

LAFFERTY EQUIPMENT MFG., INC.

INSTALLATION / OPERATION INSTRUCTIONS

TIMED ASPHALT RELEASE SPRAY-ALLS AND AIRLESS FOAMERS

Requirements

35 – 125 PSI Water — Up to 2 GPM
1/2" I. D. Discharge Hose
110 V Grounded A.C. Outlet

Water Temperature
Ambient to 140° F



Model # 977002, Timed Asphalt Release W-25 Spray-All Complete
Model # 977007, Timed Asphalt Release W-50 Spray-All Complete
(with 25' hose, ball valve, 18" stainless steel extension wand, and nozzle)

Model # 977012, Timed Asphalt Release A-25 Airless Foamer Complete
Model # 977017, Timed Asphalt Release A-50 Airless Foamer Complete
(with 25' hose, ball valve, 18" stainless steel extension wand, and airless foam wand)

Ask about our Timed Asphalt Release LC Foamer.

INSTALLATION AND OPERATION INSTRUCTIONS

TIMED ASPHALT RELEASE SPRAY-ALLS AND AIRLESS FOAMERS

IMPORTANT: UNIT SUPPLIED WITHOUT A BACKFLOW PREVENTER

TO PREVENT POSSIBLE CHEMICAL BACK UP INTO THE WATER SYSTEM, COMPLY WITH LOCAL PLUMBING CODES AND INSTALL APPROPRIATE BACKFLOW PREVENTER.

CAUTION: ALWAYS OBSERVE GOOD SAFETY HABITS. DIRECT DISCHARGE ONLY IN THE TRUCK BED. DO NOT OVERAPPLY CHEMICAL.

TO INSTALL (See Parts Diagram, Facing Page)

1. Mount the unit and push button to a suitable surface.
2. **Install appropriate backflow preventer.** Then plumb your 35 – 125 PSI water supply to the garden hose fitting located on the right of the control box. Do not plug in.
3. Connect the hose to the hose barb and the wand assembly as shown in the diagram. **[Hose must be 1/2" I.D.]**
4. *Stapled to these instructions, with a matching color-coded chart, are metering tips which control your chemical to water dilutions. [THIS IS A HIGH CONCENTRATE UNIT. Although metering tips and selection instructions are provided, do not install a tip if you want to achieve the strongest possible chemical concentration.]* If you will be using a tip, you will need to know the water pressure and the number of ounces of chemical needed per gallon of water to determine the correct tip color. *(See chemical label for manufacturer's recommendation.)*
- A. Locate your water pressure in the chart. The number below it is your water flow rate in **gallons per minute**.
- B. Multiply the **gallons per minute** by the number of **ounces of chemical needed per gallon** of water.
- C. Match your answer to the *nearest* number in the metering tip selection chart below to determine the tip color. **[Tip selection chart is based on water-thin chemical. Thicker chemicals will require a larger metering tip. If the selected metering tip does not produce desired foam consistency or asphalt releasing results, increase tip size until desired foam consistency and/or asphalt releasing results are achieved.]**
- D. Install selected metering tip into the metering tip holder. Retain the remaining tips for future adjustments. Next, push the chemical tube over the metering tip holder and close cover. Immerse the chemical strainer into your chemical concentrate.

EXAMPLE OF METERING TIP SELECTION Timed Asphalt Release W-25 Unit at 60 PSI

- 60 PSI = 1.54 GPM
- 8 ounces of chemical per gallon of water
- 1.54 x 8 oz. = 12.32 ounces of chemical
- 12.32 ≈ 12.5 for thin chemical (Burgundy tip)
(thicker chemicals will require a larger tip)

5. Make sure the Control Box (left box) is not plugged in to the power source. Remove the cover. Unwrap the timers. Install the timers in the timer bases. Set the timers by pushing the combination of timer switches that will equal the total number of seconds you need. Set Timer #2 (right) for the amount of time needed to apply chemical. Set Timer #1 (left) for the amount of time set on Timer #2 PLUS the amount of time needed for delay between chemical applications.
6. Plug the power cord into a 110 V grounded A.C. Outlet. Turn on the water supply.

