



- water tank
- fire pump
- suction line.
- first interference reel
- sieve to prevent the dirt from reaching the tank
- drainage line
- opening for filling up the tank from the fire tap.
- water inlet valve to the mixer.
- suction and drainage foam valve.
- 2.5" suction opening from the hydrant.
- Non-return valve
- foam tank
- foam mixer and foam percentage adjustment valve.
- 2.5" drainage standby outlets.
- water-foam monitor
- pump suction inlet valve
- main 2.5" drainage valve.
- tank suction valve from pump.
- foam tank drainage valve.
- suction inlet 4",5" or 6" from an external water source.
- compressed air connections from compressor to foam.

- Pump Feed

1. from the tank: by pumping water from the tank which opens valve 10, the water enters through the sieve 9. The stopper at 9 can be opened to drain the tank. The water enters into the suction line 5, into the pump 3, and out to the drainage line 11 to the rest of the outlets.
2. from external water sources into the suction openings: suction openings 18, can be opened bringing in water to the pump 3, then to the drainage 11.
3. From the hydrant suction outlets: the suction inlets 19 can be installed on the hydrant pipes or on another vehicle.

- Drainage outlets

Drainage line 11 connected to openings 12, to be connected to drainage hoses, optional openings can be added 6, connected to the drainage line are 2 outlets for the reels 7, 3" monitor drainage line 8.

- Water tank fill

1. external water hose from an external piping system to be connected to outlet 13, to fill the tank, with a non return valve.
2. From the main drainage pipe 11, valve 14 is opened and water flows through any pump drainage outlet.
3. Upper tank hole: from an elevated water source.

- Foam tank fill

1. manually by opening the tank top and pouring the contents inside.
2. Via a pump by installing it on valve 17, opening valve 16, and operating the pump manually or electrically depending on its type.

- Mixing method

1. the water pump is operated and valves 15 and 16 are opened.
2. The water enters with high pressure into the mixer 4, creating a pressure difference in the foam suction line , which then sucks the foam with high concentration to the mixer 4.
3. The mixer pushes the water and foam mixture into the pump suction line 5, also into the pump inlet opening.
4. The pump mixes the foam with the water well to decrease the foam concentration to the required ratio which is 1:10 depending on the positioning of the handle which is predetermined depending on the type of foam used.
5. The foam mixture exits through all the outlets including monitor, hose reels, and drainage outlets.

- Foam Line cleaning

1. The pump is operated and valve 16 closed, valves 15 and 17 opened.
2. The water exits from all the drainage outlets until all the lines are washed and the water is clean, then valves 15 and 17 are closed.

- Filling and dumping of the foam tank

Through valves 16 and 17.