# Agri-Fab® **OWNERS MANUAL**

Model No. 45-02103-101



# **125 LB. PUSH BROADCAST SPREADER**

**CAUTION:** Read Rules for Safe Operation and Instructions Carefully

- Assembly
- Operation
- Maintenance
- Repair Parts

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PRINTED IN U.S.A. FORM NO. 49120 (12/03)

# **RULES FOR SAFE OPERATION**

The following safety precautions are suggested. This broadcast spreader is designed, engineered and tested to offer reasonably safe and effective service, provided it is operated in strict accordance with these instructions. Failure to do so may result in personal injury. Always observe the rules of safe operation.

- 1. Do not allow anyone to operate the broadcast spreader without proper instructions.
- 2. Do not permit children to operate the broadcast spreader.

- 3. Wear eye and hand protection when handling and when applying lawn or garden chemicals.
- 4. Read the chemical label instructions and cautions for handling and applying the chemicals purchased for spreading.
- 5. Keep all nuts, bolts and screws tight to be sure equipment is in safe working condition.
- 6. Follow maintenance and lubrication instructions as outlined in this manual.



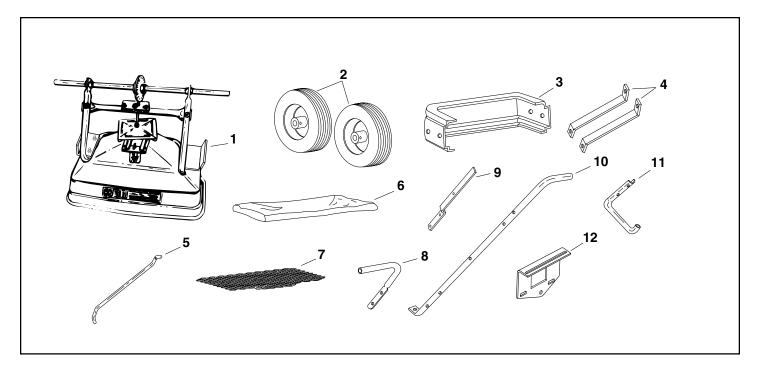
LOOK FOR THIS SYMBOL TO POINT OUT IMPORTANT SAFETY PRECAUTIONS. IT MEANS -- ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED.

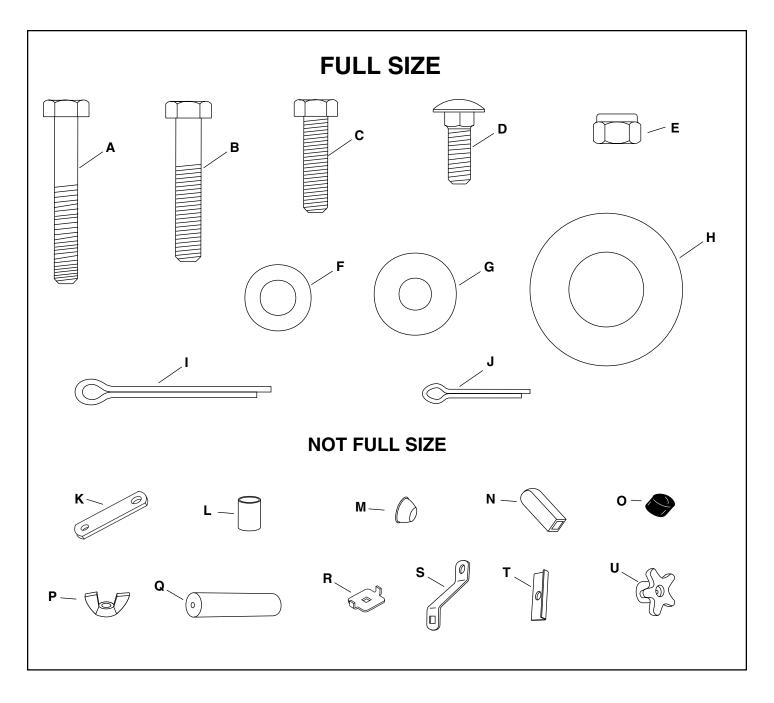
# **CARTON CONTENTS**

#### LOOSE PARTS IN CARTON

- 1. Hopper Assembly
- 2. Wheel
- 3. Spreader Shield
- 4. Braces (2)
- 5. Flow Control Rod
- 6. Vinyl Hopper Cover

