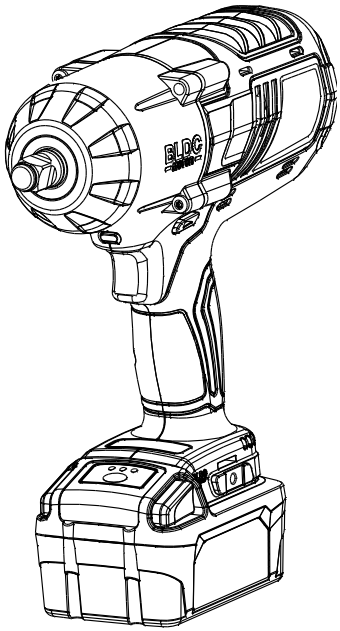
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IMPACT WRENCH BRUSHLESS

PRODUCT INFORMATION MANUAL



THIS MANUAL CONTAINS IMPORTANT INFORMATION REGARDING SAFETY, OPERATION, MAINTENANCE AND STORAGE OF THIS PRODUCT.

DO NOT ATTEMPT TO OPERATE THE TOOL UNTIL YOU HAVE READ AND UNDERSTOOD ALL INSTRUCTIONS AND SAFETY RULES CONTAINED IN THIS MANUAL. FAILURE TO COMPLY MAY RESULT IN ACCIDENTS INVOLVING FIRE, ELECTRIC SHOCK, OR SERIOUS PERSONAL INJURY. SAVE THIS OWNER'S MANUAL FOR FUTURE REFERENCE AND REVIEW IT FREQUENTLY FOR SAFE OPERATION.



Original Instructions



THANKS FOR CHOOSING THIS PRODUCT

Kraftwerk provides you with products at an affordable price, and we would like you to be fully satisfied with this product and our technical support. If any help or advice is needed, please kindly contact us.

INTENDED USE

This tool is intended for personal use only.

This Impact Wrench is designed to remove and install threaded fasteners.

GENERAL SAFETY RULES

⚠ WARNING **Read all safety warnings, instructions, illustrations and specifications provided with this power tool.** 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 FOR FUTURE REFERENCE

RECOGNIZE SAFETY SYMBOLS, WORDS AND LABELS

The safety instructions provided in this manual are not intended to cover all possible conditions and practices that may occur when operating, maintaining and cleaning power tools.

Always use common sense and pay particular attention to all the **DANGER**, **WARNING**, **CAUTION** and **NOTE** statements of this manual.



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 **DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING **WARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION **CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTE **NOTE** provides additional information that is useful for proper use and maintenance of this tool. If a NOTE is indicated make sure it is fully understood.

WARNING LABEL IDENTIFICATION



Read Manuals Before Operating Product.



Wear Eye Protection.



Wear Hearing Protection.



Wear Dust Mask.



Power tools can vibrate in use.



Keep body stance balanced and firm. Do not overreach when operating this tool.

CE marking is a certification mark that indicates conformity with health, safety, and environmental protection standards for products sold within the European

IMPORTANT SAFETY RULES

⚠ DANGER

When using power tools, always prevent exposure and breathing of harmful dust and particles.

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 and other masonry products, and arsenic and chromium from chemically-treated lumber.

Your 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 dust masks that are specially designed to filter out microscopic particles.

WARNING: Handling the power cord on corded products may 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*.**

WORK AREA

⚠ WARNING

Keep work area clean and well lit. Cluttered and dark areas invite accidents.

Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.

Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

ELECTRICAL SAFETY

⚠ WARNING

a. **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.

b. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.

c. **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.

d. **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.

e. **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.

f. **NOTE** The term "residual current device (RCD)" can be replaced by the term "ground fault circuit interrupter (GFCI)" or "earth leakage circuit breaker (ELCB)".

PERSONAL SAFETY

⚠ WARNING

a. **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.

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. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.

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 unexpected 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.

h. Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.

TOOL USE AND CARE

⚠ WARNING

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

b. **Do not force tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.

c. **Do not use tool if switch does not turn it on or off.** A tool that cannot be controlled with the switch is dangerous and must be repaired.

d. **Disconnect battery pack from tool or place the switch in the locked or off position before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.

e. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.

f. **Maintain power tools and accessories. 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.

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

h. **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.

i. **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

j. **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 sparks, burns, or a fire.

k. **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with sharp cutting edge are less likely to bind and are easier to control.

l. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.

m. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may create a risk of injury when used on another tool.

