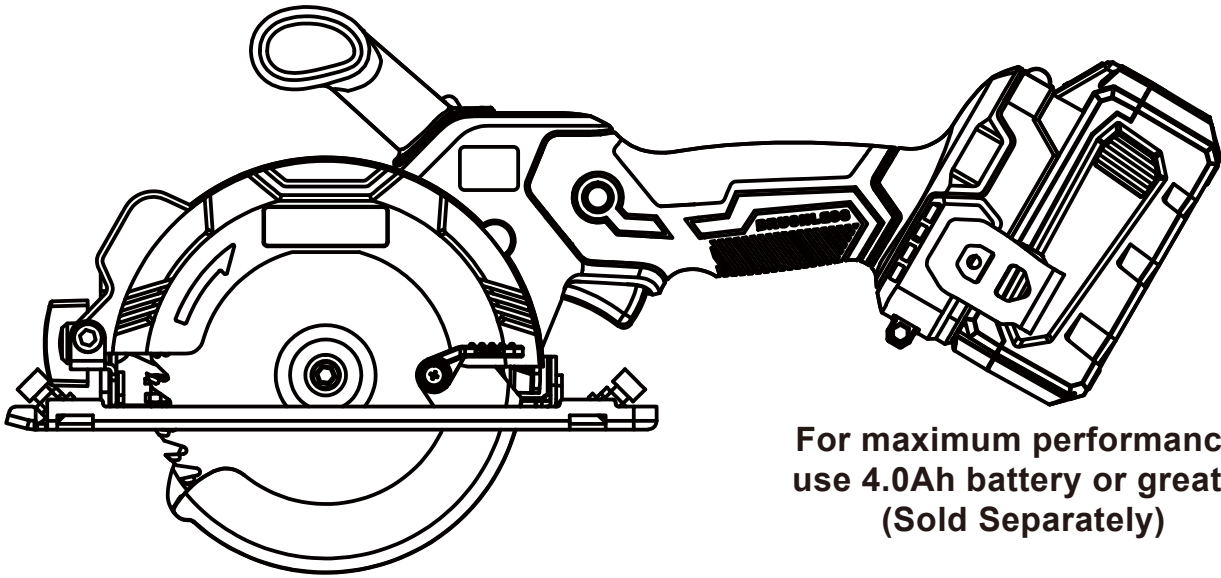


KLUTCH™

20V 4-1/2IN. BRUSHLESS COMPACT CIRCULAR SAW

Owner's Manual



For maximum performance,
use 4.0Ah battery or greater
(Sold Separately)

⚠ WARNING: Read carefully and understand all ASSEMBLY AND OPERATION INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

Item # 5797047

READ & SAVE THESE INSTRUCTIONS

Thank you very much for choosing a **KLUTCH** product!

For future reference, please complete the owner's record below:

Serial Number/Lot Date Code: _____

Purchase Date: _____

Save the receipt, warranty, and this manual. It is important that you read the entire manual to become familiar with this product before you begin using it.

This 20V 4-1/2In. Brushless Compact Circular Saw is designed for certain applications only. Northern Tool and Equipment is not responsible for issues arising from modification or improper use of this product such as an application for which it was not designed. We strongly recommend that this product not be modified and/or used for any application other than that for which it was designed.

For technical questions, please call **1-866-915-8626**.

IMPORTANT SAFETY INSTRUCTIONS

WARNING:

When using electric tools, machines or equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury.



WORK AREA SAFETY

1. Keep the 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

1. 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.
2. 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.
3. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
4. 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.
5. 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.
6. 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

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. Protective 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 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.
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 jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
7. If devices are provided for the connection of dust extraction and collection facilities, ensure

IMPORTANT SAFETY INSTRUCTIONS

that these are connected and properly used. Use of these devices can reduce dust-related hazards.

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 more safely 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 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.
4. Store side 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, 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

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, also 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.

CUTTING PROCEDURES

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

IMPORTANT SAFETY INSTRUCTIONS

stable platform. It is important to support the work properly to minimize body exposure, blade binding, or loss of control.

