

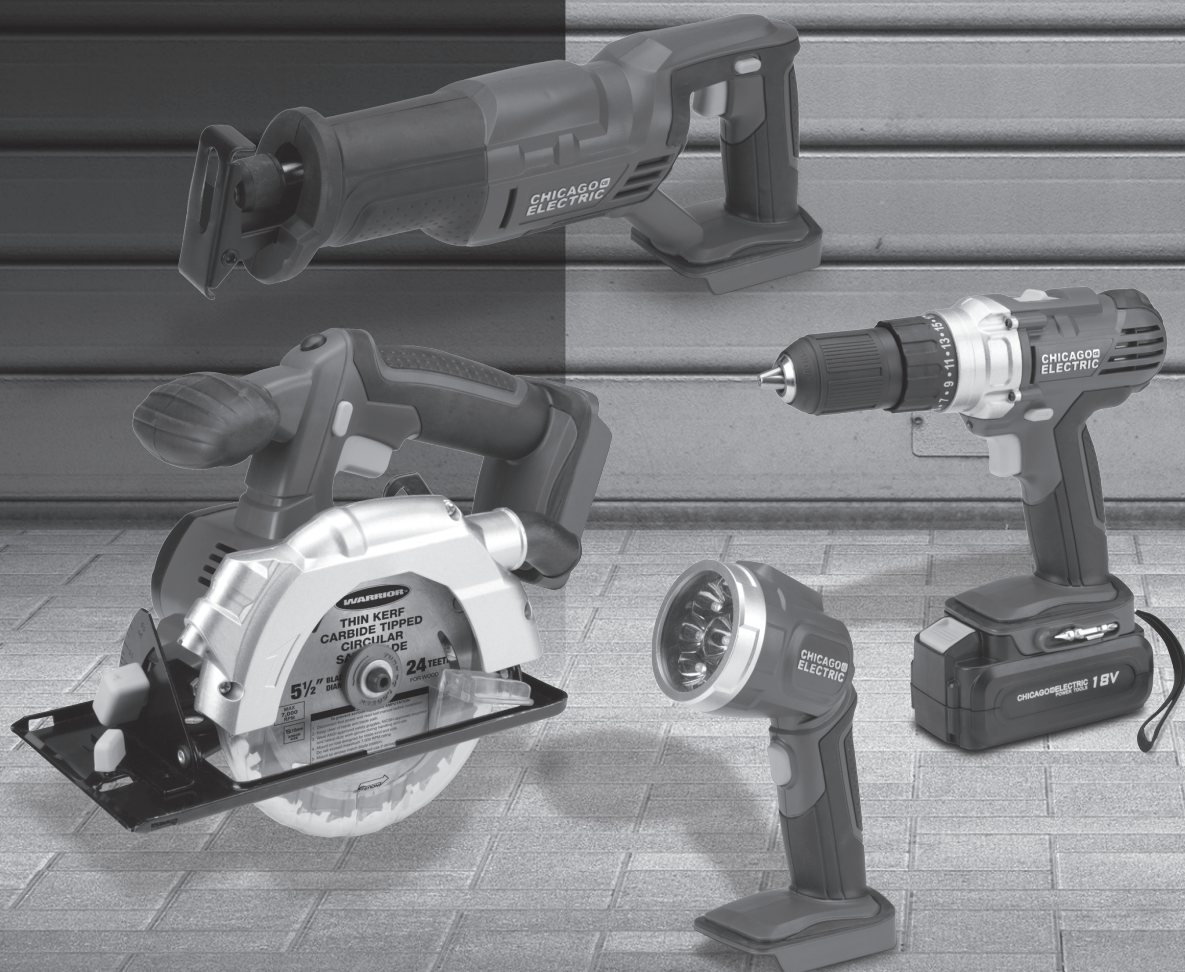
Owner's Manual & Safety Instructions

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.

CHICAGO  ELECTRIC
POWER TOOLS

ITEM 68857

18 VOLT CORDLESS FOUR TOOL COMBO PACK



Visit our website at: <http://www.harborfreight.com>
Email our technical support at: tech@harborfreight.com

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

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No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools. Diagrams within this manual may not be drawn proportionally. Due to continuing improvements, actual product may differ slightly from the product described herein. Tools required for assembly and service may not be included.

⚠ WARNING





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

Table of Contents

Safety	2	Maintenance	18
Specifications	8	Parts Lists and Diagrams	19
Setup	9	Warranty	24
Operation	12		

CHICAGO ELECTRIC[®] POWER TOOLS

WARNING SYMBOLS AND DEFINITIONS

	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	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.
 CAUTION	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
NOTICE CAUTION	Addresses practices not related to personal injury.

IMPORTANT SAFETY INFORMATION

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 battery-operated (cordless) power tool.

Work area safety

- 1. Keep work area clean and well lit.**
Cluttered or dark areas invite accidents.
- 2. 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.*
- 3. Keep children and bystanders away while operating a power tool.**
Distractions can cause you to lose control.

Electrical safety

Do not expose power tools to rain or wet conditions.

Water entering a power tool will increase the risk of electric shock.

Personal safety

1. **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.
2. **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.
3. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting the 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.
4. **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.
5. **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
6. **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.
7. **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.
8. **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.

Power tool use and care

1. **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.
2. **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.
3. **Disconnect 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.
4. **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.
5. **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.
6. **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
7. **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

SAFETY

1. **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.*
2. **Use power tools only with specifically designated battery packs.** *Use of any other battery packs may create a risk of injury and fire.*
3. **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.*
4. **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.

Drill Safety Warnings

1. **Hold power tools by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring.** *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.

Circular Saw Safety Warnings

1. **DANGER! Keep hands away from cutting area and the blade. Keep your second hand on auxiliary handle or motor housing.** *If both hands are holding the saw, they cannot be cut by the blade.*
2. **Do not reach underneath the workpiece.** *The guard cannot protect you from the blade below the workpiece.*
3. **Adjust the cutting depth to the thickness of the workpiece.** *Less than a full tooth of the blade teeth should be visible below the workpiece.*
4. **Never hold piece being cut in your hands or across your leg.** *Secure the workpiece to a stable platform. It is important to support the work properly to minimize body exposure, blade binding, or loss of control.*
5. **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.*
6. **When ripping, always use a rip fence or straight edge guide.** *This improves the accuracy of cut and reduces the chance of blade binding.*
7. **Always use blades with correct size and shape (diamond versus round) of arbor holes.** *Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.*
8. **Never use damaged or incorrect blade washers or bolt.** *The blade washers and bolt were specially designed for your saw, for optimum performance and safety of operation.*
9. **Causes and Operator Prevention of Kickback:**
 - Kickback is a sudden reaction to a pinched, bound, or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator;
 - When the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator;
 - If the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood, causing the blade to climb out of the kerf and jump back toward the operator.

Kickback is the result of saw misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below:

SETUP

OPERATION

MAINTENANCE

- a. **Maintain a firm grip with both hands on the saw and position your arms to resist kickback forces. Position your body to either side of the blade, but not in line with the blade.** *Kickback could cause the saw to jump backwards, but kickback forces can be controlled by the operator, if proper precautions are taken.*
 - b. **When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or kickback may occur. Investigate and take corrective actions to eliminate the cause of blade binding.**
 - c. **When restarting a saw in the workpiece, center the saw blade in the kerf and check that saw teeth are not engaged into the material. If saw blade is binding, it may walk up or kickback from the workpiece as the saw is restarted.**
 - d. **Support large panels to minimize the risk of blade pinching and kickback. Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.**
 - e. **Do not use dull or damaged blades.** *Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.*
 - f. **Blade depth and bevel adjusting locking levers must be tight and secure before making cut.** *If blade adjustment shifts while cutting, it may cause binding and kickback.*
 - g. **Use extra caution when making a "plunge cut" into existing walls or other blind areas. The protruding blade may cut objects that can cause kickback.**
10. **Check lower guard for proper closing before each use. Do not operate the saw if lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position. If saw is accidentally dropped, lower guard may be bent. Raise the lower guard with the retracting handle and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.**
 11. **Check the operation of the lower guard spring. If the guard and the spring are not operating properly, they must be serviced before use.** *Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.*
 12. **Lower guard should be retracted manually only for special cuts such as "plunge cuts" and "compound cuts." Raise lower guard by retracting handle and as soon as blade enters the material, the lower guard must be released. For all other sawing, the lower guard should operate automatically.**
 13. **Always observe that the lower guard is covering the blade before placing saw down on bench or floor. An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.**
 14. **DO NOT USE THIS SAW WITH THE SAW HELD UPSIDE DOWN IN A VISE. The saw is not designed for such use and cannot be used safely in that position.**
 15. **The torque developed during braking may loosen the blade-retaining nut/bolt. The blade retaining nut/bolt should be checked periodically and tightened if necessary, especially after braking.**
 16. **Do not use to cut logs, tree limbs, or uneven lumber.**
 17. **Wet lumber, green (unseasoned) lumber, and pressure treated lumber all have an increased potential for kickback and should only be cut with a blade for cutting that lumber type. Wear a NIOSH-approved respirator and have appropriate ventilation whenever cutting pressure treated lumber.**
 18. **Do not use blades made from high-speed steel, abrasive blades, or metal- or masonry-cutting blades. The guards of this saw are not designed to protect against the failure of such blades.**
 19. **Place the larger portion of the saw base on the larger, supported part of the workpiece. This will help maintain balance and control while the cut is completed.**
 20. **Do not depress the spindle lock when starting or during operation.**

