XHD LITHIUM

XHD Lithium Cordless Hammer Drill Brushless 70Nm 18V - Bare Tool

TSC19

OPERATORS MANUAL

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Note

This manual is for your reference only. Due to the continuous improvement of the XHD Lithium products, changes may be made at any time without obligation or notice.

Thank You

For the purchase of this XHD Lithium product. We try our hardest to supply customers like you with the best quality products available, at the best price possible. We cant wait to continue working together in the future.

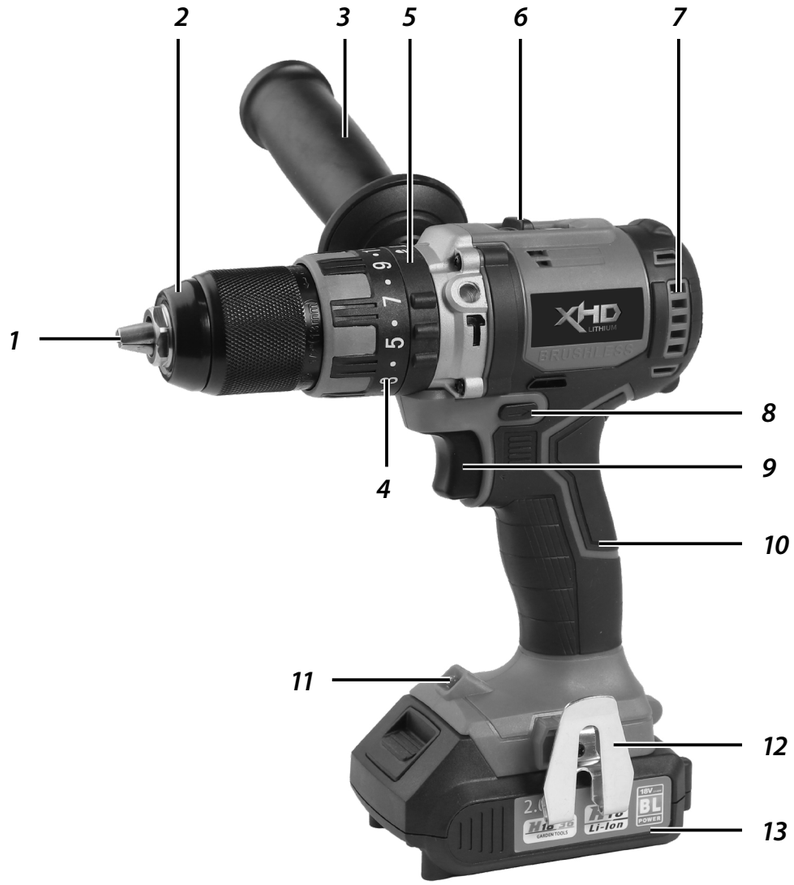
SPECIFICATIONS

Rated Voltage	18 V DC
No-Load Speed	0–550 | 0–2000RPM
Impact Power	0–32000 BPM
Torque	70 Nm
Input Power	80 Watts
Chuck Capacity	13mm
Maximum Drilling Capacity	Steel: 6mm Ø Concrete: 8mm Ø Wood: 20mm Ø
Net Weight (With 3Ah Battery)	2.02 kg

Intended Use

This tool is intended for impact drilling in brick, concrete and stone, as well as for drilling without impact in wood, metal, ceramic and plastic.

PRODUCT IDENTIFICATION



1	Chuck Jaws	*7*	Motor Vents
2	Chuck Collar	*8*	Forward/Reverse Switch
3	Auxiliary Handle	*9*	On/Off Trigger Switch
4	Torque Selector	*10*	Insulated Gripping Handle
5	Mode Selector	*11*	LED Work Light
6	Gear Switch	*12*	Belt Clip
		13	XHD Battery (Not Included)

SAFETY GUIDELINES

⚠ WARNING

READ ALL SAFETY WARNINGS & INSTRUCTIONS. Failure to follow instructions and warnings could lead to serious injury, electric shock, or fire.

