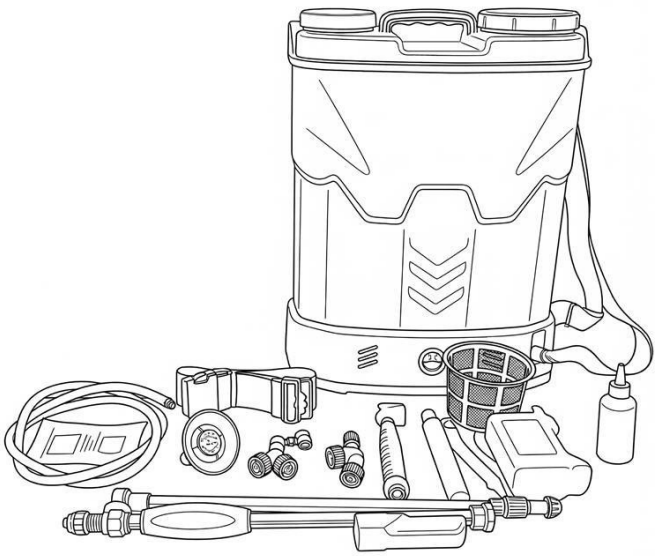
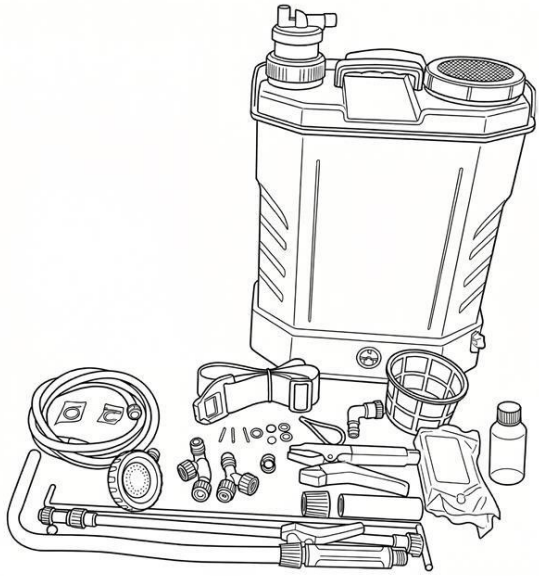
Pro-Tech GARDEN

Cordless sprayer





Instructions for use

Translation of the original instructions

Intended use

The cordless pressure sprayer is intended for watering gardens, weed control and pest control, as well as for plant care in private use, e.g. in the garden. The pressure sprayer is not intended for use with foodstuffs. Liquids with
high density. The device is not suitable for professional use. Use of the device for commercial purposes will void the warranty.
In particular, the spraying of the following substances is considered improper use:

- Solvents
- Liquids containing solvents
- Disinfectants
- Fertilisers
- Oils
- Lubricants
- Varnishes
- Staining agents
- Impregnating agents
- Flammable liquids
- Corrosive liquids, such as acids and alkalis

Minors must not operate the appliance – with the exception of young people aged 16 or over who have been trained and are under supervision. The operator or user is liable for any injury or damage caused to other persons or their property. The manufacturer is not liable for damage caused by incorrect use of the device or its improper operation. Any other use not expressly permitted in this manual may result in damage to the equipment and pose a serious hazard to the user.
The battery-powered pressure sprayer uses an integrated pump to create pressure in the hose between the pump and the handle. Using the nozzle, it is possible to spray liquid onto designated plants or surfaces. The device is designed for spraying a wide range of water-soluble chemicals. The functions of the controls are described below.

Safety guidelines

- Before using the appliance for the first time, please read this user manual and the safety instructions it contains carefully, and then keep it in a safe place.
- The appliance should be used with the utmost care, in accordance with the following safety rules.
- Failure to observe the safety rules may result in a risk of serious injury to the operator and health complications. The operating instructions should always be available whilst the appliance is in use.
- The device may only be used for its intended purpose.
- Children must not use the device. Young people under the age of 18 may only use the device under adult supervision and after receiving training.
- There should be no bystanders or animals present in the workplace. Never point the nozzle at people or animals.
- Liquid escaping under high pressure poses a potential hazard and may cause serious injury.
- The operator is responsible for the safety of third parties and animals in the area where the equipment is being used.
- The device may only be loaned to persons familiar with the operating instructions and safety regulations. The operating instructions should always be provided to those to whom the device has been loaned.
- The equipment may only be operated by persons who are physically fit. Fatigue or illness may cause reduced concentration and lack of attention.
- Persons under the influence of alcohol, drugs or medication must not operate the equipment.
- The device must only be used when it is in good working order.
- Always check the condition of the equipment before putting it into operation.
- Only original accessories supplied by the manufacturer for the specific model of the device are permitted.
- Reliable operation of the device and compliance with safety rules also depend on the quality of spare parts.
- Use only original spare parts manufactured using the correct technology, which guarantees the highest possible quality in terms of materials, dimensions, functionality and safety.
- Failure to use original parts may invalidate the warranty.
- When the equipment is not in use, it must be stored in a manner that does not endanger other people.
- The equipment must only be used in accordance with safety regulations and with due regard to the risk of accidents. The operator is responsible for safety and for any accidents or damage to property on the premises.