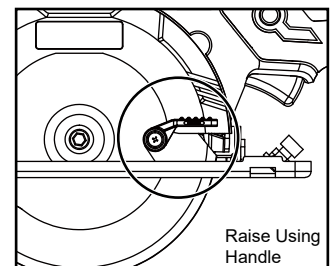
5. Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will also make exposed metal parts of the power tool "live" and could give the operator an electric shock.
6. When ripping, 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 specifically designed for your saw, for optimum performance and safety of operation.

SAFETY INSTRUCTIONS FOR SAWS LOWER GUARD FUNCTION

1. 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.
2. 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.
3. Lower guard may 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.
4. 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.

SAFETY INSTRUCTIONS FOR SAWS KICKBACK

1. 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.
2. 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.
3. 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.
4. 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.

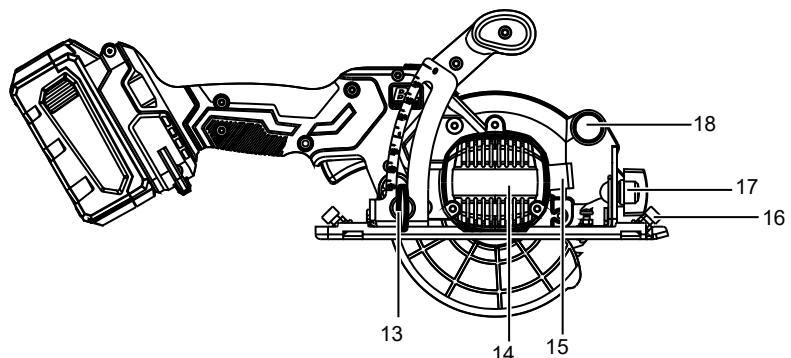
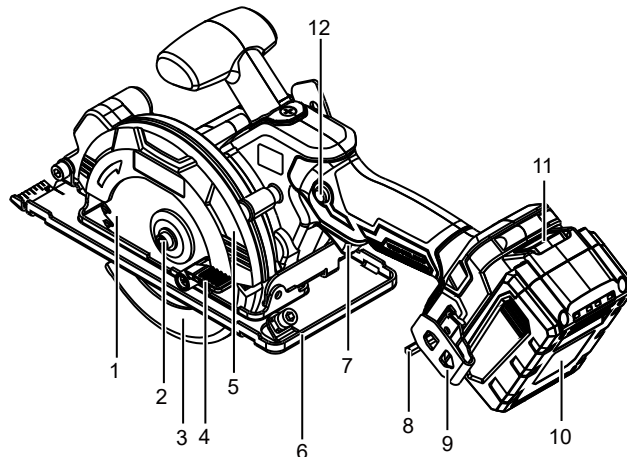


IMPORTANT SAFETY INSTRUCTIONS

5. 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.
6. 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.
7. 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.
8. 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.
9. Do not use dull or damaged blades. Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.
10. 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.
11. Use extra caution when sawing into existing walls or other blind areas. The protruding blade may cut objects that can cause kickback.

FUNCTION

1. Saw Blade
2. Arbor Bolt
3. Lower Guard
4. Lower Guard Lever
5. Upper Saw Guard
6. Shoe
7. Trigger Switch
8. Hex Key(built in the tool)
9. Metal Belt Hook
10. Battery Pack (Sold Separately)
11. Battery Release Button
12. Trigger Switch Lock-off Button
13. Depth Adjustment Lever
14. Motor Housing
15. Spindle Lock Button
16. Fence Lock Bolt
17. Bevel Adjustment Knob
18. Dust Outlet



SPECIFICATION

Voltage: 20V

No Load Speed: 6000 RPM

Blade Size: 4-1/2"

Bevel Angle Degrees: 0-45

ASSEMBLY

WARNING: If any part is broken or missing, DO NOT attempt to plug in the power cord, attach the battery, or operate the tool until the broken or missing part is replaced. Failure to do so could result in possible serious injury.



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



WARNING: Your tool should never be connected to the power source when you are assembling parts, making adjustments, installing or removing application tools, cleaning, or when it is not in use. Disconnecting the tool will prevent accidental starting, which could cause serious personal injury.



UNPACKING

1. Carefully remove the tool and any accessories from the box. Make sure that all items listed in the packing list are included.
2. Inspect the tool carefully to make sure that no breakage or damage occurred during shipping.
3. Do not discard the packing material until you have carefully inspected and satisfactorily operated the tool.