Work Area Safety

- **Ensure that your work area is kept clean and well lit.** Lack of visibility and clutter greatly increase the risk of accident when using tools.
- **Keep bystanders, pets, and children clear when operating this power tool or machine.** They can cause distraction or risk injury to themselves.
- **Ensure you are not operating the power tool or machinery in the presence of dust, liquids, flammable gases, or anything that can create an explosive atmosphere.** Power tools and machinery can create sparks which can lead to ignition and fire hazards in working environments.

Personal Safety

- **Always wear personal protective equipment (PPE).** Eye protection, ear protection, dust masks, and other protective equipment will help to reduce the risk of personal injury or long-term illnesses.
- **Dress appropriately. DO NOT wear loose clothing that can get caught in moving parts.** Keep hair, loose clothing, jewellery, and anything else that could be of risk, away from moving parts in the machine, or they could become caught therein.
- **Always remain alert and DO NOT operate power tools or machinery under the influence of any substances such as alcohol or drugs, including prescription medications.** Lack of focus could lead to injury or accidents while operating these power tools and machinery.
- **Always ensure proper footing and balance.** Overreaching can lead to slipping and falling which can result in injury or accident.
- **Ensure the power switch is in the OFF position before connecting any battery, or power source to the power tool or machinery.** This can cause injury as tools and machinery can suddenly fire incidentally when live, causing accidents.
- **Use all provided dust collection and extraction attachments, if included.** This equipment, along with the use of PPE dust masks, can help keep you safe from dust inhalation, and keep your work site clear from hazards.
- **Ensure loose parts such as wrenches or adjusting keys are removed before starting the power tool or machinery.**

SAFETY GUIDELINES

Power Tool & Machinery Use & Care

- **Use the correct tool for the job.** Forcing a tool to do a job it was not designed for increases the risk of accident or injury.
- **Disconnect tools and machinery from power, or remove batteries before doing any maintenance or adjustments, or before storing the tools and machinery.** This reduces or removes the risk of a power connection that causes the tool or machinery to accidentally fire, which can help prevent injury or accident.
- **Check the general condition of the power tool for damage or any problems that could affect the way the tool or machine works.** An unrepaired tool or machine can lead to accident and injury. Only have your tool or machine repaired with genuine parts from your local distributor
- **Only use the power tool and machinery with genuine parts or accessories that are designed to be used with this power tool and machinery.** Failure to do so could result in accident or injury, or damage your tool or machinery.
- **Store your tool or machinery out of reach of children, and away from untrained personnel when not in use.** Use by somebody untrained, or a child, could lead to accident or serious injury.

Service

- **Have your tools and machinery serviced by your local distributor with genuine XHD Lithium replacement parts.** This will ensure that the safety of the power tool or machine is maintained.

⚠ WARNING

The warnings and precautions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Always Use Common Sense

- It is not possible to cover every conceivable situation you can face. Always exercise care and use your common sense. If you get into a situation where you feel unsafe, stop and seek expert advise. Contact your dealer, service agent, or an experienced user. Do not attempt any task you feel unsure of!
- **Do not let familiarity gained from the 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.

SAFETY GUIDELINES

Battery Tool Use & Care

- Prevent unintentional starting. Ensure the switch is in the OFF position before connecting to the battery pack, picking up, or carrying the machine. Carrying the machine with your finger on the switch or energising a machine that has the switch ON invites accidents.
- Disconnect the battery pack from the machine before making any adjustments, changing accessories, or storing the machine. Such preventive safety measures reduce the risk of starting the machine accidentally.
- Recharge the battery 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.
- Use machines only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- When the battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws, or small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush the area with water. If liquid contacts eyes, seek medical help. Liquid ejected from the battery may be acidic and may cause irritation or burns.
- Do not use a battery pack or machine that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion, or risk of injury.
- Do not expose a battery pack or machine to fire or excessive temperature. Exposure to fire or temperature above 130°C may cause explosion.
- Follow all charging instructions and do not charge the battery pack or machine outside of the temperature range specified in the instructions.
- Charging the battery improperly, or at temperatures outside of the specified range may damage the battery and increase the risk of fire.
- Have servicing performed by a local XHD distributor repair person using only identical replacement parts. This will ensure that the safety of the product is maintained.
- Do not modify or attempt to repair the machine or the battery pack except as indicated in the instructions for use and care.

