# Lafferty Equipment Manufacturing, LLC Installation & Operation Instructions

## Model # 969521-B · Model 20 SS Compact Sprayer

REQUIREMENTS			
Water Temperature	up to 180°F		
Pressure Washer	2.2 - 5.5 GPM		
Supply Hose	3/8" ID minimum		
OPTIONS			
Pressure Washer Hose & Trigger G HP 3/8" x 50' Hose & Trigger Gun Kit	un # 807069		
Additional Bottles			
Bottle, 32oz (Includes Solid Lid)	# 709082		
Unit Storage Rack			
Compact Foamer/Sprayer Rack, Stainless Steel	# 224301		



## **OVERVIEW**

Designed for 2.2–5.5 GPM pressure washers. The Model 20 Stainless Steel Compact Sprayer is a chemical spray applicator for quickly diluting and applying virtually any liquid chemical. This venturi unit draws chemical concentrate from the attached bottle and blends it into the water stream to create an accurately diluted solution. The solution is then projected as a fan pattern chemical spray on to surfaces up close or at a distance.

## 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.
- · Follow the chemical manufacturer's safe handling instructions.

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

1. Remove your rinse nozzle and quick connect the sprayer to your trigger gun. (1/4" quick connect).



SCAN QR CODE FOR OVERVIEW & SETUP VIDEO https://vimeo.com/515352837

Set the chemical dilution ratio by threading one of the color coded metering tips 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.
- Application results will ultimately determine final tip color.
- Select the tip color that is closest to your desired chemical strength and thread it into the tip holder. DO NOT OVER-TIGHTEN.
- Push the chemical tube over the check valve barb and place the suction tube in the chemical concentrate.
- If necessary, cut suction tube(s) to length before attaching suction strainer.

#### **TO OPERATE**

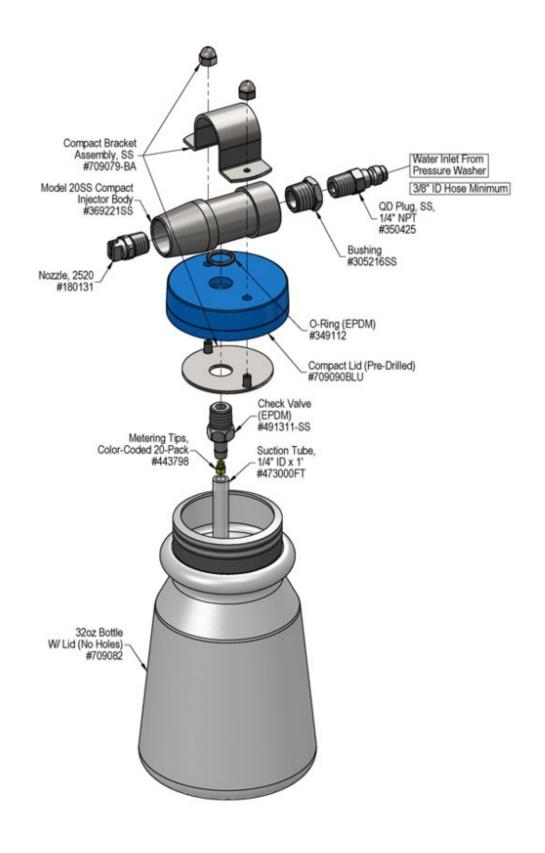
- 1. Unscrew the bottle and install the selected colored metering tip, add chemical concentrate to the bottle and reattach. Do not over tighten.
- 2. Quick connect to the trigger gun.
- 3. Direct the discharge in a safe direction. Pull the trigger to begin application.
- Make final metering tip adjustments based on application results. Try the next larger sized metering tip until the results are acceptable.
- 5. When application is complete, release the trigger.
- 6. To rinse, quick disconnect the unit from the gun, rinse before the chemical dries.

NOTE: Foaming models (not sprayers) include two nozzles. The fan nozzle provides a wide pattern for faster coverage.

The 0° nozzle provides increased foam throw distance. Install the preferred nozzle in the end of the foam wand.

