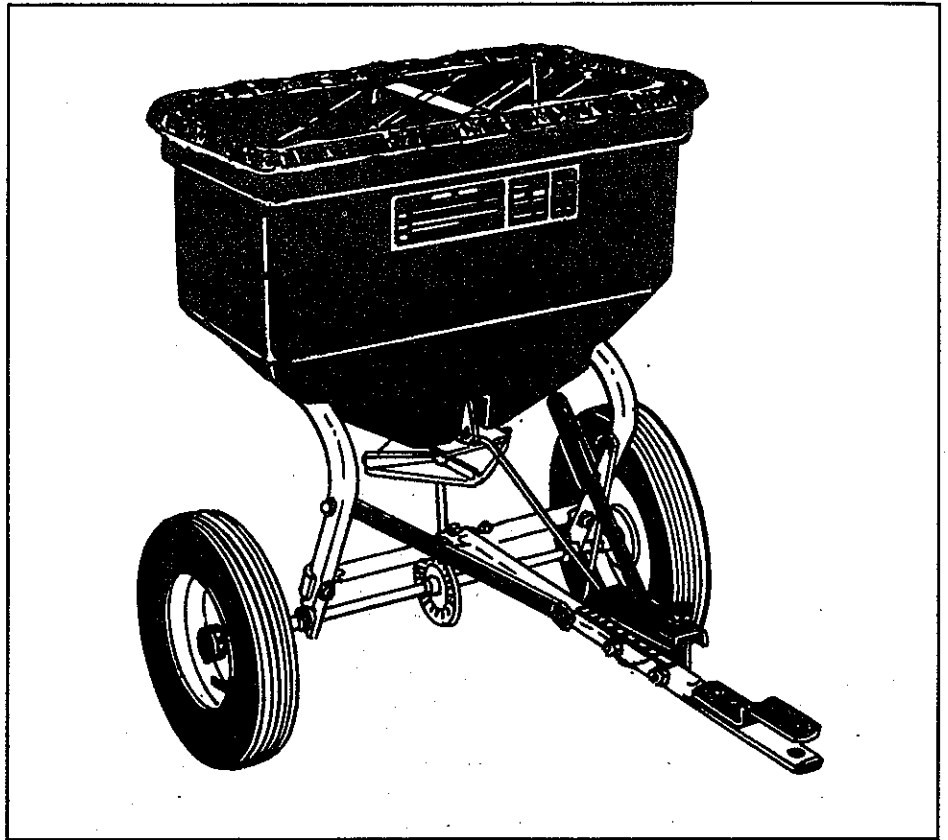


OWNERS MANUAL

**Model No.
45-01871
190-438C-100**



BROADCAST SPREADER 175

CAUTION:
Read Rules for
Safe Operation
and Instructions
Carefully

- Assembly
- Operation
- Maintenance
- Repair Parts

RULES FOR SAFE OPERATION

Remember, any power equipment can cause injury if operated improperly or if the user does not understand how to operate the equipment.



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



VEHICLE BRAKING AND STABILITY MAY BE AFFECTED WITH THE ADDITION OF AN ACCESSORY OR AN ATTACHMENT. BE AWARE OF CHANGING CONDITIONS ON SLOPES.

Exercise caution at all times when using power equipment.

1. Read the towing vehicle owners manual and towing vehicle safety rules. Know how to operate your tractor before using the broadcast spreader attachment.
2. Read the chemical label instructions and cautions for handling and applying the chemicals purchased for spreading.
3. Wear eye and hand protection when handling and when applying lawn or garden chemicals.
4. Never operate tractor and spreader attachment without wearing substantial footwear, and do not allow anyone to ride or sit on spreader attachment frame.
5. Never allow children to operate the tractor or spreader attachment, and do not allow adults to operate without proper instructions.
6. Always begin with the transmission in first (low) gear and with the engine at low speed, and gradually increase speed as conditions permit. Maximum towing speed - 10 M.P.H.
7. 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 loose control of the broadcast spreader and tractor.
8. 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!**
9. 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 Gauge
5. Flow Control Arm
6. Flow Control Rod
7. Hitch Bracket
8. Wheels (R.H. and L.H.)
9. Hopper Assembly
10. Hopper Cover
11. Hardware Package (not shown)