BATTERY TOOL USE AND CARE

⚠ WARNING

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, 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.

e. **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.

f. **Do not use a battery pack or tool that is damaged or modified**. Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.

g. **Do not expose a battery pack or tool to fire or excessive temperature**. Exposure to fire or temperature above 130 °C may cause explosion. NOTE The temperature 130 °C can be replaced by the temperature 265 °F.

h. **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

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.

Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel may result in a risk of injury.

When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of shock or injury.

SPECIFIC SAFETY RULES AND SYMBOLS

⚠ CAUTION

Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring. Contact with 'live' wire will also make exposed metal parts of the tool 'live' and shock the operator.

Be aware that this tool is always in an operating condition, because it does not have to be plugged into an electrical outlet. Always set the trigger switch to the locked OFF position when installing or removing the battery pack or bits.

Do not use bits or sockets larger than those recommended. Large bits or drills may overload the wrench/driver and damage the motor and gears.

Do not use if chuck jaws or other parts are cracked or worn.

Never change direction of rotation until motor has completely stopped.

Never hold work in your hand, lap, or against other parts of your body when driving.

Do not use drill as a router or try to elongate or enlarge holes by twisting the

drill bit. Drill bits may break and cause injury.

Keep hands away from rotating parts.

Keep drill bit clear of yourself and all objects while installing and removing bit.

Some wood contains preservatives which can be toxic. Take extra care to prevent inhalation and skin contact when working with these materials. Request, and follow, all safety information available from your material supplier.

Do not stare at operation lamp.

SYMBOLS

The label on your tool may include the following symbols. The symbols and their definitions are as follows:

SYMBOL	NAME	EXPLANATION
V	Volts	Voltage (potential)
n_o	No Load Speed	No-load Rotational Speed
kg	Kilograms	Weight
⎓ d.c.	Direct Current	Type of Current IEC60417.5031(2002.10)
…/min	Revolutions per Minute	Revolutions, Surface Speed, Strokes, etc. per Minute
rpm	Revolutions per Minute	Revolutions, Surface Speed, Strokes, etc. per Minute

FUNCTIONAL DESCRIPTION

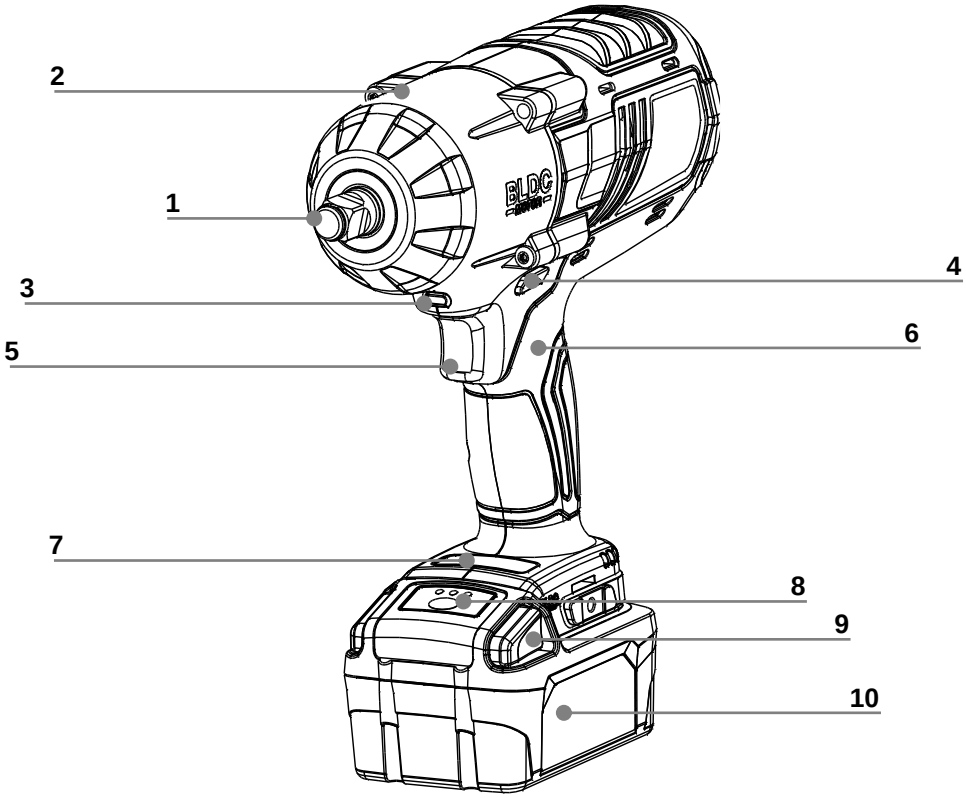


Fig. 1

CONTROLS AND COMPONENTS

1. 1/2” Anvil / 3/4” Anvil
2. Aluminum Gearbox Housing
3. Built-in LED light
4. Forward / Reverse Control Button
5. Variable Speed Switch
6. Anti-slip Soft Grip
7. Speed Mode Setting
8. Power indicator
9. Battery Pack Release Button
10. Battery Pack

