

REVOLT

A BRAND OF MASTER MANUFACTURING

INSTRUCTIONS FOR ASSEMBLY, OPERATION, SERVICING & STORAGE

RECHARGEABLE BACKPACK SPRAYER



800.825.5397

RBPS-M

www.MASTER-MFG.com

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IMPORTANT NOTE:

THE REVOLT SERIES BATTERY PACK IS NOT CHARGED OUT OF THE CARTON. BEFORE USING THE BATTERY PACK AND CHARGER, READ THE SAFETY INSTRUCTIONS IN THIS MANUAL. THEN FOLLOW ASSEMBLY AND CHARGING PROCEDURES OUTLINED.

INTRODUCTION

Congratulations on the purchase of your REVOLT Rechargeable Backpack Sprayer. This sprayer has been manufactured to provide years of dependable and efficient use in spraying a wide range of agricultural pesticides, herbicides and other non-flammable liquids.

IMPORTANT NOTE:

THE PURPOSE OF THIS MANUAL IS TO ASSIST YOU IN THE ASSEMBLY, OPERATION, SERVICING AND STORAGE OF YOUR SPRAYER. PLEASE READ THROUGH THIS MANUAL COMPLETELY TO FULLY UNDERSTAND HOW TO OPERATE AND MAINTAIN YOUR EQUIPMENT. KEEP YOUR MANUAL IN A SAFE, CONVENIENT PLACE FOR FUTURE REFERENCE. ALWAYS MENTION THE MODEL AND PART NUMBER IN ANY CORRESPONDENCE.

WARRANTY

Sprayers sold shall be warranted from defects in workmanship and material when used within the service and scope for which they were designed for a period of two years from date of purchase. Warranty covers replacement parts ONLY.

Contact our Spraying Division for warranty parts at 800.825.5397. DO NOT RETURN PRODUCT TO YOUR DISTRIBUTOR/DEALER. Please have original proof of purchase, model number of sprayer and part number of part from illustrated parts breakdown in this manual.

INCLUDED HARDWARE

CLOSELY INSPECT ALL CONTENTS
IN THE SHIPPING CARTON

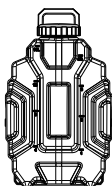
- IF YOU HAVE DAMAGED COMPONENTS:
CONTACT THE FREIGHT COMPANY THAT DELIVERED
THE UNIT TO FILE A CLAIM.
- IF YOU HAVE MISSING COMPONENTS:
CONTACT US AT 800.825.5397.

SPRAYER
COMPONENTS

Tank Lid (1)
BPS-REV-TL



Basket Strainer (1)
BPS-REV-TLS

SPRAYER
COMPONENTS

Backpack Sprayer (1)



Revolt Battery Pack (1)
33-100512



Battery Charger (1)
33-100518



Spray Gun Assy (1)
SG-4200-18

REVOLT BACKPACK SPRAYER ASSEMBLY

1.

PARTS



TOOLS

None



NOTE: The Revolt Series Battery Pack is not charged out of the carton and requires four hours to fully charge.

Connect Battery Charger to the open hole on top of Revolt Battery Pack.

Plug the Battery Charger into an appropriate outlet.

Charging Revolt Battery Pack



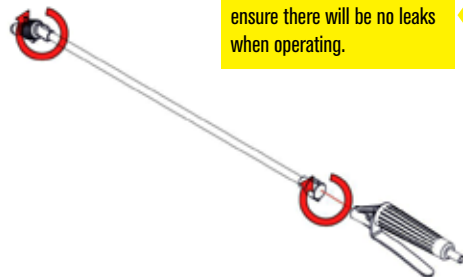
2.

PARTS



TOOLS

None



NOTE: Screw hand tight to ensure there will be no leaks when operating.

Thread Spray Gun Nozzle onto the end of the Spray Gun Shaft.

Make sure there is an O-ring before threading onto Spray Gun Shaft.

