



Sales Rentals

Sales Service

Parts & Service

C24HD & C24HDS Broadcast Spreader Assembly and Operating Instructions

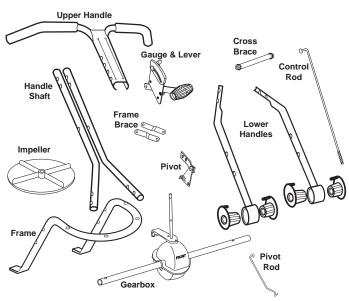


PLEASE CONTACT US: IF YOU ARE MISSING ANY PARTS, HAVE ANY DIFFICULTY IN ASSEMBLY, OR HAVE ANY QUESTIONS REGARDING THE SAFE OPERATION OF THIS SPREADER. THIS MODEL INCLUDES LIFETIME TECHNICAL SUPPORT. SUPPORT HOT LINE: 574-848-7491 or 800-294-0671, email: techsupport@earthway.com

HELPFUL HINTS:

- ☑ If your spreader does not spread evenly, be sure the FRONT on the gear box points to the front of the spreader. The impeller must turn clockwise. Reversing the gearbox will cause the impeller to turn counter clockwise. Clean the impeller after each use as some fertilizer may become stuck on the impeller blades and will cause uneven spreading.
- ☑ Your spreader is designed to be pushed at three miles per hour, which is a brisk walking speed. Slower or faster speeds will change the spread patterns. Wet fertilizer will also change the spread pattern and flow rate.
- ☑ Clean and dry your spreader thoroughly after each use, wash between the shut-off plate and bottom of the hopper regularly. To prevent rust, coat all metal parts (inside and out) including the frame tubes with a light oil or silicon spray.
- 🗹 Gears are permanently lubricated at the factory. Do not open the gearbox or dirt may enter.
- ☑ If you use *Rock Salt* remove the agitator to prevent damage to the gearbox and remove salt from the hopper daily. *Rock Salt* will reconstitute back into a solid block if left in the hopper overnight and will damage your gearbox if pushed with the block in place.

IF YOUR SPREADER COMES SEMI ASSEMBLED, SKIP TO STEP #7



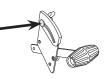
1. Remove and identify all of the loose parts from carton.

WARNING NOT USE AIR TOOLS TO ASSEMB

DO NOT USE AIR TOOLS TO ASSEMBLE. TO PREVENT SEIZING SPRAY ALL NUTS & BOLTS WITH FURNITURE POLISH OR WAX

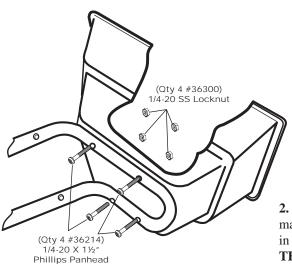
Gauge Overlay is snapped over the metal gauge. Replace the stop' bolt assembly to secure overlay on the gauge.

36305



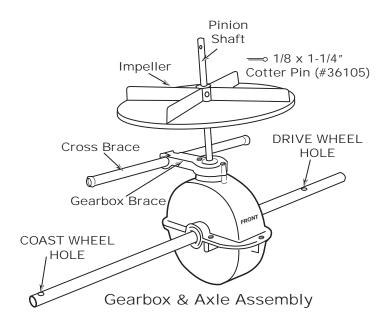
ROCK SALT AND <u>POWDERED MATERIALS</u> SHOULD NOT BE USED IN THIS SPREADER AS IT WILL DAMAGE GEARBOX AND CAN VOID WARRANTY. USE ONLY GRANULAR MATERIALS.

