



HALE PRODUCTS INC.
Trusted by Emergency Services Worldwide

Hale Fire Pump Division

HALE FOAMPRO SERVICE BULLETIN *SB55P*

JUNE 1994

The following items are presented to keep FoamPro installers up to date on the latest information concerning the FoamPro product line. Hale FoamPro manuals are updated on a regular basis to keep you, the installer, aware of the most accurate and current information on the foam systems themselves and the truck installation details that are imperative to a properly operating system. This service bulletin is not a replacement for a complete read-through of each Hale FoamPro manual: please pass on this bulletin and the manuals to all personnel who are involved with Hale FoamPro specification, purchasing, installation, calibration, and delivery within your organization. The Hale FoamPro manuals are the most complete and state of the art in the fire industry. Nevertheless, if the information contained therein is not disseminated within your organization, poor installation and customer dissatisfaction will result. We look forward to working with you toward world class installation status with all Hale FoamPro products. The following items and issues are of the utmost importance and we appreciate your attention in advance in seeing that all FoamPro installations conform to these practices.

1.) ELECTRICAL POWER: HALE FOAMPRO 2001

Be sure to provide adequate electrical power (40 amps minimum) directly from the apparatus battery master switch, using adequately sized wire, as specified in the 2001 manual. This includes a ground strap (a flat-braided strap 1-3/8 inches wide by 1/16 inch thick) installed from the ground stud that is located inside the black cover on the motor-pump base unit. Grounding the unit via the bolts that hold it to the apparatus compartment is not acceptable! The ground strap should be kept as short as possible, and travel from the ground stud to an acceptable ground on the chassis frame rail or back to the battery. We cannot emphasize enough, the importance of a strong power supply for FoamPro systems. Weak or erratic power supplies can damage electronic systems and void Hale FoamPro warranty.



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2.) EMI SUPPRESSION KIT: 2001 HALE FOAMPRO

An EMI/RFI (radio frequency interference) suppression kit is included in the factory box with each Hale FoamPro 2001. The clamp-on beads included in the kit, when properly installed, reduce the potential for radio frequency interference. Be sure that these beads are installed per the instructions as one of the last steps during the FoamPro installation process.

3.) OPERATOR CONTROL DIGITAL DISPLAYS:
1001,2001,3001 HALE FOAMPROS

Always ensure the panel in which the operator digital display control module is mounted is grounded. Many stainless steel panels actually float a couple of millivolts above ground, since there is paint between the frame and panel. Vinyl coated panels should have a ground strap attached to one of the four screws that secure the operator control digital display module to the panel. Use a lock washer under the head of the screw.

4.) OPERATOR CONTROL DIGITAL DISPLAYS:
2001, 3001 HALE FOAMPROS

We have added an extra cable hook-up port in the rear of the operator control digital display module to facilitate an optional cable that leads to a remote start/stop switch for mounting in the apparatus driver's compartment. While the cable and remote control start/stop switch have not been released and are not available at this time, all new digital displays will have the "extra" 4-pin port, on the back side of the display. The port will have a cover (secured by a chain) that screws on the port to keep it moisture and sediment free. The remote start/stop switch feature need not be utilized to make the unit operate properly. Thus, this new display can be utilized in any existing Hale FoamPro 2001 and 3001, as a replacement module, if need be. The following part number has been altered to reflect this product change:

<u>Obsolete</u>	<u>Replace With</u>	<u>Description</u>
168-0300-00-0	168-0301-00-0	Operator Control Digital Display