Battery Long Life Tips

- Charge the battery cartridge before it is completely discharged. Always stop tool operation and charge the battery cartridge when you notice less tool power.
- Never recharge a fully charged battery cartridge. Overcharging shortens the battery service life.
- Charge the battery cartridge with room temperature at 10°C – 40°C. Allow a hot battery cartridge to cool before charging it.
- Charge the battery cartridge once in every six months if you do not use it for extended periods at a time.

SAFETY GUIDELINES

Hammer Drill Specific Safety

- Wear ear protectors when impact drilling. Exposure to noise can cause hearing loss.
- Use the auxiliary handle supplied with the tool. Loss of control can cause injury.
- Hold the power tool by its insulated gripping surfaces, when performing an operation where the cutting accessory/fastener may contact hidden wiring. Contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- Always be sure you have a firm footing. Be sure no one is below you when using the tool in high locations.
- Hold the tool firmly. Keep hands and fingers clear from rotating parts.
- Do not leave the tool running. Operate the tool only when hand-held.
- Do not touch the drill bit, or the workpiece immediately after operation; they may be extremely hot and could burn your skin.
- Some material contains chemicals which may be toxic. Take caution to prevent dust inhalation and skin contact.
- Never operate the drill at a higher speed than the maximum speed rating of the drill bit.
- Always start drilling at low speed and with the bit tip in contact with the workpiece. At higher speeds, the bit is likely to bend if allowed to rotate freely without contacting the workpiece, resulting in personal injury.
- Apply pressure only in direct line with the bit and do not apply excessive pressure. Bits can bend causing breakage or loss of control, resulting in personal injury.
- When using the drill, use safety equipment including safety glasses or shield, ear defenders, and protective clothing including safety gloves. Wear respiratory protection suitable for the work being undertaken. If operating the tool causes discomfort in any way, stop immediately and review your method of use.
- Ensure that the drill bit is properly secured in the chuck. Improperly secured bits can be ejected from the tool causing a hazard.

⚠ WARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- ***Lead from lead-based paint,***
- ***Crystalline silica from bricks, 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.

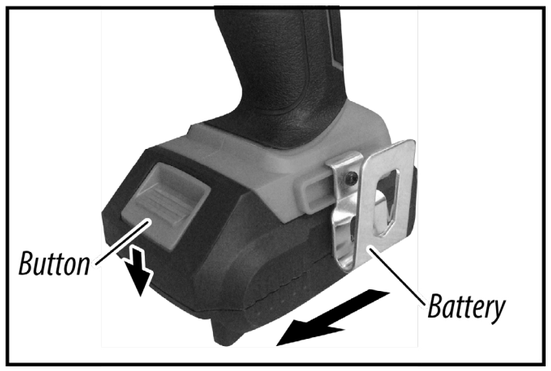
ASSEMBLY

⚠ WARNING

Always be sure that the tool is switched off and the battery cartridge is removed before adjusting or checking the tool.

Installing or Removing the Battery

- To remove the battery cartridge, slide it from the tool while depressing the button on the front of the cartridge.
- To install the battery cartridge, align the tongue on the battery cartridge with the groove in the housing and slip it into place. Insert it all the way until it locks in place with a little click. If you can see the red indicator on the upper side of the button, it is not locked completely.



