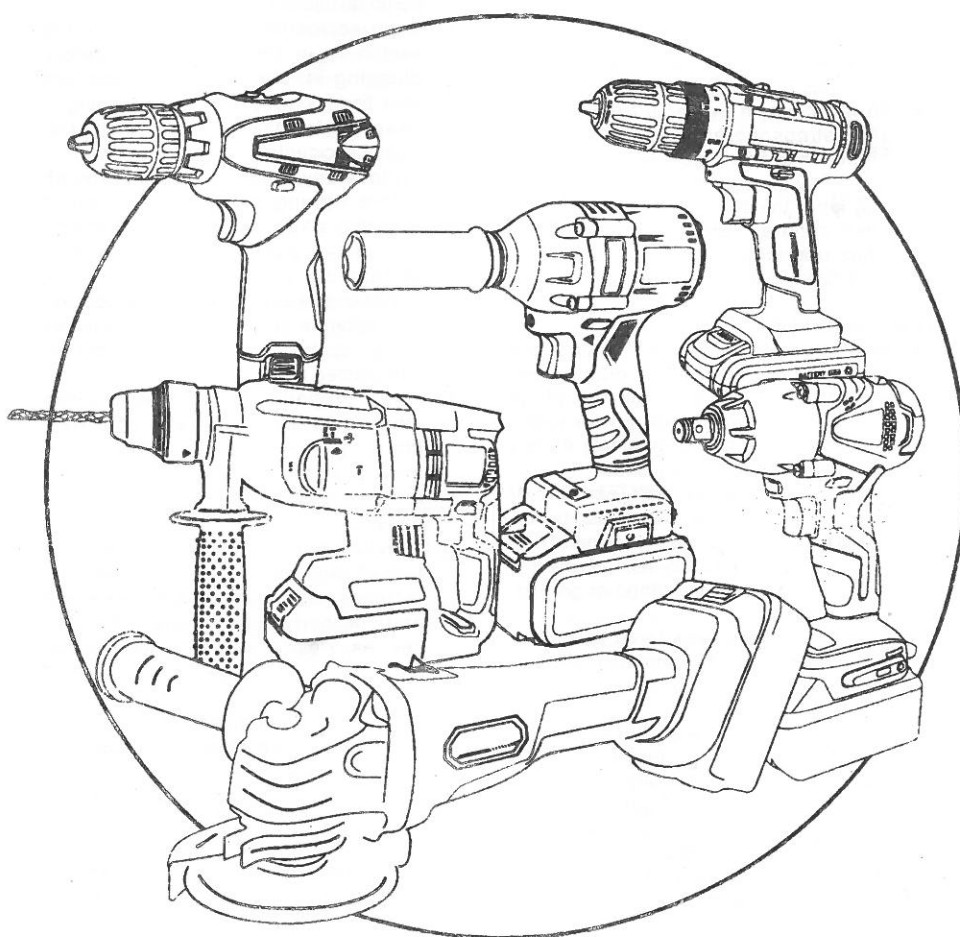


# CORDLESS IMPACT

## Product operation instruction



**THANK YOU FOR BUYING A PRODUCT.**

To ensure your safety and satisfaction, carefully read through this **OWNER'S MANUAL** before using the product.

**General Safety Rules**

**WARNING!** Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all of the warnings listed below refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

**SAVE THESE INSTRUCTIONS**

**1) Work area**

- a) Keep work area clean and well lit. Cluttered and dark areas invite accidents.
- b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable ligds, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- c) Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

**2) Electrical safety**

- a) 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.
- b) 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.
- c) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d) 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 entangles cords increase the risk of electric shock.
- e) 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.

**3) Personal safety**

- a) Stay alert, watch what you are doing and use common sense when operating a power tools. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A momen of inattention while operating power tools may result in serious personal injury.
  - b) Use safety 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.
  - c) Avoid accidental starting. Ensure the switch is in the off-position before plugging in. Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.
  - d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
  - e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpeected situations.
  - f) 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.
  - g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dust-related hazards.
- 4. Power tool use and care**
- a) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
  - b) Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

- c) Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
  - d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the poer tool. Power tools are dangerous in the hands of untraineool.
  - e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
  - f) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
  - g) Use the power tool, accessories and tool bits etc, in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.
- 5) Battery tool use and care**
- a) Ensure the switch is in the off position before inserting battery pack. Inserting the battery pack into power tools that have the switch on invites accidents.
  - b) 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.
  - c) Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
  - d) When battery pack is not in use, keep it away from other metal objects like paper clips, keys, nails, screwa, or other metal objects that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.

