

**CHICAGO**  
**Electric Power Tools**  
*Lithium Powered*

# 10.8 VOLT CORDLESS DRILL/DRIVER

**Model 98544**

## SET UP AND OPERATING INSTRUCTIONS



Distributed exclusively by Harbor Freight Tools®.

3491 Mission Oaks Blvd., Camarillo, CA 93011

Visit our website at: <http://www.harborfreight.com>



**Read this material before using this product.  
Failure to do so can result in serious injury.  
SAVE THIS MANUAL.**

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**For technical questions or replacement parts, please call 1-800-444-3353.**

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## SAVE THIS MANUAL

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Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

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## IMPORTANT SAFETY INFORMATION

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In this manual, on the labeling, and all other information provided with this product:



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

### **DANGER**

**DANGER** indicates a hazardous

situation which, if not avoided, will result in death or serious injury.

### **WARNING**

**WARNING** indicates a

hazardous situation which, if not avoided, could result in death or serious injury.

### **CAUTION**

**CAUTION**, used with the safety

alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

### **NOTICE**

**NOTICE** is used to address practices not related to personal injury.

### **CAUTION**

**CAUTION**, without the safety alert symbol, is used to address practices not related to personal injury.

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## General Power Tool Safety Warnings



**WARNING** Read all safety warnings and instructions.

*Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.*

**Save all warnings and instructions for future reference.**

*The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.*

1. **Work area safety**
  - a. **Keep work area clean and well lit.**  
*Cluttered or dark areas invite accidents.*
  - b. **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.*
  - c. **Keep children and bystanders away while operating a power tool.**  
*Distractions can cause you to lose control.*
2. **Electrical safety**
  - a. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter**

- plugs with grounded power tools.** *Unmodified plugs and matching outlets will reduce risk of electric shock.*
- b. **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.*
- c. **Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*
- d. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** *Damaged or entangled cords increase the risk of electric shock.*
- e. **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** *Use of a cord suitable for outdoor use reduces the risk of electric shock.*
- f. **If operating a power tool in a damp location is unavoidable, use a Ground Fault Circuit Interrupter (GFCI) protected supply.** *Use of a GFCI reduces the risk of electric shock.*
3. **Personal safety**
- a. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** *A moment of inattention while operating power tools may result in serious personal injury.*
- b. **Use personal protective equipment. Always wear eye protection.** *Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.*
- c. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** *Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.*
- d. **Remove any adjusting key or wrench before turning the power tool on.** *A wrench or a key left attached to a rotating part of the power tool may result in personal injury.*
- e. **Do not overreach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*
- f. **Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.** *Loose clothes, jewelry or long hair can be caught in moving parts.*
- g. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** *Use of these devices can reduce dust-related hazards.*
- h. **Only use safety equipment that has been approved by an appropriate standards agency.** *Unapproved safety equipment may not provide adequate protection. Eye protection must be ANSI-approved and breathing protection must be NIOSH-approved.*

*proved for the specific hazards in the work area.*

#### 4. Power tool use and care

- a. **Do not force the power tool. Use the correct power tool for your application.** *The correct power tool will do the job better and safer at the rate for which it was designed.*
- b. **Do not use the power tool if the switch does not turn it on and off.** *Any power tool that cannot be controlled with the switch is dangerous and must be repaired.*
- c. **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*
- d. **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** *Power tools are dangerous in the hands of untrained users.*
- e. **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** *Many accidents are caused by poorly maintained power tools.*
- f. **Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*

- g. **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** *Use of the power tool for operations different from those intended could result in a hazardous situation.*

#### 5. Battery tool use and care

- a. **Recharge only with the charger specified by the manufacturer.** *A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.*
- b. **Use power tools only with specifically designated battery packs.** *Use of any other battery packs may create a risk of injury and fire.*
- c. **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 burns or a fire.*
- d. **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** *Liquid ejected from the battery may cause irritation or burns.*

#### 6. Service

- a. **Have your power tool serviced by a qualified repair person using only identical replacement parts.** *This will ensure that the safety of the power tool is maintained.*