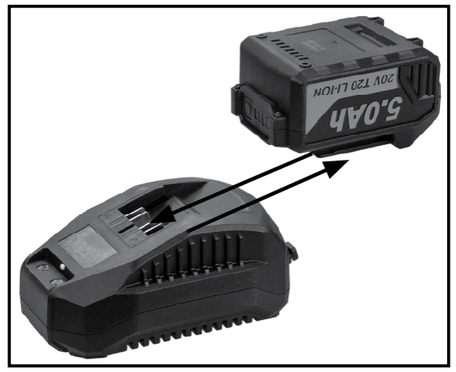
⚠ CAUTION

Do not install the battery cartridge forcibly. If the cartridge does not slide in easily, it is not being inserted correctly.

Indicating the Remaining Battery Capacity

- Press the check button on the battery cartridge to indicate the remaining battery capacity. The indicator will light up for few seconds.

NOTE: Depending on the conditions of use and the ambient temperature, the indication may differ slightly from the actual capacity.



INDICATOR LAMPS			*REMAINING CAPACITY*
LIGHTED	*OFF*	*BLINKING*	
■	■	■	75% to 100%
■	■	□	50% to 75%
■	□	□	25% to 50%
■	□	□	0% to 25%
◪	□	□	Charge the Battery.
■ ↑ □	■ ↓ □	□ ■	The Battery may have Malfunctioned

ASSEMBLY

Tool/Battery Protection System

- The tool is equipped with a tool/battery protection system. This system automatically cuts off power to the motor to extend tool and battery life. The tool will automatically stop during operation if the tool or battery is placed under one of the following conditions:

Overload Protection

- When the tool/battery is operated in a manner that causes it to draw an abnormally high current, the tool automatically stops without any indication. In this situation, turn the tool off and stop the application that caused the tool to become overloaded. Then turn the tool on to restart.

Overheat Protection

- When the tool/battery is overheated, the tool stops automatically. In this situation, let the tool/battery cool before turning the tool on again.

Over Discharge Protection

- When the battery capacity is not enough, the tool stops automatically. In this case, remove the battery from the tool and charge the battery.

Installing the Side Grip (Auxiliary Handle)

- Always use the side handle during operation of the drill to ensure the safest and easiest operation possible.
- The side handle can be easily screwed into either side of the hammer drill for left or right handed operation.

Fitting Drill Bits & Accessories

⚠ WARNING

ALWAYS remove the Battery from the drill before attaching, adjusting or removing accessories.

Do not attempt to tighten drill bits by gripping the front part of the chuck and switching the tool on. This can lead to personal injury and can cause damage to the chuck.

Never fit any accessory or bit with a maximum speed lower than the no load speed of the power tool.

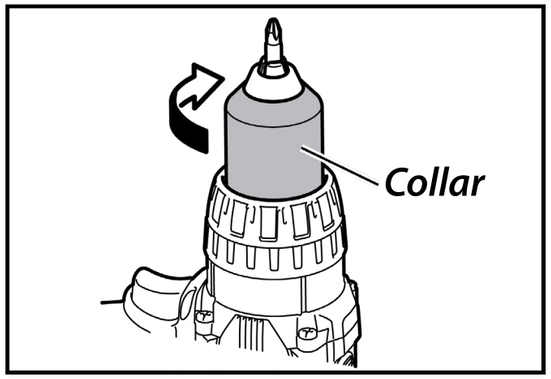
⚠ CAUTION

Before installing the battery cartridge into the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.

- Open the Chuck Jaws (1) by rotating the Chuck Collar (2) counter-clockwise.
- Place the drill bit or accessory centrally into the chuck.
- Tighten the Chuck Jaws by rotating the Chuck Collar clockwise.

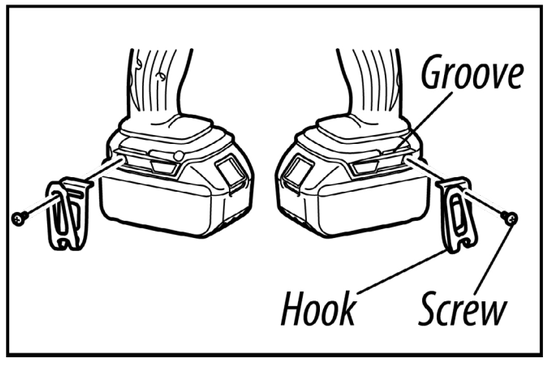
OPERATION

- When the drill bit or accessory is securely fastened, carefully run the drill to test that it is running centrally, smoothly and evenly. If the bit is 'wobbling' or not running centrally, release the chuck, check the accessory for damage, correct its position, retighten and test again.