Safety rules for handling plant protection products

- The sprayer is suitable for use with liquid plant protection products, herbicides, pesticides and other liquid fertilisers available from authorised specialist retailers.
- Use only products approved by local regulations.
- Plant protection products may only be used for the purposes specified in the instructions for use and strictly in accordance with the recommendations contained therein, so as to prevent contamination of humans, animals and the environment, and so that biological, breeding and agrotechnical methods of plant protection are adopted first, thereby limiting the use of chemical substances to the absolute minimum.
- Holders are obliged to observe safety intervals and take precautionary measures when using plant protection products.
- Operators are required to keep records of treatments carried out using plant protection products, which should include the plants, plant products, or objects and surfaces on which the treatment was carried out, the dates on which they were carried out, and the name and dose of the plant protection products used.
- Records should be kept for at least four years.
- Never pour chemicals into public sewers, rivers or lakes!!! Particular care must be taken when pouring out, emptying and cleaning equipment so that residues do not pollute the environment.

- Collect any unused chemical residues in suitable containers and take them to specialist collection points for chemicals.
- Minimise direct contact with chemicals.
- People who carry out long-term chemical protection work should be examined regularly by a doctor.
- When handling chemicals (preparing spray solution, spraying, cleaning the sprayer), do not smoke, eat or drink, especially alcoholic beverages.
- If you feel unwell or dizzy, stop working immediately. When replacing used containers, the liquid container must be thoroughly cleaned.
- After washing the tank, fill it with water and run it briefly to thoroughly remove any residual liquid from the pump, pipes, inlet tube and nozzles. This will prevent the risk of dangerous chemical reactions between substances.
- Do not use the sprayer in small enclosed spaces – risk of operator poisoning from chemical spray.
- Use in greenhouses only with effective ventilation. After spraying, mark the greenhouses and allow them to air out to disperse chemical vapours.
- After spraying, empty and clean the spray tank.
- Wash your hands and face thoroughly under running water after work
- Change your clothes.

Handling and use of battery-powered tools

a) Only charge batteries in chargers recommended by the manufacturer. Charging batteries using a charger other than the one recommended may cause a fire.
b) Only use batteries designed for this purpose in power tools. Using other batteries may cause injury and fire.
c) Keep unused batteries out of reach of paper clips, coins, keys, nails, screws or other small metal objects that could cause a short circuit between the contacts. A short circuit between the battery contacts may cause burns or a fire.
d) If used incorrectly, fluid may leak from the battery. Avoid contact with this fluid. In the event of accidental contact, rinse with water. If the fluid gets into your eyes, seek medical attention. Leaking fluid from the battery may cause skin irritation or burns.
e) Do not use a damaged or modified battery. Damaged or modified batteries may behave unpredictably and cause a fire, explosion or injury.
f) Do not expose the battery to fire or excessive heat. Fire or temperatures above 130 °C may cause an explosion.
g) Follow all charging instructions and never charge the battery or battery-powered tools outside the temperature range specified in the user manual. Incorrect charging or charging outside the permitted temperature range may damage the battery and increase the risk of fire.

Protective clothing

- Operators of battery-powered sprayers should always wear personal protective equipment.
- Clothing must protect all parts of the operator's body from contact with the sprayed liquid and the objects being treated.
- This also applies to work involved in preparing the spray mixture and cleaning the sprayer.
- Recommended personal protective equipment includes:
- safety goggles to protect the eyes,
- a mask or half-mask to protect against inhalation of chemicals,
- a jacket and trousers, or a chemical-resistant coverall with cuffs. Trousers should be tucked into boots,
- protective gloves to protect the hands,
- boots with non-slip soles.
- Protective clothing should be suitable for the person wearing it and worn in such a way that chemicals cannot come into contact with the skin.
- Depending on the type of activity, protect your eyes and head with a hood or safety goggles.
- Avoid wearing loose coats, scarves, jewellery and other items of clothing that could get caught on branches and bushes.
- You should also take precautions if you have long hair, such as wearing a hat, a safety helmet or similar headgear.
- While working, your face and eyes must be protected by a face shield or safety goggles. When working in densely vegetated areas, you should wear a safety helmet. In the event of chemical contamination, change your clothing immediately.

