OWNERS MANUAL

Model No. 45-0215

CAUTION:
Read Rules for Safe Operation and Instructions Carefully

BROADCAST SPREADER 70 (TOW)

- Assembly
- Operation
- Maintenance
- Repair Parts

Agri-Fab Inc. • 303 WEST RAYMOND • SULLIVAN, ILLINOIS 61951

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RULES FOR SAFE OPERATIONS

Any power equipment can cause injury if operated improperly or if the user does not understand how to operate the equipment. Exercise caution at all times, when using equipment.

1. Read the towing vehicle owner’s manual, towing vehicle safety rules and know how to operate your equipment, before using the broadcast spreader attachment.
2. Never operate tractor and broadcast spreader attachment without wearing substantial footwear, and do not allow anyone to ride or sit on broadcast spreader attachment frame.
3. Never allow children to operate tractor and broadcast spreader attachment, and do not allow adults to operate without proper instructions.
4. Always begin with the transmission in first (low) gear and gradually increase speed as conditions permit. Maximum towing speed - 10 M.P.H.
5. When towing broadcast spreader do not drive too close to a creek or ditch and be alert for holes and other hazards which could cause you to lose control of the broadcast spreader and tractor.
6. Before operating vehicle on any grade (hill) refer to the safety rules in the vehicle owner’s manual concerning safe operation on slopes. Stay off steep slopes.
7. Read instructions and caution notes for handling/spreading of materials purchased for spreading.
8. Follow maintenance and lubrication instructions as outlined in this manual.

Your broadcast spreader carton contains parts as shown in figure 1. The hardware package contains parts shown in figure 2 on page 3. Identify all parts and layout as shown in figures 1 and 2.

CARTON CONTENTS

LOOSE PARTS IN CARTON
1. Hitch tube
2. Braces
3. Flow Control Mount Bracket
4. Flow Control Gage
5. Flow Control Arm

6. Flow Control Rod
7. Hitch Bracket
8. Wheels (R.H. and L.H.)
9. Hopper Assembly
10. Hardware Package (not shown)
### FIGURE 2  HARDWARE PACKAGE

<table>
<thead>
<tr>
<th>KEY</th>
<th>QTY</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>A</td>
<td>5</td>
<td>Hex Bolt 1/4-20 x 1-1/2&quot; Long</td>
<td>B</td>
<td>9</td>
<td>Hex Lock Nut 1/4-20 Thread</td>
</tr>
<tr>
<td>C</td>
<td>1</td>
<td>Hand Knob</td>
<td>D</td>
<td>1</td>
<td>Nylon Washer</td>
</tr>
<tr>
<td>E</td>
<td>1</td>
<td>Cotter Pin 3/32 x 3/4&quot; Long</td>
<td>F</td>
<td>3</td>
<td>Flat Washer 5/16&quot; SAE</td>
</tr>
<tr>
<td>G</td>
<td>2</td>
<td>Hex Bolts 1/4-20 x 1&quot;</td>
<td>H</td>
<td>2</td>
<td>Lock Washers 1/4&quot; I.D.</td>
</tr>
<tr>
<td>I</td>
<td>2</td>
<td>Hub Cap</td>
<td>J</td>
<td>2</td>
<td>Epoxyres</td>
</tr>
<tr>
<td>K</td>
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<td>Flat Washers 1&quot; O.D.</td>
<td>L</td>
<td>1</td>
<td>Grip</td>
</tr>
<tr>
<td>M</td>
<td>2</td>
<td>Hex Bolt 1/4-20 x 5/8&quot; Long</td>
<td>N</td>
<td>1</td>
<td>Control Link</td>
</tr>
<tr>
<td>O</td>
<td>1</td>
<td>Extension Spring</td>
<td></td>
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</tr>
</tbody>
</table>

### FULL SIZE HARDWARE REFERENCE CHART

- A: Hex Bolt 1/4-20 x 1-1/2" Long
- B: Hex Lock Nut 1/4-20 Thread
- C: Hand Knob
- D: Nylon Washer
- E: Cotter Pin 3/32 x 3/4" Long
- F: Flat Washer 5/16" SAE
- G: Hex Bolts 1/4-20 x 1"
- H: Lock Washers 1/4" I.D.
- I: Hub Cap
- J: Epoxyres
- K: Flat Washers 1" O.D.
- L: Grip
- M: Hex Bolt 1/4-20 x 5/8" Long
- N: Control Link
- O: Extension Spring