OPERATION

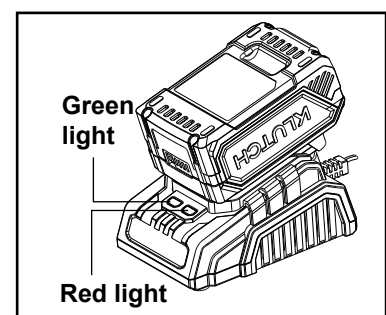
How to charge the battery pack ?

CHARGING BATTERIES

1. Place the Battery Pack on a dry fireproof surface in a room where the temperature is from 50° F to 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 an undamaged 20V lithium-ion 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 not fit the Charger properly, do not try to insert it. Do not force a Battery Pack into the Charger.
4. Make sure the power supply is normal household voltage, 120 volts, AC only, 60 Hz.
5. Connect the charger to a power supply.
6. Slide the Battery Pack onto the Charger.
7. The battery pack may become slightly warm to the touch while charging. This is normal and does not indicate a problem.
8. After charging is complete, the green LED will remain on while the charger is in Maintenance mode.
9. Charger will periodically wake from Energy Save mode to ensure the battery pack remains in a fully charged state.



OPERATION

- To remove the battery pack from the charger, depress the latches on the top of the battery pack and separate battery from charger.

CHARGING A HOT BATTERY PACK

When using a tool continuously, the battery pack may become hot. A hot battery pack may be placed directly onto the charger port but charging will not begin until the battery temperature cools to within acceptable temperature range. When a hot battery pack is placed on the charger, the red LED will begin flashing. When the battery pack cools, the charger will automatically begin charging.

The LED lights on charger show different status as below.

LED FUNCTIONS			
RED LED	GREEN LED	STATUS	ACTION
Off	On	Power	Ready to charge battery pack.
Off	Flashing	Charging	Battery is being charged.
Off	On	Fully charged	Disconnect charger from power supply and remove battery pack from charger.
Flashing	Off	Hot battery	The charger will recover to charge when the temperature drops to 104° F (40°C).
On	Off	Battery defective	Battery pack or charger is defective

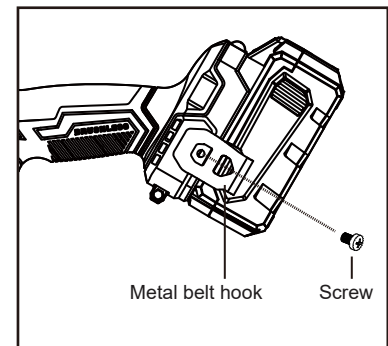
Caution

- Fully charge battery before first use.
- Avoid short periods of charging. Only charge battery pack when it completely runs out.
- In order to extend the battery life, fully charge it after each use and ensure that it is charged every three months; avoid storing batteries in cold places as low temperatures may cause them to fail.

TO INSTALL/REMOVE METAL BELT HOOK

Attach metal belt hook to Handle using supplied Screw:

- Clockwise is to tighten.
- Counterclockwise is to loosen.
- Metal belt hook may be attached to either side.



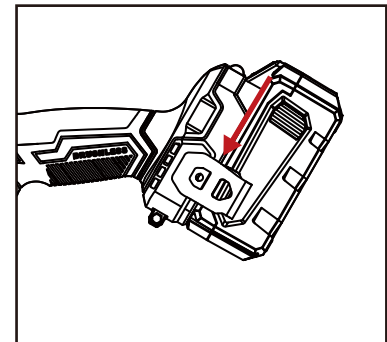
TO ATTACH THE BATTERY PACK

WARNING: To avoid the possibility of accidental starting, always take care not to activate the trigger switch when you are attaching the battery pack or performing other adjustments to the tool.



- Make sure that the circular saw is turned off.
- Align the raised rib on the battery pack with the grooves on the bottom of the tool, and then attach the battery pack to the circular saw.

NOTICE: When attaching the battery pack to the tool, make sure that the raised platform on the pack aligns with the grooves on the bottom of the tool and that the latches snap properly into place. Improper assembly of the battery pack can cause damage to internal components.

