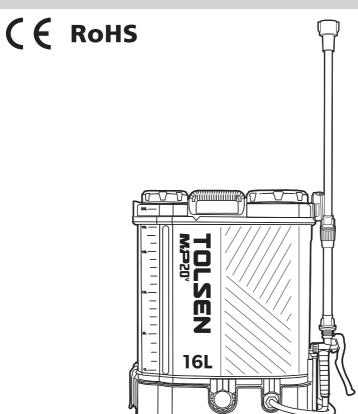
TOLSENMP20

87378 LI-ION CORDLESS SPRAYER

INSTRUCTION MANUAL

20V

LITHIUM-ION



SAVE THIS MANUAL!

You will need this manual for safety instructions, operating procedures and warranty. Put it and the original sales receipt in a safe dry place for future reference.



IMPORTANT SAFETY INFORMATION

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.

WARNING: This appliance is not intended for use by persons (including children) with reduced, physical or mental capabilities or lack of experience or knowledge unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children must be supervised to ensure that they do not play with the appliance.

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.

Work area safety

- 1. Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- 3. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

Electrical safety

- 1. 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.
- 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.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- 4. 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.
- 5. 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.
- 6. If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) or ground fault circuit interrupter (GFCI) protected supply. Use of an RCD or GFCI reduces the risk of electric shock.
- 7. Power tools can produce electromagnetic fields [EMF] that are not harmful to the user. However, users of pacemakers and other similar medical devices should contact the maker of their device and/or doctor for advice before operating this power tool.



Personal safety

- 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.
- 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.
- 3. 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.
- 4. 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.
- 5. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations
- 6. 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.
- 7. 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.
- 8. 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.

Power tool use and care

- 1. 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.
- 2. Do not use the power tool if the switch could not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- 7. 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.
- 8. 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.



Battery Tool Use and Care

- 1. 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 power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- 3. 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.
- 4. Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.
- 5. 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.
- 6. Do not expose a battery pack or tool to fire or excessive temperature. Exposure to fire or temperature above 130 °C may cause explosion.
- 7. Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions. Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

Service

- Have your power tool serviced by a qualified repair person using only identical replacement parts. This will
 ensure that the safety of the power tool is maintained.
- Never service damaged battery packs. Service of battery packs should only be performed by the manufacturer or authorized service providers.
- 3. Follow instruction for lubricating and changing accessories.

Safe Use And Precautions

- 1. the machine is strictly prohibited to use strong acid, strong alkali, flammable and other special working fluids.
- 2. incorrect use of the machine may lead to serious injury, in the use of the process is strictly prohibited to spray human or animal;
- do not leave the machine or store in an unattended place, do not use to turn off the power, do not hold harmful chemical liquids, to store in a place without direct sunlight;
- 4. the use of this product under dangerous conditions may cause yourself, nearby and natural objects injury, please read the instructions carefully, do not disassemble or change, assemble the machine;
- 5. after each use, it is necessary to thoroughly clean the sprayer and discharge the residual liquid from the machine, otherwise it will damage the pump.
- 6. the machine is strictly prohibited to use non-water-soluble powder, if used, after the operation must be sprayed with not less than half a bucket of water for cleaning;
- 7. whether the machine is on or off, the spray rod should not be directed at people or animals;
- work should be strictly in accordance with the rules of dress, should wear masks, long-sleeved clothes, trousers, use long gloves or anti-pesticide penetration of the coat, do not work naked;
- handling pesticides: prohibit the use of special working fluids, in the handling of pesticides, should comply with the safety instructions provided by the pesticide manufacturer.
- 10. it is strictly prohibited to immerse the base or the whole machine in water collection or cleaning.
- 11. Only fill the tank in the form of water-soluble agricultural chemicals or powder liquids that have been mixed into the fill filter. Do not prepare the mixture directly in the sprayer.
- 12. do not use sharp hard objects to clean the nozzle, and do not blow with your mouth.



Battery Safety



WARNING

This battery can only be used in the machines included in the TOLSEN MP20V lithium-ion power platform system. This battery can only be used cooperatively with the designated battery charger.

Li-lon batteries, if incorrectly used, stored or charged will cause a fire, burn and explosion hazard.

Failure to follow these instructions may cause overheating or fire.

