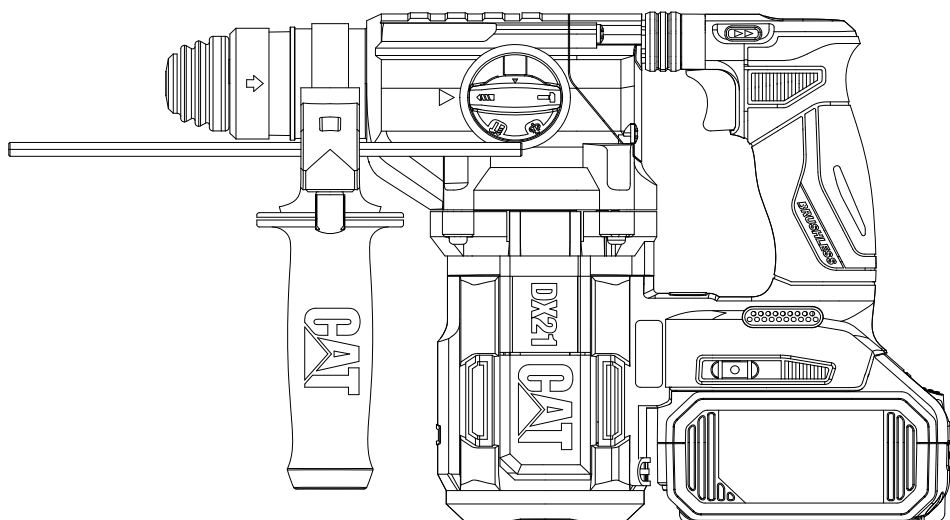


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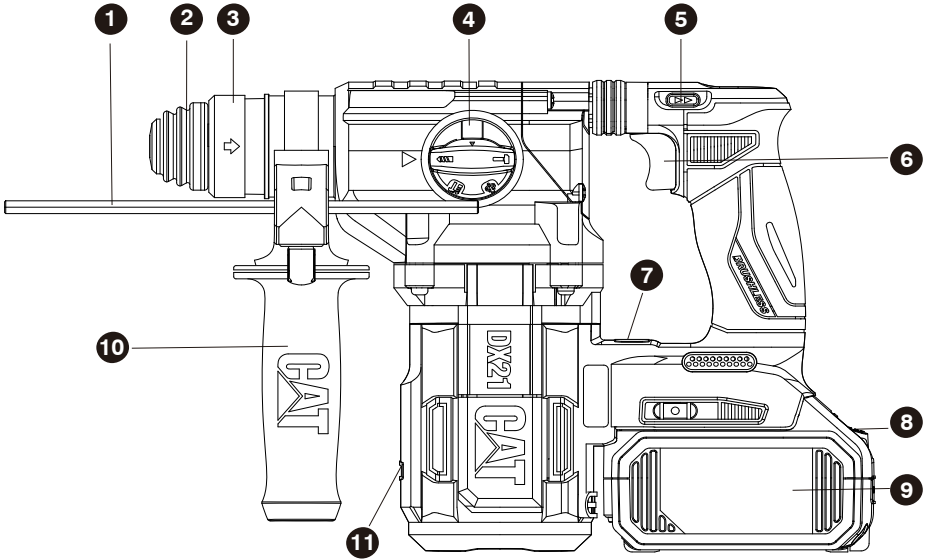


