

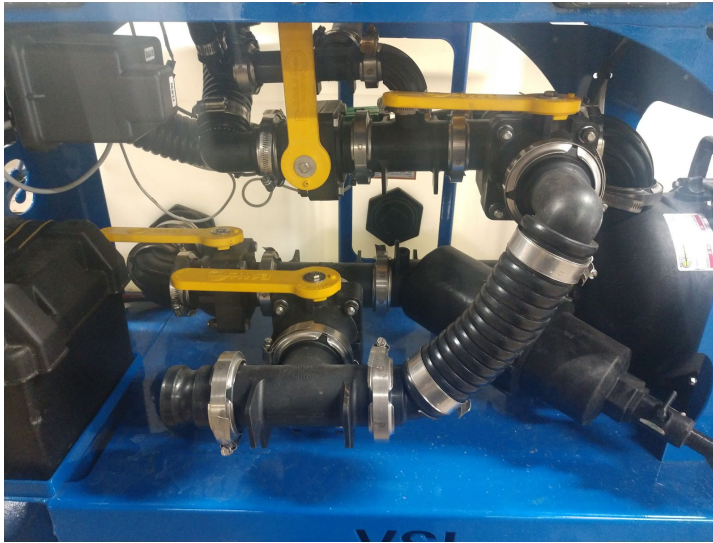
De-Icing Applicator Manual
305LP, 500 ASM, 750 ASM, 1000 ASM,
Automated Power Bundle



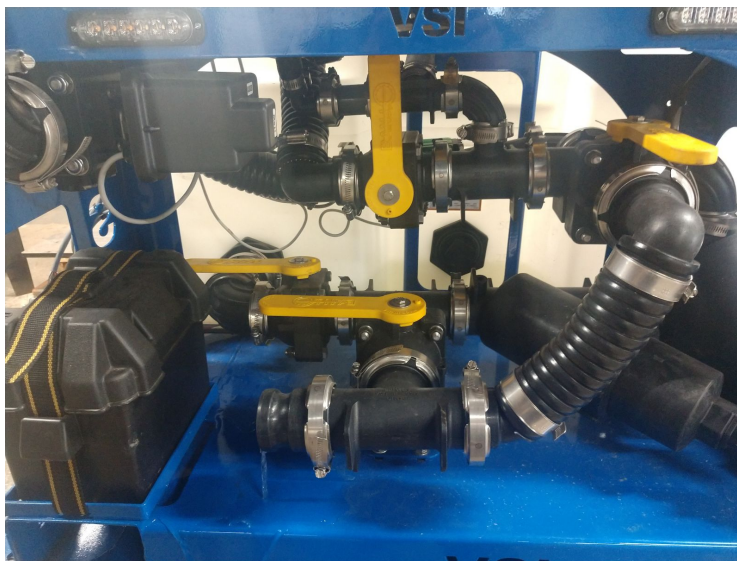
VALVE FUNCTIONS

The following pictures indicate proper valve positions for the different functions of the sprayer.

1. **Application Mode** - Your valves are to be in this configuration when you are applying liquid de-icer.



2. **Pump-Out Mode** - Your valves need to be in this configuration when you are using the pump to transfer liquid from the sprayer to another tank outside of the sprayer.



3. Self-Fill Mode - Your valves need to be in this configuration when you are using the pump on your sprayer to self fill from a holding tank.



Each sprayer is equipped with a filter. Inside is a stainless steel 30 mesh filter that is reusable. Loosen collar around filter around housing and pull outer housing off and remove filter. Rinse clean and place back in the housing. The valve on the end of the filter housing is for a “quick clean” option when in the field. With the tank valve open and the pump running, open valve to blast debris out of the housing.

BOOM CONNECTION POSITIONS

The following pictures show where your camlock sections are to be hooked up. These go from your three valves on the top of the driver side of your platform.

Remember the following positions from left to right:

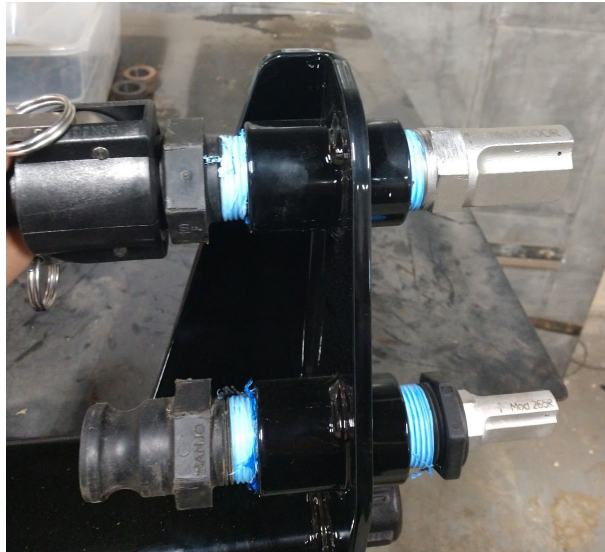


LEFT: Driver side 3 Lane, #1 on controller
CENTER: Middle boom, #2 on controller
RIGHT: Passenger side 3 Lane, #3 on controller

Generally we recommend pre-treating at 30-50 gallons per acre, and post treating at 80-100 gallons per acre (sometimes more in cases of severe snow and ice pack) but we always recommend consulting the manufacturer of the product for application rates.

