

**Agri+Fab™**

**OWNERS  
MANUAL**

**Model No.  
45-02104**



**125 LB. PUSH  
BROADCAST SPREADER**

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

- Assembly
- Operation
- Maintenance
- Repair Parts

**SpeedPart** *the fastest way to purchase parts* [www.speedepart.com](http://www.speedepart.com)

# 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.

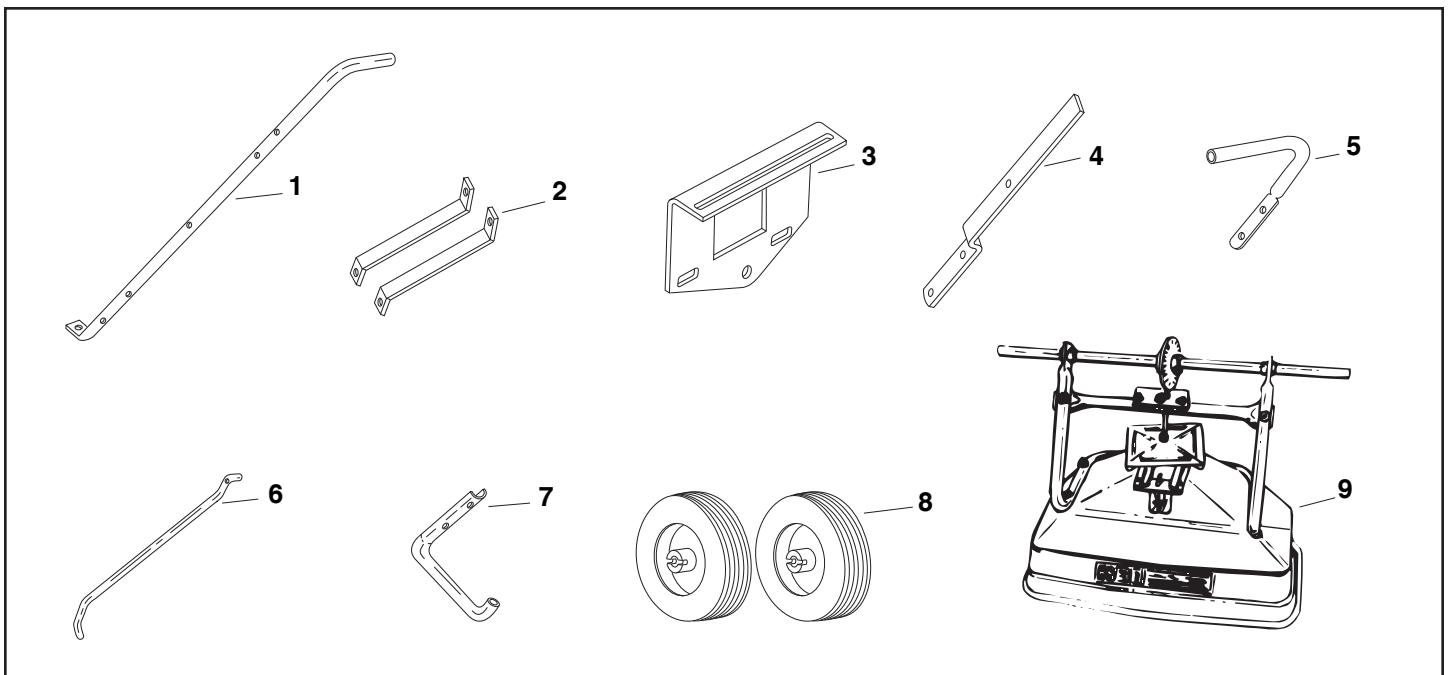


LOOK FOR THIS SYMBOL TO POINT OUT IMPORTANT SAFETY PRECAUTIONS. IT MEANS — ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED.

