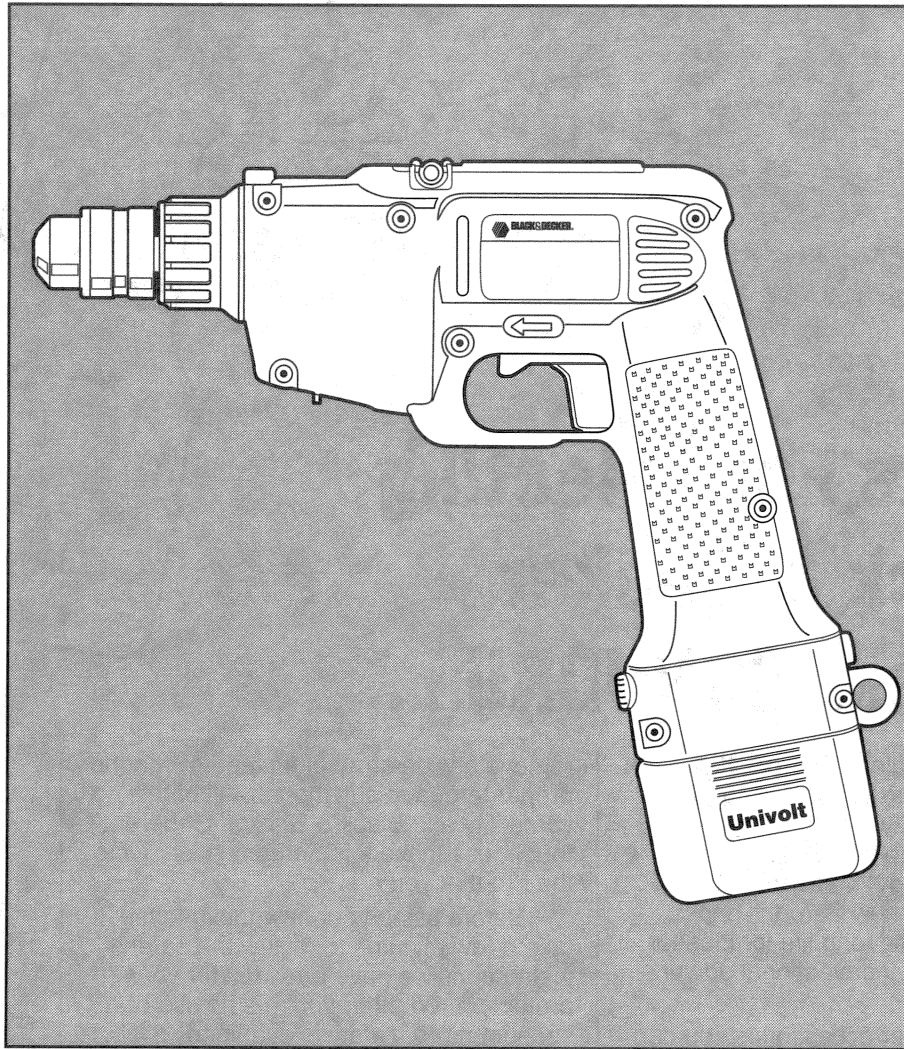




BLACK & DECKER®

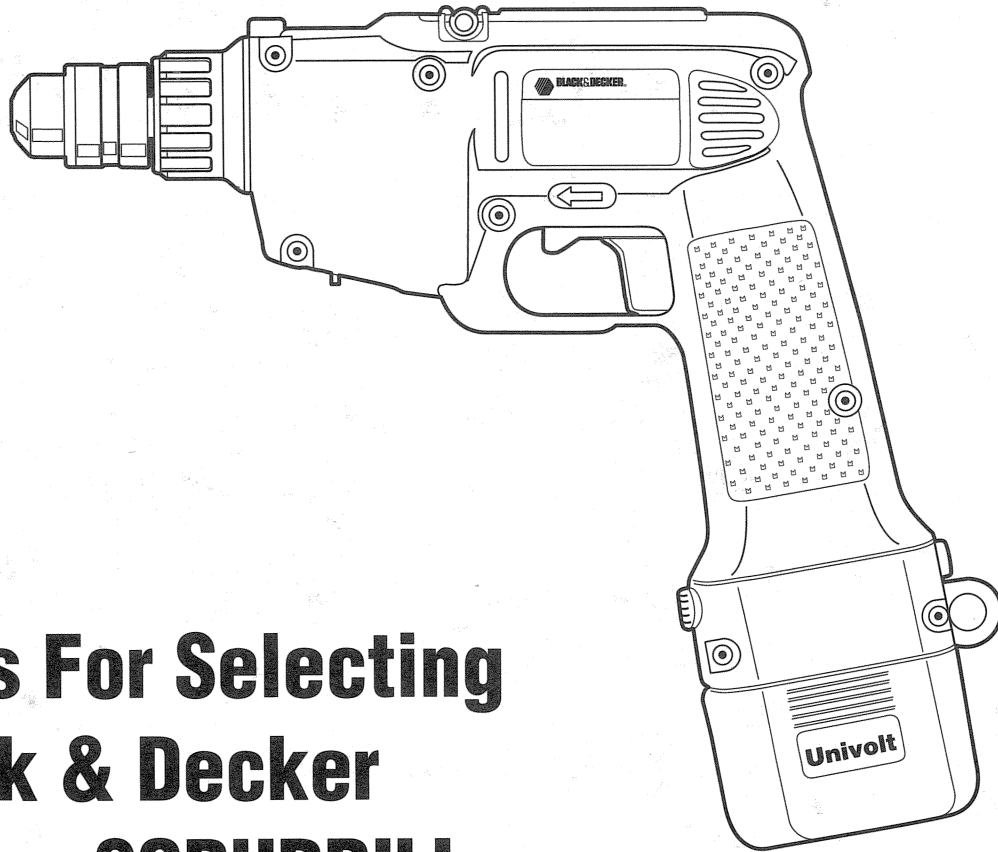
C-clone™

Super C-clone™



Instruction Manual

**7.2, 9.6 & 12.0 Volt
3/8" VSR Dual Range
Versa-Clutch SCRUDRILL®
Screwdriver/Drills**



Thanks For Selecting A Black & Decker Cordless SCRUDRILL.

Your new cordless Scrudrill has been engineered to the same tough standards of quality that have made Black & Decker the world's leader in cordless technology. Made to be tough and reliable, your new Scrudrill packs plenty of power and long life for jobs far removed from any conventional power source.

With the proper accessories you can drill in practically any material, wire brush and sand. Flick a switch and you've got an adjustable torque screwdriver with dual range gearing and an 11 position adjustable clutch feature. Drive and

remove a wide array of fasteners with the proper torque to suit the job. All of this versatility and Black & Decker's inherent toughness make this Scrudrill every inch the pro that you are.

Before using your new tool, please take a few minutes to review the safety instructions we have provided for your protection. Whether you're a novice or a seasoned pro, safety is everybody's job.

Don't forget to send in your owner's registration card.

Thanks again for choosing Black & Decker.



Important Safety Instructions

WARNING: When using Electric Tools, basic safety precautions should always be followed to reduce 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. **KEEP CHILDREN AWAY.** All visitors should be kept away from work area. Do not let visitors contact tool.