CARTON CONTENTS

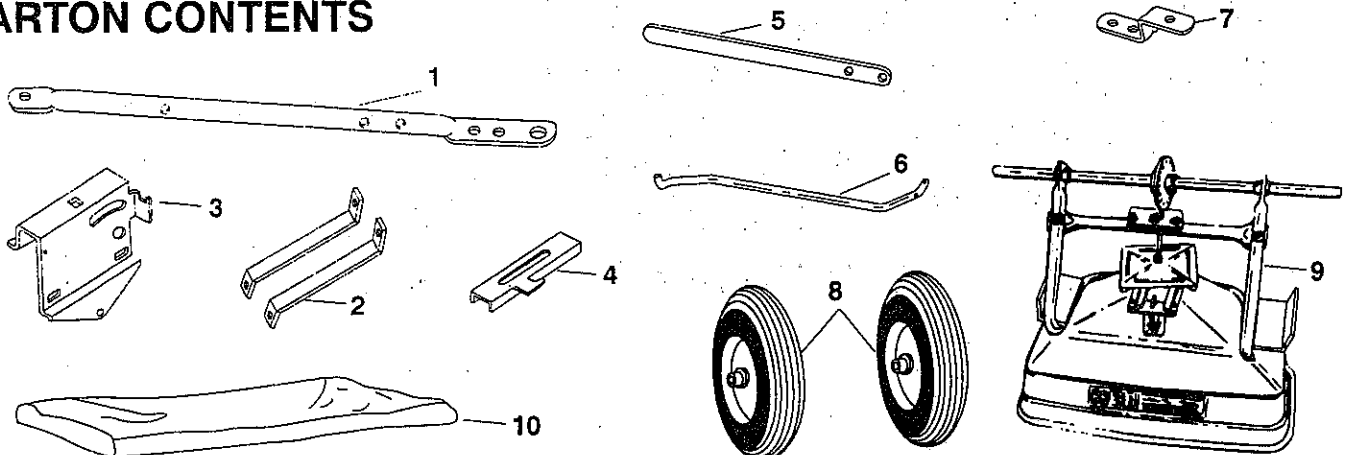


FIGURE 1

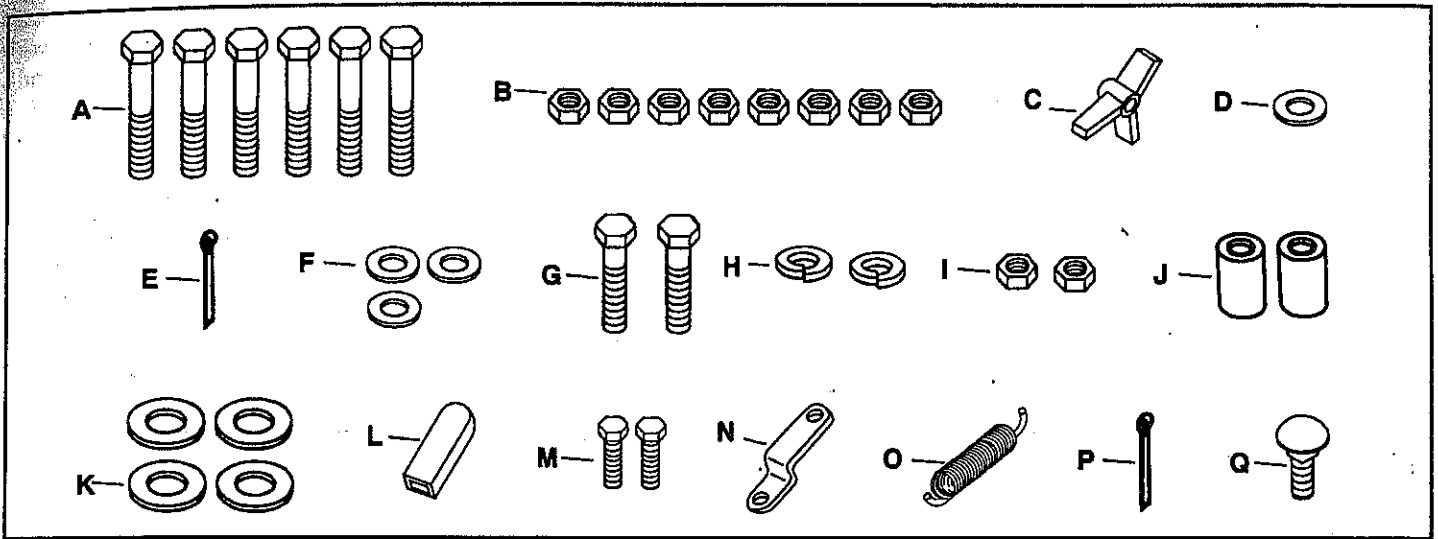
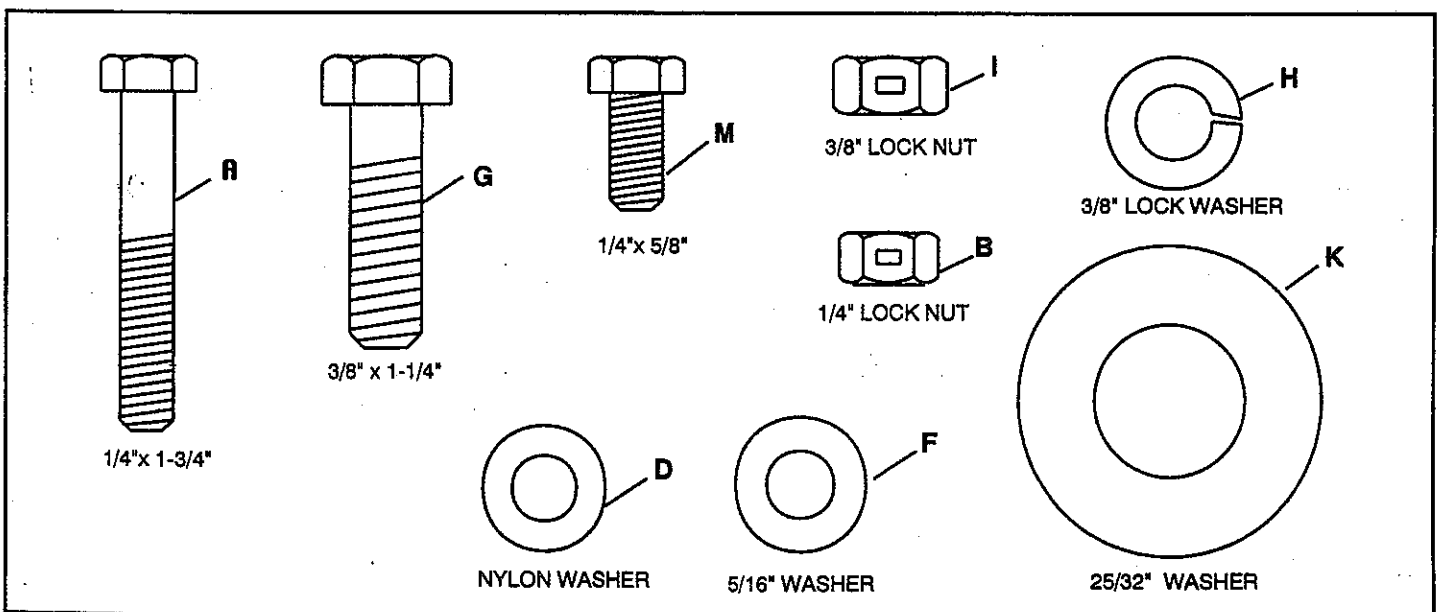


