

SERVICE MANUAL

SP25-B2, SP25-TR3, SP55-B2, SP55-B2TR4

-25L REDLINE RECHARGEABLE SPRAYER

-55L REDLINE RECHARGEABLE REMOTE CONTROL SPRAYER

SERVSP25-B2 REV A – 04/08/2025



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TROUBLESHOOTING GUIDE

START HERE

This guide is organised to help you quickly identify troubleshoot and resolve common problems with your sprayer. Use the table of contents below to navigate directly to the section that best matches your concern, whether it involves operation, maintenance, component replacement or troubleshooting.

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1. Spray System

This section focuses on the delivery of liquid through the hose, spray gun, spray lance and nozzle. Issues such as pump priming failures, blocked filters, leaking, trigger malfunctions are diagnosed and resolved here.

1.1 Pump not priming

If the pump fails to prime, the internal valves may be stuck due to chemical residue from long term storage.

Follow these steps to flush and reset the pump:

1. Unplug the suction filter from the end of the suction hose.



2. Remove the spray gun from opposite hose end, and keep the hose pointed away from yourself to prevent splashing



3. Connect the suction hose end to your garden water hose.
4. Turn on the power switch of the Redline sprayer unit
5. Open the garden water supply to allow water to flow into the pump.
6. Confirm water flows freely from the open hose end
7. Turn off the garden water supply
8. Turn off the sprayer unit
9. Reinstall the spray gun and reattach the suction filter to the suction hose.



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1.2 Possible blockages

Inspect for possible blockages

- a. Suction filter in the tank, ensure the suction filter end is facing toward the drain outlet and the mesh is clean.



- b. Gun filter, ensure the filter is securely screwed to the hose end. If not, check whether the gun filter has dislodged and is jammed in the handle blocking the flow.



