

# S15 PUSH SPRAYER

ASSEMBLY and OPERATING INSTRUCTIONS

**EarthWay**<sup>®</sup>

Congratulations on the purchase of this new sprayer from Earthway Products, Inc. Please call us if you have any difficulty with assembly or operation of this sprayer. We can be reached via the telephone at 800-294-0671 or 574-848-7491, Monday—Friday 9:00am ~ 4:00pm or visit us online at [www.earthway.com](http://www.earthway.com) This sprayer comes with *lifetime technical support*, email us at [techsupport@earthway.com](mailto:techsupport@earthway.com).

## HELPFUL HINTS: READ THE DIRECTIONS BEFORE ASSEMBLY

THIS SPRAYER COMES FULLY ASSEMBLED, REQUIRING YOU TO FLIP UP THE HANDLE AND TIGHTEN TWO WING NUTS - ***NO TOOLS REQUIRED***.

Your sprayer is designed to be pushed at two to three miles per hour, which is a brisk walking speed. Slower or faster speeds will change the spray patterns and output volumes.

- ☑ Clean your sprayer tank thoroughly after each use. Wash with clean water and push sprayer a several feet to evacuate any residual materials until you see clean water in a safe area as described in the chemical suppliers directions.
- ☑ Gears are permanently lubricated at the factory. Do not open the gearbox or dirt may enter.
- ☑ Check all hose connections regularly to ensure they remain tight.
- ☑ If unit fails to spray on initial use see **Initial Start-Up Procedures** on page 3.
- ☑ To help prevent corrosion, coat all metal surfaces (inside & out) with WD-40 or a light oil.
- ☑ ***When the tank is empty, pull the sprayer backward to the designated cleaning or storage area to prevent damage that can occur with a dry pump.***

## ASSEMBLY INSTRUCTIONS

1. Open carton and remove the S15 from carton.
2. Place the S15 onto its wheels.
3. Loosen the two wing nuts that secure the handle slightly.
4. Lift the handle into place and tighten the two wing nuts.