FIGURE 2 - HARDWARE PACK

KEY	QTY.	DESCRIPTION	KEY	QTY.	DESCRIPTION
A	6	Hex Bolt 1/4-20 x 1-3/4" Long	I	2	Hex Lock Nuts 3/8-16 Thread
B	8	Hex Lock Nuts 1/4-20 Thread	J	2	Spacers
C	1	Hand Knob	K	4	Flat Washers 1-5/8" O.D.
D	1	Nylon Washer	L	1	Grip
E	1	Cotter Pin 3/32" x 3/4" Long	M	2	Hex Bolt 1/4-20 x 5/8" Long
F	3	Flat Washer 5/16" SAE	N	1	Flow Control Link
G	2	Hex Bolts 3/8-16 x 1-1/4" Long	O	1	Extension Spring
H	2	Lock Washers 3/8" I.D.	P	1	Cotter Pin 1/8 x 1-1/2" Long
			Q	1	Carriage Bolt, 1/4-20 x 3/4" Long



FULL SIZE HARDWARE REFERENCE CHART

ASSEMBLY INSTRUCTIONS

TOOLS REQUIRED FOR ASSEMBLY

- (1) Pliers
- (2) 7/16" Open or End Wrench
- (2) 9/16" Open or Boxed End Wrench

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 hopper.
3. Remove the 3/8" hex bolt, flat washer and hex lock nut from the center of the crossover tube and shaft support plate. See figure 3.

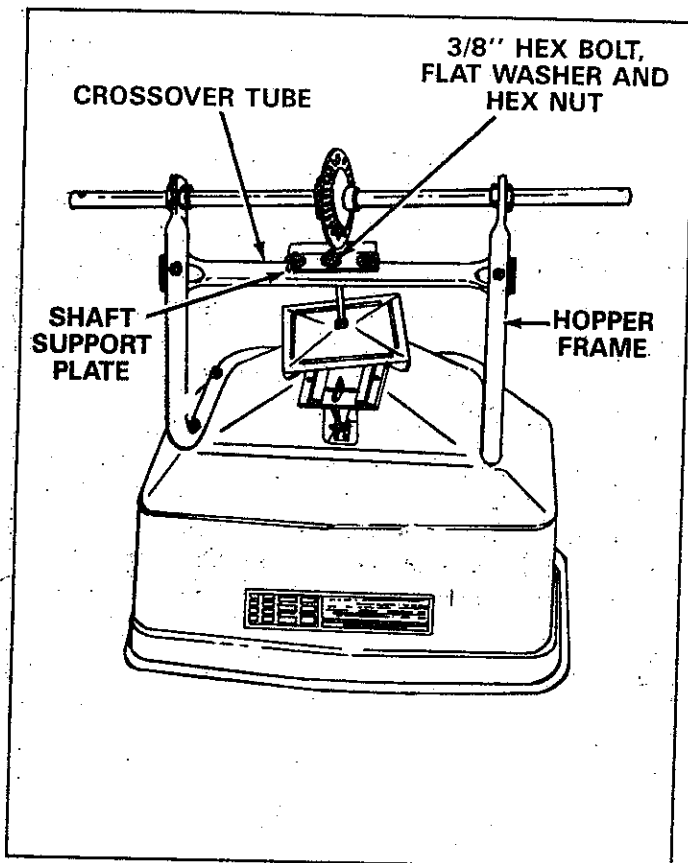


FIGURE 3

4. Assemble the two hitch braces to the inside of the hopper frame, one on each side, using two 1/4" x 1-3/4" hex bolts and two 1/4" hex lock nuts. See figure 4. **DO NOT TIGHTEN AT THIS TIME.**
5. Assemble short end of hitch tube to the crossover tube (on opposite side from shaft support plate). Fasten to the center hole in the crossover tube using the previously removed 3/8" x 2" hex bolt, the 3/8" flat washer and the 3/8" hex lock nut. See figures 3 and 4. **DO NOT TIGHTEN AT THIS TIME.**