- 1/4" LOCK WASHER
- 5/16" SAE
- 17/32" x 1"
ASSEMBLY INSTRUCTIONS

TOOLS REQUIRED FOR ASSEMBLY
(1) Pliers
(2) 7/16" Open or End Wrench
(1) Small Hammer

1. Remove the spreader, loose parts and hardware package from the carton. See figures 1 and 2.

2. Turn the spreader upside down as shown in figure 3, so that it rests on the hoppers.

3. Remove the 1/4" hex bolt, flat washer and hex lock nut from the center of the crossover tube and shaft support plate. See figure 3.

![Figure 3](image)

4. Assemble two hitch braces to the inside of the hopper frame, one each side, using two 1/4" x 1-1/2" and two 1/4" hex lock nuts. See figure 4. DO NOT TIGHTEN AT THIS TIME.

5. Place the hitch tube up against the crossover tube, align the holes in hitch tube, crossover tube and shaft support plate, assemble with 1/4" hex bolt, flat washer and 1/4" hex lock nut, removed in step 3. See figures 3 and 4. MAKE ONLY FINGER TIGHT AT THIS TIME.

6. Align the holes in the ends of the two hitch braces with the nearest hole in the hitch tube, secure with 1/4" x 1-1/2" hex bolt and 1/4" hex lock nut. See figure 4.

![Figure 4](image)

7. Tighten all hex nuts and bolts, following same sequence as assembled in steps 4, 5 and 6. DO NOT COLLAPSE TUBE WHEN TIGHTENING.

8. Assemble one spacer and one 1" dia. flat washer to each side of axle. See figure 5.

![Figure 5](image)
9. Place wheel with round center hole onto round end of axle. The side of the wheel with the shortest hub must be toward outside of axle.

10. Place one 1" diameter flat washers and hub cap onto axle outside of wheel. Using a small hammer lightly tap hub cap until snug against wheel.

13. Turn the broadcast spreader over so it rests on its wheels.

14. Assemble the hitch bracket to the hitch tube. See figure 8. Secure with two 1/4" x 1" hex bolts, 1/4" lock washers and 1/4" hex lock nuts. See figure 8.

11. Place wheel with flat sided center hole onto swaged end of axle. The side of the wheel with the shortest hub must be toward outside of axle.

12. Place hub cap onto axle outside of wheel. Using a small hammer lightly tap hub cap until snug against wheel.

15. Assemble the flow control link (the end with smallest hole) to the flow control arm using one 1/4" x 5/8" hex bolt and one 1/4" hex lock nut. See figure 9. DO NOT OVER TIGHTEN. FLOW CONTROL LINK MUST PIVOT FREELY.

16. Place vinyl grip on the flow control arm. See figure 9.
17. Assemble the flow control arm to the flow control mounting bracket using one 1/4" x 5/8" hex bolt and one 1/4" hex lock nut. See figure 10. **DO NOT OVER TIGHTEN, FLOW CONTROL ARM MUST PIVOT FREELY.**

18. Hook one end of extension spring through small hole near bend in flow control rod and the other end through hole in flow control mounting bracket. See figure 10.

**FIGURE 10**

19. Place 5/16" SAE washer on end of flow control link, align with slot in flow control mounting bracket and insert end of flow control rod through slot and hole in flow control link. Secure with 3/32" cotter pin. See figure 11. **DO NOT TIGHTEN AT THIS TIME.**

**FIGURE 11**

20. Hook free end of flow control rod through hole in slide gate bracket located near bottom of hopper. See figure 12.

**FIGURE 12**

21. Assemble flow control mounting bracket to the hitch tube using two 1/4" x 1-1/2" hex bolts, two 5/16" SAE washers and two 1/4" hex lock nuts. See figure 13. **DO NOT TIGHTEN AT THIS TIME.**

**FIGURE 13**
22. Assemble the flow control gage onto the flow control mounting bracket as shown in figure 14. Secure with nylon washer and hand knob.