## **Specific Drill/Driver Safety Warnings**

- 1. Maintain a safe working environment.** Keep the work area well lit. Make sure there is adequate surrounding workspace. Always keep the work area free of obstructions, grease, oil, trash, and other debris. Do not use the Cordless Drill/Driver in areas near flammable chemicals, dusts, and vapors. Do not use this product in a damp or wet location.
- 2. Maintain labels and nameplates on the Cordless Drill/Driver.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- 3. When using the Cordless Drill/Driver, always maintain a firm grip on the tool with both hands.**
- 4. Hold the tool by its insulated gripping surfaces when performing an operation where the Cordless Drill/Driver may contact hidden wiring.** Contact with a “live” wire will make exposed metal parts of the Cordless Drill/Driver “live” and shock the operator.
- 5. Do not use the Cordless Drill/Driver or Charger if it has been dropped, damaged, left outdoors, or immersed in liquid.**
- 6. To avoid electric shock, do not pull or carry the Charger by its Power Cord or pull the Power Cord around sharp corners or edges.** Do not unplug the Charger by pulling on the Power Cord. Keep the Power Cord away from heated surfaces.
- 7. To avoid electrical shock, do not handle the Charger or the Cordless Drill/Driver with wet hands.**
- 8. Keep the Handles of the Cordless Drill/Driver dry, clean, and free from oil or grease.**
- 9. Avoid unintentional starting.** Make sure you are prepared to begin work before turning on the Cordless Drill/Driver.
- 10. Never leave the Charger unattended when it is plugged into an electrical outlet.** Unplug the Charger from its electrical outlet before leaving. Place the Charger on a solid surface such as a garage floor; never place on anything flammable.
- 11. PROPER BATTERY PACK CARE: Battery Pack (44) leakage may occur under extreme usage or temperature conditions.** If Battery Pack fluid comes in contact with skin, rinse with lemon juice and vinegar then wash with soap and water. If the fluid comes into contact with the eyes, flush with water for several minutes and contact a doctor immediately. Never burn the Battery Pack, as it can explode in a fire. Do not charge the Cordless Drill/Driver with a leaking Battery Pack. Contact local solid waste authorities for instructions on correct disposal or recycling of the Battery Pack.
- 12. WARNING! People with pacemakers should consult their physician(s) before using this product.** Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.

13.



**The battery charger gets hot during use.** The charger's heat can build up to unsafe levels and

create a fire hazard if it does not receive adequate ventilation, due to an electrical fault, or if it is used in a hot environment.

Do not place the charger on a flammable surface. Do not obstruct any vents on the charger. **Especially avoid placing the charger on carpets and rugs; they are not only flammable, but they also obstruct vents under the charger.**

Place the charger on a stable, solid, nonflammable surface (such as a stable metal workbench or concrete floor) at least 1 foot away from all flammable objects, such as drapes or walls. Keep a fire extinguisher and a smoke detector in the area. Frequently monitor the charger and battery during use.

14. **This product is not a toy.** Keep it out of reach of children.

15. **People with pacemakers should consult their physician(s) before use.** Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure. In addition, people with pacemakers should:

- Avoid operating alone.
- Do not use with power switch locked on.
- Properly maintain and inspect to avoid electrical shock.
- Any power cord must be properly grounded. Ground Fault Circuit Interrupter (GFCI) should also be implemented – it prevents sustained electrical shock.

16. Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contains chemicals known [to the State of California] 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 or other masonry products
- Arsenic and chromium from chemically treated lumber

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 microscopic particles. (California Health & Safety Code § 25249.5, *et seq.*)

17.  **WARNING:** Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling. (California Health & Safety Code § 25249.5, *et seq.*)

18. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

### **Vibration Safety**

This tool vibrates during use. Repeated or long-term exposure to

vibration may cause temporary or permanent physical injury, particularly to the hands, arms and shoulders. To reduce the risk of vibration-related injury:

1. Anyone using vibrating tools regularly or for an extended period should first be examined by a doctor and then have regular medical check-ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud's Disease should not use this tool. If you feel any medical or physical symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.
2. Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.
3. Wear suitable gloves to reduce the vibration effects on the user.
4. Use tools with the lowest vibration when there is a choice between different processes.
5. Include vibration-free periods each day of work.
6. Grip tool as lightly as possible (while still keeping safe control of it). Let the tool do the work.
7. To reduce vibration, maintain the tool as explained in this manual. If any abnormal vibration occurs, stop use immediately.