- 7. Hopper Screen
- 8. Handle Tube (short)
- 9. Flow Control Arm
- 10. Handle Tube (long)
- 11. Leg Stand Tube
- 12. Flow Control Mount Bracket Hardware Package (page 3)





KEY	QTY.	DESCRIPTION	KEY	QTY.	DESCRIPTION
A B C D E F G H I J	2 5 8 3 15 20 8 4 1	Hex Bolt, 1/4-20 x 1-3/4" Long Hex Bolt, 1/4-20 x 1-1/2" Long Hex Bolt, 1/4-20 x 1" Long Carriage Bolt, 1/4-20 x 3/4" Long Nylock Nut, 1/4-20 Thd. Flat Washer, 5/16" SAE Nylon Washer Flat Washer, 5/8" Cotter Pin, 5/32" x 2" Cotter Pin, 3/32" x 3/4" Long	K L M N O P Q R S T U	1 2 2 1 1 1 2 1 4 2 2	Flow Control Link Spacer Tube Hub Cap Grip Vinyl Cap Nylon Wing Nut Handle Grip Adjustable Stop Swivel Bracket Angle Stop Bracket Plastic Knob

# **ASSEMBLY INSTRUCTIONS**

# **TOOLS REQUIRED FOR ASSEMBLY**

- (1) Pliers
- (1) Hammer
- (2) 7/16" Open or Boxed End Wrenches
- 1. Remove the spreader, the loose parts and the hardware package from the carton. Lay out parts and hardware and identify using the illustrations on pages 2 and 3.
- 2. With the spreader resting upside down on the top of the hopper, assemble a spacer and then a 5/8" flat washer onto each end of the axle. See figure 1.

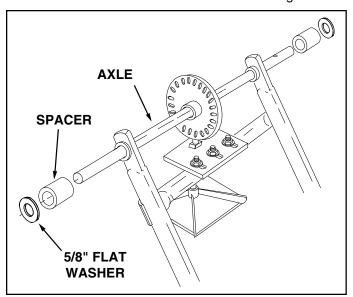


FIGURE 1

- 3. Place a wheel onto the end of the axle that has no cross hole. The long end of the hub goes to the inside. See figure 2.
- 4. Place a 5/8" flat washer onto the axle and then lightly tap a hub cap onto the axle until it is snug against the washer and wheel hub. See figure 2.

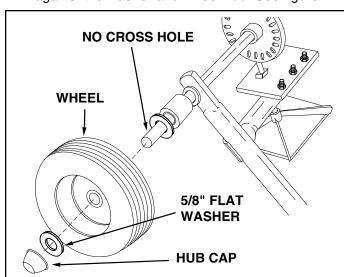


FIGURE 2

- Place a wheel onto the end of the axle that has a cross hole. The long end of the hub goes to the inside. See figure 3.
- 6. Assemble a 5/32" x 2" cotter pin through the hole in the wheel hub and the axle. See figure 3.
- 7. Place a 5/8" flat washer onto the axle and then lightly tap a hub cap onto the axle until it is snug against the washer and wheel hub. See figure 3.

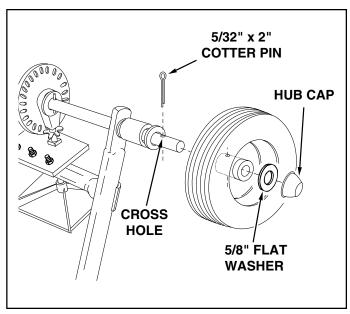


FIGURE 3

8. Remove the nut from the middle bolt in the crossover tube. See figure 4.

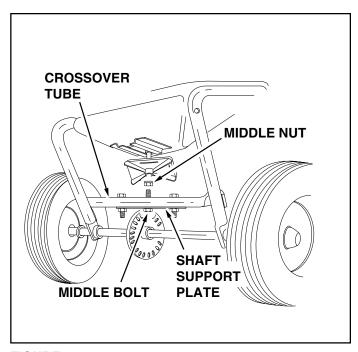


FIGURE 4

**IMPORTANT: Do Not** assemble handle tube to same side of crossover tube as shaft support plate.

- Place the long handle tube onto the crossover tube on the side opposite from the shaft support plate. Fasten with the bolt, washer and nut removed in the previous step. See figures 4 and 5.
   Do not tighten at this time.
- Assemble two handle braces to the inside of the hopper frame, one on each side, using two 1/4" x 1-1/2" hex bolts and two 1/4" nylock nuts. See figure 5. Do not tighten at this time.
- 11. Assemble the other end of the two handle braces to the long handle tube using a 1/4" x 1-1/2" hex bolt and 1/4" nylock nut. Do not tighten at this time. See figure 5.
- 12. **Tighten** all nuts and bolts in same sequence as assembled in steps 9 through 11. See figure 5.