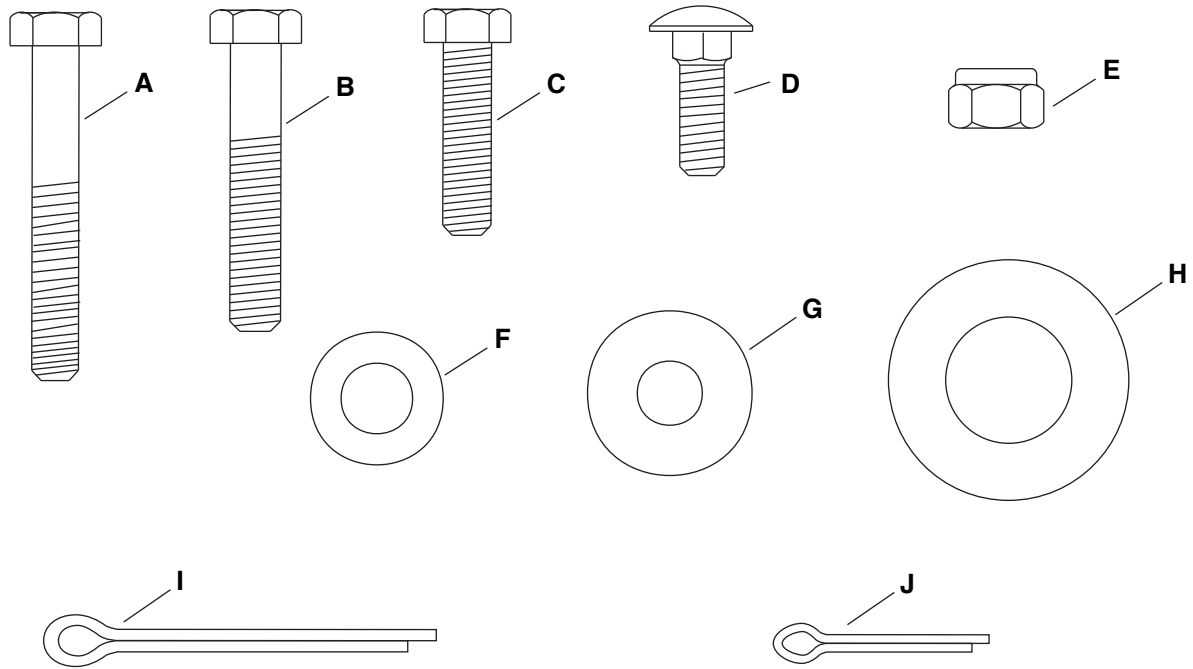
## CARTON CONTENTS

### LOOSE PARTS IN CARTON

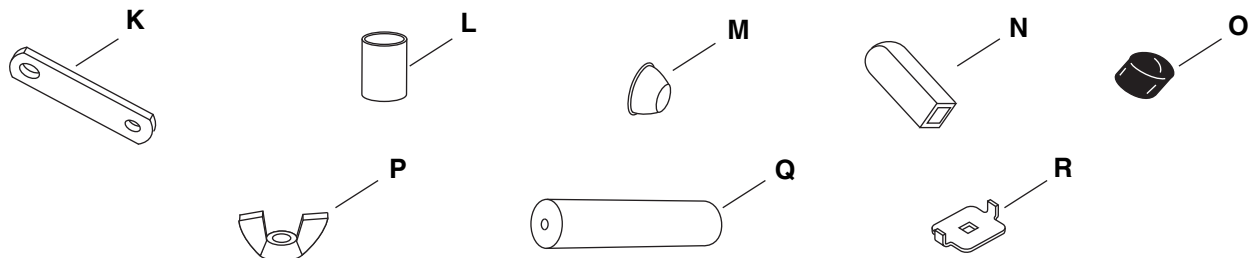
1. Handle Tube (long)
2. Braces (2)
3. Flow Control Mount Bracket
4. Flow Control Arm
5. Handle Tube (short)
6. Flow Control Rod
7. Leg Stand Tube
8. Wheels (2)
9. Hopper Assembly  
Hardware Package (not shown)



## SHOWN FULL SIZE



## NOT SHOWN FULL SIZE



KEY	QTY.	DESCRIPTION	KEY	QTY.	DESCRIPTION
A	2	Hex Bolt, 1/4-20 x 1-3/4" Long	J	1	Cotter Pin, 3/32" x 3/4" Long
B	5	Hex Bolt, 1/4-20 x 1-1/2" Long	K	1	Flow Control Link
C	2	Hex Bolt, 1/4-20 x 1" Long	L	2	Spacer Tube
D	1	Carriage Bolt, 1/4-20 x 3/4" Long	M	2	Hub Cap
E	9	Nyock Nut, 1/4-20 Thd.	N	1	Grip
F	6	Flat Washer, 5/16" SAE	O	1	Vinyl Cap
G	4	Nylon Washer	P	1	Nylon Wing Nut
H	4	Flat Washer, 5/8"	Q	2	Handle Grip
I	1	Cotter Pin, 5/32" x 2"	R	1	Adjustable Stop

# 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.

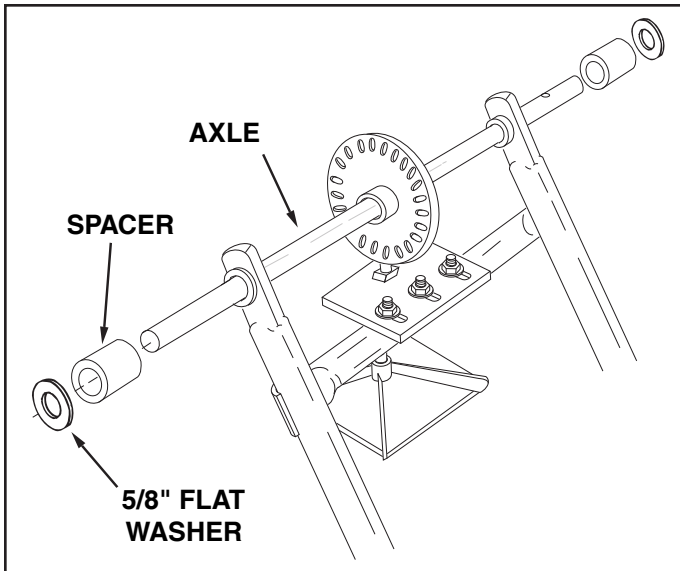


FIGURE 1

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.