Connects Spray Gun Shaft To Handle



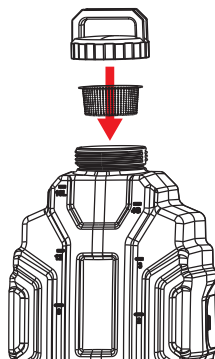
3.

PARTS



TOOLS

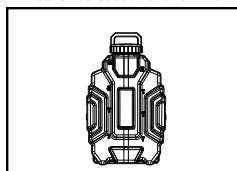
None



Drop Basket Strainer into the open mouth of Sprayer.

Thread Tank Lid onto open mouth of Sprayer.

Installs Basket Strainer & Tank Lid



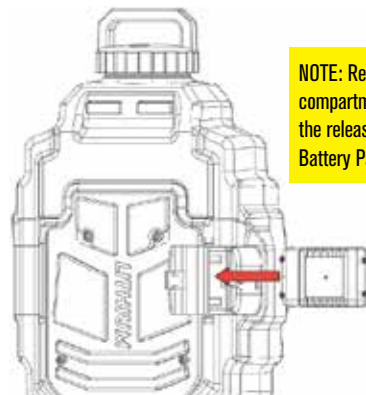
4.

PARTS



TOOLS

None



NOTE: Remove from compartment by pressing the release button on the Battery Pack.

Open side compartment on Backpack Sprayer and slide Revolt Battery Pack into the open dock.

A click will be heard when properly attached.

Installing Revolt Battery Pack To Dock



OPERATION - IMPORTANT SAFETY INFORMATION

Now that you have assembled your sprayer, there is some important safety and health information you need to know with regard to handling and spraying chemicals.



TAKE NOTE! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THIS SECTION IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND THE SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN PROPERTY DAMAGE, INJURY OR DEATH.

NOTE: THE USE OF CORROSIVE OR FLAMMABLE CHEMICALS IN THIS SPRAYER IS HAZARDOUS AND WILL ALSO VOID YOUR WARRANTY.

GENERAL CHEMICAL SAFETY



WARNING

Pesticides are hazardous chemicals. Heed the warning below and follow all instructions carefully. Improper handling of chemicals can result in serious injury or illness, or cause damage to humans, animals or the general environment.

SAVE THESE INSTRUCTIONS



WARNING

Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

- **Before Using The Battery Pack & Charger:** Read this operator's manual and all labels on the battery pack.
- **Caution:** To reduce risk of injury, ONLY CHARGE REVOLT BATTERY PACK WITH REVOLT SERIES CHARGERS. Other types of batteries may burst causing personal injury and damage. Do not wire a battery pack to a power supply plug or the DC outlet of a vehicle. Batteries will be permanently disabled or damaged.
- **Avoid Dangerous Environments:** Do not charge battery pack in rain, snow, damp or wet locations. Do not use battery pack or charger in the presence of explosive atmosphere (gaseous fumes, dust or flammable materials) because sparks may be generated when inserting or removing battery pack, possibly causing a fire.
- **Charge In A Well Ventilated Area:** Do not allow smoking or open flames near charging battery pack. Vented gases may explode.
- **Do Not Burn Or Incinerate Battery Packs:** Battery packs may explode, causing personal injury or damage. Toxic fumes and materials are created when battery pack burns.
- **Do Not Crush, Drop or Damage:** Do not use a battery pack or charger that has received a sharp blow, been dropped, run over, or damaged in any way.
- **Do Not Disassemble:** Incorrect reassembly may result in the risk of

electric shock, fire or exposure to battery chemicals.

- **Battery Chemicals Cause Serious Burns:** Never allow contact with skin, eyes or mouth. If a damaged battery pack leaks battery chemicals, use rubber or neoprene gloves to dispose of it. If skin is exposed to battery fluids, wash with soap and water, and rinse with vinegar. If eyes are exposed to battery chemicals, immediately flush with water for 20 minutes and seek medical attention. Remove and dispose of contaminated clothing.
- **Do Not Short Circuit:** A short circuited battery pack may cause a fire, personal injury, and product damage. A batter pack will short circuit if a metal object makes a connection between the positive and negative contact on a battery pack. Do not place a battery pack near anything that may cause a short circuit such as coins, keys or nails in your pocket.

