



20V MAX LITHIUM ION CORDLESS IMPACT WRENCH

Model : PDWX2-M2-EU

บล็อกกระแทกไร้สาย ไร้แปรงถ่าน
20V 1/2" (330Nm) รุ่น PDWX2-M2-EU

พร้อมแบตเตอรี่ 2.0Ah 1 ก้อน และแท่นชาร์จ 1 อัน



For customer service please find all information on www.senixtools.com
CAUTION: BEFORE USING THIS PRODUCT, READ THIS MANUAL AND
FOLLOW ALL ITS SAFETY RULES AND OPERATING INSTRUCTIONS.

ORIGINAL INSTRUCTIONS

TABLE OF CONTENTS

SAFETY & INTERNATIONAL SYMBOLS	2
SAFETY INSTRUCTIONS.....	3
KNOW YOUR UNIT.....	10
SPECIFICATIONS*	11
ASSEMBLY.....	12
OPERATION.....	14
MAINTENANCE.....	17
TROUBLESHOOTING.....	18

SAFETY & INTERNATIONAL SYMBOLS

Explanation of Safety & international symbols describes safety and international symbols and pictographs that may appear on this product. Read the operator's manual for complete safety, assembly, operating and maintenance and repair information.



Caution / Warning.



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



Wear eye protection.



Wear a dust mask.



Wear safety footwear.



Wear protective gloves.



Do not dispose of battery packs in rivers or immerse in water.



Do not dispose of battery packs in fire. They will explode and cause injury.



Use and store the battery within an temperature below 50°C.



Do not disassemble, crush, heat above 100°C; Never expose the battery to microwaves or high pressures.



Keep bystanders a safe distance away from the work area.



Indoor use only. Only use battery charger indoors.



Single mark of circulation of products on the market of the Member States of the Customs Union.



Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or local store for recycling advice.



Crossed out dust bin. Batteries and battery packs should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or local store for recycling advice.

SAFETY INSTRUCTIONS

GENERAL POWER TOOL SAFETY WARNINGS

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.

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 a 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 and clothing 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.
 - 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.

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 remove the battery pack, if detachable, 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 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.

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.

h) **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.

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.

- e) **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.
 - f) **Do not expose a battery pack or tool to fire or excessive temperature.** Exposure to fire or temperature above 130 °C may cause explosion.
 - g) **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.
- ## 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.
 - b) **Never service damaged battery packs.** Service of battery packs should only be

performed by the manufacturer or authorized service providers.

SAFETY WARNINGS FOR IMPACT WRENCH

- a) Hold power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring. Fasteners contacting a “live” wire may make exposed metal parts of the power tool “live” and could give the operator an electric shock.
- b) Wear ear protectors when impact drilling. Exposure to noise can cause hearing loss.
- c) Use only sockets and other accessories specifically designed for use on impact wrenches and drivers. Other sockets and accessories might shatter or break causing injury.
- d) Always use common sense and be cautious when using tools. It is not possible to anticipate every situation that could result in a dangerous outcome. Do not use this tool if you do not understand these operating instructions or you feel the work is beyond your capability; contact Milwaukee Tool or a trained professional for

additional information or training.

- e) Maintain labels and nameplates. These carry important information. If unreadable or missing, contact the service facility for a free replacement.

SAFETY WARNING FOR BATTERY PACK AND BATTERY CHARGER

- 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.
- Use appliances only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.



WARNING!

Only use following batteries: B20X2/B25X2/B40X2/B50X2.

- 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.

- 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. (This advice is considered correct for conventional NiMh, NiCd, lead acid and lithium-ion cell types. If this advice is incorrect for a cell design that differs from these, then the correct advice may be substituted.)
- Do not use a battery pack or appliance that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.
- Do not expose a battery pack or appliance 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 appliance outside of the temperature range specified in the instructions. Charging improperly or at temperatures outside of the specified range

may damage the battery and increase the risk of fire.

- Do not modify or attempt to repair the appliance or the battery pack (as applicable) except as indicated in the instructions for use and care.