23. Move flow control arm to off position and slide flow control mounting bracket toward hopper until closure plate (located in bottom of hopper) is completely closed. Tighten 1/4" hex lock nuts assembled in step 21. See figure 14.

24. Pre-lubricate per lubrication section on page 9 before operating spreader.
**OPERATION**

The application spread pattern should overlap to insure uniform coverage at the edges. The approximate distance between each pass is shown in the application diagram. See figure 15.

**APPLICATION DIAGRAM**

**FLOW RATE CHART**

<table>
<thead>
<tr>
<th>TYPE</th>
<th>SETTING AT 3 MPH</th>
<th>SPREAD WIDTH IN FEET</th>
</tr>
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<tbody>
<tr>
<td>FERTILIZER</td>
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<tr>
<td>Powder</td>
<td>3 - 5</td>
<td>3 - 4</td>
</tr>
<tr>
<td>Granular</td>
<td>3 - 5</td>
<td>8 - 10</td>
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<tr>
<td>Pelleted</td>
<td>3 - 5</td>
<td>10 - 12</td>
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<tr>
<td>Organic</td>
<td>6 - 8</td>
<td>6 - 8</td>
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<tr>
<td>GRASS SEED</td>
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<td></td>
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<tr>
<td>Fine</td>
<td>3 - 4</td>
<td>6 - 7</td>
</tr>
<tr>
<td>Coarse</td>
<td>4 - 5</td>
<td>8 - 9</td>
</tr>
</tbody>
</table>

**NOTE**

Do not use powdered lime, only granulated materials are approved for use.

1. Determine approximate square footage of area to be covered and estimate amount of fertilizer or seed required.
2. With flow control arm in off position, set flow rate gage at number indicated in flow rate chart—light or heavy application rate. Also refer to the bag instructions for manufacturers recommended settings.
3. Break up lumpy fertilizer as you fill hopper.
4. To broadcast, always start tractor in motion before opening closure plate. Do not allow tractor to sit stationary with flow control arm in on position. If fertilizer is accidentally deposited too heavily in a small area, soak down thoroughly with garden hose or sprinkler to prevent burning of lawn.

**IMPORTANT** Application rates (shown on chart) are affected by humidity and moisture content of material (granular and pellet); therefore, minor setting adjustments may be necessary to compensate for this condition. The rate chart is calculated for light and heavy application. The faster you drive, the wider the broadcast width. A variation in speed will determine the flow rates and widths of broadcast.

**CAUTION**

When broadcasting weed control fertilizers make sure broadcast pattern does not hit evergreen trees, flowers or shrubs.
MAINTENANCE

1. Do not store spreader with any material left in hopper.

2. Clean your spreader after use. Flush thoroughly with water.

3. If for any reason the axle, gear and sprocket assembly is disassembled, be sure to mark position of parts as they are removed. Drive wheel and sprocket position determine relation direction of spreader plate. See figure 7 on page 5. With reassembly of gear and sprocket use shim washers (see page 10 Ref. No 21) as needed for minimum backlash. Add grease to gear and sprocket.

4. If agitator wire becomes damaged or worn it can be replaced. Loosen 3/8" lock nut on the top of sprocket shaft until agitator wire is free. Remove and replace with new agitator wire. Position agitator wire so that sprocket shaft turns freely and tighten 3/8" lock nut on top of sprocket shaft. See figure 17.

5. Heavy moisture conditions may require a cover over the hopper to keep contents dry. The vinyl cover acts as a wind and moisture shield, but should not be used as a rain cover. See figure 18.

LUBRICATION

(See figure 23)

1. Apply a little automotive grease as needed to the sprocket and gear.
2. Oil nylon bushings on sprocket shaft as shown in figure 19.
3. Oil axle/shaft bushing on axle as shown in figure 19.
4. Oil right hand wheel bearing as needed.
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<tr>
<th>REF. NO.</th>
<th>PART NO.</th>
<th>QTY</th>
<th>DESCRIPTION</th>
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<td>1</td>
<td>Owner’s Manual</td>
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*Purchase common hardware locally.