Reciprocating Saw 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. **Use clamps or another practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body leaves it unstable and may lead to loss of control.**

Additional Safety Warnings

SAFETY

1. Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
2. Avoid unintentional starting. Prepare to begin work before turning on the tool.
3. 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.
4. When using a handheld power tool, maintain a firm grip on the tool with both hands to resist starting torque.

SETUP

5. Do not leave the tool unattended when the Battery Pack is connected. Turn off the tool, and remove the Battery Pack before leaving.
6.  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 Pack while charging.

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

OPERATION

8. 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.
9. **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 paints
 - Crystalline silica from bricks and cement or other masonry products
 - Arsenic and chromium from chemically treated lumberYour 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.*)
10. **WARNING:** Handling the cord on this product's Charger 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.*)
11. 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 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.
5. Include vibration-free periods each day of work.

MAINTENANCE

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.

Grounding

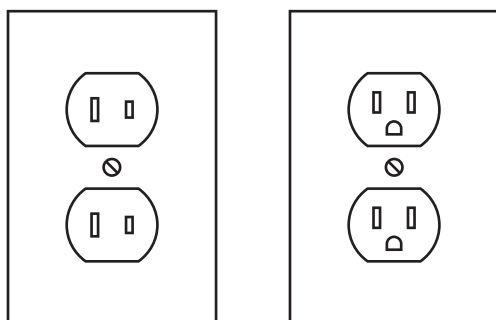
⚠ WARNING



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 Charger. Do not use the Charger 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



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 Electrical Code.
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

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

Symbology

	Double Insulated		Read the manual before set-up and/or use.
	Canadian Standards Association		WARNING marking concerning Risk of Hearing Loss. Wear hearing protection.
	Underwriters Laboratories, Inc.		WARNING marking concerning Risk of Fire. Do not cover Charger ventilation ducts. Charge on fireproof surface only.
	Volts Alternating Current		WARNING marking concerning Risk of Electric Shock. Properly connect Charger's power cord to appropriate outlet.
	Amperes		WARNING marking concerning Risk of Explosion. Do not puncture, short, or open battery packs and do not charge damaged battery packs.
	No Load Revolutions per Minute (RPM)		
	WARNING marking concerning Risk of Eye Injury. Wear ANSI-approved safety goggles with side shields.		

Specifications

Charger	120V~, 60Hz Input 7.2-24VDC Output 1 Hour Charge Time (SKU 68859, included)
Battery Type	18V, 1500mAh, NiCd (SKU 68860, one included)

Drill / Driver

Speed	0-400/0-1200 RPM; Variable/Reversible
Chuck	1/2 IN., Keyless
Settings	23 Torque Settings 1 Drill Setting
Max. Torque	225 in-lb

Reciprocating Saw

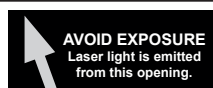
Speed	0-3000 Strokes Per Minute; Variable
Stroke Length	3/4"

Flashlight

Adjustment	90°
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Circular Saw

Speed	4000 RPM; Variable/Reversible
Blade Size	5-1/2 IN.
Arbor	10mm
Cutting Capacity	1-9/16 IN. @ 90° 1-1/8 IN. @ 45°
Footplate Angle	0-45°



Note: This label applies only to Circular Saw

⚠ Caution: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

⚠ Caution: The use of optical instruments with this product will increase eye hazard.

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POWER TOOLS

Setup - Before Use:

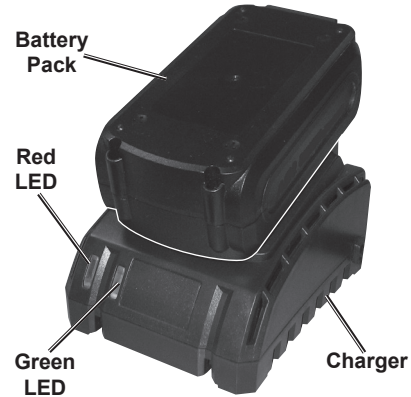


Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Charger Indicator LED's

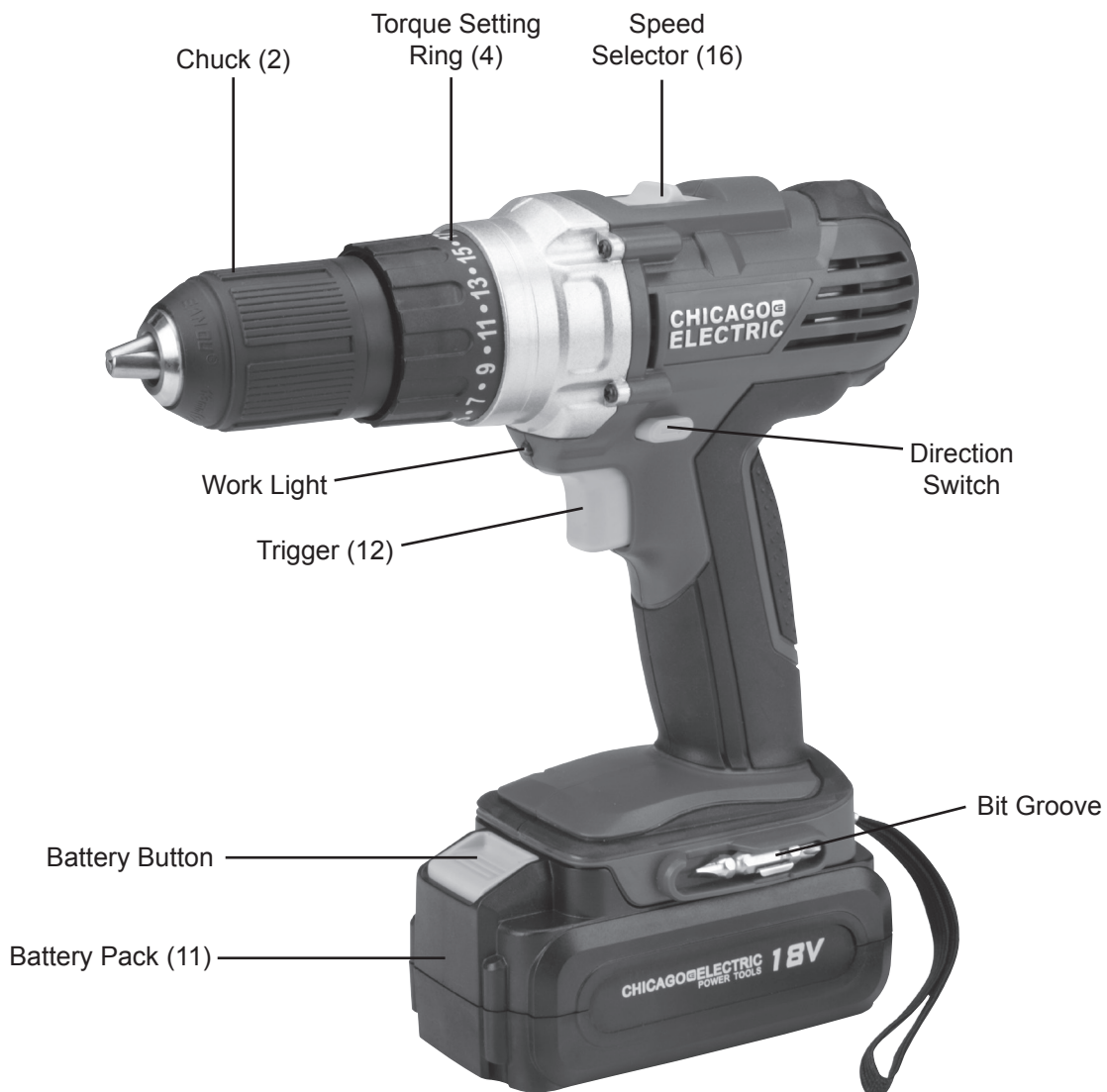
Green LED: Continuously lit indicates charger is powered.