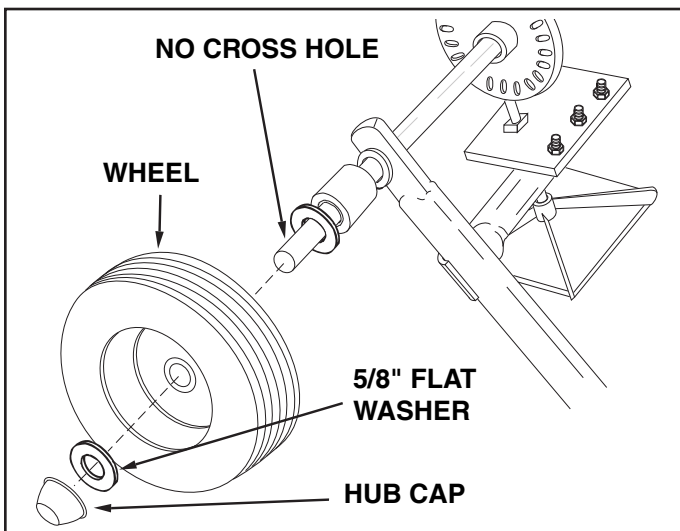


FIGURE 2

5. 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.

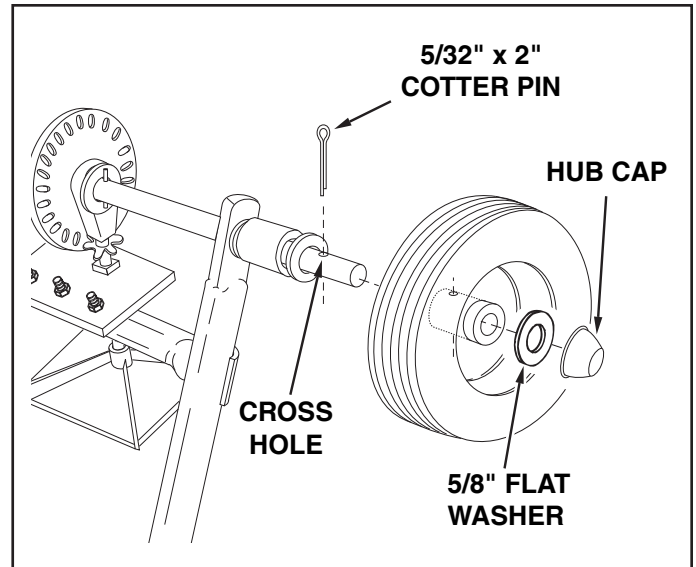


FIGURE 3

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

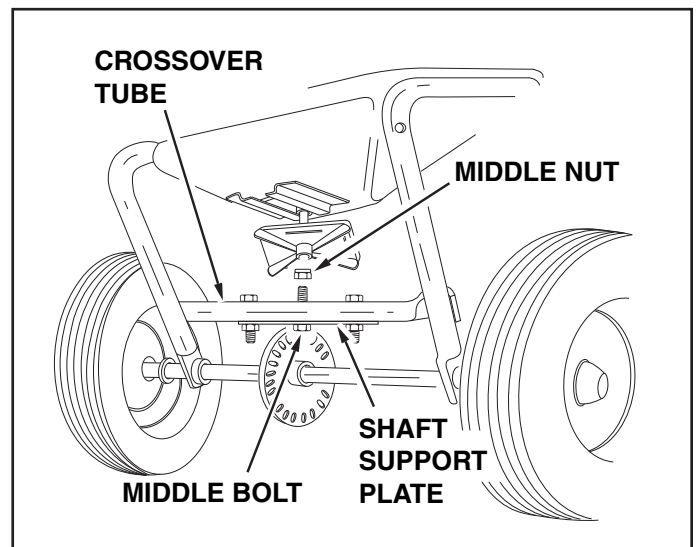


FIGURE 4

**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.**
- 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.
- Tighten** all nuts and bolts in same sequence as assembled in steps 9 through 11. See figure 5.

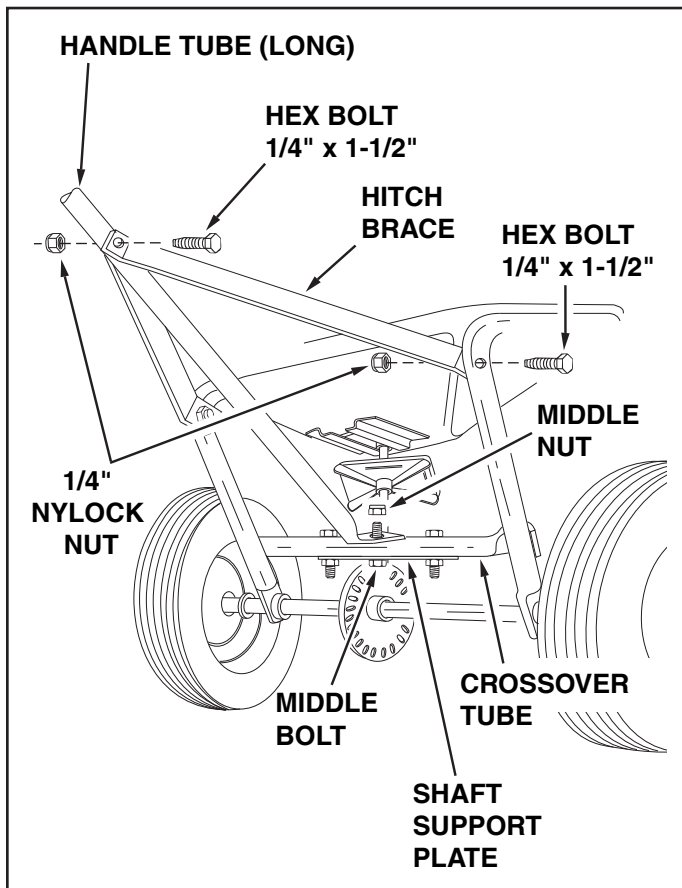


FIGURE 5

- 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.
- Place a vinyl cap over the end of the leg stand tube. See figure 6.