TO OPERATE

When the remote button is pressed, the unit is activated for the time set on Timer #2 (Run). Timer #1 (Delay) will prevent the unit from activating again until the time set on Timer #1 runs out.

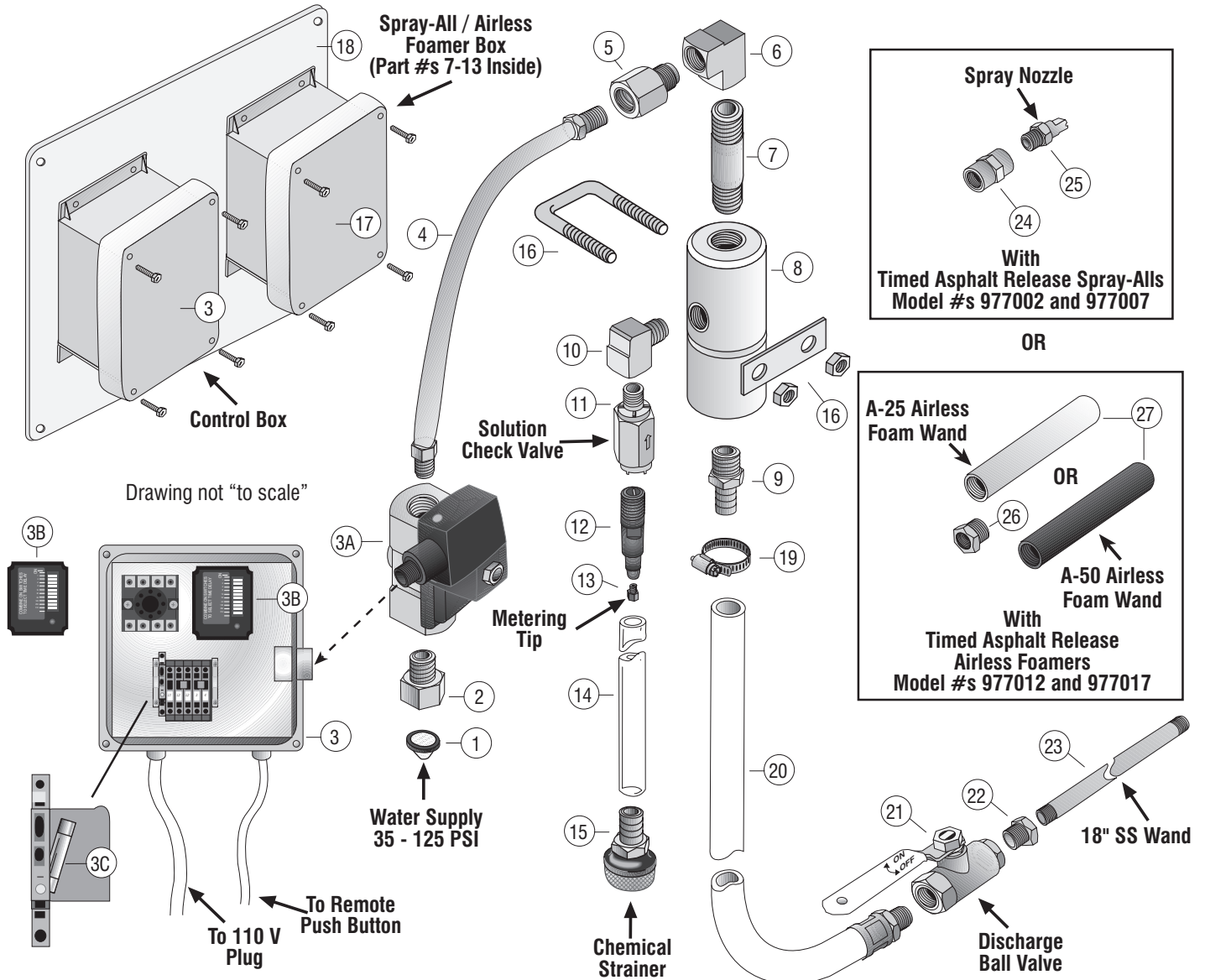
1. While holding the wand, point the discharge away from yourself and others. Completely open the discharge ball valve. Push the remote push button to activate the unit. Spray entire truck bed. **Do not overapply chemical. Overuse is wasteful and can cause slippery roads.**
2. When application is completed or timer times out, close the discharge ball valve. The unit will automatically reset.
3. For proper storage between uses, relieve the pressure in the hose by quickly opening then closing the discharge ball valve.

