



## ***Instruction Manual***

MANWP12-1 REV H 29/04/25

**MODEL: WP12-1  
12L RECHARGEABLE BACKPACK SPRAYER**



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# Safety Instructions

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Before attempting to operate or install the sprayer carefully read and take note of the following safety warnings.

Failure to comply with these warnings may result in serious injury or death.

**Warning!** This sprayer is designed and manufactured solely for the purpose of applying agricultural chemicals to plants. Under no circumstances may it be used for any other purposes.

**Warning!** Prior to using the sprayer all operators must read and fully understand the contents of this instruction manual, all safety information fitted to the sprayer and any other instructions for associated equipment or chemicals.

**Warning!** Never allow an inadequately trained person to install or operate the sprayer.

**Warning!** Do not spray or pump flammable liquids.

**Warning!** Refer to the chemical manufacturer's label for correct use and safe handling instructions of chemicals before filling or using the sprayer. Always wear the recommended safety clothing and equipment when handling chemicals and operating the sprayer. Ensure that all operators and associated personnel are familiar with the legal regulations and codes of practice that apply to the safe use, storage, and disposal of spray chemicals.

**Warning!** Exercise care to ensure proper stability when carrying or operating in hilly and uneven terrain, particularly if the ground is wet or loose. Wear non-slip shoes.

**Warning!** Before carrying out maintenance work, wash the sprayer thoroughly to remove all toxic chemicals that may contaminate the sprayer. Wear appropriate safety clothing and equipment when carrying out maintenance. Do not clear blocked nozzles by blowing out with your mouth.

**Warning!** Never point the spray gun at any person or any part of the human body.

**Warning!** Dispose of empty chemical containers and chemical residues in accordance with the instructions supplied by the chemical manufacturer.

**Warning!** This sprayer places weight directly on the back and shoulders as well as indirectly on the lower body. If you have or suspect you may have any physical condition that may be aggravated by carrying weight on your back, then do not use this product.

## **BATTERY CHARGER WARNINGS**

**Warning!** When using the battery charger ensure it is a dry environment and do not leave the charger where it may rain.

**Warning!** 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.

**Warning!** Children should be supervised not to play with the battery charger.

**Warning!** Do not use this charger to charge Non-Rechargeable battery packs.

**Warning!** If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons to avoid a hazard.

# Specifications



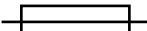

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## GENERAL

This sprayer has been designed and manufactured solely for the purpose of applying agricultural chemicals to plants.

STANDARD SPECIFICATIONS	
TANK:	12 Litre maximum operating capacity
PUMP:	<ul style="list-style-type: none"><li>• Piston drive with chemically resistant diaphragm</li><li>• 40 psi max pressure</li></ul>
SPRAY LANCE:	<ul style="list-style-type: none"><li>• 500mm long telescopic lance – extendable to 900mm</li><li>• Plastic trigger grip with lock on trigger feature</li><li>• Filter fitting in handle</li></ul>
NOZZLES:	Poly adjustable nozzle
FILTRATION:	<ul style="list-style-type: none"><li>• Basket strainer under lid screens debris from entering the tank.</li><li>• Suction foot filter inside the tank to protect the pump</li><li>• Filter in spray gun handle helps protect the nozzle from blockage.</li></ul>
WEIGHT (EMPTY)/(FULL):	(3.1kg)/(15.1kg)
DIMENSIONS:	500 x 310 x 160mm (dimensions exclude spray gun)
SPRAY GUN STORAGE:	Spray lance can clip to filler cap
RUN TIME:	Up to 6 tanks of spraying per charge
CHARGING TIME:	Up to 6 hours
BATTERY:	12.6V, 2500mAh (Milliamp/hour), Lithium Ion

# Safety Instructions

Battery Charger	
Brand Name:	Silvan
Part No:	HC211
Input:	230V -240V, 50Hz, 0.164A
Output:	12.6VDC, 1.2A
Class II Symbol:	
Symbol for Indoor Use Only:	
Fuse Link:	 T2A
Regulatory Compliance Mark (RCM):	
Charger for 12.6V Lithium-Ion Battery Pack Model No: YD-MT19H0125A Part No : 382-121 from Silvan Australia Pty Ltd only. <b><u>Before Charging Read Instructions.</u></b> Do not expose to rain.	

## CHARGING THE BATTERY

**Note:** The battery should be charged before first use.

Plug the battery charger into a standard 230 Volt power point. The indicator light on the charger will show **GREEN**.

Slide the battery pack into the charger. The indicator light will show **RED**.

When the indicator light shows GREEN your battery is fully charged.

Recharging time depends on the state of the battery. A completely discharged battery takes up to 6 hours to recharge.

After recharging for general safety reasons turn off the charger, particularly in an unattended area.

**WARNING:** Only intended to charge 12.6V Lithium-Ion Battery Pack Part No. 382-121 (Model YD-MT19H0125A) from Silvan Australia Pty Ltd having max. rated capacity 2500mAh.