- c. Nozzle tip, disassemble and check for blockages

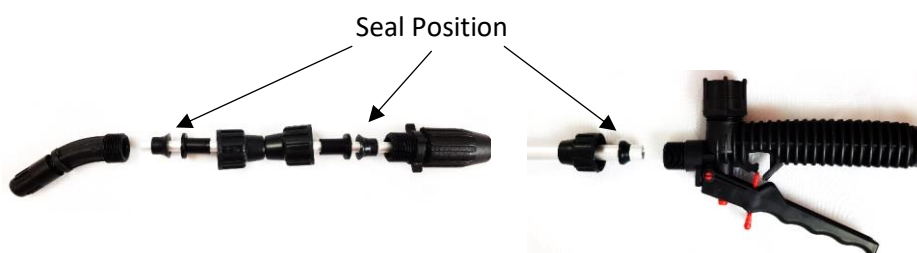


- d. Nozzle filter, check for cleanliness



1.3 Spray lance leaking

Check seals are fitted in correct position

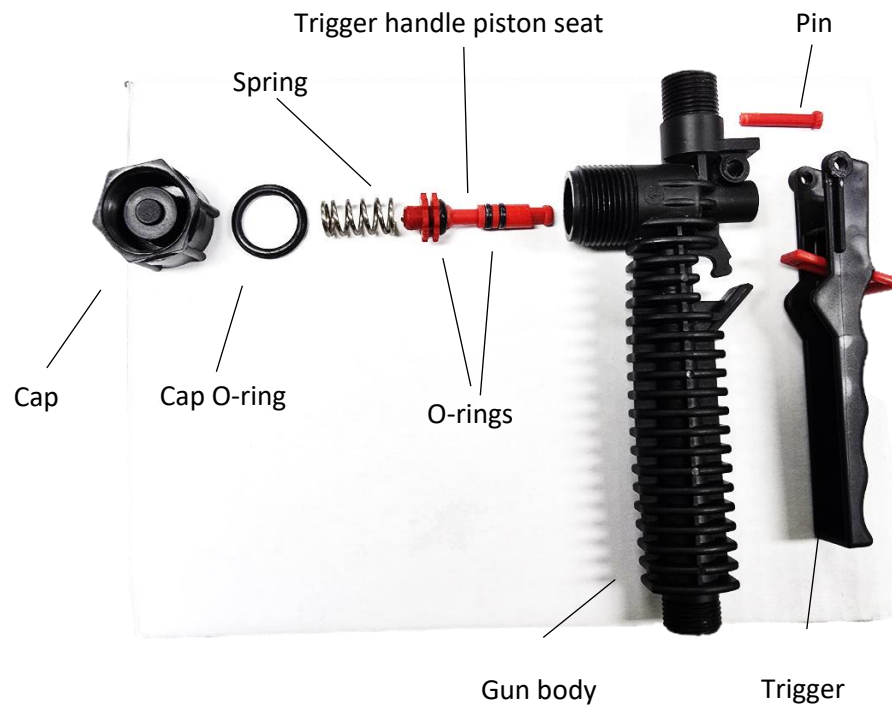


1.4 Spray gun does not shut off

1. Disconnect the spray gun from the spray lance and hose
2. Disassemble the spray gun
 - i. Carefully remove the pin from the gun body and trigger
 - ii. Remove the trigger
 - iii. Unscrew the cap
 - iv. Push the trigger handle piston seat out of the gun body

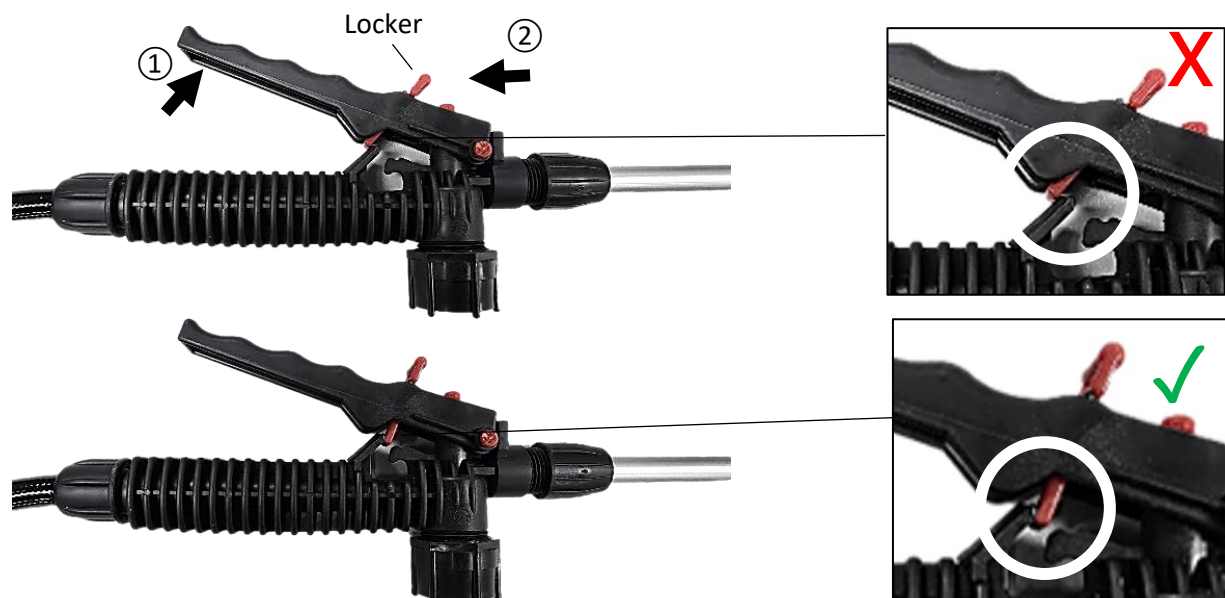
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3. Check O-rings on the trigger handle piston seat for swelling, damage, missing parts or blockages.



1.5 Trigger does not lock on

If the locker is offset, gently push the end of the trigger outward ① and realign the locking mechanism inward to its original position ②.