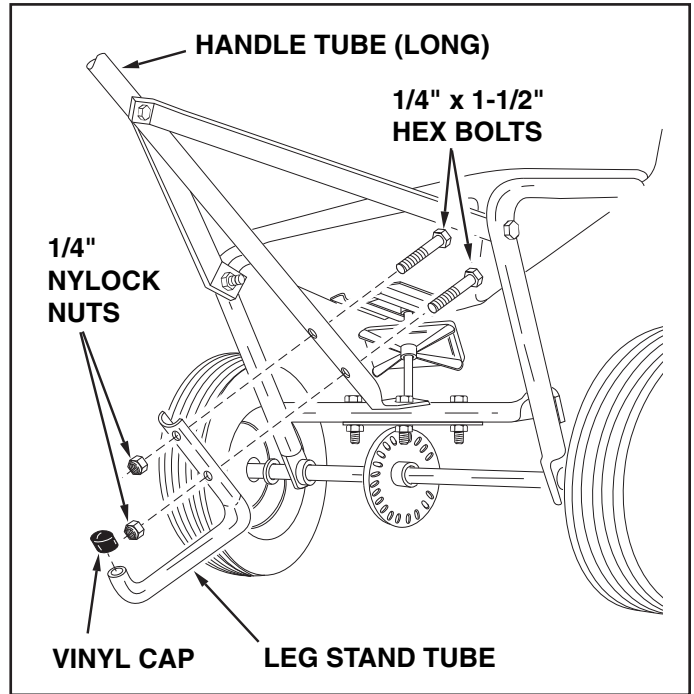


FIGURE 6

- 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.

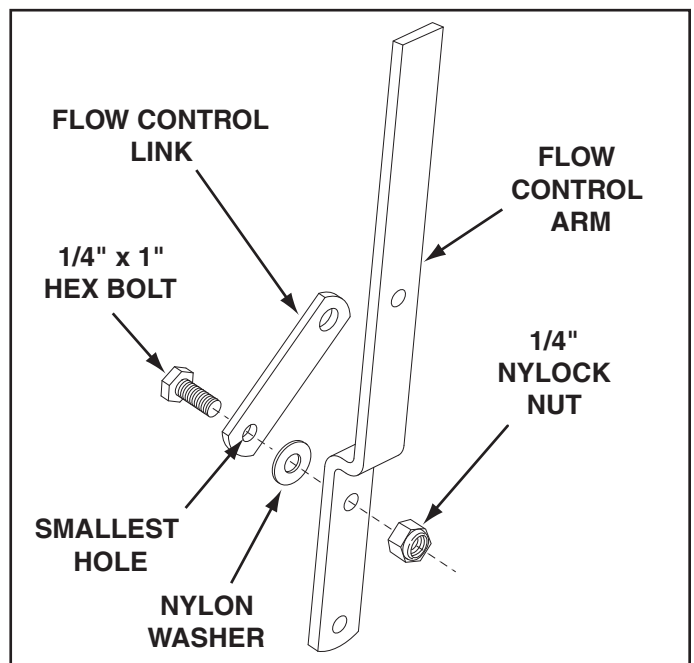


FIGURE 7

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.

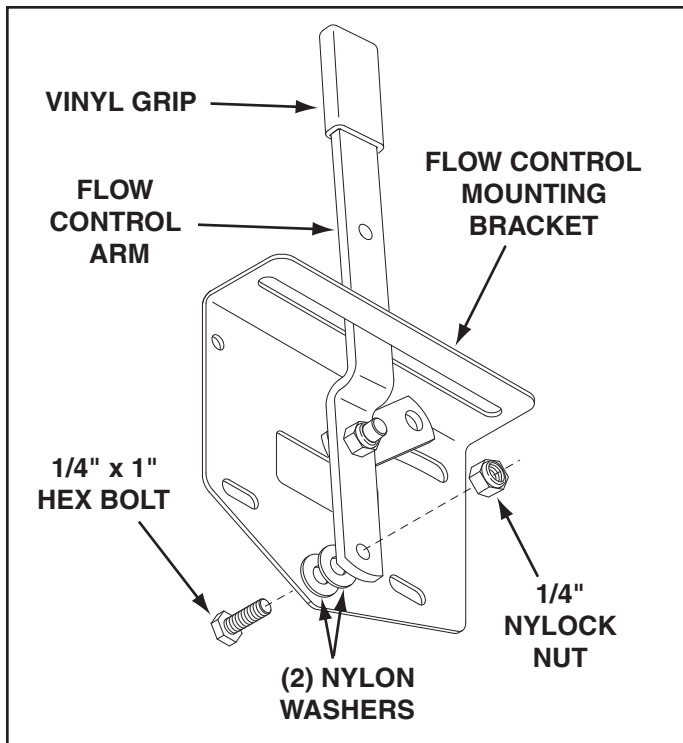


FIGURE 8

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.

