

# 2170 COMMERCIAL BROADCAST SPREADER *with* SSC ASSEMBLY and OPERATING INSTRUCTIONS

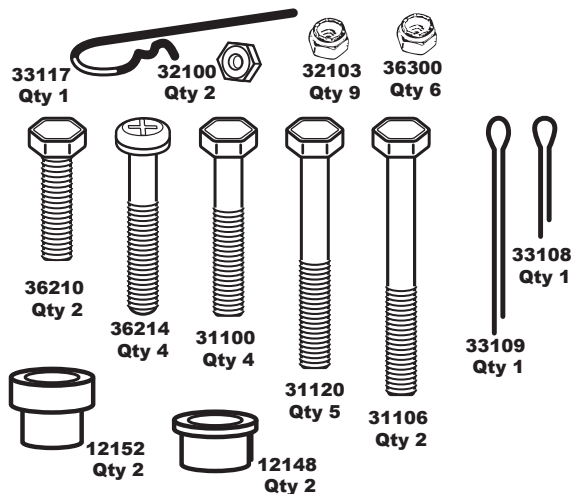
**EarthWay**  
EV-N-SPRED®

**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**. HOT LINE: 574-848-7491 OR 800-294-0671, EMAIL: [TECHSUPPORT@EARTHWAY.COM](mailto:TECHSUPPORT@EARTHWAY.COM)

## HELPFUL HINTS: READ THE DIRECTIONS BEFORE ASSEMBLY

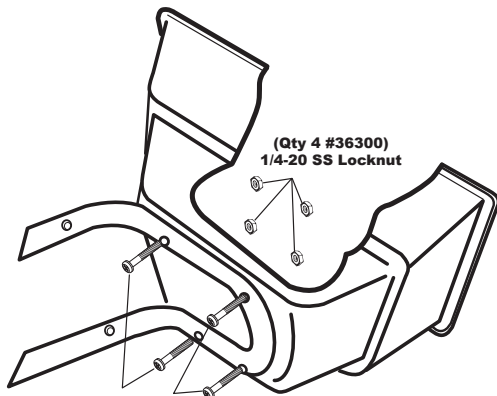
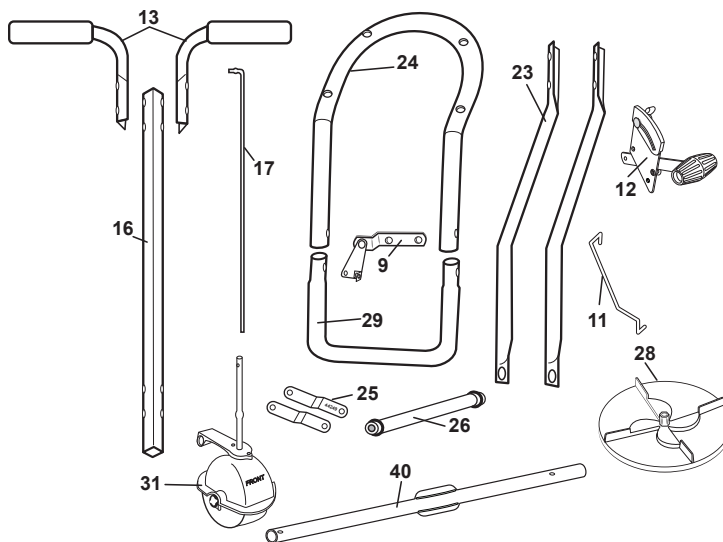
- ☑ If your spreader does not spread evenly, be sure the FRONT on the gear box points to the front of the spreader. The impeller must turn clockwise. Reversing the gearbox will cause the impeller to turn counter clockwise. Clean the impeller plate after each use. Fertilizer stuck on the impeller blades 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. Coat all metal surfaces (**pay special attention to the inside & outside of tubing - it's easiest to do while assembling**) with light oil, Fluid Film® or silicon spray to help prevent corrosion. Wash between the shut off plate and bottom of the hopper. **Do not use powdered materials.**
- ☑ Gears are permanently lubricated at the factory. Do not open the gearbox or dirt may enter.

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



1. Remove and identify all loose parts from carton.

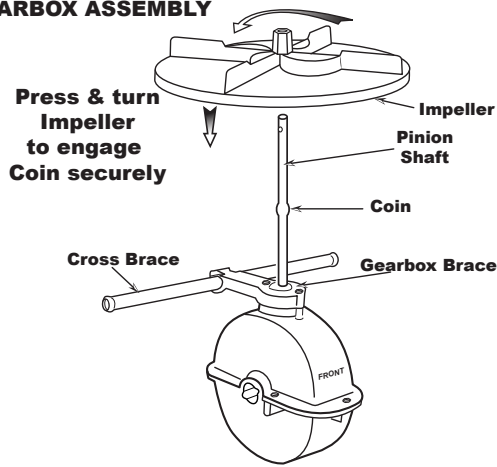
**ROCK SALT and POWDERED MATERIALS** should not be used in this spreader as it will damage gearbox and can void warranty.  
Use only granular materials.



