



Instruction Manual

MAN190714 REV C 28/04/25

**PRO GRADE RECHARGEABLE SPRAYER 15L
190714**



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WARNINGS

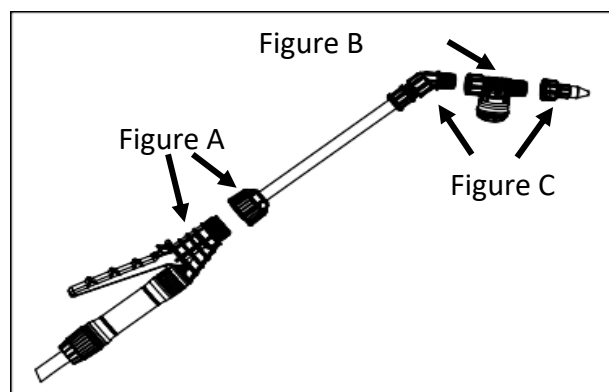
- This sprayer is designed and manufactured solely for the purpose of applying agricultural chemicals. Under no circumstances may it be used for any other purpose.
- Read owner's manual completely before operating this sprayer.
- Test the sprayer with water before using chemicals.
- Before using chemicals refer to the chemical manufacturer's label and safety instructions for safe handling procedures and recommended personal protective clothing and safety equipment.
- Never use flammable liquids, caustics, acids, chlorine or hot water in this tank.
- Do not use sprayer near open flame or anything that could cause ignition of the spray.
- Do not leave sprayer in the sun when not in use.
- Spray when the air is calm to prevent drift of chemicals. Do not spray in windy conditions.
- Always inspect hose and all the hose connections before each use. A damaged hose or loose hose connection can result in unintended exposure to the pressurised chemical resulting in serious injury or property damage.
- Do not store chemicals in this tank.
- Dispose of empty chemical containers and chemical residues in accordance with the instructions supplied by the chemical manufacturer.
- Clean and rinse sprayer thoroughly after each use and before and maintenance.
- Never attempt to alter sprayer from original condition.
- Exercise care to ensure proper stability when carrying or operating in hilly or uneven terrain, particularly if the ground is wet or loose. Wear non-slip shoes
- Keep the sprayer and all chemicals out of the reach of children.

BATTERY CHARGER WARNINGS

- When using the battery charger ensure it is in a dry environment and do not leave the charger where it may rain.
- The battery charger is not to be used by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they have given supervision or instruction.
- Children should be supervised not to play with the battery charger.
- Do not use this charger to charge Non-Rechargeable battery packs.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons to avoid a hazard.

Assemble Extension, Shut-Off, Nozzle and Spray Optimizer:

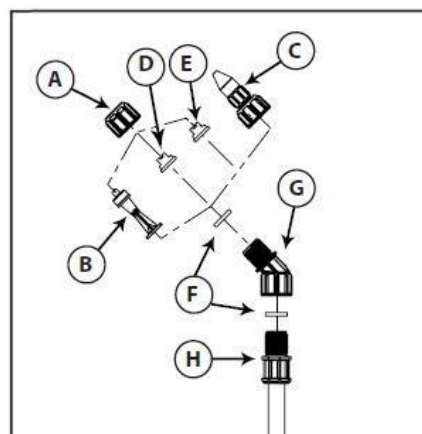
1. Install the extension “wand” onto the shut-off assembly and tighten the nut securely. (See Figure A)
2. If included the optional Spray Optimiser for low pressure (low drift) applications can be installed. This will help prevent spray drifting into undesired areas. (**Do not over tighten, actual position will vary.** See Figure B)
3. Install selected nozzle onto the end of the extension or optimiser (if installed) and tighten securely (See Figure C)







SELECT USING NOZZLE CHART BELOW:

(Nozzle selections vary by model)

- A. Cap Nut
- B. Foaming Nozzle
- C. Adjustable Cone Nozzle
- D. Red High-Volume Fan Nozzle
- E. Yellow Low-Volume Fan Nozzle
- F. Flat Seal
- G. Adapter Elbow
- H. Extension

