

# Lafferty Equipment Manufacturing, LLC Installation & Operation Instructions

Model # 910061 · Single Foam Stick Set

## REQUIREMENTS

### Ready to Use Chemical Solution

Solution Pressure	40 - 60 PSI
Flow Rate	up to 2 GPM
Compressed Air	up to 1.5 CFM
Liquid Tubing - Pump to Tee	1/2" I.D.
Liquid Tubing - Tee to Foam Sticks	3/8" I.D.
Tubing From Air Supply	1/4" I.D.

## OPTIONS

### Alternate Check Valve (Viton Standard)

TL Check Valve, PVC / EPDM, 3/8"	# 491456-E
----------------------------------	------------



[www.laffertyequipment.com](http://www.laffertyequipment.com)

501-851-2820

**WARNING! READ ALL  
INSTRUCTIONS BEFORE  
USING EQUIPMENT!**



## OVERVIEW

The Single Foam Stick Set is a foam applicator designed for car-wash pre-soak, brush lubrication or to apply any foaming product. This unit receives pre-diluted chemical from a pumping system. Thick, rich, clinging foam is created by injecting compressed air into the solution to greatly expand volume and coverage ability. The foam is then projected through the pair of 6 foot foam sticks. A fixed flow rate allows just one air valve to easily adjust foam quality for both sticks. Great for retrofitting and for new installations.

## SAFETY & OPERATIONAL PRECAUTIONS

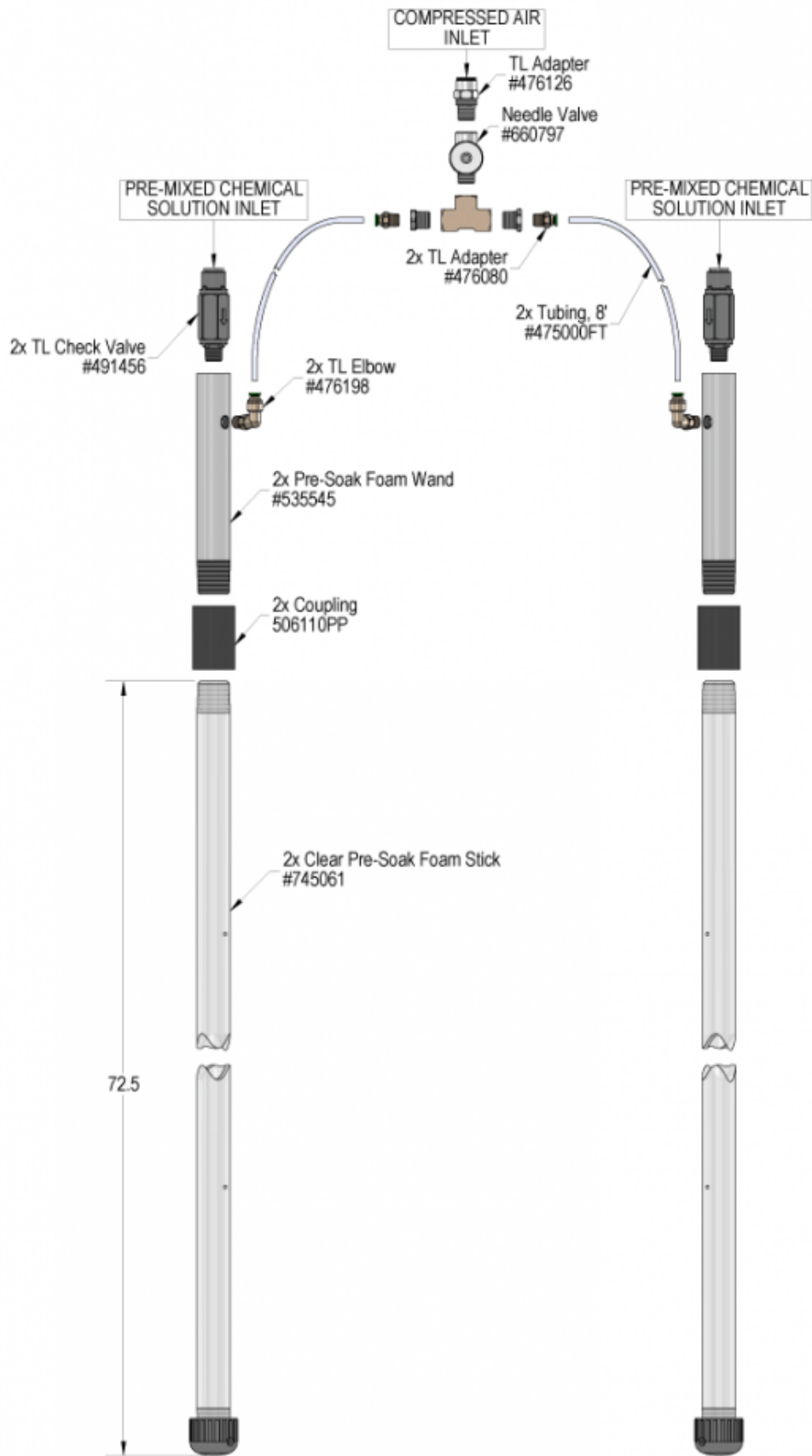
- For proper performance do NOT modify, substitute nozzle, hose diameter or length.
- Manufacturer assumes no liability for the use or misuse of this unit.
- Wear protective clothing, gloves and eye-wear when working with chemicals.
- Always direct the discharge away from people and electrical devices.
- For pressures over 100 PSI, remove the discharge valve or lower pressure
- Follow the chemical manufacturer's safe handling instructions.
- Turn off solution supply and air when unit is not in use for extended periods.

