

How to change the diaphragm in the Vermorel 2000 series knapsack sprayer

- 1. Ensure that the sprayer is clean, dry and depressurised.
- 2. Remove pumping lever and harness Fig 1
- 3. Unscrew & remove pressure limiter. Remove the poppet valve & spring and keep in a safe place Fig 2 & 3. TIP: Use the lid to store small parts
- 4. Pull off the pump cover Fig 4
- 5. Undo the tank retaining screw TIP: You can use a small coin Fig 5
- 6. Undo and remove the white pressure chamber Fig 6
- 7. Lift the tank off the frame
- 8. Slide the pump assembly out of the frame Fig 7
- 9. Remove the spring
- 10. Undo the retaining nut and pull the crank assembly off of the pump chamber Fig 8
- 11. Check the condition of the pump inlet/outlet valves and replace if necessary Fig 9 TIP: They are a push fit
- Using a 10mm socket, undo the diaphragm retaining nut. Replace the diaphragm Fig
 10
- 13. Reassemble using the keyways in the components for correct alignment.
- 14. Correctly locate the diaphragm and its retainer using the keyways. Do not tighten the retaining nut. Fig 11
- 15. Push the crank assembly onto the pump chamber ensuring that the bearing lugs engage between the two raised profiles Fig 12
- 16. Hold the diaphragm retainer in the correct position using the keyway as a guide and tighten the nut Fig 13
- 17. Reassemble using the reverse of points 1-8 N.B. Follow the instructions below to reassemble the pressure limiter
 - a. Lay the sprayer on its back limiter side up
 - b. Place the spring and plunger into the limiter body ensuring that it is centrally located.
 - c. Position the limiter onto the male thread and turn the yellow ring anticlockwise until the number '1' is aligned with the black pin. You will hear a click – Fig 14
 - d. Turn the yellow ring <u>clockwise</u> until the number '4' is aligned with the black pin, then turn 2 more complete revolutions. It is now ready for operation.

