36300



36105 36210 36104 Qty 1 Qty 1 36200 36214 Qty 4 36209 36103 Qty 4 Qtv 1 36205 Qty 3 33117 36207

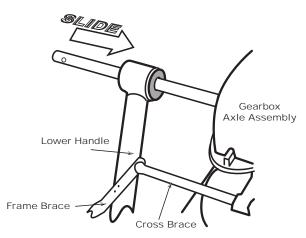
2. Position hopper on side. Install frame using (4) 1/4-20 x 1 ½" Pan Head Phillips machine screws and (4) 1/4-20 nylon insert locknuts. First put bolts through holes in frame then through holes in bottom of hopper. Secure with locknuts. **TIGHTEN THESE LOCKNUTS NOW.**



3. Install impeller onto pinion shaft. Insert 1/8" x 1¼" cotter pin through impeller then through pinion shaft. Use hole nearest gear box. Spread cotter pin to prevent from falling out. **Next**, install the Cross Brace through the Gearbox Brace Support as shown above.



4. Install Gearbox by inserting the pinion shaft into hole in center of hoppers bottom. The word **"FRONT"** on the gearbox must point to **FRONT** of the hopper.



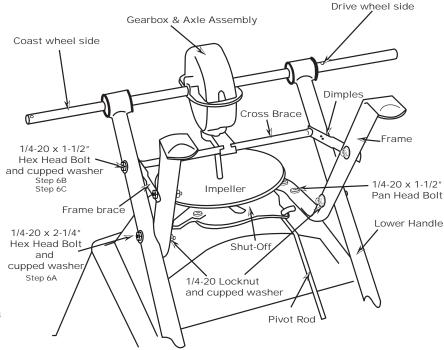
5. Install Lower Handles onto Axle to both sides as shown above.

6. A. Now insert 2 ¼" bolt with a cupped washer through second hole in lower handle and through first hole in frame, secure with cupped washer and locknut.

B. Now insert 1 ½" bolt with a cupped washer through first hole in lower handle, then through frame brace, and finally into the threaded connector in the Cross Brace. [NOTE: Dimples on frame braces must be facing toward gearbox as shown.] **DO NOT TIGHTEN YET.**

C. Next insert 1 ½" bolt through other end of frame brace and through second hole in frame install cupped washer and locknut.

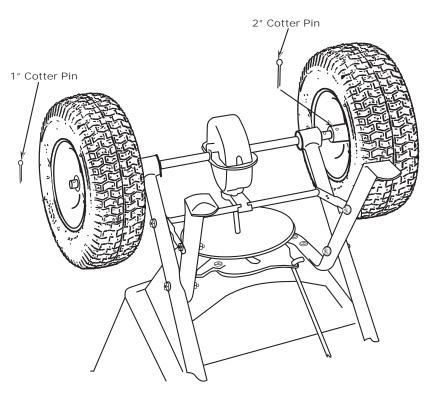
DO NOT TIGHTEN YET.



NOTICE CUPPED WASHER LOCATIONS

TIP: Position cupped washers between nut or bolt head and chassis

NOW GO BACK AND TIGHTEN ALL NUTS AND BOLTS STARTING WITH FIRST STEP. DO NOT OVER TIGHTEN.



7. Install drive wheel to axle using pin hole nearest to lower handles as shown. Insert 2" cotter pin through wheel and through axle. Bend with pliers to prevent pin from falling out.

NEXT

3 Position Handle

Lower Position

Middle Position

Upper Position

Install coast wheel to axle, and then using outside pin hole on the axle (as shown on the left), insert 1" cotter pin through axle [NOTE: not thru the wheel]. Bend with pliers to prevent pin from falling out.

TURN SPREADER UPRIGHT ON TO WHEELS

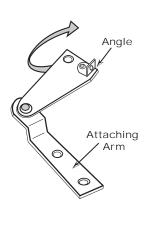
If you have any questions please call 574-848-7491

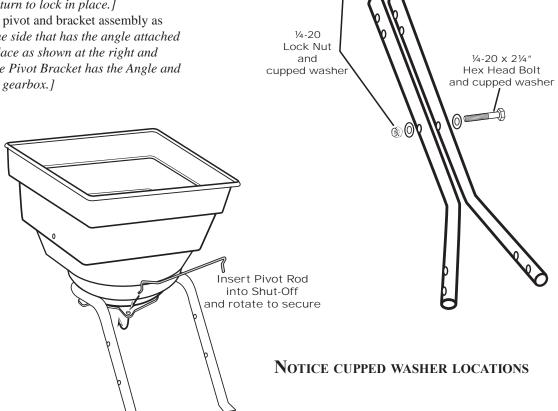
8. NOTE: BEFORE INSTALLING THE GAUGE & LEVER ASSEMBLY AND UPPER HANDLE TO THE HANDLE SHAFT, SELECT THE BEST POSITION FOR THE OPERATOR'S COMFORT. You can select lower, middle, or upper positions for best fit to the operator's height. Insert 2 ¾" bolt through the Gauge, then upper handle and finally through handle shaft. See example to the right.