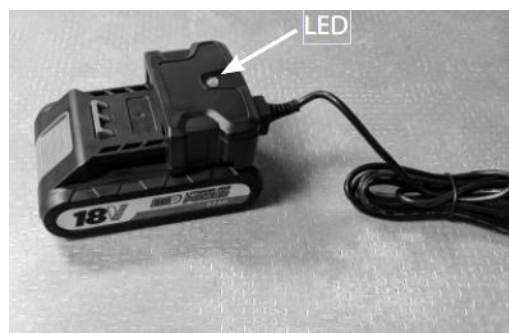
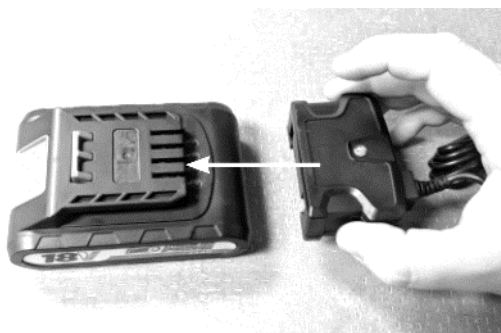


<u>ADJUSTABLE CONE USES</u>	<u>FOAMING NOZZLE USES</u>
 <ul style="list-style-type: none"> • Spot spraying in or around flower beds, trees, and shrubs. • Edging along fences, driveways, and walkways. • Preparing garden beds for planting of ornamentals and vegetables. 	 <ul style="list-style-type: none"> • Spot spraying in flower beds, walkways, driveways, and patios, around trees and shrubs. • Edging along fences, driveways and walkways. • Reduces drift.

<u>RED HIGH VOLUME FAN NOZZLE USES</u>	<u>YELLOW LOW VOLUME FAN NOZZLE USES</u>
 <ul style="list-style-type: none"> • Lawn replacement. Kill lawn and weeds before planting a new lawn. • Preparing large areas for planting of ornamental and vegetable gardens. 	 <ul style="list-style-type: none"> • For precision spraying in confined areas such as gardens and flower beds.

Charging the Battery: (18V 2.1Ah Battery)

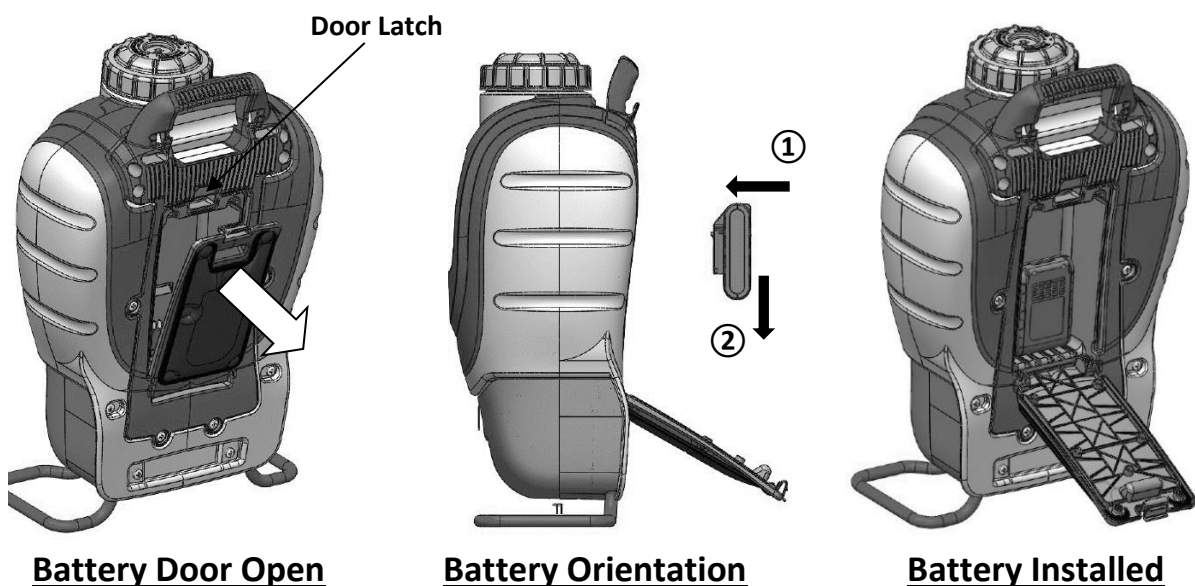
1. In a covered, dry, dust-free location, insert the Charger Plug into a 230V wall outlet. The light on the Charger Body should turn red and stay on, indicating it is connected to power.
2. If not already done, remove the Battery from the Sprayer by following instructions in section Removing the Battery.
3. Fully slide the Charger Body onto the Battery. The light on the Charger Body should flash red twice to indicate the Battery is connected. The light will then change to flashing green to indicate it is correctly charging.