Installing the Belt Hook

- The Belt Hook (12) is convenient for temporarily hanging the tool.
- This can be installed on either side of the tool.
- To install the hook, insert it into the groove in the tool housing on either side, and then secure it with a screw.
- To remove, loosen the screw and then take the hook out.



Direction Control

⚠ CAUTION

Always check the direction of rotation before operation.

Use the reversing switch only after the tool comes to a complete stop. Changing the direction of rotation before the tool stops may damage the tool.

When not operating the tool, always set the reversing switch lever to the neutral position.

- The direction of rotation can be set using the Forward/Reverse Switch (8).
- For counter-clockwise rotation, push the switch to the right.
- For clockwise rotation, push the switch to the left.

NOTE: When the Forward/Reverse Switch is in the central position, the drill is locked and cannot be switched on. Use this setting as a safety feature to prevent the drill from being switched on accidentally.

OPERATION

Torque Control

NOTE: This cordless drill is equipped with a torque control clutch allowing the machine to be set to the correct torque for the individual application.

- The clutch settings are indicated by the symbols on the Torque Selector (4).
- Rotate the Torque Selector to select the desired setting: the higher the number displayed on the torque ring, the higher the torque produced by the tool.

Gear Selection

- Select Gear 1 on the Gear Switch (6) for higher torque. A lower speed gear is generally more suitable for driving screws and fasteners.
- Select Gear 2 on the Gear Switch for lower torque. A higher speed gear is for drilling and must not be used for driving screws and fasteners.

Displayed Number	*Speed*	*Torque*	*Applicable Operation*
1	Low	High	Heavy Loading Operation
2	High	Low	Light Loading Operation

CAUTION

Do not use the speed change lever while the tool is running. The tool may become damaged.

Switching On/Off

- To start the drill, squeeze the Trigger Switch (9).
- The built-in LED Work Light (11) will illuminate when the trigger switch is squeezed.

NOTE: If the trigger switch cannot be depressed, check that the Forward/Reverse Switch (8) is not set to its middle position, which locks the tool.

- The speed of the drill is controlled by the movement of the trigger: the further the Trigger Switch is pressed down the faster the drill will run.
- Release the Trigger Switch to stop the tool.

Screwdriver Use

NOTE: Always use a universal bit holder when working with screwdriver bits. Do not mount screwdriver bits directly into the chuck.

- Select Gear 1 using the Gear Switch (6).
- Rotate the Mode Selector (5) to Drive
- Adjust the drill to the appropriate torque setting. When driving in screws, NEVER use the tool in drill mode.

NOTE: If in doubt which torque setting best suits the application, start with a low setting and increase, should more torque be required (e.g. if the screw is not being driven far enough into the workpiece).

OPERATION

Drilling Masonry & Concrete

- Select Gear 1 using the Gear Switch (6).
- Rotate the Mode Selector (5) to the hammer drill position
- Hammer drill mode should be used for drilling into masonry and concrete.
- Apply moderate pressure to the rear of the drill, in line with the drill bit.
- Use masonry drill bits only. Ensure that the bit size is within the maximum capacity of the machine.
- DO NOT apply too much pressure. If debris blocks the drill hole, run the drill slowly and remove the bit from the hole. Repeat until the hole is cleared.

WARNING

The drill bit, especially the tip, will become very hot when drilling masonry and concrete. DO NOT touch the bit and never allow it to come into contact with combustible materials.

DO NOT inhale masonry dust. Wear adequate breathing protection. Dust from masonry, concrete and similar substances is harmful and may be toxic.