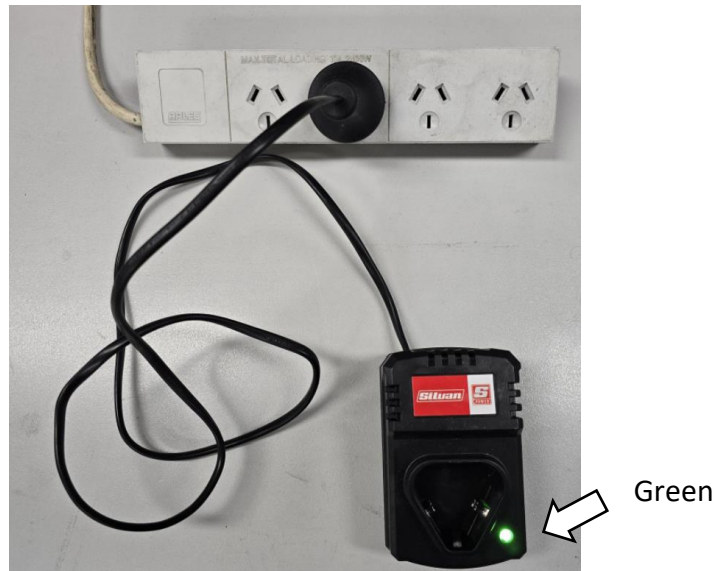


2. Power system

This section covers components responsible for supplying power to sprayer, including the battery, charger and knapsack battery holder.

2.1 Battery not charging

Battery charger: Connect the charger to the 240V power supply, but do not insert the battery to the charger. The light on the charger should be **Green**.



Place the battery in the charger:

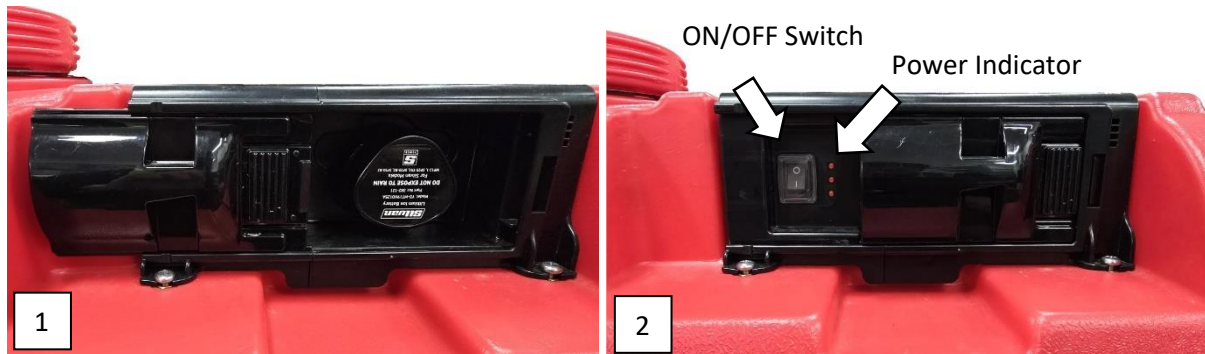
- GREEN** indicates the battery is fully charged or the charger is on standby.
- RED** indicates the battery is charging, it should take approx. 4 hours to charge.

Battery: After charging for at least 4 hours, measure the battery voltage using a multimeter: Connect the red multimeter probe to the positive (+) terminal and the black probe to the negative (-) terminal. If the battery voltage is below 6.5V, one or more cells in the battery pack may be damaged.



2.2 Loose connection - Battery to battery holder

Insert the battery into the holder and turn on the power switch.



1. If the power indicator does not illuminate and the pump is not running, wriggle the battery gently to check for intermittent operation.
 - i. If the pump runs intermittently, there may be a loose connection, possibly the tang inside the socket that connects to battery bent too far away.

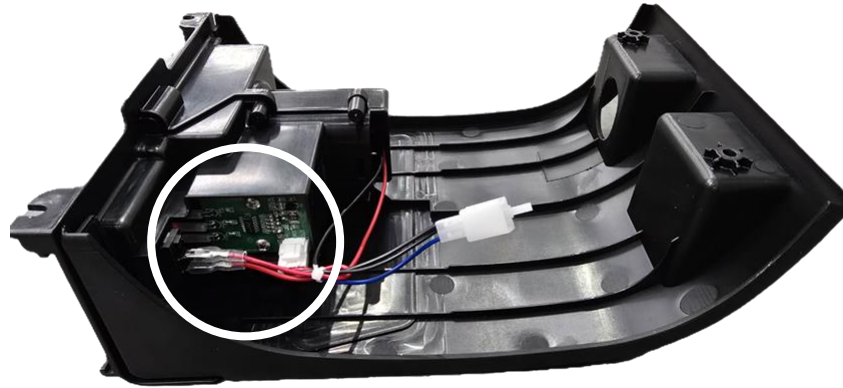


- ii. If the indicator is still not on and the pump is not running, remove the battery, empty the tank and remove the top cover of the tank for further inspection (See 6. Removing the pump assembly cover)
2. If the power indicator does not illuminate but the pump is running.
 - i. The battery voltage monitoring IC on the circuit board may be faulty.