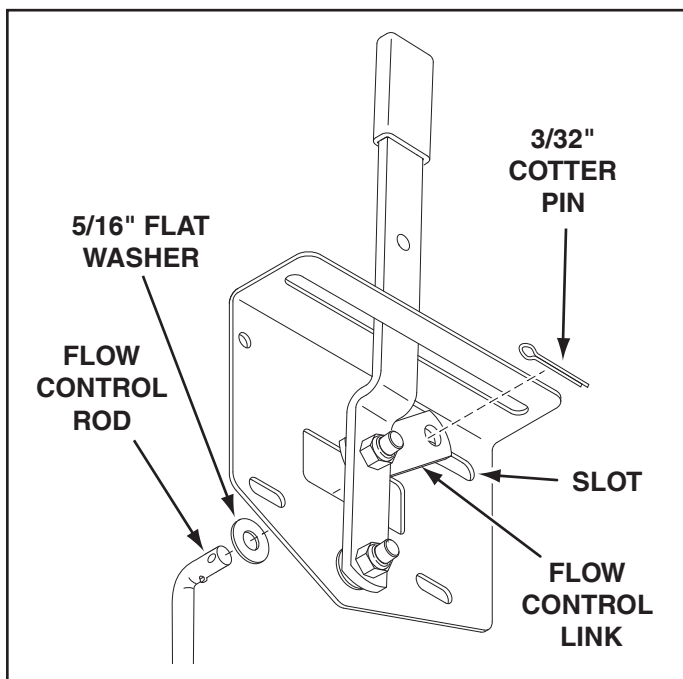


FIGURE 9

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.

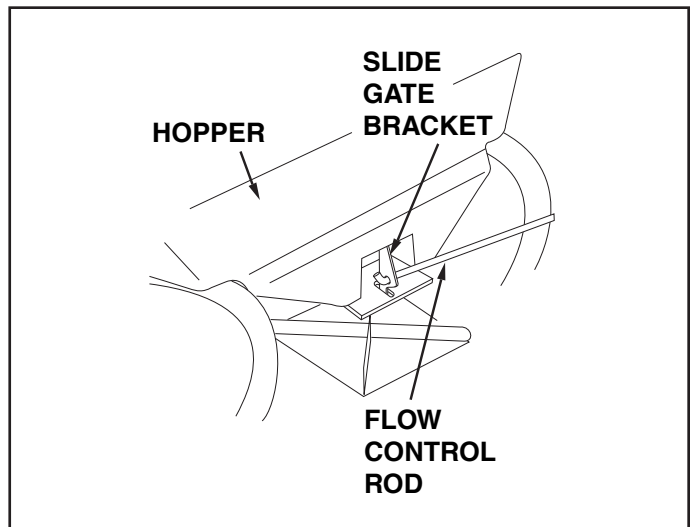


FIGURE 10

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.

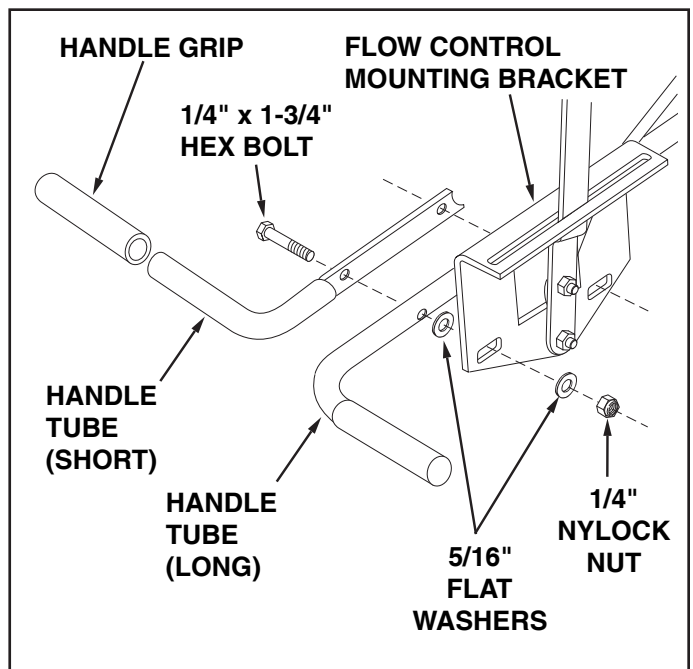


FIGURE 11

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.