Safety instructions for working with a pressure sprayer

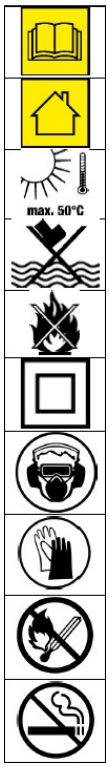
• When using the equipment, attention must be paid to various parameters, such as nozzles, pressure, boom height, wind speed, etc., to ensure that the target area is not missed during spraying.
• Use only water-soluble plant protection products.
• Never twist the reduction handle unless the hose is disconnected.
• Do not leave the sprayer in direct sunlight.
• Protect the pressure sprayer from frost.
• Disconnect the hose after use. Empty the tank after use.
• Children, animals and bystanders should keep away from the equipment.
• When the equipment is not in use, it must be stored in such a way that it does not pose a danger to people.
• The equipment must be protected against access by unauthorised persons.
• The equipment may only be put into operation if none of its parts are damaged. Pay particular attention to the tightness of all parts of the equipment.
• The equipment may only be put into operation if it is complete.
• The person operating the equipment must be well-rested, in good health and in good physical condition. You must not operate the equipment whilst under the influence of alcohol, medication or drugs that may impair your reaction time.
• Never spray in the direction of other people or animals – risk of injury!
• Take the wind direction into account!

• Operators should hold the sprayer facing away from the wind.
• In the event of black ice, damp conditions, snow, ice, work on slopes and uneven terrain, etc. Be careful – risk of slipping!
• Watch out for obstacles – risk of tripping!
• It is advisable to take breaks to prevent fatigue and exhaustion – risk of injury!
• Only work in good visibility conditions and with sufficient lighting.
• Carry out the work carefully so as not to endanger others.
• Do not carry out work whilst standing on a ladder or in other unstable places.
• Do not work near power lines! Risk of death due to possible electric shock!
• Wear suitable clothing and use appropriate equipment when using, filling or cleaning the appliance.
• To reduce the risk of eye injury, wear well-fitting safety goggles in accordance with standard EN166. Ensure that the safety goggles are securely fastened.
• Work clothing must fit snugly and must not get in the way.
• To ensure the safety of the user and others, always follow the safety instructions and, if in doubt, seek advice from a specialist. If necessary, complete the relevant training on the safe operation of the equipment.
• Clean the entire machine between using different plant protection products.
• Change out of work clothes contaminated with plant protection products immediately.
• For some plant protection products, it is necessary to wear protective clothing that is impervious to liquids.
• Wear a protective head covering when working overhead.
• Wear liquid-impermeable gloves that are resistant to plant protection products.
• Wear footwear that is waterproof and resistant to plant protection products, with non-slip soles.
• Never work barefoot or in sandals.
• Inhaling plant protection products can be hazardous to health. To protect against harmful effects on health or allergic reactions, use suitable respiratory protection.
• Follow the instructions in the plant protection product's user manual and comply with national safety regulations.
• Use the sprayer only in a well-ventilated area.
• Do not eat or drink whilst working with the sprayer.
• Do not direct the spray towards an open flame.
• Comply with local regulations.
• Avoid running the sprayer dry.
• Follow the instructions regarding personal protective equipment given in the instructions for use of the plant protection product. If necessary, wear safety goggles and gloves, or other recommended protective equipment.
• Do not use hot, corrosive, flammable liquids, or liquids containing alkalis or generating heat in the sprayer.
• Keep your hands and arms at a safe distance from the nozzle whilst the equipment is in operation.
• In the event of contact with chemicals, follow the instructions on the product being used and seek medical attention immediately.
• In the event of an accident or a malfunction during operation, switch off the equipment immediately. Treat any injuries properly or seek medical attention

Contact with pesticides

In case of inhalation
• Remove the affected person from the area where the pesticide was sprayed.
• Seek medical assistance if necessary
• In the event of respiratory arrest: call for help and then administer artificial respiration to the affected person.
In case of eye contact
• Keep the eyes open and rinse them immediately with clean water.
• Contact a poison information centre or seek medical advice.
In case of skin contact
• Remove contaminated clothing.
• Rinse the affected areas with clean water.
• Seek medical advice if necessary.
If swallowed
• Contact a poison information centre or seek medical advice.
• Drink water to dilute the pesticides.

Symbols



WARNING: Read the user manual and safety instructions carefully before using the device. Keep the manual in a safe place.

CAUTION: Only use the charger in dry areas.

WARNING: Do not expose the battery to temperatures above 50 °C.

WARNING: Do not expose the battery to water.

WARNING: Do not use the battery in potentially explosive atmospheres or in flammable environments.

