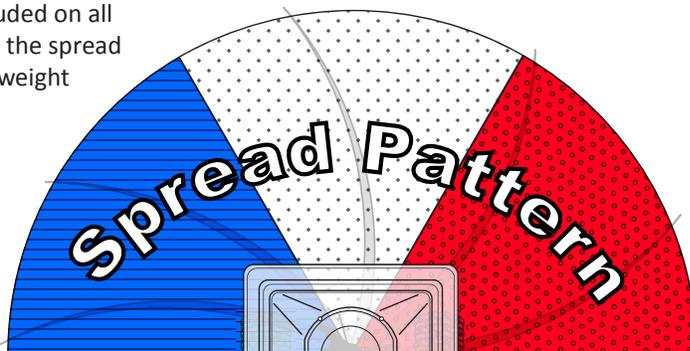


Using the EV-N-SPRED® Dual Port PRO Adjustable Shut-Off System

EarthWay® EV-N-SPRED®

The EV-N-SPRED® Dual Port PRO Adjustable Shut-Off System is included on all EarthWay® professional models and allows the operator to balance the spread pattern evenly across the full 180° spread width, regardless of the weight or size of granular material. By closing either the right and or left side throwing ports you can balance the spread pattern to exacting precision without compromising spread width or application rate.

Each EV-N-SPRED® Dual Port PRO Adjustable Shut-Off System drop hole has a corresponding 1/3rd coverage area on the spread width of the spreader leaving a feathered-edge for overlapping the spread path. The illustration to the right shows each port and the corresponding 1/3rd coverage area of the spread path. These ports can be adjusted to effectively balance the spread pattern, giving equal amounts of material across the full 180° spread pattern.

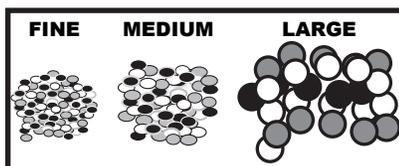


Adjustable Throwing Ports with 8 repeatable settings to balance the left or right spread pattern to the center.

EV-N-SPRED® Dual Port PRO System Setup

Test all material prior to beginning your spreading job. You will need a 50' measuring tape, a small scale to weigh the material, bucket or container to hold the material for re-weighing, chalk or a line marking device, and (7) low baking tins. Using the EarthWay® Bag Calibrator #77016 can greatly reduce the time needed for determining the Setting Rates on any material but is not mandatory to establish a setting rate.

1. Evaluate the material being spread by comparing it to the following standard as a reference.



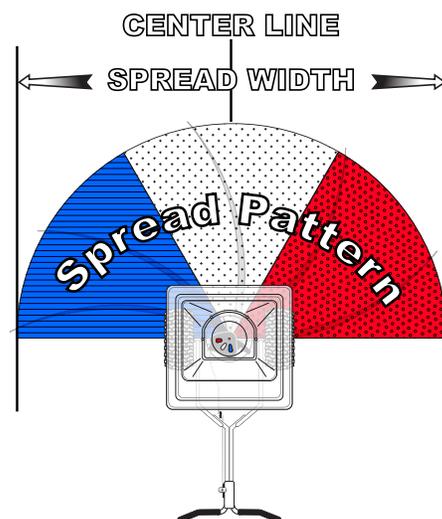
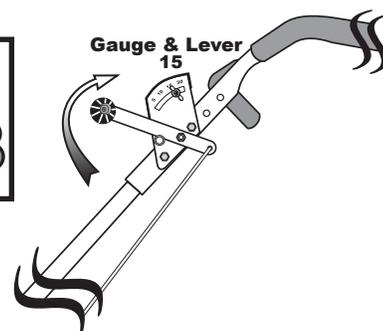
Large/Heavy is the size of a BB (1/8 in / 3mm), spread width is 9 - 12 feet (2.8 - 3.7 meters)

Medium/Mixed (1/2 the size of a BB), spread width is 7 - 9 feet (2.1 - 2.8 meters)

Small/Fine (the size of sand), spread width is 5 - 7 feet (1.5 - 2.1 meters)

2. Add a small amount of the material into the spreader, enough to cover the bottom (2 - 3 in / 5 - 7 cm) and begin to test for spread width.