Red LED: Flashing indicates that the battery is charging. Continuously lit (not flashing) indicates that the battery has finished charging and should be removed from the charger.



Drill / Driver Components and Controls

Note: For additional information regarding the parts listed in the following pages, refer to Drill / Driver Parts List and Diagram on page 19.



Circular Saw Components and Controls

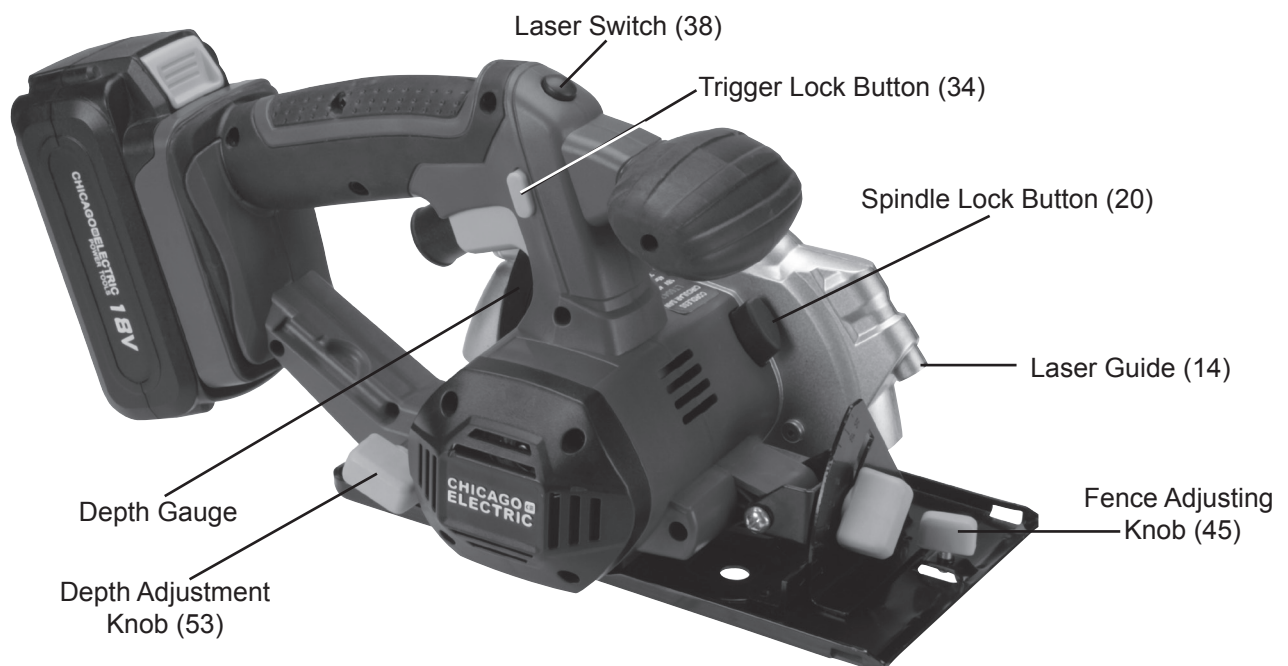
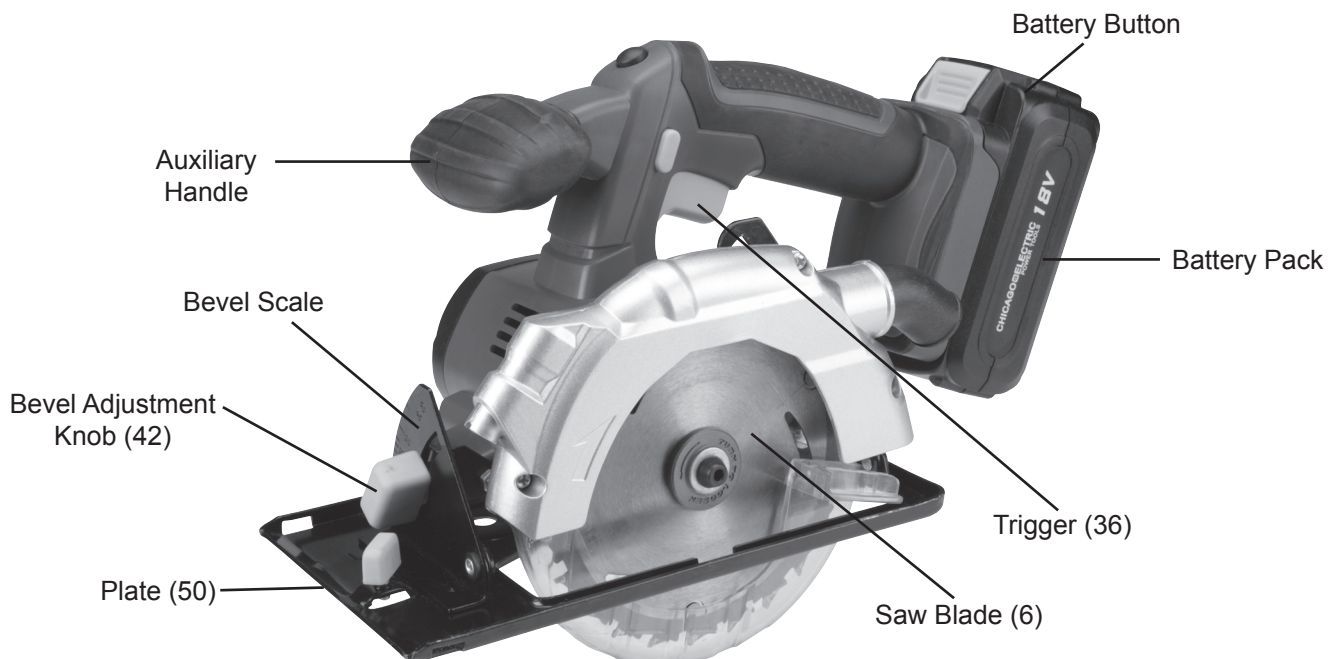
Note: For additional information regarding the parts listed in the following pages, refer to Circular Saw Parts List and Diagram on page 21.