2. Position hopper on side. Install frame using (4) 1/4-20 x 1-1/2" Pan Head Phillips bolts 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 - DO NOT TIGHTEN WITH POWER TOOLS. TIP: coat stainless steel bolts with wax or grease before tightening to prevent them from seizing.**

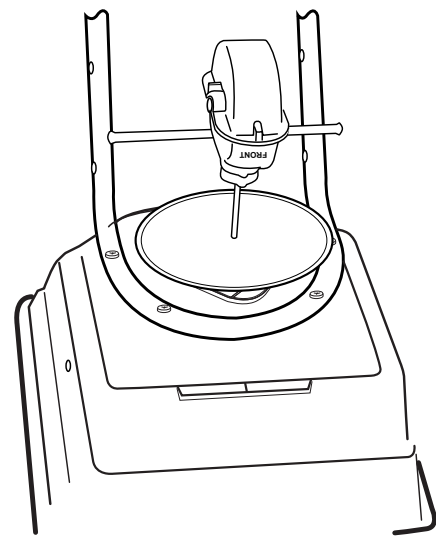


**GEARBOX ASSEMBLY**



3. Install impeller onto pinion shaft by pressing the impeller as shown onto the pinion shaft and turning the impeller while holding the pinion shaft to engage with the **COIN** fully, and press down to secure.

Next, insert Cross Brace thru the Gearbox Brace as shown above.



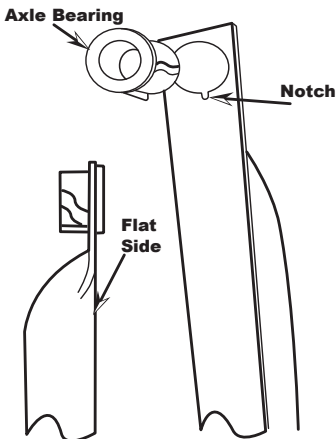
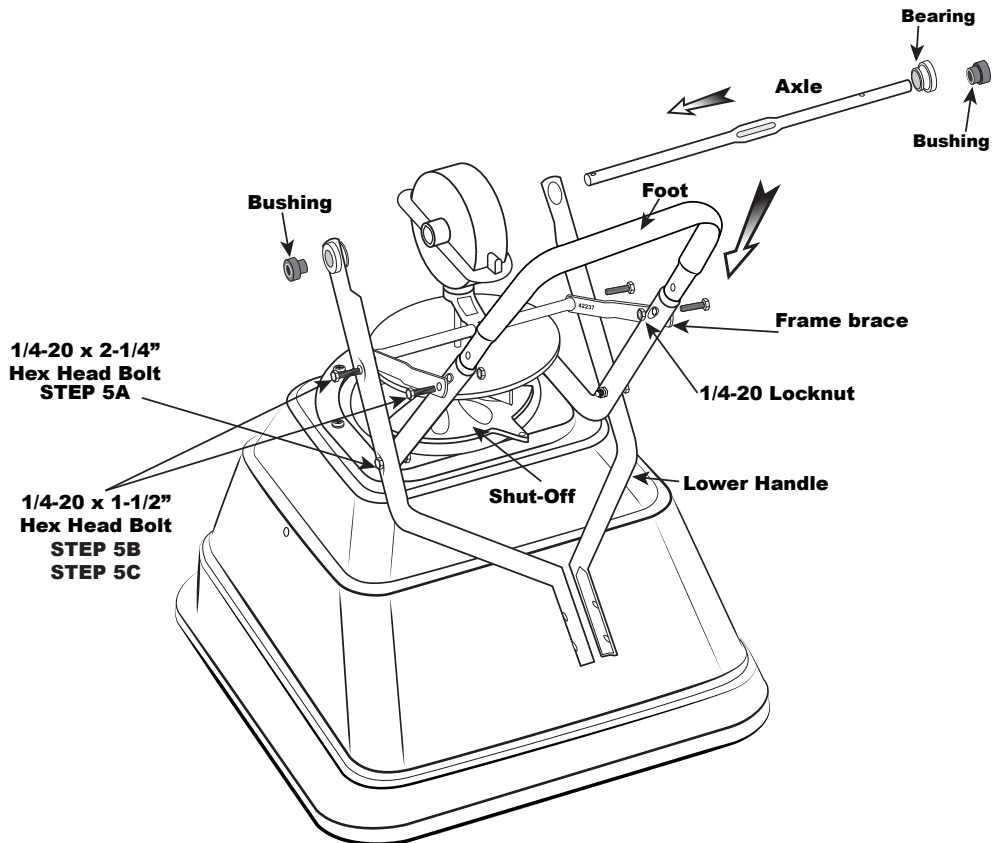
4. Install gearbox by inserting the pinion shaft into hole in center of hopper's bottom. The word "FRONT" on the gearbox must point to **Front** of the hopper. The EarthWay logo is on the front of the hopper.

