Lafferty Equipment Manufacturing, Inc.
Installation & Operation Instructions

Model # 910310 · Triple Foam Stick Set

REQUIREMENTS

Ready to Use Chemical Solution	
Solution Pressure	40 - 60 PSI
Flow Rate	up to 1.55 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

Air and Chemical Tubing (Order in 10' Increments)	
Air, Polyflow, 1/4" x 1'	# 475200FT
Solution, Pump to Tee, Polyflow, 1/2" x 1'	# 475400FT
Solution, Tee to Foamer, Polyflow, 3/8" x 1'	# 475300FT

Alternate Check Valve (Viton Standard)	
TL Check Valve, PVC / EPDM, 3/8"	# 491456-E

WEIGHT & DIMENSIONS

Single Package	
Shipping Weight	19 lbs.
Shipping Dimensions	91" x 8" x 5"

Additional Package	
Shipping Weight	19 lbs.
Shipping Dimensions	91" x 8" x 5"

Lafferty EQUIPMENT MANUFACTURING INC.

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WARNING! READ ALL INSTRUCTIONS BEFORE USING EQUIPMENT!

OVERVIEW

The Triple Foam Stick Set is a foam applicator designed for car-wash pre-soak, brush lubrication or to apply any 3 foaming products. This unit receives 3 ready-to-use chemicals from a pumping system and injects compressed air to increase the solution volume and create thick, rich, clinging foam. The foam is then evenly projected through the 7 foot foam stick assemblies. A fixed flow rate allows the user to use just one air valve to adjust the foam quality for all 3 foam sticks simultaneously. This system is great for retrofitting and for new installations.

SAFETY & OPERATIONAL PRECAUTIONS

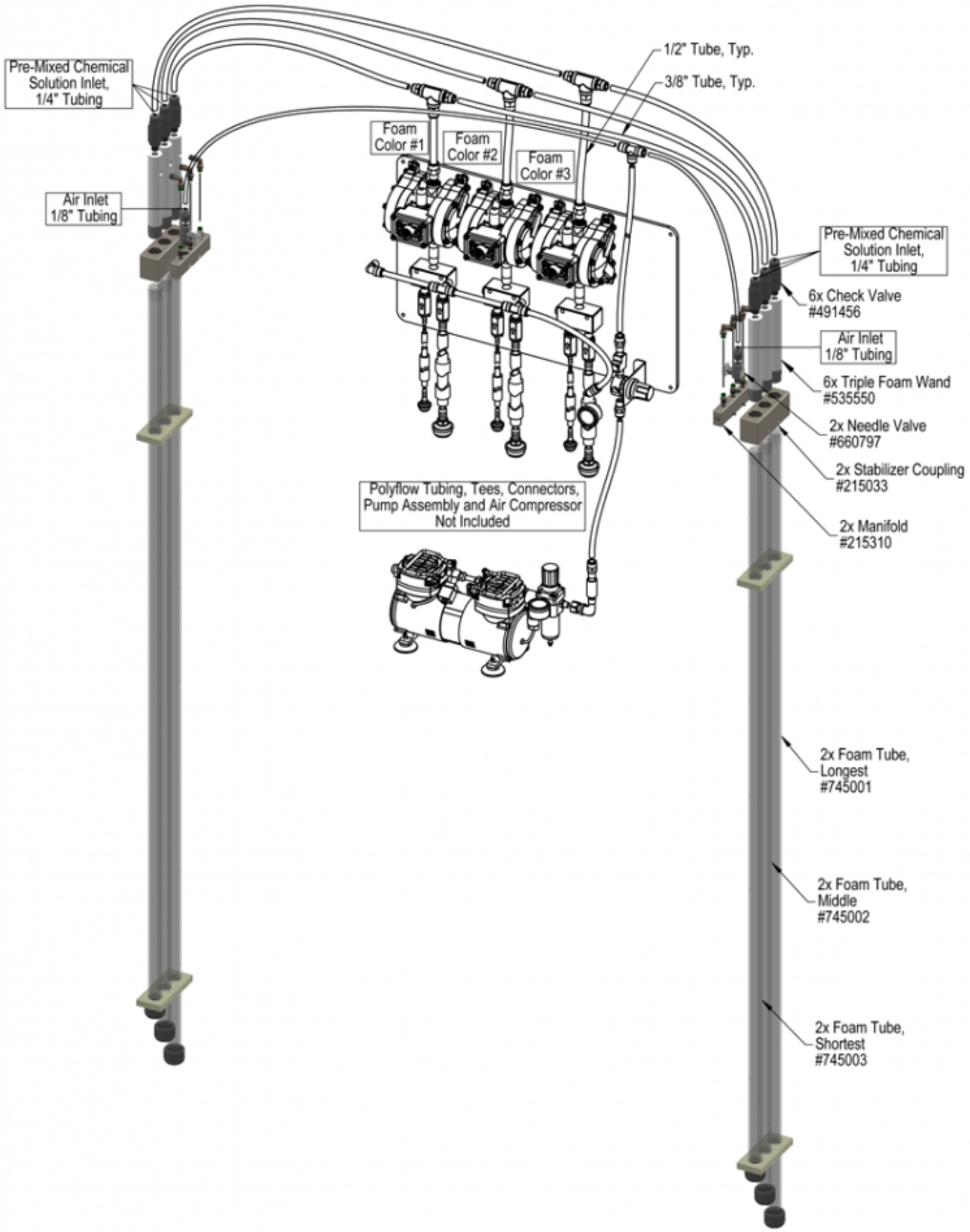
- For proper performance do NOT modify, substitute nozzle, hose diameter or length.
- Manufacturer assumes no liability for the use or misuse of this unit.
- Wear protective clothing, gloves and eye-wear when working with chemicals.
- Always direct the discharge away from people and electrical devices.
- 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 triple foam sticks to either side of the bay. The longest bar should be mounted so that its foam is the first to contact the vehicle. 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 each of the three "solution pumps" to the middle of the arch and connect with a tubing tee (not included).
4. From there step down to 3/8" I.D. tubing and connect to the solution check valves. The tubes should be the same length for the best performance.
5. Run 1/4" air tubing from your compressed air supply to the middle of the arch and push connect it to the 1/4" tube lock of the tee. (not included)

