3/8” Cordless, Reversible Scru-Drills

Your new CORDLESS SCRU-DRILL® is as versatile as any corded 3/8” Drill and also performs assembly or disassembly operations. It offers the ultimate in convenience and electrical safety. You can forget the electric outlet, and forget the cord. You can take your Cordless Tool anywhere, and use it in a wide variety of applications.

This Scru-Drill® is powered by a Removable Power Pack. When additional Power Packs are purchased, this feature enables you to take on prolonged or continuing jobs without interruption for charging. One power Pack can be on charge, while another is powering the tool.

For safe and efficient operation of this tool, please read all safety rules and instructions carefully.

THANK YOU for buying BLACK & DECKER!

Instruction Manual
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 dust mask 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.

Additional Drill Safety Rules

1. Be aware that this tool is always in operating condition, because it does not have to be plugged into an electrical outlet. Keep the switch control button in “LOCK-OFF” position (Figure B) when not using tool.

2. 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 electrical shock if you drill into a “live” wire.

Important Charger And Power Pack Safety Instructions

1. SAVE THESE INSTRUCTIONS — This manual contains important safety and operating instructions for battery charger Model 98038.
2. Before using battery charger, read all instructions and cautionsary markings on (1) battery charger, (2) battery, and (3) product using battery.
3. The Charger and Power Pack are specifically designed to work together. DO NOT attempt to change any other cordless tool or battery pack with this Charger. DO NOT attempt to charge the Power Pack with any other Charger than the one(s) shown in this manual.
4. Do not expose charger to rain or snow.
5. Use of an attachment not recommended or sold by the battery charger manufacturer may result in a risk of fire, electric shock, or injury to persons.
6. To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting charger.
7. Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
**TABLE 1**

**RECOMMENDED MINIMUM AWG SIZE FOR EXTENSION CORDS FOR BATTERY CHARGERS**

<table>
<thead>
<tr>
<th>AC Input Rating Amperes*</th>
<th>AWG Size of Cord</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal to or greater than</td>
<td>25</td>
</tr>
<tr>
<td>0</td>
<td>Length of Cord, Feet</td>
</tr>
<tr>
<td>2</td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>150</td>
</tr>
<tr>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td>18</td>
<td>14</td>
</tr>
</tbody>
</table>

*If the input rating of a charger is given in watts rather than in amperes, the corresponding amperage rating is to be determined by dividing the wattage rating by the voltage rating — for example:

\[
\frac{1250 \text{ watts}}{125 \text{ volts}} = 10 \text{ amperes}
\]

8. An extension cord should not be used unless absolutely necessary. Use of improper extension cord could result in a risk of fire and electric shock. If extension cord must be used, make sure:
   a. That pins on plug of extension cord are the same number, size, and shape as those of plug on charger;
   b. That extension cord is properly wired and in good electrical condition; and
   c. That wire size is large enough for AC ampere rating of charger as specified in Table 1.

9. Do not operate charger with damaged cord or plug — replace them immediately.

10. Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way, take it to a qualified Black & Decker Service Center.

11. Do not disassemble charger, take it to a qualified Black & Decker Service Center when service or repair is required. Incorrect reassembly may result in a risk of electrical shock or fire.

12. To reduce risk of electric shock, unplug charger from outlet before attempting any maintenance or cleaning.

13. NEVER attempt to connect 2 Chargers together.

14. DO NOT store the Tool and Power Pack in locations where the temperature may reach or exceed 120°F (such as outside sheds or metal buildings in summer).

15. DO NOT Charge Power Pack when its temperature is BELOW +40°F or ABOVE +105°F.

16. DO NOT incinerate the Power Pack even if it is severely damaged or is completely worn out. The power pack can explode in a fire.

A small leakage of liquid from the power pack cells may occur under extreme usage or temperature conditions. This does not indicate a failure. However, if the outer 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.
   c. If battery liquid gets into your eyes, flush them with clean water for a minimum of 10 minutes and seek immediate medical attention.

(Medical note: The liquid is a 25-35% solution of potassium hydroxide.)

17. The charger is designed to operate on standard household electrical power (120 volts AC only). Do not attempt to use it on any other voltage!

18. Do not attempt to open the power pack housing.

19. Do not carry extra "charged power packs" in aprons, pockets or tool boxes along with other metal objects. Power Pack could be short circuited causing damage to the power pack and possibly causing electrical shock or fire.

