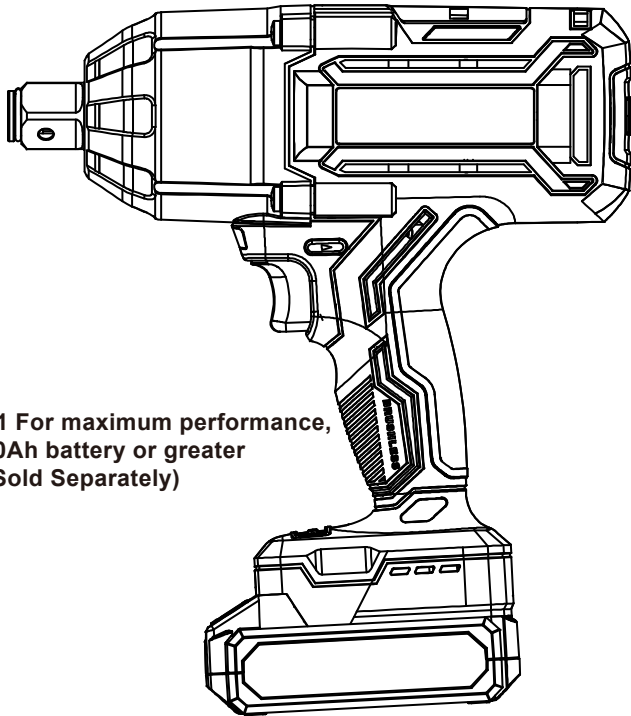


KLUTCH™

20V BRUSHLESS 1/2 IN. HIGH-TORQUE IMPACT WRENCH

Owner's Manual



Item # 5797021 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 # 5797021, 5796870

READ & SAVE THESE INSTRUCTIONS

Thank you very much for choosing a KUTCH 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 Brushless 1/2 In. High-Torque Impact Wrench 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

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



KEEP WORKING AREA CLEAN. Clean areas to prevent injuries.

CONSIDER YOUR WORK AREA ENVIRONMENT. Don't use power tools in damp, wet, or poorly lit locations. Don't expose your tool to the rain. Keep the work area well lit.

Don't use tools in the presence of flammable gases and liquids.

KEEP CHILDREN AWAY. All children should be kept away from the work area. Don't let them handle machines, tools and extensions cords.

STORE UNUSED EQUIPMENT. To avoid being rusted, the machine must be stored in a dry area. Equipment also placed in a high location or locked up, to prevent children having access to the tool.

DON'T FORCE THE TOOL. It will do the job better and more safely at the rate for which it was intended.

USE THE RIGHT TOOL. Don't force a small tool or attachment to do the work of a larger industrial tool. Don't use a tool for a purpose for which it was not intended.

DRESS PROPERLY. Don't wear loose clothing or jewelry, they can get caught by moving parts. Protective, non-electrically conductive gloves and non-skid footwear are recommended when working. Wear protective hair covering to contain long hair and keep it from harm.

USE EYE PROTECTION. Use a full face mask if the work you're doing produces metal filings, dust or wood chips. Wear a clean dust mask if the work involves creating a lot of sparks or coarse dust.

DO NOT TOUCH BITS OR BLADES WITH HANDS AFTER USE. They can become extremely hot after the job is completed.

DON'T OVERREACH. Keep proper footing and balance at all times. Do not reach over or across machines when running.

IMPORTANT SAFETY INSTRUCTIONS

MAINTAIN TOOLS WITH CARE. Keep tools clean for better and safer performance.

Follow instructions regarding lubricating, safe performance and changing accessories.

Keep handles dry, clean and free from oil and grease.

REMOVE ALL ADJUSTING KEYS AND WRENCHES. Make it a habit to check that keys and adjusting wrenches are removed from any rotating tool before using.

AVOID UNINTENTIONAL STARTING. Don't carry tools with your finger pressing on the switch. Make sure the direction switch is in the **STOP** position when your machine is not in use or changing attachments.

STAY ALERT. Don't operate any tool when you are tired.

CHECK FOR DAMAGED PARTS. Before using the tool, any part that is damaged should be carefully checked to determine whether it will operate properly and perform its intended function. Any part that is damaged should be properly repaired or replaced by an authorized service center unless indicated elsewhere in the instruction manual. Don't use the tool if the switch does not turn on and off properly.