## SAVE THESE INSTRUCTIONS.

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### GROUNDING

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#### **WARNING**

**TO PREVENT ELECTRIC SHOCK**

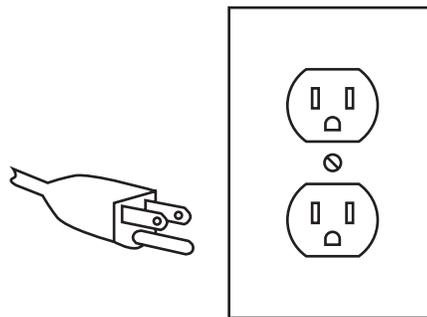


**AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION:**

**Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.**

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#### **Grounded Tools: Tools with Three Prong Plugs**



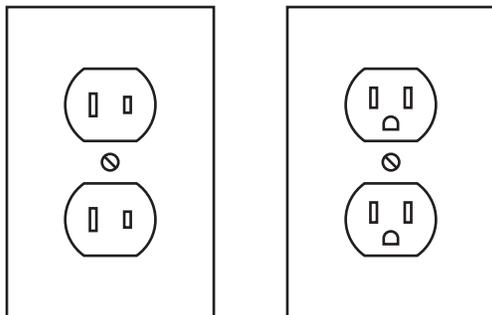
**3-Prong Plug and Outlet**

1. Tools marked with "Grounding Required" have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should

electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. **(See 3-Prong Plug and Outlet.)**

2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool's grounding system and must never be attached to an electrically "live" terminal. **(See 3-Prong Plug and Outlet.)**
3. The tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the preceding illustration. **(See 3-Prong Plug and Outlet.)**

### **Double Insulated Tools: Tools with Two Prong Plugs**



**Outlets for 2-Prong Plug**

1. Tools marked "Double Insulated" do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electric

Code. **(See Outlets for 2-Prong Plug.)**

2. Double insulated tools may be used in either of the 120 volt outlets shown in the preceding illustration. **(See Outlets for 2-Prong Plug.)**

### **Extension Cords**

1. **Grounded** tools require a three wire extension cord. **Double Insulated** tools can use either a two or three wire extension cord.
2. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. **(See Table A.)**
3. The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. **(See Table A.)**
4. When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. **(See Table A.)**
5. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size. **(See Table A.)**
6. If you are using an extension cord outdoors, make sure it is marked with the suffix "W-A" ("W" in Canada) to indicate it is acceptable for outdoor use.

7. Make sure the extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.
8. Protect the extension cords from sharp objects, excessive heat, and damp or wet areas.

<b>RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (120/240 VOLT)</b>					
<b>NAMEPLATE AMPERES (at full load)</b>	<b>EXTENSION CORD LENGTH</b>				
	<b>25'</b>	<b>50'</b>	<b>75'</b>	<b>100'</b>	<b>150'</b>
0 – 2.0	18	18	18	18	16
2.1 – 3.4	18	18	18	16	14
3.5 – 5.0	18	18	16	14	12
5.1 – 7.0	18	16	14	12	12
7.1 – 12.0	18	14	12	10	-
12.1 – 16.0	14	12	10	-	-
16.1 – 20.0	12	10	-	-	-

**TABLE A** \* Based on limiting the line voltage drop to five volts at 150% of the rated amperes.

### Symbology

	Double Insulated
	Canadian Standards Association
	Underwriters Laboratories, Inc.
	Volts Alternating Current
	Amperes
$n_0$ xxxx/min.	No Load Revolutions per Minute (RPM)

## **SPECIFICATIONS**

Power Source	1.3Ah Battery, 10.8v Lithium Ion
Charge Time	3-5 Hours (after initial charge)
Charger Input	120V ~ 60Hz
Charger Output	15V DC, 400mA
Chuck Type	3/8" Jacobs® Keyless
Max. Torque	100 in./lb.
Torque Settings	22 Clutch Settings
Variable Speed	0-600 RPM
Reversible	Yes
Trigger Lock	Yes
Weight	2 lb. (Drill Only)

## **UNPACKING**

When unpacking, make sure the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.



**Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.**

**⚠ WARNING TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION: Turn the Power Switch of the tool to its "OFF" position and unplug the tool from its electrical outlet before assembling or making any adjustments to the tool.**

**Note:** For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

## Lithium Battery Safety and Charging Instructions

1. Do not leave Drill/Driver unattended while charging.
2. Battery charging should be done by adults only.
3. Charge on non-flammable surface and keep away from flammable items.
4. Turn charger off when battery is charged, and unplug charger from battery-powered device.
5. Disconnect AC wall chargers from outlets while not in use.
6. If battery-powered device has been damaged, immediately stop use, unplug, and safely move away from flammable materials.
7. Follow instructions for charging battery. Do NOT charge longer than recommended.