SAFETY

SETUP

OPERATION

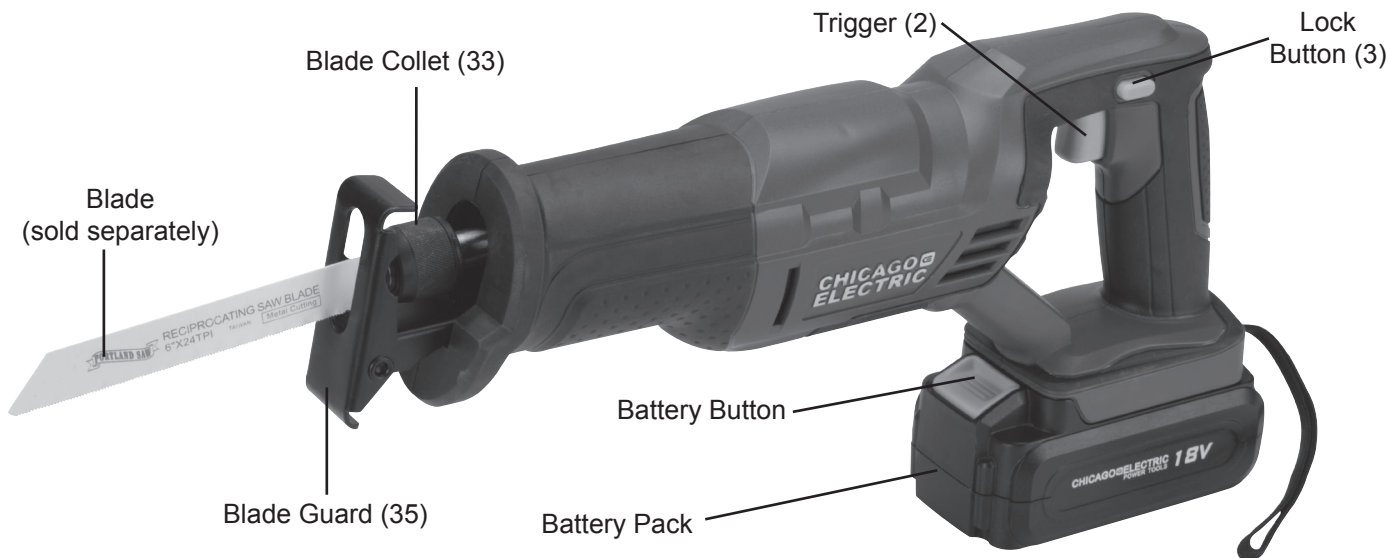
MAINTENANCE



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POWER TOOLS

Reciprocating Saw Components and Controls

Note: For additional information regarding the parts listed in the following pages, refer to Reciprocating Saw Parts List on page 22 and Reciprocating Saw Assembly Diagram on page 23.



Flashlight Components and Controls

Note: For additional information regarding the parts listed in the following pages, refer to Flashlight Parts List and Diagram on page 20.



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.

SAFETY

Tool Set Up

⚠ WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Release the Trigger, disconnect the Battery Pack, and center any Direction Switch (which locks the Trigger) prior to making any adjustments to the tool.

SETUP

Drill / Driver Set Up

WARNING! Do not install the Battery Pack until **AFTER** you complete the following steps to set up the tool for use.

1. The Drill is designed to accept up to 1/2 IN. standard drill bits. Do not use larger drill bits in this Drill as damage to the gears and/or motor may result. Always use a drill bit that is designed for the specific drilling job. Keep other drill bits tucked in the Drill Driver's Bit Groove during use.
2. To "lock" the trigger mechanism as a safety measure, slide the Direction Switch so that it is in the "center" position. This will prevent the drill from turning on accidentally.
3. While holding the ring behind the collar of the chuck with one hand, rotate the collar of the Chuck (2) counterclockwise, if needed, and place the desired drill bit or screw driver bit into the drill between the Chuck Jaws.
4. Hand tighten the Chuck until the bit is held securely in place, centered between the Chuck Jaws.
5. Slide the Speed Selector (16) at the top of the Drill Driver forward and back to adjust from the lower speed (0-400 RPM) to the higher speed (0-1200 RPM).
6. Set the desired torque setting by rotating the Torque Setting Ring (4) to the desired setting.
 - a. Use the torque setting marked by the drill icon for drilling.
 - b. The numbered torque settings from 1 to 23 are for driving screws, bolts and nuts.
 - It is recommended that a very low torque setting be used when first driving small screws into soft materials. Then adjust the setting as the proper force required is determined.
 - The torque setting required depends on the item being driven. In the case of screws, consider the size, length, and type of material.
 - If a pilot hole has been drilled into the material, a lower torque setting will be required.
 - In addition to single or double-ended screwdriver bits, adapters with hexagonal shafts with matching socket heads can also be used.
 - Fix the torque setting low enough to allow a safety margin.

OPERATION

MAINTENANCE

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Circular Saw Set Up

⚠ WARNING

TO PREVENT SERIOUS INJURY FROM FLYING FRAGMENTS:

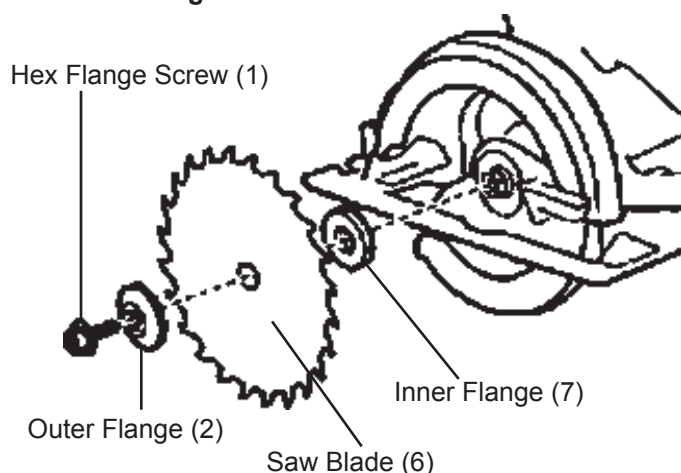
Do not use blades made from high-speed steel, abrasive blades, or metal- or masonry-cutting blades. The guards of this saw are not designed to protect against the failure of such blades.

Mounting Blade

WARNING! Do not install the Battery Pack until **AFTER** you complete the following steps to set up the tool for use.

1. Hold in the Spindle Lock Button (20) while using the Hex Wrench (51) to remove the Hex Flange Screw (1), turning it **CLOCKWISE**.

Figure A: Blade Installation



2. Remove the Outer Flange (2).
3. Use the lever on the Lower Guard (10) to raise the Guard and remove the Blade (6). Leave the inner flange in place.
4. Install the new blade, with the directional arrow on the blade pointing the same as the directional arrow on the Upper Guard (5,18).
5. Place the Outer Flange on the spindle, recessed side first.
6. Hold the Spindle Lock Button (20) while using the Hex Wrench (51) to replace the Hex Flange Screw (1), turning it clockwise.

Adjusting Depth

1. Use the Depth Adjusting Knob (53) to adjust the Saw's cutting depth.
2. Set the Plate (50) flat against the edge of the workpiece. Loosen the Knob, which will allow the Plate to be moved.

3. Use the scale along the Depth Gauge located behind the main housing to determine depth of cut. Adjust the depth of cut to just barely clear the workpiece and remove shavings. This will reduce the risk of injury.
4. After adjustment, tighten Depth Adjusting Knob.

WARNING! Tighten Depth Adjusting Knob before use.

Adjusting Bevel

1. Use the Bevel Adjusting Knob (42) to adjust the Saw's cutting depth.
2. Turn the Bevel Adjusting Knob to loosen the Plate, allowing you to adjust angle of cut.
3. Use the Bevel Scale to set the desired angle (anywhere between 0-45°).
4. After adjustment, tighten the Bevel Adjusting Knob.

WARNING! Tighten Bevel Adjusting Knob before use.

Adjusting Fence

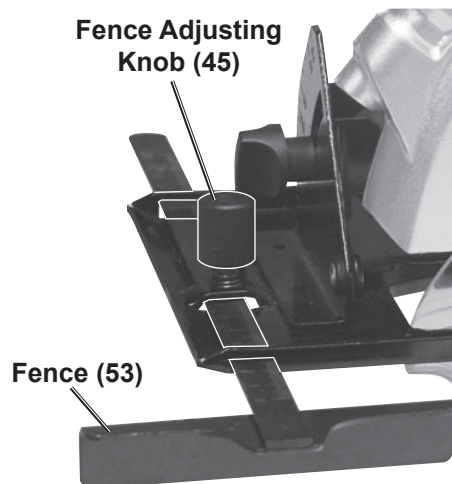


Figure B: Fence Adjustment

1. Loosen the Fence Adjusting Knob (45) and slide the Fence (53) to the desired setting.

Note: There is a ruler on the fence to show the approximate width of cut.

2. The Fence can be removed entirely, if needed.
3. After adjustment if the Fence is used, tighten the Fence Adjusting Knob.

WARNING! Tighten Fence Adjusting Knob before use.

Reciprocating Saw Set Up

SAFETY

WARNING! Do not install the Battery Pack until **AFTER** you complete the following steps to set up the tool for use.

Installing the Saw Blade

1. If there is an installed blade, rotate the Chuck counterclockwise and hold it open while pulling the blade out.
2. Rotate and hold the Chuck counterclockwise while inserting the Saw Blade and pushing it in to its deepest position.
3. Release the Chuck to close it.
4. Check that the Saw Blade is firmly locked in place and that the teeth are pointed downward.