TO OPERATE

1. As a starting point turn the air needle valve on each stick set completely clockwise, then open it 1/2 turn counterclockwise.
2. Activate the solution and air pressure. Wait a few seconds to purge the air out of the solution tube and for the solution to get to the foamers. Solution pressure must be between 40 - 60 PSI. Air pressure/volume is controlled by the needle valves.
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 and air only will blow out the fist hole or two. 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.


Pre-Mixed Chemical Solution Inlet, 1/4" Tubing
Air Inlet 1/8" Tubing
1/2" Tube, Typ.
3/8" Tube, Typ.
Foam Color #1
Foam Color #2
Foam Color #3
Polyflow Tubing, Tees, Connectors, Pump Assembly and Air Compressor Not Included
Pre-Mixed Chemical Solution Inlet, 1/4" Tubing
6x Check Valve #491456
Air Inlet 1/8" Tubing
6x Triple Foam Wand #535550
2x Needle Valve #660797
2x Stabilizer Coupling #215033
2x Manifold #215310
2x Foam Tube, Longest #745001
2x Foam Tube, Middle #745002
2x Foam Tube, Shortest #745003

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

1. **Air volume too high or too low**
   - 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.
2. **Use of an oiler in the airline will cause poor foam quality**
   - Use only clean, dry air.
3. **Solution Pressure too Low**
   - Must be 40 PSI minimum. 60 PSI maximum
4. **Not enough chemical.**
   - Increase concentration.
5. **Discharge tubes kinked or wrong size.**
   - Straighten the tubes or replace with correct size.

Maintenance

6. **Solution Chemical check valve stuck or failed.**
   - Clean or replace.
7. **Leak in air or solution connections.**
   - Tighten the connection or cut off 1/2" of tube and reconnect.
8. **Needle valve clogged not allowing enough air**
   - Clean or replace.
9. **Chemical build-up may have formed in the foamer causing low flow**
   - When there is no flow at all, carefully remove fittings and soak entire foam wand in descaling solution. Or replace.

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.