6. Align the holes in the ends of the two hitch braces with the nearest hole in the hitch tube. Fasten with a 1/4" x 1-3/4" hex bolt and a 1/4" hex lock nut. See figure 4. **DO NOT TIGHTEN AT THIS TIME.**

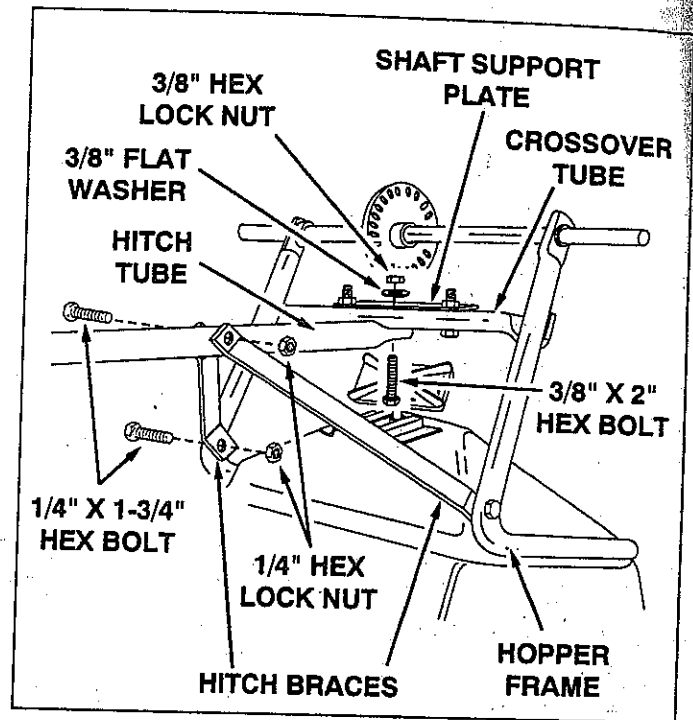


FIGURE 4

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 1-5/8" dia. flat washer to each side of axle. See figure 5.

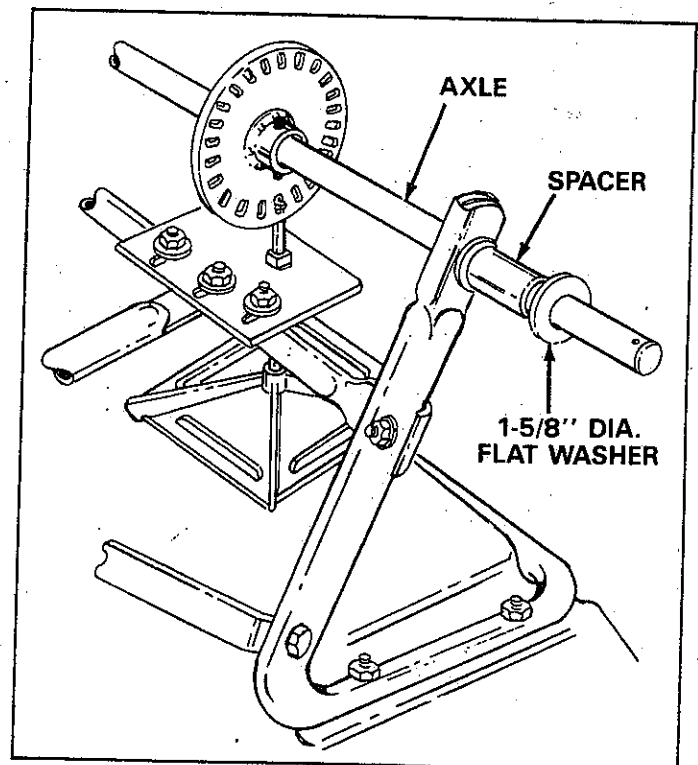


FIGURE 5

- Place wheel assembly without hole through hub (air valve to the outside) onto axle end having the smallest hole and secure with 1-5/8" diameter flat washer and 1/8" x 1-1/2" cotter pin. See figure 6. Use extra 1-5/8" diameter flat washer if needed to take up play.