Insulation class II

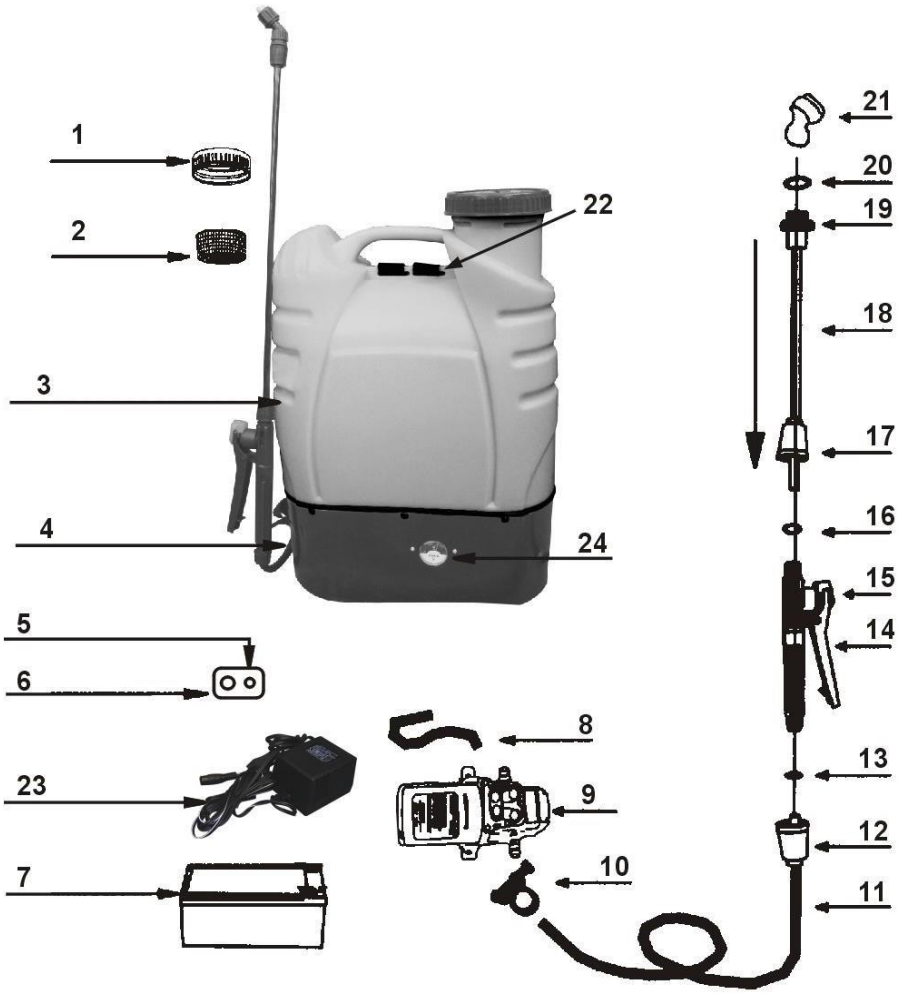
WARNING: It is recommended to use eye protection, ear protection and a dust mask.

CAUTION: Do not touch the tool with bare hands! Wear protective gloves! Gloves also protect against chemicals to prevent skin damage.

WARNING: No open flames are permitted near the sprayed liquid!

WARNING: No smoking whilst working!

Description of the equipment



1 Tank filler cap
2 Filter
3 Tank
4 Base
5 Charging connector
6 Power switch
7 Battery
8 Inlet hose
9 Pump
10 Clamp
11 Outlet hose
12 Nut
13 O-ring
14 Gun handle
15 Valve
16 O-ring
17 Nozzle nut
18 Extension
19 Nozzle coupling
20 O-ring
21 Nozzle
22 Strap holes
23 Charger
24 Voltmeter

Preparation for start-up

Warning! Before starting any assembly work, switch off the device and remove the battery.

ADJUSTING THE SHOULDER STRAP

1. Adjust the shoulder strap (22) to the desired length using the tabs. The shoulder strap (22) can be attached and removed by hooking or unhooking the hook onto the four hooks on the tank (3).

FITTING THE TELESCOPIC NOZZLE

1. Insert the nozzle (18) into the hole on the handle.

2. Slide the O-ring (16) and the cap nut (17) towards the bracket.

3. Tighten the cap nut (17) onto the bracket.

Caution! It is essential to check the hose connections. Any leaks must be rectified immediately. Do not use the device until this has been done.

During transport, or when the device is not in use, the nozzle should be inserted into the holder on the tank (3).

ADJUSTING THE TELESCOPIC NOZZLE

LENGTH ADJUSTMENT

The telescopic nozzle can be extended and retracted. The length must be adjusted so that you do not stand in the spray mist.

1. Unscrew the nut (19) anticlockwise until it comes loose.

2. Pull out and extend the telescopic nozzle (6) to the required length.

3. Screw the nut (19) clockwise until it is tight.

ADJUSTING THE SPRAY NOZZLE

Turn the spray head (21) at the end of the telescopic pole (18):

- anti-clockwise to achieve a wide spray pattern.

- clockwise to achieve a fine spray pattern.

Caution! Do not unscrew the spray head (21) completely. There is a risk of contact with pesticides.

Before starting the device, check that the spray head (21) is securely tightened. In this state, the spray head is closed. Do not turn the spray head (21) by more than 1.5 turns, otherwise the spray head (21) may become detached and, under certain circumstances, the user could come into contact with pesticides.

FITTING NOZZLES TO THE POLE

1. Slide the required nozzle onto the rod.

2. Insert the O-ring (20) and the cap nut towards the nozzle.

3. Tighten the cap nut onto the nozzle.

MIXING THE SPRAY SOLUTION



Use only chemicals approved for use with pressure sprayers.