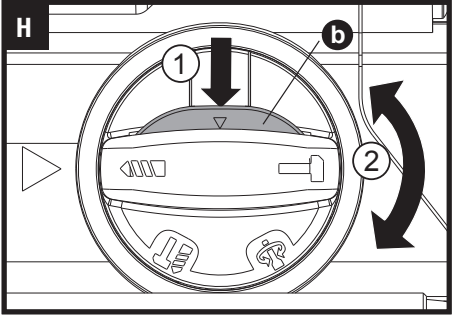
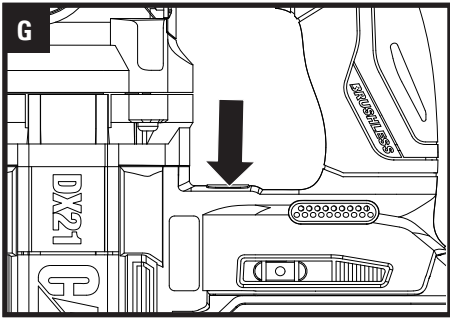
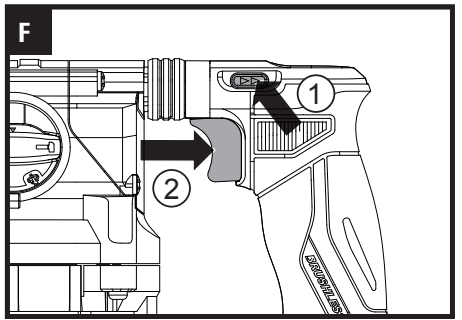
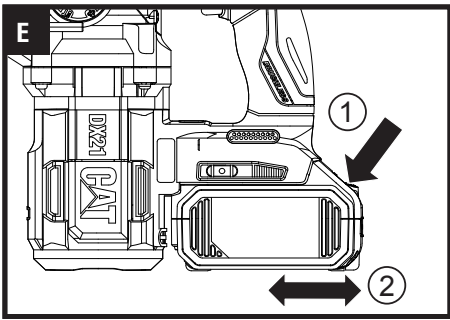
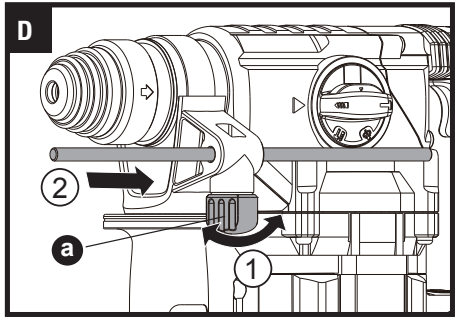
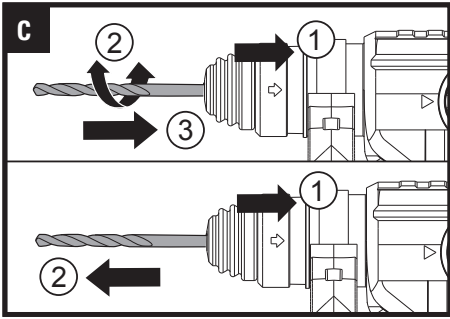
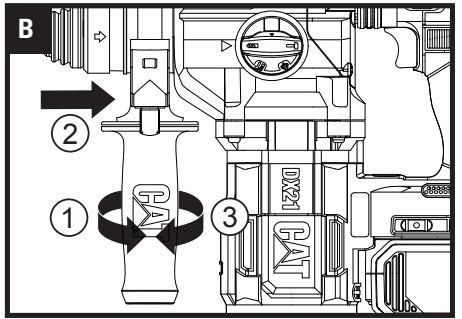
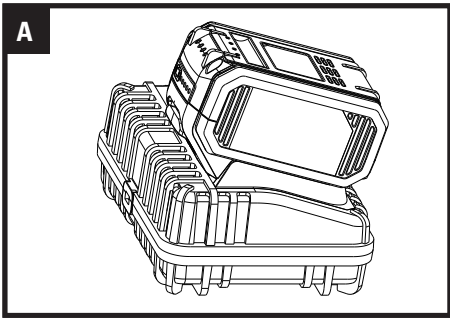
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DX21 DX21B



1 IN. CORDLESS SDS PLUS ROTARY HAMMER	EN	P04
1 IN. MARTEAU ROTATIF SANS FIL SDS PLUS	FR	P12
ROTOMARTILLO SDS PLUS DE 26 MM SIN CABLE	ES	P20






COMPONENT LIST

1. DEPTH GAUGE
2. DUST PROTECTION CAP
3. TOOL HOLDER LOCKING SLEEVE
4. FUNCTION MODE SELECTOR DIAL
5. FORWARD AND REVERSE ROTATION CONTROL
6. ON/OFF SWITCH
7. AUXILIARY FUNCTION BUTTON ON TILE
8. BATTERY PACK RELEASE BUTTON*
9. BATTERY PACK*
10. AUXILIARY HANDLE
11. LED LIGHT


*Not all the accessories illustrated or described are included in standard delivery.

