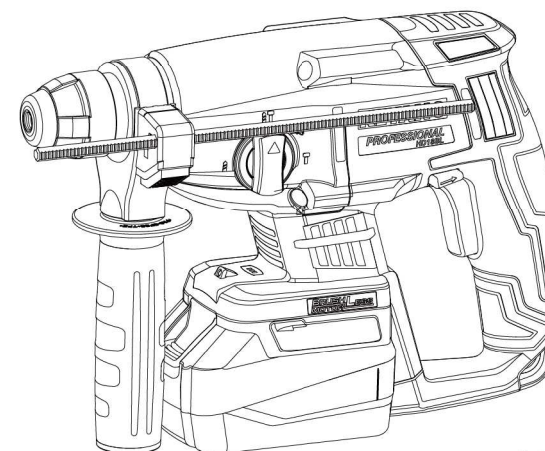


CORDLESS HAMMER DRILL

(18V Li-ion Battery)

BLDC
Motor

GB ORIGINAL INSTRUCTION MANUAL



HD18BL
HD18BLZ(BARE TOOL)

※ To reduce the risk of injury
user must read instruction
manual

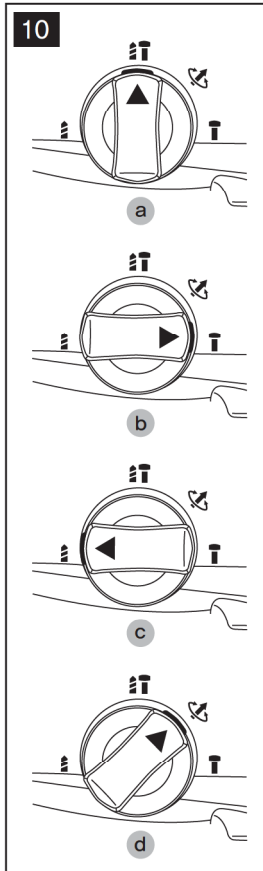
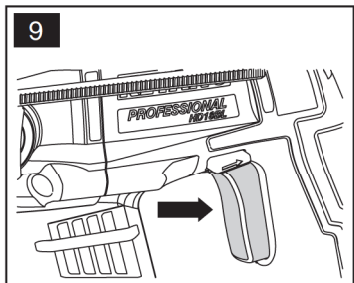
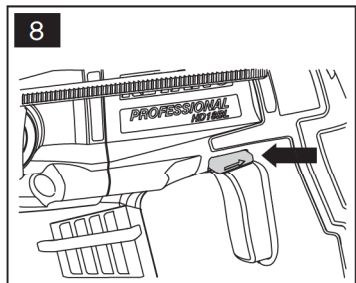
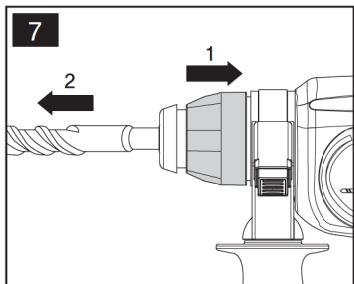
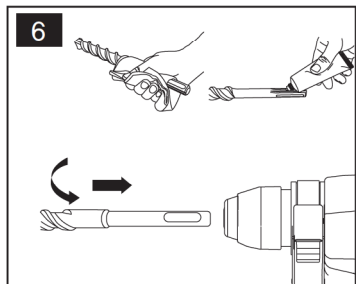
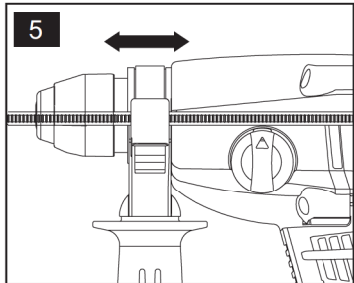
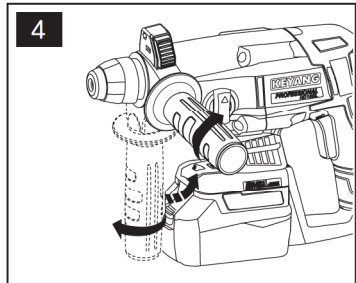
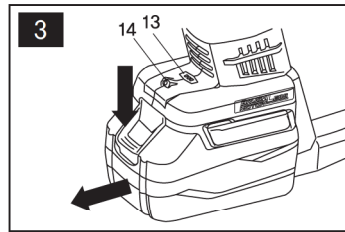
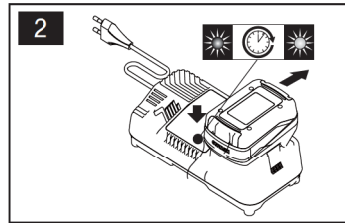
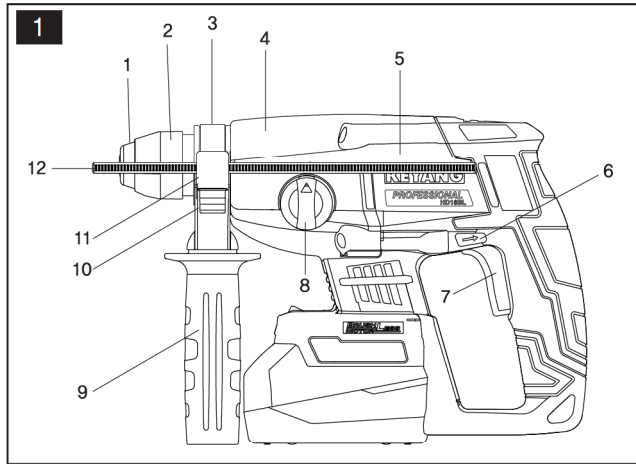
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Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)