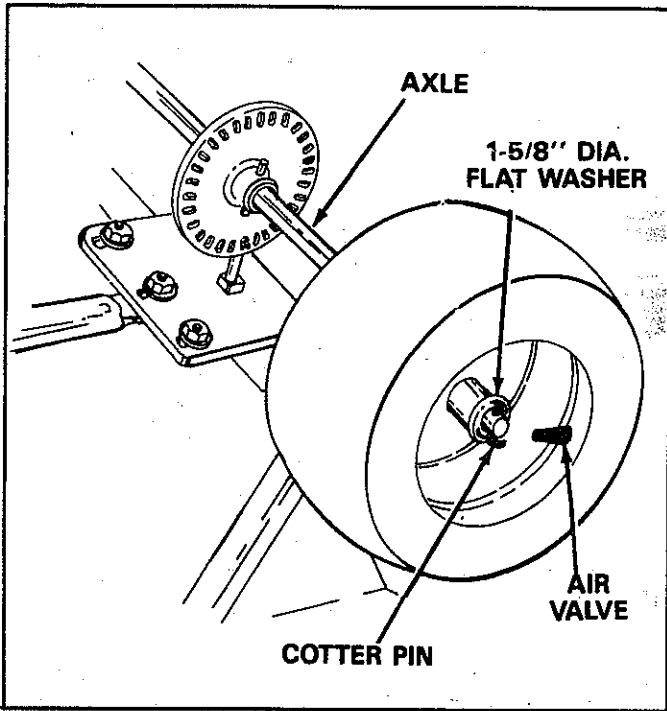


FIGURE 6

- Place the drive wheel onto axle (air valve to the outside) and secure with 1/4" x 1-3/4" hex bolt and 1/4" hex lock nut. See figure 7.

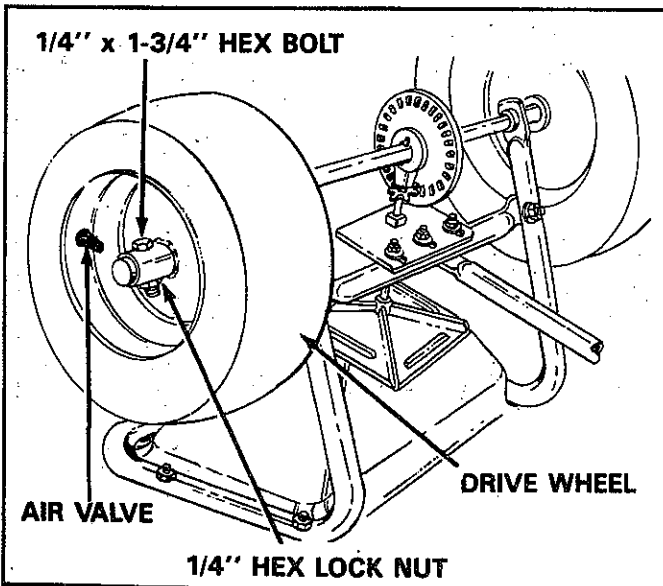


FIGURE 7

- Turn the broadcast spreader over so it rests on its wheels.
- Assemble the hitch bracket to the hitch tube. See figure 8. Secure with two 3/8" x 1-1/4" hex bolts, 3/8" lock washers and 3/8" hex lock nuts. See figure 8.

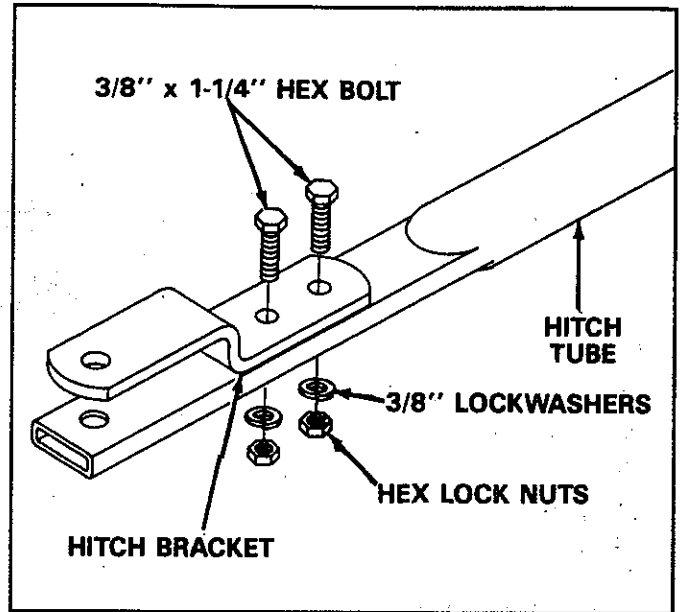


FIGURE 8

- 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.**
- Place vinyl grip on the flow control arm. See figure 9.

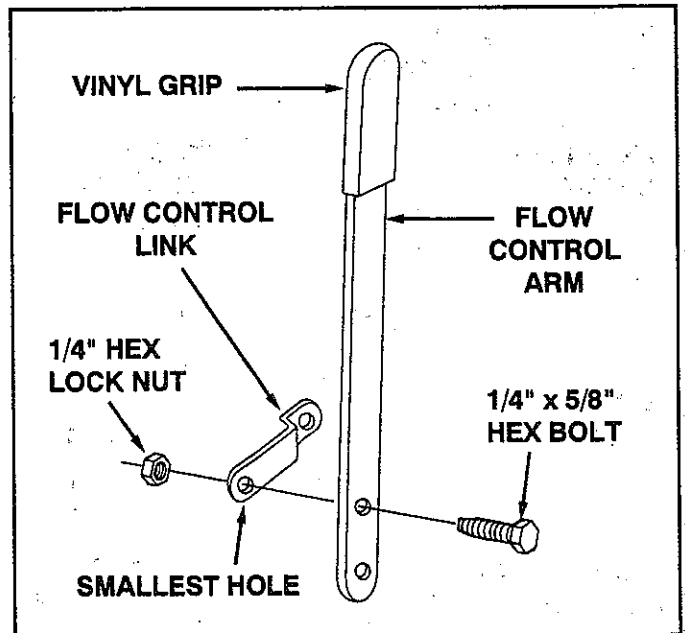


FIGURE 9

15. 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.**

16. 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.