VIBRATION + NOISE REDUCTION

To reduce the impact of noise and vibration emission, limit the time of operation, use low-vibration and low-noise operating modes as well as wear personal protective equipment. Take the following points into account to minimise the vibration and noise exposure risks.

- Only use the product as intended by its design and these instructions.
- Ensure that the product is in good condition and well maintained.
- Use correct attachments for the product and ensure they are in good condition.
- Keep tight grip on the handles/ grip surface.
- Maintain this product in accordance with these instructions and keep it well lubricated (where appropriate).
- Plan your work schedule to spread any high vibration tool

use across a longer period of time.

EMERGENCY

Familiarize yourself with the use of this product by means of this instruction manual. Memorize the safety directions and follow them to the letter. This will help to prevent risks and hazards.

- Always be alert when using this product, so that you can recognize and handle risks early. Fast intervention can prevent serious injury and damage to property.
- Switch off the product and remove the battery pack if there are malfunctions. Have the product checked by a qualified professional and repaired, if necessary, before you operate it again.

INTENDED USE

This impact wrench is intended for tightening or loosening bolts and nuts. Do not use it for other purposes.

KNOW YOUR UNIT

APPLICATIONS

Model: PDWX2-M2-EU

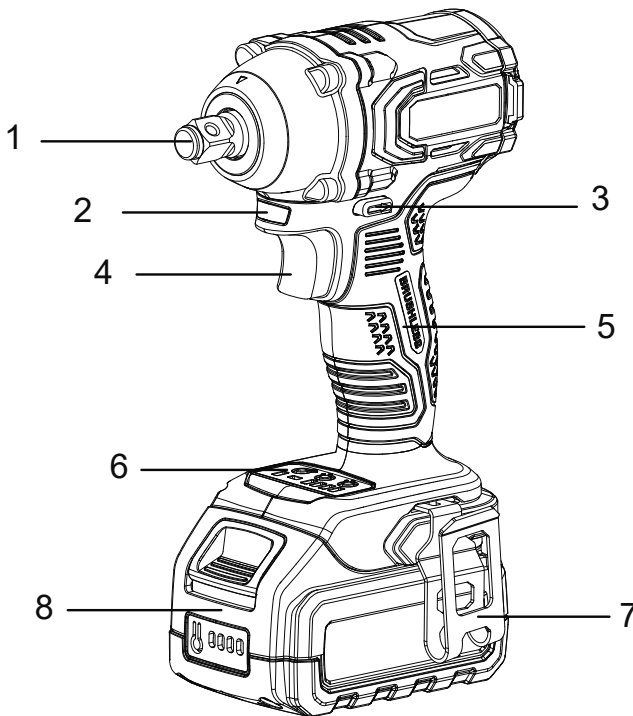
As a cordless impact wrench:

Tightening or loosening bolt or nut.



NOTE:

PDWX2-M2-EU-0 does not include the charger and the battery pack.



1. Anvil

2. Work Lamp

3. Reversing Switch Lever

4. Switch Trigger






5. Handle

6. Control Panel

7. Belt Clip

8. Battery Pack

SPECIFICATIONS*

Model	PDWX2-M2-EU			
Rated Voltage	18 V d.c.			
No Load Speed	0-1000/1800/2600/3200 rpm			
No Load IPM	0-1800/2600/3400/4000 ipm			
No Load Current	≤6.0A			
Average Operation Current	35-40 A			
Max Tightening Torque	330 N.m			
Max Loosening Torque	580 N.m			
Weight (without battery)	1.2 kg			
Battery model	B20X2	B25X2	B40X2	B50X2
Rated voltage	18 V 	18 V 	18 V 	18 V 
Rated capacity	2.0 Ah	2.5 Ah	4.0 Ah	5.0 Ah
Weight	0.34 kg	0.34 kg	0.65 kg	0.65 kg
Charger model	CHX2-L-EU		CHQX2-L1-EU	
Rated input	100-240 V ~ 50/60 Hz			
Rated output	21 V, 2 A		21 V, 4 A	
Charging time (for 2.0 Ah battery)	70±5mins		40±5mins	
Charging time (for 2.5 Ah battery)	58±5mins		48±5mins	
Charging time (for 4.0 Ah battery)	130±5mins		70±5mins	
Charging time (for 5.0 Ah battery)	160±5mins		85±5mins	
Protection class (for charger)	 / II			
Weight	0.34 kg		0.48 kg	

