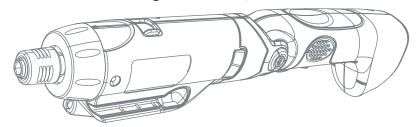


# CORDLESS SCREWDRIVER

Catalog No. PD600, PD600G



# **INSTRUCTION MANUAL**

## SAVE THIS MANUAL FOR FUTURE REFERENCE.

# **GENERAL SAFETY RULES - FOR ALL BATTERY OPERATED TOOLS**

### **⚠ 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
- 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
- Keep bystanders, children, and visitors away while operating a power tool. Distractions can cause you to lose control.

## **Electrical Safety**

- A battery operated tool with integral batteries or a separate battery pack must be recharged only with the specified charger for the battery. A charger that may be suitable for one type of battery may create a risk of fire when used with another battery.
- · Use battery operated tool only with specifically designated battery pack. Use of any other batteries may create a risk of fire.

### **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
- Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
- Avoid accidental starting. Be sure switch is in the locked or off position before inserting battery pack. Carrying tools with your finger on the switch or inserting the battery pack into a tool with the switch on invites accidents.
- Remove adjusting keys or wrenches before turning the tool on. A wrench or a 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 enable 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.

- · 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 loss of
- Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.
- Do not use tool if switch does not turn it on or off. A tool that cannot be controlled with the switch is dangerous and must be repaired.
- Disconnect battery pack from tool or place the switch in the locked or off position before making any adjustments, changing accessories, or storing the tool. Such preventive 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.
- When battery pack is not in use, keep it away from other metal objects like: paper clips, coins, keys, nails, screws or other small metal objects that can make a connection from one terminal to another. Shorting the battery terminals together may cause sparks, burns, or a fire.
- Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools, with sharp cutting edge 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 tool's 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 create a risk of injury when used on

### **Service**

- · Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel may 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 shock or injury.

# **Specific Safety Rules**

 Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring. Contact with a "live" wire will also make exposed metal parts of the tool "live" and shock the operator.

## First Aid Measures for Gel Components (PD600G Only)

If gel within the comfort grip becomes exposed and results in skin contact wash with soap and water; for eye contact, flush with flowing water. If swallowed, seek medical attention.

The label on your tool may include the following symbols.

V	VOlts	A	amperes
Hz	hertz	W	watts
min	minutes	∼	alternating curren
	direct current	n <sub>o</sub>	no load speed
	Class II Construction	⊜	earthing terminal
<u>^</u>	safety alert symbol		revolutions or
_			reciprocations
			per minute

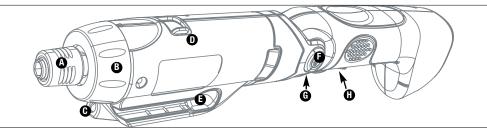
△ WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

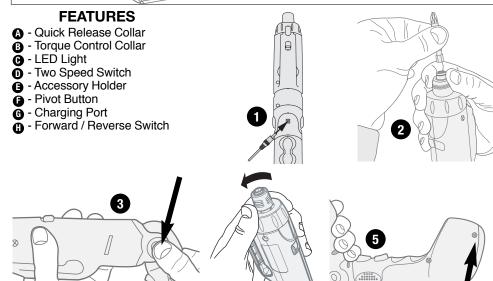
- · lead from lead-based paints,
- · crystalline silica from bricks and cement and other masonry products, and
- · arsenic and chromium from chemically-treated lumber (CCA).

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out

Avoid prolonged contact with dust from power sanding, sawing, grinding, drilling, and other construction activities. Wear protective clothing and wash exposed areas with soap and water. Allowing dust to get into your mouth, eyes, or lay on the skin may promote absorption of harmful chemicals.

riangle **WARNING:** Use of this tool can generate and/or disburse dust, which may cause serious and permanent respiratory or other injury. Always use NIOSH/OSHA approved respiratory protection appropriate for the dust exposure. Direct particles away from face and body.





# **△Safety Warnings and Instructions: Charging**

- 1. This manual contains important safety and operating instructions.
- Before using battery charger, read all instructions and cautionary warnings on battery charger and product using battery. **ACAUTION:** To reduce the risk of injury, use charger only with this product. Batteries in other products may burst causing personal injury or
- 3. Do not expose charger to rain or snow.
- Use of an attachment not recommended or sold by Black & Decker may result in a risk of fire, electric shock, or injury to persons.
- To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting charger.
- Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- An extension cord should not be used unless absolutely necessary. Use of improper extension cord could result in a risk of fire, electric shock or electrocution.
- Two-wire cords 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 is to be used outside, the cord must be suitable for outdoor use. Any cord marked for outdoor use can also be used for indoor work. The letters "W" or "WA" on the cord jacket indicate that the cord is suitable
- 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 extension contains at least the minimum wire size.