4. **STORE IDLE TOOLS.** When not in use, tools should be stored in dry, and high or locked-up place - out of reach of children.
5. **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was intended.
6. **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.
7. **DRESS PROPERLY.** Do not wear loose clothing or jewelry. They can be caught in moving parts. Non-skid footwear is recommended when working outdoors. Wear protective hair covering to contain long hair.
8. **USE SAFETY GLASSES.** Also use face or dustmask if operation is dusty.
9. **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.
10. **DON'T OVERREACH.** Keep proper footing and balance at all times.
11. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safe performance. Follow instructions for lubricating and changing accessories. Keep handles dry, clean, and free from oil and grease.
12. **LOCK OFF TOOL** when not in use, before servicing, and when changing accessories.
13. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
14. **AVOID UNINTENTIONAL STARTING.** Don't carry tool with finger on switch.
15. **STAY ALERT.** Watch what you are doing. Use common sense. Do not operate tool when you are tired.
16. **CHECK DAMAGED PARTS.** Have defective switches replaced by authorized service center. Do not use tool if switch does not turn it on and off.
17. **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.
18. **BE AWARE** that this tool is always in an operating condition because it does not have to be plugged into an electrical outlet. Keep the switch control lever in the lock "OFF" position, as shown in Figure 3, when you are not using the tool.