5. **A** - Install lower handles onto the frame to both sides as shown. Insert 2 1/4" bolt through second hole in lower handle and through first hole in frame and install locknut. **DO NOT TIGHTEN.**

**B** - Now insert 1 1/2" bolt through first hole in lower handle. Then through frame brace. **NOTE:** Numbers on frame brace must be facing toward gear box as shown. Next into threaded connector in cross brace. **DO NOT TIGHTEN.**

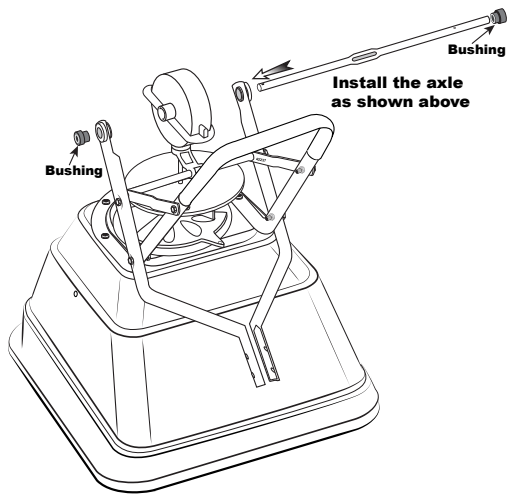
**C** - Next insert 1 1/2" bolt through other end of frame brace and through second hole in frame install locknut.

6. Install the axle through the axle hole in the lower handle and then through the gearbox and then through the lower handle on the other side as shown.



**NOTE:** Notch on bearings and lower handles. Bearings must go through flat side of lower handle (from the outside to the inside).

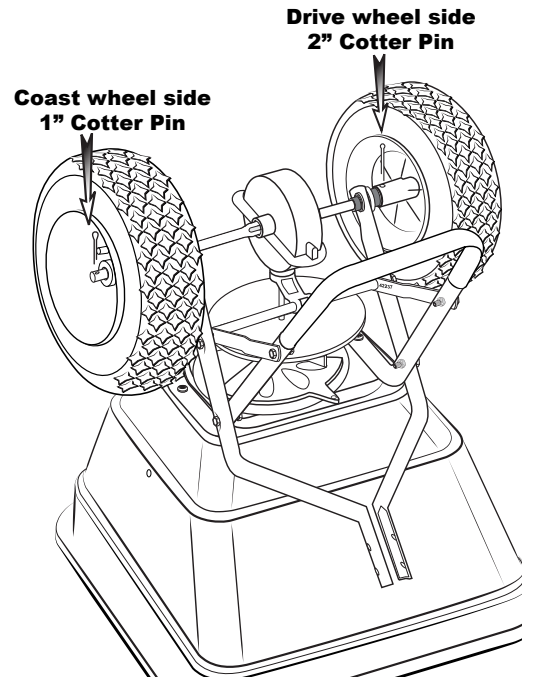
**NOW GO BACK AND TIGHTEN ALL NUTS AND BOLTS STARTING WITH FIRST STEP. DO NOT OVER TIGHTEN.**



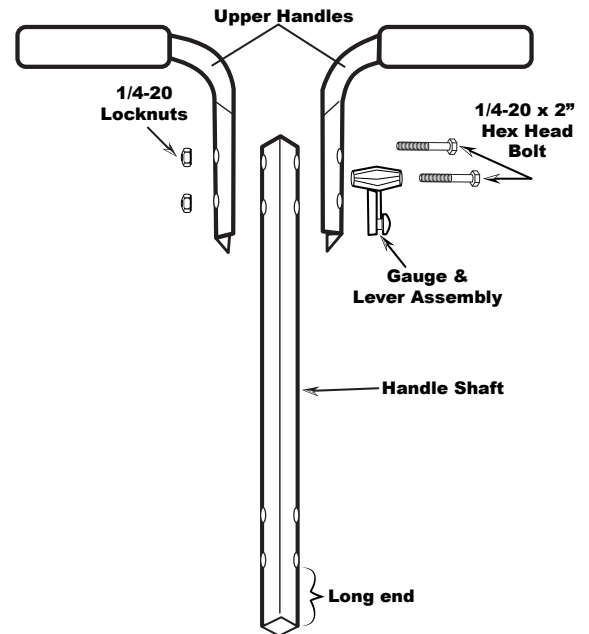
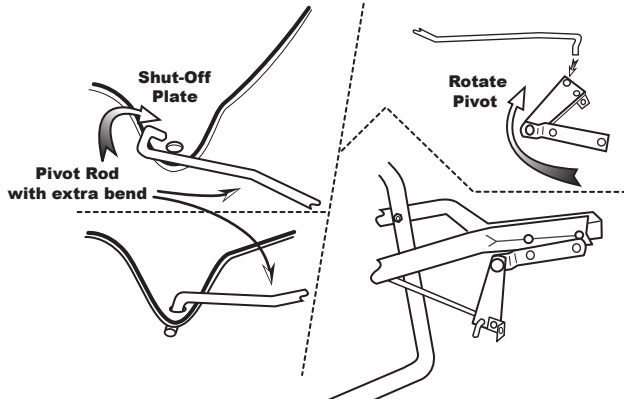
7. Slide axle bushing over axle and into axle bearing to both sides as shown.

8. Install drive wheel onto the axle and align with the cotter 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.

9. Install coast wheel onto the axle fully, then using outside cotter pin hole, insert 1" cotter pin through axle (not thru the wheel). Bend with pliers to prevent pin from falling out.