This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.



CORDLESS HAMMER DRILL (Li-ion Battery)

It is essential that instruction manual is read before the power tool is operated for the first time. Always keep this instruction manual together with the power tool. Ensure that the instruction manual is with the power tool when it is given to other persons.

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Note

As our engineers are striving for the constant research and development to develop the quality of products, shape or structure of our model can be changed without previous notice.



1. General Power Tool Safety Warnings

WARNING! Read all safety warning and all instructions. Failure to follow the warning Instructions may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference. The term "power tool" in the warnings refers to your mains -operated (corded) power tool or Battery-operated (cordless) power tool.

1) Work area safety

- 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 liquids, 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 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.

- 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.

- f) **If operating a power tool in a damp location is unavoidable, use residual current device (RCD) protected supply.** Use of an RCD 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 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 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 dust collection 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 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.

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, 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) **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.

b) **Use power tools only with specifically designated battery pack.**

Use of any other battery packs may create a risk of injury and fire.

c) **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.**

Shortening the battery terminals together may cause burns or a fire.

d) **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.

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.

2. Specific Tool Safety Warnings

- **Do not use the wet tools or in the rain.**
You can be killed by an electric shock or injured seriously.
- **Do not insert wires or other similar objects into the ventilation slots.**
You can be killed by an electric shock or injured seriously.
- **Do not removal the battery charger. Keep out of reach of children.**
Person injury by an electric shock.
- **Do not put the battery in a fire.**
The battery can be exploded by high temperature, and it may cause a dangerous injury.

- **Do not disassemble charger or operate the charger if it has received a sharp blow, been dropped or otherwise damaged in any way. Replace damaged cord or plugs immediately.**

Incorrect reassembly or damage may result in electric shock or fire.

- **Take care not to short-circuit the terminal of the battery.**

When two terminals of the battery are short-circuited, an enormous current is generated. In result, a fire or explosion can be occurred, which may cause a serious personal injury.

- **Do not make your fingers and hands touch with the drill bit during operation.**

When your fingers and hands are touched with the drill bit or caught in it, you may be injured seriously.

- **Do not leave the running tool.**

Other operators stayed close to you may be injured.

- **Set the forward/reverse lever in the neutral position while you are changing or operating the tool.**

Careless operating of the switch may cause a serious injury by the rotating part of the tool.

- **Make sure the battery is attached in the body of the tool tightly before you start operation.**

When the battery is not attached tightly, it may be fallen during the operation and cause an injury in the top of your foot.

- **Charge only Keyang approved rechargeable batteries. Other types of batteries may burst causing personal injury and damage**

- **Do not disassemble battery.**

Incorrect reassembly may result in a risk of electric shock, electrocution or fire.

- **Accessories may be hot after prolonged use.**

When removing the bit from the tool avoid contact with skin and use proper protective gloves when grasping the bit or accessory.



- **Wear ear protectors when impact drilling.**

Exposure to noise can cause hearing loss.

- **You must use the battery charger and the battery only for our tools.**

When the battery charger and the battery are not specified items, it may cause the remarkable decrease of performance by a poor charge or overheat.

- **While you are charging the battery, do not charge it for several times continuously.**
It causes an overheating of the battery charger or the battery, which may decrease its performance or life.