Drilling Wood

- Select the appropriate gear using the Gear Switch (6).
- Rotate the Mode Selector (5) to the Drill position
- Ensure that drill bits are suitable for wood and are within the maximum capacity of this machine.

WARNING

DO NOT inhale wood dust. Wear adequate breathing protection. Some wood dusts may be toxic.

Drilling Metal

- Select the appropriate gear using the Gear Switch (6).
- Rotate the Mode Selector (5) to the Drill position
- Ensure that drill bits are suitable for the grade of metal being drilled, and are within the maximum capacity of the machine.
- To ensure accuracy, mark the intended hole position using a hammer and centre punch.

OPERATION

Drilling Metal (Cont.)

WARNING

The drill bit and the workpiece will become very hot when drilling metal. DO NOT touch the bit and never allow it to come into contact with combustible materials when hot. Always use a suitable lubricant or cutting fluid, and drill at appropriate speeds.

- ONLY apply moderate pressure to the drill bit, ensuring efficient cutting and prolonged drill bit life.
- Use a countersink bit to remove sharp burrs from the hole, preventing cuts and other kinds of injury.

WARNING

If the power tool gets excessively hot in use, stop using the tool immediately and allow it to cool before continuing work. The cooling period can be reduced by operating the drill at maximum speed with no load. Always make sure the Motor Vents (7) are not blocked and do not allow dust to enter the body of the tool through the Motor Vents; dust, especially metallic dust, may damage or destroy the tool.

CAUTION

Pressing excessively on the tool will not speed up the drilling. In fact, this excessive pressure will only serve to damage the tip of your bit, decrease the tool performance and shorten the service life of the tool.

There is a tremendous force exerted on the tool/bit at the time of hole break through. Hold the tool firmly and exert care when the bit begins to break through the workpiece.

A stuck bit can be removed simply by setting the reversing switch to reverse rotation in order to back out. However, the tool may back out abruptly if you do not hold it firmly.

Always secure small workpieces in a vice or similar hold-down device.

If the tool is operated continuously until the battery cartridge has discharged, allow the tool to rest for 15 minutes before proceeding with a fresh battery.

MAINTENANCE

- Before cleaning or performing any maintenance, you must ensure the tool is switched off and disconnected from the power supply.
- Compressed air is the most effective way to clean this tool. Always wear PPE safety goggles when cleaning tools with compressed air.
- Ventilation openings and switch levers must be kept clean. DO NOT attempt to clean by inserting pointed objects through openings.
- Do not use harsh chemicals or solvents when cleaning this tool.
- If you discover any damaged or broken parts, consult your local XHD distributor for replacements and advise.

Cleaning

- Keep your tool clean at all times. Dirt and dust will cause internal parts to wear quickly, and shorten the tools service life. Clean the body of your machine with a soft brush, or dry cloth. If available, use clean, dry, compressed air to blow through the ventilation holes.
- Clean the tool casing with a soft, damp cloth using a mild detergent. Do not use alcohol, petrol, or strong cleaning agents.
- Never use caustic agents to clean plastic parts.

Lubrication

- Slightly lubricate all moving parts at regular intervals with a suitable spray lubricant.

Storage

- Store this tool carefully in a secure, dry place out of the reach of children.

WARNING

Always be sure that the tool is switched off and the battery removed before attempting to perform any inspection or maintenance.