REPLACEMENT PARTS. When servicing, use only identical replacement parts.

SAFETY NOTES FOR BATTERY AND CHARGER

RIGHT TEMPERATURE FOR CHARGING. Room temperature must be higher than 32°F and lower than 122°F.

DO NOT CHARGE IF THE CHARGER'S CORD OR PLUG IS DAMAGED. Charging with a damaged cord may result in a fire or electrical shock. If the charger is damaged in any way, have it repaired by a trained serviceman.

DO NOT CAUSE SHORT CIRCUITS IN YOUR BATTERY. If connection is made between the positive (+) and negative (-) terminal directly or via accidental contact with metallic objects, the battery will be short circuited and an intense current will flow causing heat generation which may lead to casing rupture or fire.

The warnings, cautions, and instructions detailed in this manual cannot cover all possible conditions and situations that occur. Please use common sense and caution when operating this tool.



SPECIFICATIONS

Voltage: 20V

3-Speed: 0-1000/1500/1800 RPM

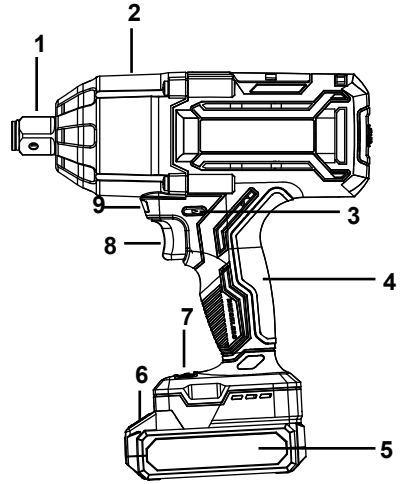
Chuck Size: 1/2"

Bolt Breakaway Torque: 1000 ft.lbs

Fastening Torque: 650 ft.lbs

FUNCTION DESCRIPTION

1. 1/2" Square drive
2. Metal gear housing
3. Direction button (Forward / Stop / Reverse)
4. Rubber handle
5. Battery pack (Item # 5797021 Sold Separately)
6. Battery release button
7. Speed control button
8. Trigger switch
9. LED light



OPERATION

How to charge the battery pack ?

CHARGING BATTERIES

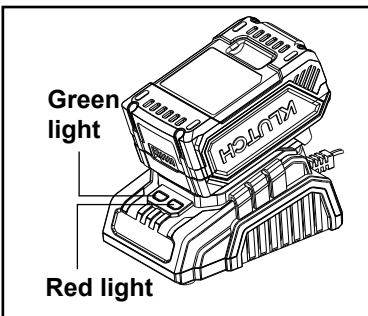
1. Place the Battery Pack on a dry fireproof surface in a room where the temperature is from 50° F to 104° F.
Note: If recharging a newly spent Battery Pack, allow it to cool completely before charging.
2. Examine the Battery Pack. It must be an undamaged 20V lithium-ion type Battery Pack. Do not charge 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.

OPERATING PROCEDURES

- After charging is complete, the green LED will remain on while the charger is in Maintenance mode.
- Charger will periodically wake from Energy Save mode to ensure the battery pack remains in a fully charged state.
- To remove the battery pack from the charger, depress the latch 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

OPERATING PROCEDURES

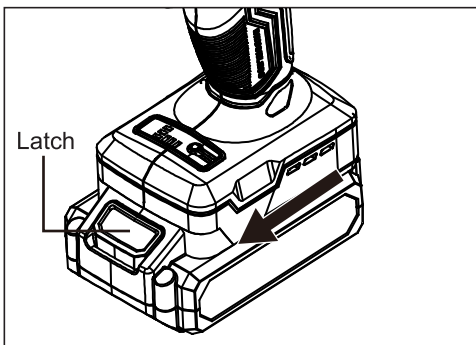
Caution

- 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.

Install or remove battery pack

To install : slide battery pack into the bottom of the tool until you hear a click. Make sure that the latch is in place and battery is secured before operation.

To remove: Press the battery release latch and pull the battery pack out at the same time.



When the machine is obstructed, please turn off the switch right away and check if the work piece is right. An obstruction may cause the machine motor to be burned.