Set the stop on the gauge to #15 and push the spreader several feet /meters at normal walking speed on a flat hard surface (where the material will be visible), and OPEN the lever to the STOP while continuing to walk for 3-4 paces, and CLOSE the shut-off and STOP (don't move the spreader from that position). Measure the spread width and evaluate the spread pattern for even distribution on either side of the spread width center line. **TIP:** Typical spread width references are listed above. The spread width that you measure is used to calculate the actual **Setting Rate** for the material.



ADJUSTING THE EV-N-SPRED® DUAL PORT SHUT-OFF SYSTEM

3. Next, using the (7) low baking tins position, them in a straight line on 2ft centers across the spread width as shown at the right.

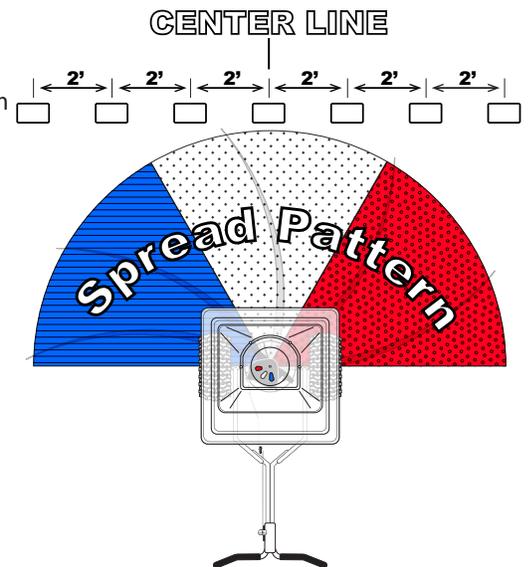
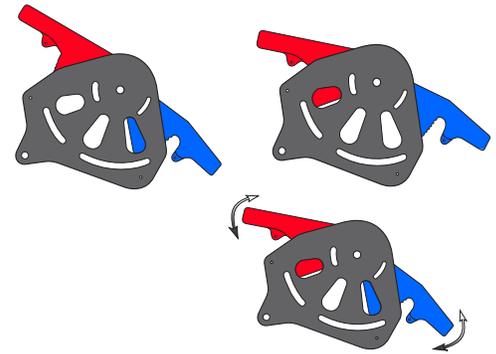
* Adjust the left or right variable throwing ports to EVEN THE SPREAD pattern.

TIP: For large/heavy materials, close the **LEFT SIDE (BLUE)** port slightly before you start your EV-N-SPRED® test. For small/light materials, open the **LEFT SIDE (BLUE)** port fully and close the **RIGHT SIDE (RED)** port slightly before you start your EV-N-SPRED® test. With **BOTH** ports closed, the spread is only from the center port, and will give you a 3-4ft spread width in the center of the spreader - *great for medians.*

* Begin pushing the spreader several feet before the line of tins and at normal walking speed. Walk along the Center Line, and **OPEN** the Lever to the **STOP** 3-4 paces before the line of tins and continue walking past the tins 1 or 2 paces and **CLOSE** the Lever and **STOP**.

* Visually evaluate the material in the baking tins to determine if your spread pattern is balanced - *having the same amount of material in each baking tin.*

* Empty each tin back into the spreader, adjust the ports and **RETEST** until you are satisfied that the coverage is balanced.



Spread width in feet	Length needed for 1,000 Sq Ft	Spread width in feet	Length needed for 1,000 Sq Ft
7	142' 11"	14	71' 5"
8	125'	15	66' 8"
9	111' 1"	16	62' 6"
10	100'	17	58' 10"
11	90' 11"	18	55' 7"
12	83' 4"	19	52' 7"
13	76' 11"	20	50'

ESTABLISH THE SETTING RATE

4. Remove the material from the hopper, and mark the distance that you need to travel with the spreader to attain the designated coverage area - i.e. 1,000 square feet using the spread width you determined earlier. Above is a chart to help determine the distance needed for 1,000 square foot calculation.