- a. If the red light remains steady and the green light does not start flashing, the Charger is unable to recognize the Battery and begin charging because the Battery has been damaged. If this happens the Battery must be replaced.
 - b. If the light on the Charger Body continues to flash red only, the Battery is too hot to be safely charged. This can happen when the Battery is used heavily in very hot weather or if the Battery is stored in a very hot location (such as in an enclosed vehicle or storage unit during very hot weather.) If this happens the Battery must be allowed to cool before it can be charged.
 - c. If the light on the Charger Body flashes red and green alternately, this means the Battery has been damaged and cannot be charged within the safe charging time limit. The Battery must be replaced.
4. Ensure the Battery and Charger are placed where they will not be exposed to liquids, falls, or other sources of damage for the duration of the charging period.
 5. When charging is complete the light will remain green and stay on constantly. Charging time will vary depending on Battery condition at the start of charging. Charging time for a 2.1Ah Battery should not exceed 3.5 hours.
 6. Remove the Battery from the Charger after it is fully charged. Batteries should not be stored on the Charger. To ensure optimal Battery life the Battery should be charged at least once every 3 months when not in use.
 7. Unplug the Charger from the outlet when not in use.

Inserting the Battery:

1. With the Sprayer on a stable surface set the power switch into the OFF (O) position.
2. Open the Battery Compartment by pushing down on the Door Latch located at the top of the Door and swing the Door open and downward.
3. Insert the Battery so that the Battery Button is facing upward and into the Battery Compartment.
4. Slide the Battery down into the Battery Dock so that it engages the Rails and slides in until it latches into place.
5. Ensure the Battery is latched in place by lifting gently upward on the Battery. The Battery should not lift up if properly latched.
6. Close the Door and ensure that the Door Latch (located at the top of the Door) is engaged.



Removing the Battery:

1. With the Sprayer on a stable surface set the power switch into the OFF (O) position.
2. Open the Battery Compartment by pushing down on the Door Latch located at the top of the Door and swing the Door open and downward.
3. Depress the Battery Button (located on the top rear surface of the Battery when installed) and lift the Battery until it releases from the Battery Dock.
4. Remove the Battery from the Battery Compartment.
5. Close the Door and ensure that the Door Latch (located at the top of the Door) is engaged.
6. Store the Battery indoors in a warm, dry location out of direct Sunlight and away from any sources of moisture or intense heat.
7. To ensure optimal Battery life the Battery should be charged at least 3 months when not in use. See Charging the Battery.

Battery Charge Indicator:

This Sprayer is equipped with a Battery Charge Condition Indicator. With the Power Switch in the ON(I) position the Battery charge condition can be displayed by pressing the Battery Charge Indicator Button. LED lights, located near the Button will illuminate for 5 seconds to indicate the approximate Battery charge, according to the following meaning:

Number of LED's Illuminated	Charge Remaining
4 LED's	100%
3 LED's	75%
2 LED's	50%
1 LED's	25%
0 LED's	No charge remaining (Battery must be charged in order to use).

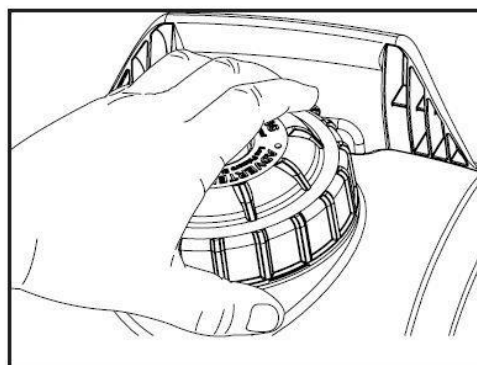


*NOTE: Actual Battery life will vary depending on spraying technique, liquid sprayed, and nozzle used.

Filling:

Test the sprayer with clean water prior to use. Always refer to chemical manufacturers label before adding chemical.

1. Remove the cap from the tank.
2. Make sure the filter basket is in place in the neck of the tank. The filter basket includes the seal and must be in place to prevent leaks.
3. Check to make sure the In-tank filter in the bottom of the tank is in place and clean.
See [In-Tank Filter Maintenance](#).
4. Fill the tank with water and chemical to the desired level.
5. Reinstall the cap.



