

# Instruction Manual

# MANSP50 REV F 01/04/16

# Spotpak 50L

100L 200L



## SILVAN AUSTRALIA PTY. LTD.

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Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

We warrant our goods to be free from defects in materials and workmanship for the warranty period of 12 months from the date the product is delivered to the consumer.

Silvan warrants its authorised Dealer, who in turn warrants the original purchaser (consumer) of each new Silvan product that it will repair or replace the product, or, pay the cost of repair or replacement, as determined by Silvan without charge for labour or any defective or malfunctioning parts in accordance with the warranty limitations below.

This Warranty is in addition to any other rights and remedies available to consumers under the law

# **This Warranty Covers**

Only conditions resulting directly from defects in workmanship or material under normal use and service.

# **Warranty Exclusions**

The Warranty does not cover:

- Conditions resulting from misuse, use of incompatible chemicals, exceeding machine specifications including overloading, impact damage, negligence, accidental damage or failure to perform recommended maintenance services as specified in the Owner/Operator Manual applicable to the product.
- Damage caused by continued use of a product after initial failure
- Any product which has been repaired by other than an authorised Silvan service outlet in a way which, in the sole and absolute judgment of Silvan, adversely affect its performance or reliability.
- The replacement of maintenance items such as diaphragms, batteries, V belts and ground engaging components, etc.

#### **How to claim Warranty**

Return the goods to the place of purchase at your cost and within the warranty period along with evidence of the purchase date. If the original supplier cannot be contacted then contact Silvan as below and we can direct you on how to proceed with your warranty claim.

## How your claim will be managed

The repair of a defective product qualifying under this warranty will be performed by any authorised Silvan service outlet within a reasonable time following the delivery of the product, at the cost of the owner, to the service outlet's place of business. The product will be repaired or replaced depending on the extent of the problem at the discretion of Silvan and the Silvan dealer.



# Safety Information

# Warnings!



You need to read carefully and take note of the following warnings before attempting to operate or install this sprayer. 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 sprayer usage all users and operators must have read and fully understand the contents of this operation manual
- Warning! Do not exceed the the vehicle manufacturer's specified safe load and carrying capacity.
- **Warning!** Exercise extreme care when operating in hilly or uneven terrain to ensure proper stability. Refer also to the vehicle manufacturer's operating and safety instructions
- **Warning!** Refer to the chemical manufacturer's label for correct use and safe handling instructions of chemicals before use
- Warning! Never allow inadequately trained personnel to attach or operate the implement
- **Warning!** Before carrying out maintenance work, wash the sprayer thoroughly to remove all toxic chemicals that may contaminate the sprayer.
- Warning! Do not point spray gun at any part of the human body.
- Warning! Do not pump flamable liquids or operate the pump in an explosive environment.

The following "Safety" decal should be fitted to the machine at all times in the location shown in the diagram. If the decal is missing or unreadable it should be replaced by ordering a new decal from your Silvan dealer by the part number, DEC 90.





# Specifications

#### **GENERAL**

The Silvan Spotpak is a compact portable sprayer.

Whether you are a commercial grower, or a home gardener you will find many uses for this unit. The tank pump and wand fittings are corrosion resistant and are suitable for applying weedicides, herbicides, insecticides, fungicides, miticides, organic and green formulations.

It is designed for spot spraying but may be used in conjunction with a boom for boom spraying.

#### STANDARD SPECIFICATIONS

#### **TANK**

50, 100 or 200 liter molded translucent U.V. stabilized and impact resistant polyethylene. Screw on lid has anti-spill breather.

#### **PUMP**

Smoothflo 12 volt DC electric, 7 L/min open flow, Max 120psi on demand electric pressure switch. Valves: Viton, Diaphragm: Santoprene. The Smoothflo pump is designed with adaptive pressure sensing technology that prevents pressure spikes while maintaining higher pressures and flows

#### **CONTROLS**

On/Off power switch.

The pump is fitted with an automatic electric pressure sensing switch which automatically starts the pump when the pressure falls and stops the pump when the pressure reaches 120 psi

#### **HOSE**

6 metre delivery hose standard.

#### LANCE

Lightweight lance with adjustable nozzle.

#### **FILTRATION**

Suction line foot filter.

DIMENSIONS			
	50 LITRE	100 LITRE	200 LITRE
Length	700 mm	800 mm	1000 mm
Width	400 mm	475 mm	540 mm
Height	300 mm	395 mm	530 mm
Capacity	50 liters	100 liters	200 liters
Weight	6 kg	10 kg	14 kg

#### IMPORTANT INFORMATION ABOUT SPOT SPRAYERS

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Silvan Spotpak's feature a positive displacement diaphragm pump with a pressure sensing switch. The pressure switch interrupts power to the pump when the system pressure builds towards maximum and power is resumed to the motor when the pressure falls.

When the spray lance trigger is depressed fluid is released and the pressure will drop allowing the pressure switch to resume power to the pumps motor.

Depending on your spraying requirements you may need to change or adjust the nozzle to suit your desired droplet size or spray pressure.

Spotpak's fitted with the Smoothflo model pump are designed not to pulsate and should stop pumping when the valve or spray gun trigger is released. If the pump fails to stop pumping see the trouble shooting section.





Do not exceed the vehicle manufacturer's specified safe load and carrying capacity.

#### SETTING UP YOUR SPOTPAK

The hose is supplied fitted at one end to the spray lance. Fit the white elbow fitting to the outlet of the pump and finger tighten.