### Charging

1. The Battery Pack (44) requires charging before the initial use. The recommended initial charge time is eight hours, prior to initial use of the Cordless Drill/Driver. Place the Charger on a solid surface such as a garage floor; never on anything flammable.

**Note:** Always switch to a fresh battery when tool performance begins to diminish. Severe heat is destructive to batteries; the more heat generated, the faster the battery will lose power. A battery that gets too hot can be permanently damaged. Never over-discharge a battery by using the tool after performance decreases. Never

attempt to discharge a battery by continuing to pull the trigger. When tool performance begins to diminish, stop the tool, recharge the battery, and use a fully charged battery for optimal performance.

2. When the Battery Pack-after initial charge-requires recharging, it must charge for three to five hours in order to operate at full power.
3. Charging room temperature: 50° F. – 104° F.
4. Depress both buttons at the rear of the Battery Pack and slide the unit down to detach from the Drill/Driver.
5. The Battery Pack can only fit into the Charger (57) in one position, insert into Charger, plug Charger into Adapter (60), and plug Adapter into any standard electrical outlet.



6. While charging, the Battery Pack, Charger, and Adapter may become warm to the touch. This is normal, and does not indicate a problem.
7. When the Battery Pack is in the Charger, both the red and green lights on the Charger will be illuminated while charging, when the Battery Pack is fully charged the red light will turn off, indicating that the Battery Pack is ready for use. Once the Battery Pack

is fully charged, unplug the Charger from the electrical outlet and remove the Battery Pack from the Adapter.

## **OPERATING INSTRUCTIONS**



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

### **Work Piece and Work Area Set Up**

1. Designate a work area that is clean and well-lit. The work area must not allow access by children or pets to prevent injury and distraction.
2. Secure loose work pieces using a vise or clamps (not included) to prevent movement while working.
3. There must not be hazardous objects, such as utility lines or foreign objects, nearby that will present a hazard while working.

### **General Operating Instructions**

**NOTE:** For additional information regarding the parts listed in the following pages, refer to the **Parts List & Assembly Diagram**.

#### **WARNING**

Remove the Battery Pack (44)

from the tool and set the Direction Lever (38) to its center, locked, position before making any adjustments, changing accessories, or storing the tool.



1. In order to use the included screw-driver bits, you must first attach the Bit Adapter (62) into the Chuck (2). With the Chuck pointing away from you, turn the Chuck counterclockwise. Insert the shank of the Bit Adapter all the way into the Chuck. Turn the Chuck clockwise to lock the Bit Adapter in place.
2. The Chuck accepts up to 3/8" diameter bits. Insert the appropriate bit for your application and tighten the Chuck firmly. **Never insert one of the included Bits directly into the Chuck. A smaller gauge than 3/8" will not be firmly secured and may result in injury or property damage.**
3. Secure the workpiece in place, using a vise or clamps (not included).

**CAUTION:** Never change Torque Setting while drill is still rotating, as this can damage the Drill/Driver.

4. Decide on which setting to choose:

**Torque Settings:**

Use one of the 22 settings (1-23) for screwdriver usage.

Use the Drill Bit setting for use with drill bits.

The different sizes of Bit Adapters (62) are an indication of how much torque the Cordless Drill/Driver will apply to the bit before the clutch slips, allowing the bit to stop and helping to prevent damage to the screw, bit, or workpiece. The larger the screw, the more torque is applied before the clutch slips. Unless when drilling, always start with a lower number to help prevent damage. This Cordless Drill/Driver also has torque settings between the screws to allow a greater range of control.

**Drill Setting (▲▼▶):**

This setting essentially prevents the clutch from slipping entirely. It is designed for drilling, but is not advised for using a screwdriver bit because it offers no protection against stripping the head or splitting the wood.

5. To use the screwdriver function, insert the Bit Adapter into the Chuck as detailed in Step 1. Insert the required screwdriver bit into the Bit Adapter.
6. Set the drilling torque by turning the Torque Control (6) so that it lines up with the Arrow on the center top of the Cordless Drill/Driver.
7. When driving screws, start with a lower torque setting.
8. When drilling in light gauge metal or wood, use a wooden block to back up

the material and prevent damage to the workpiece.