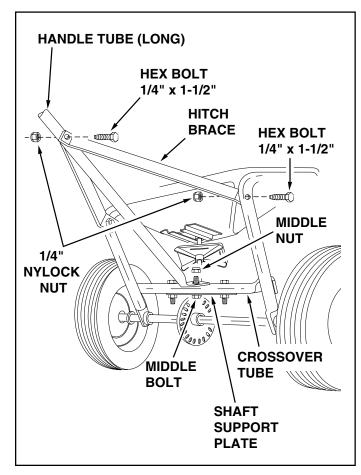


FIGURE 5

- 13. Assemble the leg stand tube to the handle tube (long) using two 1/4" x 1-1/2" hex bolts. Secure tightly with two 1/4" nylock nuts. See figure 6.
- 14. Place a vinyl cap over the end of the leg stand tube. See figure 6.

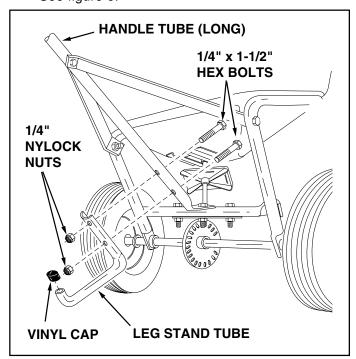


FIGURE 6

15. Assemble the flow control link (end with small hole) to the flow control arm using a 1/4" x 1" hex bolt, a nylon washer and a 1/4" nylock nut as shown in figure 7. **Tighten carefully.** The flow control link should not be loose but should pivot with no more than slight resistance.

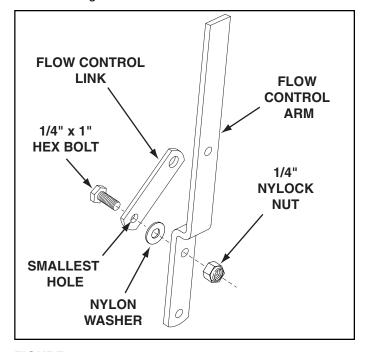


FIGURE 7

- 16. Assemble the flow control arm to the flow control mounting bracket using a 1/4" x 1" hex bolt, two nylon washers and a 1/4" nylock nut as shown in figure 8. **Tighten carefully.** The flow control arm should be snug, but should pivot with no more than a slight resistance.
- 17. Assemble the vinyl grip. See figure 8.

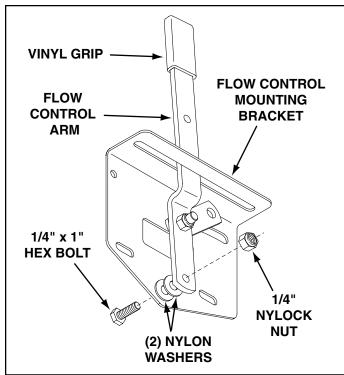


FIGURE 8

18. Place a 5/16" flat washer onto the end of the flow control rod. Insert the end of the flow control rod through the slot in the flow control mounting bracket and through the hole in the flow control link. Secure with a 3/32" x 3/4" cotter pin. See figure 9.

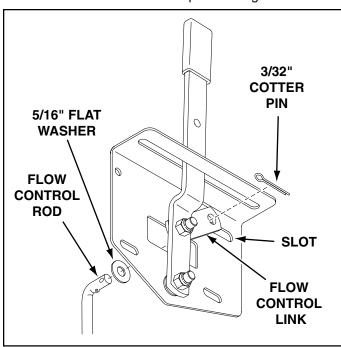


FIGURE 9

19. Hook the free end of the flow control rod through the hole in the slide gate bracket located near the bottom of the hopper. See figure 10.