- **Make sure the temperature of the battery will not exceed 45°C.**

When the temperature of the battery exceeds 45°C, its performance and life will be decreased.

When the temperature of the battery is increased, the temperature switch begins to work and the contact point is detached. When you put the overheated battery in the battery charger, the poor battery mark is displayed. Cool the battery before you charge it.

- **If drill stalls, it is usually because it is being overloaded.**

Release trigger immediately. Otherwise this can damage the drill.

- **Do not change gears when the tool is running.**

If you have trouble changing gears, make sure that the gear shifter is engaged in one of the two speed settings.

- **Use auxiliary handle(s), if supplied with the tool.**

Loss of control can cause personal injury.

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

Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

3. Battery charger Safety Warnings

- **This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.**
- **Children should be supervised to ensure that they do not play with the appliance.**
- **Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.**
- **Do not use non-rechargeable batteries with KEYANG battery charger.**

4. Check before Use

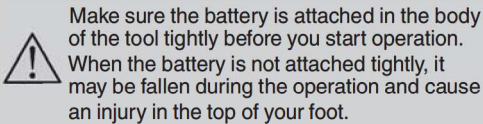
1) The power source

- Observe correct main voltage. The voltage of power source must agree with the voltage specified in the name plate.

- Please check if the rated voltage of the product is same as the rated voltage of the battery.
Using the battery with higher rated voltage than the rated voltage of the drill can result in burning and damaging of the motor.

2) Attachment of the battery

Make sure the battery is attached correctly before you use the tool.



3) Polarity of the battery

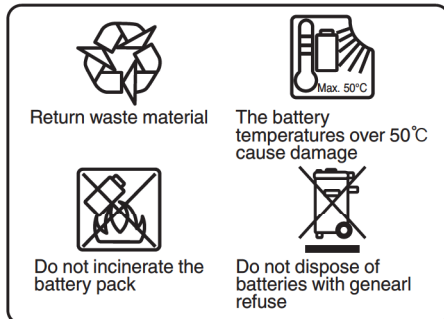
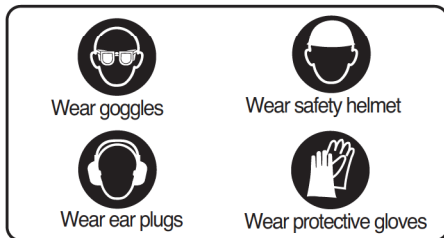
When the polarity of the battery is not correct, it may cause the trouble of the switch. Also, the reversal of the rotating direction can bring a dangerous situation.

4) Trial run

Before starting the work, wear protection (goggles, safety helmet, ear plugs, protective gloves) and run the tool in the direction avoiding other persons to see if the tool is operated normally.



5) An explanation of any symbols or pictogram on the tool relevant to safe use.



	Volts
	Direct Current
	No load speed
	Revolutions or reciprocations per minute
	Hammer drill feature
	Hammer feature
	Drill feature
	Angle adjustment function



EC Declaration of conformity

We declares that these products meet the standards
EN 60745-1, EN 60745-2-2, EN 60335-1, EN 60335-2-29, EN 55014-1, EN 55014-2, EN 61000-3-2, EN 61000-3-3, EN 50581 in compliance with directives 2006/42/EC, 2014/30/EU, 2006/95/EC, 2011/65/EU.

Seung yeol, Lee
Plant Manager

5. Noise and Vibration Emissions

1) Noise emission

Noise emission values determined according to EN 60745.

A weighted emission sound pressure level [L _{pa}]	dB(A)	91
A weighted emission sound power level [L _{wa}]	dB(A)	102
Uncertainty [K]	dB	3

2) The operator wear ear protection.

3) Vibration emission

Vibration total values(triaxial vector sum) determined according to EN 60745.

Chiselling hammer mode[a _h]	[m/s ²]	13.5
Hammer drilling mode[a _h]	[m/s ²]	10.5
Uncertainty[K]	[m/s ²]	1.5

4) The following information

- The declared vibration total value has been measured in accordance with a standard test method given in EN60745 and may be used for comparing one tool with another.

- The declared vibration total value may also be used in a preliminary assessment of exposure.

5) A warning

- 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.
- Identify additional 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).