- 1. Keep the battery out of reach of children.
- The battery should be charged at ambient temperatures between 5 and 40°C (ideally around 20°C). After charging, allow 15 minutes for the battery to cool before use.
- 3. The Battery Charger monitors battery temperature and voltage while charging. DO NOT leave batteries on charge for extended periods and NEVER store batteries on charge. Ensure that the charger is disconnected from the mains supply after use.
- 4. When not in use batteries should be stored at room temperature. Do not store the tool and battery cartridge in locations where the temperature may reach or exceed 40° C (ideally around 20° C).
- 5. Ensure that battery contacts cannot accidentally short in storage. Keep batteries clean; foreign objects or dirt may cause a short. Keep away from other metal objects, for example, paperclips, coins, keys, nails and screws.
- 6. DO NOT store lithium-ion battery packs in a discharged state over a long period as this can damage the lithium-ion cells. For long-term storage, store batteries in a high charge state disconnected from the power tool.
- 7. Batteries can become faulty over time, individual cells in the battery can fail and the battery could short. The charger will not charge faulty batteries. Use another battery, if possible, to check correct functionality of the charger and purchase a replacement battery if a faulty battery is indicated.
- 8. DO NOT open, disassemble, crush, heat or incinerate. Do not dispose of in fire or similar.

Battery Charger Safety



WARNING

This charger can only be used to charge the batteries which has TOLSEN MP20V symbol. If it is used to charge other kinds of batteries, there is a risk of explosion. **DO NOT** attempt to recharge non-rechargeable batteries.

- 1. This is class 2 power supply. It is suitable for indoor use only.
- 2. Before use, the input and output technical data must be checked to secure correct use.
- 3. Do not use the Battery Charger in the circumstances that the output polarity does not match the load polarity.
- 4. Do not attempt to use the charger with any batteries other than those supplied. Keep your battery charger clean; foreign objects or dirt may cause a short or block air vents. Failure to follow these instructions may cause overheating or fire
- 5. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

Save these instructions



WARNING

DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to safety rules for the subject product. MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.



Note: Symbology

	,
	Class II Double insulated for additional protection
(€	CE conformity
③	Read the instruction manual before using
	Wear hearing protection while operating the tool Wear hand protection
	Always use breathing apparatus when machining materials which generate dust.
	Protective clothing must be worn
Max 45°C	Operating environmental temperature
*	Do not incinerate battery pack
	Do not expose to water
	Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.
Li-ion	Batteries and rechargeable batteries are not household waste! As a consumer, you are required by law to dispose of all batteries and accumulators, whether or not they contain harmful substances *, at a collection point in your municipality / neighborhood or in commerce so that they can be disposed of in an environmentally sound manner.
Li-ion	Battery pack is recyclable and should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for ecycling advice
A	Safety alert
T2A	Internal time lag fuse with a maximum current of 2A.

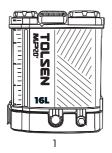


SPECIFICATIONS

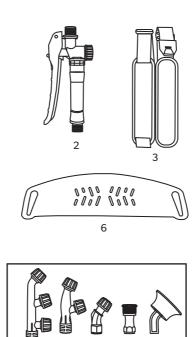
Battery pack voltage	20V
Capacity	16L
Working pressure	0.2-0.6MPa
Maximum flow	4L/min
Allowable ambient temperature	0°C-45°C

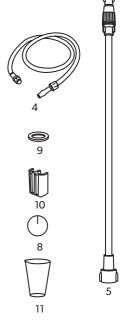


PRODUCT ACCESSORIES



- 1. Sprayer
- 2. Pressure handle
- 3. Thicken belts
- 4. High pressure hose
- 5. Spray lance
- 6. Waist support
- 7. Nozzle combination
- 8. Speed controller
- 9. Sealing gasket
- 10. Lance clamp
- 11. Measuring cup





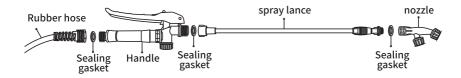


ASSEMBLY AND USE

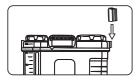
Product Introduction

This electric sprayer is commonly used to spray water and water-soluble solutions such as herbicides, pesticides and other liquid chemicals. Widely used in fruit trees, flowers, tobacco, tea trees, horticulture, greenhouse and other crops pest control and spraying, can also be used for public environment disinfection.

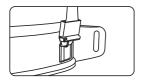
Installation



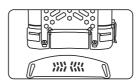
- Connect the handle to the hose and install a gasket in the middle to prevent water leakage. Agasket is a circular
 elastic ring used to seal between structures such as pipes, pistons and cylinders. When placed between two
 surfaces, thed gasket prevents the leakage of liquid. Leakage and product failure may occur if the gasket is not
 properly installed.
- 2. Connect the handle to the spray lance and install a sealing gasket in the middle to prevent water leakage.
- 3. Connect the nozzle to the spray lance, and install a sealing gasket in the middle to prevent water leakage.



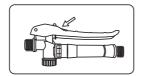
 Insert the clip into the card slot on the side of the sprayer, where the assembled spray rod can be placed



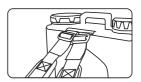
7. Hook the hook of the lower half of the strap into the bottom groove of the sprayer. The straps are thickened and comfortable, with adjustable lengths.