CAUTION: When driving into walls, floors or wherever "live" electrical wires may be encountered, **DO NOT TOUCH ANY FRONT METAL PARTS OF THE TOOL!** Hold the tool only by the plastic handle to prevent shock if you drive into a "live" wire.

SAVE THESE INSTRUCTIONS FOR FUTURE USE.

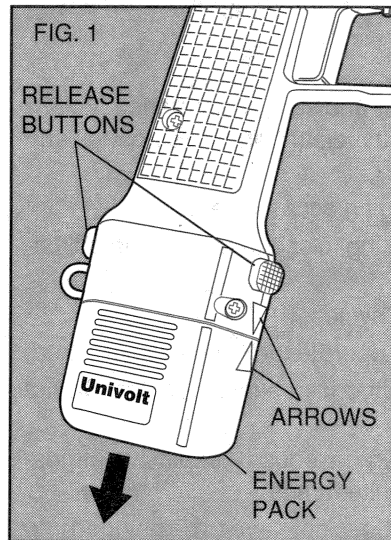
Your tool carton contains two separate instruction manuals; one for the cordless Scudrill and one for the UNIVOLT™ one hour battery charger.

READ ALL OF THE INSTRUCTIONS IN THE UNIVOLT ONE HOUR BATTERY CHARGER INSTRUCTION MANUAL BEFORE ATTEMPTING TO CHARGE THE ENERGY PACK FOR YOUR TOOL.

Removing and Installing the Energy Pack

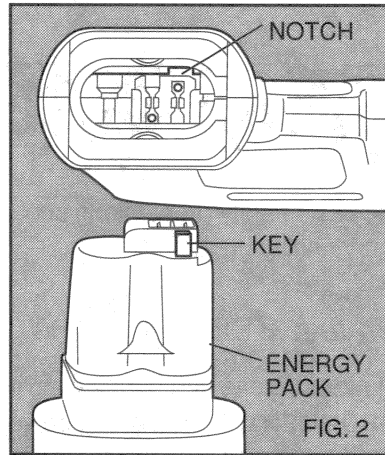
NOTE: THE BATTERIES IN YOUR ENERGY PACK ARE NOT FULLY CHARGED AT THE FACTORY.

To remove the energy pack from the tool, press the two release buttons, as shown in Figure 1, and firmly pull the energy pack out of the tool handle. Insert it into the charger as described in the charger instruction manual.



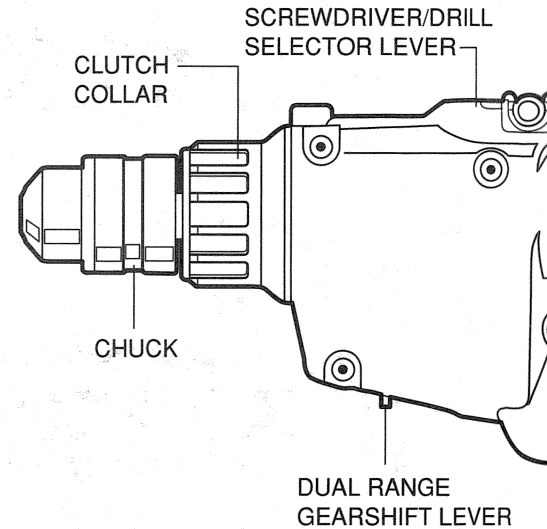
To install the energy pack into the tool handle, align the key, shown in Figure 2, with the notch inside the tool's handle and slide the energy pack firmly into the handle until you hear the lock snap into place.

An alternate means of alignment is to match the arrows on the front of the tool and the energy pack. (Older packs don't have arrows.)