9. Mark the center of the hole to be drilled with a center punch (not included) to give a Drill Bit a starting point and to prevent it from “walking”.
10. Lubricate the Drill Bit with cutting oil (not included) when drilling iron or steel. Use a coolant (not included) when drilling nonferrous metals such as copper, brass, or aluminum.
11. Insert the fully charged Battery Pack into the Handle of the Drill/Driver.
12. The Direction Lever (38) allows you to change the rotational direction of the Drill/Driver. For a clockwise rotation, move the Lever forward. For a counterclockwise rotation, move the Lever back. The center position locks the Trigger (61), to prevent the Drill/Driver from operating.

**CAUTION: Never attempt to change rotational direction while Chuck is rotating.**

13. Hold the Cordless Drill/Driver firmly with both hands, as torque from the Motor can cause the tool to twist.
14. Operate Drill by squeezing Trigger. The speed of can be controlled by varying the pressure on the Trigger.
15. If the clutch starts slipping before the screw is in all the way, stop the drill, put the Direction Lever in the center position and change the torque setting. Reset the rotation direction before continuing.
16. If Drilling:  
Use the Drill torque setting, as described above.

Drill only as deep as necessary. Do not drill deeper than necessary into walls or other areas where you cannot identify any possible hazards behind the drilling surface.

To reduce jamming as the Bit breaks through the workpiece, decrease the drilling pressure when the point of the Bit breaks through the workpiece.

17. When you have drilled the hole, remove the Bit from the hole while the Cordless Drill is still running. This prevents the Bit from getting caught in the hole and causing damage.
18. Release Trigger to stop the Drill, put Direction Lever in the center position, and remove the bit from the Drill.

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## CLEANING AND MAINTENANCE

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**Procedures not specifically explained in this manual must be performed only by a qualified technician.**

### **⚠️ WARNING**

#### **TO PREVENT SERIOUS INJURY**

**FROM ACCIDENTAL OPERATION:** Set the Direction Lever (38) to the center locked position and unplug the battery from the tool before performing inspection, maintenance, or cleaning procedures.

**Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.**

1. **BEFORE EACH USE**, inspect the general condition of the tool. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation.
2. **AFTER USE**, clean external surfaces of the tool with clean cloth.
3. **BEFORE EACH USE**, inspect the general condition of the Cordless Drill/Driver. Check for misalignment or binding of moving parts, cracked or broken parts, leaking Battery Pack, damaged Charger wiring, chipped or broken Drill Bits, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use.  
**Do not use damaged equipment.**
4. **After each use:** With a soft brush or cloth, remove all dirt and debris from the Cordless Drill/Driver. Do not immerse the Cordless Drill/Driver in any liquids.
5. **The lithium battery in this tool must be recycled or disposed of properly.**

## PARTS LIST

Part	Description	Qty.
1	Screw (M6 x 16)	1
2	3/8" Keyless Chuck	1
3	Screw (M2.2 x 12)	4
4	Mounting Plate	1
5	Spring Holder	1
6	Torque Control	1
7	Sleeve	1
8	Torque Spring	1
9	C-Ring	1
10	Washer	1
11	Ball	15
12	Washer	1
13	Clutch Washer	1
14	Ball	16
15	Bushing	1
16	Gear Housing	1
17	Output Shaft	1
18	Ring Gear	1
19	Planet Gear	6
20	Sun Gear	1
21	Washer	1
22	Screw (M3x6)	2
23	Mounting Bracket	1
24	Screw (M2.2x12)	4
25	Motor Pinion	1
26	Motor	1
27	Screw (M2.9x14)	2
28	Housing Cover	1
29	Screw (M2.9x16)	7
30	E-Washer	1
31	Red Wire	