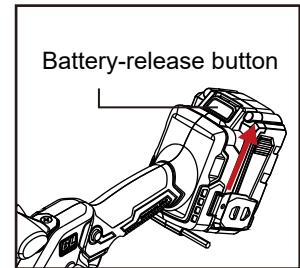


OPERATION

TO DETACH BATTERY PACK

1. Make sure that the circular saw is turned off.
2. Depress the battery-release button located on the front of the battery pack to release the battery pack.
3. Pull the battery pack forward to remove it from the tool.

INTENDED USE: This circular saw is design for do-it-yourself, wood-cutting applications.



WARNING: The saw blade installed on the machine can only be used to cut wood or plastic pipes. Do not use the provided saw blade to cut metal and other materials. If you need to cut other materials, please purchase a suitable saw blade separately.



1. DO NOT use any abrasive wheels.
2. DO NOT use under wet conditions or in the presence of flammable liquids or gases.
3. DO NOT let children come in contact with the tool.
4. Supervision is required when inexperienced users operate the tool.

WARNING: Cutting sap coated wood, and other materials may cause melted substances to accumulate on the blade tips and the body of the saw, increasing the risk of the blade overheating and binding while cutting



STARTING/STOPPING THE SAW

1. Make sure that the trigger is locked, then attach the battery pack.
2. Make sure that all guards are in place and in proper working order and that all adjustment knobs are tight before operation.
3. Hold the saw with one hand on the main handle and the other hand on the auxiliary handle.
4. Align saw on cut line with the larger part of the workpiece to the left of the saw blade.
5. Push in and hold trigger lock on either side, then press trigger.
6. Allow the blade to come up to full speed before contacting the workpiece.
7. After completing the cut, release the trigger. Make sure that the lower guard closes immediately.
8. To prevent accidents, turn off the tool and remove its battery pack after use. Clean, then store the tool indoors out of children's reach.

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

WARNING: After use, remove battery pack and clean inside upper guard. Sawdust accumulation interferes with lower guard operation



OPERATION

WORKPIECE AND WORK AREA SET UP

1. Workpiece selection:

- a) Workpiece must be free of foreign objects and loose knots.
- b) Do not use to cut logs, tree limbs, or uneven lumber.
- c) Wet lumber, green (unseasoned) lumber and pressure treated lumber all have an increased potential for kickback and should only be cut with a blade designed for cutting that lumber. Wear a NIOSH-approved respirator and have appropriate ventilation whenever cutting pressure treated lumber.

2. 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.

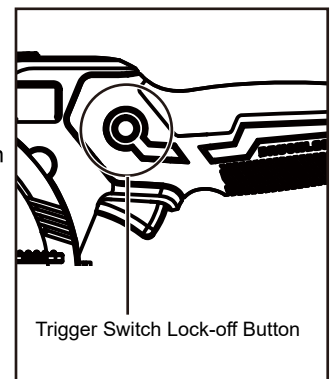
3. Secure loose workpieces using a vise or clamps (not included) to prevent movement while working.

4. There must not be objects, such as utility lines, nearby that will present a hazard while working. This is especially critical for plunge cuts.

LOCK-OFF BUTTON

The lock-off button reduces the possibility of accidental starting. The lock-off button is located on the handle above the switch trigger. The lock-off button must be pressed before you pull the switch trigger. The lock resets each time the trigger is released.

NOTE: You can press the lock-off button from either the left or right side.



ADJUSTING FENCE

1. Loosen fence lock bolt and slide the fence to the desired width of cut.

2. If needed, remove the fence entirely. Otherwise, tighten the fence lock knob after adjustment.

NOTE: The ruler on the fence shows the approximate width of cut.

WARNING: Tighten fence lock knob before use.



KICKBACK

Kickback occurs when the blade stalls rapidly and the saw is driven back towards you. Blade stalling is caused by any action which pinches the blade in the wood.

WARNING: When using the saw, always stay alert and exercise control.

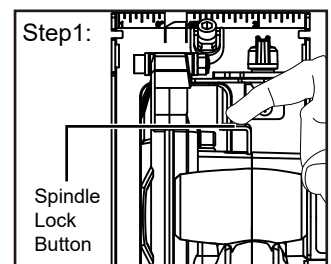
Do not remove the saw from the workpiece while the blade is moving.