Spraying:

1. A Battery must first be inserted into the Battery Dock in the Battery compartment for the Sprayer to operate. Follow the instructions for *Inserting the Battery*.
2. Set the Power Switch into the ON(I) position. If the Sprayer has not been used recently there will probably be a low, audible hum, indicating the Pump has turned on and is building pressure in the Hoses. If the Sprayer was used recently, and still has pressure in the Hoses, the Pump may not turn on until the Shut-off is opened (Lever depressed).
3. Aim the Wand in the desired direction of spraying and depress the Shut-off Lever.
4. For continuous spraying, depress the Lever and rotate the lock to hold the Lever in the depressed position.
5. Unlock, if needed, and release the Shut-off Lever to stop spraying.
6. To turn off the Sprayer set the Power Switch into the OFF(O) position.
7. Always remove any chemical and clean the Sprayer when finished use.

Flow rate and pressure:

Sprayer flow rates are typically measured in litres per minute(lpm). As with any electric pump, the spraying pressure and flow rate are determined by a combination of the pump performance and nozzle characteristics. Pressure and flow rates can be changed by using different nozzles. This Sprayer contains a pump that is optimised to spray 0.75 lpm at a pressure of 40psi, but is capable of a wide range of pressures and flow rates with little change in Battery life. Pressure and flow rate will vary depending on actual nozzle used. It is the responsibility of the user to select an appropriate nozzle for the desired application.

Determining Actual Flow Rate:

For Typical flow rates for this Sprayer range from 0.57 lpm to 1.13 lpm. The actual flow rate for any nozzle can be measured by spraying into a suitable container for 1 minute, then measuring the volume of liquid in litres in the container. This amount is equal to the flow rate litres per minute(lpm).

Maintenance



Cleaning:

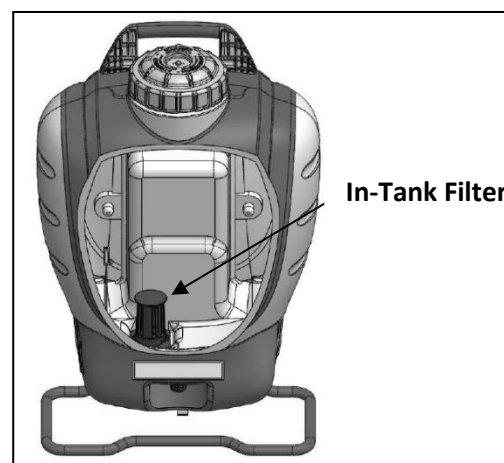
1. Fill the tank with clean tap water. Replace the cap and tighten securely. (Never use hot water for cleaning)
2. Agitate the tank to rinse the chemical from the tank walls.
3. Remove the cap and empty the contents into gravel or bare soil or according to chemical manufacturers recommendations.
4. Refill the tank with clean tap water. Replace the cap and tighten securely.
5. Pressurise the tank as described in the Pressurising and Spraying section.
6. Direct the nozzle away from you and activate the shut-off for at least 30 seconds to clean the pump, hose and shut-off.
7. Remove the cap and empty the contents.
8. Repeat steps 4 - 7 until thoroughly cleaned. Remove nozzle when flushing pump system. Clean nozzle before replacing.

Sprayer Storage:

1. Never store sprayer with liquid in any part of sprayer especially in freezing or frosty conditions.
2. The Sprayer tank should be hung upside down, with the cap removed, to dry completely.
3. Do not store or leave any solution in the tank after use.
4. Store in a dry location out of direct sunlight.
5. Keep the sprayer and all chemicals out of the reach of children.

In-Tank Filter Maintenance:

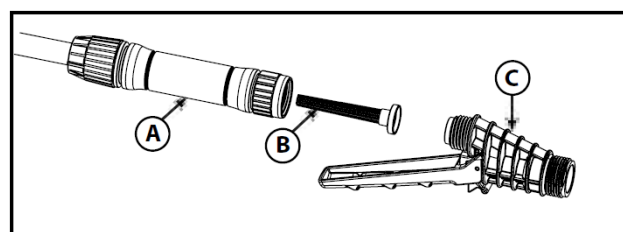
1. Ensure the Power Switch is in the OFF (O) Position.
2. Remove the Battery from the Battery Compartment.
3. Remove the Tank Cap and Strainer Basket. Rinse strainer with clean water to remove any debris.
4. Rinse and empty the Tank to remove any dirt, debris, or residue.
5. Reach into the Tank and carefully grasp the cylindrical Filter located at the bottom of the Tank.
6. Turn the filter approximately 1/8 of a turn anti clockwise until it stops turning.
7. Pull up on the Filter and remove it from the Tank.
8. The Filter can be cleaned by carefully rinsing from the inside to the outside. Be sure not to tear or damage the mesh. Any damage to the mesh may allow debris to enter the pump and cause clogging or damage to the pump.
9. If the Filter is damaged or too dirty to permit cleaning, it must be replaced with a new Filter **P/No. 183418**.
10. To re-install the Filter gently set it back over the Filter Base in the bottom of the Tank, and slowly turn the Filter until the locking tabs on the Filter Base align with the grooves in the Filter. The Filter will drop downward approximately 3 mm where this happens.
11. Push down on the Filter until it stops, approximately 6 mm, then turn the Filter approximately 1/8 turn clockwise until it stops.



