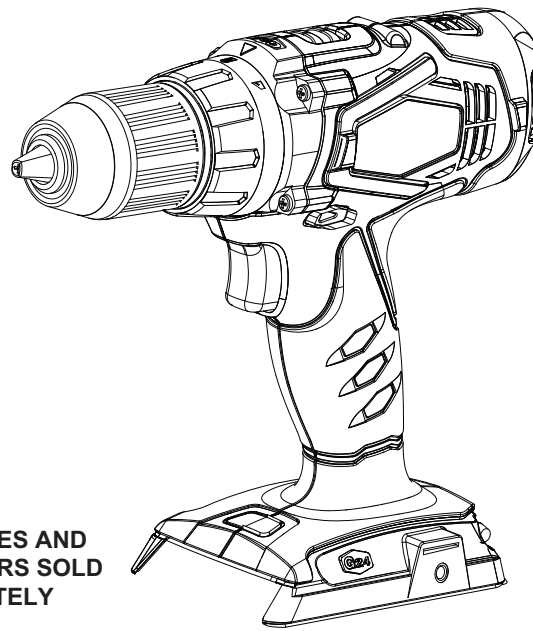
24V Lithium-Ion 1/2” Cordless Drill
37012a



BATTERIES AND CHARGERS SOLD SEPARATELY

218549

OWNER’S MANUAL

TOLL-FREE HELPLINE: 1-888-90WORKS (888.909.6757)

Read all safety rules and instructions carefully before operating this tools.

CONTENTS

PRODUCT SPECIFICATIONS

24V COMPACT DRILL

Chuck	1/2 in. Keyless
Motor	24V DC
Switch	VSR (Variable Speed Reversible)
No Load Speed	0-450 / 0-1750 / min. (RPM)
Clutch	24 Positions+Drill
Torque	500 in. lbs (56.5 N.m)
Weight with battery	3.75 lb (1.69 kg)

* For use with 24V 2Ah Greenworks battery only. Model # 29842
* For use with 24V Greenworks charger only, Model # 29862

SAFETY INFORMATION

⚠ WARNING

Read all safety warnings and all 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.

WORK AREA SAFETY

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- 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.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

ELECTRICAL SAFETY

- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- 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.
- 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.
- 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.

PERSONAL SAFETY

- 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 .
- Use personal protective equipment. Always wear eye protection with side shields marked to comply with ANSI Z87.1. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- 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 energising power tools that have the switch on invites accidents.
- 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.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.
- Do not wear loose clothing or jewelry. Contain long hair. Loose clothes, jewelry, or long hair can be drawn into air vents.
- Do not use on a ladder or unstable support. Stable footing on a solid surface enables better control of the power tool in unexpected situations.

SAFETY INFORMATION

POWER TOOL USE AND CARE

- 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.
- 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.
- 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.
- 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.
- 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.
- Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- 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.

BATTERY TOOL USE AND CARE

- 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.
- Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- 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.
- 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.

SERVICE

- 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.
- When servicing a power 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.

SAFETY INFORMATION

- Use auxiliary handle(s), if supplied with the tool. Loss of control can cause personal injury.
- Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring. Cutting accessory contacting a “live” wire may make exposed metal parts of the power tool “live” and could give the operator an electric shock.
- Know your power tool. Read operator’s manual carefully. Learn its applications and limitations, as well as the specific potential hazards related to this power tool. Following this rule will reduce the risk of electric shock, fire, or serious injury.
- Always wear eye protection with side shields marked to comply with ANSI Z87.1. Following this rule will reduce the risk of serious personal injury.
- Protect your lungs. Wear a face or dust mask if the operation is dusty. Following this rule will reduce the risk of serious personal injury.
- Protect your hearing. Wear hearing protection during extended periods of operation. Following this rule will reduce the risk of serious personal injury.
- Battery tools do not have to be plugged into an electrical outlet; therefore, they are always in operating condition. Be aware of possible hazards when not using your battery tool or when changing accessories. Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- Do not place battery tools or their batteries near fire or heat. This will reduce the risk of explosion and possibly injury.
- Do not crush, drop or damage battery pack. Do not use a battery pack or charger that has been dropped or received a sharp blow. A damaged battery is subject to explosion. Properly dispose of a dropped or damaged battery immediately.
- Batteries can explode in the presence of a source of ignition, such as a pilot light. To reduce the risk of serious personal injury, never use any cordless product in the presence of open flame. An exploded battery can propel debris and chemicals. If exposed, flush with water immediately.
- Do not charge battery tool in a damp or wet location. Following this rule will reduce the risk of electric shock.
- For best results, your battery tool should be charged in a location where the temperature is more than 50°F but less than 100°F. To reduce the risk of serious personal injury, do not store outside or in vehicles.
- Under extreme usage or temperature conditions, battery leakage may occur. If liquid comes in contact with your skin, wash immediately with soap and water. If liquid gets into your eyes, flush them with clean water for at least 10 minutes, then seek immediate medical attention. Following this rule will reduce the risk of serious personal injury.
- Save these instructions. Refer to them frequently and use them to instruct others who may use this tool. If you loan someone this tool, loan them these instructions also to prevent misuse of the product and possible injury.