5.) CHECK VALVES: ALL HALE FOAMPRO SYSTEMS

We recommend that all Hale FoamPro foam proportioning systems be "double-check-valved" insofar as the waterway piping between the fire pump discharge and foam concentrate chemical injection point. These double check valves are extremely important to prevent backflow of foam solution into the fire pump, booster tank, and any plain water discharges on the apparatus. Remember, the end-user is buying a Hale FoamPro because it is a discharge side foam proportioning system and thus expects no chemical will ever contaminate the fire pump or booster tank. Improperly installed check valves, check valves of the wrong design and materials, or failure to use a "double-check-valve" arrangement will cause chemical contamination problems and are not acceptable. Hale offers a "115" flange, wafer check that is spring loaded for this purpose. When ordering your FoamPro system, order two (2) of Part # 038-1570-00-0 ("115" flange check valve) also. Four (4) of the proper size (1-1/2", 2", 2-1/2" or 3") "115" x female NPT flange adapters for the particular size installation can be specified and purchased to facilitate check valve installation in addition to these "115" wafer check valves.

It is important to note that a minimum cracking pressure check valve is also required to be installed in the chemical injection line between the FoamPro concentrate pump and waterway piping. Hale offers a 1/2" NPT foam injection check valve (part # 038-1630-00-0) for this purpose. One each should be ordered with every FoamPro system from Hale.

6.) HALE FOAMPRO 2001: CALIBRATION

Recently released technical operation data from the U.S.B.L.M. shows that the Hale FoamPro 2001 is the most accurate commercially available foam proportioning system over a wide range of water flows. This is because the microprocessor provides accuracy not available in any other system. As such, it is imperative to follow the instructions to calibrate the microprocessor in Chapter 9 of the Installation and Operation Manual "Calibration and Set-up." This should be one of the last of multiple quality control processes the FoamPro installation is subjected to, before it leaves your facility. The two operations involved, calibrating the microprocessor to the water flowmeter (Step #1) and chemical injection pump (Step #2), should take no longer than ten minutes. If these calibration steps are not taken, the FoamPro may not achieve its designed accuracy. Please be sure to complete the calibration steps as outlined in Chapter 9 of the Installation Manual.

7.) HALE FOAMPRO 2001 INSTALLATION SPECIFICATION

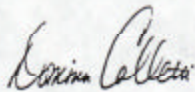
Find the attached Hale FoamPro "Type 1, 2, and 3" specification drawings. Please use them as a guide in ordering materials for different types of customized installations. Please refer to the drawings only for ordering purposes; please read the 2001 Installation and Operation Manual before ordering also; and use the 2001 Installation and Operation Manual as the bible for performing final equipment installation.

8.) HALE FOAMPRO 2001 AND 3001 SPECIFICATION

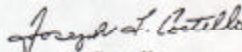
When choosing a Flowmeter(s) for the Hale FoamPro 2001 or 3001 systems, be sure to quiz the end-user on what water flow range(s) he/she expects to flow from the discharge(s), and size the Flowmeter(s) used in the installation accordingly. A convenient Hale FoamPro Flowmeter flow range guide is available for this purpose, and it can be found on the last page of the 2001 Installation and Operation Manual.

9.) HALE FOAMPRO 2001 AND 3001

There are pump panel placards, now available, showing diagrams of the Hale FoamPro system layout. Please order one (1) of the following with each FoamPro system: Hale part number 101-1034-10-0 (for a dual concentrate tank system) and Hale part number 101-1340-09-0 (for a single concentrate tank system). Find copies of the diagrams on these placards on the attached page.