3. Control system

This section includes the internal electrical connections, power switch and control circuitry.

(Refer to [Section 6](#) for pump assembly cover removal instruction.)



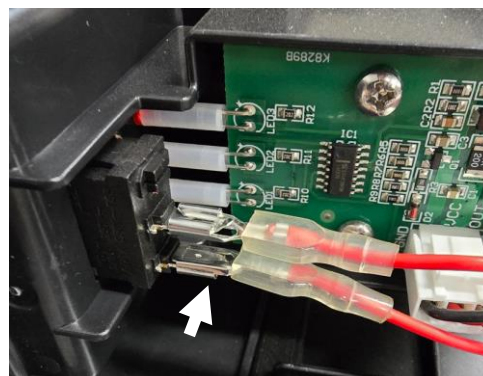
3.1 Improper soldered power wires

Before further inspection, ensure the power wires at the back of the cover are properly soldered.

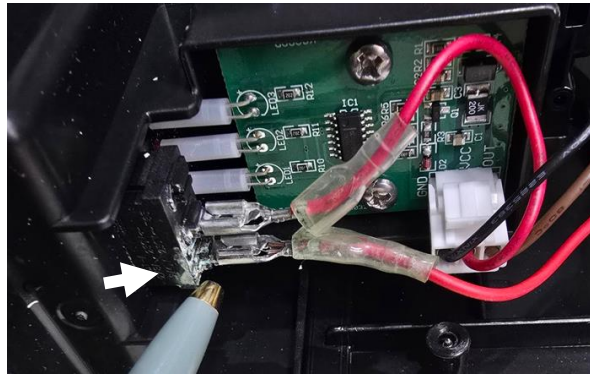


3.2 Power switch faults

- Check the spade connectors on the power switch to ensure they are securely connected.

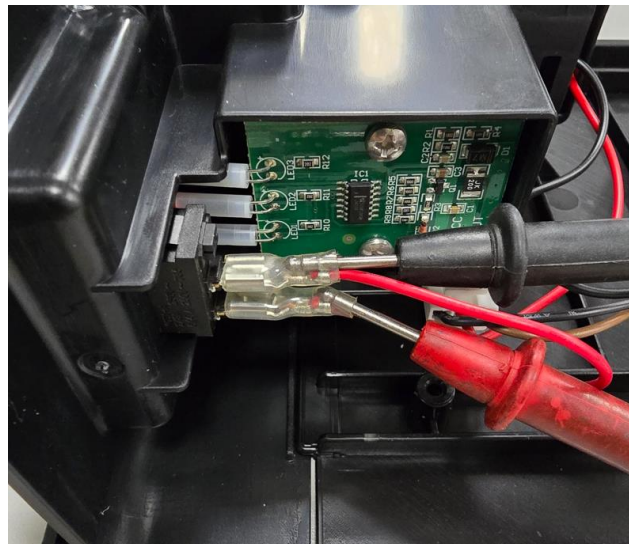


- b. Visually inspect for moisture or corrosion on the power switch



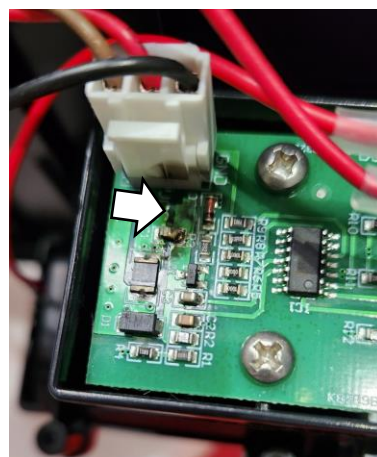
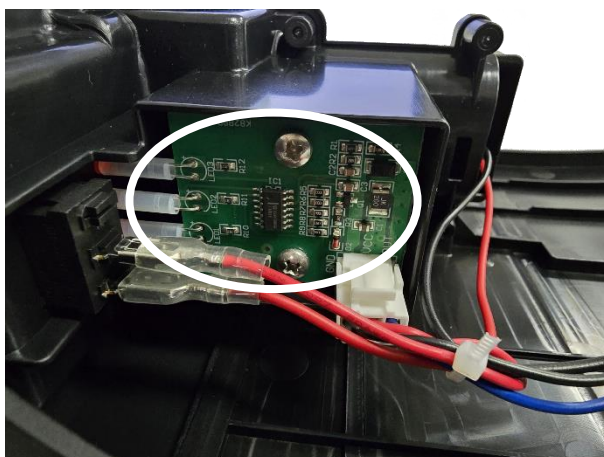
- c. Ensure the battery is **not** inserted and the power switch is in ON position. Switch the multimeter to resistance mode (Ω) and touch the probes to the terminals, as shown below. If the multimeter shows no reading or remains “OL”, the power switch may be damaged and should be replaced.