	METERING TIP SELECTION								
METERING DILUTION RATIO AT GPM									
2.5	3.0	3.5	4.0	4.5	5.0	5.5			
571:1	686:1	800:1	914:1	1029:1	1143:1	1257:1			
364:1	436:1	509:1	582:1	655:1	727:1	800:1			
232:1	278:1	325:1	371:1	417:1	464:1	510:1			
149:1	179:1	208:1	238:1	268:1	298:1	327:1			
109:1	131:1	153:1	175:1	197:1	218:1	240:1			
83:1	100:1	117:1	133:1	150:1	167:1	183:1			
66:1	79:1	92:1	105:1	118:1	131:1	144:1			
55:1	67:1	78:1	89:1	100:1	111:1	122:1			
53:1	64:1	75:1	85:1	96:1	106:1	117:1			
46:1	55:1	64:1	73:1	82:1	91:1	100:1			
40:1	48:1	56:1	64:1	71:1	79:1	87:1			
34:1	41:1	48:1	54:1	61:1	68:1	75:1			
28:1	33:1	39:1	45:1	50:1	56:1	61:1			
27:1	32:1	38:1	43:1	48:1	54:1	59:1			
23:1	28:1	32:1	37:1	42:1	46:1	51:1			
21:1	25:1	30:1	34:1	38:1	42:1	46:1			
18:1	21:1	25:1	29:1	32:1	36:1	39:1			
13:1	15:1	18:1	20:1	23:1	25:1	28:1			
11:1	13:1	16:1	18:1	20:1	22:1	25:1			
6:1	8:1	9:1	10:1	12:1	13:1	14:1			
5:1	5:1	6:1	7:1	8:1	9:1	10:1			
	2.5 571:1 364:1 232:1 149:1 109:1 83:1 66:1 55:1 55:1 25:1 23:1 23:1 23:1 13:1 11:1 6:1 5:1	2.5         3.0           571:1         686:1           364:1         436:1           232:1         278:1           149:1         179:1           109:1         131:1           83:1         100:1           66:1         79:1           55:1         67:1           55:1         64:1           46:1         55:1           40:1         48:1           34:1         41:1           28:1         33:1           27:1         32:1           23:1         28:1           21:1         25:1           18:1         21:1           13:1         15:1           13:1         5:1           5:1         5:1	2.5         3.0         3.5           571:1         686:1         800:1           364:1         436:1         509:1           322:1         278:1         325:1           149:1         179:1         208:1           109:1         131:1         153:1           83:1         100:1         117:1           66:1         79:1         92:1           55:1         67:1         78:1           53:1         64:1         75:1           46:1         55:1         64:1           34:1         41:1         48:1           28:1         33:1         39:1           27:1         32:1         38:1           34:1         41:1         48:1           28:1         33:1         39:1           27:1         32:1         32:1           31:1         25:1         30:1           13:1         25:1         30:1           13:1         25:1         30:1           13:1         15:1         18:1           13:1         15:1         16:1           13:1         15:1         31:1           14:1         31:1         15:1	2.5         3.0         3.5         4.0           571:1         686:1         800:1         914:1           364:1         436:1         500:1         582:1           322:1         278:1         325:1         371:1           132:1         278:1         325:1         371:1           149:1         179:1         208:1         371:1           109:1         131:1         153:1         175:1           83:1         100:1         117:1         133:1           66:1         79:1         92:1         105:1           55:1         67:1         78:1         89:1           53:1         64:1         75:1         85:1           46:1         55:5         64:1         73:1           40:1         48:1         54:1         34:1           34:1         41:1         48:1         54:1           27:1         32:1         37:1         37:1           34:1         41:1         48:1         54:1           28:1         32:1         37:1         37:1           21:1         22:1         37:1         37:1           31:1         12:1         37:1         37:1 <td>2.5         3.0         3.5         4.0         4.5           571:1         686:1         600:1         914:1         1029:1           364:1         436:1         509:1         582:1         655:1           322:1         278:1         325:1         371:1         417:1           149:1         179:1         208:1         383:1         268:1           109:1         131:1         153:1         175:1         971:1           83:1         100:1         117:1         133:1         150:1           66:1         79:1         92:1         105:1         181:1           55:1         67:1         78:1         89:1         100:1           53:1         64:1         75:1         85:1         96:1           40:1         85:1         64:1         71:1         82:1           41:1         48:1         54:1         61:1         71:1           31:1         13:1         83:1         14:1         14:1           31:1         13:1         13:1         14:1         14:1           31:1         13:1         13:1         14:1         14:1           32:1         32:1         32:1</td> <td>A.S.         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S.O.           571:1         686:1         800:1         914:1         1029:1         1143:1           364:1         436:1         509:1         582:1         655:1         727:1           323:1         278:1         325:1         371:1         417:1         464:1           149:1         179:1         208:1         288:1         268:1         298:1           109:1         131:1         153:1         175:1         197:1         218:1           83:1         100:1         117:1         133:1         150:1         167:1           661         79:1         92:1         105:1         181:1         131:1           55:1         67:1         78:1         89:1         100:1         111:1           53:1         64:1         73:1         82:1         91:1           41:1         48:1         54:1         61:1         79:1           34:1         41:1         48:1         54:1         61:1         68:1           28:1         33:1         39:1         45:1         50:1         56:1           31:1         48:1         <			

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



Problem	Possible Cause / Solution			
robiem	Startup	Maintenance		
	., 2, 3 ., 4	6, 7, 8, 9, 10 6, 7, 8, 10		
Possible Ca	use / Solution			
Startup	Maintenance			
<ul> <li><b>1. GPM too low</b> <ul> <li>See requirements.</li> </ul> </li> </ul>	<ul> <li>6. Metering tip holder clogged or loose.</li> <li>• Clean or tighten.</li> </ul>			
<ul> <li>2. Water inlet clogged         <ul> <li>Clean the water inlet. DO NOT DRILL OUT</li> </ul> </li> </ul>	<ul> <li>7. Chemical strainer or metering tip blocked <ul> <li>Clean or replace chemical strainer and/or metering tip.</li> </ul> </li> <li>8. Chemical tube stretched out where tube slides over check valve or pin hole/cut in chemical tube (sucking air in) while reduces chemical intake <ul> <li>Cut off end of tube or replace tube.</li> </ul> </li> <li>9. Discharge nozzle is wrong size <ul> <li>Install correct nozzle (see parts drawing).</li> </ul> </li> </ul>			
<ul> <li>3. Chemical tube not immersed in chemical or depleted <ul> <li>Immerse tube or replenish.</li> </ul> </li> <li>4. Dilution too weak / Chemical is very thick. <ul> <li>Install larger metering tip or remove metering tip.</li> </ul> </li> </ul>				
<ol> <li>Dilution too strong / No metering tip installed or wrong metering tip installed</li> </ol>				
<ul> <li>Install a metering tip or install a smaller metering tip.</li> </ul>	the injector I • Follow using	d-up or hard water scale may have formed in dy causing poor or no chemical pick-up Preventive Maintenance instructions below, ot water and/or descaling acid. When there is n all soak entire sprayer in de-scaling acid.		

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.