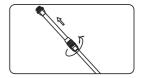
 Insert the waist rest into the groove on the lower back of the sprayer to relieve the load pressure during use.



 The handle has a locking switch, press the handle and open the locking switch, you can avoid pressing the long-term spraying operation; Turn off the lock switch to remove.



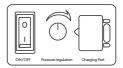
6. Insert the upper half of the strap into the hole on the back of the sprayer and connect it with the sun button.



 The spray lance is adjustableand telescopic, and the length is adjusted by turning the locking thread of the spray lance.



10. Insert the governor into the sprayer to control the pressure by adjusting the knob.Pressure non-regulation mode. Set power switch to ON position. Adjust the pressure by rotating to the right. After use, turn off the switch to the off position each time, and rotate the governor to the left.



11. when using for the first time, please use the special charger for the sprayer to fully charge the battery and use it again. The charger is fully charged when it changes from red to green.



12. There is a voltmeter indicator at the bottom of the sprayer. The L indicator is the power indicator. When the sprayer is turned on, the "L" light will light up. The N indicator is a battery status indicator. When the sprayer is turned on, the "N" light will light up. If the "N" light is off, the battery is exhausted and needs to be recharged.





INSTRUCTIONS FOR USE

- 1. the battery is fully charged before use, insert a section of the charger port into the sprayer charging jack, the other end into the household 220V power socket, charge until the green light is on; There is a protective device next to the charger jack, and in the case of no charging, it is necessary to plug the plastic plug into the jack to prevent the jack from getting damp.
- the first use should first use water test spray, check whether the connection is leaky, atomization effect is good, all normal before the preparation of liquid medicine operation.
- 3. the machine is strictly prohibited to use strong acid, strong alkali, flammable and other special working fluids.
- 4. please do not use insoluble powder, because it can not be dissolved into a liquid and easily suspended in the tank, solid will precipitate down to block the tank filter and pump channel, please use liquid
- 5. the working environment temperature exceeds $45\,^{\circ}\text{C}$ or below-10C prohibited use, and the maximum temperature of the liquid injection
- 6. the sprayer must pass through the filter when adding water and medicine liquid, otherwise it is easy to cause other debris to enter, resulting in blocking the filter screen and water pump in the water tank, affecting the normal use of the machine.
- 7. If there is overflow when adding the liquid, please wipe it off immediately. If the battery comes into contact with the liquid, the battery should be removed and dried with a dry cloth.
- 8. After the water tank is filled with water, please cover and tighten the lid to prevent the liquid from overflowing during the operation.
- 9. start the power switch, squeeze the injection switch, a few seconds later you can spray, loosen the handle to stop, the injection pump then stop working, when the water tank after the liquid spray water pump will continue to work, please turn off the power.
- 10. spray liquid should pay attention to the following problems1) After the spray switch is turned on, spray the spray rod by hand immediately, and it is strictly prohibited to spray in one place to prevent drug damage;2) The operator must be in front of the wind and tilt the spray rod up about 15°;3) When spraying, shake the spray rod left and right to increase the spray amplitude, and the forward speed and the swing speed should be properly matched to prevent leakage from affecting the quality of the operation;4) Spraying agents, preferably in the morning, cool and windless weather, so as to reduce the volatilization and drift of pesticides, improve the control effect;5) Operators do not spray upwind.
- 11. After the power is turned off, the spray rod is squeezed into a safe place to spray the spray switch. After spraying the pesticide, it must be sprayed with water for 2-3 minutes to discharge the liquid remaining in the machine, otherwise it will cause damage to the pump.
- 12. after the power is turned off, please strictly follow the instructions of the chemical manufacturer, otherwise it may cause environmental pollution of life safety, clean the residual liquid in the water tank and pump with water;
- 13. in the cold area to store the machine, must exhaust all the liquid to prevent damage to the sprayer components;
- 14. the battery must be adequately stored, especially after use should be charged in time, (if not used for a long time should be charged once every three months), the charger should be placed in a dry and ventilated, safe, 50CM from the ground.



CLEANING AND STORAGE

WARNING: Chemical exposure poses a risk of personal injury. Always wear appropriate personal protective equipment when using, preparing, handling, spraying or cleaning, as directed by the chemical manufacturer.