(Recommended replacement part: Rocker On-Off Switch, 118-149)

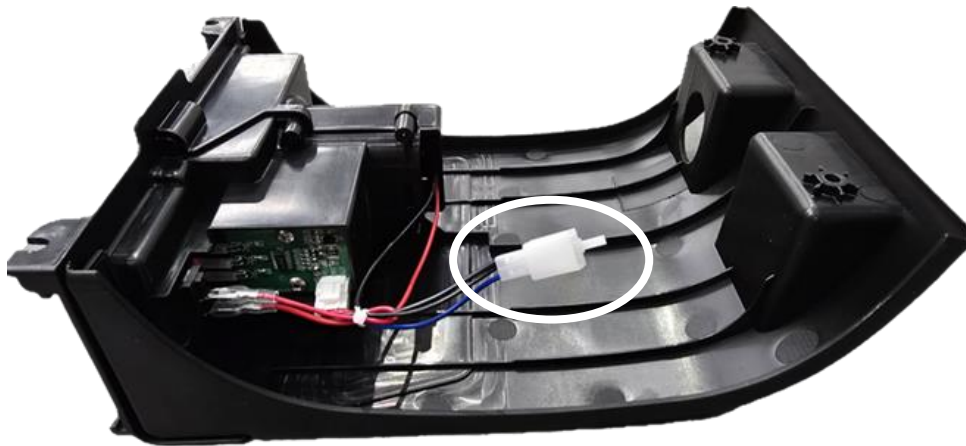


3.3 Circuit board faults

1. Visually inspect for moisture or corrosion on the circuit board



2. Insert the battery and turn on the power switch.
Measure the voltage at the test point, as shown in the picture below.



- i. If there is no voltage reading on the multimeter, the circuit board may be damaged
- ii. If voltage is present, turn off the power and proceed to inspect the pump
(See [4. Pump System](#))



*Ensure the red and black probes are not touching each other when testing to the circuit.

4. Pump system

This section addresses cases where the pump fails to operate entirely. If the pump is not running when the power is switched on, refer here to diagnose switch issues, or motor-related problems.

(Refer to [Section 6](#) for pump assembly cover removal instruction.)



4.1 Pump not running

Switch the multimeter to resistance mode (Ω) and measure the terminal as circled. If the multimeter shows no reading or remains “OL”, it indicates an open circuit in the electrical path, potentially in the motor windings or pressure switch.

(**Recommended replacement part:** Pump, 382-122)



5. Remote system – (MODEL SP55-B2 and SP55-B2TR4 only)

If the remote function is not working, consider the following possible causes: 1. Faulty electrical components; 2. Faulty connection between electrical components; 3. Flat remote battery. This section covers remote battery replacement, remote and receiver re-pairing, and connection checks.

5.1 Remote control function not working

1. Hold the button on the remote and check whether the indicator light (top left of the remote) illuminates. If the light does not illuminate: The remote battery may be flat, or the remote may be faulty. Refer to [Section 5.2](#) – Remote Checking.
2. If the light illuminates, remove the pump assembly cover (Refer to [Section 6](#) – Removing the Pump Assembly Cover)
3. Refer to [Section 4](#) (Pump system) to ensure the pump is functioning correctly.



4. Insert a fully charged 12 V battery into the pump assembly cover and switch the power ON.
5. Measure the voltage output from the receiver as shown in the picture below:
 - a. If 12 V output is present: Refer to [Section 5.3](#) – Remote and Receiver re-pairing.

