



LMOOAM

[User Manual]

Please refer to your Parts Inventory Sheet when installing your marker.

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IMPORTANT:

YOUR SMUCKER FOAM MARKER COMES WITH A 2 YEAR MANUFACTURES WARRANTY. PLEASE SAVE YOUR RECEIPT FOR PROOF OF PURCHASE. CONTACT THE DEALER THAT YOU PURCHASED YOUR FOAM MARKER FROM WITH ANY WARRANTY ISSUES.

You can visit our smuckermfg.net website page for reference to all foam marker parts and diagrams. If you still have questions, give us a call and we can even help you locate your closest Smucker dealer.

Also, visit www.smuckermfg.net or ask your dealer about the other product lines we offer. We offer premium products at an affordable price. Take a look at our Weed Wipers, Calf Warmers, and VisionWorks camera systems for farm equipment on our website.

www.smuckermfg.net

www.redweeder.com

www.visionworkscameras.com

Mobile website for VisionWorks Cameras

Smucker Mobile website

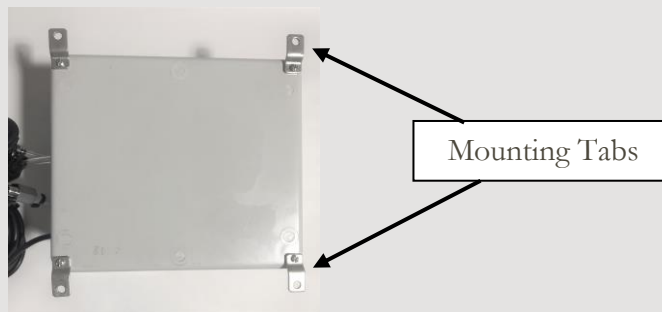


Installation Instructions

Thank you for purchasing a LandMark™ Foam Marker, it has been built to produce high-quality foam marks with minimal service. In addition to producing great foam, the LandMark™ is also capable of keeping pace with high-speed sprayers. For best results, please read and follow the installation and operating instructions below. Please refer to your Parts Inventory Sheet when installing your marker.

Step #1 Mount the Tank & Pump Assembly in a Secure Position

Open your fiberglass control box. Locate the screws and mounting tabs in the plastic bag. Screw your mounting tabs to your box with the mounting tabs facing out.

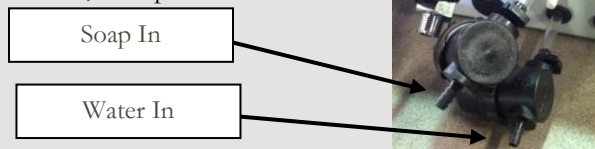


Mount your tank and pump assembly in a secure location as pictured (**with your own bolts**). We do not provide the bolts to mount your control box and tank because the length needed will vary based on where you mount your assembly. These pictures are only meant to give you an idea of where you will want to mount your assembly. However, it is crucial that your assembly is **within 24 ft.** of your operating area.



Step #2 Attach the Soap & Liquid Tank Lines to the Control Box

Plumb 1/4" tubing from the freshwater tank to the bowl filter hose barb marked, "Water In" and 1/4" tubing from the 1-gallon foam concentrate canister to the bowl filter hose barb marked, "Soap In." (Look inside your control box to find a label for this). Use the CL0380 plastic clamps provided to attach the tubing lines to your, "Water In" and, "Soap In."



Step #3 Wiring to Power & Installing Switchbox

Next, you will need to route the power lead to the operator's area and mount the switch box (EL8103) with the provided zip ties or use **your own mounting hardware**. Mount in an area that is easily accessible. Make sure that you do not allow the wire to come into contact with any sharp, hot, or moving surfaces.



Route the power lead to a 12v power source by connecting the red wire to positive, connect the black wire to negative. Connecting the wires backwards will destroy your solenoids and void your warranty. To power your switchbox, simply run your 24 ft. cable from the tank assembly to your **push to connect cord** on your switch box.

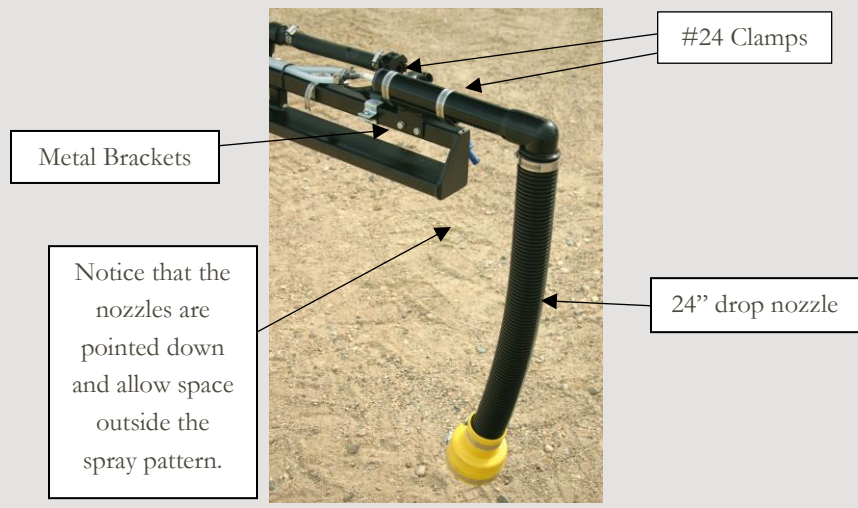
Note: If two 6v batteries are used, connect the red wire to the positive post connected to the starter, and the black wire to a ground. You can find a wiring schematic on our website