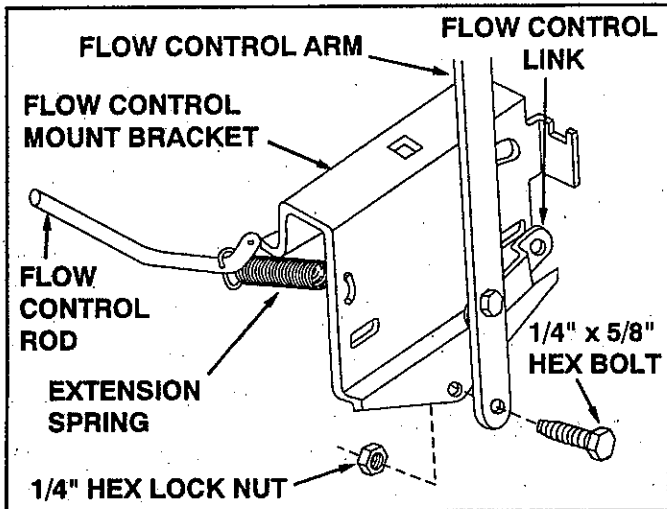


FIGURE 10

17. Place a 5/16" flat washer over the end of flow control rod, and insert end of rod through slot in flow control mount bracket and through the hole in flow control link. Secure with a 3/32" x 3/4" cotter pin. See figure 11.

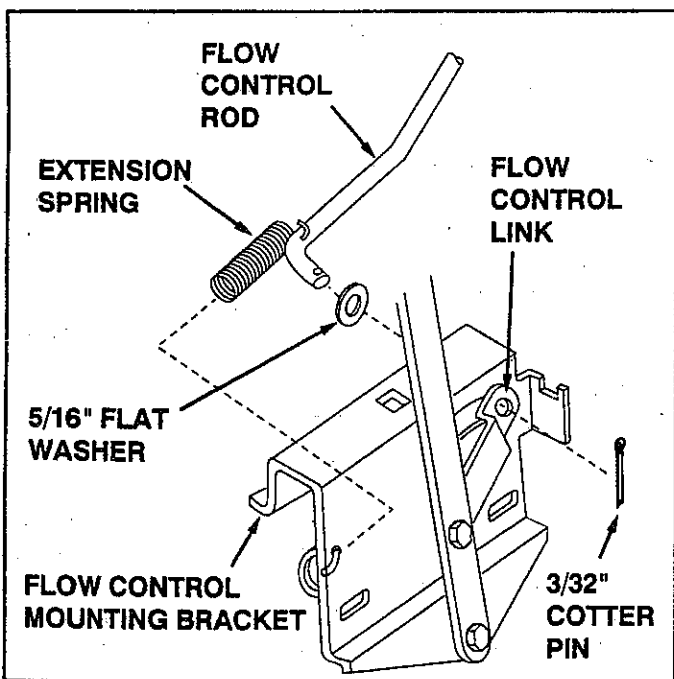


FIGURE 11

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

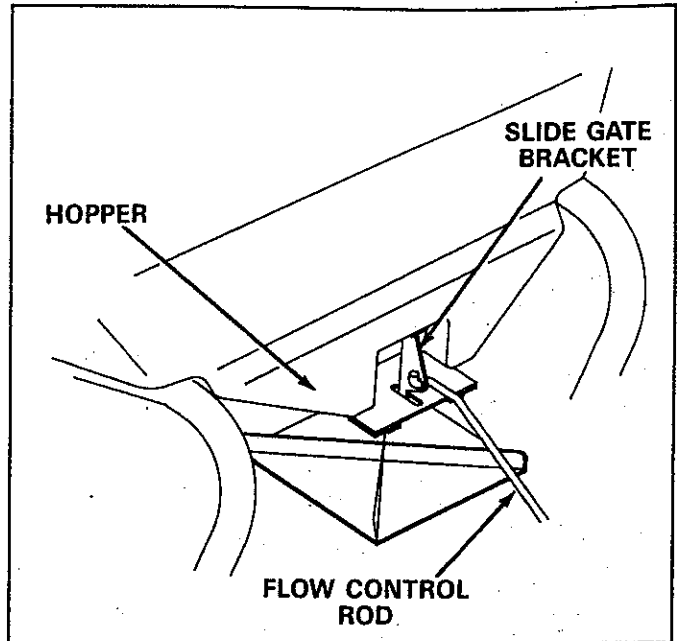


FIGURE 12

19. Assemble the flow control mounting bracket to the hitch tube using two 1/4" x 1-3/4" hex bolts, two 5/16" flat washers and two 1/4" hex lock nuts. See figure 13. **DO NOT TIGHTEN AT THIS TIME.**