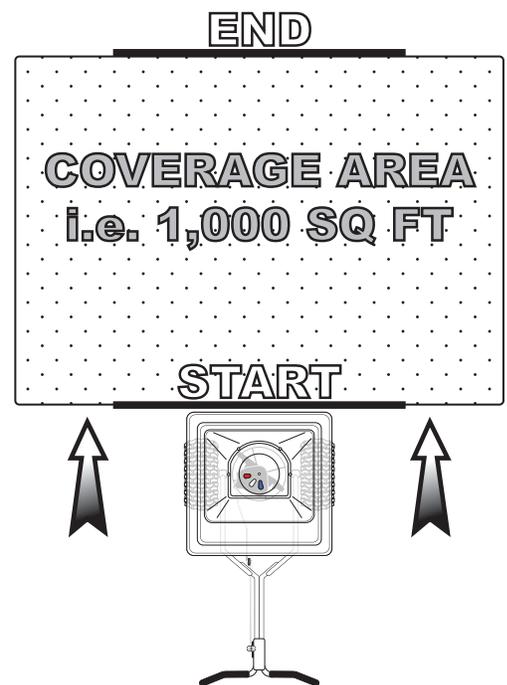
* Mark the **START** and **END POINTS** on the surface required for the test.

* Weigh a small amount (10-20lbs/4-9kg) of the material, and add that into to the spreader. Using the Setting Matrix included with the spreader, estimate a setting rate based on material manufacturers recommendations and adjust the **STOP** on the Gauge to that position.

* Now to test, start walking 1-2 paces before the **START LINE** and **OPEN** the Lever to the stop and then **CLOSE** when you cross the **END POINT LINE**.

* Pour the remaining material from the spreader and weigh to calculate the amount applied over the area. Adjust the **Setting Rate** to a higher number if you need to increase the application rate, or to a lower number if you applied too much in the test.

* You may need to repeat this process to acquire the exact rate.



The EV-N-SPRED® Dual Port PRO Adjustable Shut-Off System ensures that EarthWay® Professional spreaders evenly spread all types of fertilizers, seed, ice melt, or other granular products, and is only available from EarthWay®.

Broadcast Setting Matrix

EV-N-SPRED® Calibration Techniques

How to ensure your spreader is properly calibrated

Make sure the drop holes in the bottom of the hopper are fully open when the Rate Control handle is on #30. If not, please adjust control cable or control rod to allow for a full open hopper position at #30.

Rod Type Adjustment

1. Open the shut-off so that the drop holes are completely open as illustrated to the right.
2. Review the Control Lever position - if it is set so that the forward edge is at #30, you are calibrated. If not you need to adjust the control rod at the pivot bracket shown in Fig 1.
 - A. If your shut-off is not able to open fully as in step #1. Loosen the top nut a few turns, then loosen the lower nut so that it allows you to push the shut-off open fully. Next tighten each nut so that they contact the pivot bracket without moving it, and then carefully tighten each nut fully so they do not loosen during use. Recheck adjustment as outlined in #1 above.
 - B. If your shut-off is able to open fully as in step #1, but the Control Lever is not at #30. Loosen the top nut a few turns, then loosen the lower nut so that it allows you to push the Control Lever to #30. Next tighten each nut so that they contact the pivot bracket without moving it. Carefully tighten each nut fully so they do not loosen during use. Recheck adjust as outlined in #1 above.

Cable Type Adjustment

1. Open the Control Lever so that the shut-off and drop holes are completely open as illustrated above right.
2. Review the Control Lever position so that the indicator is pointed to #30, if it is your calibration is correct. If not you need to adjust the control cable at the cable clamp on the underside of the hopper as shown in Fig 2.
 - A. If your shut-off is not able to open fully as in step #1. Loosen the cable clamp screw slightly so that you can slide the outer cable out so that the shut-off is fully open. Next tighten the cable clamp screw securely. Recheck adjustment as outlined in #1 above.
 - B. If your shut-off is able to open fully as in step #1, but the Control Lever is not at #30. Loosen the cable clamp screw slightly so that you can slide the outer cable in so that the Control Lever opens to #30. Next tighten the cable clamp screw securely. Recheck adjustment as outlined in #1 above.

If you have any questions regarding the operation or assembly of your spreader please call us at 800-294-0671 or 574-848-7491 Monday - Friday 9:00am - 4:00pm Eastern. **Accessories and Repair Parts** are also available at these numbers.

