

# Lafferty Equipment Manufacturing, LLC Installation & Operation Instructions

## Model # 977800 · DART AP-PD Asphalt Release Spray System

### REQUIREMENTS

#### Ready-to-Use Chemical Solution

**Compressed Air** up to 10 CFM

**Minimum Air Supply Line** 3/8"

**Hose** 3/4" ID x 40'

**Nozzle** 45WSQ

**Electric** 120V

### OPTIONS

#### Heater Assembly

Retro-Fit Heater Assembly # 720981

#### Drum & Tote Stick Lengths & Seal Materials

Drum Stick, 33" (Viton or EPDM) # 491643 / 491643-E

Drum Stick, 48" (Viton or EPDM) # 491648 / 491648-E

Drum Stick, 54" (Viton or EPDM) # 491645 / 491645-E

Tote Stick, 33" (Viton or EPDM) # 491653 / 491653-E

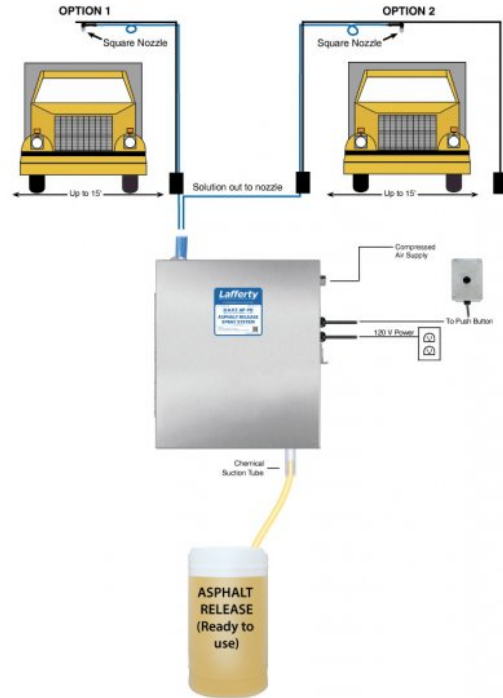
Tote Stick, 48" (Viton or EPDM) # 491654 / 491654-E

Tote Stick, 54" (Viton or EPDM) # 491656 / 491656-E

#### Level Masters Provide an Automatic Supply of Ready-to-Use Chemical

Level Master (Various Tank Sizes) # 989304

Gemini Level Master (Various Tank  
Sizes) # 989316



**DART™**  **DRIVE THRU  
ASPHALT RELEASE,  
TIMED**

**Lafferty**  
EQUIPMENT MANUFACTURING LLC  
 **CFS** TECHNOLOGIES

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501-851-2820

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

### OVERVIEW

The DART AP-PD Asphalt Release Spray System is a push button activated asphalt release sprayer for coating any length asphalt truck bed with pre-diluted asphalt release agent. When the system is activated, a delay timer allows the driver to position the truck under the spray nozzle before applying release agent. The run timer controls the amount of spraying time, after which the system shuts down and resets.

## SAFETY & OPERATIONAL PRECAUTIONS

- See Additional Safety Precautions included with the Electrical Control Box Installation Information
- Always consider electrical shock hazard when working with and handling electrical equipment. If uncertain, consult an Electrician. Electrical wiring should only be done by a qualified Electrician, per Local and State Electrical Codes.
- 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.
- DO NOT use d-Limonene or other chemicals that are not compatible with the Santoprene diaphragms.
- TEFLON upgrade is available.