20. 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 empty battery cavities. Always unplug the battery charger from the power supply when there is no battery in the cavity. Unplug charger before attempting to clean.

**SAVE THESE INSTRUCTIONS**

**Charging The Power Pack**

THE BATTERIES IN YOUR NEW POWER PACK ARE NOT FULLY CHARGED! First read the Safety Rules above. Then follow charging notes and procedures on page 3.

**Power Pack, Important Charging Notes**

1. Longest life and best performance can be obtained if the batteries are charged when the air temperature is about +75°F. DO NOT charge the batteries in an air temperature below +40°F or above +105°F. This is important and will prevent serious damage to the batteries.

2. When you charge your power pack for the first time, or after prolonged storage, it will only accept about an 80% charge. However, after several charge and discharge cycles, the batteries will come up to full capacity.

3. If the batteries do 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.

4. 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.

5. The power 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.

6. If, after repeated use, your power pack does not take a full charge, and produces operating time less than normal, it may not be caused by faulty batteries. If you use the power pack repeatedly for only a few minutes and then charge it, the batteries build up a resistance to taking a full charge. This resistance results in reduced operating time.
Power Pack Notes

The batteries can be restored to their original power and life by fully charging and then completely using up the charge several times. This will recondition the batteries to deliver maximum performance.

Fast Charging Procedure
(Cat. No. 98038 Fast Charger)

1. Place the Power Pack in the Charger as shown in Figure 1. Note that groove in Power Pack faces front. Plug in Charger.

2. Press button momentarily until light turns "ON". Your Power Pack is now on charge.

Removing The Power Pack From Tool

Move Switch Control Button to the center of its slot to LOCK Trigger Switch "OFF" (See Fig. 2).

Depress the Release Button as shown in figure 3 until the latch pops free. Remove the Power Pack as shown in figure 4.

Torque Adjust Collar
Cat. #1985
Cat. #1982

The Torque Adjust Collar is clearly marked 1, 2, 3, 4, and $\theta$.

The collar should be rotated until the desired setting is located at the top of the tool (Figure 5). Locators are provided in the collar to eliminate "guess-work" when selecting fastening torque. Store tool with collar in number 1 setting.

Shift Knob
Cat. #1975

With the motor "OFF", move the Shift Knob into either the Drilling or Screwdriving position as indicated in Figures 6 & 7. If you experience any difficulty in moving the Knob from Screwdriving into the Drill position, rotate the chuck slightly by hand to permit clutch jaws to engage.

Trigger Switch & Control Button

The Scru-Drill® is turned "ON" and "OFF" by pulling and releasing the Trigger Switch. However the Trigger can be locked "OFF" by positioning the Switch Control Button in the center of its slot (Figure 8). This position should be used to prevent the Trigger from being accidentally pressed when the tool is not in use, when attaching or removing the Power Pack, when attaching or changing accessories, and when cleaning or servicing the Scru-Drill®.

For drilling, or driving fasteners, the Switch Control Button should be in the FORWARD position (Figure 9).

Use the REVERSE position (Figure 10) for removing fasteners or smoothly withdrawing drill bits that bind in the hole. When moving from FORWARD to REVERSE, or vice versa, always release the trigger first as the control button will not move when the trigger is depressed. Always store tool with control in LOCK-"OFF" position.

Variable Speed Switch

In units equipped with a variable speed switch, the further the trigger is depressed, the higher the speed of the unit. For maximum tool life, use lower speeds only for starting holes or fasteners. Continuous use at lower speeds is not recommended.

Chuck & Key

Turn chuck collar to open chuck jaws. Place bit in chuck as far as it will go. Tighten chuck collar by hand. Place chuck key in each of the three holes, and tighten in clockwise direction (Figure 11). It’s important to tighten chuck with all three holes to prevent bit slippage. To release bit, turn chuck key counterclockwise in just one hole, then loosen chuck by hand.

When not in use, the chuck key is stored in the tool or the end of the power pack. To remove the key, place thumb as shown in Figure 8 and push key firmly upward out of its holding socket. To replace key, push key’s handle firmly and completely down into the socket (Figure 12).

Operation, Drilling

FOR LONGEST BATTERY LIFE DON'T FORCE TOOL!

1. Lock Trigger Switch "OFF" with switch control button when attaching or changing bits or accessories. Turn Shift Knob to the Drill position (Figure 6).