BLADE INSTALLATION

1. Remove the battery pack from the tool
2. Use supplied hex wrench.
3. Press the spindle lock. Rotate blade until it locks into place.
4. Using the wrench, remove the blade bolt by turning it clockwise.
5. Remove the outer flange washer.
6. Slide the blade inside the lower blade guard and onto the spindle.

The saw teeth point upward at the front of the saw. Replace the outer



OPERATION

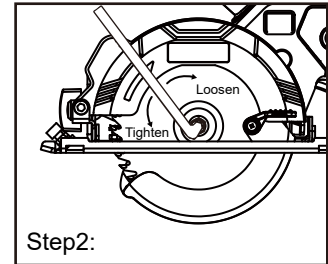
flange washer.

7. Press the spindle lock and replace the blade bolt. Tighten the blade bolt securely by turning it counterclockwise with the wrench.
8. Place the wrench in the storage area.

REMOVING THE BLADE

1. Remove the battery pack from the tool
2. Use supplied hex wrench.
3. Press the spindle lock.
4. Remove the blade bolt by turning it clockwise with the wrench.
5. Remove the outer flange washer.
6. Lift the lower blade guard.
7. Remove the blade from the spindle and off the saw.

CAUTION: DO NOT OVER TIGHTEN.



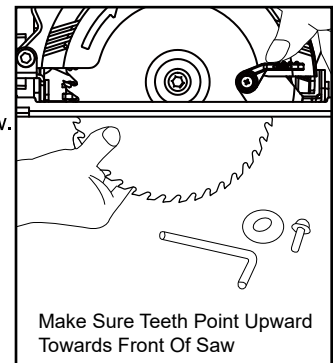
WARNING: Always be sure that the battery is removed from the tool before making any adjustments.



BLADE GUARD SYSTEM

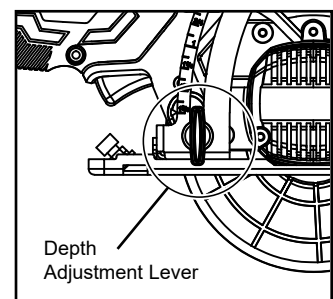
The lower blade guard attached to the circular saw is there for your protection and safety. Do not alter it for any reason. If it becomes damaged, do not operate the saw until you have the guard repaired or replaced. Always leave guard in operating position when using the saw.

DANGER: When sawing through work, lower blade guard does not cover blade on the underside of work. Since blade is exposed on underside of work, keep hands and fingers away from cutting area. Any part of your body coming in contact with moving blade will result in serious injury.



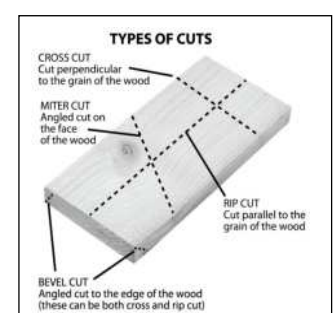
ADJUSTING THE DEPTH OF CUT

1. Remove the battery from the tool.
2. Loosen the lever on the depth guide at the back of saw.
3. Move the base up or down to the desired depth as indicated on the depth of cut scale.
4. Secure the base by tightening the lever.
5. Raise the lower blade guard and place the saw base on the work piece to be cut with the saw blade positioned against the edge.
6. Hold the saw base down on the work piece surface, then raise or lower the motor housing to obtain the desired depth of cut using the work piece edge as a reference.



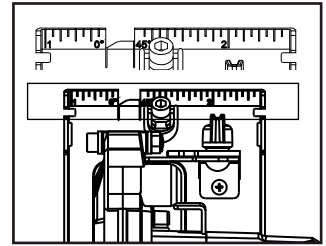
WIDTH OF CUT SCALE

A width of cut scale has been provided on the base of the saw.



OPERATION

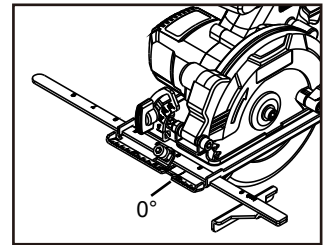
When making straight cross cuts or rip cuts, the scale can be used to measure up to 3 in. on the right side of the blade, and up to 1 in. on the left side of the blade.