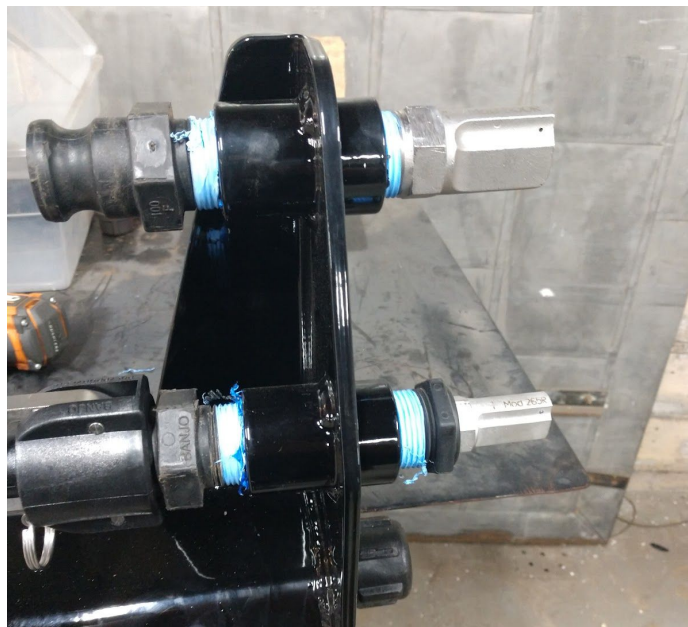
3 Lane Post Treatment

(This is for rates of 70-120+ gallons per acre at higher speeds in post treatment mode)

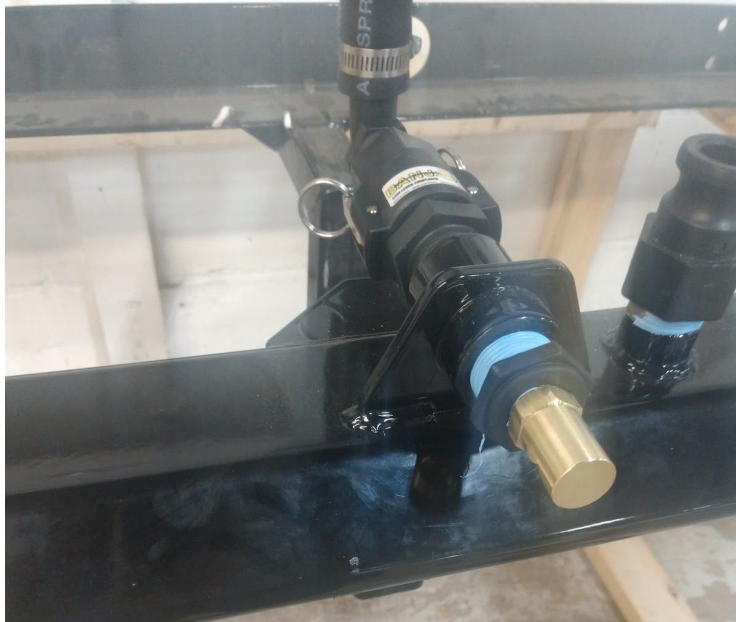


3 Lane Pre Treatment

(This is for rates of 30-60 gallons per acre in pre treatment mode and 80-100 gallons in post treatment mode at low speeds)



Center Boom Pre Treatment
(Full broadcast nozzle at 30-60 gallons per acres)



Center Boom Post Treatment
(Jet stream pattern for post treatment at 80-120+ gallons per acre. Can also be used in a pre treatment application)



CONTROLLER FUNCTIONS

This first picture is for standard operation of the sprayer. Generally you will operate your sprayer in AUTO mode as that is when your sprayer will run off of GPS rate control. When the controller is in AUTO mode, you will adjust your gallons per acre by turning the knob to the RATE section and using the up and down arrows on your controller. When the controller is turned on and you are not moving, it will flash “NO SPEED” so will have to start driving to get the system to register. Remember to not make rapid starting and stop motions and allow the system to read.

PLEASE VISIT OUR WEBSITE UNDER ‘VIDEOS’ TAB FOR A FULL VIDEO ON THE FUNCTIONS OF THE CONTROLLER.

The RUN / HOLD switch is on the right side of your controller. HOLD is a system “lock” when it is in the hold position. This allows you to leave your controller on but will not allow the sprayer to function until you switch it back to RUN.



This next picture will describe the manual mode function of the controller. This is used primarily when you are looking to apply a larger quantity of liquid at a slow speed such as a loading dock or handicap parking area. To use the manual function, come to a complete stop, push the AUTO/MAN button until MAN is displayed on the screen. Open one of your boom sections on the top of the controller (this is so the system can react to a flow of liquid through it) and then turn your controller to the Volume/Minute section on the controller and use the up and down arrows to control your flow rate. Note: if you are operating in AUTO mode and you switch to MAN mode without stopping, it will hold your servo in the position that it was operating at in AUTO mode.