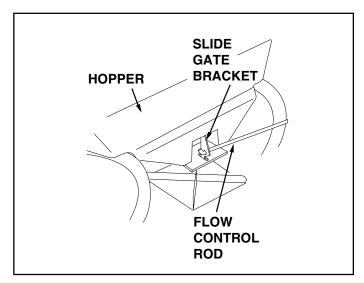


FIGURE 10

- 20. Assemble both the flow control mounting bracket and the short handle tube to the long handle tube. Use two 1/4" x 1-3/4" hex bolts, four 5/16" flat washers and two 1/4" nylock nuts as shown in figure 11. **Do not tighten at this time.**
- 21. Place a handle grip on each handle. See figure 11.

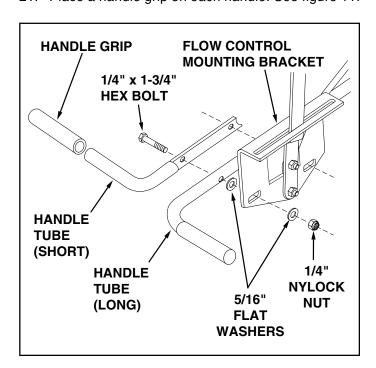


FIGURE 11

22. Place the adjustable stop into the "ON" end of the slot in the top of the flow control mounting bracket. Secure with the 1/4" x 3/4" carriage bolt, a nylon washer, a 5/16" flat washer and the nylon wing nut. See figure 12.

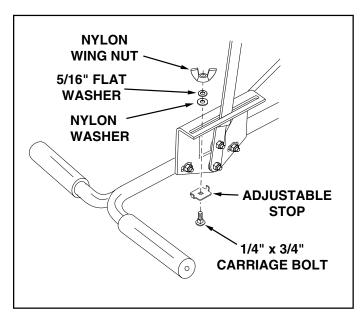


FIGURE 12

- 23. Position the flow control mounting bracket (figure 13).
  - a. Push on flow control arm until it locks in "OFF" position.
  - b. Slide flow control mounting bracket along tube until closure plate in bottom of hopper just closes.
  - c. Snug the 1/4" lock nuts just enough to hold flow control mounting bracket in place.
  - d. Set adjustable stop at "5". Pull flow control arm against stop. Verify that closure plate has opened about half way.
  - e. If closure plate does not open half way, it may be closed too far at "OFF". Adjust position of flow control mounting bracket until closure plate will open about half way at "5" and still close when arm is locked in "OFF". **Tighten** 1/4" lock nuts.

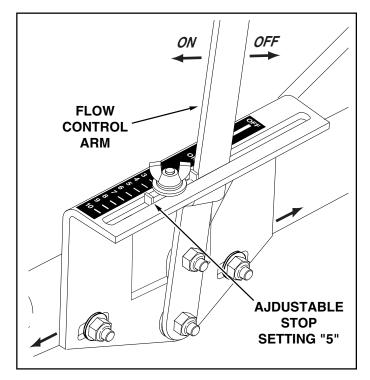


FIGURE 13

- 24. Attach an angle stop bracket and a swivel bracket to the rear hole in the R.H. shield bracket using a 1/4" x 1" hex bolt, two 5/16" washers, a nylon washer and a 1/4" Nylock nut. Place the angle stop bracket on the inside and the swivel bracket on the outside. **Tighten** the locknut so that the swivel bracket can pivot freely. See figure 14. Repeat step on L.H. shield bracket.
- 25. Attach a swivel bracket to the front hole in the R.H. shield bracket using a 1/4" x 1" hex bolt, two 5/16" washers, a nylon washer and a 1/4" Nylock nut. **Tighten** the nut so that the swivel bracket can pivot freely. See figure 14. Repeat step on L.H. shield bracket.

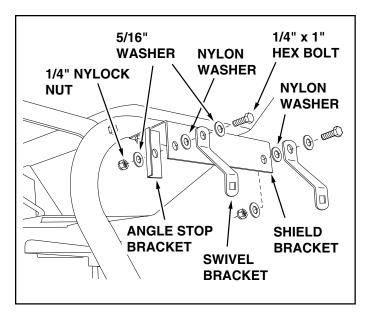


FIGURE 14

- 26. Assemble the spreader shield to the front swivel brackets using two 1/4" x 3/4" carriage bolts, 5/16" washers and the two 1/4" plastic knobs. See figure 15.
- 27. Assemble the spreader shield to the rear swivel brackets using two 1/4" x 1" hex bolts, four 5/16" washers and two 1/4" Nylock nuts. **Tighten** the nuts so that the swivel bracket can still pivot freely. See figure 15.