DO NOT TIGHTEN LOCKNUT YET.

9. Insert pivot rod into shut off plate as shown below. [TIP: Insert rod end from the top, then push down & turn to lock in place.]

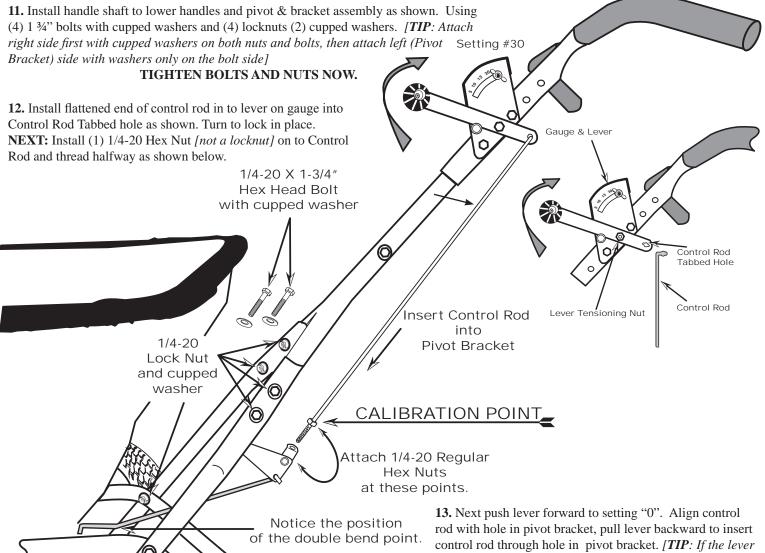
10. Insert other end of pivot rod into pivot and bracket assembly as shown. [TIP: Insert rod end from the side that has the angle attached to the bracket, then turn to lock in place as shown at the right and above. The correct positioning of the Pivot Bracket has the Angle and Attaching Arm facing away from the gearbox.]



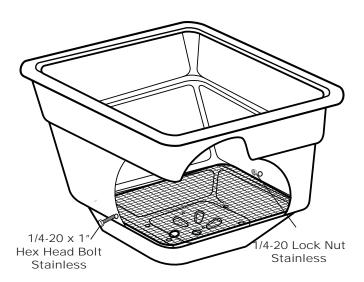


1/4-20 x 23/4"

Hex Head Bolt



NOTICE CUPPED WASHER LOCATIONS



16. Install the two 1/4-20 x 1" Stainless Steel bolts into holes located on each side of the hopper and secure with 1/4-20 lock-nut. Next slide Debris Screen under the two bolts inside the hopper.

does not move easily, loosen slightly to make this step easier] Now install 1/4-20 regular nut on to Control rod.

DO NOT TIGHTEN NUTS YET.

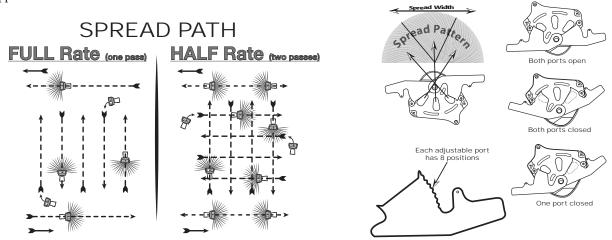
- **14.** Pull lever back to setting "30" as shown. Next push pivot & bracket forward so that the shut off plate in the hopper is in the full open position. [NOTE: THE SETTING OF "30" ON THE GAUGE & LEVER ASSEMBLY MUST OPEN THE SHUT-OFF COMPLETELY FOR PROPER CALIBRATION.] Now tighten the nuts against the pivot bracket to prevent change in calibration. Test by opening and closing the Gauge & Lever a few times to ensure an accurate calibration.
- **15.** Tension on the flow control lever may be adjusted by tightening or loosening the tension nut as shown above.