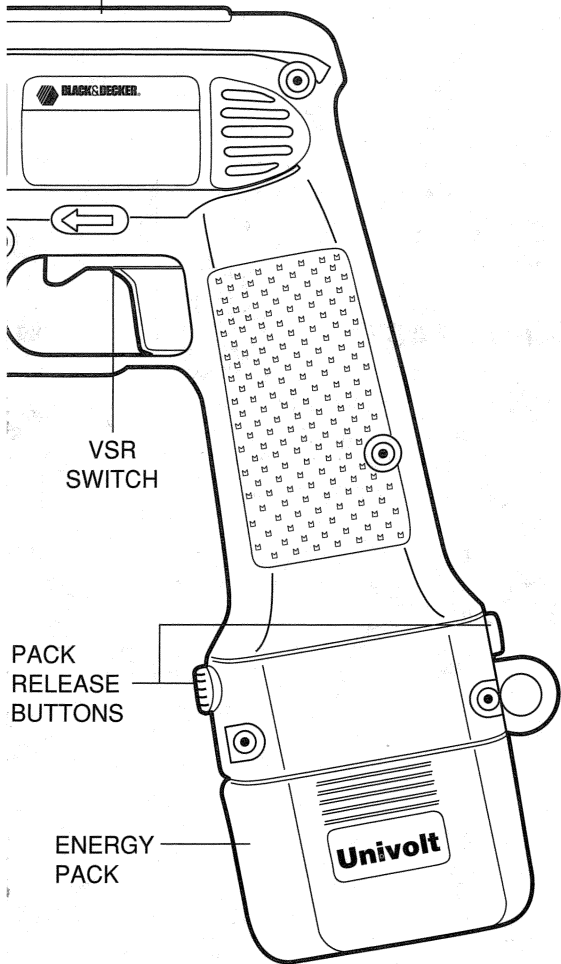


Energy Pack Important Charging Notes

1. Longest life and best performance can be obtained if the energy pack is charged when the air temperature is about +75°F. **DO NOT** charge the energy pack in an air temperature below +40°F or above +105°F. This is important and will prevent serious damage to the energy pack.
2. If the energy pack does 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. If the receptacle is o.k., and you do not get proper charging, take or send the tool and charger to your local Service Center. See "TOOLS, ELECTRIC" in yellow pages.
4. The energy pack 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.
5. Under certain conditions, with the charger plugged in to the power supply, the exposed charging contacts inside the charger 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 charger cavities. Always unplug the charger from the power supply when there is no energy pack in the cavity. Unplug charger before attempting to clean.
6. 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 gets on your skin -
 - (a) Wash quickly with soap and water.
 - (b) Neutralize with a mild acid such as lemon juice or vinegar.



CHUCK KEY AND
SCREWDRIVER BIT STORAGE



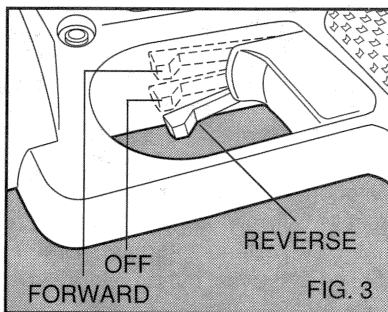
- (c) If battery liquid gets into your eyes, flush them with clear water for a minimum of 10 minutes and seek immediate medical attention. (Medical note: The liquid is a 25-35% solution of potassium hydroxide).

Switches

To turn the tool "ON", squeeze the trigger switch; to turn the tool "OFF", release the trigger switch. Your tool is equipped with a variable speed switch which enables you to select the best speed for a particular application. The farther you squeeze the trigger, the faster the tool will operate.

Use lower speeds for starting holes without a centerpunch, drilling in metals or plastics, driving screws and drilling ceramics. Higher speeds are better for drilling in wood, wood compositions and for using abrasive and polishing accessories. For maximum tool life, use variable speed only for starting holes or fasteners. **NOTE:** Continuous use in the variable speed range may damage the switch and should be avoided.

A switch control lever determines the direction of the tool and also serves as a lock "OFF" lever. To select forward rotation (drilling holes or driving screws) release the trigger switch and push the switch control lever to the right when viewed as shown in Figure 3.



To select reverse (for backing out screws or jammed drill bits) push the lever to the left, as shown in Figure 3. The center position of the lever locks the tool in the "OFF" position.

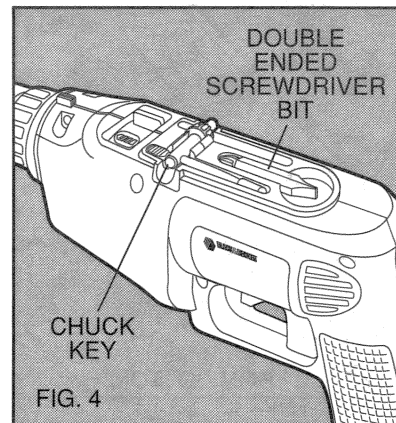
When changing the position of the switch control lever, be sure the trigger is released and the tool has stopped coasting.