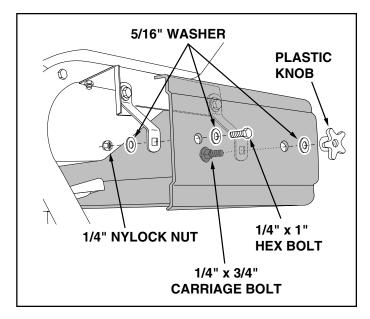


FIGURE 15

28. Place the hopper screen down into the hopper to help break up clumpy material and to prevent large clumps from reaching the bottom of the hopper and clogging the opening. See figure 16.

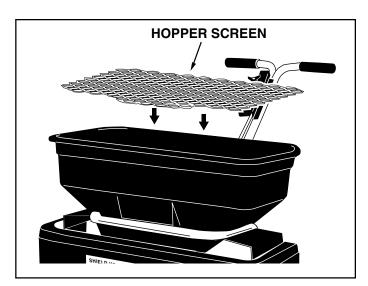


FIGURE 16

29. Lubricate the spreader following the instructions in the maintenance section on page 11.

# **OPERATION**

#### **HOW TO USE YOUR SPREADER**

#### SETTING THE FLOW CONTROL

(Refer to figure 13 on page 7.)

- Loosen the nylon wing nut, set the adjustable stop to the desired flow rate setting and retighten the wing nut. The higher the setting number, the wider the opening in the bottom of the hopper.
- 2. Refer to the application chart on page 10 and to the instructions on the fertilizer bag to select the proper flow rate setting.
- Pull the flow control arm against the adjustable stop for the on position and toward the hopper for the off position.

# **USING YOUR SPREADER**

We do not recommend the use of any powdered lawn chemicals, due to difficulty in obtaining a satisfactory or consistent broadcast pattern.

- 1. Determine approximate square footage of area to be covered and estimate amount of material required.
- 2. Before filling the hopper make sure the flow control arm is in the off position and the closure plate is shut.
- 3. Break up any lumpy fertilizer as you fill the hopper.
- 4. Set the adjustable stop with the flow control arm still in the off position. Refer to the application chart on page 10 and to the instructions on the fertilizer bag to select the proper flow rate setting.
- 5. The application chart is calculated for light to heavy application at a walking speed of 3 mph, or 100 ft. in 23 seconds. A variation in speed will require an adjustment of the flow rate to maintain the same coverage. The faster you walk, the wider the broadcast width.
- 6. Always start the spreader in motion before opening the closure plate.
- 7. Always shut the closure plate before turning or stopping the spreader.
- 8. If fertilizer is accidentally deposited too heavily in a small area, soak the area thoroughly with a garden hose or sprinkler to prevent burning of the lawn.
- 9. To insure uniform coverage, make each pass so that the broadcast pattern slightly overlaps the pattern from the previous pass as shown in figure 17. The approximate broadcast widths for different materials are shown in the application chart on this page.
- 10. When broadcasting weed control fertilizers, make sure the broadcast pattern does not hit evergreen trees, flowers or shrubs. Lower the spreader shield to limit the dispersal pattern. Reduce the flow control setting according to the application chart on page 10.

11. Heavy moisture conditions may require a cover over the hopper to keep contents dry. The vinyl cover (available as an accessory) acts as a wind and moisture shield, but should not be used as a rain cover. Refer to the parts list on page 13.

# APPLICATION DIAGRAM

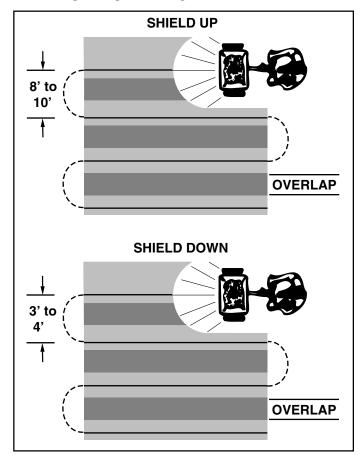


FIGURE 17

**IMPORTANT:** Application rates shown in the chart are affected by humidity and by the moisture content of the material (granular and pellet). Some minor setting adjustments may be necessary to compensate for this condition.