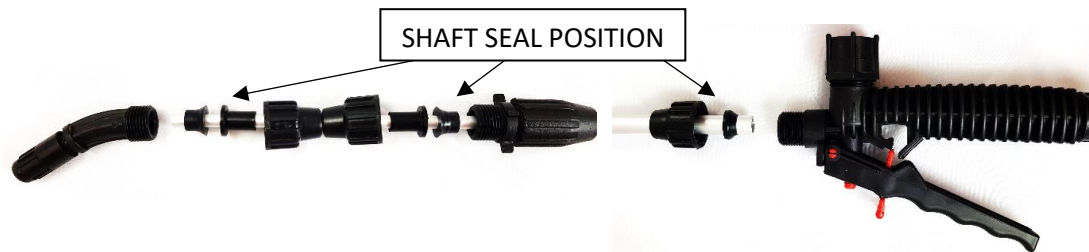
## CHARGER INDICATOR LIGHT

GREEN = Charger not connected to battery  
 RED = Battery Charging  
 GREEN = Battery Charged

# Installation

## ASSEMBLY:

Fit the spray lance to the gun ensuring the O-Ring is fitted. Fit the 45-degree elbow and nozzle to the tip of the lance again ensuring the O-ring is in place.

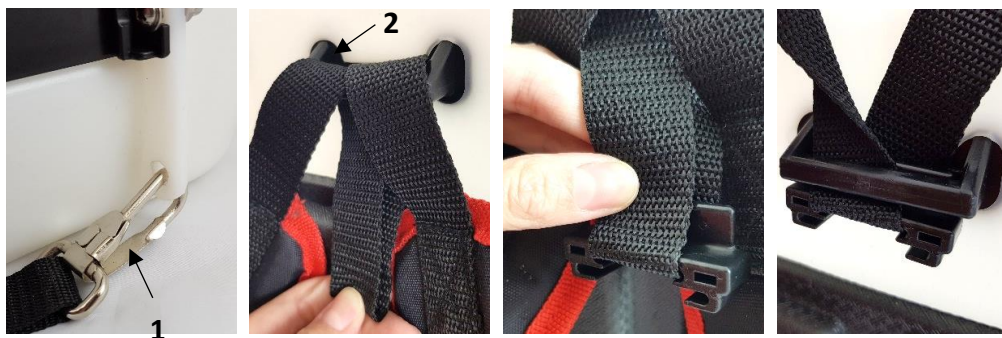


Fit the hose to the tank ensuring the O-rings are in place.



## FITTING SHOULDER STRAPS:

The backpack sprayer is supplied with a padded shoulder strap.



1. At the base of the backpack, clip the strap onto the base on both sides
2. Raise the free end of the strap to the mounting area on the back, thread strap through slot as shown (top to bottom)
3. Fit supplied clip to hold strap in place by notching strap in the smaller groove



# Operation

## FILLING THE TANK AND ADDING CHEMICAL:

**Warning:** Before using the sprayer for the first time or adding chemical check the operation and function of the sprayer with clean water

Check that the battery is charged, the filters are clean, and all fittings, hoses and gun connections are tight.

Partly fill the sprayer before adding chemical. Always use clean water to prevent blockages and ensure chemical function is not inhibited.

Add the chemical according to the directions on the chemical container following all safety and protective equipment recommendations.

**Do not use** wet powders or chemicals that must remain suspended in solution and require agitation. Only use chemicals or dyes that fully dissolve.

**Do not use** a sprayer that has been used to spray herbicides for insecticides or nutrients unless the sprayer has been thoroughly cleaned including neutralizing the herbicide according to the manufacturer's directions if required.

## INSTALLING BATTERY PACK:



1. Push in lock tab
2. Slide cover down – then install battery in socket



3. Push in lock tab on the battery to pull it out of socket



# Operation

## OPERATING THE PUMP:



*Light Indicator Off (left) and On (right)*

The pump has an on/off switch located on the left-hand side of the sprayer. The pump will also switch off automatically when the spray lance is not in use, however when the tank is empty this does not function. When leaving the sprayer unattended **always** switch the pump switch off.