Shut-off Maintenance:

Always ensure the sprayer is turned off and any residual pressure in the spray lance is discharged by activating the gun trigger

1. Unscrew the handle from the shut-off assembly.
2. Remove the filter from the shut-off assembly.
3. Clean any debris from inside the handle, shut off assembly, or the filter by rinsing with clean water.
4. Reassemble the components as shown and tighten all connections securely.



A. Handle
B. Filter
C. Shut-off Assembly

Nozzle Maintenance:

1. If nozzle clogs, remove and disassemble the nozzle assembly.
2. Clean the openings of any obstructions and reassemble.

Harness Installation:

1. For each side, remove the small plastic clips from the two shoulder strap loops and thread each loop through the slots at the top of the carry handle. Replace the clips through the loops and pull strap securing the two shoulder straps in place. (Figure 20)
2. To install lower end of the straps, remove strap from top portion of buckles and place around the foot stand, starting from underneath. (See Figure 21)
3. Loop strap through the first section of buckle. (See Figure 22)
4. Next loop strap through other section of buckle and tighten (See Figure 23). Adjust the shoulder pads and strap length for a comfortable fit.



Figure 20



Figure 21



Figure 22



Figure 23

Troubleshoot

PROBLEM	REASON	SOLUTION
Sprayer will not turn (No audible hum of the pump.)	<ol style="list-style-type: none"> 1. Battery inserted incorrectly. See Inserting the Battery. 2. Battery not charged. Check Battery condition. See Battery Charge indicator. 3. Power Switch in the OFF(O) position. 4. Battery damaged, overheated, or non-functional. Visually inspect the Battery for damage. Use the Charger to diagnose any Battery problem. See Charging the Battery. 5. Hose is already pressurised, so the pump has turned off automatically. 	<ol style="list-style-type: none"> 1. Insert Battery correctly 2. Charge Battery as needed. See Charging the Battery. 3. Set the power Switch to the ON(I) position. See Spraying. 4. Replace Battery if damaged or non-functional. Allow Battery to cool if overheated. 5. Open the Shut-off (depress Lever) to see if the Sprayer starts spraying and the Pump turns on.

Troubleshoot (cont.)