CALIFORNIA PROPOSITION 65

⚠ WARNING

This product and some dust created by power sanding, sawing, grinding, drilling, and other construction activities may contain chemicals, including lead, known to the State of California to cause cancer, birth defects, or other reproductive harm. Wash hands after handling.

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.

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

SYMBOLS

The following signal words and meanings are intended to explain the levels of risk associated with this product.		
SYMBOL	**SIGNAL**	**MEANING**
	**DANGER:**	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
	**WARNING:**	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
	**CAUTION:**	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.
	CAUTION:	(Without Safety Alert Symbol) Indicates a situation that may result in property damage.

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper inter -pretation of these symbols will allow you to operate the product better and safer.		
SYMBOL	**SIGNAL**	**MEANING**
	Safety Alert	Indicates a potential personal injury hazard.
	Read Operator's Manual	To reduce the risk of injury, user must read and understand operator's manual before using this product.
	Eye Protection	Always wear eye protection with side shields marked to comply with ANSI Z87.1.
	Ear Protection	Protect your hearing. Wear hearing protection during extended periods of operation.
	Wet Conditions Alert	Do not expose to rain or use in damp locations.
V	Volts	Voltage
min	Minutes	Time
⎓ or d.c.	Direct Current	Type or a characteristic of current
n_0	No Load Speed	Rotational speed, at no load
.../min	Per Minute	Revolutions, strokes, surface speed, orbits etc., per minute

KNOW YOUR DRILL-DRIVER

The safe use of this product requires an understanding of the information on the product and in this operator's manual as well as a knowledge of the project you are attempting. Before use of this product, familiarize yourself with all operating features and safety rules.

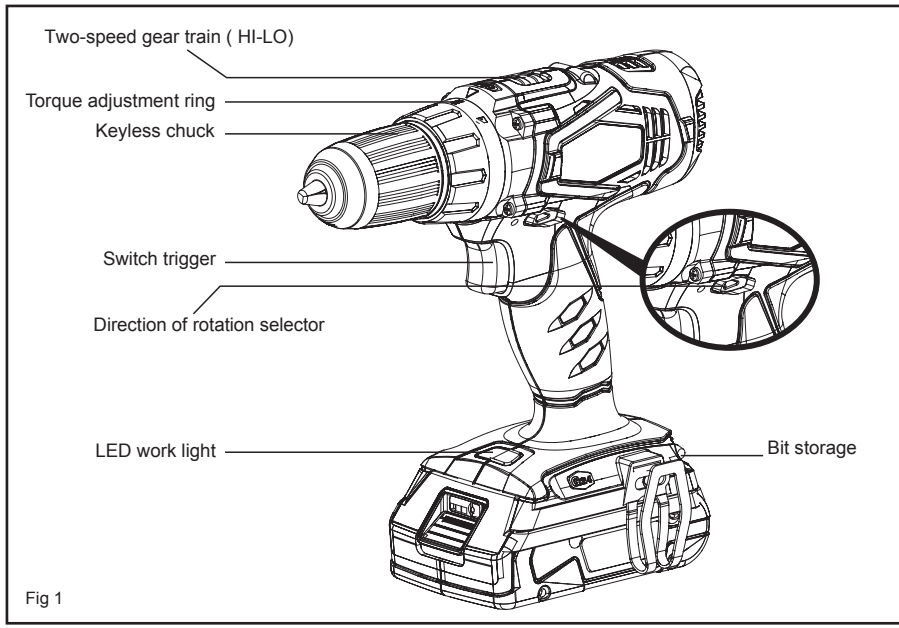


Fig 1

BIT STORAGE
The bit provided with the drill can be placed in one of the storage areas located on the base of the drill.