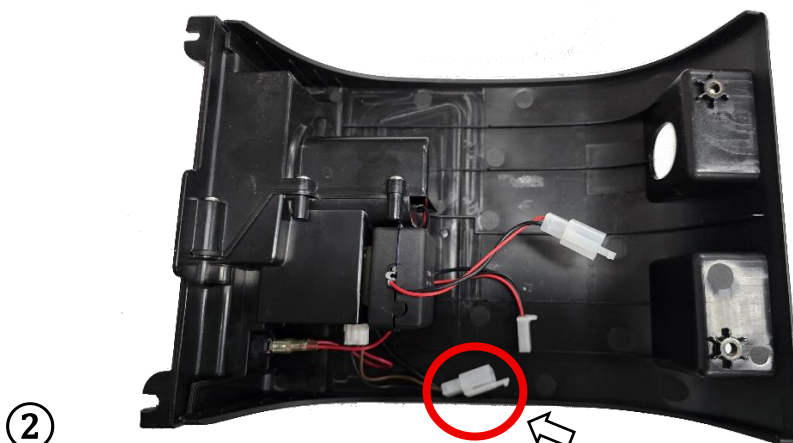


*Ensure the red and black probes are not touching each other when testing to the circuit.

- b. If there is no output: ① Disconnect the connector between the pump assembly cover and the receiver box, ② then measure the voltage output at the circled point (see picture). If no output is present, refer to Section 3 – Control system.



①



②

5.2 Remote checking

1. Remove the three screws on the back of the remote.
2. Measure the battery voltage as shown in the picture.
If the voltage is 10 V or below, the battery is flat.
- Replace with a 27A 12 V battery or replace the complete remote (Silvan P/N 382-189).
3. After installing the new battery or replacing the remote, refer to following sections for re-pairing:

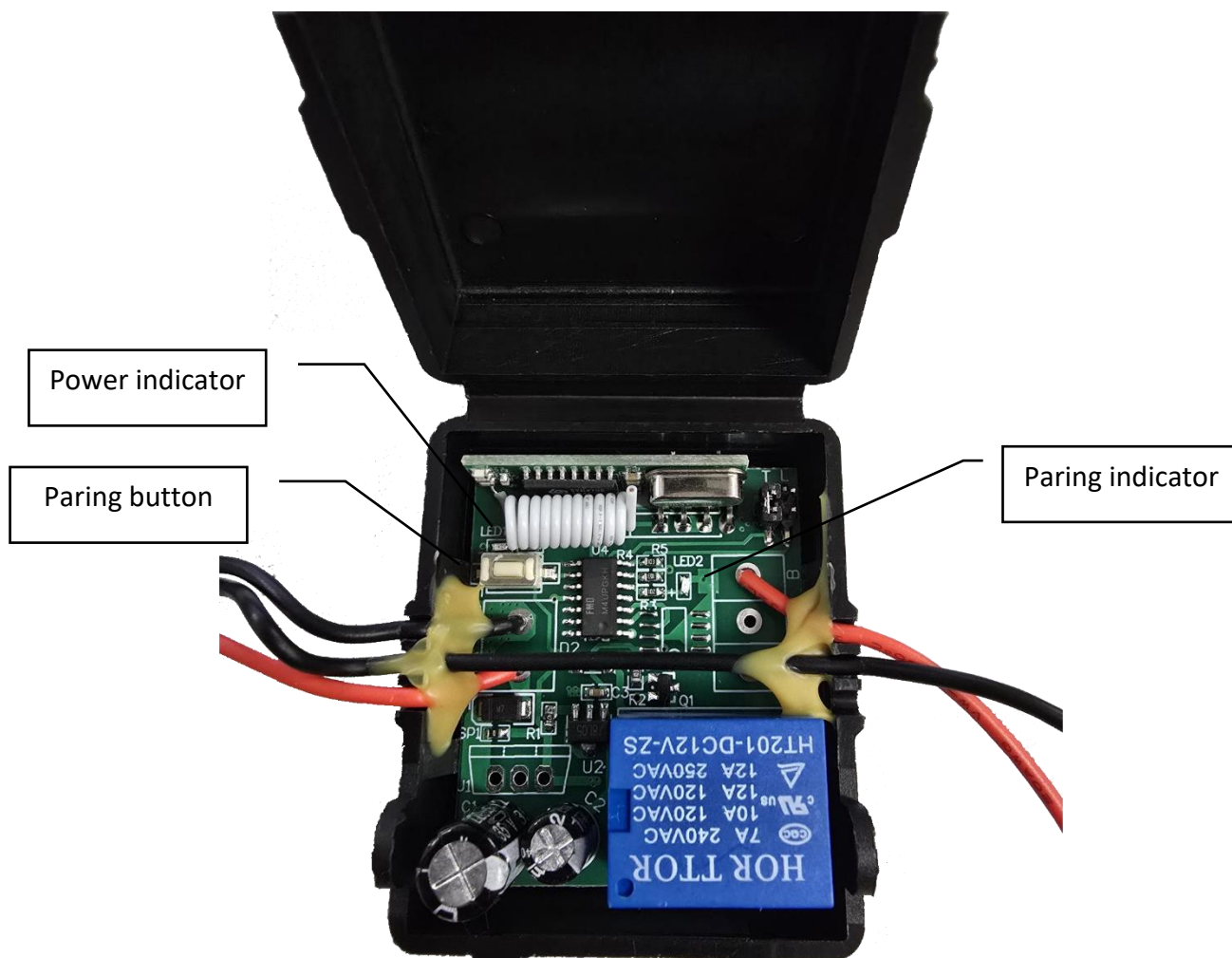
Section 6 – Removing the Pump Assembly Cover