PRODUCT SAFETY

 **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;
- 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 those dust masks that are specially designed to filter out microscopic particles.

 **WARNING:** This product can expose you to chemicals including lead and Di(2-ethylhexyl) phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

GENERAL POWER TOOL SAFETY WARNINGS

 **WARNING!** Read all safety warnings and all instructions. Failure to follow the warnings and 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 or 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 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.*
 - 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 a 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 personal protective equipment. Always wear eye protection.** *Protective 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 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 of 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 tool's 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 packs.** *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.** *Shorting 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.*

HAMMER SAFETY WARNINGS

- 1. **Wear ear protectors.** *Exposure to noise can cause hearing loss.*
- 2. **Use auxiliary handles, if supplied with the tool.** *Loss of control can cause personal injury.*
- 3. **Hold power tools 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.*

SAFETY WARNINGS FOR BATTERY PACK

- a) **Do not dismantle, open or shred battery pack.**
- b) **Do not expose battery pack to heat or fire. Avoid storage in direct sunlight.**
- c) **Do not short-circuit a battery pack. Do not store battery packs haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal objects.** *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 fire.*
- d) **Do not remove battery pack from its original packaging until required for use.**
- e) **Do not subject battery pack to mechanical shock.**
- f) **In the event of battery leaking, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice.**
- g) **Observe the plus (+) and minus (–) marks on the battery back and equipment and ensure correct use.**
- h) **Do not use any battery pack which is not designed for use with the equipment.**
- i) **Keep battery pack out of the reach of children.**
- j) **Seek medical advice immediately if a cell or battery has been swallowed.**
- k) **Always purchase the battery pack recommended**

by the device manufacturer for the equipment.

- l) **Keep battery pack clean and dry.**
- m) **Wipe the battery pack terminals with a clean dry cloth if they become dirty.**
- n) **Battery pack needs to be charged before use. Always use the correct charger and refer to the manufacturer's instructions or equipment manual for proper charging instructions.**
- o) **Do not leave battery pack on prolonged charge when not in use.**
- p) **After extended periods of storage, it may be necessary to charge and discharge the battery pack several times to obtain maximum performance.**
- q) **Recharge only with the charger specified by Cat®.** **Do not use any charger other than that specifically provided for use with the equipment.**
- r) **Retain the original product literature for future reference.**
- s) **Use only the battery pack in the application for which it was intended.**
- t) **Remove the battery pack from the equipment when not in use.**
- u) **Dispose of properly.**
- v) **Do not mix cells of different manufacture, capacity, size or type within a device.**

SYMBOLS



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



Warning



Wear eye protection



Wear ear protection



Wear dust mask



Li-Ion battery, battery must be recycled

Li-Ion



Do not burn



Batteries may enter water cycle if disposed improperly, which can be hazardous for ecosystem. Do not dispose of waste batteries as unsorted municipal waste.



call2recycle®

POSITEC Inc. has established a partnership with the RBRC Corporation to recycle any Positec batteries with the RBRC-call2recycle seal. For environmental protection, please do not discard batteries in the trash. After the batteries' life cycle is ended, then please call 1-800-822-8837 for a free service that will properly dispose of the battery.

