

Lafferty Equipment Manufacturing, Inc. Installation & Operation Instructions

Model #975085 • Uni-Body A-50 Airless Foamer Complete

REQUIREMENTS

Chemical Concentrate

Water

Temperature.....up to 160°F
Pressure.....35 - 125 PSI
Flow.....up to 4 GPM
Supply Line..... 1/2"

Hose.....1/2" x 50'

Nozzle..... A-50 Airless Foam Wand

OPTIONS

Stainless Steel Hose Racks

Large.....# 224150
Small.....# 224145



**READ ALL
INSTRUCTIONS BEFORE
USING EQUIPMENT!**

www.LaffertyEquipment.com
501-851-2820

Principles of Operation

This Airless Foamer is powered by water pressure and will draw chemical concentrate from the container, mix it with the water and apply the solution onto any surface as a wet clinging foam. Metering tips provide up to 21 dilution ratios.

Lafferty Equipment Manufacturing, Inc. • 5614 Oak Grove Road • North Little Rock, Arkansas 72128



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.
- When connecting to a potable water supply follow all local codes for backflow prevention.
- 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.
- NEVER mix chemicals without first consulting chemical manufacturer.

TO INSTALL (REFER TO DIAGRAM, NEXT PAGE.)

If you are connecting to a potable water supply follow all local codes for backflow prevention.

1. Mount the unit to a suitable surface above the chemical supply to prevent siphoning.
2. Connect the discharge hose(s) as shown in the diagram.
3. Flush any new plumbing of debris before connecting water.
4. Connect water supply. If water piping is older or has known contaminants install a water filter.

Set the chemical dilution ratio by threading one of the color coded metering tip into each chemical check valve. See chemical labels for dilution ratio recommendation or consult your chemical supplier.

- For the strongest dilution ratio do NOT install a colored metering tip.
- The dilution ratios in the metering tip chart are based on water thin chemicals with a viscosity of 1CPS.
- Thicker chemicals will require a larger tip than the ratios shown in the chart.
- Select the tip color that is closest to your desired chemical strength and thread it into the tip holder.
- Application results will ultimately determine final tip color.
- Push the chemical tube over the check valve barb and place the strainer in the chemical concentrate.

TO OPERATE

Always make sure the discharge ball valve is closed or pointed in a safe direction before turning water on. Ball valve can be shut off at any time during operation but should not be left unattended for long periods of time.

1. Open the inlet ball valve then open the discharge ball valve to begin application.
2. Make final metering tip adjustments based on application results.
3. When application is completed, close the discharge ball valve, return to the unit and close the inlet ball valve. Re-open the discharge ball valve to relieve pressure in hose then close the discharge ball valve. If applicable rinse the work surface before solution dries.

Metering Tip Selection Chart

Metering Tip Color	Oz. per Min.	Example: Dilution Ratio @ 40 PSI
Brown	.56	526:1
Clear	.88	335:1
Bright Purple	1.38	213:1
White	2.15	137:1
Pink	2.93	100:1
Corn Yellow	3.84	77:1
Dark Green	4.88	60:1
Orange	5.77	51:1
Gray	6.01	49:1
Light Green	7.01	42:1
Med. Green	8.06	37:1
Clear Pink	9.43	31:1
Yellow Green	11.50	26:1
Burgundy	11.93	25:1
Pale Pink	13.87	21:1
Light Blue	15.14	19:1
Dark Purple	17.88	16:1
Navy Blue	25.36	12:1
Clear Aqua	28.60	10:1
Black	45.00	—
No Tip	—	8.0:1