- e) Under abusive conditions, liquid may be ejected from the battery: avoid contact. if contact accidentally occure, flush with water. if liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

**6) Service**

- a) Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

**CORDLESS IMPACT WRENCH SAFETY PRECAUTIONS**

1. Be aware that since this tool does not have to be plugged into an electrical outlet, it is always in operating condition.
2. First, Charge the battery.
3. Be sure the battery pack is securely snapped in place.
4. When not in use, lock the trigger.
5. When operating at high places, be aware of things below you.
6. Make sure the socket is securely mounted. An incorrectly mounted socket is extremely dangerous since it can fly off or break during operation.
7. Do not wear cloth gloves or a necktie since they could become caught in a rotating socket.
8. Hold the tool securely.

**INSTRUCTIONS FOR SAFE HANDLING**

1. Make sure that the charger is only connected to the voltage marked on the name plate.
2. Never use the tool if its cover or any screws are missing. If the cover or screws have been removed, replace them prior to use. Maintain all parts in good working order.
3. Always secure the tool when working in elevated positions.
4. Never touch the moving parts during use.
5. Never lay the tool down before its moving parts have come to a complete stop.
6. **ACCESSORIES:** The use of accessories or attachments other than those recommended in this manual might present a hazard.
7. **REPLACEMENT PARTS:** When servicing, use only identical replacement parts.

## DISPOSAL OF THE EXHAUSTED BATTERY

Li-ion batteries must be recycled.

Take the battery to the shop from which it was purchased as soon as the post-charging battery life becomes too short for practical use. Do not discard the exhausted battery.

## DESCRIPTION

1. Drive shank
2. LED
3. Trigger
4. Forward/Reverse switch
5. Belt hook
6. Battery pack
7. Charger
8. Push button
9. Screw
10. Charger light (Red light)
11. Charger light (Green light)
12. Socket
13. O-ring
4. Pin

## SPECIFICATIONS

Drive shank	1/2" square
Driving capacity	
Bolt	M8-M27
Max fastening torque	250N.m
(When tightening M27	High torque bolt for 3
seconds)	
Motor	DC26V
Battery type	B-26
Charger type	BC-26
Charging time	Approx 60min
No load speed	0-2600min <sup>-1</sup>
Impact per minute	0-3200min <sup>-1</sup>
Overall length	165mm
Net weight	1.8kg

## STANDARD ACCESSORIES

Charger, Battery pack(2pcs), Carrying case, Belt hook, ( Straps, Sleeve, Leather ring, Pin) Optional

## APPLICATIONS

(Use only for the purposes listed below.)

1. Tightening and Loosening the various bolts and nuts.

## REMOVING AND ATTACHING THE BATTERY PACK (Fig. 1)

To remove the battery pack (6), push the push buttons (8) on both sides and remove it in the direction of the arrow.

To attach the battery pack, align the body with the groove in the battery pack and push in the direction of the arrow.

After the clicking sound, check that the push buttons have returned to their original positions.

## CHARGING(Fig. 2)

The battery pack must be charged before you use the tool. The batteries are affected by temperature, so do not charge them outside of in a location exposed to direct sunlight. Doing so will shorten the charging time and result in less than the full charge.

## HOW TO CHARGE

The charger (7) may become a little warm while charging, but this does not affect its performance.

The charging condition is indicated by the LED on the charger




(BCTY-2188L) (Fig 3, Table 1)

1. Insert the electric plug of the charger into the socket.
2. Firmly insert the battery pack (6) into the charger.
3. When the charging is complete, remove the battery pack from the charger (Remove while pushing the push buttons (8) on both sides.)
4. Remove the electric plug of the charger from the socket.

Note1: Lithium ion batteries can be charged when the batter packs are between 0 °C and 40 °C, but the charging time will be longer if the battery pack temperature is over than 5 °C.

Note2: The charging time will be longer when the battery level is low.

## LED display

Display mode	LED	Flashing speed	Meaning
Stand-by	Green light	Light 	The charger is plugged into the socket.
charging	Red light	Light 	Charging
charging	Green light	Light 	Charging completed
Unchargeable	Red light	Fast flashing (Alternately)	The battery can not be charged.
	Gree light		

## HOW TO EXTEND THE LIFE OF THE BATTERY PACK

Do not recharge a fully charged battery pack. When the battery pack is not going to be used for an extended period of time (6 months or longer), store it with a battery being charged. Before storing the battery pack, remove it from the charger.

## TRIGGER(Fig 4)

This tool is started and stopped by depressing and releasing the trigger (3).

The tool speed is variable from 0 through 2,500 by controlling the trigger-squeezing force.

To change the direction of rotation, stop the tool by releasing the trigger and push the forward/reverse switch (4) to the opposite side. When the forward/reverse switch is set to the "R" mark, the direction of rotation will be clockwise when viewed from the handle end of the tool.