ASSEMBLY

1. Unpack all parts and lay them on a flat, stable surface:
2. Remove all packing materials and shipping devices, if applicable.
3. The scope of delivery varies depending on the country and purchased variant:
Model of PDWX2-M2-EU
 - Impact wrench x1
 - Belt clip x1
 - Screw x1
 - Battery pack x1
 - Charger x1
 - Instruction manual x1
4. If you find that parts are missing or show damage do not use the product but contact your dealer. Using an incomplete or damaged product represents a hazard to people and property.
5. Ensure that you have all the accessories and tools needed for assembly and operation. This also includes suitable personal protective equipment.



NOTE:

PDWX2-M2-EU-0 does not include the charger and the battery pack.



WARNING:

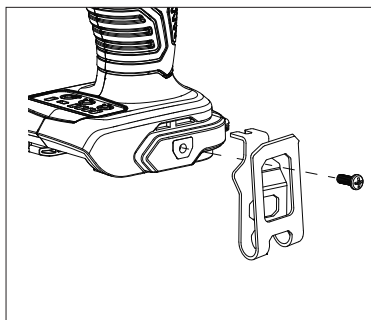


Wear protective gloves for this assembly work and always lay the product on a flat and stable surface while assembling. Follow the assembly instructions step-by-step and use the pictures provided as a visual guide to easily assemble the product!

Do not insert the battery pack before the power tool is completely assembled or adjusted!

BELT CLIP

Secure the belt clip on the tool by a screw.



SOCKET



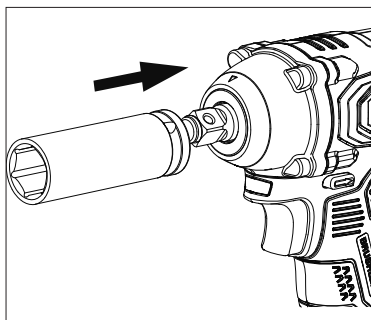
WARNING:

Only use accessories specifically recommended for this tool. An improper sized socket may cause hazard.

Always remove battery pack before changing or removing accessories.

To attach:

Align the accessory with the anvil and push it to the end.



To remove:

Pull the accessory off the anvil.

BATTERY PACK

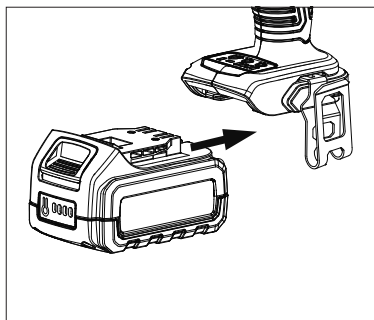


NOTE:

Prior to installation, lock the switch trigger by trigger lock to avoid unintentional start.

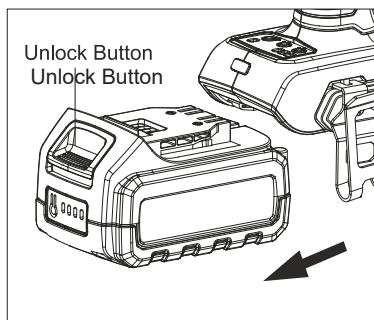
To install:

Align and slide the battery pack to the docking port of the tool until it is locked in place.



To remove:

Press the unlock button on battery pack and slide the battery pack out.



OPERATION



WARNING:

Always wear eye, hearing, hand protection to reduce the risk of injury when operating the tool. Keep all parts of your body away from the rotating bit.

ROTATION DIRECTION

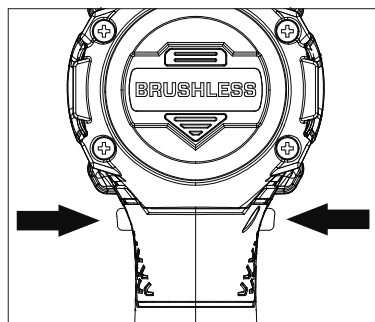
The tool is designed to loosen or tighten bolts/nut. That depends on the rotation direction of spindle determined by the reversing switch lever.