NOTE: The first time the tool is run after changing the direction of rotation, you may hear a click on start up. This is normal and does not indicate a problem.

Chuck Key Storage

The chuck key for your tool is stored on the top of the housing, as shown in Figure 4. To remove the chuck key, simply pull it up and out.

To return the key to the holder, push it firmly into place.

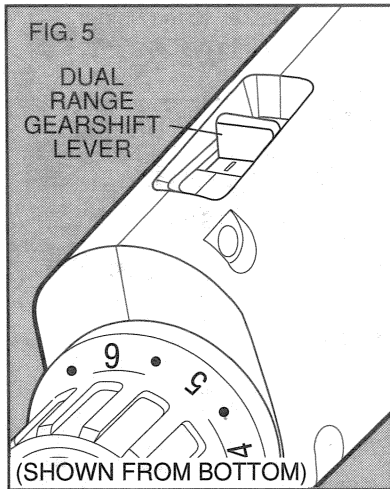


Dual Range Gearing

The dual range feature of your Scrudrill allows you to shift gears for greater versatility. The low range, indicated by the numeral I located as shown in Figure 5 provides low speed and high torque. The high range, indicated by the numeral II, produces high speed and low torque. To shift gears, turn the tool off and permit it to coast. **While it's coasting**, slide the Dual Range Gearshift Lever all the way to the opposite end of the slot in the housing. Refer to the chart below to determine the available speeds of your model of Scrudrill.

The dual range feature coupled with the variable speed switch and the 11 position clutch (discussed next) combine to make your Scrudrill an exceptionally versatile tool.

Catalog No.	Shift Position	RPM Range
1924	I	0-300
	II	0-1000
1964/2664	I	0-350
	II	0-1200
1965/2665	I	0-400
	II	0-1300



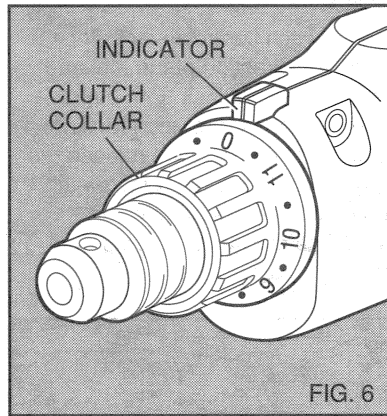
Clutch Collar Operation

The Versa-Clutch feature of your Scrudrill is an adjustable torque screwdriver mechanism for driving and removing a wide array of fastener shapes and sizes.

Circling the collar are numbers ranging from zero to 11. These numbers (and half numbers designated by dots on the collar) are used to set the clutch to deliver a torque

range. The torque produced at any given number is not specific but rather relative to the torque produced by higher and lower numbers.

The higher the number on the collar, the higher the torque and the larger the fastener which can be driven. To select any of the numbers, simply pull out on the collar and rotate until the desired number aligns with the Indicator at the top of the gear case, as shown in Figure 6.



The following chart shows some typical clutch settings for various fasteners in different materials. Results will vary depending on materials, fasteners and pressure applied to the tool during operation.

Override Control

Due to inconsistencies in materials and fasteners, conventional adjustable clutch screwdrivers may fully seat some fasteners while leaving others extended. The Black & Decker patented Versa-Clutch mechanism gives you the ability to increase or decrease the clutch torque simply by varying the amount of pressure you apply to the tool.

Clutch Lock

Since the Clutch Collar and the Drill/Screwdriver Selector Lever are distinctly different controls, you can switch between drilling and screw-driving without touching the Clutch Collar.

Once the Clutch Collar is set, it remains unchanged until you decide to adjust it.