**TURN SPREADER UPRIGHT ON TO WHEELS.**

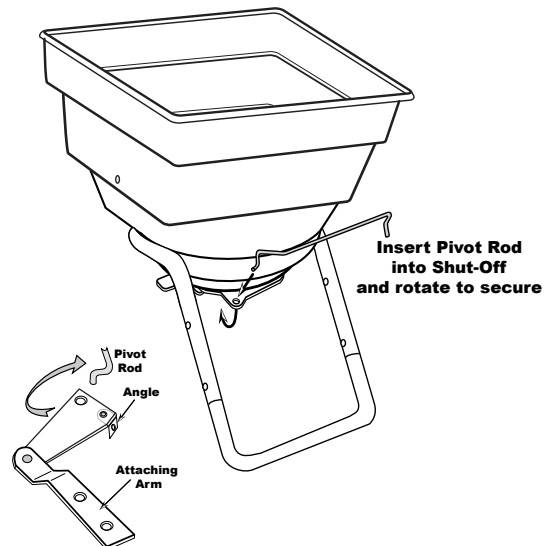


10. Insert 2" bolt through Gauge & Lever assembly, next through upper handle, then the handle shaft and then the other upper handle and secure with locknut.

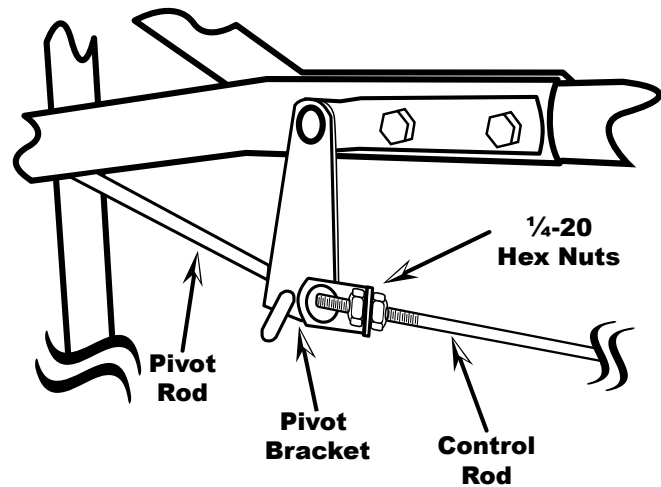
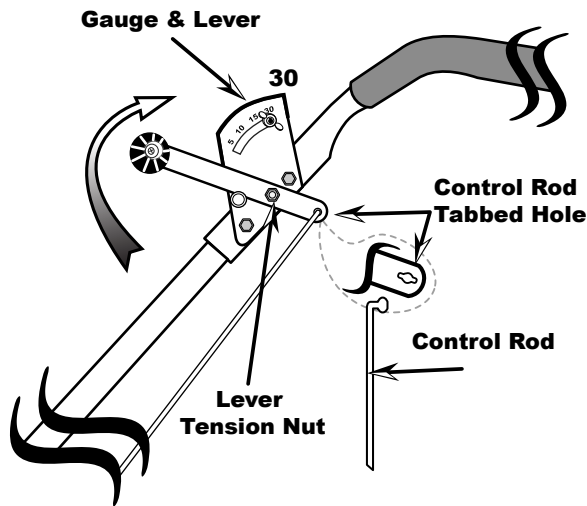
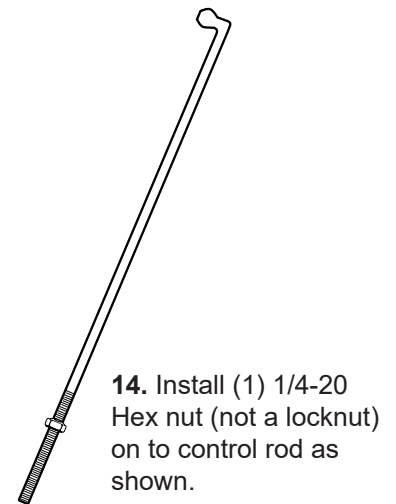
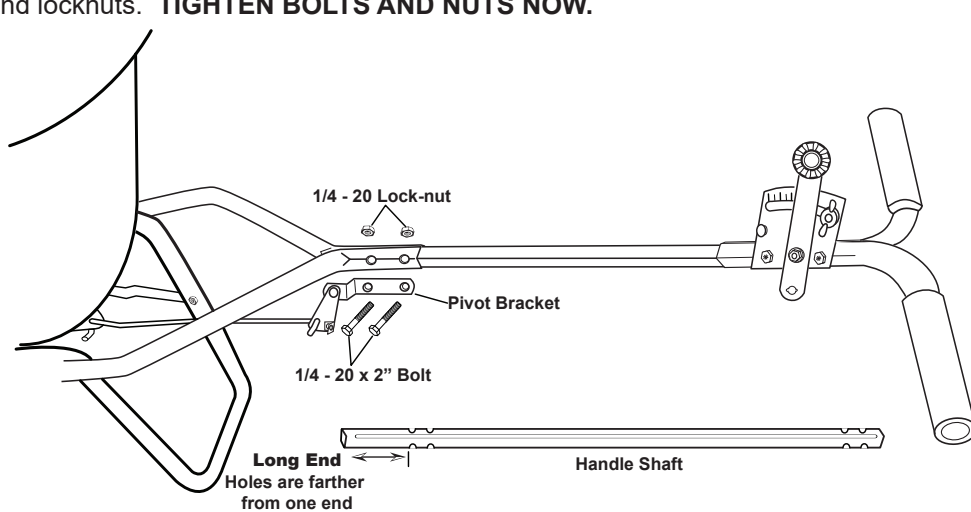
**TIGHTEN ALL HARDWARE NOW**