Notice: This tool is cordless and does not need to be connected to a power supply.

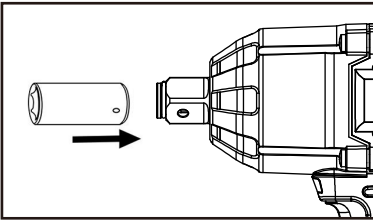
CAUTION: Do not expose either the tool or charger to the rain or water. Do not overcharge the battery as this may damage the battery. If the battery power is low, stop working and recharge the battery pack. To prolong the life of the tool, do not work continually for more than 20 minutes at a time.

APPLICATION

INSTALL SOCKETS(Sold Separately)

This tool is intended for loosening and tightening nuts and bolts with 1/2" drive impact sockets.

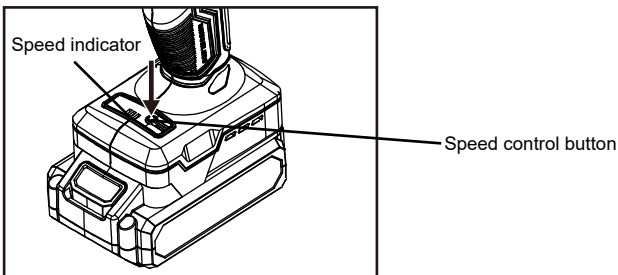
- Choose a 1/2" driver socket of the correct size and mount it on the drive shaft.
- After you place the socket over the fastener, it will self-lock when you align the hole in the socket with the hole in the fastener.
- You can also install the extension bar to extend access to hard-to-reach fasteners in tight spots.



NOTE: Since being equipped with friction design, Klutch impact wrench can hold sockets onto the anvil more tightly and allow more smooth socket changes.

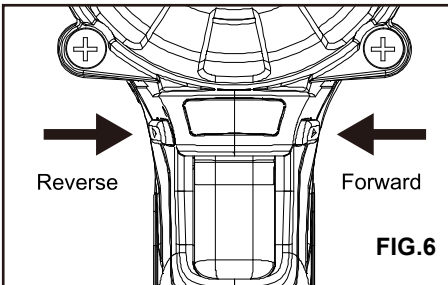
- This tool is equipped with a variable speed (1000/1500/1800rpm) with electronic brake system. The speed may be controlled during operation by pressing the speed control button.
- Depending on different working conditions, selecting an appropriate speed will be more efficient.
- The lower speed, the smaller the impact frequency; the higher speed, the greater the impact frequency.

Note: After the trigger switch is turned on, the power and speed indicator lights will light up, so that you can start to press the speed control button to adjust the speed.



OPERATING PROCEDURES

- If the tool shows signs of decreased power, stop and recharge the battery. Using the tool to do heavy work when the battery is weak drains the battery very quickly and may damage the battery.
- Use the variable speed only for starting
- Your tool is equipped with a 3-position switch (forward / reverse / self-lock) through the housing above the trigger.
- When the knob is pushed toward the right, the rotation is forward (clockwise).
- When pushed from right to left, the rotation is reversed (counter clockwise).
- When in center position, it is locked into stop and the trigger is blocked.
- Do not push the rotation direction knob until the drive stops turning.



LED WORKING LIGHT

- The impact wrench has 1 LED light to illuminate the work area and improve vision when working in areas with insufficient light.
- The LED light will be turned on or off depending on the position of the trigger switch.