Step #4 Mounting the Foam Chambers

We have included metal brackets to mount the foam chamber/nozzle assemblies. Weld or U-bolt (**not provided**) your brackets so that your foam chamber sits in the metal cradle near the end of each boom (as pictured below). Each foam chamber mounts on the bracket with two #24 clamps (CL0024). This kit contains four #24 hose clamps (two for each foam chamber). Mount the chamber/nozzle assemblies so that the nozzles are pointed down. If possible, the nozzles should be outside the spray pattern. The 24" drop nozzle can be cut to a length of your choice.

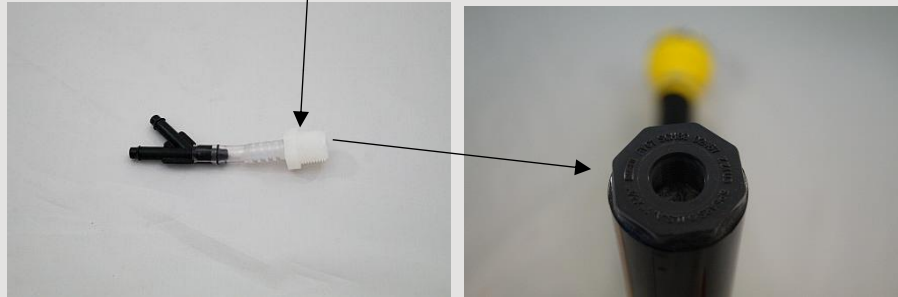


Metal Brackets



Step #5 Plumbing the Liquid and Air Lines

Next, screw your Y-connectors (HY14AS QTY: 2) into the ends of the foam chambers with a wrench.