WARNING:

Do not change rotation direction while the product is running. Wait for a complete stop before performing setting.

Mode	Setting	Application
Forward	Push the reversing switch lever to left side.	Tightening bolts.
Backward	Push the reversing switch lever to right side.	Loosening bolts.
Center Lock	keep the reversing switch lever at center position.	Lock the switch trigger.



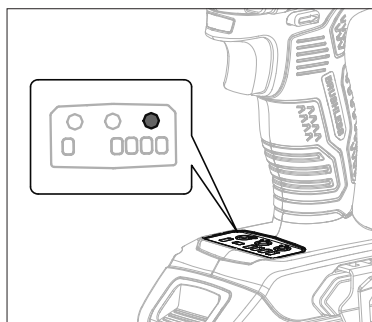
SPEED

A suitable working speed will ease your operation. Adjust to a desired speed in advance by pressing the speed control button.



WARNING:

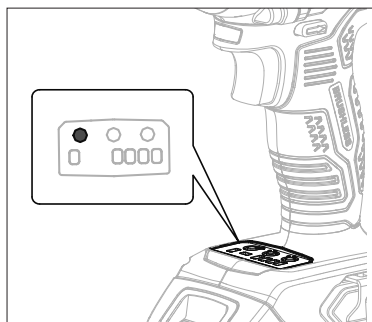
To avoid damage to the product, only press the speed switch when the power tool is completely stop.



REVERSAL AUTO STOP

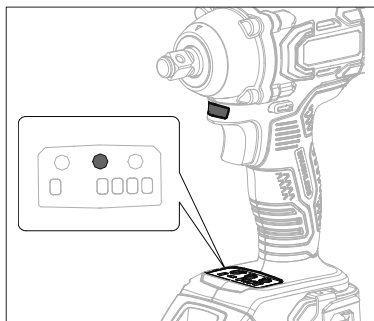
A fully loosened bolt is likely to fall off if you keep the switch trigger depressed under the backward rotation mode.

Activate the reversal auto stop mode, the spindle stops automatically after bolt/nut gets enough loosened even if the switch trigger continue to be pulled.



WORK LAMP

This product is designed with a lamp for lighting working area. Turn on the lamp and adjust brightness of lamp by pressing the lamp button on the control panel. It shuts down automatically after product stops.



SWITCHING ON/OFF

1. Push the direction switch to left or right (Fig.6).
2. Press the switch trigger to start the product.
3. Release the switch trigger to stop the product.



NOTE:

Always lock the switch trigger before storage and any time not in use.

IMPACTING TECHNIQUES

The longer a bolt, screw, or nut is impacted, the tighter it will become. To help prevent damaging the fasteners or workpieces, avoid excessive impacting. Be particularly careful when impacting smaller fasteners because they require less impacting to reach optimum torque.

Practice with various fasteners, noting the length of time required to reach the desired torque. Check the tightness with a hand-torque wrench. If the fasteners are too tight, reduce the impacting time. If they are not tight enough, increase the impacting time.

Oil, dirt, rust or other matter on the threads or under the head of the fastener affects the degree of tightness.

The torque required to loosen a fastener averages 75% to 80% of the tightening torque, depending on the condition of the contacting surfaces.

On light gasket jobs, run each fastener down to a relatively light torque and use a hand torque wrench for final tightening.

HOW TO CHARGE THE BATTERY PACK



WARNING:

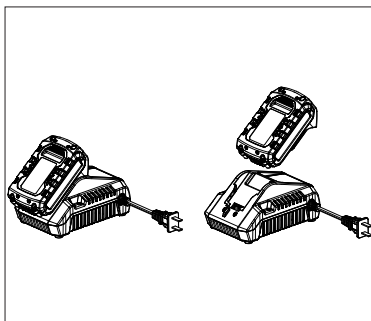
This Lithium-Ion battery pack is shipped partially charged. Fully charge the battery pack before using it for the first time.