*Now you are ready to go!*

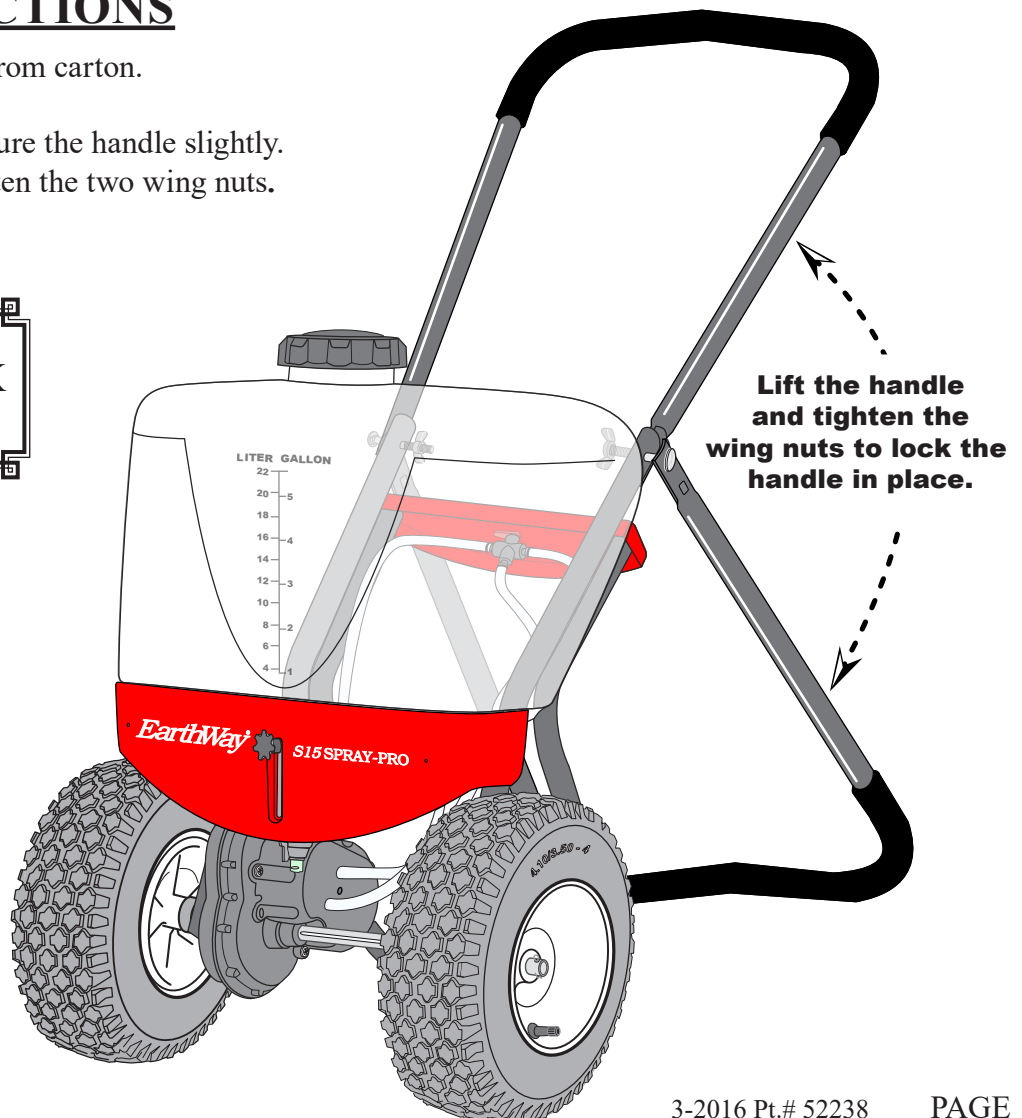
**DO NOT PUSH FORWARD WITH TANK EMPTY**



*For best results keep enough of the liquid in the tank to keep the pump supply line filled. Hills and rough ground can create a “wave effect” in the tank that will cause the pump to have an inconsistent spray or to lose prime. If this occurs, turn the control lever to **TRANSPORT** and push a few feet to re-establish the prime and continue from*



*where you stopped.*



### 5-YEAR LIMITED WARRANTY

Earthway Products, Inc. warrants this product free of defects in original workmanship and materials for a period of 5-years to the end user with the original purchase receipt for **at home use**. If used for business, the warranty is 90-days. If a manufacturing non-conformance is found, Earthway Products, Inc. at its discretion will repair or replace the part(s) or product at no charge provided the failure is not the result of incorrect installation, mishandling, misuse, tampering, or normal wear and tear as determined by Earthway. Earthway at its discretion may require that the part(s) or product be returned along with the original purchase receipt at owners expense for examination and compliance with the terms of this warranty. Do not return any product without first receiving authorization from Earthway Products, Inc. To seek remedy under this warranty, contact Earthway Products, Inc. at 574-848-7491, techsupport@earthway.com or write to Earthway Products, Inc. P.O. Box 547 Bristol, Indiana 46507 and describe the nature of the manufacturing defect.

**SPECIFIC LIMITATIONS:** This warranty covers only the part(s) or product; any labor charges associated with repair or replacement of non-conformances are specifically excluded. Due to the corrosive nature of most fertilizers and ice melt products, Earthway Products, Inc. makes no warranty against and specifically excludes part(s) or product degradation or failure due to corrosion or its effects. **Clean and dry** your sprayer thoroughly after each use, as a preventative measure, coat all metal parts (inside and outside of the steel tubes) with a light oil or silicon spray.

## For Support for your S15, please contact:

### **NORTH AMERICA**



#### **Earthway Products, Inc.**

P.O. Box 547  
1009 Maple Street  
Bristol, IN 46507  
T: 574-848-7491  
T: 800-294-0671  
E: techsupport@earthway.com  
W: www.earthway.com