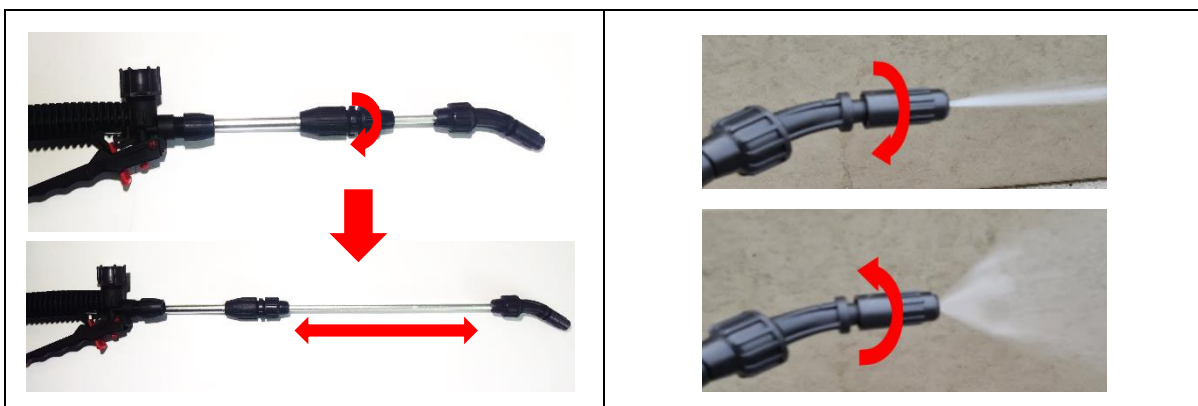
Pump also has a light indicator to show how much battery usage is left before the battery runs out.



SWITCH POSITION: O = OFF, 1 = ON

## ADJUSTING THE SPRAY LANCE AND THE NOZZLE

The spray lance can be adjusted by loosening the nut as shown below, extending the lance to the desired length, and retightening. The nozzle can be adjusted by loosening the nozzle as shown below, loosening and tightening the nozzle for desired spray stream (single stream or cone stream).



# Maintenance

To avoid chemical contamination, wear appropriate protective equipment including gloves whenever maintenance is carried out; turn off the pump and depress the trigger on the spray lance to dissipate any pressure.

After spraying is completed, drain unused chemicals from the tank. Rinse the tank with clean water then operate the sprayer with clean water in the tank to clean out the pump, hose, and spray lance. Do not leave chemicals in the tank as they may crystallize or form solids and block in pump, spray lines, nozzle, or filters.

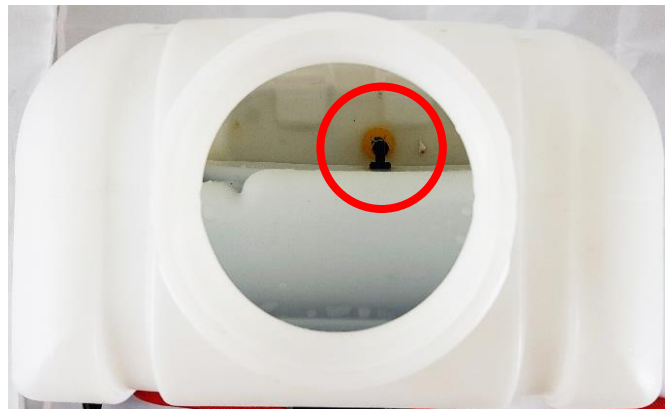
If heavy frosts are experienced, run the sprayer until the pump and spray lines are dry. This will prevent water freezing in the pump and damaging the sprayer.

**Warning!** Dispose of unused chemical and water used for rinsing in a manner that will not endanger people, animals, or the environment in accordance with local regulations and the handling and disposal information available from the chemical manufacturer.

## CLEANING THE FILTERS

The knapsack has 3 filters that require cleaning. Always use clean water and rinse out the sprayer after use to avoid filters becoming clogged.

1. Basket strainer under lid. Clean when dirty.
2. There is a filter fitted to the hose connection. Unscrew the hose connection to the gun and withdraw the filter.
3. Suction foot filter inside tank. Remove the foot filter from the end of the hose. Withdraw the filter, and clean.





# Maintenance

## REFER TO THE TROUBLE SHOOTING GUIDE

### USING THE VACUUM PUMP TO PRIME THE PUMP (IF REQUIRED)

If the sprayer has not been used for some time or has been left with chemical in it then the pump valves may become stuck. If this happens the pump will run but no liquid is pumped.

If this happens you can use the hand operated vacuum pump to prime the pump as follows:

1. Empty the tank and spray hose of liquid
2. Make sure the power switch on the knapsack is off
3. Connect the hand pump as shown in the pictures below (a-d) and lock the trigger on
4. Pump the handle to draw some air and unstick the pump valves
5. Clean the vacuum pump after use.



# Troubleshooting Guide

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TROUBLESHOOTING GUIDE	
Problem	Solution
Pump does not operate	<ul style="list-style-type: none"><li>• Check battery is not flat, or charger has not been working</li></ul>
Pump operates but cycles or continues to run when the wand handle is released	<ul style="list-style-type: none"><li>• There is a slow leak – check all connection</li><li>• The tank is empty, or the suction line is not fully immersed</li></ul>
Pump operates with no flow rate or reduced flow	<ul style="list-style-type: none"><li>• The pump will not prime unless the gun trigger is on</li><li>• Check filter, nozzles and spray line for any blockage</li><li>• Use the vacuum pump as shown on the previous page to prime the pump.</li></ul>