

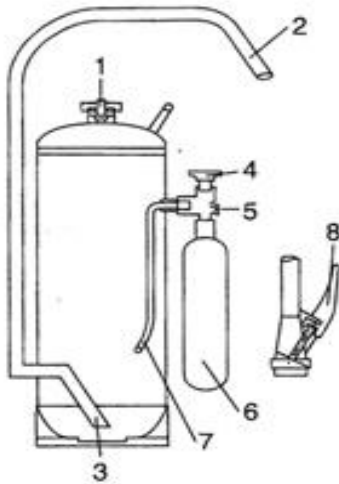
Cartridge Units both hand portable and trolley.

The operational principle is the same for all cartridge types whether internal or external.

A no pressure high pressure unit. The medium cylinder has no pressure until the high pressure cylinder releases the pressure into the medium cylinder, and this can be N2 or CO2 gas.

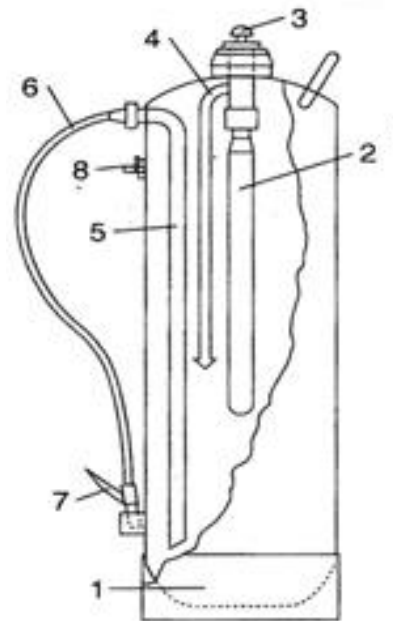
EXTERNAL TYPE

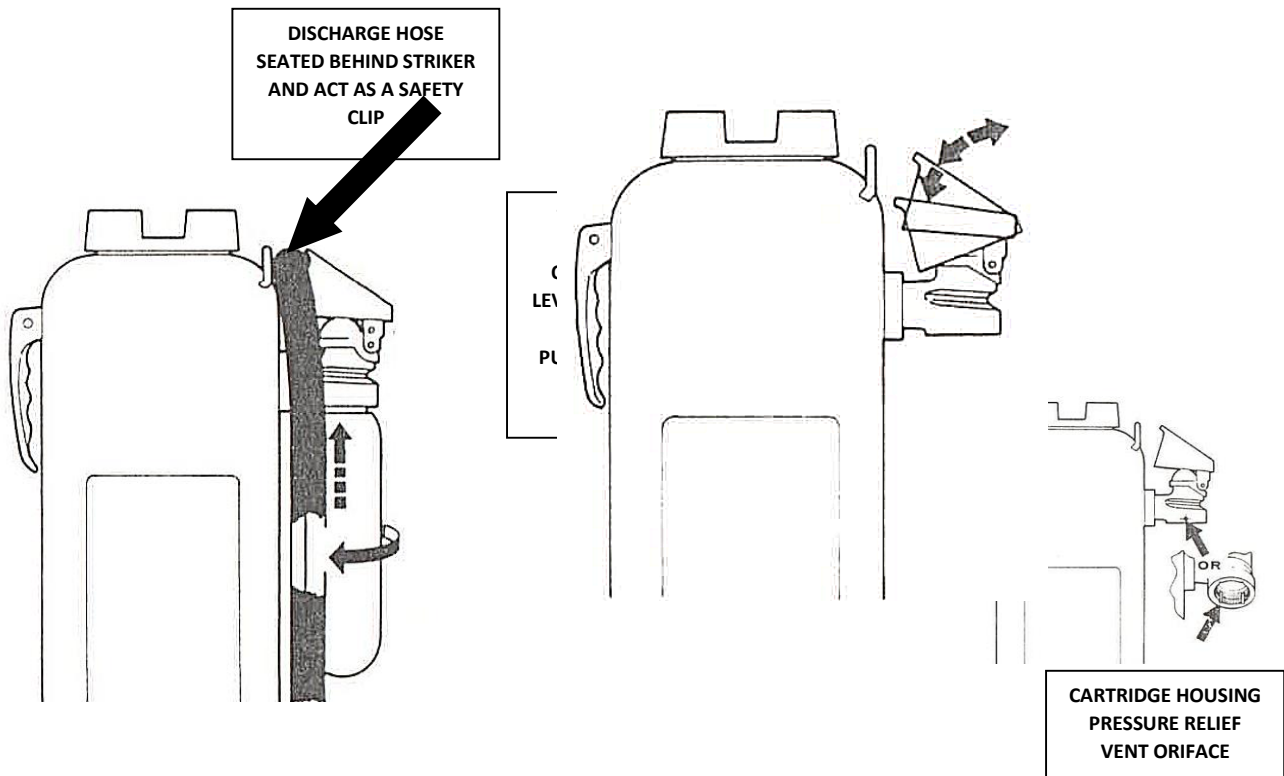
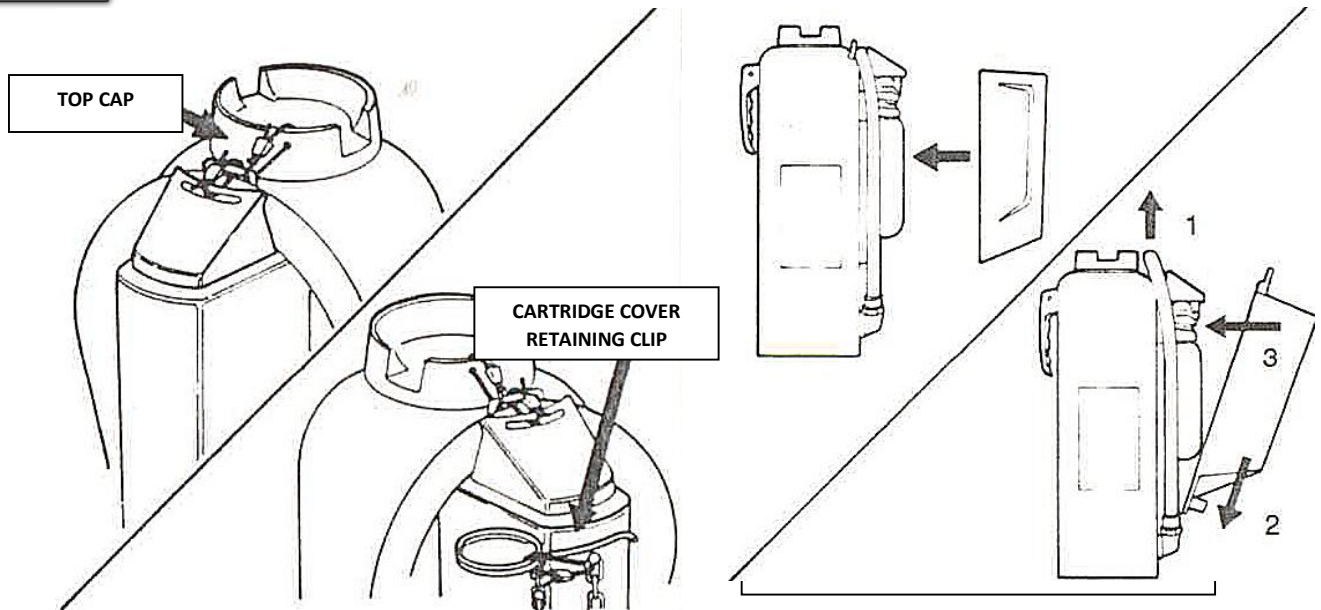
- 1.Top Cap
- 2.Discharge hose
- 3.Syphone Tube
- 4.Hand plunger pin/knob
- 5.Cartridge Housing
- 6.Cartridge
- 7.Cartridge Discharge Tube
- 8.Discharge Nozzle