SETUP

Adjusting the Shoe

CAUTION! Adjust the retracted blade length to be longer than the width of the workpiece. If the Blade is shorter, the tip will jam in the workpiece during cutting, possibly causing injury and damaging the Blade or workpiece.

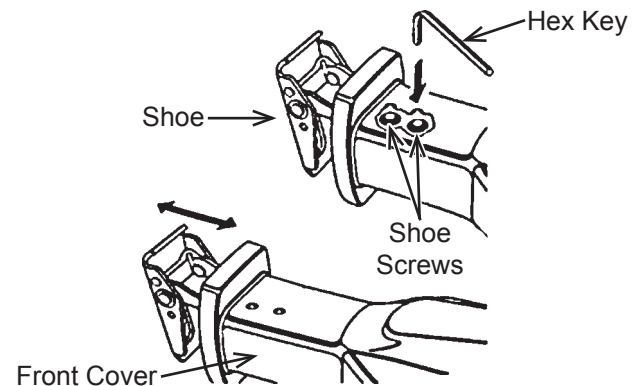


Figure C: Shoe Adjustment

1. Loosen both Cap Screws on the underside of the Front Cover.
2. Adjust the Pivot Shoe in or out as needed.
3. Tighten the Cap Screws. Do not over tighten.

Charging

1. Place the Battery Pack on a dry fireproof surface in a room where the temperature is from 50–104° F.

Note: If recharging a newly spent Battery Pack, allow it to cool completely before charging.

2. Examine the Battery Pack. It must be undamaged, and a NiCd type Battery Pack. **Do not charge a cracked, open, or leaking Battery Pack, or charge a non-recommended type of Battery Pack.**
3. The Battery Pack's terminals are designed to fit this Charger specifically. If the Battery Pack does to not fit the Charger properly, do not try to insert it. **Do not force a Battery Pack into the Charger.**
4. Plug the Power Supply into a grounded, 120V~, 60Hz receptacle.
5. Connect the Power Supply to the Charger. The **green** power LED will light, showing that power is supplied to the Charger.

6. Slide the Battery Pack into the charger until the button on the Battery Pack clicks into place. The Red LED will flash to show the Battery is charging and the Green LED will continue to stay lit.

Note: The Battery Pack's capacity will increase somewhat during the first few charging cycles. A fully discharged Battery Pack will take about 1 hour to fully charge. Recharging the Battery Pack for more than 1 hour can damage the battery cells.

7. While charging, the Battery Pack, Charger, and Power Supply may become warm to the touch. This is normal, and does not indicate a problem.
8. The red LED will light continuously when the Battery Pack is charged. Unplug the Charger and disconnect it from the Battery Pack when finished.
9. Allow the Battery Pack to cool completely before using it.
10. Press the Battery Button to release Battery Pack from the Charger.

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 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.

OPERATION

MAINTENANCE

Operating Drill / Driver

1. Insert the fully charged Battery Pack (11) into the base of the Drill Driver, making sure that it clicks into place securely. Be sure the Battery Pack is securely seated into the Drill Handle so it does not fall off during use.
2. Slide the Direction Switch (which should initially be centered in the “lock” position) to the right for forward drilling/fastening, or to the left for reversing the operation. Use the “reverse” setting only to remove screws or to release a jammed drill bit.

NOTICE: Do not change direction of rotation while Chuck is rotating. Wait until Chuck has come to a complete stop before changing direction.

3. If using the Drill to insert or remove screws, position the driver tip in the item to insert or remove.
4. If drilling a hole, hold the Drill above the area to drill.
5. Press the Trigger to start the drill. **NOTE:** The built-in worklight will also activate once the Switch is pressed and turn off once Switch is released.
6. When inserting or removing a screw or bolt, use slight pressure at first to keep the screw driver bit in the head of the screw or bolt and cause the screw or bolt to thread into or unthread from the material.
7. When drilling a hole, let the Drill do the work, using only enough pressure to follow the drill as it cuts the hole in the material.
8. When drilling a hard, smooth surface, use a center punch (not included) to mark the desired hole. This will prevent the drill bit from slipping as the hole is started.

Wood Drilling Tips

- a. For best performance, use high speed drill bits for wood drilling and turn the torque setting to the drill icon.
- b. Start wood drilling at very low speed to keep the bit from slipping. Increase speed as drill bit bites into wood.
- c. When drilling through holes, place a block or wood behind the workpiece to prevent ragged edges on the back side of the hole.

Metal Drilling Tips

- a. For best performance, use high speed drill bits for metal or steel drilling and turn the torque setting to the drill icon.
 - b. Start wood drilling at very low speed to keep the bit from slipping. Maintain the speed and pressure, allowing for cutting without overheating the bit.
NOTICE: Applying too much pressure will overheat Drill Driver, wear out the bearings, bend or burn bits, and produce irregular shaped holes.
 - c. When drilling large holes in metal surfaces, use a small drill bit at first. Then finish with a larger drill bit. Be sure to lubricate the bit with oil to improve the drilling action and help increase bit life.
9. When finished using the Drill, release the Trigger and center the Direction Switch to lock the trigger mechanism as a safety measure.
 10. Remove the Battery Pack.
 11. Clean then store the Drill indoors and out of children’s reach.

CHICAGO  **ELECTRIC®**
POWER TOOLS

SAFETY

SETUP

OPERATION

MAINTENANCE

Operating Circular Saw

SAFETY

1. **WARNING! TO PREVENT SERIOUS INJURY, BEFORE OPERATION:**

- Remove Battery Pack.**
- Adjust Blade Depth** to extend beyond bottom of workpiece by 1/4 IN. or less. **Lock Depth Adjustment Knob (53).**
- Make sure that all guards are in place and in proper working order.**
- Tighten all knobs/bolts securely.**
- Tighten Hex Flange Screw.**

SETUP

- Install fully charged Battery Pack into base at back of handle.
- Hold the saw with one hand on the Main Handle and the other hand on the Auxiliary Handle.
- Align Saw on cut line with the larger part of the workpiece to the left of the Saw Blade.
- Press Laser Switch (38) to activate Laser (14).

WARNING! Only turn Laser on when Saw is on workpiece. Do not stare directly at the laser beam. Do not aim the beam at any person or object other than the workpiece. Do not aim Laser Guide at a workpiece with a reflective surface, such as sheet steel or metal. Bright, shiny reflective sheet metal could direct the beam back at you.

OPERATION

- Push the Trigger Lock Button (34) and squeeze the Trigger (36).
- Allow the Blade to come up to full speed before contacting the workpiece.

Note: When cutting across the grain, wood fibers can lift and tear. Move the Saw slowly to minimize any tearing.

- After completing the cut, release the trigger. Make sure that the Movable Guard closes immediately.
- To prevent accidents, turn off the tool and disconnect the Battery Pack after use.

- Clean, then store the tool indoors out of children's reach.

Pocket Cut

- WARNING! Verify workpiece is clear of any hidden wiring and utility lines before cutting.**
- Draw a line on the workpiece to indicate the cut. Set the Blade's depth adjustment accordingly and raise the Lower Guard (10).
- Set the Blade so that it is barely above the workpiece.
- Start the Saw and allow the Blade to come to full speed.
- Gradually lower the Blade onto the workpiece, using the front end of the Plate (50) as a pivot point.
- Once the Blade starts cutting, release the Blade's Lower Guard.
- When the Plate is resting flat on the surface being cut, continue to cut forward to the end of the cut.
- Allow the Blade to come to a full stop before removing it from the cut.
- WARNING!** Do not pull the Saw back. Doing so will cause the Blade to climb out of the cut, leading to Kickback (see warnings on page 4).
- Turn the Saw around and finish the cut in a normal manner, sawing forward. Use a jig saw or hand saw (not included) to finish cutting the corners, if needed.

Cutting Large Sheets

- Cutting large sheets or boards requires support to prevent sagging. Cutting without leveling and/or proper support will cause the Blade to bind, leading to kickback (see warnings on page 4).
- Use sawhorses to support the board or panel to be cut.

