CHICAGO ELECTRIC[®] POWER TOOLS

12V LITHIUM CORDLESS DRILL



SET UP AND OPERATING INSTRUCTIONS



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.

Manual Revised 12a

SAVE THIS MANUAL

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.

IMPORTANT SAFETY INFORMATION

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.

A DANGER

DANGER indicates a hazardous situation

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

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

ACAUTION

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.

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 iniurv.

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**

Do not expose power tools to rain or wet conditions. Water entering a power tool will increase 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, nonskid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c. Prevent unintentional starting. Ensure the trigger is in the offposition 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 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.

Drill and Impact Drill Safety Warnings

- 1. Hold power tools by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.
- 2. Let bit cool before touching, changing or adjusting it. Bits heat up dramatically while in use, and can burn you.
- 3. If the drill bit jams, release the trigger immediately; drill torque can cause injury or break bit.
- 4. Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- 5. Avoid unintentional starting. Prepare to begin work before turning on the tool.
- 6. Do not lay the tool down until it has come to a complete stop. Moving parts can grab the surface and pull the tool out of your control.
- 7. When using a handheld power tool, maintain a firm grip on the tool with both hands to resist starting torque.
- Do not leave the tool unattended when it is plugged into an electrical outlet. Turn off the tool, and unplug it from its electrical outlet before leaving.

9.

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 while charging.

- 10. This product is not a toy. Keep it out of reach of children.
- 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 trigger 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.

- 12. WARNING: 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 paintsCrystalline silica from bricks and
 - Crystainine since 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.*)

- 13. 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.*)
- 14. 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.

Lithium Battery Safety Warnings



LITHIUM BATTERIES STORE A LARGE AMOUNT OF ENERGY AND WILL VENT FIRE OR EXPLODE IF MISTREATED:

- 1. Keep Battery Pack dry.
- 2. DO NOT DO ANY OF THE FOLLOWING TO THE BATTERY PACK:
 - a. Open,
 - b. Drop,
 - c. Short-circuit,
 - d. Incinerate, or
 - e. Expose to temperatures greater than 140°F.
- 3. Charge Battery Pack only according to the instructions indicated in the charger manual.
- 4. Inspect Battery Pack before every use; do not use or charge if damaged.

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:

 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 symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.

- 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.
- 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.



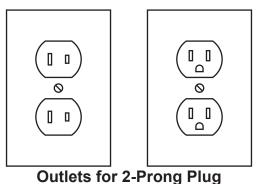
GROUNDING

AWARNING 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.

Double Insulated Tools: Tools with Two Prong Plugs



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 Electrical Code. 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

Note: Extension cords must not be used with this item's charger.

Symbology

	Double Insulated
	Canadian Standards Association
(UL)	Underwriters Laboratories, Inc.
V~	Volts Alternating Current
Α	Amperes
n ₀ xxxx/min.	No Load Revolutions per Minute (RPM)

SPECIFICATIONS

Charger Input	120V~ / 60Hz
Motor Speed	0-350 RPM (1st gear) 0-1200 RPM (2nd gear)
Battery	12V, 1300mAh Lithium-Ion (ITEM 68059)
Chuck Capacity	3/8" (10mm)

UNPACKING

When unpacking, make sure that the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at 1-800-444-3353 as soon as possible.

INSTRUCTIONS FOR PUTTING INTO USE



Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under

subheadings therein before set up or use of this product.



Controls

1. TRIGGER:

This is a variable speed tool. Squeeze the Trigger more to increase speed, less to reduce speed. The light will illuminate when the trigger is pressed.

2. DIRECTION SETTING:

- : (towards front of drill) Press switch from the right side of the drill to make the drill turn clockwise, usually for tightening or driving screws.
- : (away from front of drill) Press switch from the left side of the drill to make the drill turn counterclockwise, usually for loosening or removing screws.

3. CLUTCH COLLAR:

- 1 11: These settings control the amount of torque at the bit to prevent stripping bolts and screws or splitting wood.
 Settings range from 1 - lowest torque - to 11 - highest torque.
 - This setting prevents the clutch from slipping. It is used when drilling holes.

4. GEAR SWITCH:

- 1: low gear, higher torque
- 2: high gear, faster speed

<u>CAUTION</u> To prevent drill damage,

do not adjust any setting halfway between options.

Example:

Do not use the Drill with the Clutch collar set between settings 11 and **\$**.

OPERATING INSTRUCTIONS



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

Charging the Battery Pack

The Battery Pack (ITEM 68059) needs to be charged before first use. Recharge the Battery after every use.

- Remove the Battery Pack by pressing on the striped side tabs and sliding it out. Then set the Pack and Charger on a dry fireproof surface in a room where the temperature ranges from 50-104° F.
- **NOTE:** Allow a recently used Battery Pack to cool completely before charging. Also make sure the Battery Pack is undamaged; do not charge a cracked or leaking pack.
- Insert Charger's plug into a grounded, 120V~ outlet. Then slide Battery Pack into Charger's battery port, making sure Battery Pack's tabs snap into place and Battery Pack is secure before charging.



- The green light will activate once Charger is plugged in. The green light will continue to light and the red light will flash during charging.
- **NOTE:** Normal charging time after use is about 45 minutes.
- 4. When Battery Pack is fully charged, both red and green lights will stay lit.
- **NOTE:** If both the green and red lights of the charger are blinking simultaneously, the charger or the battery is defective.
- **NOTE:** Batteries will not reach full charge the first time they are charged. Allow for several cycles (drilling and recharging) before the Tool is fully charged.
- 5. Press Battery Pack's side tabs and pull Pack from the Charger and unplug the Charger from the wall outlet.
- **Note:** Do not use a battery pack immediately after charging. Allow it to cool first. Store the Charger and Battery Packs not in use indoors, away from children.