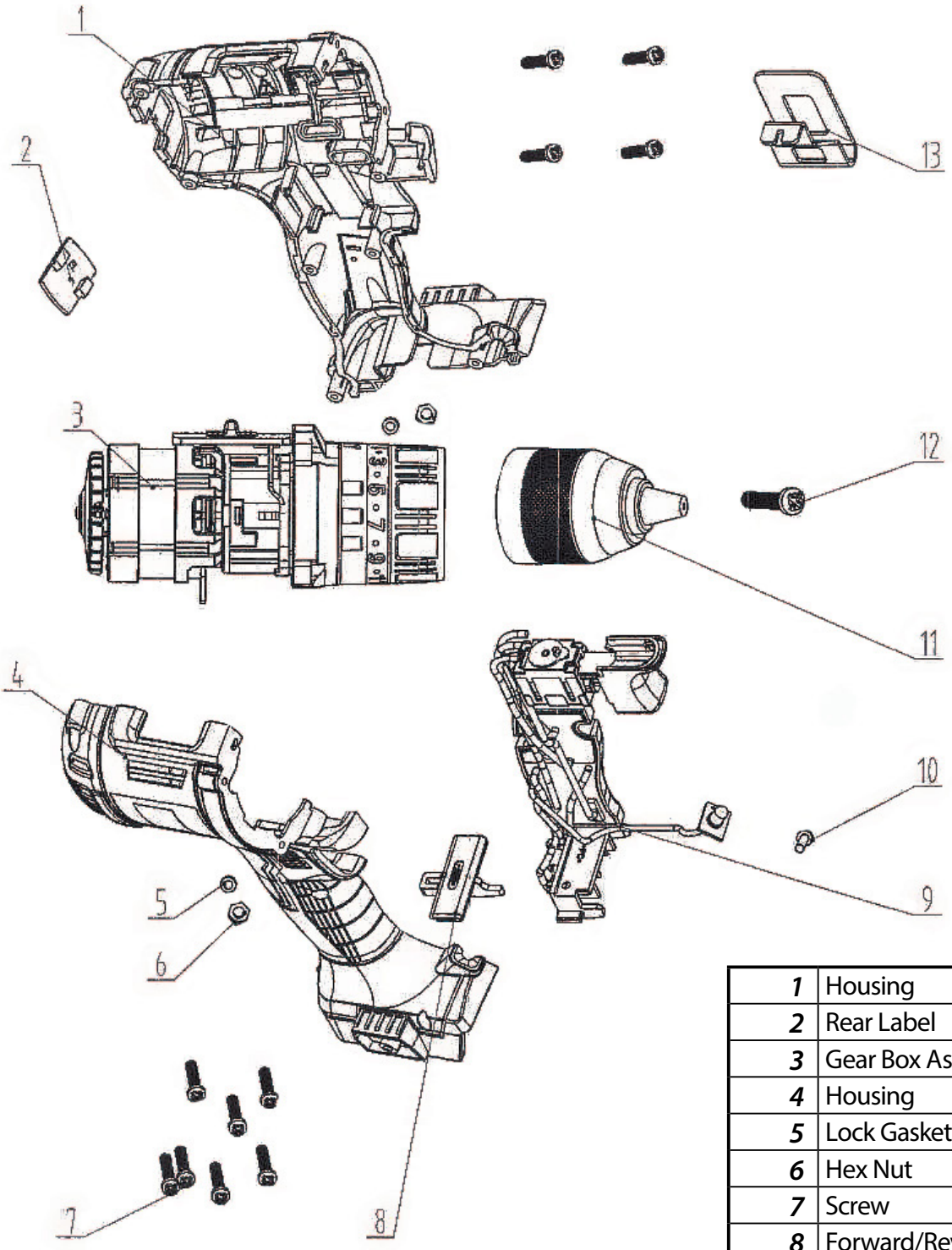
Environment & Disposal

- Packaging materials are raw materials and can be re-used. Separate the different packaging materials and take them to the appropriate waste disposal facility. More information can be obtained from your local authorities.
- Old machines do not belong in your household garbage! Dispose of old machines appropriately, we are all responsible for the environment.

Battery Disposal

- Batteries and electronics should not be disposed of in household garbage. Please return your old batteries to your local distributor for safe and environmentally friendly disposal.
- Together, we can care for the environment.

EXPLODED PARTS LIST



1	Housing
2	Rear Label
3	Gear Box Assembly
4	Housing
5	Lock Gasket
6	Hex Nut
7	Screw
8	Forward/Reverse Lever
9	PCBA
10	Screw
11	Chuck
12	Screw
13	Belt Clip