MAINTENANCE

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POWER TOOLS**

Operating Reciprocating Saw

1. Slide a fully charged Battery Pack into the bottom of the Handle, making sure that it clicks into place. Be sure the Battery Pack is securely seated into the Saw Handle so it will not fall off during use.
2. Firmly hold the Reciprocating Saw with both hands. Position the Blade near the work piece, depress the Trigger Lock Button (3) and hold the Trigger down.
3. Release the Lock Button once the tool has power. Allow the Saw to come up to full speed before addressing it to the work piece.

IMPORTANT: Do not start the Saw if the Saw Blade is in contact with anything before operation. If necessary, lift the tool from the work piece before squeezing the Trigger.

4. In preparation for making a cut, place the Blade Guard (35) on the surface to be cut. Align the Saw Blade with the direction of the cut and slowly lower the saw blade onto the cut line to begin the cut. Do not attempt to cut with the tip of the Blade; kickback and damage to the Blade could result.

Metal Cutting

- a. When cutting metal materials with the Saw, make sure to use the metal Saw Blade.
 - b. Lubricate the cutting surface with cutting oil to avoid heat build-up. Follow the **“Operating the Reciprocating Saw”** section earlier in this manual for basic instructions.
 - c. Slowly start the cut. You may tip the Handle down for a slant cut.
5. When finished cutting, release the Trigger to stop the tool.
 6. Remove the Battery Pack and the Saw Blade.
 7. Clean, then store the Saw indoors and out of children’s reach.

Plunge Cutting

WARNING! TO PREVENT SERIOUS INJURY FROM ELECTRICAL SHOCK AND FIRE: Do not cut into areas where you cannot identify possible hazards behind or inside the surface being cut.

Note: Before Plunge Cutting, drill a hole large enough to insert the Saw Blade. **Never allow the tip of the Saw Blade to contact the workpiece.**

1. Clearly mark the line of cut on the work piece.
2. From a convenient starting point within the cut out area, place the blade tip into the hole or opening. The Blade Guard should be positioned vertically at a 90° angle to the workpiece. See Figure B, below.

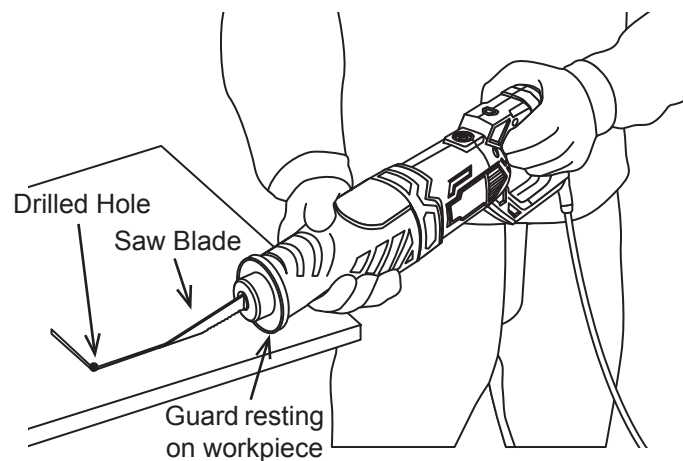


Figure D: Plunge Cutting

3. Start the Saw and allow it to reach full speed.
4. With the Saw resting on the Blade Guard, slowly tilt the Saw Blade onto the cut line. Continue this motion until the Saw Blade is perpendicular to the work piece.
5. Continue cutting along the line to complete the cut.

Operating Flashlight

1. Slide the top of the Battery into the bottom of the Flashlight handle until Battery locks into place.
2. Adjust the Flashlight’s head position by rotating it up or down.
3. Press the Trigger to activate LED lights on the front of the Flashlight. Press again to turn off the lights.
4. After use, press the battery release latch on the front of the Battery to release the Battery Pack from the Flashlight and slide it out of the Base to remove it.

Maintenance and Servicing



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

⚠️ WARNING


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

- BEFORE EACH USE**, inspect the general condition of the tool. Check for:
 - leaking, swollen, or cracked battery pack,
 - loose hardware,
 - misalignment or binding of moving parts,
 - cracked or broken parts, and
 - any other condition that may affect its safe operation.
- AFTER USE**, wipe external surfaces of the tool with clean cloth.
- Ni-Cd BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY.**
Do not short, incinerate or open Battery Pack.

Troubleshooting

Problem	Possible Causes	Likely Solutions
Tool will not start.	<ol style="list-style-type: none">Battery Pack not properly connected.Battery Pack not properly charged.Battery Pack burnt-out.Internal damage or wear.	<ol style="list-style-type: none">Remove Battery Pack, make sure there are no obstructions, reinsert the Battery Pack according to its shape (it should only fit one way), and press firmly until the Battery Pack locks in place.Make sure Charger is connected and operating properly. Give enough time for Battery Pack to recharge properly.Dispose of old Battery Pack properly or recycle. Replace Battery Pack.Have technician service tool.
Tool operates slowly.	<ol style="list-style-type: none">Forcing tool to work too fast.Battery Pack power low.Battery Pack burnt-out.	<ol style="list-style-type: none">Allow tool to work at its own rate.Recharge Battery Pack.Dispose of old Battery Pack properly or recycle. Replace Battery Pack.
Performance decreases over time.	<ol style="list-style-type: none">Accessory dull or damaged.Battery Pack wearing out.	<ol style="list-style-type: none">Keep cutting accessories sharp. Replace as needed.Battery Pack capacity will gradually decrease through use. If symptoms are severe, recycle old Battery Pack (or dispose of properly) and replace it.
Excessive noise or rattling.	Internal damage or wear. (Carbon brushes or bearings, for example.)	Have technician service tool.
Overheating.	<ol style="list-style-type: none">Forcing tool to work too fast.Accessory misaligned.Accessory dull or damaged.Blocked motor housing vents.	<ol style="list-style-type: none">Allow tool to work at its own rate.Check and correct accessory to fence and/or table alignment.Keep cutting accessories sharp. Replace as needed.Wear ANSI-approved safety goggles and NIOSH-approved dust mask/respirator while blowing dust out of motor using compressed air.
 Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect Battery Pack and Charger power supply before service.		

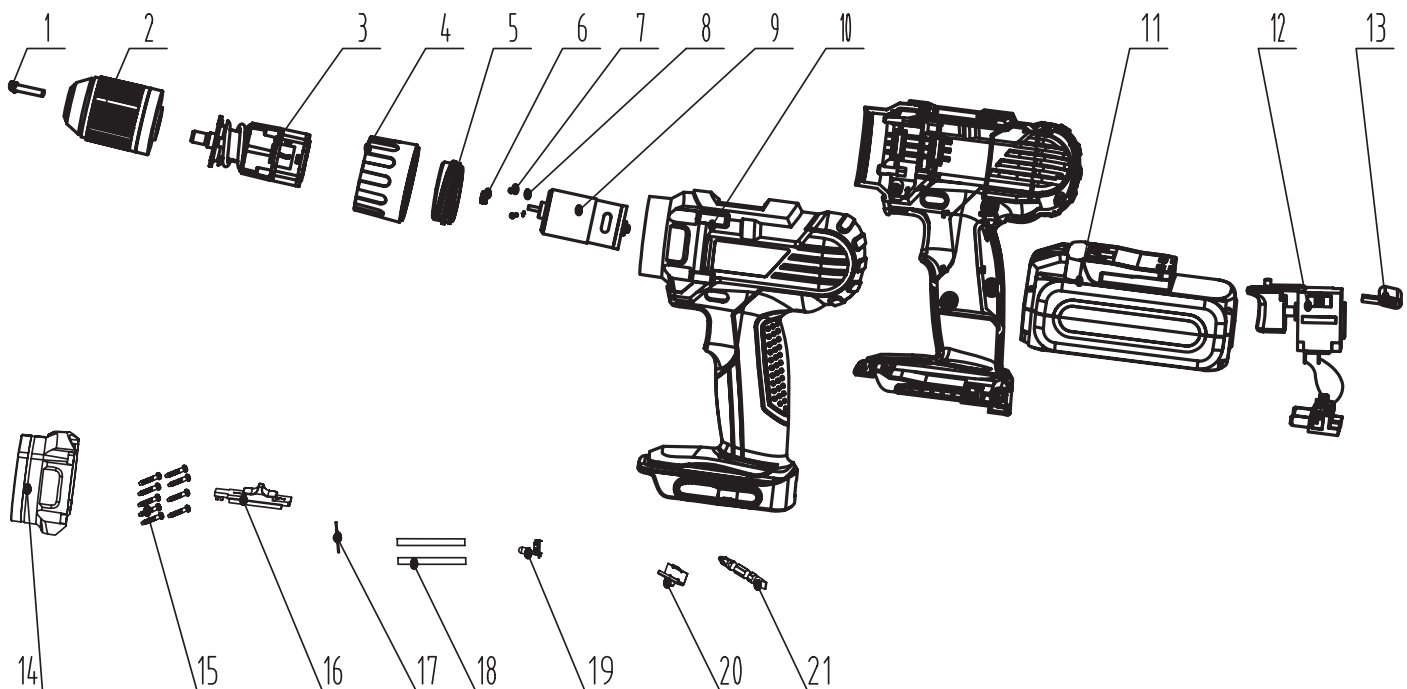
PLEASE READ THE FOLLOWING CAREFULLY

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.