SPECIFICATIONS

Model Number	Unit	RI2002
Voltage	V d.c.	20
Drive/Anvil	in.	1/2”sq.
Max. Tightening Torque	ft-lbs	260 (350Nm) 450 (600Nm) 738 (1,000Nm)
Max. Breakaway Torque	ft-lbs	1100 (1,500Nm)
No Load Speed	rpm	L:0-950 M:0-1,300 H:0-1,700
Impacts per Minute	ipm	0-2,000
Tool Weight(with battery 2.0Ah**)**	lbs	7.26
Tool Weight(with battery 2.0Ah**)**	kg	3.30
Noise value	L_{pA}= 94.9 dB(A), L_{WA}= 105.9 dB(A) K= 3.0 dB(A)	
Vibration value	a_h= 24.3 m/s^2 K= 1.5 m/s^2	

⚠ WARNING

− that the vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used; and

− of the need to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

Charger Model Number	DC20EU28-C30
Input	100-240 Va.c., 50-60 Hz
Output	21.0 Vd.c.
Output Amps	3.0A
Input Power	85W
Charger Weight	0.88 lbs / 0.4kg
Battery Pack Model Number	B2029LA-2
Type	Li-ion
Capacity	4.0Ah

VARIABLE SPEED SWITCH

The variable speed switch provides safety feature to the user for fastening.

To turn the tool on, squeeze the trigger switch. To turn the tool off, release the trigger switch (see Fig. 1-A).

Your tool is equipped with a brake. The hammer will stop as soon as the trigger switch is fully released. The variable speed switch enables you to select the best speed for a particular application. The farther you squeeze the trigger, the faster the tool will operate.

NOTE: Continuous use in variable speed range is not recommended. It may damage the switch and should be avoided.

FORWARD / REVERSE CONTROL BUTTON

A forward/reverse control button (see Fig. 1-B) determines the direction of the tool and also serves as a lock off button. To select forward rotation, RELEASE THE VARIABLE SPEED SWITCH (see Fig. 1-A), and depress the forward/reverse control button (see Fig. 1B), toward left side of the tool. To select reverse, depress the forward/reverse control button, toward right side of the tool. The center position of the control button locks the tool in the off position. When change the position of the control button, making sure the trigger is released.

NOTE: The first time the tool is run after changing the direction of rotation, you may hear a click on start up. This is normal and does not indicate a problem.

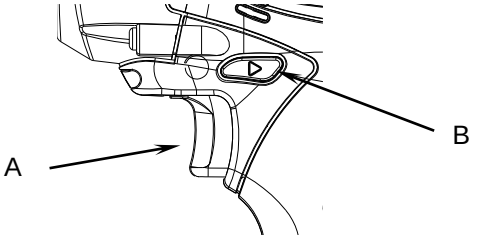


Fig. 1

BUILT-IN LED LIGHT

A built-in LED light can illuminate the work area and improve vision when drilling/driving in areas with insufficient light.

ELECTRIC BRAKE

The variable speed switch is equipped with a circuit design electric of brake function. The tool will consistently operate to quickly stop rotating after the switch release.

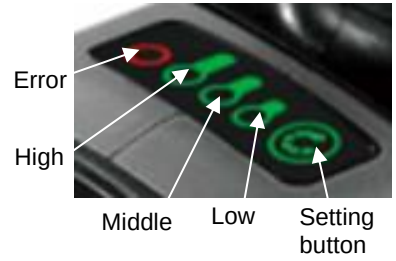
SPEED MODE SETTING

Press the button to select the speed in Low (1) or Middle (2) or High (3) (selected one will be lightened on)

Low： 0-950 rpm

Middle : 0-1,300 rpm

High： 0-1,700 rpm



Remark : If the red LED bright, it means there is the error or start up protection.

BATTERY POWER INDICATOR

Trigger the tool and Battery Indicator to show the battery pack's remaining capacity

1. One light ON: 30% remaining capacity.
2. Two lights ON: 60% remaining capacity.
3. All lights ON: 100% remaining capacity.