### **EUROPE**



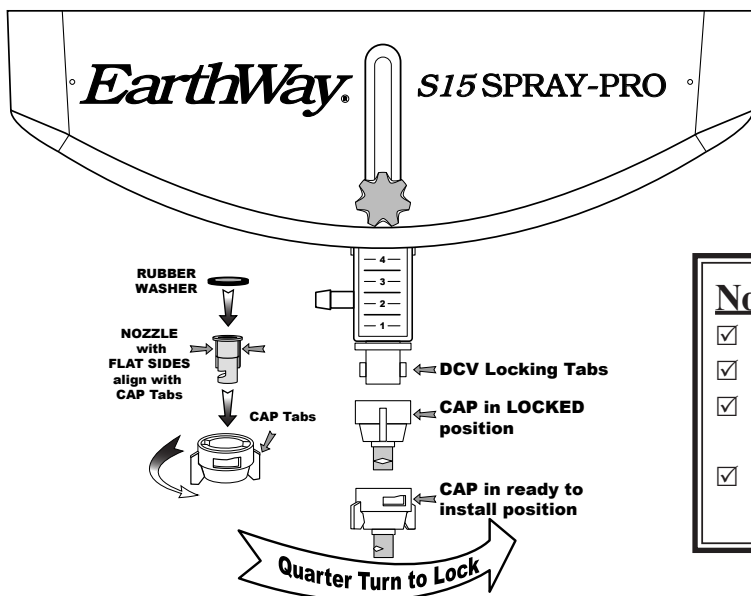
#### **DMMP Limited**

T: 0845 643 9776  
E: info@dmmp.co.uk  
W: www.earthway.co.uk



#### **Muggioli Giardinaggio**

T: 0422 96 9990  
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### Nozzle Installation

- ☑ To remove turn Cap from right to left
- ☑ Push Nozzle out of the Cap and remove rubber washer.
- ☑ Install Nozzle aligning the flat sides with the Cap tabs and reinstall rubber washer.
- ☑ To install the assembly, align the Cap slot with DCV locking tabs and push onto DCV and turn left to right to lock.

# Operation of your S15 Sprayer

The S15 sprayer is designed to be simple to use, easy to operate, and provide years of accurate spraying. The S15 is the latest development from Earthway Products, Inc., a world leader in the manufacture of broadcast spreaders, seeding tools, and sprayers.

## Calibration

The S15 is supplied with three different nozzle options. The table below shows the characteristics and performance of the supplied nozzle options at the eight different height setting of the DCV holder.

S15		Application Coverage - OUNCES/SQUARE FOOT   OUNCES/1,000 SQUARE FEET					
Spray width in Inches	DCV Setting Position	FINE SPRAY #3 Gray Nozzle Output 98oz/min		MEDIUM SPRAY #5 Blue Nozzle Output 150oz/min		COARSE SPRAY #10 Black Nozzle Output 168oz/min	
		SPRAY RATE	SPRAY RATE	SPRAY RATE	SPRAY RATE	SPRAY RATE	SPRAY RATE
60	1	0.07	74.24	0.11	113.6	0.13	127.3
58	1.5	0.08	76.80	0.12	117.6	0.13	131.7
54	2	0.08	82.49	0.13	126.3	0.14	141.4
50	2.5	0.09	89.09	0.14	136.4	0.15	152.7
44	3	0.10	101.24	0.15	155.0	0.17	173.6
43	3.5	0.10	103.59	0.16	158.6	0.18	177.6
39	4	0.11	114.22	0.17	174.8	0.20	195.8
36	4.5	0.12	123.74	0.19	189.4	0.21	212.1

S15		Application Coverage - LITER/SQUARE METER					
Spray width in Centimeters	DCV Setting Position	FINE SPRAY #3 Gray Nozzle Output 2.9L/min		MEDIUM SPRAY #5 Blue Nozzle Output 4.4L/min		COARSE SPRAY #10 Black Nozzle Output 5.0L/min	
		SPRAY RATE	SPRAY RATE	SPRAY RATE	SPRAY RATE	SPRAY RATE	SPRAY RATE
152cm	1	0.024		0.036		0.040	
147cm	1.5	0.024		0.037		0.042	
137cm	2	0.026		0.040		0.045	
127cm	2.5	0.028		0.043		0.049	
112cm	3	0.032		0.049		0.055	
109cm	3.5	0.033		0.050		0.057	
99cm	4	0.036		0.056		0.062	
91cm	4.5	0.039		0.060		0.067	

One Gallon = 128oz

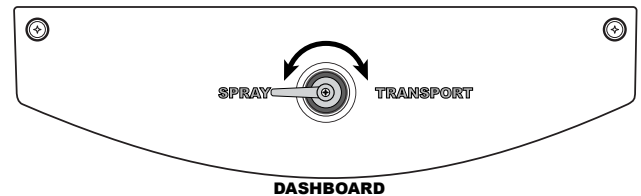
## Initial Start-up Procedures

Before the first use, partially fill the tank with clean water to test the spray. If it fails to spray, the pump may require priming or the DCV rubber valve could be immobile. To fix the DCV, loosen the cap on the DCV to unseat the rubber valve inside and then retighten. To prime the pump, select **TRANSPORT** and then push for a short distance. Now, select **SPRAY** and test. Repeat if necessary until a spray is achieved. If unit leaks from the nozzle, remove the cap on the DCV, wipe off the top of DCV body to remove any debris, and then replace the cap and tighten.