APPLICATION CHART (SHIELD UP)						
TYPE MATERIAL	FLOW SETTING 3 MPH (100 FT. IN 23 SEC.)	SPREAD WIDTH IN FEET				
FERTILIZER Powder Granular Pelleted Organic GRASS SEED Fine Coarse ICE MELTER	3 - 5 3 - 5 3 - 5 6 - 8 3 - 4 4 - 5 6 - 8	3 - 4 8 - 10 10 - 12 6 - 8 6 - 7 8 - 9 10 - 12				

APPLICATION CHART (SHIELD DOWN)						
TYPE MATERIAL	FLOW SETTING 3 MPH (100 FT. IN 17 SEC.)	SPREAD WIDTH IN FEET				
FERTILIZER Powder Granular Pelleted Organic GRASS SEED Fine Coarse ICE MELTER	1 - 3 1 - 3 1 - 3 3 - 4 1 - 3 2 - 3 2 - 4	3 - 4 3 - 4 3 - 4 3 - 4 3 - 4 3 - 4				

OPERATING SPEED - 3 MPH. (100 ft. in 23 seconds)

# **MAINTENANCE**

#### **CHECK FOR LOOSE FASTENERS**

 Before each use make a thorough visual check of the spreader for any bolts and nuts which may have loosened. Retighten any loose bolts and nuts.

#### **CHECK FOR WORN OF DAMAGED PARTS**

Check for worn or damaged parts before each use. Repair or replace parts if necessary.

#### **CHECK TIRE INFLATION**

Check if tires are adequately inflated before each use.
 Do not inflate tires beyond maximum recommended pressure.



**CAUTION: DO NOT** inflate tires beyond the maximum recommended pressure printed on side of tire.

#### **CLEANING**

4. Rinse inside of hopper and exterior of spreader and dry off before storing.

#### **LUBRICATE** (See figure 18)

- 5. Lightly apply automotive grease as needed to the sprocket and gear.
- 6. Oil the nylon bushings on the vertical sprocket shaft and on the axle at least once a year, or more often as needed.
- Oil right hand (idler) wheel at least once a year or more often as needed.

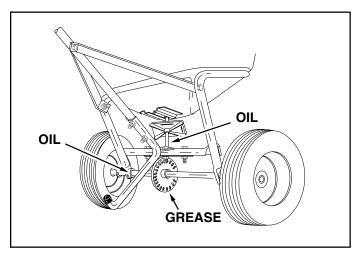


FIGURE 18

# **STORAGE**

- 1. Rinse inside of hopper and exterior of spreader and dry off before storing.
- 2. Store in a clean, dry area.

# **SERVICE AND ADJUSTMENTS**

- 1. If the axle, slotted gear and sprocket assembly is disassembled, mark down the positions of the parts as they are removed. The drive wheel and sprocket positions in relation to the slotted gear determine which direction the spreader plate will spin. Be sure to reassemble them in their original positions. (Refer to figure 3 on page 4.) Use shim washers (Ref. no. 20 on pages 12 and 13) as needed for minimum backlash. Add grease to gear and sprocket.
- 2. If the agitator hairpin becomes damaged or worn it can be replaced. Remove old agitator hairpin from hole in sprocket shaft and replace with new agitator hairpin. See figure 19.