CROSS-CUTTING AND RIP CUTTING

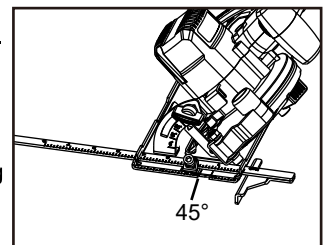
When making a cross cut or rip cut, align the line of cut with the 0° blade guide notch on the base. Since blade thicknesses vary, always make a trial cut in scrap material along a guideline to determine how much, if any, you must offset the guideline to produce an accurate cut.

NOTE: The distance from the line of cut to the guideline is the amount you should offset the guide.



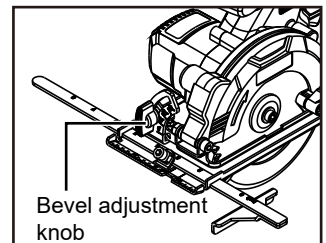
BEVEL CUTTING

1. Align the line of cut with the 45° blade guide notch on the base when making 45° bevel cuts.
2. Make a trial cut in scrap material along a guideline to determine how much you should offset the guideline on the cutting material.
3. Adjust the angle of the cut to any desired setting between zero and 45°. (Refer to Adjusting the Bevel Setting next.)



ADJUSTING THE BEVEL SETTING

1. Loosen the bevel adjusting knob.
2. Raise the motor housing end of the saw until you reach the desired angle setting on the bevel scale.
4. Tighten the bevel adjusting knob securely.



WARNING: Always adjust bevel setting to zero before making a plunge cut. Attempting a plunge cut at any other setting can result in loss of control of the saw possibly causing serious injury.



WARNING: Never extend your fingers while holding the lower blade guard handle. Extending your fingers could result in contact with the blade, causing serious injury.



WARNING: Never tie the lower blade guard in a raised position. Leaving the blade exposed could lead to serious injury.



MAINTENANCE

WARNING: Before cleaning or performing any maintenance, the tool should be unplugged from the power supply.



WARNING: If the supply cord is damaged, it must be replaced by a specially prepared cord available through the service organization.



GENERAL MAINTENANCE

Using compressed air may be the most effective cleaning method. Always wear safety goggles when cleaning tools with compressed air. Periodic maintenance allows for long life and trouble-free operation.

A cleaning, lubrication and maintenance schedule should be maintained.

1. Avoid dropping or otherwise causing impact to the tool and keep it from oil and grease.
2. Inspect the screws periodically. If the screws loosen, tighten them immediately, to avoid serious accident.
3. Inspect the cord regularly and have it replaced by an authorized repair facility if it is damaged.
4. Clean all parts of the tool; clean dust and debris from vents. Keep the tool clean, dry and free of oil or grease.
5. 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 and mild soap to remove dirt, dust, etc.

LUBRICATION

All of the bearings in this product are lubricated with a sufficient amount of high grade lubricant for the life of the unit under normal operating conditions. Therefore, no further lubrication is required.