DIRECTION OF ROTATION SELECTOR (FORWARD/REVERSE/CENTER LOCK)
Your drill has a direction of rotation (forward/reverse/center lock) selector located above the switch trigger for changing the direction of bit rotation. Setting the direction of rotation selector in the OFF (center lock) position helps reduce the possibility of accidental starting when not in use.

KEYLESS CHUCK
The keyless chuck allows you to hand-tighten or release the drill bit in the chuck jaws.

LED WORKLIGHT
The LED worklight, located on the front of the tool, illuminates when the switch trigger is depressed. This provides extra light for increased visibility.

ASSEMBLY

UNPACKING

This product has been shipped completely assembled.

- Carefully remove the product and any accessories from the box. Make sure that all items listed in the packing list are included.
- Inspect the product carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the product.
- If any parts are damaged or missing, please call 1-800-909-6757 for assistance.

⚠ WARNING

Do not use this product if it is not completely assembled or if any parts appear to be missing or damaged. Use of a product that is not properly and completely assembled could result in serious personal injury.

⚠ WARNING

If any parts are damaged or missing do not operate this product until the parts are replaced. Use of this product with damaged or missing parts could result in serious personal injury.

⚠ WARNING

Do not attempt to modify this product or create accessories not recommended for use with this product. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

PACKING LIST

- 1 24V Compact Drill P/N: 37012a
- 1 bit
- 1 Belt Clip-drill

OPERATION

⚠ WARNING

To prevent accidental starting that could cause serious personal injury, always remove the battery pack from the product when assembling parts.

⚠ WARNING

Do not allow familiarity with products to make you careless. Remember that a careless fraction of a second is sufficient to inflict serious injury.

⚠ WARNING

Always wear eye protection with side shields marked to comply with ANSI Z87.1. Failure to do so could result in objects being thrown into your eyes resulting in possible serious injury.

⚠ WARNING

Do not use any attachments or accessories not recommended by the manufacturer of this product. The use of attachments or accessories not recommended can result in serious personal injury.

APPLICATIONS

You may use this product for the purposes listed below:

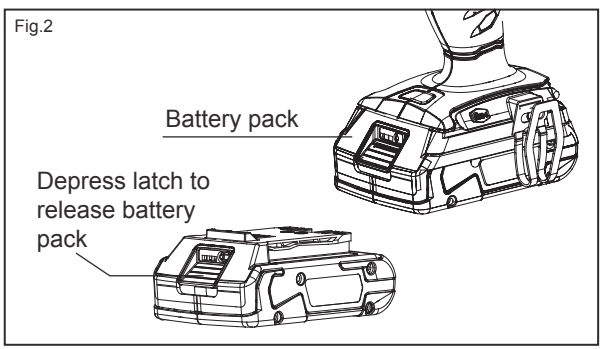
- Drilling in all types of wood products (lumber, plywood, paneling, composition board, and hard board)
- Drilling in ceramics, plastics, fiberglass, and laminates
- Drilling in metals

BATTERY PROTECTION FEATURES

Greenworks lithium-ion batteries are designed with features that protect the lithium-ion cells and maximize battery life. If the tool stops during use, release the trigger to reset and resume operation. If the tool still does not work, the battery needs to be recharged.

TO INSTALL/REMOVE BATTERY PACK

Fig.2



To install:

- Place the direction of rotation selector in the center position.
- Insert the battery pack into the product as shown.
- Make sure the latch on the battery pack snap in place and that battery pack is secured in the product before beginning operation.

OPERATION

To remove:
- Depress the latch on the battery pack.
- Remove the battery pack from the drill.

⚠ WARNING

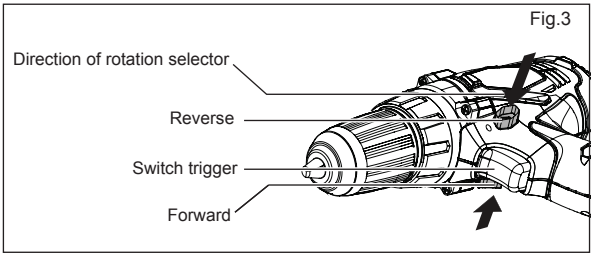
Always remove battery pack from your tool when you are assembling parts, making adjustments, cleaning, or when not in use. Removing battery pack will prevent accidental starting that could cause serious personal injury.

⚠ WARNING

Battery products are always in operating condition. Therefore, the switch should always be locked when not in use or carrying at your side.