TECHNICAL DATA

Type Designation DX21 DX21B (21 - designation of machinery, representative of rotary hammer)

		DX21	DX21B
Voltage		18V \equiv	
No load speed		0-1,210 /min	
Impact rate		0-5,400 /min	
Impact energy		1.6 ft/lbs (2.2 J)	
Max. drilling capacity	Steel	1/2 in. (13 mm)	
	Wood	1-1/4 in. (32 mm)	
	Masonry	1 in. (26 mm)	
Battery capacity (DXB4)		4.0 Ah	/
Charger input (DXC4)		120V~60Hz, 95W	/
Charger output (DXC4)		20V \equiv 4A	/
Charger protection class		\square /II	/
Machine weight		7.17 lbs (3.25 kg)	5.74 lbs (2.6 kg)

ACCESSORIES

	DX21	DX21B**
Auxiliary handle	1	1
Depth gauge	1	1
Battery pack (DXB4)**	2	/
Charger (DXC4)**	1	/

We recommend that you purchase your accessories from the same store that sold you the tool. Refer to the accessory packaging for further details. Store personnel can assist you and offer advice.

Please Note: We strongly recommend the Cat® DXB4 (4.0 Ah) / GXB5 (5.0 Ah) battery packs for maximum working performance and extended runtime. **Sold separately

OPERATING INSTRUCTIONS



NOTE: Before using the tool, read the instruction book carefully.

INTENDED USE

The machine is intended for hammer drilling in concrete, brick and stone. It is also suitable for drilling without impact in wood, metal, ceramic and plastic.

BEFORE PUTTING INTO OPERATION

1. CHARGE YOUR BATTERY PACK (SEE FIG. A)

2. CHECKING THE BATTERY POWER CONDITION

5 LED lights show the battery power condition. Before starting or after use, press the button beside the lights to check the battery charge status.

ASSEMBLY

1. INSTALLING THE AUXILIARY HANDLE (SEE FIG. B)

For your personal safety we recommend using the auxiliary handle at all times.

Rotate the handgrip of the auxiliary handle counter-clockwise to loosen the clamping ring. Slide the clamping ring of the auxiliary handle over the handle collar of the hammer, and rotate the handle around the collar until the handle is in a desired working position. Rotate the handgrip clockwise to tighten the auxiliary handle in place.



WARNING: Always use the auxiliary handle.

2. INSERTING AND REMOVING DRILL BIT (NOT SUPPLIED) (SEE FIG. C)

Take care that the dust protection cap is not damaged when changing tools.

- Inserting

Clean and lightly oil the bit before inserting. Retract back the tool holder locking sleeve and insert the dust-free bit into the tool holder with a twisting motion until it latches.

The bit locks itself. Check the locking by pulling on the tool.

- Removing

Retract back the tool holder locking sleeve and pull out the bit.



WARNING: Your new rotary hammer generates powerful forces to get your job done quickly and effectively. These forces may cause inferior quality SDS bits to break and jam in the chuck. We therefore recommend that only high quality SDS bits be used with this tool.

3. INSTALLING THE DEPTH GAUGE (SEE FIG. D)

The depth gauge can be used to set a constant depth to drill.

Rotate the locking screw (a) on the top of the auxiliary handle counter-clockwise to loosen, insert the depth gauge into the hole of the handle. Adjust it to the desired depth. Rotate the locking screw clockwise to tighten.

4. TO REMOVE OR INSTALL BATTERY PACK (SEE FIG. E)

Depress the battery pack release button to release and slide the battery pack out from your tool. After recharge, slide it back into your tool. A simple push and slight pressure will be sufficient.

OPERATION


1. ON/OFF SWITCH WITH VARIABLE SPEED CONTROL (SEE FIG. F)


Depress the on/off switch to start and release it to stop your tool. This tool has a variable speed switch that delivers higher speeds with increased on/off switch pressure or delivers lower speeds with reduced on/off switch pressure - speed is controlled by varying the pressure applied to the switch.

2. SWITCH LOCK

The on/off switch can be locked in the OFF position. This helps to reduce the possibility of accidental starting when not in use. To lock the on/off switch, place the direction of forward and reverse rotation control in the center position.

3. FORWARD AND REVERSE ROTATION CONTROL (SEE FIG. F)

Forward rotation: Push and press the "" from body back side to body front side for drilling.

Reverse rotation: Push and press the "" from body front side to body back side for removing the drill bits.



WARNING: Never change the direction of rotation while the tool is rotating, wait until it has stopped.