## Before use

Before using any liquid products always read thoroughly the manufacturers product label, to ensure correct dosage and proper handling of the product being applied through the applicator. Use the correct Safety Equipment as directed by the chemical manufacturer.

- Check that the applicator has been thoroughly cleaned from its previous use and that both the nozzle outlet and the handgun line (if included) have been washed thoroughly.
- Always spray on a day where wind is minimal. It can be unsafe and inaccurate if spraying is undertaken in windy conditions.
- Always wear appropriate safety clothing when the sprayer is being used. Refer to manufacturers instructions, or contact your supplier of the product being applied for safety recommendations.
- Make sure the tires are properly inflated to 20 psi.



## How to use ~ Walk behind spraying

### Practice before use

It is recommended for first time users of the S15, that the user familiarizes themselves with the workings of the sprayer. By simply putting water in the spray tank and spraying it out onto a dry tarmac surface the operator will very quickly familiarize themselves with the workings of the machine. Make sure the spray tank is then emptied of water before further use. Make sure the handlebar is locked into place and the wing nuts are securely tightened.

- Choose the correct nozzle of the three nozzle options that is suitable for the product being applied. (See calibration chart above)
- Ensure the **SPRAY (ON) / TRANSPORT (OFF)** lever on the dashboard is in the **TRANSPORT** position. The **TRANSPORT** position is with the lever over to the right side when standing behind the handlebars of the machine.
- Make sure the tank is clean and there is no chance of remnants or deposits from a previous spray task being left in the tank.
- With the tank clean, fill the tank with the required volume of liquid for the designated spray task, making sure the product being used is mixed and being applied in accordance with the manufacturers instructions.
- With the control lever is in the **TRANSPORT (OFF)** the machine can be safely pushed to the area where spraying is to be carried out.
- Locate the sprayer at the point at which spraying needs to commence. Lift the machine up off the stand, so the body of the machine is parallel with the ground (see example drawing in the center of the next page). To spray simply turn the control lever (**ON/OFF**) over to the left side (**SPRAY POSITION**), and walk forward at a brisk walking speed 2 to 3 MPH is recommended.
- To stop the spray turn the **ON/OFF LEVER** back to the right side (**TRANSPORT POSITION**). NOTE: When the **SPRAY/TRANSPORT** lever is at the right side (**TRANSPORT POSITION**) and the machine is being pushed, the pump is circulating the liquid through the system. This circulation provides agitation and helps keep the liquids in suspension while walking the sprayer to and from the area being treated.

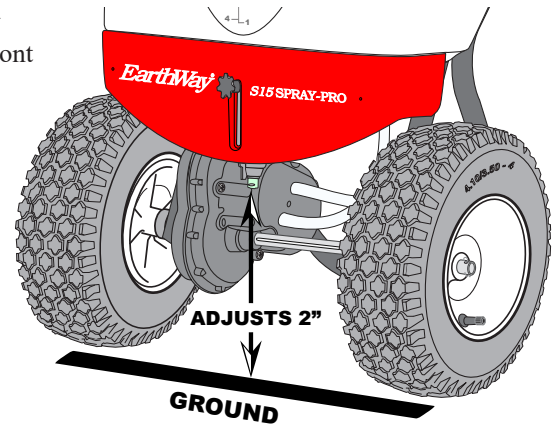
# How to use the S15 Sprayer ~ continued

## Technical spray information and how to ensure accuracy

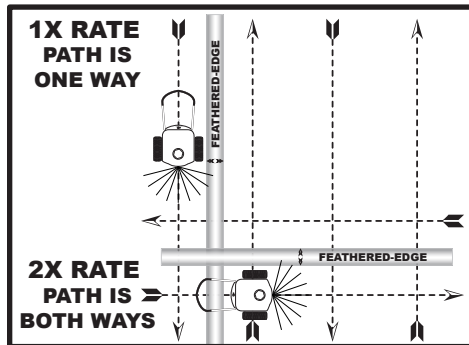
The S15 has an adjustable height nozzle that offers spray widths from approximately 3 feet/.9 meters to 5 feet / 1.5 meters.

### Spray Width Adjustment

You can adjust the spray width of the S15, which will change the application coverage, by moving the Adjustable DCV holder up or down. To use, loosen the knob located on the front of the skirt, and slide the DCV & Nozzle assembly up/down to the desired spray width or to a position indicated on the Application Chart on the previous page, then tighten knob. There are indices molded into the DCV Holder for easy repeatability.



