

Instructions for 242-95 portable eductor

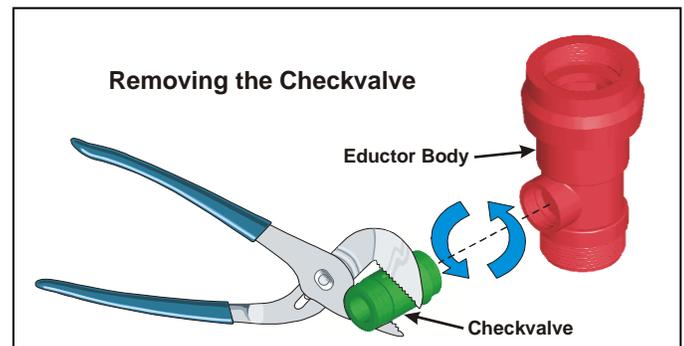
The Elkhart 242-95 Eductor is a device used for educting a liquid concentrate solution into the water stream of 1-1/2" fire hose lines.

The 242-95 Eductor is constructed of Armor-Lyte™ composite material with stainless steel components for resilience and durability. Armor-Lyte™ is impervious to the corrosion caused by high concentrate detergents, salt water and most chemicals.

The 242-95 Eductor is designed for use with nozzles calibrated for flow rates of 95gpm (356 lpm) at 100 psi (6.9 bar). Each Eductor comes equipped with a 1-1/2" NHT female swivel inlet connection, a 1-1/2" NHT male outlet connection. The eductor comes with four metering/check valves to choose from (1/2%, 1%, or 3% fixed orifice) or (1/2%, 1%, & 3% adjustable). Each metering/check valve has a 3/4" male Garden Hose Thread inlet that the concentrate pick-up hose assembly will attach to.

Installing a fixed orifice metering/check valve. Each of the three different fixed orifice metering/check valves provides a different concentrate eduction rate. When installed, the Black metering/check valve will educt at a 1/2% rate, the Purple metering/check valve will educt at a 1% rate and the Green metering/check valve is for educting at a 3% rate. To install a fixed orifice metering/check valve screw the male thread located on the end of the metering/check valve from which the inner coil spring is visible into the female thread on the side of the eductor body as far as possible by hand. Then gently grasp the metering/check valve body with pliers or vise grips and tighten snugly. There is no need to over tighten.

To remove a fixed orifice metering/check valve, gently grasp the checkvalve body with pliers or vise grips and unscrew. The illustration to the right shows the method of removing the fixed orifice metering/check valves.



Installing the adjustable metering/check valve. Screw the male thread located on the end of the adjustable metering/check valve with the chrome position indicator label. (On the illustration to the right it's shown at the top.) Tighten snugly by hand only no tools are needed. There is no need to over tighten.

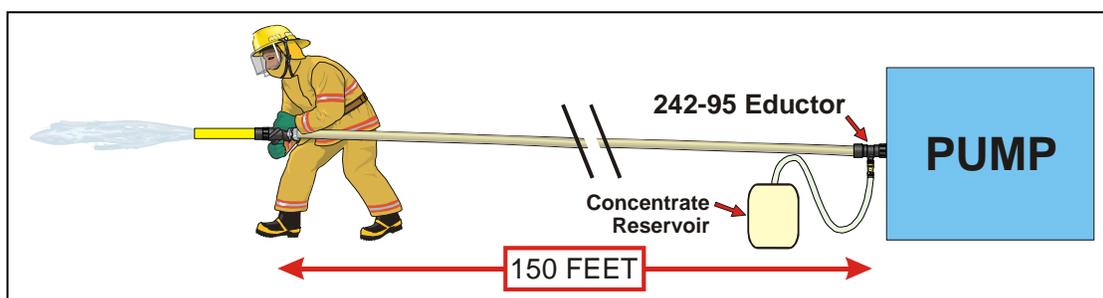
Operating the adjustable metering/check valve. Rotate the red selector ring to align it's pointer with the desired eduction rate on the chrome label. The red half dot indicates the 1/2% position, the red full dot indicates the 1% position, and the three red dots indicate the 3% position. There is no OFF position.



98417000 (Rev-B)

Installing the pickup hose and wand. Thread the female end of the pickup hose onto the metering/check valve and the pickup wand onto the male end of the pickup hose. Tighten both snugly, there is no need to over tighten.

Eductor System set up. The illustration below shows a typical set-up. The eductor is mounted on the discharge of the pump or fire truck, a liquid concentrate reservoir is placed nearby with the 242-95 Eductors pick-up wand placed in it. A 1-1/2" hose lay of 150 ft. is attached to the discharge of the eductor with a nozzle rated for 95gpm (356 lpm) at 100 psi (6.9 bar) at the end. 242-95s are restricted to a maximum hose length of 150 feet between the eductor and nozzle. **However, when using the 1/2% or 1% fixed orifice metering/check valve, the maximum length for the 1-1/2" hose lay may be increased to 200 feet.**



Note: The eductor to nozzle hose length can be increased to 300 ft. when using 1-3/4" hose.

Operation. The 242-95 Eductor is designed to operate at a maximum inlet pressure of 150 psi. The minimum inlet pressure required for an effective nozzle stream is 75 psi.