Tool Set Up

AWARNING FROM ACCIDENTAL OPERATION: Release the Trigger and remove the Battery Pack before adjusting tool or installing accessories.

BIT INSTALLATION:

- CAUTION! Let bit cool before touching, changing or adjusting it. Bits heat up dramatically while in use, and can burn you.
- 2. Slide Direction Selector to its midposition.
- 3. While holding ring behind collar of Chuck with one hand, rotate collar counterclockwise to open jaws.
- 4. Insert shank of drill bit or other accessory into chuck.
- 5. Turn collar clockwise to hand tighten. CAUTION! To prevent injury, do not squeeze Trigger to release or tighten chuck.

Work Piece and Work Area Set Up

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

General Operating Instructions

- Change Direction, Clutch, and Gear settings as desired, see page 8.
 CAUTION: To prevent damage, do not adjust any setting while drill is in motion.
- 2. Install bit as explained to the left.
- 3. Insert Battery Pack into base of tool until it clicks in place.
- Place tip of bit against desired location.
 Verify that work surface has no hidden utility lines before drilling or driving screws.
- 5. Place one hand over top of housing for greater tool stability. With other hand grip handle and squeeze Trigger to activate motor.
- 6. Do not force bit. Excessive force will damage tip and lead to tool failure. Drill only as deep as needed.
- 7. To prevent accidents: After use, turn off the tool and remove the Battery Pack by pressing on the striped side tabs and sliding it out. Clean, then store the tool indoors out of children's reach.

MAINTENANCE AND SERVICING



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

AWARNING

TO PREVENT SERIOUS INJURY

FROM ACCIDENTAL OPERATION: Release the Trigger and remove the Battery Pack before performing any inspection, maintenance, or cleaning procedures.

TO PREVENT SERIOUS INJURY FROM TOOL FAILURE: Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

Cleaning, Maintenance, and Lubrication

- 1. **BEFORE EACH USE,** inspect the general condition of the tool. Check for loose hardware, 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,** wipe external surfaces of the tool with clean cloth.
- 3. Dispose of Battery Pack properly. Do not short, incinerate or open Battery Pack. Keep Charger and Battery Pack dry.

Troubleshooting

Problem	Possible Causes	Likely Solutions
Tool will not start.	 Battery not installed or properly charged. 	1. Check that battery is properly installed and fully charged.
	 Internal damage or wear. (Wiring or Trigger, for example.) 	2. Have technician service tool.
Performance decreases over time.	1. Accessory dull or damaged.	 Keep cutting accessories sharp. Replace as needed.
	 Carbon brushes worn or damaged. 	2. Have qualified technician replace brushes.
Excessive noise or rattling.	Internal damage or wear. (Motor bearings, for example.)	Have technician service tool.
Overheating.	1. Forcing tool to work too fast.	1. Allow tool to work at its own rate.
	2. Accessory misaligned.	 Check and correct accessory to fence and/or table alignment.
	3. Accessory dull or damaged.	 Keep cutting accessories sharp. Replace as needed.
	4. Blocked motor housing vents.	 Wear ANSI-approved safety goggles and NIOSH-approved dust mask/respirator while blowing dust out of motor using compressed air.

Disconnect battery before service.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

Record Product's Serial Number Here:___

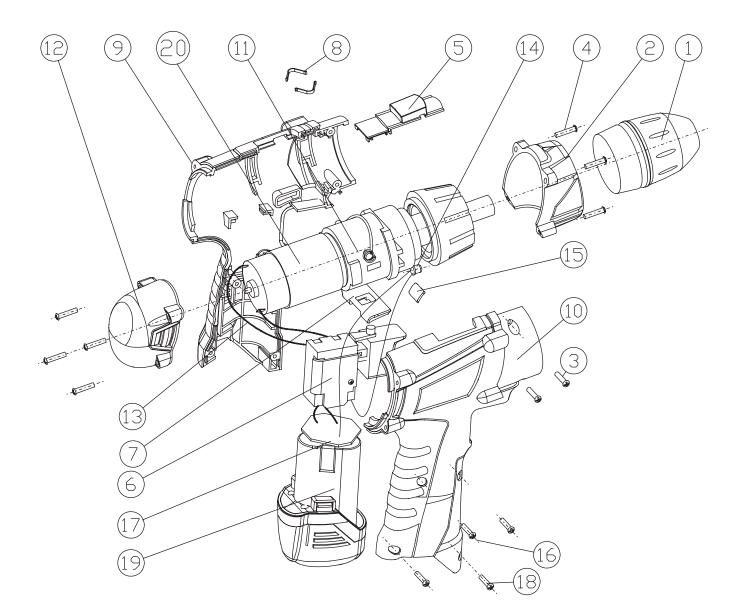
Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

PARTS LIST AND DIAGRAM

Part	Description	Qty.
1	Keyless Chuck	1
2	Front Cover	1
3	Screw	3
4	Screw	7
5	Gear Switch	1
6	Trigger	1
7	Direction Switch	1
8	Gear Switch Spring	2
9	Left Housing	1
10	Right Housing	1
11	Gear Box	1

Part	Description	Qty.
12	Rear Cover	1
13	Wire	1
14	White LED	1
15	LED Cover	1
16	Screw	3
17	Terminal Board	1
18	Screw	1
19	Battery Pack - ITEM 68059 (12V, 1300mAh Lithium-Ion)	1
20	Motor	1
21	Charger (not shown)	1



LIMITED 90 DAY WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities. criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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