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. 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 tool and ease the bit through last part of hole.

6. Hold tool firmly to control the twisting action of the tool.
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drilling In Wood</td>
<td>Holes in wood can be made with the same twist drill bits used for metal or with wood augers. These bits should be sharp and should be pulled out frequently when drilling to clear chips from the flutes. Work that is apt to splinter should be backed up with a block of wood. Let up on the pressure just before the tip cuts through, this will give a good clean hole.</td>
</tr>
<tr>
<td>Drilling In Metal</td>
<td>Use a cutting lubricant when drilling ferrous metals. The exceptions are 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. Aluminum is best drilled with turpentine or kerosene.</td>
</tr>
<tr>
<td>Screwdriving</td>
<td>Always drill pilot holes for wood screws. Spraying all screws with a dry lubricant will give them the easiest rundown. Experiment with different types of sheet metal screws to find the ones best suited to your application.</td>
</tr>
<tr>
<td>Screwdriving, Torque Adjust Collar</td>
<td>To drive screws, rotate the collar to the setting required for the job and drive screw until tool ratchets audibly. Keep ratcheting to a minimum for longest clutch life and longer screwdriving capacity between charges.</td>
</tr>
<tr>
<td>Screwdriving, Shift Knob</td>
<td>Turn Shift Knob to the Screwdriving position (Figure 7). Insert bit into chuck, making sure that chuck jaws rest squarely on the “flats” of the bit. Tighten chuck jaws securely using key in all three holes in the chuck. When the tool is first turned “ON”, a clutch provides a “dead” or stationary front spindle. This permits the screwdriving accessory to “locate” the screw slot or nut. Forward pressure then engages the clutch and drives or removes the fastener. Your Cordless ScrU-Drill® has what is known as a POSITIVE CLUTCH. With this clutch, sufficient forward pressure is maintained on the tool, while driving, to keep the clutch jaws engaged. When the fastener has been driven home, an easing of forward pressure will permit the clutch jaws to disengage. If you maintain foreward pressure after the fastener has been seated, the clutch will ratchet audibly. Try to keep this ratcheting to a minimum for longest clutch life and longer screwdriving capacity between charges. It is suggested that you practice by driving a few screws into a scrap piece of material until you get the “feel” of this procedure. DO NOT RATCHET UNNECESSARILY.</td>
</tr>
<tr>
<td>Accessories</td>
<td>Recommended accessories for use with your ScrU-Drill are listed below. (CAUTION: The use of any other accessory might be hazardous). All types of Bits, Hole Saws, Rotary Files &amp; Rasps, Angle Heads, Sanding &amp; Polishing Accessories, etc. are available from your B&amp;D Distributor. For help and advice on any application, write Cordless Product Manager at Black &amp; Decker. The accessories listed in this manual are available at extra cost from your local dealer or Black &amp; 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 &amp; Decker (U.S.) Inc., Consumer Service Department, 626 Hanover Pike, P.O. Box 618, Hampstead, MD 21074-0618. Every Black &amp; 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</td>
</tr>
<tr>
<td>Accessories, Drilling</td>
<td>For safety in use, the following accessories should be used only in the sizes specified below: BITS, METAL DRILLING—Up to 3/8&quot; BITS, MASONRY DRILLING—Up to 3/8&quot; BITS, WOOD DRILLING—Up to 3/4&quot; HOLE SAWS—Up to 1&quot; WIRE BRUSHES—Up to 3&quot; diam.</td>
</tr>
<tr>
<td>Accessories, Screwdriving</td>
<td>Your ScrU-Drill can use practically every type of fastening accessory that has a 1/4&quot; hexagon shank. Recommended accessories for your tool are listed in this manual and in the Black &amp; Decker catalog. CAUTION. The use of any other accessory or attachment might be hazardous.</td>
</tr>
</tbody>
</table>
Accessories, Bit Tip Holders

Non-Magnetic, For 1/4" Bit Tips
Magnetic, For 1/4" Bit Tips

HEX CHANK INSERT BITS
FOR BIT TIP HOLDERS

<table>
<thead>
<tr>
<th>Screw Type</th>
<th>Point Size (in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phillips</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>2 drywall</td>
</tr>
<tr>
<td>Fraiseon</td>
<td>6 &amp; larger</td>
</tr>
<tr>
<td>Reed &amp; Price</td>
<td></td>
</tr>
<tr>
<td>Phillips</td>
<td>2</td>
</tr>
<tr>
<td>Posdrive</td>
<td>3</td>
</tr>
<tr>
<td>Socket Head</td>
<td>1/8</td>
</tr>
<tr>
<td>Cap Screw</td>
<td>5/32</td>
</tr>
<tr>
<td></td>
<td>3/16</td>
</tr>
</tbody>
</table>