Warning! Chemicals must be mixed strictly in accordance with the manufacturer's instructions! Incorrectly prepared mixtures may cause an explosion and the release of toxic fumes.



Follow safety precautions to protect against contact with or inhalation of hazardous substances. Wear suitable personal protective equipment in accordance with the chemical manufacturer's instructions!



Wear a dust mask and suitable protective clothing.

- Mix the spray solution in well-ventilated areas or in the open air!
- Have a cloth ready to wipe up any spilled solution immediately.
- Mix only the amount of spray solution required for the intended use.
- Avoid direct skin contact with the spray solution!
- Dispose of any remaining spray solution in accordance with the manufacturer's instructions.

FILLING THE TANK



To prevent the machine from starting accidentally, remove the battery.



Warning! Observe safety precautions to protect against contact with or inhalation of hazardous substances. Wear suitable personal protective equipment in accordance with the chemical manufacturer's instructions!



Before each use, check the device for visible damage, e.g. cracks. Also check that the nozzle is working properly.



Warning! Do not fill the device with liquids containing acids, corrosive substances or flammable liquids.



Warning! Do not fill the device with liquids containing acids, corrosive substances or flammable liquids. Before filling the tank with spray solution, check the device for leaks using water.



Before filling the tank with spray solution, check the unit for leaks using water. FILLING AN EMPTY TANK

1. Place the machine on a flat surface.

2. Turn the cap (1) anti-clockwise.

3. Check that the filter basket (2) is correctly positioned.

4. Carefully pour the liquid through the filter basket (2) into the tank.

While doing this, keep an eye on the scale in the tank so as not to exceed the maximum fill level!

5. Once filling is complete, tighten the cap (1) with both hands by turning it clockwise.

6. Check that the cap is secure.

REPLACING THE SPRAY MATERIAL

1. Turn the cap (1) anticlockwise.

2. Remove the filter basket (2).

• If there are chemicals in the tank:

3. Empty the machine's tank (3) into a suitable container.

4. Rinse the tank (3) with clean water.

5. Rinse the nozzle (18) with clean water.

6. Pour new spray solution into the tank (1).

Chemical residues may remain in the hose. The hose must be rinsed with clean water.

• If there is water in the tank:

7. Drain the tank (3).

8. Pour fresh spray into the tank (3).

CHARGING THE BATTERY

If the battery is hot, wait for it to cool down before charging. The charge status indicator on the device shows the battery charge level (24).

1. Insert the battery (7) into the compartment.

2. Connect the charger (23) to the charging socket (5).

3. Once charging is complete, disconnect the charger from the mains.

Before connecting the charger to the mains, ensure that its specifications match those stated on the type plate. Do not connect the charger to a mains supply with a higher voltage than required, as this could cause electric shock and damage to the device. Connecting to a mains supply with a lower voltage may damage the charger or the battery.

CAUTION! Only charge batteries on a flat, stable and non-flammable surface, at a sufficient distance from flammable materials.

WARNING! Incorrect charging of the battery may cause damage. Before inserting or removing the batteries, unplug the power cable from the socket (2).

Under no circumstances should you charge the batteries at an ambient temperature below 10 °C or above 40 °C.

• Before first use, fully charge the battery using the charger supplied with the device within 14 hours.

• To charge, connect the DC power connector of the supplied power supply to the battery's charging port (2) and plug the power cable into a mains socket.

• It takes approximately 12 hours to fully charge the battery.

• A full charge is indicated by the LED on the power adapter changing colour from red to green.

• The battery can be charged at any time and at any charge level.

• The average operating time is 6.5 hours and the maximum is up to 8 hours, depending on the pump's output.

WARNING! If you plan to leave the battery unused for a long period, such as six months, it is recommended that you take appropriate measures to maintain its capacity and prevent loss of performance. Here are a few tips for charging the battery in the event of seasonal non-use:

Fully charge the battery before storage:

Before storing the battery for a long period, ensure that it is fully charged. Batteries should be stored in a charged state to prevent deep discharge, which can shorten their service life.

Regular charging:

If the battery is stored for a long period, it is recommended that you charge it regularly, for example once a month. This helps to maintain the battery's charge level at an appropriate level and prevents deep discharge.

Avoid deep discharge:

Try to avoid situations where the battery is completely discharged, as deep discharge can negatively affect its ability to recharge.

Check the voltage:

Check the battery voltage regularly during storage. If the voltage drops below the level recommended by the manufacturer, consider recharging the battery.

Please note that recommended procedures may vary depending on the type of battery (e.g. lead-acid, gel, AGM), so it is always advisable to consult the user manual supplied by the battery manufacturer. Following these instructions will help keep the battery in good condition and ready for use after a period of storage.

Operating the equipment

Warning! Use appropriate personal protective equipment! Do not leave the unit filled with chemicals unattended! During breaks in operation, do not leave the unit in direct sunlight or near heat sources.