BEFORE SPRAYING

- **Test with Fresh Water:** Before adding and spraying chemicals, always test sprayer with fresh water to make sure there are no cracks or leaks and equipment is performing correctly.
- **Sprayer Prep:** ALWAYS inspect and prepare the sprayer before use according to the directions provided in this manual.
- **Keep Sprayer Off:** Do not turn power on to the sprayer until ready to spray in order to avoid unintentional spray release.
- **Wind Speed:** NEVER spray when wind exceeds 4 MPH in order to minimize spray drift.
- **Clear Area:** ALWAYS keep work area clear of people and pets. Post warning notices to restrict access by the public for the period recommended on chemical label.
- **Operator Age:** To operate this sprayer, you must be 16 years of age or

older. Pesticides are extremely toxic to children.

- **Chemical Label:** ALWAYS READ and FOLLOW all chemical label instructions.
- **State & Federal Laws:** ALWAYS refer to state and federal regulations with regard to the application of a particular chemical you plan to use.
- **Flammables:** NEVER use any flammable chemicals, such as diesel fuel, in the sprayer.
- **Corrosives:** DO NOT use corrosive chemicals, such as bleach, in the sprayer. They can weaken the sprayer and its parts, resulting in leaks. Always check with chemical manufacturer for compatibility with sprayer.
- **Emergency Procedures:** Before handling chemicals, carefully review the "Statement of Practical Treatment" on the chemical label.

DURING SPRAYING

- **Over Application:** DO NOT over apply pesticide. Apply at a rate recommended by chemical manufacturer. Excess pesticide can be dangerous to humans, damage desirable plants, and contaminate soil and water sources.
- **Never Point Spray Gun:** NEVER point the spray gun at people or animals.
- **Children & Pets:** ALWAYS exercise extra caution when spraying near areas accessible to children and pets.
- **Eating & Smoking:** DO NOT eat, drink, smoke, rub your eyes or touch any part of your bare skin while handling chemicals and spraying.
- **Heat & Flames:** DO NOT spray near open flames or sources of heat.
- **Spills:** ALWAYS clean up spills immediately per instructions on the chemical label.

AFTER SPRAYING

- **Clean Sprayer:** ALWAYS clean the sprayer immediately after use according to the directions provided in this manual.
- **Decontaminate:** ALWAYS decontaminate yourself immediately after you are finished with spraying and handling chemicals. Wash all exposed areas of the body with soap and water. Remove and launder clothing.
- **Chemical Disposal & Storage:** ALWAYS dispose or store remaining chemicals properly as recommended on the chemical label.
- **Health Monitoring:** Monitor the health of operators who are frequently exposed to pesticides, as recommended by the chemical label.



WARNING

Chemical spills, sprayer leaks, personal contamination, and poisoning are accident situations which you may encounter. All require an immediate response. In the event these accidents take place, follow first aid instructions on the chemical label and contact poison control for further advice (1-800-222-1222). If victim collapses or isn't breathing CALL 911.

OPERATION - PREPARING & USING SPRAYER

If the sprayer has been used previously, it must be prepared BEFORE EACH SUBSEQUENT USE.



WARNING

Read the following instructions carefully for inspecting and using the sprayer. Damaged or clogged equipment could result in leaks or uncontrolled spray. Leaks could result in injury to the operator or bystanders from chemical exposure, or cause damage to the environment.

IMPORTANT NOTE:

THIS SPRAYER IS NOT CERTIFIED FOR USE IN DISPENSING POTABLE WATER OR OTHER CONSUMABLE LIQUIDS.

