

# TFT PRO/PAK

## CHAPTER 20.1

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**Submitted by:**

**Revised:**

**Approved by: Chief of Fire Rescue**

This portable foam system can be used in potentially dangerous situations. The following must be observed at all times:

**WARNING:** Make sure that the foam concentrate in the foam tank is the right type for the situation. Do not use Class A foam on Class B fires or Class B foam on Class A fires. Note: Some foam concentrates are universal and can be used on Class B fires and spills and as a wetting agent on Class A fires. (Refer to foam concentrate manufacturer's recommendations for proper foam choice.)

**WARNING:** Foam concentrates can be ineffective if not used at the correct percentage. Make sure that the Percentage Knob is set to the correct concentration for the type of foam being used.

**CAUTION:** Make sure the Flow Control Valve is off and the correct nozzle and Outlet Hose are securely attached to the Control Block before the hose line is charged.

### **GENERAL INFORMATION**

The PRO/Pak Portable Foam System is a very versatile eductor-type foam application appliance. It can be used with 0.1% -1% Class A foam concentrates for wildland, rural and urban fire suppression on Class A fuels (wood, paper, combustible materials). On Class A materials the PRO/PAK is intended to be used for direct extinguishment, overhaul, and wetting of fuels. Some foam concentrates are corrosive, we recommend using only Class A concentrates that have received USDA and USFS approval.

On Class B materials the PRO/PAK is primary intended to be used for vapor suppression. It can be used with 1% and 3% AFFF Class B concentrates on flammable liquids that do not contain alcohol. It can be used with 3% and 6% Alcohol Resistant AFFF Class B concentrates on flammable liquids containing polar solvents. It can also be used with 3% X 6% or 6% Class B concentrates. Whenever possible back up the PRO/PAK with additional water/foam capabilities for added safety.

The PRO/PAK can be used on ignited liquid fuels, but it's foam application rate is very limited. Based on NFPA 11 this unit should not be used on ignited Class B fuels with an area greater than 120 square feet (10 x 12 feet) or 11 square meters. The PRO/PAK should not be used on burning Polar Solvents with an area greater than 60 square feet (6 x 10 feet) or 5.5 square meters.

The PRO/PAK is designed for Class A and Class B foam concentrates, but it has been used with other concentrates for other uses.

If you intend to use the PRO/PAK for liquids other than Class A and Class B concentrates and water, we urge you to contact the Task Force Tips Engineering Department. The use of other liquids may void the warranty and subject the user to hazards not addressed in this manual. The user assumes all risks for non-intended uses.

## **LEFT or RIGHT HAND OPERATION**

The Control Block and Valve Assembly can be mounted on the Foam Tank for right or left hand operation. To switch hands, remove the Shoulder Strap from the Pull Pins. Remove the Circle Cotters from the Pull Pins and remove the Pull Pins themselves. Pull the Control Assembly straight up and out of the tank. Turn the Control Unit around and reinstall the Pull Pins, the Circle Cotters, and the Shoulder Strap.

## **FOAM SELECTION**

In any eductor type system the accuracy of the foam concentrate to water ratio will depend upon the viscosity (thickness) of the foam concentrate. The more viscous, or thick, the foam concentrate, the greater the amount of energy required to draw the concentrate into the eductor. The viscosity of most foam concentrates changes with temperature, some thickening to a gel at temperatures or 40°F (4° C).

The PRO/PAK percentage knob has two sides, the green Class A side was calibrated for 20 Centipoise Class A foam concentrates and the red, Class B, side was calibrated with National Foam's Universal Gold® AFFF concentrate.

**CAUTION:** Class A foam concentrates are generally less viscous than Class B foam concentrates. Do not use 1 percent Class B concentrates with the percentage knob set at 1 percent on Class A side of the knob. Using 1% Class B foam on the 1% Class A setting may cause the actual percentage to be less than 1%.

Actual foam concentrations vary with changes in water flow, foam concentrate temperature and viscosity. The user must verify that the concentrate's performance is suitable for use in their application. In all cases, the manufacturer's recommendations must be followed.

[\*\*CLASS A FOAM\*\*](#) ←(Click to View)

[\*\*CLASS B FOAM\*\*](#) ←(Click to View)

## **FOAM COMPATABILITY**

**WARNING:** Do not mix different types of foam concentrates or foams of the same type from different manufacturers. Mixing of foam concentrates can cause the contents of the foam tank to gel and produce unpredictable results. Clean tank and foam passages thoroughly when changing foam types

## **NOZZLE SELECTION**

**Straight Stream Nozzle** – is for Class A foam solutions. Foam Expansion will be negligible. It should be used where maximum reach or penetration is desired.

Reach

50ft @ 100 psi

15m @ 6.8 bar

**Low Expansion Nozzle** – can be used with either Class A or B solutions. Reach is slightly less than the smooth bore. It should be used on Class B fires for extinguishment and Class A fuels to soak the fuel with a wet foam solution.

Reach

37ft @ 100 psi

11m @ 6.8 bar

**Medium Expansion Nozzle** - produces the greatest expansion ratios. It should be used on Class B fuels for vapor suppression and Class A fuels when a longer lasting insulating layer of drier foam is desired.

Reach

9ft @ 100 psi

3m @ 6.8 bar