ASPHALT RELEASE UNITS FLOW CHART			WATER PRESSURE IN POUNDS PER SQUARE INCH (PSI)						
			40 PSI	50 PSI	60 PSI	70 PSI	80 PSI	90 PSI	100 PSI
Injector	Nozzle	Wand	WATER FLOW RATE (GPM)						
W-25HC	4040	A-25	1.34 GPM	1.46 GPM	1.54 GPM	1.59 GPM	1.76 GPM	1.80 GPM	1.91 GPM
W-50HC	2550	A-50	1.96 GPM	2.17 GPM	2.40 GPM	2.50 GPM	2.75 GPM	2.98 GPM	3.21 GPM

The number under each color in the chart below represents the **average ounces of water-thin chemical which will pass through the tip per minute.**

METERING TIP SELECTION IN OUNCES PER MINUTE (AVERAGE)																				
COLOR	Brown	Clear	Bright Purple	White	Pink	Corn Yellow	Dark Green	Orange	Gray	Light Green	Medium Green	Clear Pink	Yellow Green	Burgundy	Pale Pink	Light Blue	Dark Purple	Navy Blue	Clear Aqua	Black
Thin Chemical	0.84	1.16	1.4	2.0	2.7	3.4	4.0	5.3	6.1	7.0	8.5	9.2	11.2	12.5	12.9	14.2	17.6	21.4	30.2	40.4

TIMED ASPHALT RELEASE SPRAY-ALLS AND AIRLESS FOAMERS



QTY.	CALL #	DESCRIPTION	PART #	QTY.	CALL #	DESCRIPTION	PART #
1	1	ADAPTER WASHER, GH, W/SCREEN	102050	1	15	STRAINER, MONEL, 3/8", WITH ADAPTER	150119
1	2	ADAPTER, FGH x 1/2" MPT	102027	1	16	U-BOLT ASSEMBLY, #6 SQUARE	392486
1	3	CONTROL BOX, TIMED SPRAY W/ D & R	291015	1	17	ENCLOSURE, PVC, 6" x 6" x 4"	226604
1	3A	SOLENOID, BURKERT, 120 VOLT, 1/2"	720275	1	18	MOUNT BASE, 10" x 18", POLY	222155
2	3B	TIMER, INFITEC, W/INITIATE START	720170	1	19	HOSE CLAMP, 1/2" (SIZE 8)	134302
1	3C	FUSE, 3-AMP	720070	1	20	HOSE, 1/2" x 25', 3/8" MPT (ONE END)	803525
1	4	HOSE, 1/2" x 9.5", 3/8" & 1/2" MPT	195205	1	21	BALL VALVE, NPB, 3/8" FF, APOLLO	413623
1	5	SWIVEL, NPB, 3/8" x 3/8"	243347	1	22	BUSHING, 3/8" x 1/4"	305216
1	6	ELBOW, 90°, 3/8"	257360	1	23	WAND, SS, 1/4" x 18"	536518
1	7	NIPPLE, SS, 3/8" x 2"	429713	1	24	COUPLING, HEX, 1/4"	506668
1	8	INJECTOR BODY, W25HC, POLY, 3/8"	381025	1	25	NOZZLE, SS, 1/4", 4040 (W-25 ONLY)	180440
		INJECTOR BODY, W50HC, POLY, 3/8"	381051	1	25	NOZZLE, SS, 1/4", 2550 (W-50 ONLY)	180137
1	9	HOSE BARB, 1/2" x 3/8" MPT	119266	1	26	BUSHING, 1/2" x 1/4"	305218
1	10	ELBOW, ST., 1/4"	257378	1	27	WAND, AIRLESS FOAM, A-25 (A-25 ONLY)	536625
1	11	CHECK VALVE, 1/4" MF PVC W/ HAST.	491400	1	27	WAND, AIRLESS FOAM, A-50 (A-50 ONLY)	536606
1	12	METERING TIP HOLDER	491308	2 (Not Shown)		MOUNT PLATE, 6" x 6", POLY	222127
1	13	METERING TIPS, SET (20)	443798	1 (Not Shown)		REMOTE PUSH BUTTON WITH 30' CORD	720832
1	14	TUBE, CHEMICAL, 7/16" x 10'	474748				