11. Insert pivot rod into shut-off plate as shown. Turn to lock in place.

12. Insert other end of pivot rod into pivot and bracket assembly as shown. Turn to lock in place.



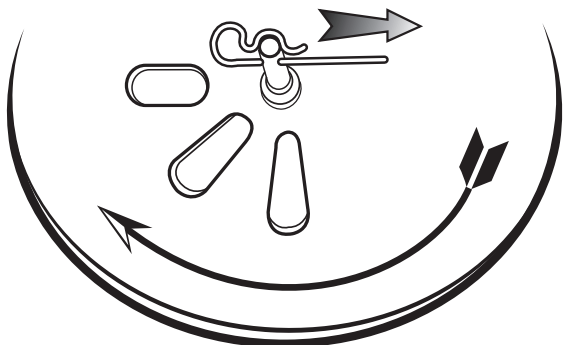
13. Install handle shaft to lower handles and pivot & bracket assembly as shown. Using 1/4 -20 x 2" bolts and locknuts. **TIGHTEN BOLTS AND NUTS NOW.**



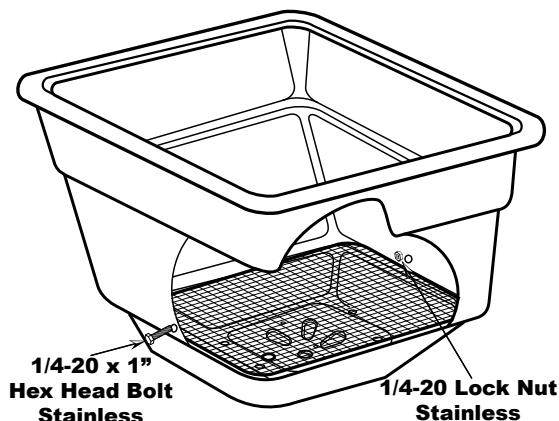
15. Install flattened end of control rod in to lever on gauge as shown. Turn to lock in place. Next push lever forward to setting "0". Align control rod with hole in pivot bracket, pull lever backward to insert control rod through hole in pivot bracket. Now install 1/4-20 Hex nut on to control rod.

16. 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. **REMEMBER SETTING "30" ON THE FLOW CONTROL LEVER MUST PLACE THE SHUT-OFF PLATE IN THE FULL OPEN POSITION TO BE PROPERLY CALIBRATED.** Now tighten the nuts against the pivot bracket to prevent change in calibration.

17. Tension on the flow control lever may be adjusted by tightening or loosening the tension nut as shown.



18. Insert agitator to pinion shaft on inside of hopper. **Note:** the position of flat side of the agitator. This pin should be installed as shown.



19. Install debris screen into hopper, then insert 1/4-20 x 1" Stainless Steel Hex Bolt thru the hole in the side wall of the hopper. Secure with Stainless Steel lock nut - **TIGHTEN WITH HAND TOOLS ONLY**

## **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, or the use of powdered materials. 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.
- 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.
- Thoroughly wash spreader and dry before storing. A coating of light oil will help prevent corrosion.
- If you use Rock Salt, remove agitator when in use to prevent damage to the GEARBOX.

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, the manufacturer makes no warranty as to the uniformity of coverage actually obtained from the settings listed.

## **NEW ~ NOUVEAU ~ NUEVO**

The **SIDESPRED-CONTROL™** is a new innovation that eliminates the need to use a side deflector, which can adversely affect your application rate, to prevent material from being spread into flowerbeds, on sidewalks, or driveways. The **SIDESPRED-CONTROL™** maintains the correct application rate while it is activated, giving you excellent results in seeding or spreading while controlling the spread pattern on the left side of the spreader.

The **SIDESPRED-CONTROL™** is an *EarthWay* exclusive.

### **SIDESPRED-CONTROL™ OPERATION**

The **SIDESPRED-CONTROL™** lever is located under the right side of the hopper. To operate the **SIDESPRED-CONTROL™**, slide the control lever from the front to the back. This will activate the **SIDESPRED-CONTROL™** for a **PARTIAL** spread pattern and prevent material from being spread to the left side of the spreader. Position the left wheel of your spreader 4"- 6" from the sidewalk, flowerbed, or driveway and spread as normal. When you have completed this spreading pass, close the control lever to "0", and then open the **SIDESPRED-CONTROL™** by sliding the control lever from back to the front, for a **FULL** spread pattern.