Drop holes shown fully open.

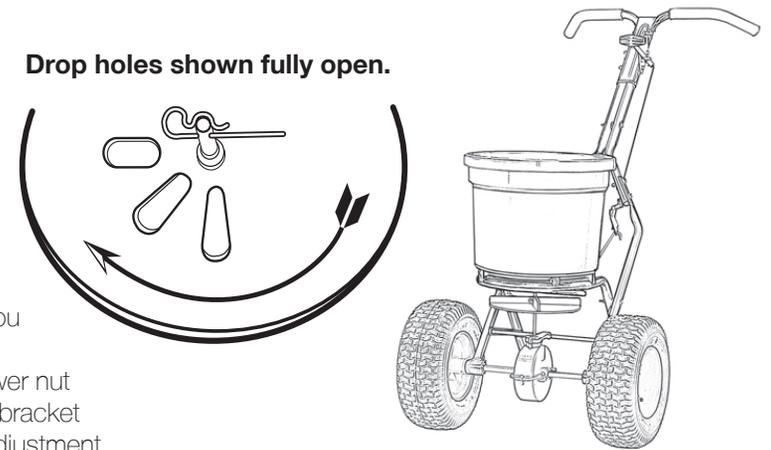


Fig 1

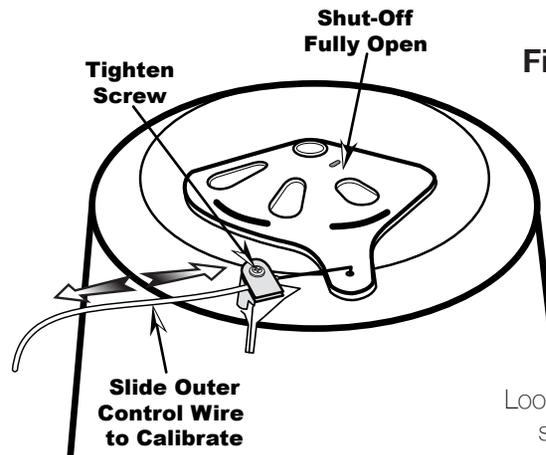
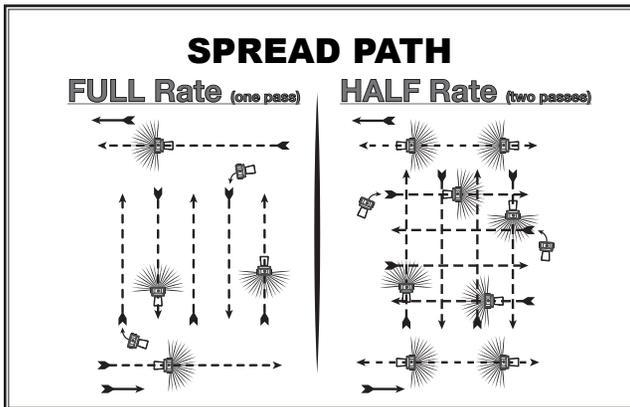
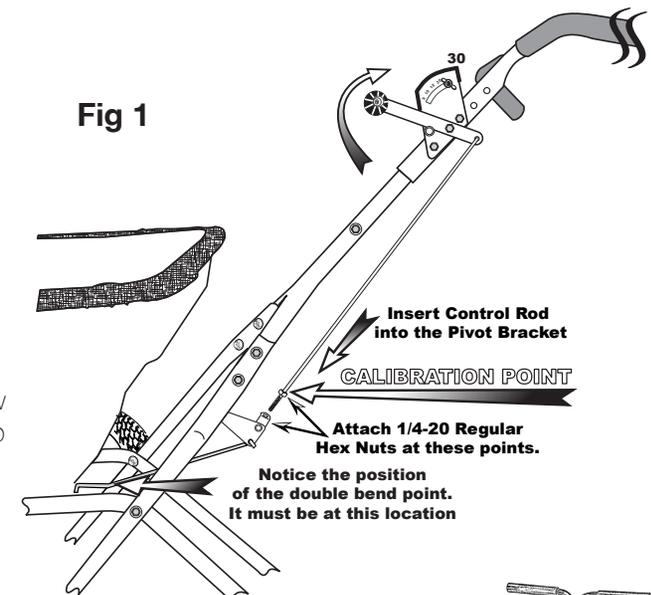
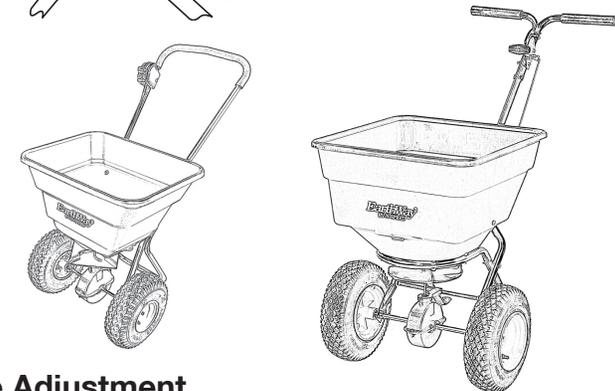


