&D factory owned or B&D authorized service center location (list provided with tool or see Yellow Pages under "Tools Electric").

Black & Decker (U.S.) Inc. • 701 East Joppa Road, Towson, Maryland 21286

Printed in Italy (AUG96-1) Form No. 154724 Copyright © 1996