- 1. Set the power switch to the Off (O) position and remove the battery.
- According to the chemical manufacturer's instructions, pour the excess chemicals from the storage tank into a suitable container for later use or disposal.
- 3. Use clean water to thoroughly rinse and empty the tank until all chemicals and residues have been removed
- 4. Add about 1 liter of water to the water tank before inserting the battery.
- 5 Set the power switch to the ON(1) position
- 6. Put clean water in a clean tank and spray it through the pump, hose, spray rod and nozzle for at least 30 seconds to rinse them off. Not cleaning pumps, hoses, spray rods, and nozzles can lead to buildup of chemical residue that clogs or damages parts. After heavy rinsing, the nozzle may not be sufficient to remove residue and may need to be cleaned with a small brush.
- 7. Empty the remaining water in the tank, then continue spraying until the water is no longer coming out of the nozzle. This indicates that most of the water in the system is removed.
- 8. Set the power switch to Off (0).
- 9. Remove the battery.
- 10. Let the sprayer dry. The best way to do this is to open the tank lid, hang the sprayer upside down and let it drain.
- 11. Store sprayers and batteries indoors in a warm, dry place, away from direct sunlight, and away from any damp or high heat source. Do not store the sprayer where freezing temperatures (below 32°F/0°C) occur. Allowing water to freeze in the sprayer may damage the pump, seals or other components.
- 12. To ensure the best battery life, the battery should be charged at least every 3 months when not in use.



TROUBLESHOOTING

Breakdown	Reason	Elimination method
The motor stops automatically when it does not start	The power supply is disconnected or the plug is in poor contact The battery is powered off The motor is overheated, and the protector is automatically disconnected The power switch is faulty	Check the connection cable and plug it in 2. Charge Use after the motor cools Replace the switch
Nozzle failure,The outlet pressure is unstable	The nozzle is blocked There is air in the pipe The water pump is blocked The suction pipe is broken	Remove the nozzle and clean leakage in the pipeline and tighten the pipe to exhaust the air Check whether there is gas Remove foreign bodies from the water pump cover Replace the suction pipe
Nozzle flow and pressure are reduced	The water filter is blocked The filter screen inside the jet switch is blocked The battery voltage is insufficient	Clean the air filter Clean the air filter Charge
Leak	The connection is not tightened The seal ring is broken The inlet and outlet pipes of the water pump are broken	Tighten the screws Replace the sealing ring Replace the water pipe
Poor spray	1. There are foreign objects in the nozzle 2. The spray core is broken 3. The water nozzle is incorrectly installed 4. The air filter is blocked 5. Pipe connection leaks 6. Battery power is insufficient	Open to remove foreign bodies Replace the spray sheet and core Make corrections Wash Tighten Charge
Turn off the jet switch the pump motor sometimes starts and sometimes turns off	The injection switch is blocked with foreign matter The seal is not in place The water pump cover overflows	Open and remove foreign bodies Tighten with a screwdriver Tighten with a screwdriver
Motor rotation has abnormal sound	The screws fixing the water pump are loose	1. Tighten with a screwdriver
Not charged	The jack is damp and the surface of the latch is oxidized The line is broken	Replace Reconnect or replace the cable
Impeller does not rotate	The switch is not in the mixing position The impeller is blocked by impurities	Switch to mixing position and test again Remove impurities from the impeller The nozzle can be unscrewed for screws
Slow rotation of impeller (mixing type)	The battery voltage is too low The spray area leaks	Charge Tighten the ejector part to release impurities

CE DECLARATION OF CONFORMITY

WE SUZHOU TOLSEN TOOLS CO.,LTD. 198 HUASHAN ROAD, ZHANGJIAGANG, JIANGSU, CHINA

> Declare that the product 87378 LI-ION CORDLESS SPRAYER

Complies with the essential health and safety requirements of the following Directices: council directive 2006/42/EC

Standards and technical specifications referred to:

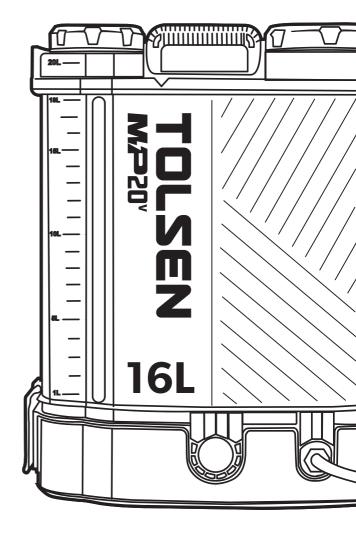
EN IEC 55014-1:2021 EN IEC 55014-2:2021

EN IEC 61000-3-2:2019+A1:2021 EN IEC 61000-3-3:2013+A1:2019

Authorised Signatory and technical file holder
Signed for and on behalf of:
SUZHOU TOLSEN TOOLS CO.,LTD.

198 HUASHAN ROAD, ZHANGJIAGANG,
JIANGSU, CHINA
WANG QING
Group Quality Director
on:07/02/2022





SUZHOU TOLSEN TOOLS CO.,LTD.

www.tolsentools.com

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