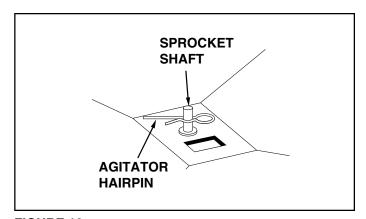
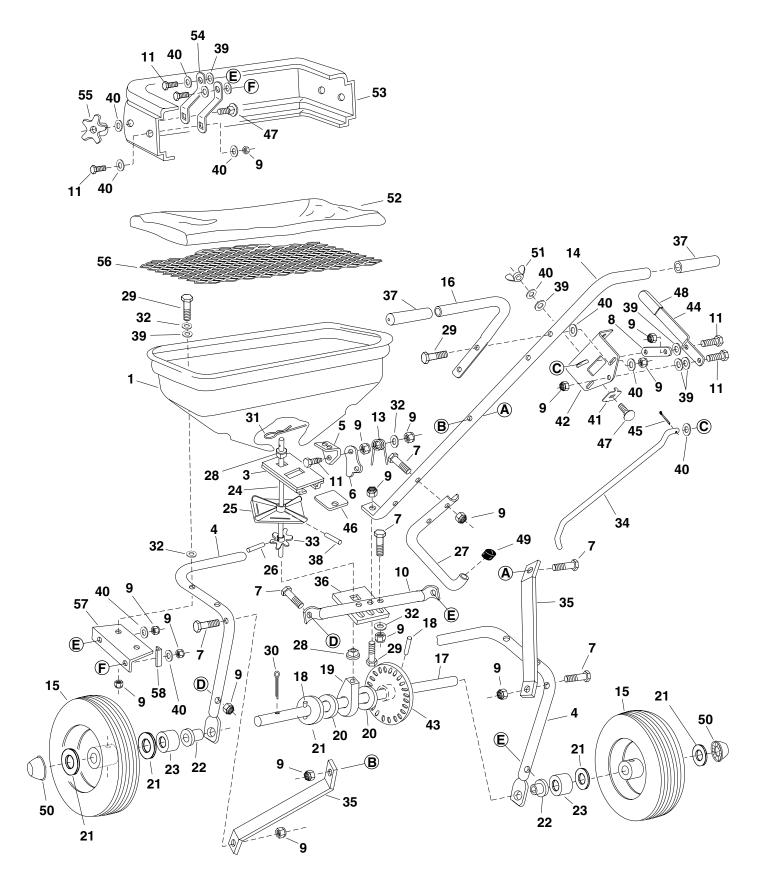