Fastener/Material	Clutch Collar Setting											
	0	1	2	3	4	5	6	7	8	9	10	11
(in./lbs.) Approximate Torque Range →	1-6	5-11	7-15	9-19	13-22	16-27	19-30	22-33	24-39	27-44	Compensation Range*	
#6 x 3/8" 20-24 ga. stl.		←-----→										
#8 x 1/2" 16-22 ga. stl.			←-----→									
#7 x 1-1/4" Drywall Screw Fir					←-----→							
# 8 x 1-1/2" Piloted Oak						←-----→						
#12 x 2" Fir							←-----→					
5/16" x 2" Lag Piloted Fir								←-----→				

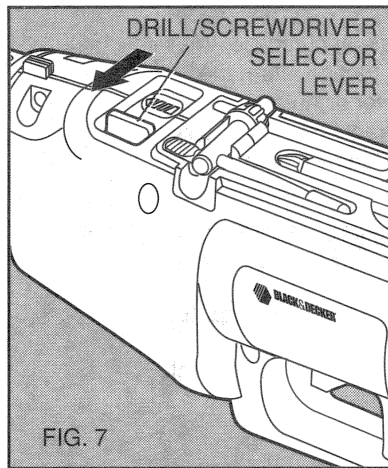
* Compensation range is to allow all settings to be increased as clutches wear over time during normal use.

Operation as a Drill

To select the Drilling mode, turn the tool off and permit it to coast. **While it's coasting**, slide the Drill/Screwdriver Selector Lever to the left, displaying the drill bit picture as shown in Figure 7. Using the chuck key stored in the top of the tool, install and tighten the desired drill bit in the chuck. Tighten the chuck in all three holes to prevent slippage. Return the chuck key to its storage clip to prevent loss.

Select the desired speed/torque range using the Dual Range Gear Shift Lever to match the speed and torque to the planned operation.

Follow the instructions on page 7 of this manual for best results before drilling.



DRILLING

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 or hole saws. 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 the material.

3. 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.
4. Hold drill firmly to control the twisting action of the drill.
5. **IF DRILL STALLS**, it is usually because it is being overloaded. **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.**
6. To minimize stalling or breaking through the material, reduce pressure on drill and ease the bit through the last fractional part of the hole.
7. Keep the motor running when pulling the bit back out of a drilled hole. This will help prevent jamming.
8. 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 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 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 Masonry

Use carbide tipped masonry bits at low speeds. Keep even force on the drill but not so much that you crack the brittle materials. A smooth, even flow of dust indicates the proper drilling rate.

Operation as a Screwdriver

Slide the Drill/Screwdriver Selector Lever to the right displaying the picture of a screw.

Select the desired speed/torque range using the Dual Range Gear Shift Lever on underside of tool to match the speed and torque to the planned operation.

Insert the desired fastener accessory into the chuck as you would any drill bit.

Make a few practice runs in scrap or unseen areas to determine the proper position of the Clutch Collar. Refer to the chart on page 6 of this manual.

Dead Spindle Action

When in the screwdriving mode, the chuck will not turn until pressure is applied in line with the fastener. Likewise, the chuck stops when pressure is released. This feature improves accuracy of work and significantly increases the rate at which screws can be driven.

Maintenance

CLEANING

With the motor running, blow dirt and dust out of all air vents with dry air at least once a week. Wear safety glasses when performing this. Exterior plastic parts may be cleaned with a damp cloth and mild detergent. Although these parts are highly solvent resistant, **NEVER** use solvents.

Accessories

CAUTION: Recommended accessories for use with your Scruddrill are available at extra cost from your local dealer or Black & Decker Service Center. The use of any other accessory or attachment might be hazardous.

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., Consumer Service Department, 626 Hanover Pike, P.O. Box 618, Hampstead, MD 21074-0618.

Important

To assure product SAFETY and RELIABILITY, repairs, maintenance (including brush inspection and replacement) and adjustment should be performed by BLACK & DECKER Service Centers or other qualified service organizations, always using BLACK & DECKER replacement parts.

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.

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 5:00 p.m. EST, Monday through Friday.
1-800-762-6672

Like most Black & Decker tools, your Cordless Scrugun is listed by Underwriter's Laboratories to ensure that it meets stringent safety requirements.

This symbol on the nameplate means the product is listed by Underwriter's Laboratories, Inc.



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



BLACK & DECKER®

BLACK & DECKER (U.S.) INC., U.S. Power Tools Group, 10 North Park Drive, P.O. Box 798, Hunt Valley, MD 21030-0798

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