## **HOW TO ORDER SPARE PARTS**

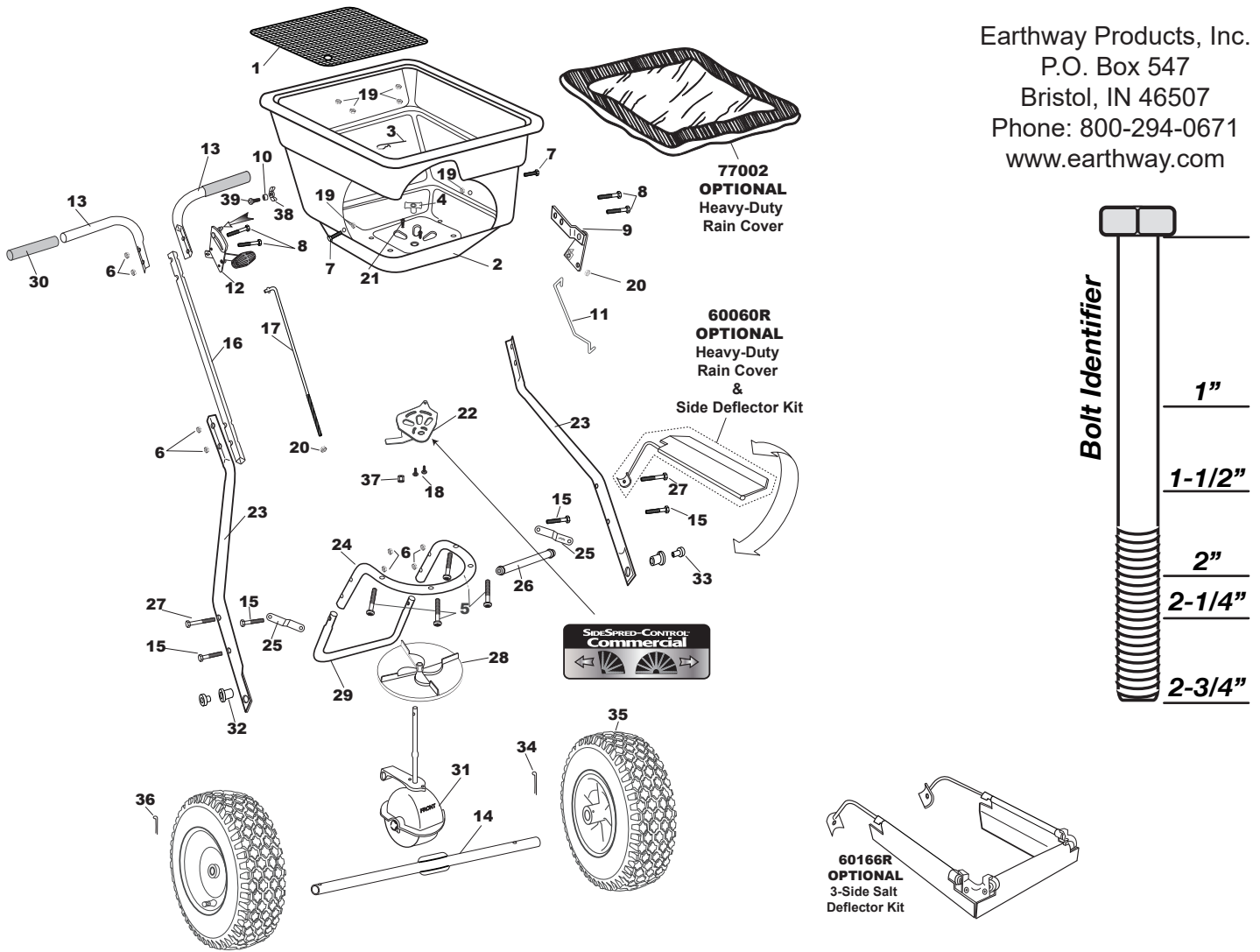
All spare parts listed herein may be ordered direct from the manufacturer. Be sure to give the following information when ordering.

- Model Number
- Part Number
- Part Description

You can contact us by calling (574) 848-7491 or 800-294-0671 to place an order with a credit card, or purchase online at [www.earthway.com/parts](http://www.earthway.com/parts) Questions? Email us at [sales@earthway.com](mailto:sales@earthway.com)



Earthway Products, Inc.  
P.O. Box 547  
Bristol, IN 46507  
Phone: 800-294-0671  
www.earthway.com



You can find replacement nuts & bolts at your local hardware store

## 2170 BROADCAST SPREADER ~ Parts List

KEY #	PART #	DESCRIPTION	KEY #	PART #	DESCRIPTION
1	40003	SQUARE SCREEN	22	12317SSC	SHUT OFF PLATE
2	60335	HOPPER ASSEMBLY (2170/2170T)	23	25222	LOWER HANDLE SQ
3	33117	AGITATOR	24	25108	FRAME
4	12209	HOPPER BUSHING	25	44249	FRAME BRACE
5	36214	1/4-20 X 1 1/2" PHPMS S.S.	26	25228	CROSS BRACE (2150/2170/S25) 11.25"
6	32103	1/4-20 NYLON INS LOCKNUT ZINC	27	31106	1/4-20 X 2 1/4" HHCS ZINC
7	36210	1/4-20 X 1" HHMS S.S.	28	12110	IMPELLER 9" Round Dished
8	31120	1/4-20 X 2" HHCS ZINC	29	25723	FRAME Foot
9	60300	PIVOT & BRACKET ASSEMBLY	30	12274	GRIP (2150/2170) 7.5" LONG
10	12147	SPACER (PIVOT LINK)	31	60333	New Floating GEAR BOX
11	44251	PIVOT ROD	32	12148	AXLE BEARING
12	60298	GAUGE & LEVER ASSEMBLY	33	12152	AXLE BUSHING
13	60175	UPPER HANDLE SQUARE W/GRIP ea.	34	33109	3/16" X 2" COTTER PIN ZINC
14	24500	AXLE, COINED	35	70138	PNEUMATIC DRIVE WHEEL STUD
15	31100	1/4-20 X 1 1/2 HHMS ZINC	36	33108	3/16" X 1" COTTER PIN ZINC
16	25223	HANDLE SHAFT SQ	37	11927	SHUTOFF SUPPORT- LARGE
17	42256	CONTROL ROD	38	60027	WING NUT ASSEMBLY BLACK
18	31138	#8 X 3/8" PMT #8 HD COARSE BLACK	39	37100	1/4-20 X 1" CARRIAGE BOLT ZINC
19	36300	1/4-20 NYLON INSERT LOCKNUT S.S.			
20	32100	1/4-20 HEX NUT ZINC			
21	36208	#6 X 3/8" TYPE 25 PHPS S.S.			