### Spray Pattern



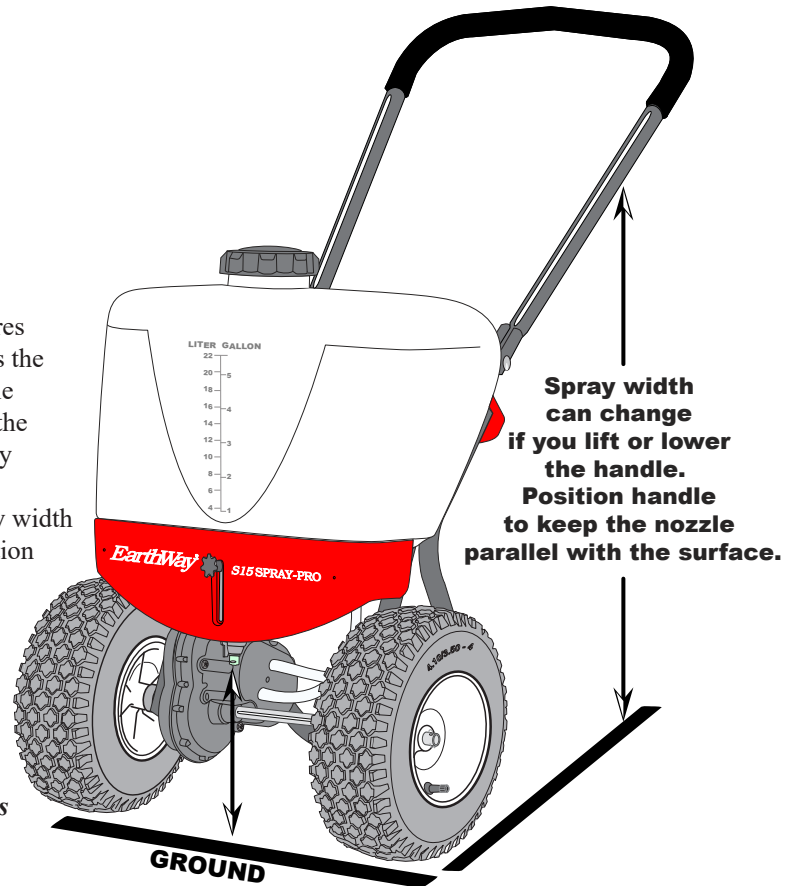
The S15 uses Teejet TF nozzles are designed to “feather” at the edges to allow the second pass to “feather in,” and so provide uniform coverage. The area of “feather” or overlap, is approximately 15% of the spray width at the edges, for a total of 30% over the two edges/ends of the spray pattern. To maximize uniform coverage the next pass should overlap the prior to allow for the 15% “feather” or overlap.

*Most applications will only require 1 pass. When higher application rates are required a cross pattern as shown above should be used.*

### Ensure accuracy

It is important that the S15 sprayer has a minimum of 1-gallon/4-litres of liquid in the tank at all time, and is pushed in a manner that keeps the spray head parallel to the ground at all times, so that the spray nozzle is constantly kept at the same correct height. Keeping the height of the nozzle constantly parallel to the ground ensures the nozzle will spray to its stipulated spray application cover. If the sprayer is pushed at a downward angle and the nozzle tip is nearer to the ground, the spray width will be reduced and over application will occur. In the reverse situation of the spray nozzle height being increased by pushing the sprayer at an upward angle the nozzle fan will be wider, the spray width will become inaccurate, and under application will likely occur. To ensure spray width accuracy it is important that the operator is aware that the sprayer is pushed in a manner that keeps the nozzle constantly parallel with the ground.

*To aid accuracy use a proprietary spray dye indicator which allows the operator to see where they have sprayed. Contact your local landscape supplier for a recommendation.*



### After use

- 1 Empty any unused contents out of the spray tank. The S15 tank has been designed to easily empty and clean. **Dispose of the tank contents and all washings in accordance with the manufacturer's disposal instructions on the product that has been used.**
- 2 Wash out the tank thoroughly using clean water and or a preparatory tank cleaner. Make sure that the nozzle and spray gun (if included) are thoroughly washed as well. To wash through the pipework to the spray nozzle, add an additional 1/2 gallon/2 liters of clean water to the tank and wash this through the nozzle by pushing the sprayer over a safe area for the purpose of disposal of washings.
- 3 Empty all water out of the sprayer making sure no water is left in the pump over winter - do not allow to freeze, unless you have setup the S15 to operate in freezing temperatures using an Ice Melt or snow pre-treatment materials.