Volts	Minimum Gage for Cord Sets Total Length of Cord in Feet							
120V		0-25	26-50		101-150			
240V		0-50	51-100	101-200	201-300			
Ampere Rating								
More	Not more		American Wire Gage		е			
Than	Thar	1		J				
0 -	6	18	16	16	14			
6 -	10	18	16	14	12			
10 -	12	16	16	14	12			
12 -	16	14	12	Not Re	ecommended			

- Use only the supplied charger when charging your tool. The use of any other charger could damage the drill or create a hazardous condition.
- Use only one charger when charging.
- 10. Do not attempt to open the charger. There are no customer serviceable parts inside. Return to any authorized Black & Decker service center.
- DO NOT incinerate the tool or batteries even if they are severely damaged or complete-ly worn out. The batteries can explode in a fire.
- 12. Do not incinerate the batteries. They can explode in a fire. A small leakage of liquid from the battery cells may occur under extreme usage, charging or temperature conditions. This does not indicate a failure. However, if the outer seal is broken and this leak-age gets on your skin:
- Wash quickly with soap and water.
- Neutralize with a mild acid such as lemon juice or vinegar.
- If the battery liquid gets in 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.

# **Charging Procedure**

THE BATTERIES IN YOUR TOOL ARE NOT FULLY CHARGED AT THE FACTORY. BEFORE ATTEMPTING TO CHARGE THEM, THOROUGHLY READ ALL OF THE SAFETY INSTRUCTIONS.

To charge your screwdriver, follow the steps below.

- 1. Plug the output cord of the charger into the socket in the bottom half of the screwdriver handle as shown in Figure 1.
- 2. Plug the charger into any standard 120 Volt 60 Hz electrical outlet
- 3. Let the tool charge initially for 9 hours. After the initial charge, under normal usage, your tool should be fully charged in 3 to 6 hours.

 $\Delta$  **WARNING:** When disconnecting the tool from the charger, be sure to unplug the charger from the outlet first then disconnect the charger cord from the tool. Do not use the tool while it is connected to the charger.

### Important Charging Notes

- After normal usage, your tool should be fully charged in 3 to 6 hours. If the batteries are run-down completely, it may take up to 6 hours to become fully charged. Your tool was sent from the factory in an uncharged condition. Before attempting to use it, it must be charged for at least 9 hours.
- DO NOT charge the batteries in an air temperature below 40°F (4,5 °C) or above 105°F (+40,5 °C). This is important and will prevent serious damage to the batteries. Longest life and best performance can be obtained if batteries are charged when air temperature is about 75°F.
- While charging, the charger may hum and become warm to touch. This is a normal condition and does not indicate a problem.
- 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. (3) Move charger and tool to a surrounding air temperature of 40°F (4,5°C) or above 105°F (+40,5°C). (4) If the receptacle and temperature are OK, and you do not get proper charging, take or send the tool and charger to your local Black & Decker service center. See Tools Electric in
- The tool should be recharged when it fails to produce sufficient power on jobs which were easily done previously. DO NOT CONTINUE using product with its batteries in a depleted condition.
- To prolong battery life, avoid leaving on charge for extended periods of time (over 30 days without use). Although overcharging is not a safety concern, it can significantly reduce overall battery life.
- The batteries will reach optimum performance after being cycled 5 times during normal usage. There is no need to run the batteries down completely before recharging. Normal usage is the best method of discharging and recharging the batteries.

# **△Safety Warnings and Instructions: Drilling**

Hold tool firmly to control its twisting action.

△ WARNING: Tool may stall (if overloaded or improperly used) causing a twist. Always expect the stall. Grip the drill firmly to control the twisting action and prevent loss of control which could cause personal injury. If a stall does occur, release the trigger immediately and determine the reason for the stall before re-starting.

# Operating Instructions

# Inserting an Accessory

Hold the screwdriver upright as shown in Figure 2 and pull down on the chuck sleeve .

- Insert a hex shank accessory into the holder.
- · Release the sleeve.

NOTE: If bit does not fit into spindle, rotate the bit and re-insert it. Do not insert a bit tip without a bit tip holder.