FIGURE 19

# **REPAIR PARTS FOR BROADCAST SPREADER MODEL 45-02103-101**

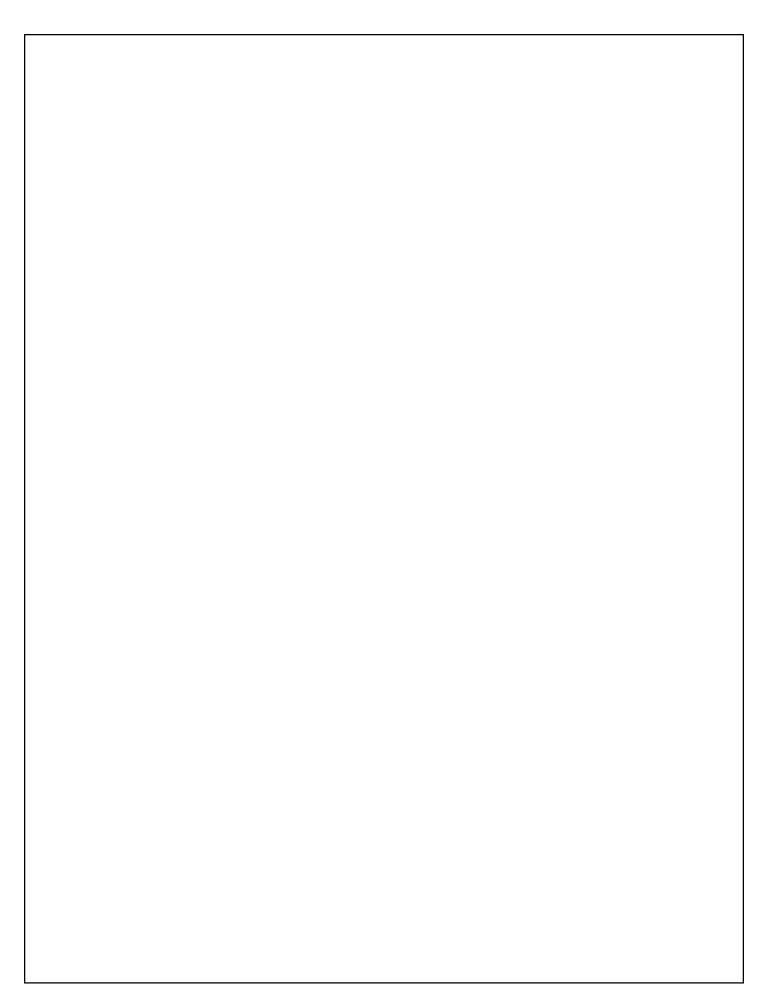


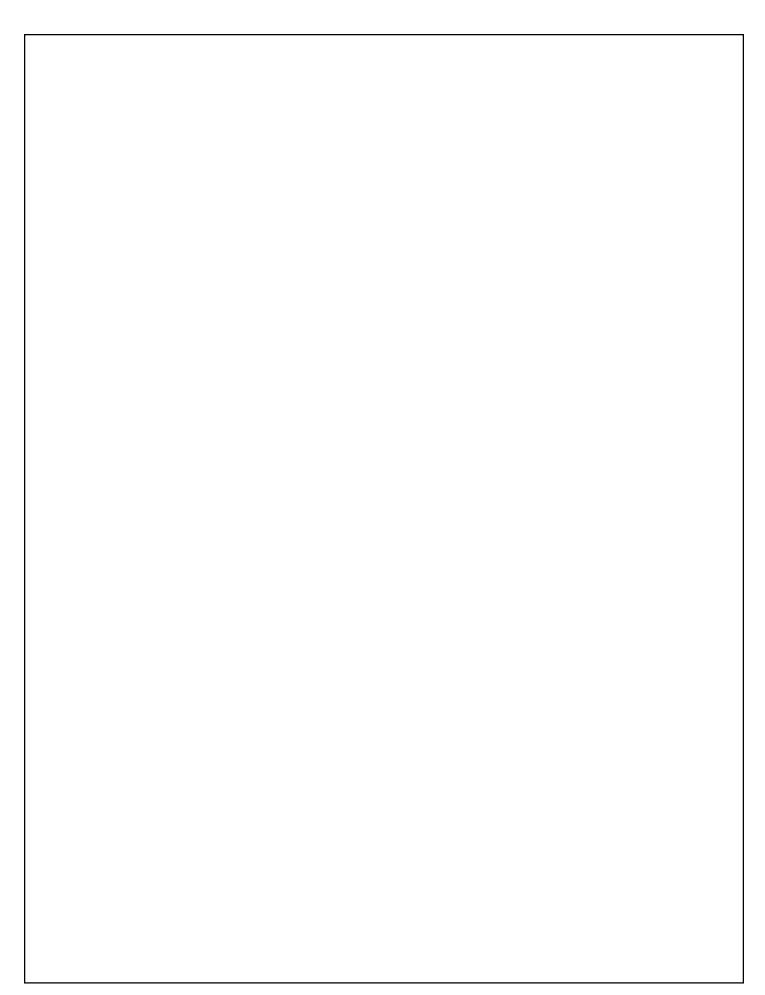
# **REPAIR PARTS FOR BROADCAST SPREADER MODEL 45-02103-101**

1       44466       1       Hopper       31       48934       1       Hairpin, Agitator         2       C-9M5732       2       Pop Rivet (not shown)       32       43088       16       Washer, Flat 1/4" Std         3       62482       1       Ass'y, Guide Closure       33       44468       1       Sprocket - 6 Tooth	DESCRIPTION
4       48842       1       Tube, Frame       34       44514       1       Rod, Flow Control         5       23753       1       Slide Gate Angle Bracket       35       23525       2       Brace, Hitch         7       43648       9       Bolt, Hex 1/4-20 x 1-1/2" Lg.*       37       44482       2       Grip, Handle         8       24857       1       Flow Control Link       38       46055       1       Pin, Spring 1/8" Dia. 3         9       47189       26       Nut, Nylock 1/4-20 Thd. *       39       1543-69       14       Washer, Nylon         10       48841       1       Tube, Crossover       40       Rijilitili 20       Washer, Sylon         11       43661       9       Bolt, Hex 1/4-20 x 1" Lg.*       41       24858       1       Stop, Adjustable         13       44566       1       Spring, Torsion       42       24855       1       Bracket, Flow Control Arm         16       44590       1       Tube, Handle (Short)       43       48888       1       Gear         16       44589       1       Tube, Handle (Short)       45       44101       1       Cotter Pin 3/32" x 3/4         17       25067	r, Flat 1/4" Std. et - 6 Tooth ow Control Hitch tt, Shaft andle ring 1/8" Dia. x 1" Lg. r, Nylon r, 5/16 SAE djustable tt, Flow Control Mount control Arm Pin 3/32" x 3/4" Lg.* Closure arriage 1/4-20 x 3/4" Lg. ow Control Arm nyl tp Ving Nut, 1/4-20 copper Cover er Shield Swivel Bracket Knob Bracket

<sup>\*</sup>Purchase common hardware locally.

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# **REPAIR PARTS**

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