# Broadcast Setting Matrix

## 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.

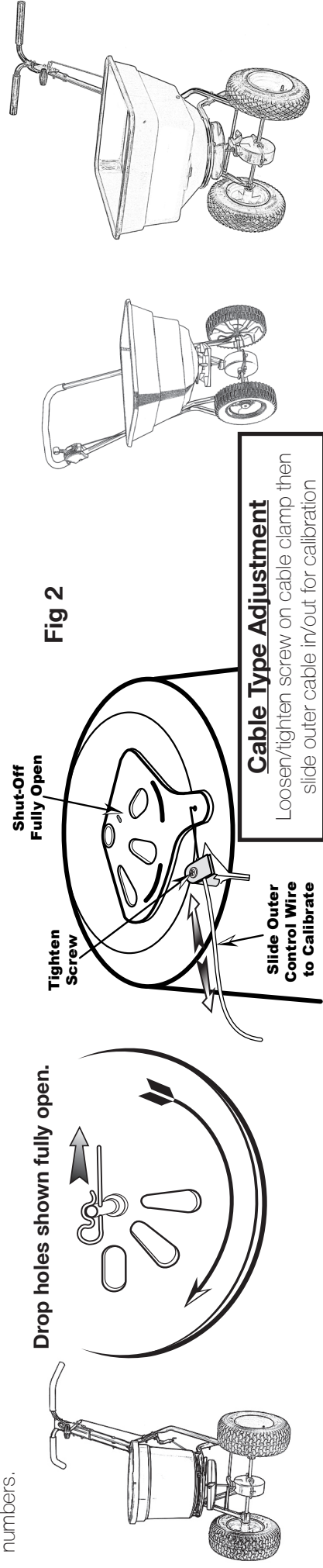
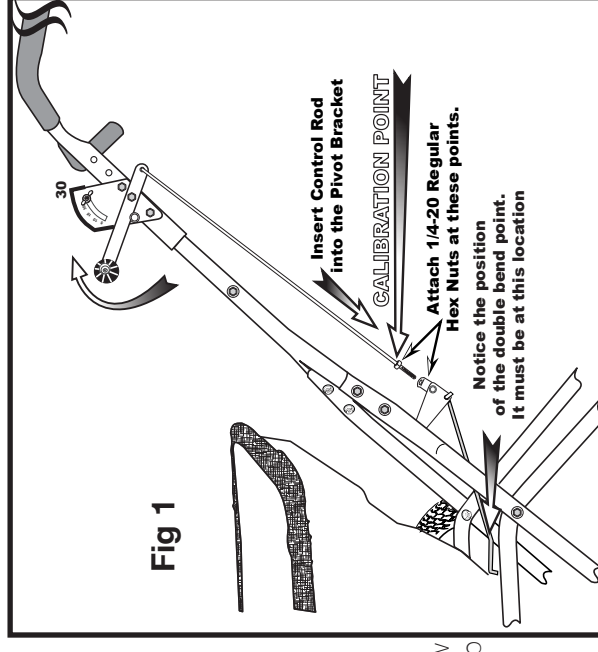
#### **Rod Type Adjustment**

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. 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.



**Cable Type Adjustment**  
Loosen/tighten screw on cable clamp then slide outer cable in/out for calibration

# ESTABLISHING A SETTING RATE

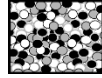
**Step 1:** Determine the rate by dividing the bag weight by the coverage of the bag listed (Example: (37lbs/10,000square feet = .0037), then multiply by 1,000 (.0037x1000 = 3.7lbs/1,000 square feet). That will give the suggested LBS/1,000 square feet rate.

**Step 2:** Find the closest LBS/1,000 square feet in **Broadcast Setting Matrix** below, based on the material **particle size**. (Example: 2.0 LBS/1,000 square feet = Spreader Setting of 10,13, or 18 based on particle size)

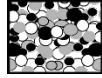
## BROADCAST SPREADER SETTING MATRIX for 2150/2170/C22/C24 models with dished impellers

### GRANULAR MATERIAL

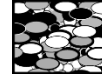
PARTICLE SIZES: Fine/Small → (1/16" SAND)



Medium → (3/32")



Large → (1/8" ICE MELT)



