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.

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.

ROCKSALT and POWDERED MATERIALS should not be used in this spreader as it will damage gearbox and can void warranty. Use only granular materials.
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 hoppers 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 2¼” bolt through second hole in lower handle and through first hole in frame and install locknut. **DO NOT TIGHTEN.**

**B** - Now insert 1½” 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 1½” 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.**

14. Install (1) 1/4-20 Hex nut (not a locknut) on to control rod as shown.

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**
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.

**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. Questions? Email us at sales@earthway.com
### 2170 Broadcast Spreader ~ Parts List

<table>
<thead>
<tr>
<th>KEY</th>
<th>PART #</th>
<th>DESCRIPTION</th>
<th>KEY</th>
<th>PART #</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>40003</td>
<td>SQUARE SCREEN</td>
<td>22</td>
<td>12317SSC</td>
<td>SHUT OFF PLATE</td>
</tr>
<tr>
<td>2</td>
<td>60335</td>
<td>HOPPER ASSEMBLY (2170/2170T)</td>
<td>23</td>
<td>25222</td>
<td>LOWER HANDLE SQ</td>
</tr>
<tr>
<td>3</td>
<td>33117</td>
<td>AGITATOR</td>
<td>24</td>
<td>25108</td>
<td>FRAME</td>
</tr>
<tr>
<td>4</td>
<td>12209</td>
<td>HOPPER BUSHING</td>
<td>25</td>
<td>44249</td>
<td>FRAME BRACE</td>
</tr>
<tr>
<td>5</td>
<td>36214</td>
<td>1/4-20 X 1 1/2&quot; PHPMS S.S.</td>
<td>26</td>
<td>25228</td>
<td>CROSS BRACE (2150/2170/S25) 11.25&quot;</td>
</tr>
<tr>
<td>6</td>
<td>32103</td>
<td>1/4-20 NYLON INS LOCKNUT ZINC</td>
<td>27</td>
<td>31106</td>
<td>1/4-20 X 2 1/4&quot; HHCS ZINC</td>
</tr>
<tr>
<td>7</td>
<td>36210</td>
<td>1/4-20 X 1&quot; HHMS S.S.</td>
<td>28</td>
<td>12110</td>
<td>IMPELLER 9&quot; Round Dished</td>
</tr>
<tr>
<td>8</td>
<td>31120</td>
<td>1/4-20 X 2&quot; HHCS ZINC</td>
<td>29</td>
<td>25723</td>
<td>FRAME Foot</td>
</tr>
<tr>
<td>9</td>
<td>60300</td>
<td>PIVOT &amp; BRACKET ASSEMBLY</td>
<td>30</td>
<td>12274</td>
<td>GRIP (2150/2170) 7.5&quot; LONG</td>
</tr>
<tr>
<td>10</td>
<td>12147</td>
<td>SPACER (PIVOT LINK)</td>
<td>31</td>
<td>60333</td>
<td>New Floating GEAR BOX</td>
</tr>
<tr>
<td>11</td>
<td>44251</td>
<td>PIVOT ROD</td>
<td>32</td>
<td>12148</td>
<td>AXLE BEARING</td>
</tr>
<tr>
<td>12</td>
<td>60298</td>
<td>GAUGE &amp; LEVER ASSEMBLY</td>
<td>33</td>
<td>12152</td>
<td>AXLE BUSHING</td>
</tr>
<tr>
<td>13</td>
<td>60175</td>
<td>UPPER HANDLE SQUARE W/GRIP ea.</td>
<td>34</td>
<td>33109</td>
<td>3/16&quot; X 2&quot; COTTER PIN ZINC</td>
</tr>
<tr>
<td>14</td>
<td>24500</td>
<td>AXLE, COINED</td>
<td>35</td>
<td>70138</td>
<td>PNEUMATIC DRIVE WHEEL STUD</td>
</tr>
<tr>
<td>15</td>
<td>31100</td>
<td>1/4-20 X 1 1/2 HHMS ZINC</td>
<td>36</td>
<td>33108</td>
<td>3/16&quot; X 1&quot; COTTER PIN ZINC</td>
</tr>
<tr>
<td>16</td>
<td>25223</td>
<td>HANDLE SHAFT SQ</td>
<td>37</td>
<td>11927</td>
<td>SHUTOFF SUPPORT- LARGE</td>
</tr>
<tr>
<td>17</td>
<td>42256</td>
<td>CONTROL ROD</td>
<td>38</td>
<td>60027</td>
<td>WING NUT ASSEMBLY BLACK</td>
</tr>
<tr>
<td>18</td>
<td>31136</td>
<td>#8 X 3/8&quot; PMT #8 HD COARSE BLACK</td>
<td>39</td>
<td>37100</td>
<td>1/4-20 X 1&quot; CARRIAGE BOLT ZINC</td>
</tr>
<tr>
<td>19</td>
<td>36300</td>
<td>1/4-20 NYLON INSERT LOCKNUT S.S.</td>
<td>20</td>
<td>32100</td>
<td>1/4-20 HEX NUT ZINC</td>
</tr>
<tr>
<td>20</td>
<td>36208</td>
<td>#6 X 3/8&quot; TYPE 25 PHPMS S.S.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**You can find replacement nuts & bolts at your local hardware store**
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, 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.
ESTABLISHING A SETTING RATE

Step 1: Determine the rate by dividing the bag weight by the coverage of the bag listed (Example: (37lbs/10,000 square 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)

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.