## TO INSTALL (REFER TO DIAGRAM ON NEXT PAGE)

1. Remove the tube lock check valves from the enclosed bag and install as shown in the drawing.
2. Mount each of the foam sticks to a suitable surface. They should be mounted so that the last hole (in the cap) hits the bottom of the vehicle. The stick sets should be "mirror-images" of each other once mounted.
3. Run 1/2" I.D. chemical tubing from the "solution pumping source" to the middle of the arch and connect with a tubing tee (not included). From there step down to 3/8" I.D. tubing and connect to the solution check valve. The tubes must be the same length for the best performance.
4. Run 1/4" air tubing from your compressed air supply and push connect it to the 1/4" tube lock of the supplied tee. Run the supplied 5/32" tubing to each stick.

## TO OPERATE

1. Turn the needle valve knob on the splitter completely clockwise, then open it 1/2 turn counterclockwise.
2. Activate the air pressure. Wait a few seconds to purge the air out of the solution tube and for the solution to get to the foamers.
3. If the foam isn't acceptable turn the needle valve slightly counterclockwise for dryer foam and slightly clockwise for wetter foam. If the needle valve is open too much, the foam will be pushed past the first holes. If this happens, turn the needle valve slightly clockwise until all the holes are foaming. Once the sticks are foaming properly, no further adjustment should be needed. You are ready for operation.



## Troubleshooting Guide

Problem	Possible Cause / Solution	
	Startup	Maintenance
A) Foam surges or sputters.	1, 2, 3, 4, 5	6, 7, 8
B) Foam too dry.	1	
C) Foam too wet.	1, 3, 4, 5	6
D) Solution drips after shutting down.		6

Possible Cause / Solution	
Startup	Maintenance
<p><b>1. Air volume too high or too low</b></p> <ul style="list-style-type: none"> <li>◦ Adjust the needle valve very slightly counterclockwise for dryer and clockwise for wetter. VERY little air is needed, if the top hole is sputtering you have too much air on them, turn needle valve knob slightly clockwise until all holes produce foam.</li> </ul> <p><b>2. Use of an oiler in the airline will cause poor foam quality</b></p> <ul style="list-style-type: none"> <li>◦ Use only clean, dry air.</li> </ul> <p><b>3. Solution Pressure too Low</b></p> <ul style="list-style-type: none"> <li>◦ Must be 40 PSI <u>minimum</u>. 60 PSI maximum</li> </ul> <p><b>4. Not enough chemical.</b></p> <ul style="list-style-type: none"> <li>◦ Increase concentration.</li> </ul> <p><b>5. Discharge tubes kinked or wrong size.</b></p> <ul style="list-style-type: none"> <li>◦ Straighten the tubes or replace with correct size.</li> </ul>	<p><b>6. Solution Chemical check valve stuck or failed.</b></p> <ul style="list-style-type: none"> <li>◦ Clean or replace.</li> </ul> <p><b>7. Leak in air or solution connections.</b></p> <ul style="list-style-type: none"> <li>◦ Tighten the connection or cut off 1/2" of tube and reconnect.</li> </ul> <p><b>8. Needle valve clogged not allowing enough air</b></p> <ul style="list-style-type: none"> <li>◦ Clean or replace.</li> </ul> <p><b>9. Chemical build-up may have formed in the foamer causing low flow</b></p> <ul style="list-style-type: none"> <li>◦ When there is no flow at all, carefully remove fittings and soak entire foam wand in descaling solution. Or replace.</li> </ul>

**PREVENTIVE MAINTENANCE:** When the unit will be out of service for extended periods, place chemical tube(s) in water and flush the chemical out of the unit to help prevent chemical from drying out and causing build-up. Periodically check and clean chemical strainer and replace if missing.