Drill / Driver Parts List and Diagram

Part	Description	Qty
1	Thread Screw	1
2	Chuck	1
3	Gear Box	1
4	Torque Setting Ring	1
5	Torque Sleeve Inner Lane	1
6	Motor Gear	1
7	Pan Head Screw	2
8	Spring Pad	2
9	Motor	1
10	Housing (Left/Right)	1
11	Battery Pack	1

Part	Description	Qty
12	Trigger	1
13	Push Rod	1
14	Front Housing Sleeve	1
15	Self-Tapping Screw	13
16	Speed Selector	1
17	Speed Wire	1
18	Latch Pin	2
19	Light	1
20	Clamp Driver	1
21	Two-Pronged Bit	1



Record Product's Serial Number Here: _____

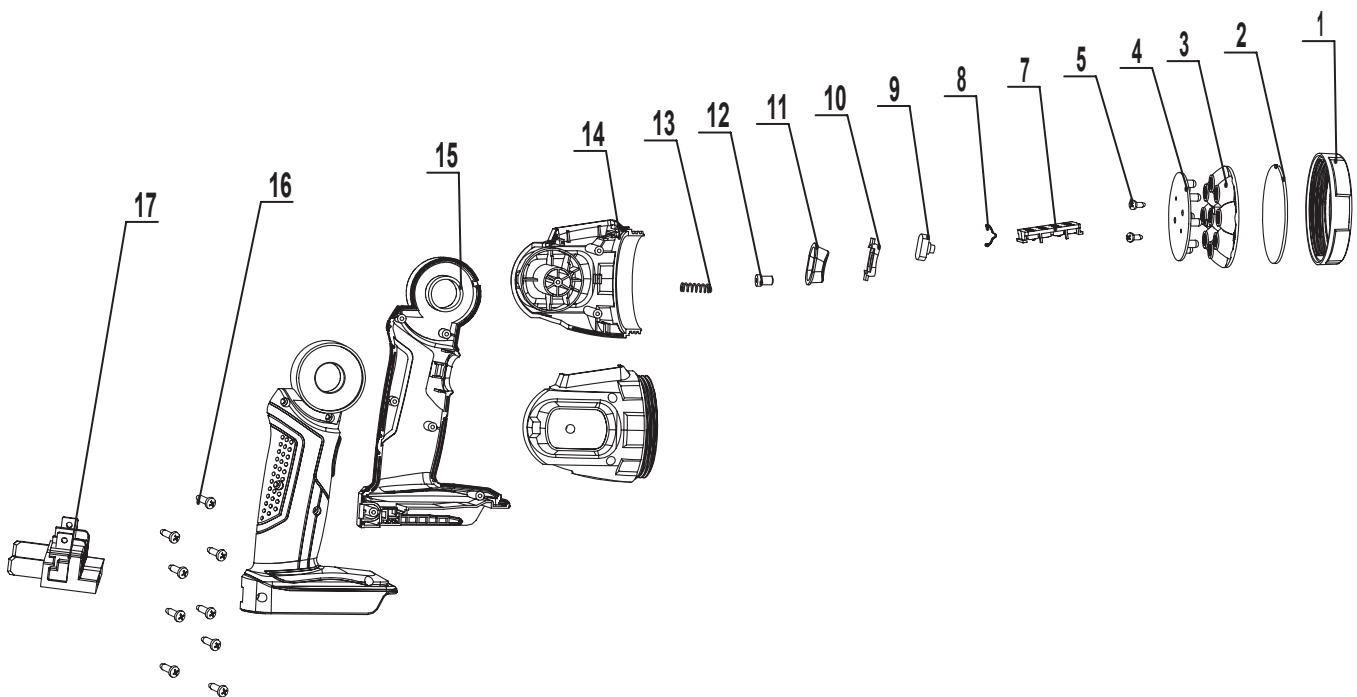
Note: If product has no serial number, record month and year of purchase instead.

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

Flashlight Parts List and Diagram

Part	Description	Qty
1	Protective Shield	1
2	Lens Cover	1
3	Reflector	1
4	Front Light Circuit Board	1
5	Screw	2
7	Top Cover	1
8	Tuning Fork	1
9	Trigger	1

Part	Description	Qty
10	Switch Pad	1
11	Switch Frame	1
12	Top Pin	1
13	Spring	1
14	Main Housing	1
15	Handle Housing	1
16	Screw	9
17	Bracket	1

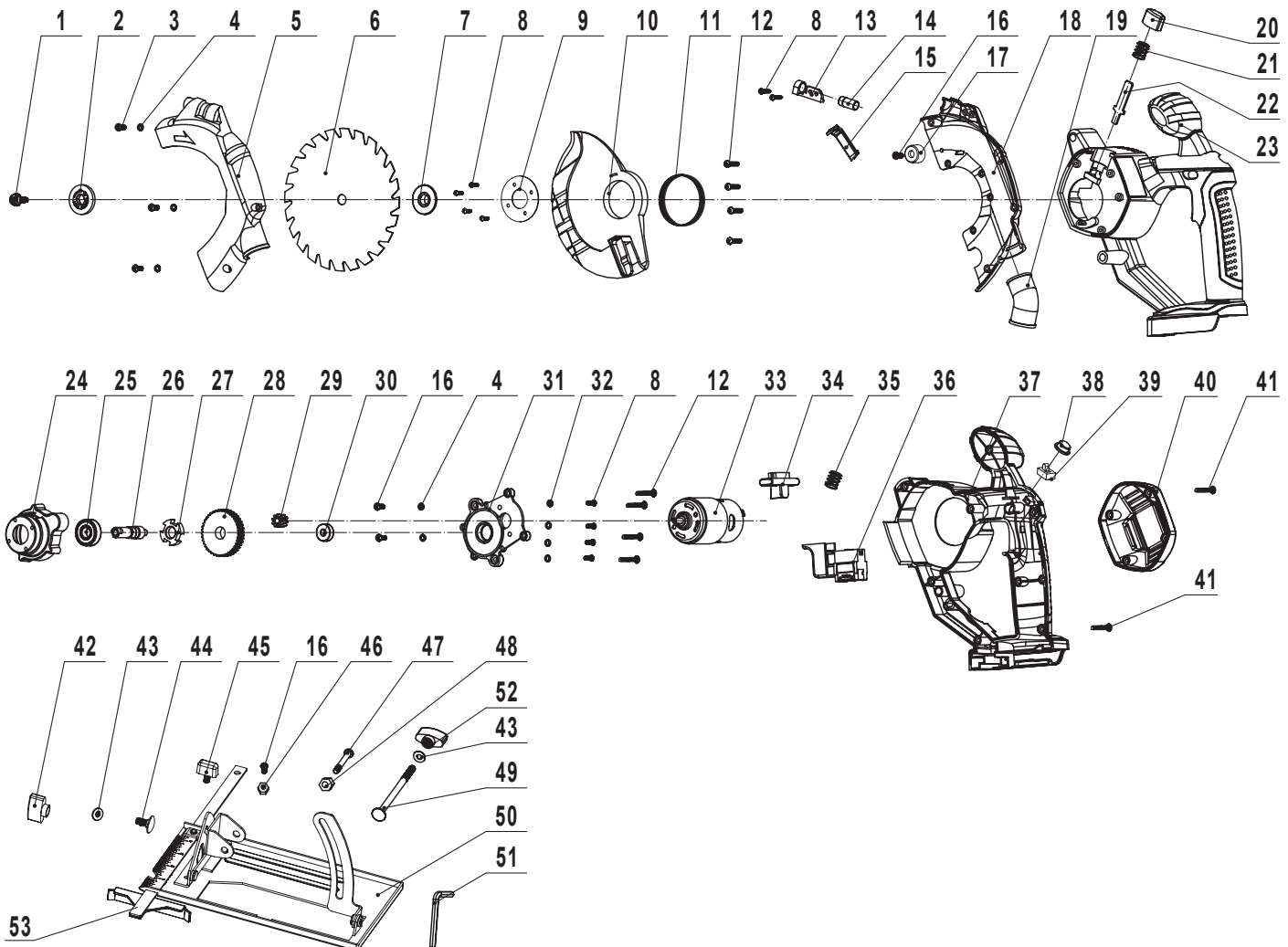


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Circular Saw Parts List and Diagram