Fig 2

Cable Type Adjustment

Loosen/tighten screw on cable clamp then slide outer cable in/out for calibration



ESTABLISHING A SETTING RATE

Step 1: Use **Chart 1** to estimate the number of LBS/1,000 square feet of coverage (Example: 20 LB bag with 10,000 square foot coverage = 2.0 LBS/1,000 square feet)

Step 2: Find the closest LBS/1,000 square feet in **Chart 2** that you estimated using **Chart 1** (Example: 2.0 LBS/1,000 square feet = Spreader Setting of 13)

CHART 1		BAG COVERAGE IN SQUARE FEET		
		5,000	10,000	15,000
B A G W E I G H T	5 LBS.	1.0	0.5	0.3
	10 LBS.	2.0	1.0	0.7
	15 LBS.	3.0	1.5	1.0
	18 LBS.	3.6	1.8	1.2
	20 LBS.	4.0	2.0	1.3
	25 LBS.	5.0	2.5	1.7
	30 LBS.	6.0	3.0	2.0
	35 LBS.	7.0	3.5	2.3
	40 LBS.	8.0	4.0	2.7
	45 LBS.	9.0	4.5	3.0
	50 LBS.	10.0	5.0	3.3

CHART 2		
GRAMS/SQ METER	LBS./1,000 SQ FT	SPREADER SETTING
5 Grams	1.0 LBS.	11
10 Grams	2.0 LBS.	13
15 Grams	3.0 LBS.	14
20 Grams	4.0 LBS.	16
25 Grams	5.0 LBS.	17
30 Grams	6.0 LBS.	18
35 Grams	7.0 LBS.	19
40 Grams	8.0 LBS.	20
45 Grams	9.0 LBS.	22
50 Grams	10.0 LBS.	23

GRASS SEED		
GRAMS/SQ METER	LBS./1,000 SQ FT	SPREADER SETTING
10 Grams	2 LBS.	13
15 Grams	3 LBS.	14
20 Grams	4 LBS.	16
25 Grams	5 LBS.	17

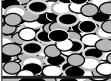
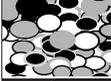


METRIC RATE SETTING

Determining a Setting Rate

Use chart below to determine the **Setting Rate** based on Grams/Square Meter of coverage as directed on the bag.

All spread widths are determined by the particle size and density. Below will give approximate spread widths.

SPREAD WIDTHS FOR DIFFERENT PARTICLE SIZES			
Particle Size		English	Metric
	Small/Fine (Sand)	5-7ft.	1.5-2.1m
	Medium (Half BB)	7-9ft.	2.1-2.7m
	Large (Full BB)	9-12ft.	2.7-3.7m

SPREAD WIDTH FOR DIFFERENT SIZE GRASS SEED			
Seed Size		English	Metric
Fine 		5-7ft.	1.5-2.1m
Coarse 		7-10ft.	2.1-3.1m

The settings furnished on the Rate Setting Matrix are intended as a guide only. Variations in physical characteristics of material applied, walking speed, and roughness of ground surface may require slightly different spreader settings. Due to the above conditions, EPI makes no warranty as to the uniformity of coverage actually obtained from the settings listed.