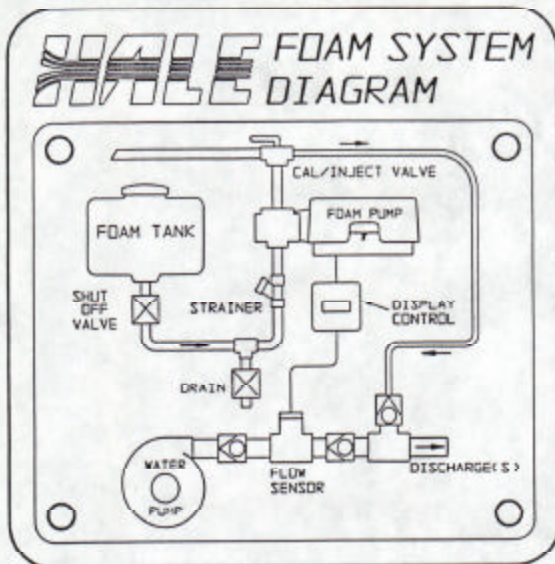


Dominic Colletti
Foam Systems Product Manager

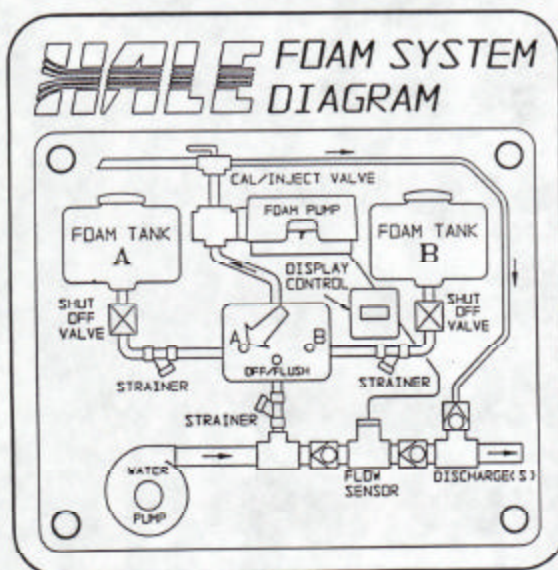


Joseph Costello
Service Department Manager

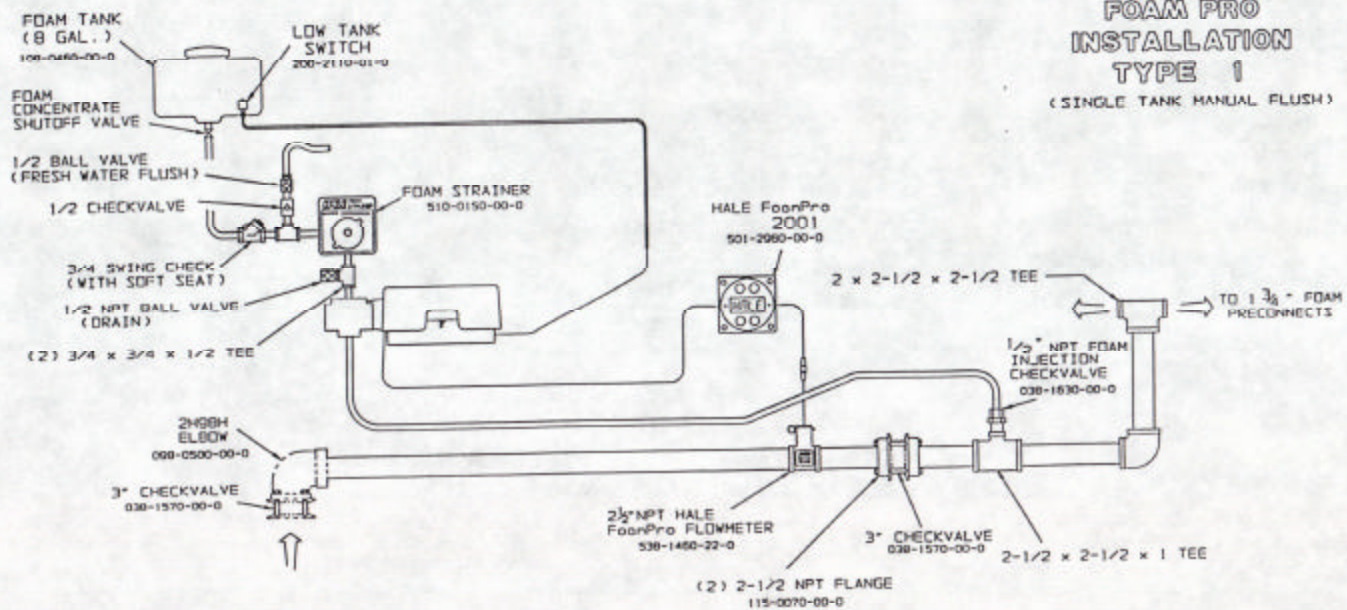