17. Insert Agitator to pinion shaft on inside of hopper. **NOTE**: Position of flat side of agitator. This pin should be installed as shown above.

18. For normal operation both doors should be fully opened. To reduce flow to the left side, partially or completely close the door over the rear (**LARGE**) hole. To reduce flow to the right side, partially or completely close the door over the front (**SMALL**) hole. Close both doors for a narrow center spread pattern.

<u>WARNING:</u> If the optional side deflector is being used in the down position, the plate over the rear (**LARGE**) hole **MUST BE CLOSED** or an over application of material will occur.



The settings furnished on the 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 these conditions, Earthway Products, Inc. makes no warranty as to the uniformity of coverage actually obtained from the settings listed.

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. 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 spreader thoroughly after each use, as a preventative measure, coat all metal parts with a light oil or silicon spray.

OPERATING INSTRUCTIONS

Before filling hopper, become familiar with the operation of this spreader.

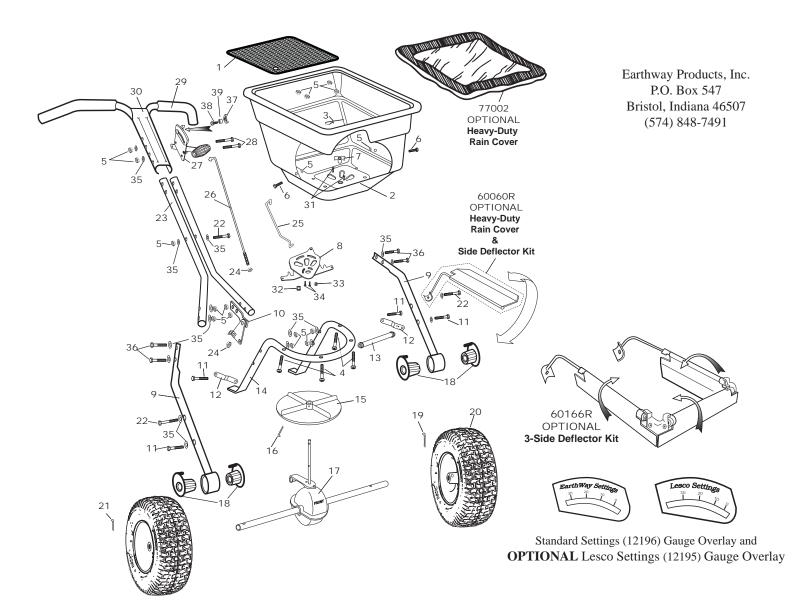
- ☑ Obtain proper setting for material to be used from the enclosed SETTING MATRIX included with this spreader, or from our web site under the MANUALS SECTION.
- \square Move stop bolt on rate gauge assembly to the proper setting.
- ☑ While pushing spreader forward, pull control lever back to stop bolt.
- To stop, push lever forward to close flow holes before you stop moving.
- ☑ When finished, empty any remaining material from hopper.

Earthway Products, Inc.

- Thoroughly wash spreader and allow to dry before storing. Apply coating of light oil to help prevent corrosion.
- ☑ If you use Rock Salt, *remove agitator* when using Rock Salt to prevent damage to the gearbox.

| 1009 Maple Street, PO Box 547 | All spare parts listed may be ordered direct from |
|-------------------------------|---|
| Bristol, IN 46507 | EarthWay Products, Inc. |
| | Be sure to give the following information when ordering. |
| For Your Records | Model Number |
| | Part Number |
| | Part Description |
| Date Purchased | Call (574) 848-7491, 800-294-0671, or email: parts@earthway.com |
| | for current prices. |
| | |