HEX SHANK POWER BITS

<table>
<thead>
<tr>
<th>Screw Type</th>
<th>Point Size (in.)</th>
<th>Length (in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phillips</td>
<td>2</td>
<td>1 1/16</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3-1/2</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1 15/16</td>
</tr>
<tr>
<td>Phillips</td>
<td>2</td>
<td>1 15/16</td>
</tr>
<tr>
<td>Posdrive</td>
<td>3</td>
<td>1 15/16</td>
</tr>
</tbody>
</table>

1/4" HEX DRIVE NUTSETTERS
For driving hex head fastener

<table>
<thead>
<tr>
<th>Type</th>
<th>Socket Size (in.)</th>
<th>Length (in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Magnetic</td>
<td>1/4</td>
<td>2 1/16</td>
</tr>
<tr>
<td></td>
<td>5/16</td>
<td>2 1/16</td>
</tr>
<tr>
<td></td>
<td>3/8</td>
<td>2 1/16</td>
</tr>
<tr>
<td>Magnetic</td>
<td>1/4</td>
<td>1 5/8</td>
</tr>
<tr>
<td></td>
<td>1/4</td>
<td>2 1/16</td>
</tr>
<tr>
<td></td>
<td>5/16</td>
<td>2 1/16</td>
</tr>
<tr>
<td></td>
<td>3/8</td>
<td>2 1/16</td>
</tr>
</tbody>
</table>

1/4" HEX BIT WITH ROTATING FINDER

<table>
<thead>
<tr>
<th>Bit Size</th>
<th>Screw Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-1/2&quot;</td>
<td>4, 5</td>
</tr>
<tr>
<td>3-1/2&quot;</td>
<td>3-1/2&quot;</td>
</tr>
<tr>
<td>5/16&quot;</td>
<td>8, 10</td>
</tr>
<tr>
<td>3-1/2&quot;</td>
<td>8, 10</td>
</tr>
<tr>
<td>3-1/2&quot;</td>
<td>12</td>
</tr>
</tbody>
</table>

120 VAC Computerized 1 Hour Charger
Order Cat. No. 98060
See Figure 16.

NOTE: See Instruction Manual packed with charger for proper operating procedure.

12 Volt DC Computerized 1 Hour Charger
Order Cat. No. 98065
For cars or trucks
See Figure 17.

NOTE: See Instruction Manual packed with charger for proper operating procedure.

Holster

To add even more to the convenience features of your Cordless Drill, an accessory Holster is available. This Holster fastens to your belt and keeps the Drill handy and ready for work. It also frees both hands when you are not actually using the tool.

Order Cat. No. 98-004 Leather Holster
See Figure 18.

Fast Charge Energy Pack
Order Cat. No. 98003
See Figure 19.

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. However, it is recommended that, once a year, you take or send the tool to a B&D Service Center for a thorough cleaning, inspection and lubrication of the gear case.

Storage

1. The best storage place is one that is cool and dry—away from direct sunlight, heating pipes and ducts, furnaces, etc.
2. Best storage temperature is approximately +50°F. Do not store where temperatures may go below +40°F or above +120°F. Avoid storage in outside metal buildings where the temperature could go above +120°F, in summer, as this could damage the power pack.
3. Long storage will not harm the Scruf-Drill®, or Charger. Under the proper conditions (given above) they can be stored for 5 years or more without harm.

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. Battery replacement should be accomplished at B&D Service Centers, using only identical replacement batteries.
Batteries
After several years of normal use, the batteries in your battery pack will no longer accept a charge. This is a normal occurrence, and signifies that the batteries have reached the end of their useful life. Replacement battery packs are available at extra cost at your local Black & Decker Service Center.

Your battery pack contains nickel cadmium batteries. The Environmental Protection Agency considers Cadmium to be a toxic material that can do severe damage to the environment. Check with your state Environmental Protection Agency to find out how to properly recycle or dispose of cadmium, or you can turn in expired battery packs to your local Black & Decker Service Center for proper recycling or disposal.

Commercial/Industrial Use 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.