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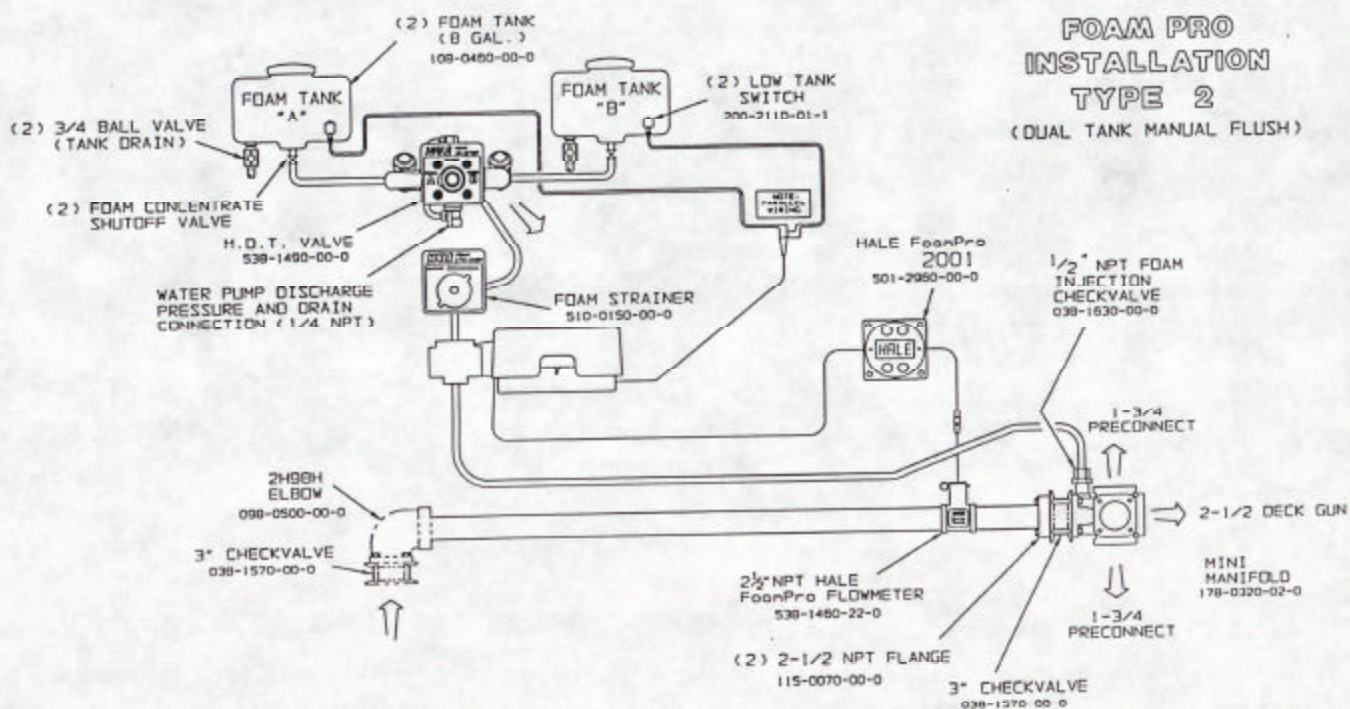


SINGLE FOAM
CONCENTRATE TANK
(101-1340-09-0)



DUAL FOAM
CONCENTRATE TANK
(101-1340-10-0)





FOAM PRO INSTALLATION TYPE 2

(DUAL TANK MANUAL FLUSH)