6. Specifications and List of Contents

1) Specifications

Items	Model	HD18BL
Rated voltage	V DC	18
No load Speed	/min	0-1,200
Beats per minute	/min	0-4,400
Φ Max	Concrete	20
	Steel	13
	Wood	22
Single impact energy	J	2.0
Weight(according to EPTA procedure 01/2003)	kg	3.0
Tool holder		SDS-plus

Model	BL18014 BL18003	BL18015 BL18004	BL18012	BL18018	BL18023
Battery Voltage [V DC]	18				
Battery Capacity [mAh]	2600	3000	4000	5000	6000
Battery Weight [kg]	0.6				

Model	C14435 C14439	C18037 C18046			
Input voltage[VDC]	100-127 220-240	220-240			
Output voltage[VDC]	14.4-18.0	10.8-18.0 14.4-18.0			
Charging current[A]	3	6.5			
Operating ambient Temp(°C)	0-40				
Safety class					
Weight[kg]	0.6				
Approx. Charging time					
Model	BL18014 BL18003	BL18015 BL18004	BL18012	BL18018	BL18023
C18046 C18037	Time [min]	60	85	105	135
C14435 C14439		30	40	50	65

2) List of contents

Model	HD18BL	HD18BLZ
Plastic box	1	X
Grease tube	1	X
Stopper	1	1
Side handle	1	1
Battery pack	2	X
Battery charger	1	X

7. Description of Functions and Applications

1) Description of Function

- HD18BL •

(See figure 1)

- | | |
|---------------------|---------------------------|
| ① Dust cover | ⑧ Change lever |
| ② Tool holder cover | ⑨ Side handle |
| ③ Band | ⑩ Stopper holder |
| ④ Gear cover | ⑪ Band holder |
| ⑤ Housing | ⑫ Stopper |
| ⑥ Reverse knob | ⑬ Battery level indicator |
| ⑦ Switch | ⑭ LED light |

- Battery •

(See figure 3)

- Charger •

(See figure 2)

2) Applications

- Boring into concrete
- Breaking up concrete
- Making hole for anchor bolt
- Consolidation, making groove, removal, etc
- Boring into concrete
- Breaking up concrete
- Making hole for anchor bolt
- Consolidation, making groove, removal, etc

[Example of uses]


Cooling and heating work, piping and wiring work, sanitary arrangements work, installation of mechanism, water supply and drainage work, interior work, steel structure installation, other civil engineering equipment repair work.


8. Operating Instructions

1) How to charge the battery


- ① Insert the plug of the charger in the socket, and the charging indicating lamp will be flickered as follows: green→red→yellow in turn within one second. And then, the battery charger will be in the stand by position charger will be in the stand by position.

- ② Insert the battery in the battery charger considering the polarity, and the charging will be started immediately.
- ③ When the battery working time is remarkably short despite full charging, the life of the battery may be over. Replace the battery immediately.

 Read all instructions for safety. Do not use charger to rain or wet condition. Use certified KEYANG battery.

 Take care not to short-circuit the terminal of the battery. The short-circuit of the terminal may cause a fire or explosion doing a serious personal injury.


2) Charging process

 Use only the specified battery and battery charger. Otherwise battery and charger can be damaged by fire, explosion, charging error or overheat.

(See figure 2)

① Charging indication

- Green Blinks : Before charging
- Red Lights : While charging
- Green Lights : Charging completed
- Red Blink : Overheat stand by
(Battery overheated)
- Yellow Blinks : Charging impossible

 Be sure to unplug the charger after finishing the charging.

- ② If charging of the heated battery is attempted immediately after it has been used or charged, indicator blinks in red (overheat stand by). After the cooling, indication changes to red glowing and charging begins.
- ③ This charger detects charging status of the battery and always keeps the battery in full charge state.

3) Installing and removing battery


(See figure 3)

① Installing.

- Set the rotational direction switch at centre position (locked state).
- Insert the charged battery into the slot below the handle until the battery securely latched with a click.

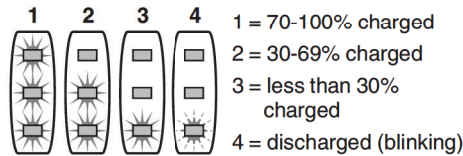
② Removing.

- Push the battery button once and take it out to remove it.

 Always set the rotational direction switch at centre position when inserting the battery or changing, carrying or storing the tool.

4) Battery condition

(See figure 3 -⑬)




5) Work light

(See figure 3 -⑭)

Pulling the switch trigger will turn on the LED light.

6) Side handle mounting and stopper positioning

 When drilling in concrete or stone material, always attach side handle for safety before working.