ASSEMBLY

INSTALLING OR REMOVING BATTERY PACK

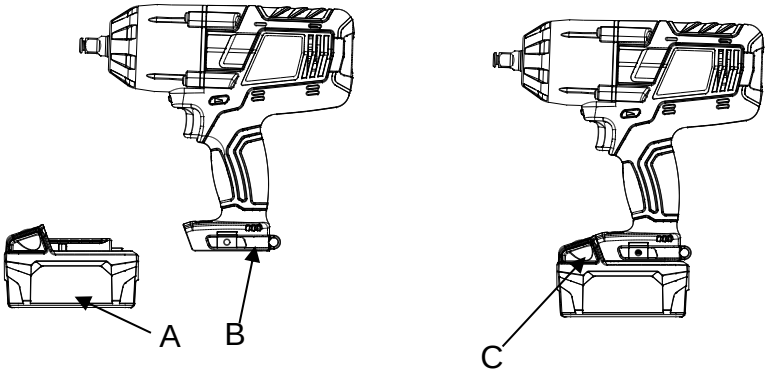


Fig. 2

TO REMOVE BATTERY PACK: Depress the battery release button (C) and pull battery pack (A) out of tool (B). (see Fig. 2)

TO INSTALL BATTERY PACK: Push battery pack(A) onto tool until it locks in place. (see Fig. 2)

INSTALLING SOCKETS

Always follow the procedure below to install a socket.

1. Insert a socket into the anvil. (see Fig. 3)
2. Make sure the bit is fixed in the anvil while clicking on the ball of the anvil.

REMOVING SOCKETS

Always follow the procedure below to remove a socket.

3. Pull out the socket from the anvil directly. (see Fig. 3)

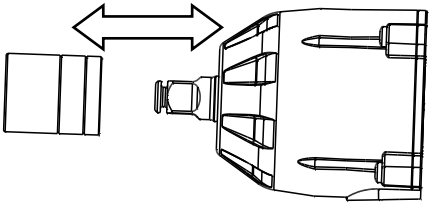


Fig. 3

⚠ CAUTION	Always set switch (5) to off position when installing and removing socket.

OPERATION

NOTE	**Always check the direction of the rotation before use.**

1. After continuous use, allow the impact wrench to sit idle for 15 minutes before replacing the battery. The temperature of the motor, switch, etc., will rise if the work is started again immediately after the battery has been changed, eventually resulting in burned-out.
2. Place the point of the bolt in the socket. Keep the tool pointed straight at the bolt.
3. Apply forward pressure to the tool to prevent the socket from slipping off the bolt.
4. To start, turn impact wrench/driver on. Always check torque with a torque wrench. The fastening torque can be affected by many factors including the following:

Voltage: Low voltage due to a nearly discharged battery will reduce the fastening torque.

Socket Size: Failure to use the correct socket size will cause a reduction in fastening torque.

Variable Speed Trigger Switch: Operating the tool at a reduced speed will reduce the fastening torque.

Bolt Size: Larger bolt diameters generally require higher fastening torque. Fastening torque will also vary according to length, grade, and torque coefficient.

Material: The type of material and surface finish of the material will affect fastening torque.

Fastening Time: Longer fastening time results in increased fastening torque. Using a longer fastening time than recommended could cause the screws to be overstressed, stripped or damaged.

NOTE Continuous use in variable speed range is not recommended. It may damage the switch and should be avoided.

NOTE When change the position of the control button, making sure the variable speed switch is released.

NOTE The first time the tool is run after changing the direction of rotation, you may hear a click on start up. This is normal and does not indicate a problem.

MAINTENANCE

⚠ WARNING Remove the battery pack from this tool before cleaning solutions.

NOTE This tool is lubricated before it leaves the factory. This lubrication should last for the life of the tool. No further lubrication is required.

CLEANING

With the motor running, blow dirt and dust out of all air vents with dry air at least once a week. Wear safety glasses when performing this. Exterior plastic parts may be cleaned a damp cloth and mild detergent. Although these parts are highly solvent resistant, NEVER use solvent.

ACCESSORIES

Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may become hazardous when used on another tool.

Recommended accessories for use with your tool are available at extra cost from your local service center.

IMPORTANT: To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustments should be performed by certified service centers or other qualified service organizations, always using identical replacement parts.

PROTECTING THE ENVIRONMENT

Before disposing of damaged, check with your state Environmental Protection Agency to find out about special restrictions on the disposal of tool or return them to a certified service center for recycling.



EC DECLARATION OF CONFORMITY

We: **Kraftwerk**

declare in sole responsibility that the equipment

Equipment： Impact Wrench /driver

Model/ Serial No.：403.001.000

to which this declaration applies, complies with these normative documents:

- **Machinery Directive: 2006/42/EC**
- **EMC Directive: 2014/30/EU**

and conforms to the following EN standard,

- **EN62841-1 :2015**
  EN 62841-2-2:2014
- **EN55014-1:2006+A1+A2**
  EN55014-2:2015

Signature