HOW TO ORDER SPARE PARTS



| Key# 1 | Part # | Description | Key # | Part # | Description |
|--------|--------|--------------------------------------|-------|--------|--|
| 1 | 40003 | SQUARE SCREEN | 21 | 36104 | 3/16 X 1" COTTER PIN S.S. |
| 2 | 60219 | HOPPER ASSEMBLY | 22 | 36205 | 1/4-20 X 2 1/4" HHCS S.S. |
| 3 | 33117 | AGITATOR | 23 | 24301 | HANDLE SHAFTS WELDED (C24HDS) |
| 4 | 36214 | 1/4-20 X 1 1/2" PHPMS S.S. | 23 | 25301 | HANDLE SHAFT (C24HD) |
| 5 | 36300 | 1/4-20 NYLON INSERT LOCKNUT S.S. | 24 | 36305 | 1/4-20 HEX NUT STAINLESS STEEL |
| 6 | 36210 | 1/4-20 X 1" HHMS S.S. | 25 | 44251 | PIVOT ROD |
| 7 | 12209 | HOPPER BUSHING (C24/C25) | 26 | 42256 | CONTROL ROD |
| 8 | 12278 | SHUT OFF PLATE ASSEMBLY - COMMERCIAL | 27 | 60298 | GAUGE & LEVER ASSEMBLY |
| 9 | 24202 | LOWER HANDLE (C24HDS) COMPLETE | 28 | 36207 | 1/4-20 X 2 3/4" HHCS S.S. |
| 9 | 25202 | LOWER HANDLE COMPLETE (C24HD) | 29 | 12273 | GRIP 9.75" LONG |
| 10 | 60299 | PIVOT & BRACKET ASSEMBLY | 30 | 60069 | UPPER HANDLE ASSEMBLY W/GRIPS C-SERIES PAINTED |
| 11 | 36200 | 1/4-20 X 1 1/2" HHCS S.S. | 30 | 60070 | UPPER HANDLE ASSEMBLY W/GRIPS C-SERIES STAINLESS |
| 12 | 42237 | FRAME BRACE | 31 | 36208 | #6 X 3/8" TYPE 25 PHPS S.S. |
| 13 | 24704 | CROSS BRACE (11.125") | 32 | 11927 | SHUTOFF SUPPORT- LARGE |
| 14 | 24100 | FRAME (C24HDS) | 33 | 11926 | SHUTOFF SUPPORT- SMALL |
| 14 | 25102 | FRAME PAINTED (C24HD) | 34 | 31138 | #8 X 3/8" PMT #8 HD COARSE BLACK |
| 15 | 12109 | IMPELLER (9" DIA) | 35 | 36404 | 1/4 CUPPED WASHER S.S. |
| 16 | 36105 | 1/8" X 1 1/4" COTTER PIN S.S. | 36 | 36209 | 1/4-20 X 1 3/4" HHCS S.S. |
| 17 | 60334 | GEAR BOX & AXLE ASSEMBLY | 37 | 60027 | WING NUT ASSEMBLY BLACK |
| 18 | 12352 | BEARING (COMMERCIAL) | 38 | 37100 | 1/4-20 X 1" CARRIAGE BOLT ZINC |
| 19 | 36103 | 3/16 X 2" COTTER PIN S.S | 39 | 12147 | SPACER (PIVOT LINK) |
| 20 | 19117 | 13" DIA PNEU TIRE DRIVE | | | |

Broadcast Setting Matrix

Drop holes shown fully open.

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.

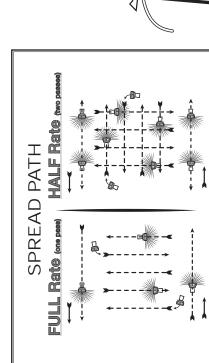
Rod Type Adjustment

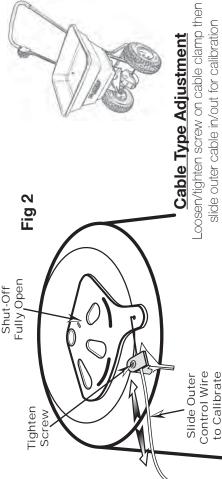
- 1. Open the shut-off so that the drop holes are completely open as illustrated to the right.
- 2. Review the Control Lever position if it is set so that the forward edge is at #30, you are calibrated. If not you need to adjust the control rod at the pivot bracket shown in Fig 1.
- without moving it,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