TROUBLESHOOTING GUIDE

for

TIMED ASPHALT RELEASE SPRAY-ALLS AND AIRLESS FOAMERS

PROBLEMS	POSSIBLE CAUSE / SOLUTION																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
A) Unit will not draw chemical.	•	•	•	•	•	•	•		•	•	•	•			•	•			
B) Foam output too wet.	•	•	•		•	•	•	•		•	•	•		•	•				
C) Water flowing into chemical container.						•													
D) Unit draws too much chemical.													•						
E) Unit doesn't start when remote button is pushed.																	•	•	•
F) Unit comes on and runs continuously.																		•	•
G) Timer light comes on but no water through the solenoid.							•									•		•	•

POSSIBLE CAUSE / SOLUTION

- Water pressure too low** – Increase water pressure if possible and ensure water supply line is at least 1/2". Water pressure must be a minimum of 35 PSI.
- Hose wrong size or kinked; must be a 1/2" I.D.** – Straighten the hose.
- Foam wand screen blocked** – Dried chemical build-up may be obstructing screen. Back flush with hot water to remove debris or soak in descaling acid.
- Nozzle size too small** – Nozzle size must match injector (see chart, pg 2.)
- Water inlet and discharge ball valve not completely open** – Completely open the water supply and discharge ball valve.
- Solution check valve clogged or failed** – Clean or replace solution check valve.
- Water inlet screen clogged** – Disconnect unit from water source. Clean or replace screen.
- Improper chemical** – Ensure product is recommended for foaming and/or the application.
- Chemical tube not immersed in chemical or chemical depleted** – Immerse tube or replenish.
- Chemical strainer or metering tip blocked** – Clean or replace chemical strainer and/or tip.
- Chemical tube stretched out where tube slides over check valve or pin hole/cut in chemical tube** – Cut approximately 1/2" off upper end of tube or replace tube.
- Vacuum leak in chemical pick-up assembly** – Tighten the connection(s).
- Chemical to water ratio too high** – Install **smaller** tip.
- Chemical to water ratio too low** – Install **larger** tip.
- Water scale or chemical build-up may have formed in the injector body causing poor pick-up** – To descale, carefully remove body and soak *entire* injector body in descaling acid.
- No water to the unit** – Ensure that the water supply to the unit is not shut off.
- May have electrical problems; fuse blown or breaker thrown** – Check to be certain that you have 110 volts coming in to the control box. Ensure the fuse (3 amp) is good.
- Timers not set properly or failed** – Ensure that both T1 and T2 are plugged into their bases. T2 sets the run time. T1 sets the delay time. (See page 2.) Replace the timers if failing.
- Solenoid failed or stuck open** – Replace the solenoid.

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