Detco Installation & Operation Instructions

Model #D-522 ● Airless By-Pass Foamer-2

REQUIREMENTS

Chemical Concentrate

Water

Temperature up to 180°F
Supply Line 1/2"

Hose 3/8" x 50'

Pressure Washer 3 - 6 GPM

OPTIONS

Stainless Steel Hose Racks

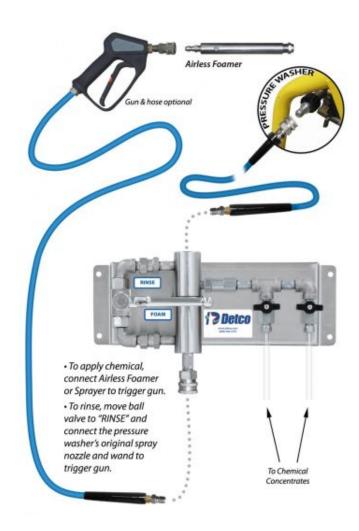
Large # 224150 Small # 224145

Stainless Steel Jug Racks

1 Gallon Round/Square	# 224200
1 Gallon Round/Square Locking	# 224200-L
2 ½ Gallon (8 ½" x 10 ½")	# 224210
5 Gallon (12" x 12")	# 224215
5 Gallon Round Locking	# 224216

Pressure Washer QD's, Hose & Trigger Gun

QD, SS, Socket, 3/8" FPT	# 350446
Hose, 3/8" x 50', BNM, High Pressure	# 195050
Gun, ST-2305, Easy Trigger	# 320438
QD_SS_Socket_1/4"	# 350423





READ ALL
INSTRUCTIONS BEFORE
USING EQUIPMENT!



Overview

The Bypass Airless Foamer is a machined stainless steel foaming system that will project high quality, wet foam onto any surface. Metering tips accurately dilute chemical concentrates to required ratios. Alternate between 2 chemicals and then rinse with the turn of a ball valve.



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, 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 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 strainer in the chemical concentrate.

TO OPERATE

TO FOAM

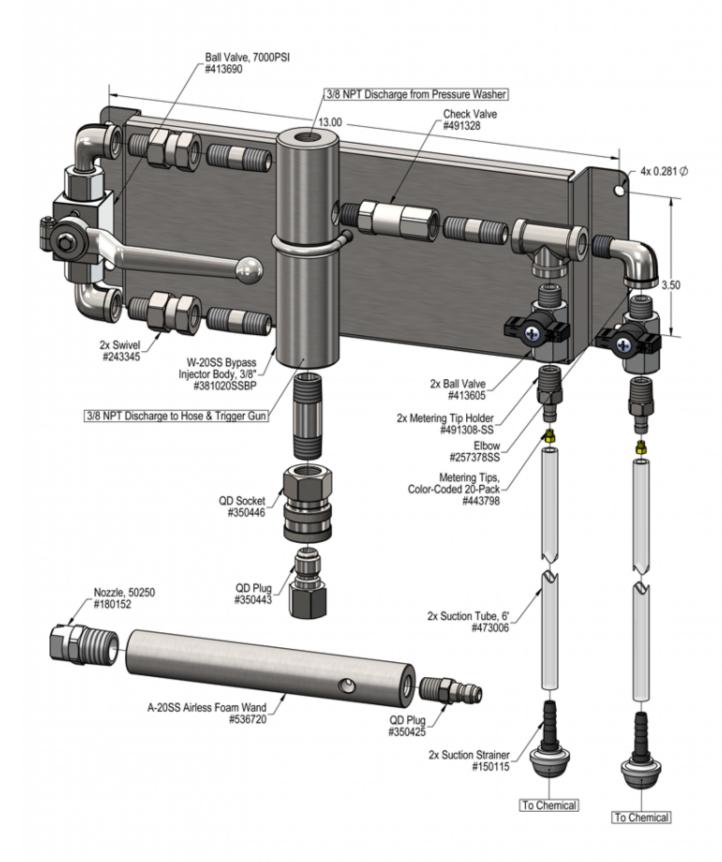
- 1. Remove the rinse nozzle and quick connect the foam wand to your trigger gun as shown in the diagram. If your trigger gun doesn't have quick disconnects you will have to install them.
- 2. Turn the by-pass ball valve to the "foam" position.
- 3. Open 1-chemical ball valve.
- 4. Hold the trigger gun firmly and direct the discharge in a safe direction. Pull the trigger and begin application.
- 5. Make final metering tip adjustments based on application results. Try the next larger sized metering tip until the results are acceptable.
- 6. Repeat step 3 for additional chemicals

TO RINSE

- 1. When foaming is completed, release the trigger.
- 2. Replace the airless foam wand with the rinse nozzle.
- 3. Open the by-pass ball valve.
- 4. Rinse the work surface as you normally would and rinse before the chemical dries.
- 5. If the foamer will not be used for a period of time it is BEST to draw fresh water through the pick up tube to prevent chemical from drying inside the components.

Metering Tip Selection Chart						
Metering Tip Color	Oz. per Min.	3.5 GPM	4.0 GPM	5.0 GPM		
Burgundy	11.93	38:1	43:1	54:1		
Light Blue	15.14	30:1	34:1	42:1		
Dark Purple	17.88	25:1	29:1	36:1		
Navy Blue	25.36	18:1	20:1	42:1		
Black	50.00	9:1	10:1	13:1		

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



Troubleshooting Guide

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Problem	Startup	Maintenance	
A) Unit will not draw chemical. B) Does not foam properly C) Using too much chemical	1, 2, 3 1, 4, 6 5	7, 8, 9, 10, 11, 12 7, 8, 9, 11	
Pos	sible Cause / Solution		
Startup		Maintenance	
Water volume too low ○ See requirements.		valve stuck, clogged, loose or failed	

- 2. Water inlet clogged
 - o Clean the water inlet. DO NOT DRILL OUT
- 3. Chemical tube not immersed in chemical or depleted
 - o Immerse tube or replenish.
- 4. Ensure chemical is recommended for foaming and/or the application
 - See chemical manufacturer.
- 5. Dilution too weak / Chemical is very thick.
 - Install larger metering tip or remove metering tip.
- 6. Dilution too strong / No metering tip installed or wrong metering tip installed
 - o Install a metering tip or install a smaller metering tip.

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- o Clean, tighten or rebuild.
- 8. Chemical strainer or metering tip blocked
 - o Clean or replace chemical strainer and/or metering tip.

Possible Cause / Solution

- 9. Chemical tube stretched out where tube slides over check valve or pin hole/cut in chemical tube (sucking air in) which reduces chemical
 - o Cut off end of tube or replace tube.
- 10. Discharge nozzle is wrong size
 - o Install correct nozzle (see parts drawing).
- 11. Chemical build-up or hard water scale may have formed in the foam wand or injector body causing poor or no chemical pick-up
 - o Follow Preventive Maintenance instructions below, using hot water and/or descaling acid. When there is no draw at all, carefully remove inlet fitting and chemical check valve. Soak injector body and or foam wand in de-scaling acid.
- 12. By-Pass ball valve open. (By-pass models only)
 - o Close by-pass valve.

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.