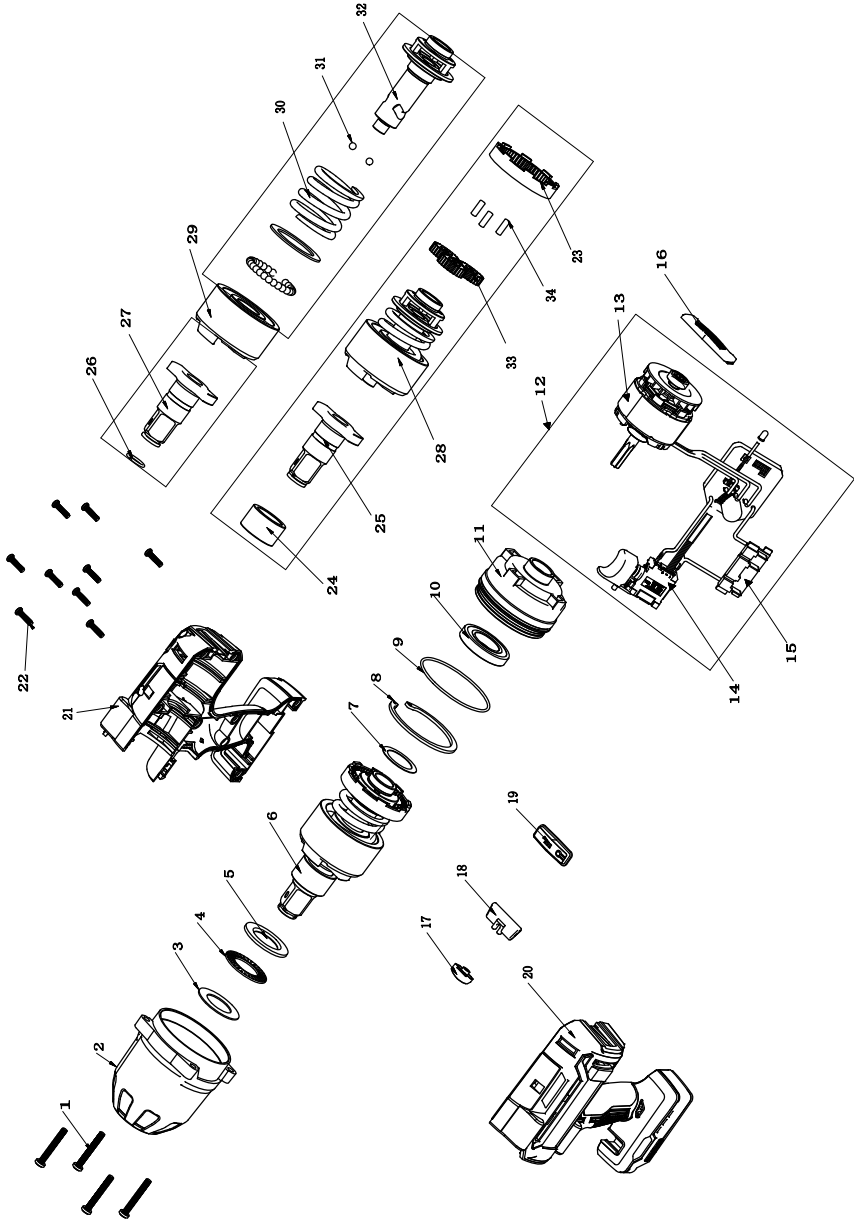
MAINTENANCE

- Keep the tool clean by using a soft damp (not wet) cloth. Do not use solvents on the plastic parts.
- Lubrication is necessary. After long-term use, find an authorized service center to maintain and lubricate the tool.
- To maintain the best performance of your rechargeable battery, protect it from overheating and overcharging. Occasionally charge the battery for 6 hours. The battery may also benefit from a full discharge from time to time.

COMPONENT LIST

No.	Description	Qty.	No.	Description	Qty.
1	ST5*40 screw	4	19	Speed control button	1
2	Gear box	1	20	Left housing	1
3	Thrust bearing front washer	1	21	Right housing	1
4	Thrust bearing	1	22	4.2*16 Screw	10
5	Thrust bearing rear washer	1	23	Gear ring	1
6	Impact block assembly	1	24	Spindle sleeve	1
7	Middle spindle washer	1	25	spindle assembly	1
8	Bearing circlip	1	26	Steel wire ring	1
9	O Ring	1	27	Spindle	1
10	16005 Bearing	1	28	Impact block middle spindle	1
11	Motor bracket	1	29	Impact block	1
12	Controller assembly	1	30	Spring	1
13	Motor	1	31	Steel ball	2
14	Switch	1	32	Middle spindle	1
15	Battery clip assembly	1	33	Planet gear	3
16	Brushless label	1	34	Column pin	3
17	LED transparent cover	1			
18	Forward / Reverse switch	1			

EXPLODED VIEW



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

LIMITED WARRANTY

- 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.

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

www.northerntool.com

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