NOTE:

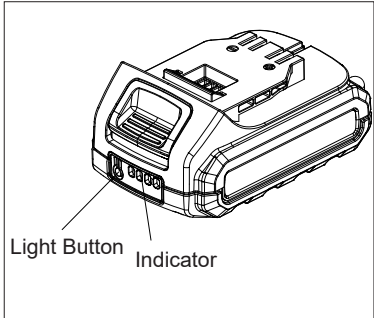
Charge batteries at a ambient temperature of 32°F(0°C)-104°F(40°C).

1. Charge the Lithium-Ion battery pack only with the correct charger.
2. Connect the charger to a power supply, the light indicator of the charger turns red.
3. Align the raised ribs of the battery pack with the slot in the charger.
4. Insert the battery pack into the charger, the light indicator of the charger turns green and it flashes.
5. The charger will communicate with the battery pack to evaluate the condition of the battery pack.
6. It is fully charged that the four lights of the battery turn on. Disconnect the power supply from the charger. Remove battery pack from the charger.



CHARGING INDICATOR

Press the light button on the battery pack to check whether it needs to charge.



OVERHEAT PROTECTION

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

OVERDISCHARGE 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.

Lights			Remaining Capacity
Lighted	Off	Blinking	
			75% - 100%
			50% - 75%
			25% - 50%
			5% - 25%
			< 5% (need to be charged)



WARNING:

Malfunctions may occur when the four lights blinking in turns.

MAINTENANCE



WARNING:

Only perform cleaning and maintenance work according to these instructions!
All further works must be performed by a qualified specialist!



WARNING:

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION: Make sure the trigger is locked and battery pack is removed before performing any procedure in this section.
TO PREVENT SERIOUS INJURY FROM TOOL FAILURE: Do not use damaged equipments.
If abnormal noise or vibration occurs, have the problem corrected before further use.

There are no user-serviceable parts in your power tool.
If any of following condition are found, stop using it and send it to the authorized service center for repair.

- leaking, swollen, or cracked battery pack
- loose hardware
- misalignment or binding of accessories.
- cracked or broken parts.
- any other condition that may affect its safe operation.

CLEANING

1. Clean dust and debris from air vents.
2. Keep handle clean, dry and free of oil or grease.
3. Wipe up the anvil to ensure its smooth running.
4. Remove stubborn dirt from housing with high pressure air (max. 3 bar).
5. Never immerse your tool in liquid or allow a liquid to flow inside them.



NOTE:

Do not use chemical, alkaline, abrasive or other aggressive detergents or disinfectants to clean this product as they might be harmful to its surfaces.

TRANSPORTATION

1. Only carry by its handle.
2. Protect from any heavy impact or strong vibrations which may occur during transportation in vehicles.
3. Secure to prevent it from slipping or falling over.

STORAGE

1. Clean thoroughly as described above.
2. Store in a dark, dry, frost-free and well-ventilated area that is inaccessible to children. The ideal storage temperature is between 50°F(10°C) and 86°F(30°C).
3. Use original package for storage or cover with a suitable cloth to protect it against dust.



NOTE:

To prolong battery life, store the battery pack separately from the tool in a 30%-50% charged condition. It's recommended to have your battery pack charged at least every 6 months.

DISPOSAL

Waste product should not be disposed of with household waste. Please recycle where facilities exist.
Check with your local authority or retailer for recycling advice.

Users should clean up the chips generated during operation to protect environment.



Electrical products should not be discarded with household products. Used electrical products must be collected separately and disposed of at collection points provided for this purpose. Talk with your local authorities or dealer for advice on recycling.

TROUBLESHOOTING

Suspected malfunctions are often due to causes that the users can fix themselves. Therefore, check the product using this section. In most cases the problem can be solved quickly.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Product does not start	Reversing switch lever at centre locking position	Push reversing switch lever to proper side
	Battery pack not properly attached	Attach properly
	Battery pack discharged	Charge the battery pack
Product does not reach full power	Battery pack capacity too low	Charge the battery pack
	Battery pack reaches its life cycle	Replace with new battery pack
Unsatisfactory result	Socket is damaged	Replace with new one
	Socket not suitable for intended operation	Use proper one