For convenience, attach the side handle at the front of the tool and adjust its angle as necessary.
(See figure 4)

Mounting side handle


1. Put the forward/backward lever in neutral position(locked) or remove the battery.
2. Turn the side handle counterclockwise to loosen the band and band holder.
3. Move the side handle to desired position.
4. Turn the side handle clockwise to fasten the handle securely.

(See figure 5)

Adjustment of stopper

1. While pressing the stopper holder button, insert the stopper aligning the knurled part of the stopper with the side of the stopper.
 2. Move the stopper to the desired position.
(When the stopper is used, the distance between the drilling bit and the stopper is the maximum possible depth of drill holes)
- * If you are left-handed, mount the side handle on the opposite side of the tool and adjust its position before operating the tool.

7) Attaching and detaching tool bit


 Be sure the wear protective gloves for changing hot tool bit during operation. Be sure to put off the switch and unplug power cord before attaching or detaching a tool bit.

(See figure 6 7)



Changing the drill bits

1. Clean the seat of the bit thoroughly and apply grease before inserting it.
2. Check the dust cover for cleanliness.
If the dust cover has been damaged, replace it and clean the dust cover thoroughly.
3. Insert the bit into the tool and turn the bit until a click is heard.
4. Test if the bit has been mounted securely by pulling it by hand.
5. To extract the drill bit, pull the tool holder cover backward in the direction of the arrow before pulling the bit out.

8) Changing the rotation direction

 Changing of rotation direction must only be done when the power tool is not in operation. Operating the tool with excessive force may damage the tool.

(See figure 8)


-  Counterclockwise (to loosen the bolt)
-  Clockwise (to fasten the bolt, drilling)

9) Adjustment of speed

(See figure 9)

The more force you use to press the switch, the higher the rotation speed will become within the range from 0 to maximum speed. Press the switch to adjust the speed as desired before working.

10) Safety clutch

 In the event when the safety clutch is activated, turn the switch OFF immediately. Note that repeated activation of the safety clutch may damage the tool.

Safety clutch will be activated to stop the rotation of the drill bit when the bit is bound or stuck.
(Running of motor is maintained)

11) Operation mode

The operation mode of the tool is selected by turning the change lever.

(See figure 10)

1. For drilling in stone or concrete, set the change lever to "Hammer Drilling" mode as shown in Fig. 10-a. In this mode, the drill bit rotates and impacts simultaneously. Use SDS-PLUS bits for operation in hammer drilling mode.
2. For chiseling or cracking, set the change lever to "Hammer" mode as shown in Fig. 10-b. In this mode, the drill bit only impacts without rotation. Use Bull-points or chisels for operation in hammer mode.

3. For drilling in wood, metal or plastic, or for screwing, set the change lever to "Drilling" mode as shown in Fig. 10-c. In this mode, the drill bit only rotates without impacting. Use drill bits or drill chuck adaptor for operation in drilling mode.
4. The angle of the chisel can be adjusted for operational convenience. To change chisel angle, set the change lever to "⚡" mode as shown in Fig.10-d and turn the drill bit clockwise or counterclockwise. While working with flat chisel, set the change lever to "Hammer" mode again after angle adjustment, before resuming work.

9. Maintenance


Always keep tool and air vent clean for safe work.

1) Checking the tool(bit)

Using the worn-off Bit will cause overloading the motor and reduce work efficiency. Either sharpen the tool or replace with a new one.

2) Environmental protection

The tool and its accessories contain much raw materials and plastics that can be recycled after their life. Therefore, plastic parts are indicated with their material types so that they can be classified and recycled for each material type.

 Do not dispose of the battery with home garbage or into the fire or river.

3) What to do when the tool does not work normally

It is very dangerous for customers to troubleshoot or repair the tool for themselves, Contact the nearest A/S center (sales agency) and request for a service.

The repair shall be requested to the qualified electric specialist.

4) Y attachment cord

If the replacement of the supply cord is necessary. This has to be done by the manufacturer or his agent in order to avoid a safety hazard.

5) After-sales Service and Customer Assistance

Our after-sales service responds to your questions concerning maintenance and repair of your product as well as spare parts. Exploded views and information on www.keyang.com
Our customer service representatives can answer your questions concerning possible applications and adjustment of products and accessories.



A large, empty rectangular area with rounded corners, intended for writing notes.



A large, empty rectangular area with rounded corners, intended for writing notes.