

# Service 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. 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 the extinguisher valve assembly. On AFFF and Wet Chemical types, flush thoroughly with clean water to remove any residues.
2. Remove valve/siphon tube 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.
3. Remove the anti-overfill tube, empty out content residue and wash out cylinder with clean water.
4. Thoroughly clean out internal passages of valve assembly and check for free movement of the valve check stem assembly by squeezing down on the valve operating lever and then releasing. If any form of sticking occurs strip down the valve by unscrewing the siphon tube assembly and then removing the check spring and check assembly. Replace any faulty or damaged components. Before re-assembly, lightly lubricate the check stem 'O' ring. After re-assembly, again check for free movement of check stem when valve is operated.
5. Inspect 'O' ring on valve body and replace if damaged.
6. Place anti-over fill tube into neck ring of cylinder
7. Fill Extinguisher

• **Water Model 84-156P** - Fill cylinder with 9.1 litres of clean water. i.e. until the water level reaches the bottom of the filler tube or as measured by volume or weight. (if adding optional CORROSION INHIBITOR charge, fill cylinder with approx. 8 litres of water, add charge and top up to 9.1 litres)

• **Foam Model 84-158P** – Pour 7 to 8 litres of clean water into cylinder, and then add the contents of a No. 22 Charge (546 ml of AFFF). Gently top up with clean water until the contents reach the bottom of the filler tube. (Total volume is 9.1 litres of AFFF/water solution)

• **Wet Chemical Model 84-229P** – Refill cylinder with 7.0 litres of Seaguard wet chemical. **WARNING** – Proper handling procedures should be followed; Safety goggles should be worn during transfer operations. Avoid agent contact with skin or eyes. In case of skin contact, immediately flush with water for 15 minutes. If irritation persists seek medical help.

8. Lightly lubricate valve body 'O' ring with petroleum jelly.
9. Screw valve/siphon tube assembly into cylinder neck, ensuring that the underface of the shoulder on the valve body makes contact with the top face of the neckring, thus retaining the sealing 'O' ring correctly. Note – Hand tight only.
10. Pressurise the extinguisher – screw adaptor directly into the valve outlet, engage the safety pin into the valve, connect the nitrogen or air pressurising supply line to the adaptor, open pressurising supply line valve and pressurise to the prescribed level below. Once the pressure has been reached, turn off pressurising supply line valve, release pressure in line by opening release valve, disconnect supply line and remove adaptor.

- Water 620kPa
- Foam 1030kPa
- Wet Chemical 690kPa

11. 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 seat has sealed correctly. Apply solution to cylinder neck to valve joint, and pressure gauge, no bubbles should appear at these joints. Note – if bubbles appear repeat recharging instructions, using “trouble shooting” guide below.

12. If no leaks detected drain all solution from valve and dry thoroughly.
13. Replace hose assembly into valve outlet.
14. Pass sealing tie through safety pin and around operating lever and handle and pull tight.

Trouble Shooting		
Problem	Cause	Remedy
Leakage at valve outlet	Foreign matter on check seat. Imperfection on seat surface. Faulty/damaged check stem.	Clean surface of check seat. Polish seat surface. Replace check stem.
Leakage at joint between cylinder	'O' ring defective or foreign matter on sealing surfaces	Replace 'O' ring and clean all sealing surfaces
Leakage at stem of check	'O' ring defective.	Replace 'O' ring.
Leakage at pressure gauge	Faulty gauge or thread of stem not sealing effectively	Replace gauge if faulty. If threads not sealing remove gauge, clean and apply Loctite 222 and remount. (use Loctite sparingly)