Cable Type Adjustment

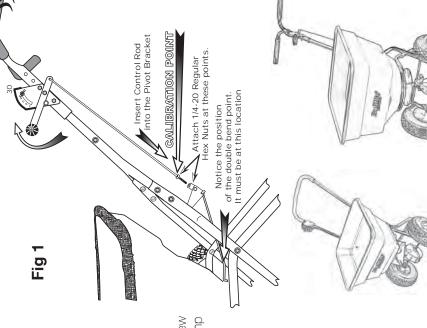
- Open the Control Lever so that the shut-off and drop holes are completely open as illustrated above right.
- 2. Review the Control Lever position so that the indicator is pointed to #30, if it is your calibration is correct. If not you need to adjust the control cable at the cable clamp on the underside 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.

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





Pt. #53192



ESTABLISHING A SETTING RATE

coverage (Example: 20 LB bag with 10,000 square foot coverage = Step 1: Use Chart 1 to estimate the number of LBS/1,000 square feet of 2.0 LBS/1,000 square feet) 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) Step 2:

Determining a Setting Rate **METRIC RATE SETTING**

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 DIFFERINT

Particle Size

1.5-2.1m

5-7ft.

Small/Fine

(Sand)

Metric

English

2.7-3.7m

9-12ft.

(Full BB)

Large

SPREAD WIDTH FOR DIFFERENT

SIZE GRASS SEED

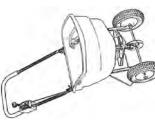
2.1-2.7m

7-9ft.

Medium Medium (Half BB)

| ୍ର | CHART 1 | BAG (SQI | G COVERAGE SQUARE FEET | BAG COVERAGE IN SQUARE FEET | ا | | |
|------------|---------|--------------|---------------------------|-----------------------------|---|----------|-----|
| | | 2,000 | 5,000 10,000 | 15,000 | | CHART 2 | |
| | | LBS | BS/1,000 SQ FI | SQ FT | | GRAMS/SQ | LBS |
| | 5 LBS. | 1.0 | 0.5 | 0.3 | | METER | Ś |
| m | 10 LBS. | 2.0 | 1.0 | 0.7 | | 5 Grams | 1.0 |
| 4 | 15 LBS. | 3.0 | 1.5 | 1.0 | | 10 Grams | 2.0 |
| U | 18 LBS. | 3.6 | 1.8 | 1.2 | | 15 Grams | 3.0 |
| | 20 LBS. | 4.0 | 2.0 | 1.3 | | 20 Grams | 4.0 |
| ≥ | 25 LBS. | 2.0 | 2.5 | 1.7 | | 25 Grams | 5.0 |
| ш. | 30 LBS. | 0.9 | 3.0 | 2.0 | | 30 Grams | 0.0 |
| _ (| 35 LBS. | 7.0 | 3.5 | 2.3 | | 35 Grams | 7.0 |
| 5 : | 40 LBS. | 8.0 | 4.0 | 2.7 | | 40 Grams | 8.0 |
| I k | 45 LBS. | 9.0 | 4.5 | 3.0 | | 45 Grams | 9.0 |
| - | 50 LBS. | 10.0 | 5.0 | 3.3 | | 50 Grams | 10. |

| GRAMS/SQ | LBS./1,000 | SPREADER |
|----------|------------|----------|
| METER | SQ FT | 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 |
| | | |



SPREADER SETTING

LBS/1,000 SQ FT

GRASS SEED GRAMS/SQ 16

3 4

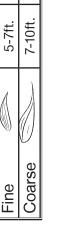
2 LBS. 3 LBS. 4 LBS. 5 LBS

> 15 Grams 20 Grams

25 Grams

10 Grams

METER



1.5-2.1m 2.1-3.1m

Metric

English

Seed Size



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.