Your sprayer is equipped with work and strobe lights. These operate when the controller is turned on. **NOTE:** The work and strobe lights are powered via the sprayer battery, so do not operate the lights without the motor running as it will drain the battery. The hose reel, starter, and lights draw power from the sprayer battery. The servo valve, flow meter, boom control valves, and controller all draw power from the truck battery. Your sprayer includes a 7 Pin connector to supplement the charging system on your sprayer (pictured below)



Whenever you disconnect the sprayer, be sure to put dielectric grease on all connections and make sure they are covered to avoid exposure to the elements.

VERY IMPORTANT: Avoid running the motor without liquid, this can cause damage to the seal and create a leak that will require a new seal kit to be installed. This is NOT a warranty item.

CARE AND MAINTENANCE:



Proper care and maintenance is essential to the longevity of the sprayer. Be sure to clean the sprayer after use, ensuring that all salt and road spray are removed. Make sure the choke, throttle, and other engine components are sprayed down with a penetrant and lubricant product like Fluid Film, JB-80, or WD-40. Follow recommended oil, filter, and spark plug replacement intervals as recommended by Honda.

After the season is complete, be sure to rinse out your sprayer and run fresh water through the entire system to wash out any salt residue. Use dielectric grease on all connection points and cap them. Add stabilizer to the fuel tank and run the motor to ensure proper off season storage of fuel.

Periodically check the tightness of the tank straps throughout the season to ensure the tank stays in place.

ELECTRONICS INSTALLATION GUIDE

Installation of the electronics system is a simple process. Included with your sprayer are the following items listed below. Reference back to these items during the installation instructions.

<p>1. VSI Controller</p>	 A black rectangular VSI controller with a digital display and several connection ports. It is connected to a bundle of black cables with various connectors.
<p>2. 15ft Power Cable</p>	 A coiled grey power cable with a black connector on one end and a red and black connector on the other.
<p>3. 15ft Extension Harness</p>	 A coiled grey extension harness with black connectors at both ends.
<p>4. GPS Puck</p>	 A circular black GPS puck with a white label that says "astro II" and "GARMIN". It is connected to a black cable with a connector and a yellow tag.
<p>5. Branch Harness - <i>Not in box, already connected to the spray unit</i></p>	 A complex branch harness with multiple black cables and connectors, including a grey cable and a black connector.

The branch harness (Box 5) is connected to your sprayer from the factory. The cable of the branch harness runs forward towards the cab.

From this point, the extension harness (Box 3) runs the rest of the way into the cab. It is recommended that the extension harness is run underneath the cab and up through the firewall of the vehicle. DO NOT run this extension harness through a door or window to avoid damage to the cable. *Note: additional extension harnesses and harnesses of different lengths are available for purchase to accommodate longer vehicles*

The power cable (Box 2) is to be run from the vehicle battery through the firewall and into the cab.

The VSI Controller (Box 1) can be mounted either temporarily or permanently in the cab of the truck. After the VSI Controller is in place, plug the GPS puck (Box 4) in the SPEED connection point in the wiring harness coming out of the back of the VSI Controller. The GPS puck is magnetic, and also comes with a velcro strip. This is to be mounted on the dashboard of your truck with a clear line of sight towards the sky.

The power cable (Box 2) and extension harness (Box 3) can be left installed in the vehicle over the off season. Be sure the connection points have dielectric grease and are capped off to keep dirt, debris, and moisture away from the connection points.

VISIT THE VOIGT SMITH INNOVATION YOUTUBE CHANNEL FOR INSTRUCTION VIDEOS ON THE CONTROLLER FUNCTIONS AND GENERAL SPRAYER OPERATION.

At VSI, nothing is more important to us than your complete and total satisfaction with our products and customer service. From the day you buy it to the day you retire it, we want you to truly feel that the product you purchased served you as well or better than any piece of equipment you have ever owned.

We use only Honda engines on our machines. Our machines are tested by Honda to ensure they meet every specification and parameter so that your engine will last for a very long time and are backed by Honda's 3 year commercial warranty. We use Banjo pumps, valves and plumbing components on our machines. All Banjo products are warranted for no less than 1 year from the date you purchase your machine.

At VSI we warranty our overall machines for 3 years from the date of purchase. The only part we do not warranty is the seal in the pump, these can be worn out very easily by user error and will not last long if the pump is ran dry. We understand that downtime is expensive and will make sure to minimize it for you. Even if the part failure is your fault, we will overnight parts at wholesale cost to keep you up and running.

VSI is under no liability or obligation of any kind with respect to an issue with a VSI product that is directly or indirectly attributable to normal wear, corrosion, neglect, misuse, alteration, modification, improper handling, improper storage, improper installation, improper maintenance, improper repair, failure to follow VSI's oral or written instructions, damage during or after shipment, any VSI product for a purpose or application for which it is not fit or suitable.

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