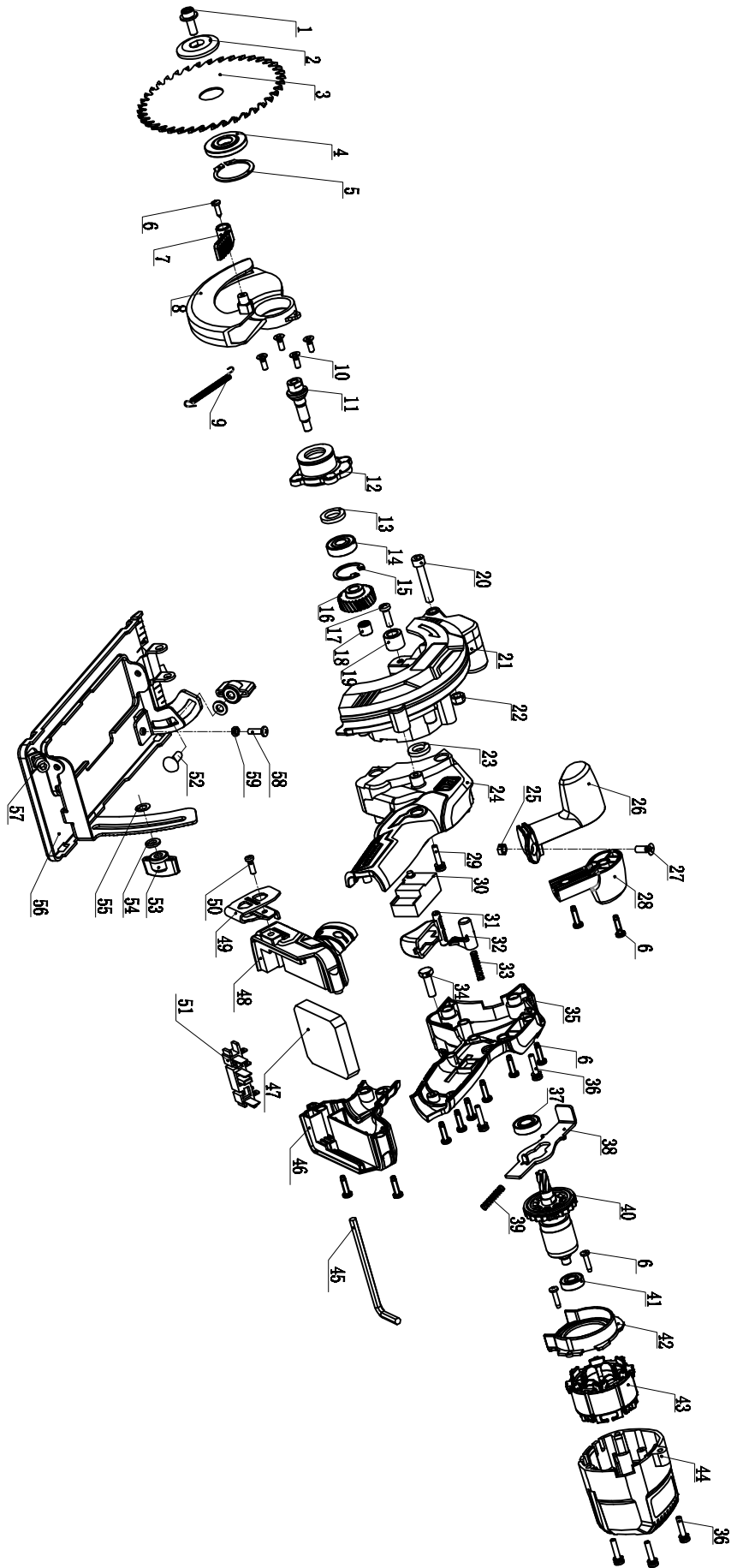
TROUBLESHOOTING

PROBLEM	CAUSE OF THE PROBLEM	SOLUTION
Tool will not start.	<ul style="list-style-type: none"> • Battery pack not properly connected. • Battery pack not properly charged. • Battery pack burnt-out. • Internal damage or wear. 	<ul 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.	<ul style="list-style-type: none"> • Forcing tool to work too fast. • Battery pack power low. • Battery pack burnt-out. 	<ul 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.	<ul style="list-style-type: none"> • Accessory dull or damaged. • Battery pack wearing out. 	<ul style="list-style-type: none"> • Keep cutting accessories sharp. Replace as needed. • Battery pack capacity will gradually decrease through use. <p>If symptoms are severe, recycle old battery pack (or dispose of properly) and replace it.</p>
Excessive noise or rattling.	Internal damage or wear. (Carbon brushes or bearings, for example.)	Have technician service tool.
Overheating.	<ul style="list-style-type: none"> • Forcing tool to work too fast. • Accessory misaligned. • Accessory dull or damaged. • Blocked motor housing vents. 	<ul 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.