Section 5.3 – Remote and Receiver re-pairing



5.3 Remote and receiver re-pairing

1. Unlock the side clip on the receiver box and open the cover
2. Insert the 12V battery into the pump assembly cover and switch the power ON. The red power indicator on the receiver should illuminate.
3. Press and hold the white pairing button on the receiver for 3 seconds. The red pairing indicator will on and flash.
4. Press and hold the button on the remote. The pairing indicator will turn off immediately. Release the remote button.
5. Verify the pairing by pressing the remote button again. A clicking sound from the receiver indicates the pairing is successful.
6. Reconnect the wiring plug to the pump and reinstall the pump assembly cover.



6. Removing the Pump Assembly Cover

For in-depth inspection, some components require access inside the sprayer. This section explains how to safely remove the pump assembly cover without damaging connected parts.

1. Empty all liquid from the tank, hoses and gun.
2. Remove the hose connection to the tank.
3. There are four screws located on the bench, two on each side, unscrew them.



4. Carefully lift the top cover as the cover is still connected via a power cable.



5. Disconnect the power connector, the cover should lift away easily.



SP55-B2, SP55-B2TR4 SPARE PARTS



	Part Number	Description
1	382-042	LID & GASKET TO SUIT REDLINE 25 55 & 100
2	382-045	MEASURING JUG SUIT REDLINE
3	118-149	ROCKER ON OFF SWITCH -NO CLEAR BOOT
4	382-066	GROMMET SUIT 25L REDLINE (8mm Hose)
5	187-MH04	HOSE CLAMP SUIT 8MM HOSE
6	382-065	ELBOW SWIVEL & GROMMET SUIT 25L 55L REDLINE
7	382-122	PUMP SUIT WP12-1 & SP25-TR3
8	382-157	ADAPTER EXTENSION FITS TO PUMP ON WP12-1 SP25-TR3
9	382-056	REDLINE SPRAYHOSE 6M X 8mm
10-1	382-069	HOSE NUT SUIT 25L REDLINE SPRAYGUN
10-2	382-070	MINI HOSE BARB SUIT 25L REDLINE SPRAYGUN
10-3	382-071	GASKET SUIT 25L REDLINE SPRAYGUN TO HOSE
11	382-050	CAP DRAIN BUNG SUIT REDLINE w/GASKET
12	382-051	SPRAYGUN TRIGGER (WITHOUT LANCE)
13	SM5L20SHCS	CAP SCRW M5x20 SKT HD ZP
14	382-044	SUCTION FILTER TO SUIT REDLINE
15	382-052	SPRAYGUN REDLINE SUIT 25L 55L
16	HC211	BATTERY CHARGER SUIT WP12-1 KNAPSACK AND SP25-TR3
17	382-121	BATTERY SUIT WP12-1 SP25-TR3 SP25-B2
18	382-189	REMOTE SUIT SP55-B2
19	382-188	433MHZ RECEIVER BOARD SUIT SP55-B2

SP25-B2, SP25-TR3 SPARE PARTS



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