Part	Description	Qty
1	Hex Flange Screw	1
2	Outer Flange	1
3	Screw (M4x10)	3
4	Spring Pad	5
5	Left Upper Guard	1
6	Saw Blade	1
7	Inner Flange	1
8	Screw (M3x10)	10
9	Guard Washer	1
10	Lower Guard	1
11	Torque Spring	1
12	Self Tapping Screw (ST3.5x14)	8
13	Laser Base	1
14	Laser	1
15	Wire Plate	1
16	Screw (M4x14)	4
17	Rubber Ring	1
18	Right Upper Guard	1
19	Connector Pipe	1
20	Spindle Lock Button	1
21	Lock Spring	1
22	Lock Block Shaft	1
23	Left Housing	1
24	Gearbox	1
25	Bearing (6000)	1
26	Output Shaft	1
27	Lock Block	1

Part	Description	Qty
28	Large Gear	1
29	Small Gear	1
30	Bearing (606)	1
31	Gearbox Cover	1
32	Spring Pad (Ø3)	1
33	Motor	1
34	Trigger Lock Button	4
35	Trigger Spring	1
36	Trigger	1
37	Right Housing	1
38	Laser Switch	1
39	Laser Switch Frame	1
40	Rear Housing	1
41	Self Tapping Screw (ST3x14)	13
42	Bevel Adjusting Knob	2
43	Washer (Ø6.5xØ15)	2
44	Screw	1
45	Fence Adjusting Knob	1
46	Nut (M4)	1
47	Connecting Screw Rod	1
48	Locknut	1
49	Screw (M6x95)	1
50	Plate	1
51	Hex Wrench	1
52	Depth Adjusting Knob	1
53	Fence	1



SAFETY

SETUP

OPERATION

MAINTENANCE

Reciprocating Saw Parts List

SAFETY

SETUP

OPERATION

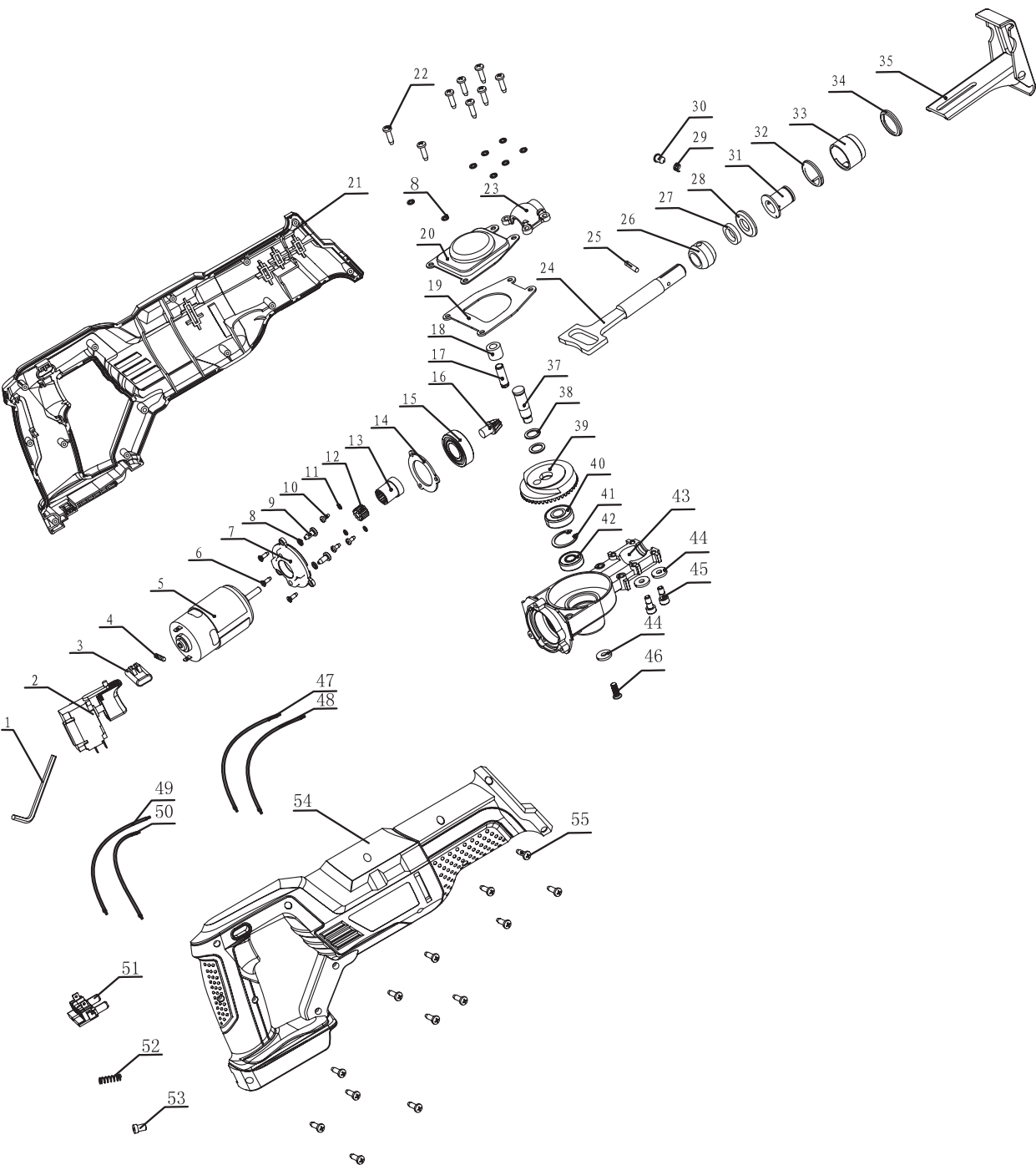
MAINTENANCE

Part	Description	Qty
1	Hex Wrench	1
2	Trigger	1
3	Lock Button	1
4	Lock Button Spring	3
5	Motor	1
6	Head Screw	10
7	Motor Bracket	2
8	Washer	3
9	Head Screw	3
10	Head Screw	1
11	Washer	1
12	External Spline Gear	1
13	Internal Spline Gear	1
14	Pressure Plate	1
15	Bearing (6002)	1
16	Pinion Wheel	1
17	Eccentric Pin	1
18	Needle Bearing	1
19	Middle Plate	1
20	Gearbox Cover	8
21	Left Housing	1
22	Screw	1
23	Ball Press Cover	1
24	Reciprocating Lever	1
25	Straight Pin	1
26	Slide Bearing	1
27	Wool Washer	1

Part	Description	Qty
28	Collet Ring	1
29	Compression Spring	1
30	Collet Pin	1
31	Inner Gasket	1
32	Torque Spring	1
33	Blade Collet	1
34	Collet Washer	1
35	Shoe	1
37	Gearshaft	1
38	Washer	2
39	Gearwheel	1
40	Bearing (6000)	1
41	Circlip	1
42	Bearing (608-2Z)	1
43	Gearbox	1
44	Washer	3
45	Shoe Adjustment Screw	2
46	Head Screw	1
47	Red wire	1
48	Black wire	1
49	Red wire	1
50	Black wire	1
51	Bracket	1
52	Spring	1
53	Top Pin	1
54	Right Housing	1
55	Screw	13

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Reciprocating Saw Assembly Diagram



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SAFETY

SETUP

OPERATION

MAINTENANCE

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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