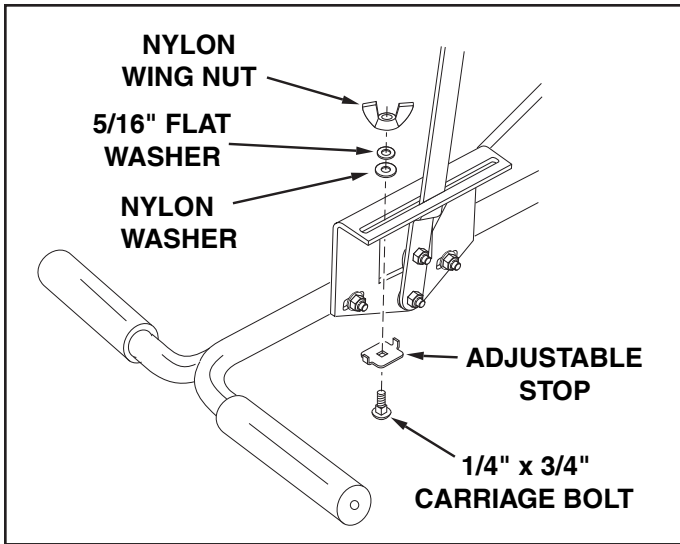


FIGURE 12

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.**

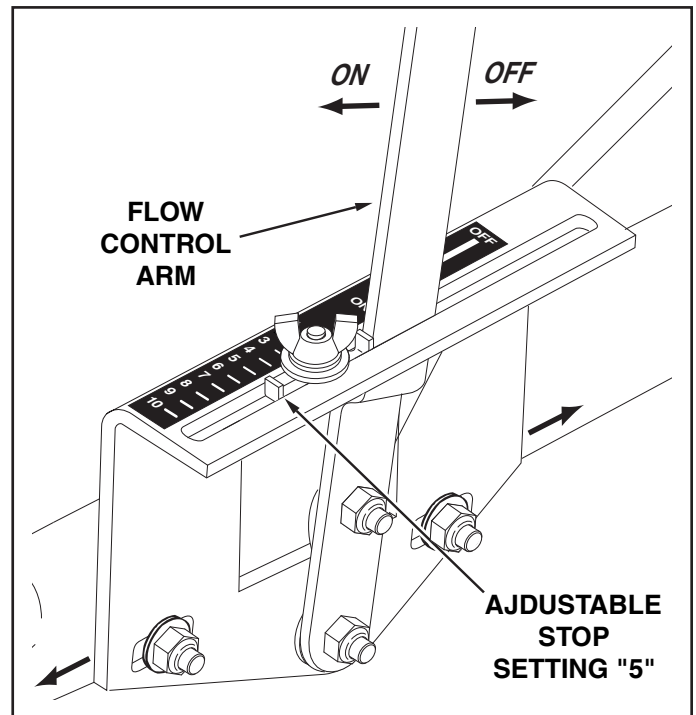


FIGURE 13

24. Before operating the spreader, pre-lubricate per the lubrication instructions in the owner's manual.

# OPERATION

## HOW TO USE YOUR SPREADER

### SETTING THE FLOW CONTROL

(Refer to figure 13 on page 7.)

1. 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 8 and to the instructions on the fertilizer bag to select the proper flow rate setting.
3. 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 this page 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 14. 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.
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 11.

## APPLICATION DIAGRAM

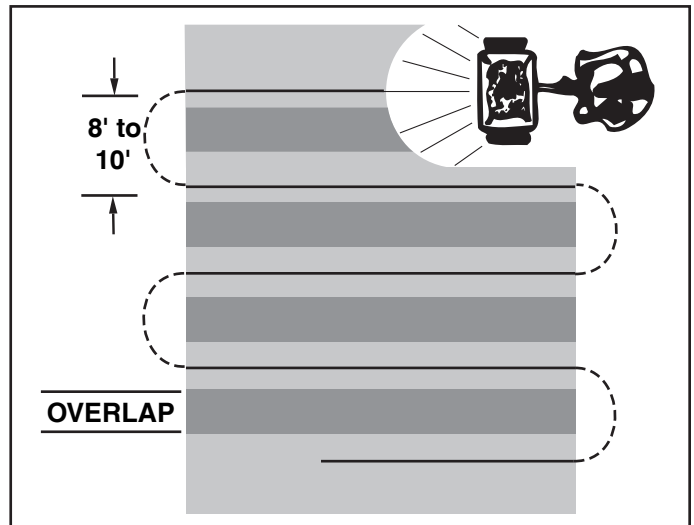


FIGURE 14

**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

MATERIAL TYPE	FLOW SETTING	SPREAD WIDTH
<i>FERTILIZER</i>		
Powder	3 - 5	3' - 4'
Granular	3 - 5	8' - 10'
Pelleted	3 - 5	10' - 12'
Organic	6 - 8	6' - 8'
<i>GRASS SEED</i>		
Fine	3 - 4	6' - 7'
Coarse	4 - 5	8' - 9'
<i>ICE MELTER</i>	6 - 8	10' - 12'

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



# MAINTENANCE

## CHECK FOR LOOSE FASTENERS

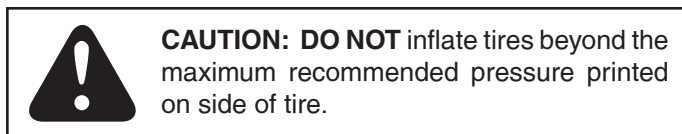
1. Before each use make a thorough visual check of the spreader for any bolts and nuts which may have loosened. Retighten any loose bolts and nuts.

## CHECK FOR WORN OR DAMAGED PARTS

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

## CHECK TIRE INFLATION

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



## CLEANING

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

## LUBRICATE (See figure 15)

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.
7. Oil right hand (idler) wheel at least once a year or more often as needed.