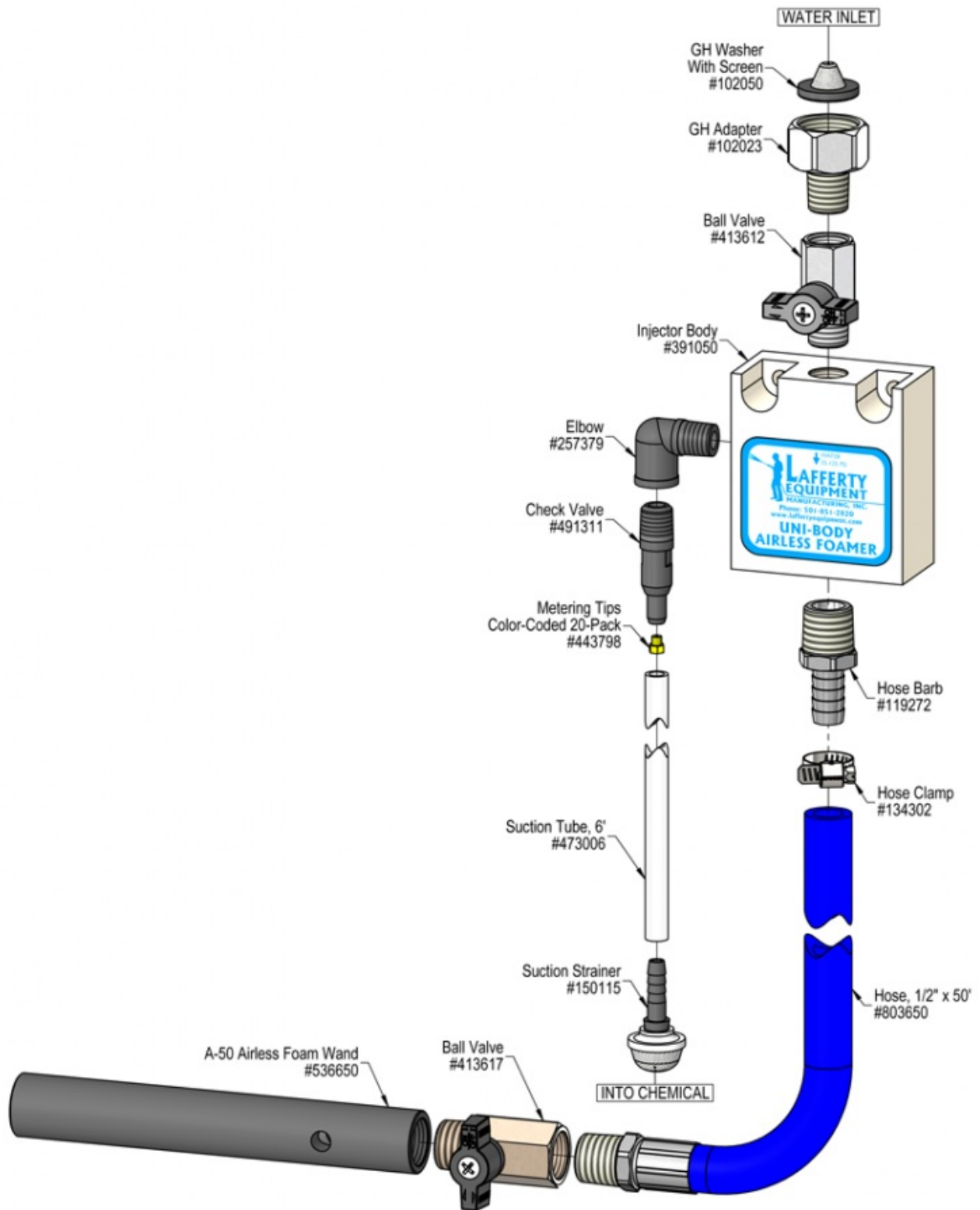
The dilution ratios above are approximate values. Due to chemical viscosity, actual dilution ratios may vary.

Metering Tip Selection Formula

$$\frac{(\text{GPM} \times 128)}{\text{Dilution Ratio}} = \text{Oz. per Min.}$$

Water Flow Rate Chart

Water Pressure	Water Flow Rate
PSI	GPM
40	2.30
50	2.57
60	2.82
70	3.04
80	3.25
90	3.45
100	3.64
110	3.81
120	3.98



Troubleshooting Guide

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Problem	Possible Cause / Solution	
	Startup	Maintenance
A) Will not draw chemical	1, 5, 6, 7, 8, 10	11, 12, 13, 14, 15, 16, 17
B) Foam does not clean or foam properly	2, 4, 5, 7, 8, 9	10, 11, 12, 13, 14, 15, 16
C) Using too much chemical	3	
D) Water backing up into chemical container	10	

Possible Cause / Solution	
Startup	Maintenance
<ol style="list-style-type: none"> 1. Inlet ball valve not completely open <ul style="list-style-type: none"> ◦ Completely open the inlet ball valve. 2. Not enough chemical - metering tip too small <ul style="list-style-type: none"> ◦ Install larger metering tip. 3. No metering tip installed or metering tip too large <ul style="list-style-type: none"> ◦ Install smaller metering tip. 4. Improper chemical <ul style="list-style-type: none"> ◦ Ensure product is recommended for foaming and the application. 5. Chemical tube not immersed in chemical or chemical depleted <ul style="list-style-type: none"> ◦ Immerse tube or replenish. 6. Discharge hose too long or wrong size or kinked <ul style="list-style-type: none"> ◦ Straighten the hose or replace hose with correct size. 7. Discharge ball valve not completely open <ul style="list-style-type: none"> ◦ Completely open the discharge ball valve. 8. Water pressure or water volume too low/inlet piping too small causing poor chemical pick up <ul style="list-style-type: none"> ◦ Increase water pressure or water volume 9. Soil has hardened on surface; always rinse before chemical dries <ul style="list-style-type: none"> ◦ Reapplication may be necessary. 	<ol style="list-style-type: none"> 10. Chemical check valve stuck or failed <ul style="list-style-type: none"> ◦ Clean or replace. 11. Chemical strainer or metering tip partially blocked <ul style="list-style-type: none"> ◦ Clean or replace chemical strainer and/or metering tip. 12. Chemical tube stretched out or pin hole/cut in chemical tube <ul style="list-style-type: none"> ◦ Cut off end of tube or replace tube. 13. Vacuum leak in chemical pick-up connections <ul style="list-style-type: none"> ◦ Tighten the connection. 14. Water strainer clogged or missing/injector inlet orifice clogged <ul style="list-style-type: none"> ◦ Clean or replace strainer; check/clean inlet orifice for obstructions. DO NOT DRILL OUT. 15. Hard water scale or chemical build-up may have formed in the injector body causing poor or no chemical pick-up <ul style="list-style-type: none"> ◦ Follow Preventive Maintenance instructions below, using hot water and/or de-scaling acid. When there is no draw at all, carefully remove fittings and soak entire injector body in de-scaling acid. 16. Foam wand clogged or scaled up / wrong nozzle <ul style="list-style-type: none"> ◦ Hard water scale or chemical build-up may have formed, soak entire foam wand in de-scaling acid / see requirements. 17. More than one chemical ball valve open or no chemical valve open <ul style="list-style-type: none"> ◦ 2 & 3 Way models only

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.