4. AUXILIARY FUNCTION ON TILE (SEE FIG. G)

- 1) Press on/off switch to see the light is on or off. Light on indicates the auxiliary function is on, and light off indicate the auxiliary function is turn off.
- 2) When operating on the tile, press the auxiliary function button on tile first, the green light on means that auxiliary function is on, then half-press switch, begin pulse auxiliary operation. Until the glaze of tile is broken, press the on/off switch to the bottom and begin the drilling.
- 3) When operating on things rather than tile, keep

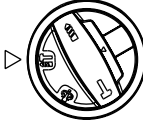
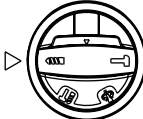
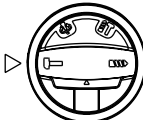
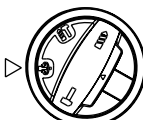


the auxiliary function button closed, to insure the high efficiency when drilling.

NOTE: Auxiliary function on tile avoid the unexpected split of tile. This auxiliary function take the place of previous pre-drilling by glass drill on tile.

NOTE: The auxiliary function on tile is only suitable to be used under the hammer drilling position. When operating under drilling/chiseling/ adjust the chuck angle mode, make sure to turn the auxiliary function off.

5. FUNCTION MODE SELECTION (SEE FIG.H)

The operation of the gearbox for each application is set with the function mode selector dial. To change between functions, depress the unlocking button (b) and rotate the selector to the desired operating mode.

	<p>Mode for simultaneous drilling and impacting of concrete, Masonry</p>
	<p>Mode for drilling into steel, wood and plastics</p>
	<p>Mode for chiseling</p>
	<p>Mode for adjust the chuck angle of chiseling NOTE: Select this function mode “” first , adjust the chuck angle to desired direction. Then select the fuction mode to “”, operate the chiseling work.</p>

 **WARNING:** The operating mode selector switch may be actuated only at a standstill.

6. OVERLOAD PROTECTION

When overloaded, the motor comes to a stop. Relieve the load on the machine immediately and allow cooling for approx. 30 seconds at the highest no-load speed.

7. TEMPERATURE DEPENDENT OVERLOAD PROTECTION

When using as intended for, the power tool cannot be subject to overload. When the load is too high or the allowable battery temperature of 167°F (75°C) is exceeded, the electronic control switches off the power tool until the temperature is in the optimum temperature range again.

8. PROTECTION AGAINST DEEP DISCHARGING

The Li-ion battery is protected against deep discharging by the “Discharging Protection System”. When the battery is empty, the machine is switched off by means of a protective circuit: The inserted tool no longer rotates.

WORKING HINTS FOR YOUR HAMMER

If your power tool becomes over heated, set the speed to maximum and run no load for 2-3 minutes to cool the motor. SDS-plus tungsten carbide drill bits should always be used for concrete and masonry. When drilling in metal, only use HSS drill bits in good condition. Where possible use a pilot hole before drilling a large diameter hole.

PROBLEM SOLUTION

1. REASONS FOR DIFFERENT BATTERY PACK WORKING TIMES

Charging time problems, having not used a battery pack for a prolonged time will reduce the battery pack working time. This can be corrected after several charge and discharge operations by charging & working. Heavy working conditions will use up the battery pack energy faster than lighter working conditions. Do not re-charge your battery pack below 32°F (0°C) and above 104°F (40°C) as this will affect performance.

MAINTENANCE

Remove the battery pack from the tool before carrying out any adjustment, servicing or maintenance.

Your power tool requires no additional lubrication or maintenance. There are no user serviceable parts in your power tool. Never use water or chemical cleaners to clean your power tool. Wipe clean with a dry cloth. Always store your power tool in a dry place. Keep the motor ventilation slots clean. Keep all working controls free of dust. Occasionally you may see sparks through the ventilation slots. This is normal and will not damage your power tool.

FOR BATTERY TOOLS

The ambient temperature range for the use and storage of tool and battery is 32-113°F (0°C-45°C). The recommended ambient temperature range for the charging system during charging is 32 -104°F (0°C-40°C).

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www.catpowertools.com



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