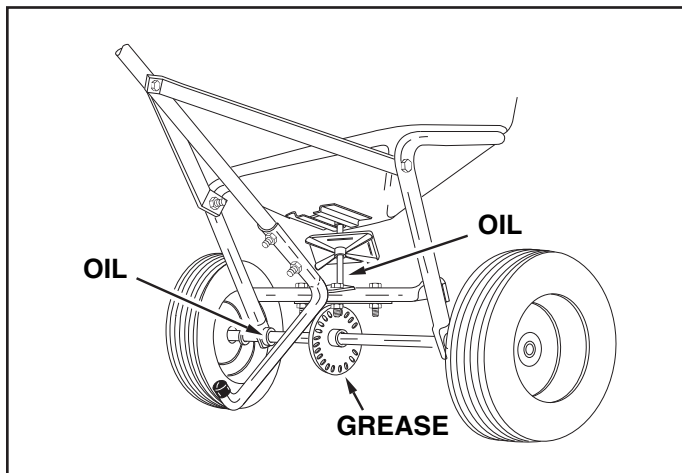


FIGURE 15

# 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

## REPLACING SLOTTED GEAR

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. 21 on pages 10 and 11) as needed for minimum backlash. Add grease to gear and sprocket.

## LOCKED UP SPREADER

1. Turn the spreader over so that the wheels are off the ground.
2. Loosen all three nuts on the shaft support plate just enough so that the bolts can be turned easily with a wrench but cannot be turned by hand.
3. Spin the drive wheel and note how freely it spins and how much noise the slotted gear makes.
4. To free up the wheel and gear, tap gently on the front or rear edge of the shaft support plate to move it slightly forward or backward. You can also tap at the corners of the plate to angle it slightly.
5. Spin the drive wheel after each adjustment to see if it spins more freely and if the gear noise is reduced.
6. Continue making slight adjustments until you find the position where the drive wheel spins most freely and the gear makes the least noise.
7. Secure the shaft support plate in this position by retightening all three nuts that you loosened.

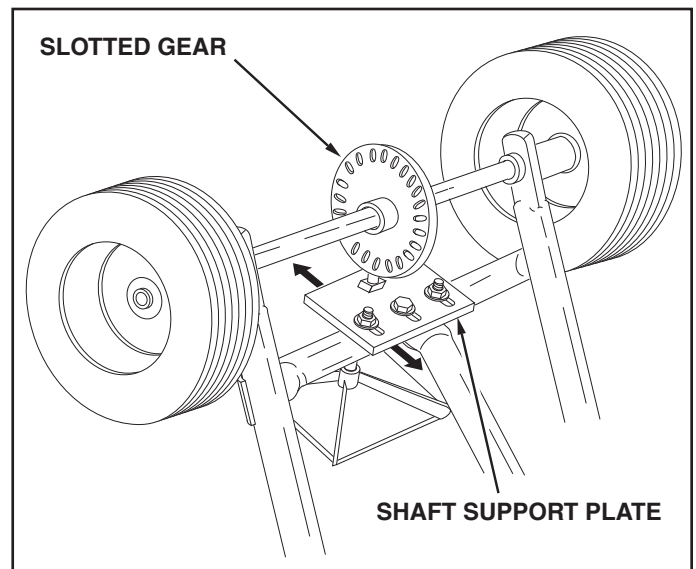
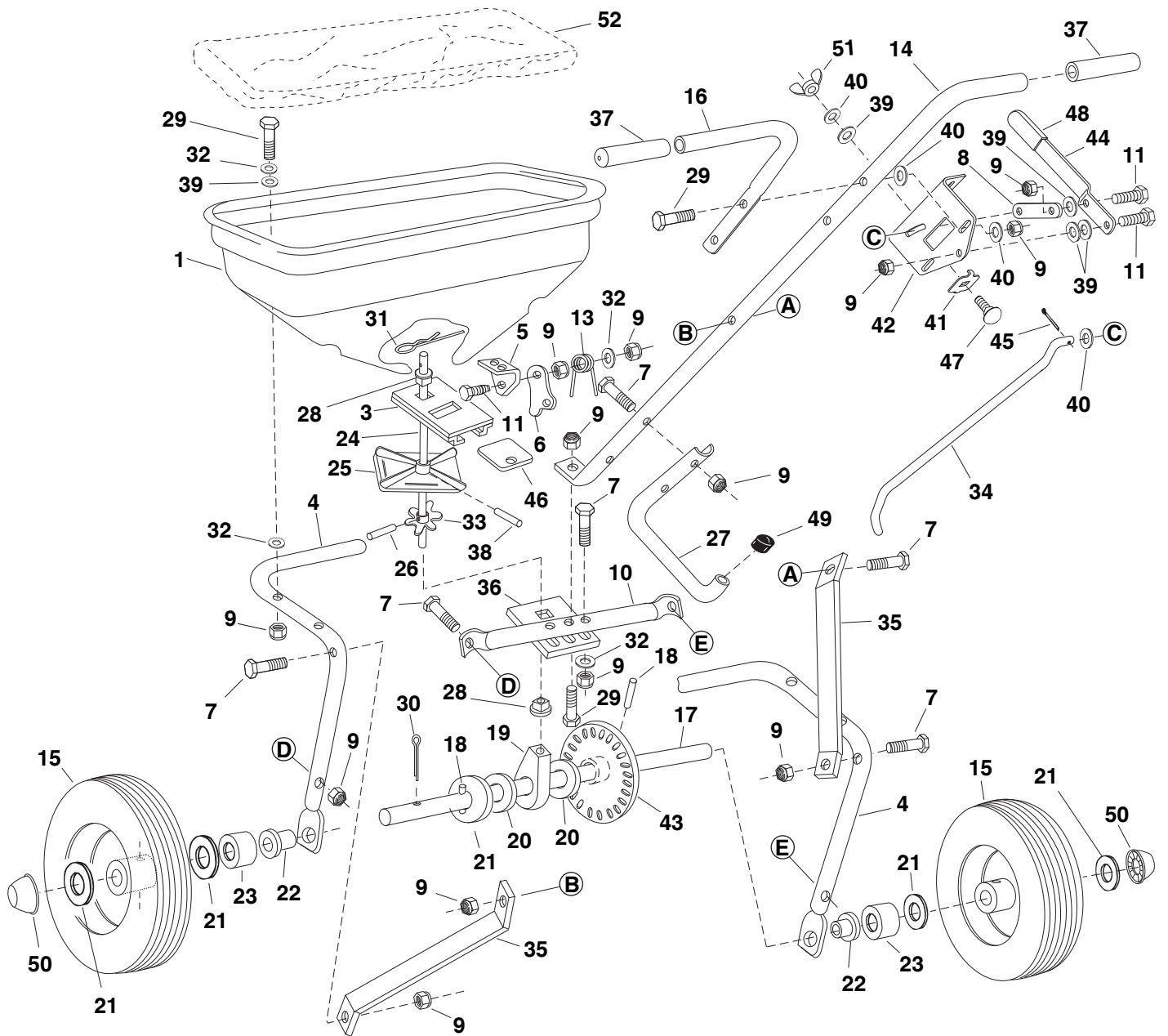