PARTS LIST

No.	Description	Qty.	No.	Description	Qty.
1	Screw #45	1	31	Switch Press Button	1
2	Upper Flange	1	32	Switch Lock Button	1
3	Saw Blade	1	33	Switch Lock Spring	1
4	Lower Flange	1	34	Screw M6X20	1
5	Circlip	1	35	Right Handle Housing	1
6	Screw ST3.5x14	13	36	Screw M4X30	5
7	Lower Guard Lever	1	37	Bearing(6900-2RS)	1
8	Lower Guard	1	38	Shaft Lock Lever	1
9	Spring	1	39	Spring	1
10	Screw M4X10	4	40	Rotor	1
11	Output Shaft	1	41	Bearing(607-2RS)	1
12	Bearing(ZL102)	1	42	Airguide Ring	1
13	Wool Felt Seal	1	43	Stator	1
14	Bearing(ZL102)	1	44	Motor Housing	1
15	Circlip	1	45	Hex Key	1
16	Big Gear	1	46	Right Foot Housing	1
17	Screw M5X16	1	47	Controller	1
18	Bearing(HK061009)	1	48	Left Foot Housing	1
19	Limit Column	1	49	Metal Belt Hook	1
20	Screw M6X35	1	50	Screw M4X10	1
21	Upper Saw Guard	1	51	Battery Clip Assembly	1
22	Hex Nut M6	1	52	Screw M6X16	1
23	Wool Felt Seal	1	53	Locking knob	2
24	Left Handle Housing	1	54	Flat Gasket	2
25	Hex Nut M5	1	55	Flat Gasket	1
26	Left Auxiliary Handle	1	56	Base	1
27	Screw M5X16	1	57	Screw M6X10	2
28	Right Auxiliary Handle	1	58	Screw M4X14	1
29	Screw M4X20	1	59	Hex Nut M4	1
30	Switch	1			

SCHEMATIC DRAWING



REPLACEMENT PARTS

- For replacement parts and technical questions, please call Customer Service at 1-866-915-8626.
- Not all product components are available for replacement. The illustrations provided are a convenient reference to the location and position of parts in the assembly sequence.
- When ordering parts, the following information will be required: item description, item model number, item serial number/item lot date code, and the replacement part reference number.
- The distributor reserves the rights to make design changes and improvements to product lines and manuals without notice.

LIMITED WARRANTY

Limited Warranty

- Northern Tool and Equipment Company, Inc. (“We” or “Us”) warrants to the original purchaser only (“You” or Your”) that the KLUTCH product purchased will be free from material defects in both materials and workmanship; normal wear and tear excepted, for a period of one year from date of purchase. The foregoing warranty is valid only if the installation and use of the product is strictly in accordance with product instructions. There are no other warranties, express or implied, including the warranty of merchantability or fitness for a particular purpose. If the product does not comply with this limited warranty, Your sole and exclusive remedy is that We will, at our sole option and within a commercially reasonable time, either replace the product or product component without charge to You or refund the purchase price (less shipping). This limited warranty is not transferable.

Limitations on the Warranty

- This limited warranty does not cover: (a) normal wear and tear; (b) damage through abuse, neglect, misuse, or as a result of any accident or in any other manner; (c) damage from misapplication, overloading, or improper installation; (d) improper maintenance and repair; and (e) product alteration in any manner by anyone other than Us with the sole exception of alterations made pursuant to product instructions and in a workmanlike manner.

Obligations of Purchaser

- You must retain Your product purchase receipt to verify date of purchase and that You are the original purchaser. To make a warranty claim, contact Us at 1-866-915-8626, identify the product by make and model number, and follow the claim instructions that will be provided. The product and the purchase receipt must be provided to Us in order to process Your warranty claim. Any returned product that is replaced or refunded by Us becomes our property. You will be responsible for return shipping costs or costs related to Your return visit to a retail store.

Remedy Limits

- Product replacement or a refund of the purchase price is Your sole remedy under this limited warranty or any other warranty related to the product. We shall not be liable for service or labor charges or damage to Your property incurred in removing or replacing the product; any damages, including, without limitation, damages to tangible personal property or personal injury, related to Your improper use, installation or maintenance of the product or product component; or any indirect, incidental or consequential damages of any kind for any reason.

LIMITED WARRANTY

Assumption of Risk

- You acknowledge and agree that any use of the product for any purpose other than the specified use (s) stated in the product instruction is at Your own risk.

Governing Law

- This limited warranty gives You specific legal rights, and You also may have other rights which vary from State to State. Some states do not allow limitations or exclusions on implied warranties or incidental or consequential damages. So, the above limitations may not apply to You. This limited warranty is governed by the laws of the State of Minnesota, without regard to rules pertaining to conflicts of law. The state courts located in Dakota County, Minnesota shall have exclusive jurisdiction.

KLUTCH™

Distributed by:

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Burnsville, Minnesota 55306

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