# **Removing an Accessory**

- · Hold the screwdriver upright as shown in **Figure 2** and pull down on the chuck sleeve.
- · Pull accessory straight out. Switch

To turn the tool ON in a forward direction, press the top section of the rocker switch and the tool will run. Release pressure from the switch and the tool will stop. To operate in reverse, press the bottom section of the rocker switch. Without depressing the rocker switch the tool is locked and will act as any conventional, non-powered screwdriver.

# Angling the screwdriver

To convert the tool to an angled screwdriver, push in on the release button shown in **Figure 3** and rotate the top portion of the tool until it locks into one of the remaining two positions.

# **⚠ Three Position Screwdriver Warnings:**

- To avoid being pinched, hold the screwdriver as shown in Figure 3 when changing
- · Do not use screwdriver as a pry bar in any position.
- · To avoid screwdriver being turned on accidentally, do not carry in your pocket.

To set the tool's torque, rotate the adjustable torque collar as shown in Figure 4. There are 12 clutch settings in all. These are indicated by screw icons depicted on the torque collar. For light duty work when using small screws, set the collar to one of the smaller screw icon settings. Each click in a clockwise direction means an increase in the torque produced. The highest position is depicted by a drill bit icon which should be used when drilling with the screwdriver. If you do not know the appropriate setting to use when tightening a screw, begin at the lowest torque setting. If the clutch ratchets before the desired result is achieved, increase the collar setting and continue tightening the screw. Repeat until you reach the correct setting.

# **Two Speed Operation**

The dual range feature of your screwdriver allows you to shift gears for greater versatility. To select low speed, (high torque setting), turn tool off and permit to stop. Push the slide switch located on the top of the tool to the left. Use low speed for screwdriving operations. To select the high speed, (low torque setting), turn tool off and permit to stop. Slide gear shifter fully to the right. Use high speed for drilling operations.

# **LED Light**

To turn the light on, push the slide switch located on the underside of the screwdriver toward the front of the tool.

# Drilling

- Use sharp drill bits only.
- Support and secure work properly, as instructed in the safety Instructions.
- Use appropriate and required safety equipment, as instructed in the safety instructions.
- Secure and maintain work area, as instructed in the safety instructions.
- Run the drill very slowly, using light pressure, until the hole is started enough to keep the drill bit from slipping out of it. Apply pressure in a straight line with the bit. Use enough pressure to keep the bit biting
- but not so much as to stall the motor or deflect the bit. Hold the tool firmly with two hands to control its twisting action.
- DO NOT CLICK THE TRIGGER OF A STALLED DRILL OFF AND ON IN AN ATTEMPT TO START IT. DAMAGE TO THE DRILL CAN RESULT.
- Minimize stalling on breakthrough by reducing pressure and slowly drilling through last part of hole.

## Keep the motor running while pulling the bit out of a drilled hole This will help reduce jamming.

# Make sure switch turns drill on and off.

△ WARNING: It is important to support work properly and to hold the drill firmly to prevent loss of control which could cause personal injury.

# **Drilling in Wood**

Holes in wood can be made with the same twist drill bits used for metal. These bits should be sharp and should be pulled out frequently when drilling to clear chips from the flutes. NOTE: This tool is not recommended for drilling in metal or masonry.

### Maintenance

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.

IMPORTANT: To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment (other than those listed in this manual) should be performed by authorized service centers or other qualified service organizations, always using identical replacement

### Lubrication

Black & Decker tools are properly lubricated at the factory and are ready for use.

### Accessories

Recommended accessories for use with your tool are available from your local dealer or authorized service center.

**CAUTION:** The use of any accessory or attachment not recommended may be hazardous. The following accessories should be used only in the sizes specified below: BITS - WOOD DRILLING - Up to 1/4" (7 mm).

The RBRC™ Seal
The RBRC™ (Rechargeable Battery Recycling Corporation) Seal on the nickelcadmium battery (or battery pack) indicates that the costs to recycle the battery (or battery pack) at the end of its useful life have already been paid by Black & Decker. In some areas, it is illegal to place spent nickel-cadmium batteries in the trash or municipal solid waste stream and the RBRC program provides an environmentally conscious alternative.

RBRC in cooperation with Black & Decker and other battery users, has established programs in the United States and Canada to facilitate the collection of spent nickelcadmium batteries. Help protect our environment and conserve natural resources by returning the spent nickel-cadmium battery to an authorized Black & Decker service center or to your local retailer for recycling.

### **Battery Removal**

Before attempting to disassemble this tool, turn it on and run it in either direction until it stops to ensure a complete discharge of the batteries. Using a phillips screwdriver, remove the screw in the product housing shown in **Figure 5** and remove the cap from the end of the tool. Lift the batteries out and pull off the terminal clips. See "Service Information" for battery replacement.