REMOVING/INSERTING THE BATTERY

1. Release the battery cover latch.

2. Tilt the battery cover downwards.

3. Insert the battery (7) into the holder until it clicks into place.

4. Connect the + and – cable terminals to the + and – terminals on the battery.

CHECKING THE BATTERY CHARGE LEVEL

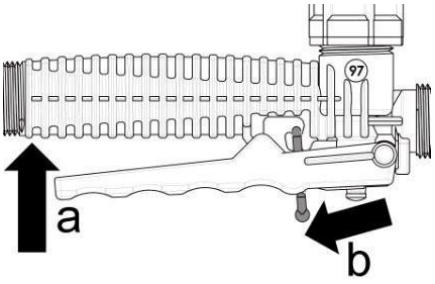
The battery charge level is indicated by the corresponding LED lighting up at the bottom of the front of the cover (24).

LED indicators on the battery (24) / control panel: When 3 LEDs are lit (red, orange and green): The battery is charged When 2 LEDs (red and orange) are lit: The battery is partially charged When 1 LED (red) is lit: The battery is flat – Charge the battery

Working with the sprayer

When using the sprayer, you must follow the safety rules set out in this user manual and the instructions below.
The sprayer must not be used in windy weather or during rain. This prevents the spray from drifting into other areas and being washed into the soil. Before spraying, check the current weather forecast for the area. We generally recommend
spraying early in the morning or in the afternoon, as these are the times when the weather is most often calm. Never spray near open

windows, doors, cars, children, animals or anything else that could be damaged by the chemicals. Take particular care whilst spraying. Ensure that you only spray in the designated area.



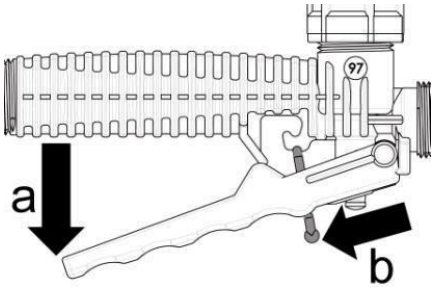
• Place the prepared sprayer on your back and adjust the shoulder straps and waist belt correctly.

• Hold the control handle with the valve in your hand and set the valve to the closed position (do not press the valve lever).

• Select the pump switch setting (I or II) suitable for the area being treated and the required liquid output. The selected spray pressure is achieved when the valve is closed and the pump switches off.
The pump switches on automatically if the pressure drops during spraying. This mode of operation ensures maximum use of the battery's capacity.

• Press the valve lever (a) and start spraying.

• To set continuous spraying, after pressing the valve lever (a), lock it in this position by sliding the red safety catch (b) in the direction of the arrow, then release the valve lever. To change the setting, press the valve lever again and slide the red safety catch towards the sprayer.



• The red safety catch (b) can also be used to prevent the valve from opening accidentally. To do this, pull the valve lever slightly away from the handle (a) and move the safety catch (b) in the direction of the arrow shown in the adjacent illustration. To release this safety catch, follow the steps in reverse order.

If the spray pressure drops significantly and the pump fails to maintain the correct working pressure at the current switch setting, stop spraying and recharge the battery.



To start the sprayer pump, set the toggle switch (1) to position I or II. There are 2 operating modes:

a) Full pump power mode (I).

b) Mode with pump power regulated by a potentiometer (II).

The potentiometer (3) is used for continuous adjustment of the pump output. Increasing the pump output increases the spray range.



To check the battery charge level, check the battery charge indicator light.
The indicator has 3 status LEDs. The maximum number of lit LEDs means that the sprayer is fully charged. The minimum number means that the battery will soon be discharged. If the LEDs are not lit – the battery is completely discharged.

END OF SPRAYING, CONSUMPTION OF WORKING FLUID IN THE TANK

Once the working fluid in the tank has been used up, as soon as the pump starts drawing in air (indicated by a different sound from the pump and a fine mist coming out of the nozzle), it is essential to stop spraying by setting the pump switch to the O position. The remaining amount of liquid in the tank is less than 50 ml. At this point, the tank must be refilled with a fresh dose of liquid, or, if the operator is finishing spraying, approximately 1 litre of clean water must be added and the diluted liquid sprayed onto the area that has already been treated. After switching off the pump (switch in the O position), with the valve open – valve lever pressed down – point the nozzle downwards, above the sprayed area, to remove any remaining liquid from the high-pressure pipe, valve, boom and nozzle.

Never run the pump when the working fluid tank is empty. Running the pump dry will cause very rapid and permanent damage to the pump. Damage caused by operating the pump without working fluid is not covered by the warranty.

After finishing work, in accordance with the instructions given in the section (Draining and cleaning the working fluid tank), the working fluid tank must be emptied and cleaned so that the equipment is ready for storage. Wash your hands and face thoroughly with soap and change out of your work clothes.