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

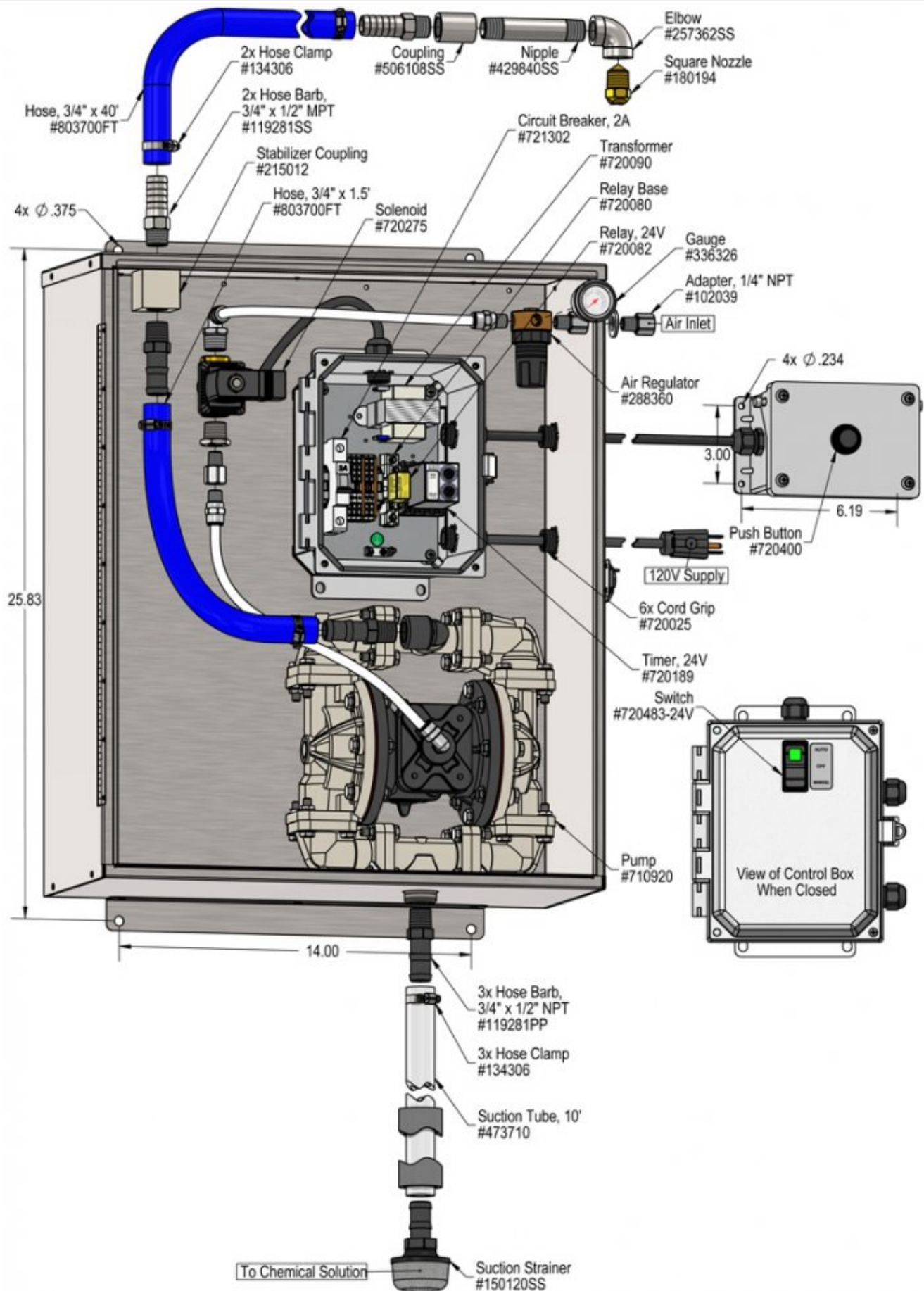
1. Mount the unit to a solid, secure surface within 15' of the drive lane. Mount above the ready-to-use chemical solution container.
2. Do NOT connect to electricity yet.
3. Choose between option 1 & 2 on page 1. Construct the mounting pole or arch, then mount the square nozzle assembly as shown . To prevent dripping after each cycle **leave a loop in the hose** to make the nozzle higher than the bottom of the loop.
4. Mount the push button activation control box at a location of your choice prior to the mounting pole/arch (see 3, above)
5. Connect the 3/4" suction tube to the hose barb as shown in the diagram on page 3.
6. Secure the tube with the clamp – do not over-tighten. Immerse the suction tube into a container of water for initial testing.
7. Connect your clean, dry compressed air supply to the system as shown in the illustration. (Air Extractor / Dryer is recommended.)
8. Make sure the system is not plugged in to a power source. Remove control box cover. The box contains one timer with "Delay & Run" adjustment knobs.  
**Delay:** This mode allows you to set the approximate amount of time needed from the time the truck driver presses the activation button until the truck bed is positioned underneath the nozzles. Set the timer by turning the knob to the amount of delay time that you require (0-60 Seconds).  
**Run:** This mode allows you to set the amount of time the sprayer will operate for. Set the timer by turning the knob to the amount of run time that you require for spraying (0-60 Seconds).
9. Replace the control box cover.
10. Plug the power cord into a 120 VAC power outlet. Activate your air supply.
11. The control box is equipped with a 3 position rocker switch. When set to "Auto", the unit will function according to the timer settings. When set to "Off" the unit is off. When "Manual" is depressed and held down the timer is bypassed.

### TO TEST

1. Perform "test runs" with water only and make any necessary timer and nozzle adjustments.
2. After several successful test runs have been made you are ready to immerse chemical suction tube into the ready to use chemical solution container.

## TO OPERATE

1. Once adjustments have been made to timers. Push the button and drive the first truck through. Make final adjustments as needed.
2. The unit is ready for operation.



## Troubleshooting Guide

Problem	Possible Cause / Solution	
	Startup	Maintenance
A) Air pump will not run/pump.	1, 2, 3, 6, 7	8, 9, 10, 11
B) Pump runs too fast with no output.	1	9
C) Unit will not draw chemical solution.	4, 6, 7	8, 9, 10, 11
D) Chemical tube will not stay primed.	4	9
E) Unit comes on and runs continuously.	6, 7	
F) Asphalt continues to stick to truck.	5	

Possible Cause / Solution	
Startup	Maintenance
<b>1. Problem with air pump</b> ◦ Refer to pump manual.	<b>8. Chemical strainer blocked</b> ◦ Clean or replace chemical strainer.
<b>2. Use of an oiler in the airline will cause pump to stall</b> ◦ Use only clean, dry air.	<b>9. Pin hole/cut in suction tube (sucking air in)</b> ◦ Replace tube.
<b>3. Inadequate air supply</b> ◦ Adjust air regulator slowly clockwise.	<b>10. Air regulator failed allowing too much air or not enough air</b> ◦ Clean or replace.
<b>4. Chemical solution tube not immersed in chemical or chemical depleted</b> ◦ Immerse tube or replenish.	<b>11. Air solenoid clogged or failed</b> ◦ Clean or replace.
<b>5. Improper chemical or solution too weak</b> ◦ Ensure product is recommended for the application.	
<b>6. Timer not be set properly or malfunctioned</b> ◦ See Timer Adjustment on page 2 or replace timer.	
<b>7. May have electrical problems</b> ◦ Have a qualified electrician check electrical connections. Ensure circuit breaker (5 amp) has not been tripped.	

**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.

