

Servicing Instructions

Safety Precautions - before commencing

1. Ensure that all propellant gas has been expelled from the extinguisher. Completely de-pressurise it by inverting the extinguisher and squeezing the operating lever.
2. Safety glasses and gloves should be worn as eye and skin irritation may occur upon frequent or prolonged contact with dry powder. Dust masks should also be worn as the dry powder may cause sneezing or slight irritation of the nose and throat.
3. Do not mix different types or different brands of dry powders. This can result in a pressure increase within the cylinder, creating a hazardous situation.
4. Check the date of the last pressure test, which will have been recorded on the maintenance tag. If pressure testing is required, it must be carried out before any recharging of the extinguisher takes place. Refer to AS1851.1 or NZS4503 for pressure test requirements as applicable.

Recharging Instructions

1. Remove hose assembly from valve and remove valve assembly from the extinguisher body. Unscrew slowly, if there is any residual pressure an audible sound will be noticeably heard. The valve should not be further removed until the sound ceases.
2. Empty and discard all residual dry powder from the cylinder. **Note:** NEVER re-use old powder.
3. Unscrew siphon tube and siphon tube adaptor nut from valve assembly.
4. Remove the spring and valve check stem assembly from the valve body. Clean the check stem, spring and internal valve body with a soft cloth and compressed air, ensuring all deposits of dry powder are removed.
5. Remove the neck seal 'O' ring from the valve, replace with new 'O' ring. Lubricate 'O' ring lightly with petroleum jelly, clean 'O' ring groove on the valve and mount 'O' ring into its seating groove making sure it is not twisted.
6. Examine the check stem seating surface and 'O' ring for cuts and scratches. Replace with new check stem assembly if damaged. Lightly lubricate the check stem small 'O' ring with petroleum jelly (use sparingly) and avoid getting any on the check stem seating surfaces. Return check stem and spring to valve body.
7. Clean the siphon tube and adaptor nut with a soft cloth and blow compressed air through to ensure clear passage and all powder deposits are removed. Screw the siphon tube and adaptor nut hand tight back into the valve assembly.
8. Visually inspect the interior of the cylinder for any corrosion or foreign materials. If the cylinder is corroded the extinguisher should be replaced. If foreign materials are present, thoroughly clean and dry the cylinder before refilling.
9. Fill extinguisher with correct amount of dry powder as stated on the label. Use only ABC Powder Company Ltd, ABC 70 powder. The weight of the dry powder is critical. Over or under filling may render the extinguisher ineffective.
10. Clean the dry powder from the neck threads with a stiff bristle brush. Make sure the 'O' ring seat in the top of the neck ring is clean and free of powder.
11. Screw the valve assembly into the cylinder by centering the siphon tube carefully in the middle of the neck ring opening. Push down into the powder, making sure the valve thread is lined up with the neckring threads. Screw the valve assembly home into the cylinder until the shoulder on the valve body is compressing the 'O' ring seal hard onto its seat in the top of the neckring. **Note:** The valve should not be tightened by excessive force. A firm hand tightening will be sufficient.
12. Pressurise with dry nitrogen, this will require a charging adaptor that fits onto the valve outlet. Fit adaptor and connect the pressurising line to charging adaptor, set the system pressure to a maximum of 150kPa above the extinguisher working pressure. Open the system pressure control valve, depress extinguisher operating lever, and charge extinguisher with dry nitrogen to its correct working pressure of 1035kPa for the 2.0kg unit and 1345kPa for the 4.5 & 9.0kg. This pressure to be taken from the pressurising line gauge and not the extinguisher gauge. **Note:** Check if extinguisher gauge pointer is in the Green operating range, if not replace gauge.
13. Upon reaching the working pressure of the extinguisher close the extinguisher valve by releasing the operating lever. Turn off the system nitrogen supply and release line pressure by opening the system pressure release valve. Engage extinguisher safety pin on 4.5 & 9.0kg models, ensure carry handle is in the down position for the 2.0kg model. Disconnect supply line from the charging adaptor and remove the pressurising adaptor from the valve outlet.
14. Leak Test – Place extinguisher on a rack with the valve outlet facing upwards. Fill valve outlet with a mixture of water and detergent, no bubbles should form in this solution if valve has sealed correctly. Apply solution to cylinder neck to valve joint, and around pressure gauge joint, no bubbles should appear at these joints. **Note:** – if bubbles appear repeat recharging instructions, using "trouble shooting" guide below.
15. If no leaks detected drain all solution from valve and dry thoroughly. Fit anti-tamper seal and refit hose assembly.

Trouble Shooting	
Leakage at neck joint.	Remove valve and replace the valve neck 'O' ring. Ensure all sealing surfaces are clean, lubricate O' ring with petroleum jelly.
Leakage at valve outlet.	Remove valve and disassemble. Clean all components, making sure all sealing surfaces are clean. Examine valve check stem assembly. Replace any damaged components and reassemble.
Leakage at pressure gauge threads.	Remove gauge, clean threads and re-install using Loctite 222.
Leakage at pressure gauge.	Replace gauge, gauges cannot be repaired.