PREPARING SPRAYER

- **Review Safety Information:** Review safety information in this manual and manufacturer chemical label before use.
- **Empty Tank:** Ensure the sprayer has been thoroughly flushed and drained of all residual chemical prior to uses.
- **Inspect & Test:** Inspect the tank and components for any cracks or leaks. Replace any damaged parts. IMPORTANT: After any repair, ALWAYS test for leaks with water one final time before use.

USING SPRAYER

- **Protective Equipment:** ALWAYS wear protective equipment as directed on the chemical label.
- **Assess Wind & Area Conditions:** Before spraying, determine if wind conditions are suitable. DO NOT spray if wind speeds are greater than 4 MPH. DO NOT spray if bystanders are in the intended area and verify that area is in a well-ventilated outdoor area.
- **Power Off:** Before filling tank, make sure power to the sprayer is off and REVOLT battery pack is not docked.
- **Filling Tank:** Remove sprayer tank lid and add chemical/water dilution ratios that are called out by chemical label. Ensure chemical is thoroughly mixed with a stirring device and then securely thread tank lid back on sprayer tank.
- **Turn On Power:** Insert REVOLT battery pack into side compartment dock. Turn the power switch to the "ON" position.

SPOT SPRAYING

- **Spot Spraying:** To spot spray, pull the gun trigger. Make sure nozzle of gun is pointed towards vegetation in need of spraying.
- **Adjustable Nozzle:** Twist the spray nozzle to adjust from a straight stream to wide pattern mist.
Note: It is not unusual for the operator to be exposed to chemical drips while adjusting the nozzle – use chemical resistant gloves when twisting.

OPERATION - CLEANING, DECONTAMINATING & STORAGE

When done using the sprayer, it is always important to clean the sprayer and decontaminate yourself. Do not store the sprayer with chemicals in the tank, as it is unsafe and could also result in damage.



WARNING

Clean-up and decontamination procedures must be followed after each use. Improper equipment clean-up and disposal of chemicals can result in dangerous chemical exposure to humans and the environment, as well as equipment damage. Personal decontamination is required after spraying to minimize unsafe exposure to chemicals and potential illness.

CLEANING & DECONTAMINATING SPRAYER

- **Drain Tank:** If excess pesticide is left in tank, drain into a suitable container.
Note: when draining pesticides, be sure to wear protective gear such as rubber gloves and eye protection for increased safety.
- **Unused Chemical:** Properly store or dispose of unused chemical in its original, suitable container and make sure to follow chemical manufacturer's recommendations and according to local hazardous waste disposal regulations.
- **Flush Sprayer:** Flush sprayer per the chemical manufacturer's recommendations.
- **Decontaminate & Launder:** Decontaminate yourself after handling chemicals by removing clothing worn, washing exposed body parts with soap and water, and laundering clothing separately from other wash.

IMPORTANT NOTE:

ALLOWING YOUR SPRAYER TO FREEZE, WITHOUT TAKING PROPER WINTERIZATION STEPS, VOIDS YOUR WARRANTY.

**WARNING**

The sprayer will be damaged if it freezes. Protect the sprayer from freezing during storage by following instructions below.

PREPARING SPRAYER FOR STORAGE

- **Add Anti-Freeze:** Pour one gallon of RV anti-freeze into the sprayer tank.
- **Spray Briefly:** Turn on the pump motor and squeeze the gun trigger briefly until fluid sprays out.

REMOVING SPRAYER FROM STORAGE

- **Drain Anti-Freeze:** Drain the anti-freeze that is left in the tank through the tank drain port into a suitable container.
- **Flush with Water:** Fill tank with fresh water and have it run through system. Operate spray gun and boom until the system is completely flushed. Be sure to set up containers to capture the flushing of the anti-freeze.
- **Disposal:** Dispose of anti-freeze and flush water properly.

TROUBLESHOOTING

Here you will find troubleshooting steps for some of the most common issues users have with sprayers.