INTERNAL TYPE

1. Cylinder Body
- 2.Cartridge
- 3.Hand plunger pin/knob
- 4.Co2 Discharge Flow
- 5.Syphone Tube
- 6.Discharge Hose
- 7.Discharge Nozzle





Ansul Extinguisher (safe stripping all types)

1. Check safety clip in position under the striker knob
2. External cartridge type you can remove cartridge before the stripping process.
3. Open discharge nozzle to check whether under pressure, and if nothing comes out that does not mean the unit is not under pressure and the discharge tube could have compacted medium in it, and therefor the cylinder could still be under pressure.



TOOL BOX 025- Cartridge Units

4. Loosen top cap or head a few turns and listen for pressure loss, at the same time keep your upper body and head away from this area.
 5. No pressure found remove top cap or head completely
- External cartridge type you can remove cartridge before the stripping process.

The following must be in place before you service said units.

You Must:

- a. Have a copy of the manufacturers servicing procedure
- b. All special tool required

Why:

- a. The operating Pressures – all vary
- b. The cartridge Medium and size used – all vary and it may have the wrong cylinder fitted
- c. Test pressure for hose and nozzle assembly
- d. The pressure relief valve set pressure.
- e. The operational pressure of the cartridge.
- f. The medium use – It will be a special brand in most cases.

None of these you know, and you cannot depend on SABS 1475 requirements at all:

EXAMPLES:

Pressure Testing:

1475-5.3.3.2 Except CO₂ extinguishers, all other extinguishers shall be tested to a minimum test pressure of 2 000kPa or 1.5 times the working pressure.

SANS1910:8.9.2.2 Connect the hose assembly to the hydraulic pump and gradually increase the pressure until a hydrostatic pressure equal to 1, 5 times the working pressure of the extinguisher is reached.

The Test Pressure for the following is:

ANSUL: Agent Cylinder – 600psi (4136 kPa)

AMERAX: Agent Cylinder – 500 psi (3447 kPa)

BUCKEYE: Agent Cylinder - 480 PSI (3309 kPa)

The Ansul 3 x the working pressure 1379 = 4137kpa.

If we followed 1475 or even 1910 we would not be complying with the manufacturer's requirements: working pressure 1379kPa x 1.5times = 2068 and this would be under the requirements by 2067kPa.

By the way Burst pressure of an Ansul is 6 x working pressure (8274kpa)

What can result if you service these units in-correctly?

1. The unit may not operate to the required manufacturers specification
2. The pressure relief valve may not operate correctly, either releasing too much

TOOL BOX 025- Cartridge Units

pressure or retaining too much pressure (the main cylinder may not be able to take that increased pressure).

3. Discharge hose and nozzle may rupture, because it has not been pressure tested.
4. The wrong size cartridge may be fitted, or the wrong expellant maybe used.

This is just a few costly mistakes that maybe performed without the correct special tools or manufacturers specifications.

No Person is to service these units unless authorised by the Management Representatives permission.

No matter if you are given permission to service you will still not service unless you have a copy of the manufacturing service procedures for that particular unit.



Example of a pressure regulator

Presented By: Name: _____	Date _____	Signature _____
----------------------------------	-------------------	------------------------

NAME	SIGNATURE	NAME	SIGNATURE