#### FITTING INSTRUCTIONS

Position the sprayer so as to minimise contamination to the operator. With the pump mounted away from operator the risk of contamination due to hose failure can be minimised. It is recommended that the sprayer be securely attached to any ATV or other vehicle. Refer to manufacturer's instructions for appropriate load limits and fitting positions.

Note: 1 litre of water = 1 kg.

Never fill spray tank to a capacity beyond the specified overall weight limits set by your vehicle manufacturer. Recesses in the top of the tank allow for tie down straps. When fitted these should be firmly secured to approved attachment points on the ATV or other vehicle.

The sprayer should be mounted centrally and as near to the centre of gravity of the ATV as possible. It should not protrude so as to cause an obstruction.

#### **CONNECT GUN AND TRIGGER**

For 50L spotpak sprayer, there is a gasket which should fit between lance and trigger. The small side is positioned face to trigger.







## SPRAY LANCE HOLDER

Supplied with the Spotpak is a pair of clips for holding the Spray lance to the tank for easy storage and transport. To fit orientate the clip as shown and pres to the locating lug in the tank. Below the Lug is a threaded brass insert embedded in the tank; attach the provided screw to tank using a phillips

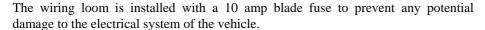
head screwdriver.



## **CONNECTING TO 12 VOLT DC SUPPLY**

The Sprayer requires a 12 volt DC power source. A three metre loom is provided with the sprayer to allow the sprayer to be connected to the 12 volt DC source available. Connect the alligator clips remembering the brown or red wire is positive and the blue or black is negative. The other end of the power loom features a plug with keyway to ensure connection with correct polarity that connects to the pump. If you extend the wire use wire of the same gauge or larger.

An on/off switch is fitted to the sprayer to allow the sprayer to be switched off from the 12 volt DC source to prevent accidental drain of power. The switch also allows the pump to be shut down when the tank is empty preventing overheating and damage to the pump.





#### SETUP AND TESTING.

It is always recommended that you first test all spray equipment thoroughly with clean water. Silvan Spotpaks are supplied with a blue adjustable nozzle containing a large orifice which when twisting the tip can allow for a greater flow of liquid. It is recommended that adjustable nozzle is used first and can be changed later if you

require.

- 1. Be sure to wear safety equipment as recommended by the chemical manufacturer before adding chemical to the sprayer
- 2. Check the suction line foot filter is clean and undamaged (see Maintenance section).
- 3. Fill the tank with clean water.
- 4. With the 12 volt supply connected and the 6 meter spray hose and spray lance connected. Fit the blue adjustable nozzle or any large orifice nozzle you may wish to use.
- 5. Check all pipes, hoses, hose clamps and connections for leaks or damage.
- 6. Switch the pump ON.
- 7. Depress the spray lance trigger. The pump is self priming and will start spraying within 30 seconds.
- 8. Check the hose connections for leaks, if any are found stop the pump and rectify the problem before continuing.
- 9. Slowly twist the tip of the nozzle from a course droplet size to a fine droplet to your preference. You can check the spray pattern by spraying water on to a dry concrete floor.

## Maintenance



Dispose of unused chemical and water used for rinsing in a manner that will not endanger people animals or the environment.

After spraying rinse out the spray lines and tank with clean water

The foot filter should be checked and cleaned if necessary each time the tank is filled. To check the filter hook it out with a bent piece of wire. Appropriate protective equipment including gloves should be used whenever maintenance is carried out.

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





# TROUBLE SHOOTING GUIDE

Symptom	Remedy	
Pump does not operate	<ul> <li>Ensure battery wires are connected to battery properly.</li> <li>Check the inline Fuse in the power loom</li> <li>Check battery is not flat or low</li> <li>Check terminals are fitted to On/Off power switch</li> <li>Check that 2 wires are connected to pump pressure switch</li> </ul>	
The pump continues to run when the spray gun is off	<ul> <li>Check if there is a slow leak of liquid. Check all hose connections and the spray gun for any leaks.</li> <li>Check the tank is not empty or the suction filter is not fully immersed.</li> <li>The pressure switch may need adjusting, the pump will need to be removed and generally 1 turn anticlockwise with a 1/16" allen key will correct the problem</li> </ul>	
Pump operates with no flow or reduced flow	<ul> <li>The pump will only prime if the gun trigger is on.</li> <li>Check the filter in tank or nozzle is not blocked or the spray hose kinked.</li> <li>Pump valves may be stuck or blocked. Apply a small amount of pressure to the suction line by removing the filter and placing a garden hose over the suction hose inside the tank while the pump is running.</li> </ul>	
Pump it getting very hot in operation	<ul> <li>Voltage drop/restriction causing excessive heat. Check that voltage at pump is 12V when operating. Remove extended power loom if required or use heavier gauge wire.</li> <li>Pumping at maximum pressure will use more amps and generate more heat. Check nozzle for restriction</li> <li>When ambient temperature is over 21°C all pumps operating at higher pressures will have additional trouble to keep cool. If spraying on hot day consider using for shorter periods of time or pumping at lower pressure.</li> </ul>	
Spray Gun is leaking at lance or nozzle	<ul> <li>Check if fitting is loose</li> <li>Washer/gasket belonge between fittings; Check that part has not been lost.</li> </ul>	

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