STARTING THE MACHINE AFTER THE WINTER SEASON

• Check the battery compartment and the nozzle/spray head for dirt and clean them if necessary.

• The system and water supply must be checked for leaks.

Operation and maintenance of the sprayer

GENERAL PRINCIPLES FOR THE OPERATION AND MAINTENANCE OF A PRESSURE SPRAYER

After the first 5 hours of operation, check that all screws and nuts accessible from the outside (without removing covers or casings) are properly tightened, and tighten them as necessary. Always ensure, before starting work, that the equipment is complete, in working order and in a condition that guarantees safe use. Carry out maintenance work regularly. If professional repairs are required, contact an authorised service centre. The user is liable for any damage or harm caused by carrying out repairs requiring expert intervention themselves, or by neglecting the required maintenance activities, as well as for any damage to the equipment resulting from incorrect storage.

CHECKING THE WORK FLUID FLOW RATE

Before the next spraying season (on average once a year), we recommend checking the actual working fluid flow rate. To do this, fill the working fluid tank with water to the maximum level and then, with the pump switch set to one of the positions,
spray for a certain period of time, e.g. one minute. After the specified time has elapsed, switch off the equipment and, after refilling the liquid tank to the maximum level again, measure the amount of water consumed. The measured amount of water (after conversion, if the time was other than one minute) will be the flow rate in litres per minute at the given pump switch setting. If the measured flow rate is too low, this may be due to a blocked outlet nozzle. The nozzle must be cleaned and the measurement repeated. If the measured flow rate is too high, this may be due to a damaged,
or a worn outlet nozzle. The outlet nozzle must be replaced with a new one. Once the correct fluid flow has been verified, you must also check that the nozzle produces a smooth, fan-shaped spray.

EMPTYING AND CLEANING THE WORK FLUID TANK

To empty the working fluid tank, turn the sprayer upside down and pour the remaining fluid into a separate container. The tank must then be cleaned with a special cleaning agent for removing pesticides, e.g. PESTICLEAN, or similar. Then dry the sprayer before closing the lid. You can use a dry cotton cloth to ensure it is completely dry.

The nozzle, filters and strainer must not be blown out with your mouth.

Do not spray water onto the device or clean it under running water. There is a risk of electric shock and damage to the device.

Before cleaning the appliance, switch it off and remove the battery. Risk of electric shock! The appliance must be cleaned after

every use.

CLEANING THE INTERNAL PARTS AFTER USING THE DEVICE WITH WATER

• Drain the tank via the filling hole and wait until the tank is completely dry.

CLEANING THE INTERNAL PARTS AFTER USING THE DEVICE WITH CHEMICALS

• Clean the tank (3), nozzle (18) and hose (11) with clean water and use personal protective equipment, e.g. gloves, safety goggles.
Remove liquids in accordance with the manufacturer’s instructions for the water-soluble plant protection product used.

EXTERNAL CLEANING

• Clean the outside of the appliance with a damp cloth. Do not use any cleaning agents or solvents; these could damage the plastic parts of the device. Ensure that no water gets inside the device. Water ingress into the power tool increases the risk of electric shock.

CLEANING IN THE EVENT OF A CLOGGED NOZZLE / CLOGGED SPRAY HEAD

Never blow into a blocked nozzle or spray head with your mouth; instead, follow these steps when cleaning:

1. Unblock the hole(s) in the nozzle or spray head by removing any residue using a needle or a thin wire.

2. Rinse the nozzle/spray head with clean water.

3. Wait until the nozzle or spray head has dried.

FILTER REPLACEMENT

Damaged or worn filters must be replaced. Accessories and spare parts can be purchased through the service department.

REPLACING THE FILTER BASKET

1. Place the appliance on a flat surface.

2. Unscrew the cap (1) anti-clockwise.

3. Remove the old filter basket (2).

4. Insert the new filter basket (2).

5. Tighten the cap (1) clockwise using both hands.

REPLACING THE FILTER IN THE HOLDER

1. Unscrew the holder sleeve anti-clockwise.

2. Remove the old filter.

3. Insert the new filter.

4. Tighten the holder clockwise again.

STORING THE EQUIPMENT

After use, empty and clean the sprayer. The sprayer should be stored in a dry, well-ventilated area protected from frost, where the temperature does not exceed 35 °C. The equipment must be secured to prevent unauthorised persons, particularly children, from operating it. The device must be stored in a safe place, away from open flames and other potential sources of fire hazard. If the sprayer is not going to be used for a long period, it is recommended to charge the battery once a month using the supplied charger. This will prevent the battery from becoming deeply and completely discharged. This also applies to the additional, second battery, if purchased.

STORAGE OF BATTERIES

Storing 12 V batteries with a capacity of, for example, 7–15 [Ah] requires compliance with several important conditions and requirements to maintain their performance, safety and capacity. Here is some important information:

Storage temperature:

Gel batteries retain their properties best at moderate temperatures. It is recommended to store them in a place with a temperature between 20 °C and 25 °C. Avoid extreme temperatures, as these can affect the performance and service life of the batteries.