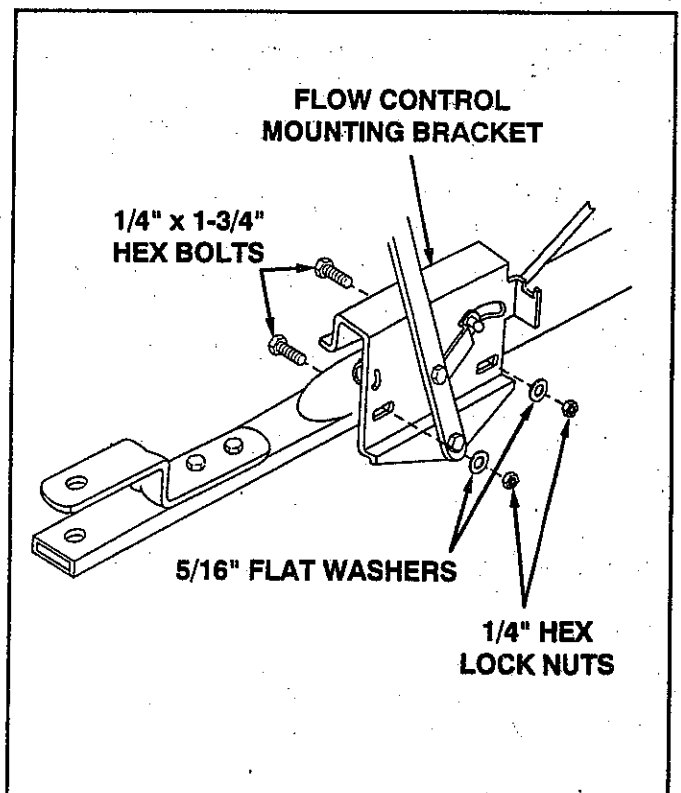


FIGURE 13

20. Assemble the flow control gage onto the flow control mounting bracket using a 1/4" x 3/4" carriage bolt, a nylon washer and the plastic hand knob. See figure 14.

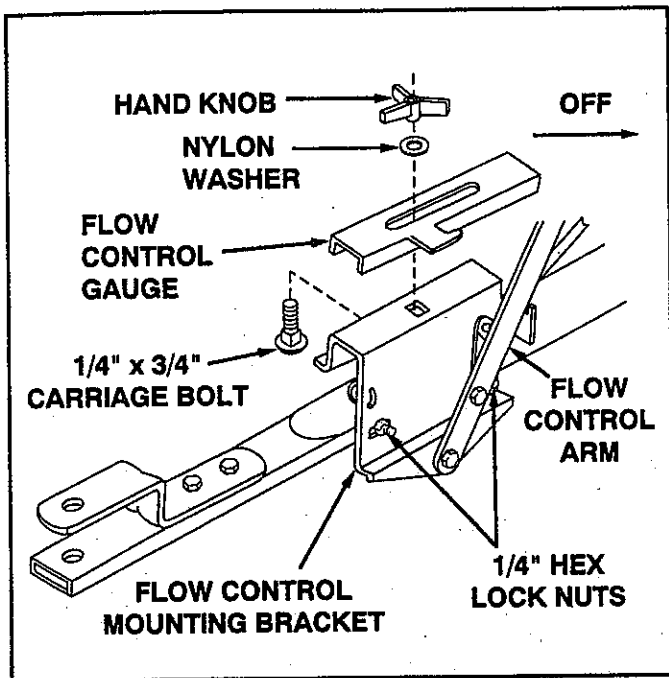


FIGURE 14

21. 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 19. See figure 14.
22. 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

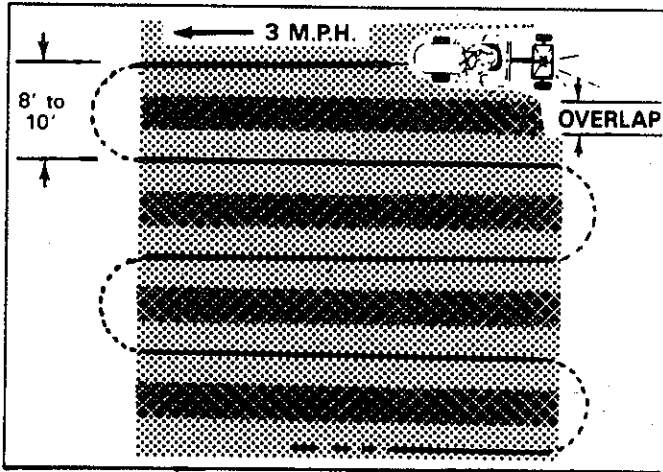


FIGURE 15



3 M.P.H. is equivalent to traveling 100 feet in 23 seconds.

FLOW RATE ADJUSTMENT.

(See figure 16)

1. Push back on the flow control arm to **off position** and pull forward to **on position**. The higher the number on flow rate gage the larger the opening in the bottom of hopper.
2. **REFER TO FLOW RATE CHART AND INSTRUCTIONS ON FERTILIZER BAG TO SELECT PROPER FLOW RATE SETTING.**
3. Loosen the hand knob to set the flow gage to the desired flow setting and tighten the hand knob.
4. Always move flow control arm to **off position** before stopping or turning spreader.
5. The spreader should be moving before you move the flow control arm to the **on position**.