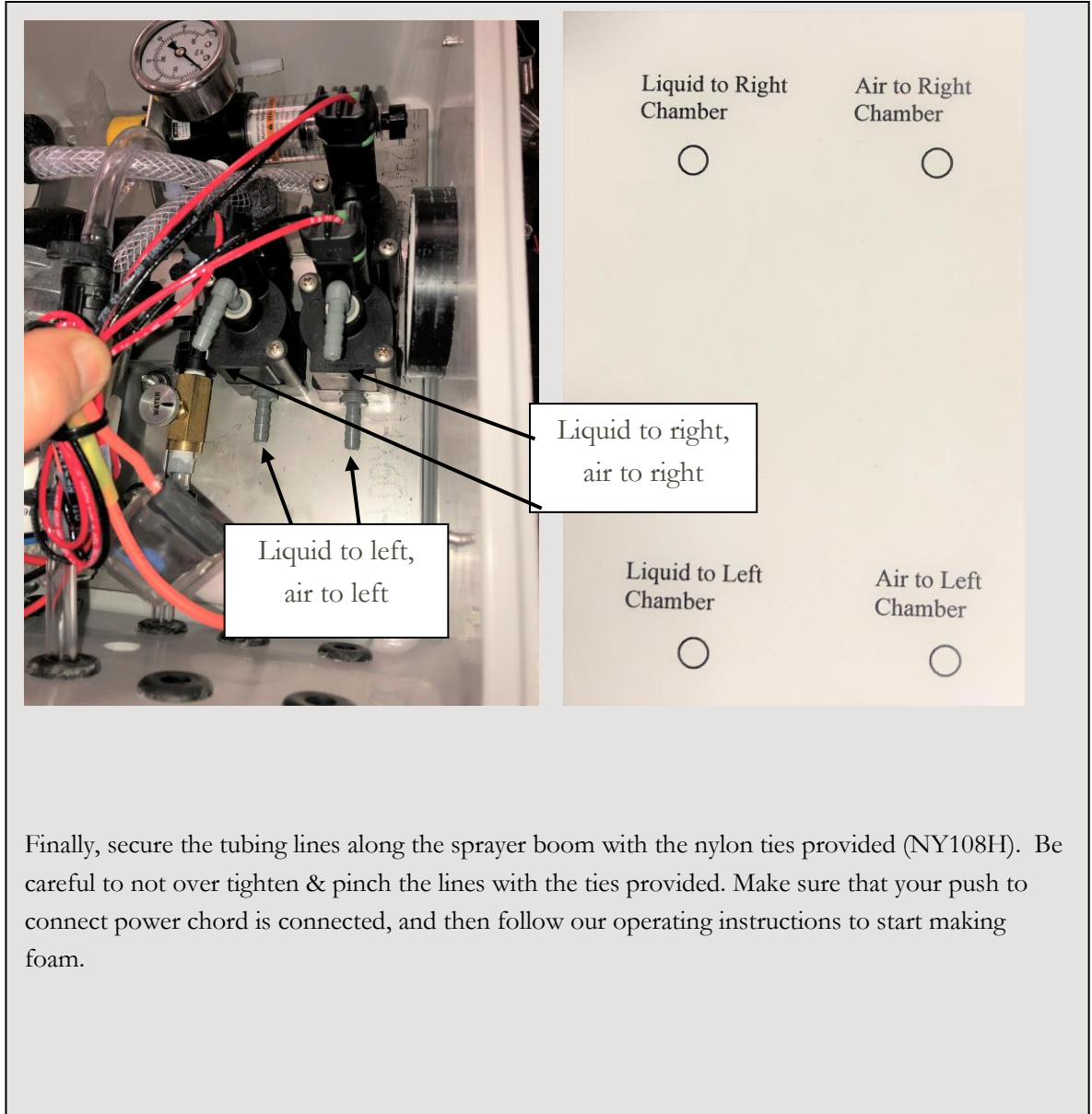


Connect your 1/4" tubing (VL0140) to each "Y" connector (air to one, liquid to the other), and run the lines along the booms frame toward the tank/compressor assembly. Cut the tubing accordingly for each line. **Make sure there is excess tubing where your spray boom folds up to prevent the lines from getting tangled.**



The **lid** of the control box should be labeled, as shown in the picture below, you must connect the 1/4" tubing to the correct port on each solenoid. (liquid to left chamber, air to left chamber & liquid to right chamber, air to right chamber). Next, plug your tubing accordingly with right & left mixing chambers. Below you will see a picture of what you should be seeing on your control box.

Step #5
Continued



Operating Instructions

Mixing Your Foam Solution

To ensure the highest-quality foam marks, we recommend using our Field Mark® Foam Concentrate (FOC001). You can try other foam concentrates if you please, but it's very important that you do not use, "hard" water. You will get, "soupy" foam if you have hard water, so a water softener is recommended if you have hard water. The key to making good foam with this injection marker is having the proper ratio of soap to water by adjusting the, "soap" and, "water" valves. This ratio can be affected by the water hardness and soap quality. Soft water is essential for the best foam quality. When using an 80:1 foam concentrate...the factory default settings on the valves are as follows.

Factory Default settings:

Your valves on your 12v air compressor version have been pre-set to the following:

- 3 ¼ turns on the water valve
 - 3/8 turn on the soap valve
-

Adjusting Your Foam Marker Output

While in the field, you may choose to adjust your marker to produce foam at a faster rate. To adjust your foam output, stiffness, and volume simply adjust the brass needle valve pictured:



Note: If the needle valve is opened too far, the foam chambers will flood and produce wet, sloppy foam. You should be able to produce a drop every second if you adjust the nozzle to optimum speed. In most spraying applications this is more than enough marks per foot. You can conserve your foam by turning down the liquid flow when a desired foam consistency is achieved.

Starting Up Your Foam Marker

Once your machine has been powered up, flip the toggle switch to the right or the left to start making foam. Turn the marker switch on and allow the liquid pump to prime. If the liquid pump does not prime, open the priming valve until liquid starts to flow, then close the priming valve (priming valve labeled in control box). Foam solution and air will travel to one of the chambers and start generating foam. If you want to generate foam on the other side, simply flip the switch.

When the foam marker is set properly, you should be able to product quality foam at approximately 60 drops per minute. This foam should be able to stick to your hand when turned upside down. Once you are happy with where your valves are set, tighten jam nuts on both the soap and water valves.



Maintenance Requirements

Common Filter Maintenance

There are two filters on the air pump (one felt that needs replaced when it turns black...and one sponge that can be blown out over time). There is a filter at the bottom of the tank that should be checked regularly to make sure the flow of liquid isn't being blocked...this can easily be cleaned by reaching into the tank. Algae in the water tank may plug the water filter...if this happens, take the necessary measures to control algae growth.

Operating at Freezing Temperature

When operating in temperatures at, or below freezing, one to two cups of ethylene-glycol-based antifreeze may be added to five gallons of foam solution.

If your system will be exposed to freezing temperatures overnight...reach into your tank and pull the suction tube out to expose it to the air. Then proceed to run the system for 10-15 seconds to clear the foam solution from the pump and solenoids.

For long term storage...drain the tank of foam solution and run fresh water through the entire system. While the unit is still running, blow air through the suction tube until the system is dry. Flip the power switch to dry the other side.