Ambient humidity:

Gel batteries should be stored in a dry place to prevent corrosion and other problems associated with humidity. A damp environment can lead to a loss of insulation and a reduction in the battery's lifespan.

Protection against mechanical damage:

Batteries should be stored in a place where they are protected from accidental mechanical damage. Avoid drops, impacts and other activities that may affect the integrity of the battery.

Charging before storage:

It is recommended that gel batteries be charged to approximately 70–80% before storage. Batteries left in a fully discharged state for a long period of time may be damaged.

Regular charging:

In the case of long-term off-season storage, it is recommended that batteries be fully charged regularly (approximately 1 to 2 times per quarter) to maintain their capacity. Leaving batteries uncharged for long periods may lead to a loss of capacity or complete wear and tear.

Separation from other batteries and power sources:

Batteries should be stored away from other batteries and power sources to prevent accidental short circuits or overvoltage, which could cause damage or even pose a fire hazard.

Electrical safety:

Stored batteries should be protected against short circuits by insulation and the use of suitable electrical safety devices. Adherence to the above recommendations will help keep gel batteries in good condition, maintain their capacity and performance, and ensure safety during storage.

Instructions for spraying

PREPARATION OF THE WORKING FLUID, FILLING THE FLUID TANK

When using chemical products, always follow all safety rules set out in these instructions for use (in particular the safety rules regarding contact with plant protection products) and the recommendations provided in the manufacturer's instructions for the chemical product.

FILLING THE SPRAY TANK

Before filling the liquid tank, always ensure that the drain valve is in the closed position (the lever is set at a right angle to the drain hose). There is a liquid level gauge on the side of the tank to assist with filling and preparing the working fluid. The maximum capacity of the sprayer's working liquid tank is 16 or 20 litres (depending on the model). Never fill above the top mark on the scale.
Before filling the working fluid tank, ensure that the strainer is in place in the filler opening. It is essential that the strainer is in place when filling the fluid tank. The strainer has filter holes with a diameter of 0.55 mm. If the strainer is damaged, it must be replaced with a new original strainer purchased from an authorised service centre. Before filling the liquid tank, switch off the sprayer pump, remove the sprayer from your back, place it on a stable surface and check that the liquid valve on the control handle is in the closed position. Do not overfill the liquid tank. Place an impermeable sheet under the sprayer to prevent any liquid from seeping into the ground or drains. Wipe up any spilled liquid immediately. After filling the liquid tank with the correct amount of working liquid, tighten the cap on the filling opening securely to prevent any leakage of chemicals.

Never prepare or store the working solution in the sprayer tank. RECOMMENDED

VOLUMES OF WORKING SOLUTION

When preparing the working mixture, follow the manufacturer's instructions. Prepare only the amount of working mixture required for the current application. General guidelines for selecting the quantity of plant protection products:

Ground-level plants – 0.3–0.5 l per 10 m²
Low shrubs and bushes – 1.0–1.5 l per 10
m²
Climbing plants, dense shrubs – 0.5–1.0 l per plant
Large shrubs – 2.0 l per plant

PREPARATION OF THE WORKING SOLUTION

Prepare **plant protection products** only in open areas. They must not be prepared in enclosed spaces or in areas where food or feed is stored.

Plant protection products in granule form:

Prepare the working solution in a separate container. Never use the sprayer tank for this purpose. Mix thoroughly and then pour into the sprayer tank. A strainer must be used when filling the tank.

Liquid plant protection products:

Fill the sprayer tank with 1/4 of the prescribed amount of water. In a separate container, mix the chemical product with water according to the manufacturer's instructions. When pouring the liquid into the tank, use a strainer in the filling opening. Add the remaining water according to the manufacturer's instructions for the chemical product. Use the spray nozzle to mix the liquid in the sprayer tank.

Biological plant protection products:

After mixing, it is recommended to filter the liquid through a strainer before pouring it into the sprayer tank. This will prevent the strainer in the filling opening from becoming blocked too quickly.

IDENTIFICATION OF CHEMICALS IN USE

To identify containers of the chemicals used, you can use the labels supplied with the sprayer, which specify the types of chemicals:

Herbicide – herbicides

Insecticide – insecticides

Fungicide – fungicides

IMPORTANT Never fill the liquid tank with a different type of chemical without first thoroughly emptying it of any remaining liquid and washing the liquid tank, pump, hoses and sprayer. After washing the tank, fill it with water and run it for a short time
Run the system to thoroughly remove any remaining liquid from the pump, hoses, sprayer and nozzles. This will prevent the risk of dangerous chemical reactions between substances.

Technical specifications

Product code	PT40561	PT41662
Model	HY-16X-2309A	HY-20E-2023A
Tank capacity	16 l	20 l
Battery	12 V / 8 Ah	12 V / 12 Ah
Battery type: lead-acid	lead-acid	lead-acid