SWITCH TRIGGER

Fig.3



To turn the drill ON, depress the switch trigger. To turn it OFF , release the switch trigger.

VARIABLE SPEED

The variable speed switch trigger delivers higher speed with increased trigger pressure and lower speed with decreased trigger pressure.

NOTE: You might hear a whistling or ringing noise from the switch during use. Do not be concerned; this is a normal part of the switch function.

DIRECTION OF ROTATION SELECTOR (FORWARD/REVERSE/CENTER LOCK)

The direction of bit rotation is reversible and is controlled by a selector located above the switch trigger. With the drill held in normal operating position, the direction of rotation selector should be positioned to the left of the switch trigger for forward drilling. The drilling direction is reversed when the selector is to the right of the switch trigger.
Setting the direction of rotation selector in the OFF (center lock) position helps reduce the possibility of accidental starting when not in use.

To stop the drill, release the switch trigger and allow the chuck to come to a complete stop.

⚠ CAUTION

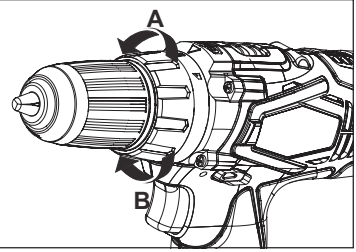
To prevent gear damage, always allow the chuck to come to a complete stop before changing the direction of rotation.

NOTE: The drill will not run unless the direction of rotation selector is pushed fully to the left or right.
Avoid running the drill at low speeds for extended periods of time. Running at low speeds under constant usage may cause the drill to become overheated. If this occurs, cool the drill by running it without a load and at full speed.

OPERATION

CHANGING CLUTCH SETTINGS

Fig.4



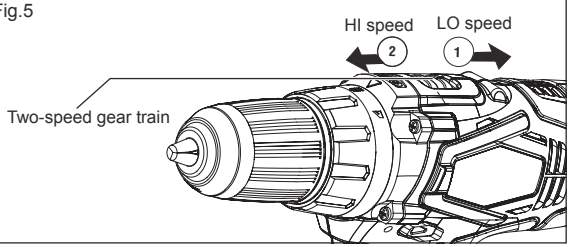
A. The direction to decrease torque
B. The direction to increase torque

⚠ WARNING

Do not hold the chuck with one hand and use the power of the drill to tighten the chuck jaws on the drill bit. The chuck body could slip in your hand, or your hand could slip and come in contact with the rotating drill bit. This could cause an accident resulting in serious personal injury.

TWO-SPEED GEAR TRAIN (HI-LO)

Fig.5



The drill has a two-speed gear train designed for drilling or driving at LO (1) or HI (2) speeds. A slide switch is located on top of the drill to select either LO (1) or HI (2) speed. When using drill in the LO (1) speed range, speed will decrease and unit will have more power and torque. When using drill in the HI (2) speed range, speed will increase and unit will have less power and torque. Use LO (1) speed for high power and torque applications and HI (2) speed for fast drilling or driving applications.

INSTALLING/REMOVING BITS

Fig.6

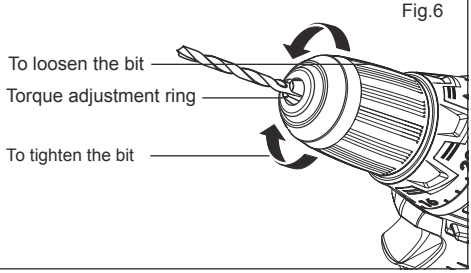
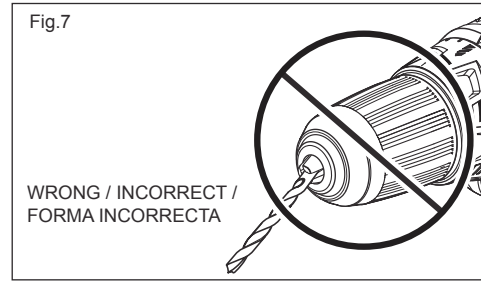


Fig.7



OPERATION

To install:
- Lock the switch trigger by placing the direction of rotation selector in the center position.
- Open or close the chuck jaws to a point where the opening is slightly larger than the bit size you intend to use. Also, raise the front of the drill slightly to keep the bit from falling out of the chuck jaws.
- Insert the drill bit.
- Tighten the chuck jaws securely on the bit.