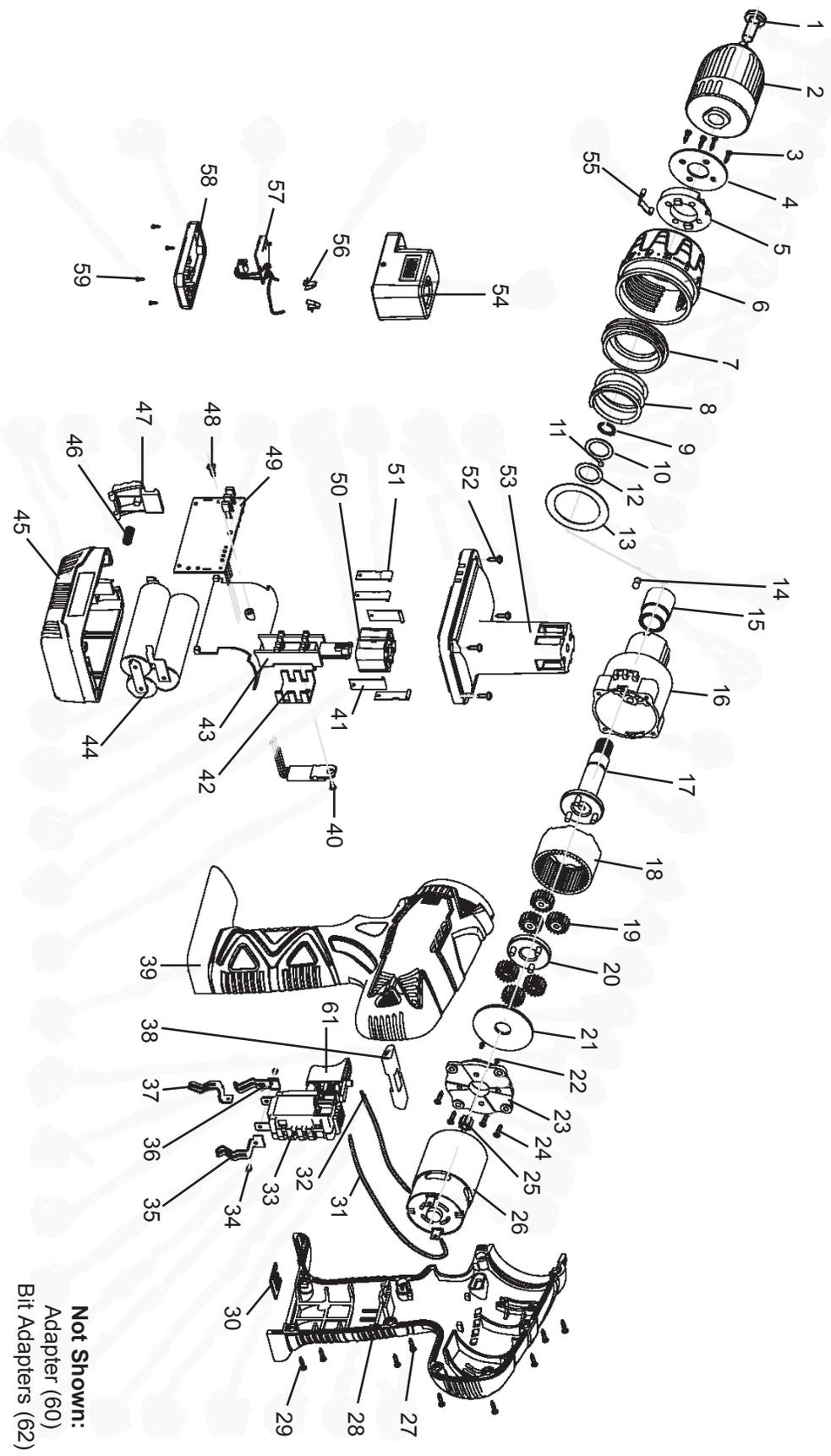
## PARTS LIST

Part	Description	Qty.
32	Black Wire	1
33	Speed Switch	1
34	Rivet	2
35	Positive Contact Plate	1
36	Negative Contact Plate	1
37	Control Contact Plate	1
38	Direction Lever	1
39	Housing Support	1
40	Screw (M2.9x10)	1
41	Recharging Contact Plate	2
42	Heat Sink	1
43	PCB Supporter	1
44	Battery Pack	1
45	Battery Pack Holder	1
46	Lock Spring	1
47	Power Pack Lock	1
48	Screw (M2.2x8)	1
49	Power Pack	1
50	Holder Plate	1
51	Charging Plate	3
52	Screw (M2.2x14 4)	4
53	Power Pack Cover	1
54	Charger Housing	1
55	Spring Plate	1
56	Charger Contact Plate	2
57	Charger	1
58	Charger Stand Support	1
59	Screw (M2.2x14)	4
60	Adapter	1
61	Trigger	1
62	Bit Adapters	1 set

### **PLEASE READ THE FOLLOWING CAREFULLY**

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# ASSEMBLY DIAGRAM



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