LBS. PER 1,000 SQUARE FEET	SETTING	SPREAD		SETTING	SPREAD		SETTING	SPREAD	
		WIDTH FT	METERS		WIDTH FT	METERS		WIDTH FT	METERS
1 LB.	7	18'	5.5m	9	24'	7.3m	14	36'	11m
2 LBS.	10	18'	5.5m	13	24'	7.3m	18	36'	11m
3 LBS.	13	18'	5.5m	16	24'	7.3m	23	36'	11m
4 LBS.	14	18'	5.5m	20	24'	7.3m	27	36'	11m
5 LBS.	16	18'	5.5m	22	24'	7.3m	30	36'	11m
6 LBS.	18	18'	5.5m	25	24'	7.3m	23 = 2 pass	36'	11m
7 LBS.	20	18'	5.5m	27	24'	7.3m	25 = 2 pass	36'	11m
8 LBS.	22	18'	5.5m	28	24'	7.3m	27 = 2 pass	36'	11m
9 LBS.	24	18'	5.5m	30	24'	7.3m	28 = 2 pass	36'	11m
10 LBS.	26	18'	5.5m	22 = 2 pass	24'	7.3m	30 = 2 pass	36'	11m

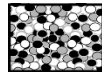
### GRASS SEED

LBS. PER 1,000 SQUARE FEET	FINE SETTING	SPREAD		COARSE SETTING	SPREAD	
		WIDTH FT	METERS		WIDTH FT	METERS
2 LBS.	14	8'	2.4m	22	14'	4.3m
3 LBS.	16	8'	2.4m	25	14'	4.3m
4 LBS.	18	8'	2.4m	28	14'	4.3m
5 LBS.	20	8'	2.4m	30	14'	4.3m

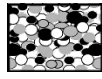
**Calibration:** Start by ensuring that your spreader calibration is correct. Make sure the drop are fully open when the Rate Control handle is on #30. If not, please adjust control rod at the pivot to allow for a full open hopper holes with the handle at position at #30.

### GRANULAR MATERIAL

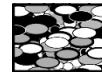
PARTICLE SIZES: Fine/Small → (1.5mm SAND)



Medium → (2mm)



Large → (3mm)

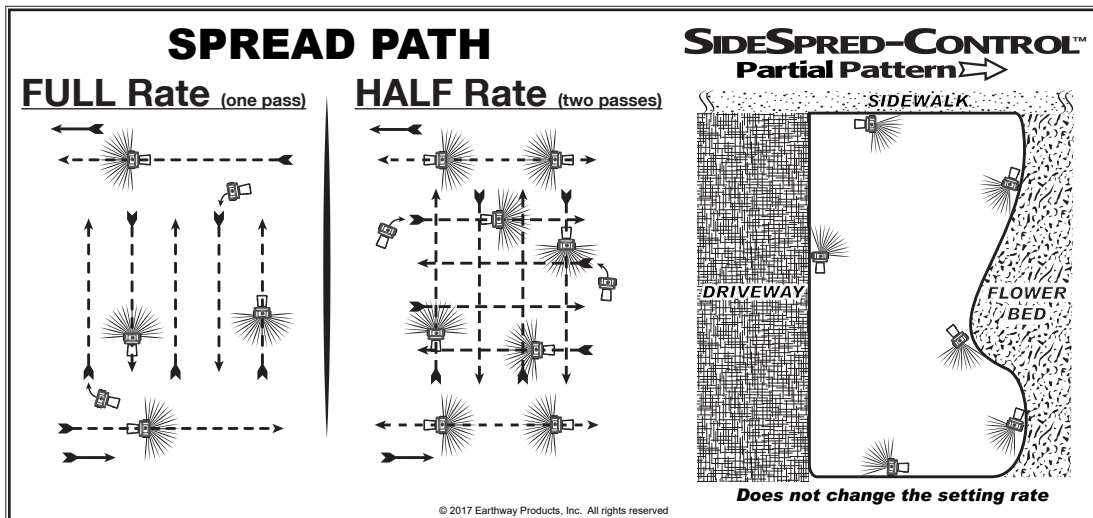


Grams PER Square Metre	SETTING	SPREAD		SETTING	SPREAD		SETTING	SPREAD	
		WIDTH FT	METERS		WIDTH FT	METERS		WIDTH FT	METERS
5	7	18'	5.5m	9	24'	7.3m	14	36'	11m
10	10	18'	5.5m	13	24'	7.3m	18	36'	11m
15	13	18'	5.5m	16	24'	7.3m	23	36'	11m
20	14	18'	5.5m	20	24'	7.3m	27	36'	11m
24	16	18'	5.5m	22	24'	7.3m	30	36'	11m
29	18	18'	5.5m	25	24'	7.3m	23 x 2 pass	36'	11m
34	20	18'	5.5m	27	24'	7.3m	25 x 2 pass	36'	11m
39	22	18'	5.5m	28	24'	7.3m	27 x 2 pass	36'	11m
44	24	18'	5.5m	30	24'	7.3m	28 x 2 pass	36'	11m
49	26	18'	5.5m	22 x 2 pass	24'	7.3m	30 x 2 pass	36'	11m

### GRASS SEED

Grams PER Square Metre	FINE SETTING	SPREAD		COARSE SETTING	SPREAD	
		WIDTH FT	METERS		WIDTH FT	METERS
10	14	8'	2.4m	22	14'	4.3m
15	16	8'	2.4m	25	14'	4.3m
20	18	8'	2.4m	28	14'	4.3m
25	20	8'	2.4m	30	14'	4.3m

**Calibration:** Start by ensuring that your spreader calibration is correct. Make sure the drop holes are fully open when the Rate Control handle is on #30. If not, please adjust control rod at the pivot to allow for a full open hopper holes with the handle at position at #30.



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.