NOTE: Rotate the chuck body to close the chuck jaws. Do not use a wrench to tighten or loosen the chuck jaws.

To remove:
- Lock the switch trigger by placing the direction of rotation selector in the center position.
- Open the chuck jaws.
- Remove the drill bit.

⚠ WARNING

Make sure to insert the drill bit straight into the chuck jaws. Do not insert the drill bit into the chuck jaws at an angle then tighten, as shown in figure 9. This could cause the drill bit to be thrown from the drill, resulting in possible serious personal injury or damage to the chuck.

⚠ WARNING

Be prepared for binding at bit breakthrough. When these situations occur, drill has a tendency to grab and kick opposite to the direction of rotation and could cause loss of control when breaking through material. If not prepared, this loss of control can result in possible serious injury.

- When drilling hard, smooth surfaces, use a center punch to mark the desired hole location. This will prevent the drill bit from slipping off-center as the hole is started.
- When drilling metals, use a light oil on the drill bit to keep it from overheating. The oil will prolong the life of the bit and increase the drilling action.
- If the bit jams in the workpiece or if the drill stalls, stop the tool immediately. Remove the bit from the workpiece and determine the reason for jamming.

NOTE: This drill has an electric brake. When the switch trigger is released, the chuck stops turning. When the brake is functioning properly, sparks will be visible through the vent slots on the housing. This is normal and is the action of the brake.

WOOD DRILLING

For maximum performance, use high speed steel bits for wood drilling.
- Begin drilling at a very low speed to prevent the bit from slipping off the starting point. Increase the speed as the drill bit bites into the material.
- When drilling through holes, place a block of wood behind the workpiece to prevent ragged or splintered edges on the back side of the hole.

METAL DRILLING

For maximum performance, use high speed steel bits for metal or steel drilling.
- Begin drilling at a very low speed to prevent the bit from slipping off the starting point.
- Maintain a speed and pressure which allows cutting without overheating the bit. Applying too much pressure will:
  - ○ Overheat the drill;
  - ○ Wear the bearings;
  - ○ Bend or burn bits; and
  - ○ Produce off-center or irregular-shaped holes.
- When drilling large holes in metal, start with a small bit, then finish with a larger bit. Also, lubricate the bit with oil to improve drilling action and increase bit life.

MAINTENANCE

⚠ WARNING

When servicing, use only identical replacement parts. Use of any other parts could create a hazard or cause product damage.

⚠ WARNING

Always wear eye protection with side shields marked to comply with ANSI Z87.1. Failure to do so could result in objects being thrown into your eyes resulting in possible serious injury.

⚠ WARNING

To avoid serious personal injury, always remove the battery pack from the product when cleaning or performing any maintenance.

GENERAL MAINTENANCE

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, dust, oil, grease, etc.

⚠ WARNING

Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc., come in contact with plastic parts. Chemicals can damage, weaken or destroy plastic which could result in serious personal injury.

⚠ WARNING

Upon removal, cover the battery pack's terminals with heavy-duty adhesive tape. Do not attempt to destroy or disassemble battery pack or remove any of its components. Lithium-ion and nickel-cadmium batteries must be recycled or disposed of properly. Also, never touch both terminals with metal objects and/or body parts as short circuit may result. Keep away from children. Failure to comply with these warnings could result in fire and/or serious injury.

CHUCK REMOVAL

The chuck may be removed and replaced by a new one.

- Remove the battery pack.
- Lock the switch trigger by placing the direction of rotation selector in center position.
- Insert a 5/16 in. or larger hex key into the chuck of the drill and tighten the chuck jaws securely.
- Tap the hex key sharply with a mallet in a clockwise direction. This will loosen the screw in the chuck for easy removal.
- Open the chuck jaws and remove the hex key. Using a screwdriver, remove the chuck screw by turning it in a clockwise direction.

NOTE: The chuck screw has left hand threads.

Insert the hex key into the chuck and tighten the chuck jaws securely. Tap sharply with a mallet in a counterclock - wise direction. This will loosen the chuck on the spindle. It can now be unscrewed by hand.

TO RETIGHTEN A LOOSE CHUCK

The chuck may become loose on the spindle and develop a wobble. Also, the chuck screw may become loose, causing the chuck jaws to bind and prevent them from closing.

To tighten:

- Remove the battery pack.
- Lock the switch trigger by placing the direction of rotation selector in the center position.
- Open the chuck jaws.
- Insert the hex key into the chuck and tighten the chuck jaws securely. Tap the hex key sharply with a mallet in a clockwise direction. This will tighten the chuck on the spindle.
- Open the chuck jaws and remove the hex key.
- Tighten the chuck screw.