When the forward/reverse switch is set to the "L" mark, the direction of rotation will be counter-clockwise.

The trigger can be locked by positioning the forward/reverse switch at the center.

Lock the trigger whenever the tool is not in use. This tool is equipped with a LED (2) to illuminate the tip of a socket (12).

LED is lit by depressing the trigger.

The LED continues to illuminate for 10 sec. after releasing the trigger.

## BELT HOOK (Fig. 5)

The belt hook (5) can be attached to either the left- or righthand side.

Follow the steps outlined below to remove or attach the belt hook.

## (Removing)

Loosen the screw (9), and remove the belt hook.

## (Attaching)

Insert the belt hook in the groove on the body, and tighten the screw.

## MOUNTING AND REMOVING THE SOCKET

Hex socket (Type: Pin, O-ring)(Fig. 6-1)

### (Mounting)

1. Shift the O-ring (13) onto the front of the socket (12), then pull the pin (14) off.
2. Align the hole in the socket with the hole on the drive shank (1) while pushing the socket onto the drive shank.
3. Insert the pin into the socket, then put the O-ring back into place.

### (Removing)

When removing the socket, follow the procedure in reverse order as described when mounting.

Hex socket (Type: Quick change)( Fig. 6-2)

### (Mounting)

Insert the hex portion of the socket into the drive shank.

### (Removing)

When removing the socket, pull it off.

## TIGHTENING TORQUE

Since the suitable tightening torque varies with the material, size, and condition of the material into which objects are tightened, use a tightening torque which is appropriate for the work conditions.

Since bolts may be stretched or broken if the tightening time is long, confirm the tightening time and tightening torque before starting the work.

The tightening torque varies with the condition of the battery pack. Since the striking force will become weaker, the striking times will become fewer, and the tightening torque will suddenly drop if the battery pack is on the verge of complete discharge, recharge the battery pack at regular intervals.

## FACTORS AFFECTING THE TIGHTENING TORQUE

### 1. Voltage

When the battery pack is on the verge of discharging, the voltage and tightening torque drop.

### 2. Tightening time

The tightening torque increases with the tightening time, but does not increase after a certain amount of time.

The suitable tightening torque for the bolts varies with their material, size, and grade. If bolts are tightened with a high tightening torque, they may be stretched or broken. Tighten with a tightening time and tightening torque suitable for the bolts.

### 3. When the material into which objects are tightened is different.

When tightening a bolt into a soft material such as wood, the tightening torque is much lower than when doing so into a hard material such as steel.

### 4. When the bolt diameter is different

When the diameter of the bolt is different, so is the tightening torque. Generally, when the diameter is large, so is the tightening torque. The tightening torque also varies with the torque coefficient, grade, and length of the bolt.

### 5. Trigger position

When the trigger is not pulled fully back (when not at full power), the tightening torque is lower.

### 6. Socket

The tightening torque is lower if a socket which is not suitable for the bolt is used.

## STORING THE TOOL

Store the tool in a dry place that does not get too hot. Avoid places which can be reached by children or from where the tool may fall.

Pay attention to the following when storing the battery pack for an extended period of time.

- a. Store lithium ion batteries when they are charged.
- b. Recharge the stored battery pack every 6 months.
- c. Avoid high temperatures. Do not store for an extended period of time in places that are 45C or hotter.
- d. Do not store in places that are C or colder.
- e. Do not store in places that are near to heat sources or places that are subject to direct sunlight.
- f. Do not store in places which have large changes in temperature and may have condensation.
- g. Do not store in humid places.
- h. Do not allow it come in contact with water.
- i. Store in a dry place
- j. Do not subject it to large vibrations or allow it to fall when moving it.
- k. In order to avoid short circuits, do not allow it come in contact with metal objects.
- l. Before storing the battery pack, remove it from the charger.

## MAINTENANCE

After use, check the tool to make sure that it is in top condition.

It is recommended that you take this tool to a Authorized Service Center for a thorough cleaning and lubrication at least Three months.

**DO NOT MAKE ANY ADJUSTMENTS WHILE THE MOTOR IS IN MOTION.**

**ALWAYS REMOVE THE BATTERY FROM THE TOOL BEFORE CHANGING REMOVABLE OR EXPENDABLE PARTS (BIT...ETC.), LUBRICATING OR WORKING ON THE UNIT.**

### WARNING!

To ensure safety and reliability, all repairs should be performed by an AUTHORIZED SERVICE CENTER or other QUALIFIED SERVICE ORGANIZATION.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.



**WARNING** To reduce the risk of injury, user must read instruction manual\*