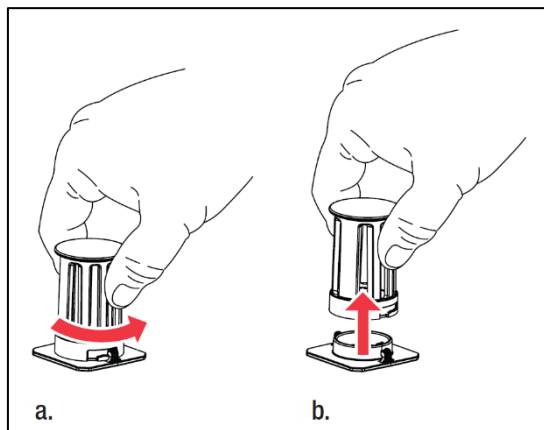


PROBLEM	REASON	SOLUTION
Sprayer will not stop spraying when shut-off lever is released.	Shut-off lock on spray handle is locked on.	Squeeze shut-off lever and disengage the lock, See Spraying .
Sprayer turns on but only sprays at low pressure.	<ol style="list-style-type: none"> 1. Shut-off clogged. 2. Nozzle clogged. 3. Pump not yet primed. 4. Oversized nonstandard nozzle fitted or leak 	<ol style="list-style-type: none"> 1. Clean Shut-off. See Shut-off Maintenance. 2. Clean Nozzle. See Nozzle Maintenance. 3. Allow time for pump to prime up to 30 seconds.
Pump will not prime.	<ol style="list-style-type: none"> 1. Low liquid level in Tank. 2. Pump was run dry without liquid prior to refilling Tank. 3. Chemical residue build-up in Tank (likely also in Pump) due to improper or inadequate cleaning. 4. In-Tank Filter improperly installed, missing, or damaged, allowing debris to enter Pump. 	<ol style="list-style-type: none"> 1. Add liquid to Tank. 2. Flush water into the tank sump. See Manually Priming the Sprayer Pump 3. Clean sprayer. See Cleaning. If necessary, repeat with warm water and mild detergent mixture, allowing mixture to stay in pump for up to 1 hour prior to rinsing.
Hose leaks at tank connection.	Cracked, swollen or faulty hose.	Replace hose.
Hose leaks at shut-off.	Loose or damaged fitting or hose	Adjust or Replace shut-off assembly.
Nozzle drips when shut-off lever is released.	<ol style="list-style-type: none"> 1. Dirt or debris in shut-off valve. 2. Damaged O-ring or seal in shut-off (Service Kit 183863) 	<ol style="list-style-type: none"> 1. Clean shut-off as described in Shut-off Maintenance section. 2. Service shut-off seals as described in Shut-off Maintenance section.
Nozzle tip leaks	Flat seal is missing or damaged.	<ol style="list-style-type: none"> 1. Instal Replace flat seal at extension tip. See Assemble Extension, Shut-off Nozzle, and Spray optimize. 2. Replace Flat Seal.
Poor Spray Pattern, partial spray or complete stoppage.	<ol style="list-style-type: none"> 1. Nozzle partially clogged. 2. Nozzle damaged. 	<ol style="list-style-type: none"> 1. Clean nozzle. See Nozzle Maintenance. 2. Replace Nozzle.
Battery will not Charge	<ol style="list-style-type: none"> 1. No lights illuminated on Charger (not plugged into outlet or outlet not functioning). 2. Red light illuminated on Charger, no green light (Charger cannot recognize Battery). 3. Red light continues flashing on Charger (Battery temperature too high for safe charging). 4. Red and Green lights flash alternately on Charger (Battery cannot be charged.) 	<ol style="list-style-type: none"> 1. Plug Charger into outlet, check outlet is functioning. 2. Refer Charging the battery, Replace Charger. 3. Allow batter to cool, Refer Charging the battery . 4. Refer Charging the battery

When first operating a new battery-powered backpack sprayer or after extended storage, the pump MAY need to be manually primed, once, prior to use.

Manually Priming the Sprayer Pump:

1. Remove all liquid from inside of the tank and rinse the tank of free of residual chemical (if any was used.)
2. Remove the red cylindrical filter from inside of the tank
 - a. Turn the filter approximately 1/8 of a turn anti clockwise until it stops turning.
 - b. Pull up on the Filter and remove it from the Tank.



3. Turn the power switch to the "ON" position.
4. Depress the trigger lever and lock in place to keep the valve open. This allows fluid to flow, once the pump is primed.
5. Insert a regular garden hose into the tank sump that is now exposed after removing the cylindrical filter but do not turn the water on yet.
6. Turn hose tap on and continue to hold the hose in the tank sump to charge the tank inlet with water
7. Once water is flowing out of spray gun, the pump is primed and the hose may be turned off, leaving some water in the tank to recirculate.
8. Release the trigger lever and turn the power "OFF".
9. Empty the tank (if needed) and reinstall the red filter.
10. The backpack sprayer is ready for use.



<https://qrcodes.pro/xPklhw>



	Code	Description
1	183865	LID
2	183866	FILTER BASKET
3	183862	NOZZLE KIT WITH FOAMING NOZZLE
4	183859	SHUTOFF ASSEMBLY (TRIGGER ASSY)
5	183863	SHUT-OFF REPAIR KIT
6	183860	LANCE STAINLESS STEEL 21INCH
7	183861	LANCE POLU 21 INCH
8	183411	BATTERY PACK 18V 2.1AH SUIT 190714 KNAPSACK
9	183530	BATTERY CHARGER 18V STANDARD SUIT 190714 KNAPSACK
10	183418	FILTER IN TANK SUIT RECHARGEABLE 190714
11	183420	SHOULDER HARNESS SUIT RECHARGEABLE 190714