WARRANTY

GREENWORKS hereby warranties this product, to the original purchaser with **proof of purchase**, for a period of four (4) years against defects in materials, parts or workmanship. GREENWORKS , at its own discretion will repair or replace any and all parts found to be defective, through normal use, free of charge to the customer. This warranty is valid only for units which have been used for personal use that have not been hired or rented for industrial/ commercial use, and that have been maintained in accordance with the instructions in the owners' manual supplied with the product from new.

Battery and charger carries a two (2) year warranty against defects in workmanship and materials. Batteries must be charged in accordance with the operator's manuals directions and regulations in order to be valid.

ITEMS NOT COVERED BY WARRANTY:

1. Any part that has become inoperative due to misuse, commercial use, abuse, neglect, accident, improper maintenance, or alteration; or
2. The unit, if it has not been operated and/or maintained in accordance with the owner's manual; or
3. Normal wear, except as noted below;
4. Routine maintenance items such as lubricants, blade sharpening;
5. Normal deterioration of the exterior finish due to use or exposure.

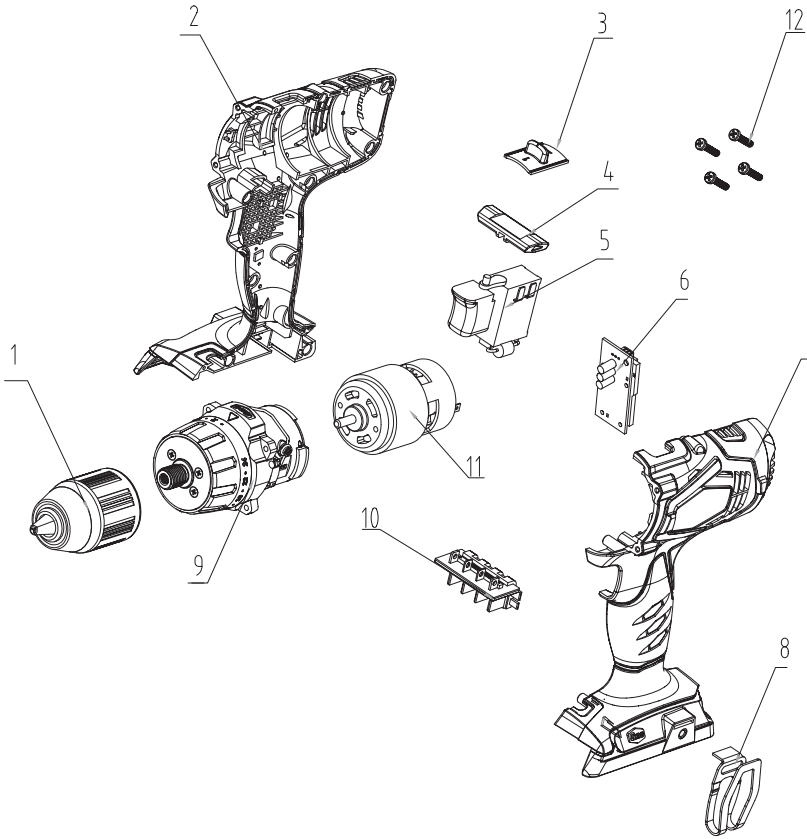
GREENWORKS HELPLINE (1 888 90WORKS):

Warranty service is available by calling our toll-free helpline, 9am to 5pm EST. at **1-888-909-6757 (1-888-90WORKS)**.

TRANSPORTATION CHARGES:

Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. It is the purchaser's responsibility to pay transportation charges for any part submitted for replacement under this warranty unless such return is requested in writing by GREENWORKS.

EXPLODED VIEW



PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY
1	32903784	1/2" Key-less Chuck	1
2	34100794	right housing	1
3	34112784	Low/High - lever - drill	1
4	34113784	Forward / Reverse Shifter - drill	1
5	36300784	Speed Control Switch - drill	1
6	36200794	PCB - 24V Li-Ion drill	1
7	34101794	Left Housing	1
8	33307784	Belt Clip - drill	1
9	31100794	Gear Box - drill	1
10	34102794	Electric Insert	1
11	36100784	Motor	1
12	32204784	Housing Screws	13

TOLL-FREE HELPLINE: 1-888-90WORKS (888.909.6757)

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