FIGURE 16

# REPAIR PARTS FOR BROADCAST SPREADER MODEL 45-02104



# REPAIR PARTS LIST FOR BROADCAST SPREADER MODEL 45-02104

REF. NO.	PART NO.	QTY.	DESCRIPTION	REF. NO.	PART NO.	QTY.	DESCRIPTION
1	44466	1	Hopper	28	44285	2	Bushing, Delrin 3/8" I.D.
2	C-9M5732	2	Pop Rivet (not shown)	29	1509-69	9	Bolt, Hex 1/4-20 x 1-3/4" Lg.*
3	62482	1	Ass'y, Guide Closure	30	47063	1	Pin, Cotter 5/32" x 2"
4	48842	1	Tube, Frame	31	48934	1	Hairpin, Agitator
5	23753	1	Slide Gate Angle Bracket	32	43088	16	Washer, Flat 1/4" Std.
6	23758	1	Slide Gate Bracket	33	44468	1	Sprocket - 6 Tooth
7	43648	9	Bolt, Hex 1/4-20 x 1-1/2" Lg.*	34	44514	1	Rod, Flow Control
8	24857	1	Flow Control Link	35	23525	2	Brace, Hitch
9	47189	22	Nut, Nyock 1/4-20 Thd. *	36	23780	1	Support, Shaft
10	48841	1	Tube, Crossover	37	44482	2	Grip, Handle
11	43661	3	Bolt, Hex 1/4-20 x 1" Lg.*	38	46055	1	Pin, Spring 1/8" Dia. x 1" Lg.
13	44566	1	Spring, Torsion	39	1543-69	10	Washer, Nylon
14	44590	1	Tube, Handle (Long)	40	R19111116	6	Washer, 5/16 SAE
15	40880	2	Wheel	41	24858	1	Stop, Adjustable
16	44589	1	Tube, Handle (Short)	42	24855	1	Bracket, Flow Control Mount
17	25067	1	Shaft, Axle	43	48888	1	Gear
18	44665	2	Pin, Spring 5/32" Dia. x 1-1/4" Lg.	44	24856	1	Flow Control Arm
19	48916	1	Bushing, Axle Shaft	45	44101	1	Cotter Pin 3/32" x 3/4" Lg.*
20	44125	4	Washer, Shim 5/8" I.D.	46	23533	1	Plate, Closure
21	R19212016	5	Washer, Flat 5/8" I.D.	47	44950	1	Bolt, Carriage 1/4-20 x 3/4" Lg.
22	741-0249	2	Bearing, Flange	48	43848	1	Grip, Flow Control Arm
23	48857	2	Tube, Spacer	49	44481	1	Cap, Vinyl
24	25305	1	Shaft, Sprocket	50	48499	2	Hub Cap
25	04367	1	Spreader Plate	51	47141	1	Nylon Wing Nut, 1/4-20
26	43850	1	Pin, Spring 1/8" Dia. x 5/8" Lg.	52	40825	1	Vinyl Hopper Cover (Optional)
27	44587	1	Tube, Leg Stand		41078	1	Owner's Manual

\*Purchase common hardware locally.

***SpeedEPart*** *the fastest way to purchase parts* [www.speedepart.com](http://www.speedepart.com)

**REPAIR PARTS**

Agri-Fab, Inc.  
303 West Raymond  
Sullivan, IL. 61951  
217-728-8388  
[www.agri-fab.com](http://www.agri-fab.com)

This document (or manual) is protected under the U.S. Copyright Laws and the copyright laws of foreign countries, pursuant to the Universal Copyright Convention and the Berne convention. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying or recording, or by any information storage or retrieval system, without the express written permission of Agri-Fab, Inc. Unauthorized uses and/or reproductions of this manual will subject such unauthorized user to civil and criminal penalties as provided by the United States Copyright Laws.

© 1990 Agri-Fab, Inc.