**WARNING**

Before troubleshooting or attempting to service your pump or sprayer, read the following safety rules to avoid accidental exposure to chemicals and the possibility of electric shock.

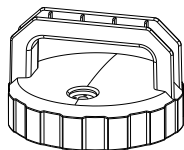
BEFORE ATTEMPTING TO SERVICE SPRAYER

- **Personal Protective Equipment:** Wear personal protective equipment as directed on the chemical label while servicing sprayer.
- **Review Troubleshooting Table:** Review the troubleshooting table to the right for the type of problem you are experiencing. DO NOT attempt to repair until reading remaining steps listed below are followed.
- **Empty & Flush Tank:** Empty the tank and flush the sprayer with water as directed in the section Cleaning, Decontaminating & Storage.
- **Disconnect Power/Relieve Pressure:** Disconnect power to the sprayer and be sure all system pressure is relieved by squeezing the gun trigger.
- **Perform Repairs:** Follow the directions provided in the troubleshooting table to repair the sprayer.
Note: Never try to unclog the sprayer nozzle by blowing through it.
- **Test after Repairs:** After repairs, ALWAYS test the sprayer for leaks with fresh water before using.

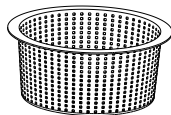
PROBLEM	CAUSE	SOLUTION
Pump Will Not Prime	Out of Product	Refill Supply Container
Pump Will Not Turn On	Battery Not Connected	Check Battery Connection
	Low Voltage	Check Voltage
	Fuse Blown	Replace Fuse
Low Pressure or Flow	Worn Spray Gun Nozzle	Replace Spray Gun
	Inlet Air Leak	Tighten Fittings or Replace Cracked Fittings
	Low Voltage	Check Voltage
Pump Leaks	Loose Fasteners	Tighten Fasteners
	Pump Seals Degraded	Replace Pump
Poor Spray Distribution	Worn Spray Gun Nozzle	Replace Spray Gun
Pump Cycles While Not Spraying	Leak In The System	Tighten Leaking Hose Clamps, Fittings or Replace Spray Gun
	Low Voltage	Check Voltage
	Air Trapped In System	Purge Air From System
Battery Pack Won't Charge	Battery Not Connected To Charger	Connect Battery Pack To Charger Until Red LED Appears
	Charger Not Plugged In	Plug Charger Into Working Outlet
	Surrounding Air Temperature Too Hot or Cold	Move Charger & Battery Pack To Air Temperature of 40 Deg or Below 105 Deg
	Bad Charger	Replace Charger
Sprayer Won't Start	Battery Pack Not Installed Properly	Check Battery Pack Installation
	Battery Pack Not Charged	Charge Battery Pack with Charger Until LED Light Is Green
Power Switch Not Lighting Up	Battery Pack Not Installed Properly	Check Battery Pack Installation
	Battery Pack Not Charged	Charge Battery Pack with Charger Until LED Light Is Green
	Battery Dock Not Working	Check To See If Battery Pack Is Fully Charged & Connect. If Not Working, Issue Is With Dock.
	Bad Charger	Replace Charger

REPLACEMENT PARTS

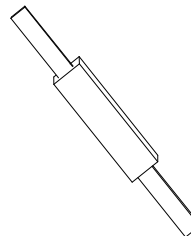
TANK LID



Part # BPS-REV-TL

BASKET
STRAINER

Part # BPS-REV-TLS

SHOULDER
STRAPS

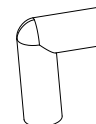
Part # BPS-REV-SS

FILTER
KIT

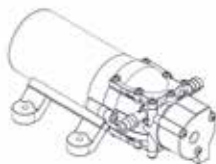
Hose Clamp



Filter



Filter Elbow

EVERFLO 1GPM, 12V
DIAPHRAGM PUMP

Part # EF1000

BATTERY
CHARGER

Part # 33-100518

SPRAY GUN
ASSEMBLY

Part # SG-4200-18

Part # BPS-REV-FLTR