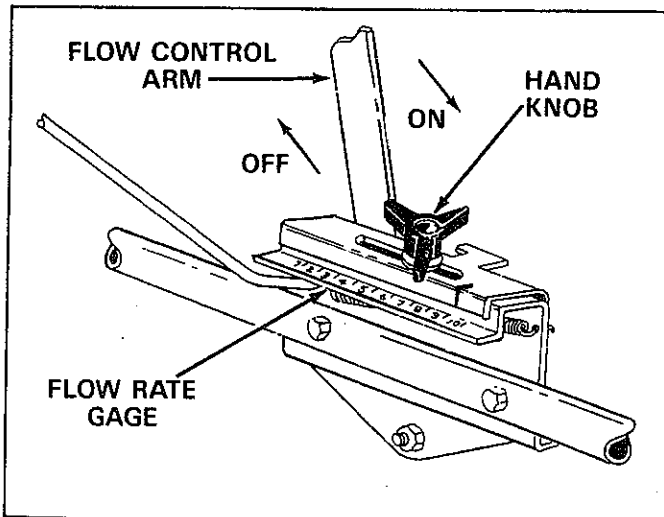


FIGURE 16

FLOW RATE CHART

MATERIAL	TYPE	Flow Rate Setting At 3 M.P.H.	
		Light	Heavy
Fertilizer	Granular ---	3	5
	Pelleted ---	5	7
Grass Seed	Fine-Blue-grass,	2	4
	Coarse-Rye, Fescue,	6	8
Ice Melters	Granular	6	8
	Pelleted		



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 width 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 assemble 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.

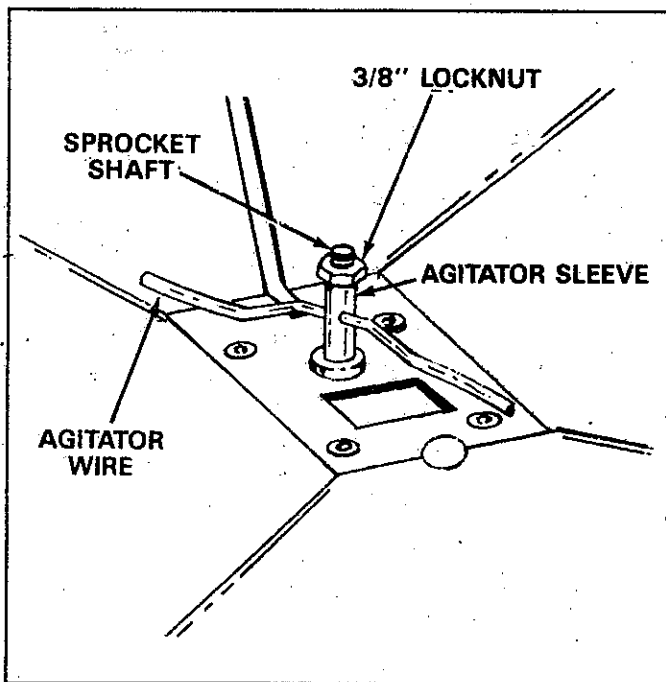


FIGURE 17

5. Keep tires inflated to 15-20 P.S.I. Do not over inflate.



6. 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 rain cover. See figure 18.



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.

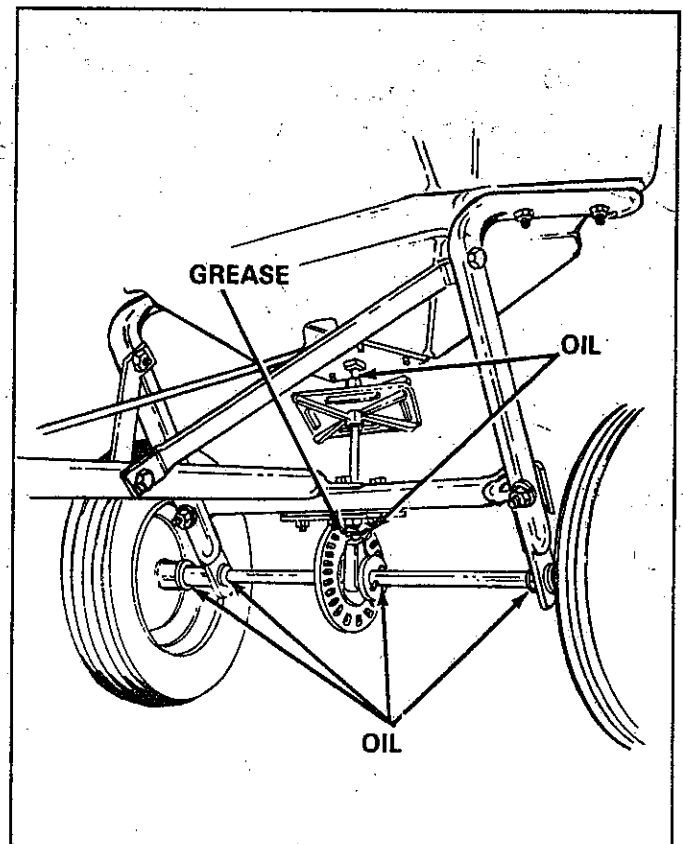
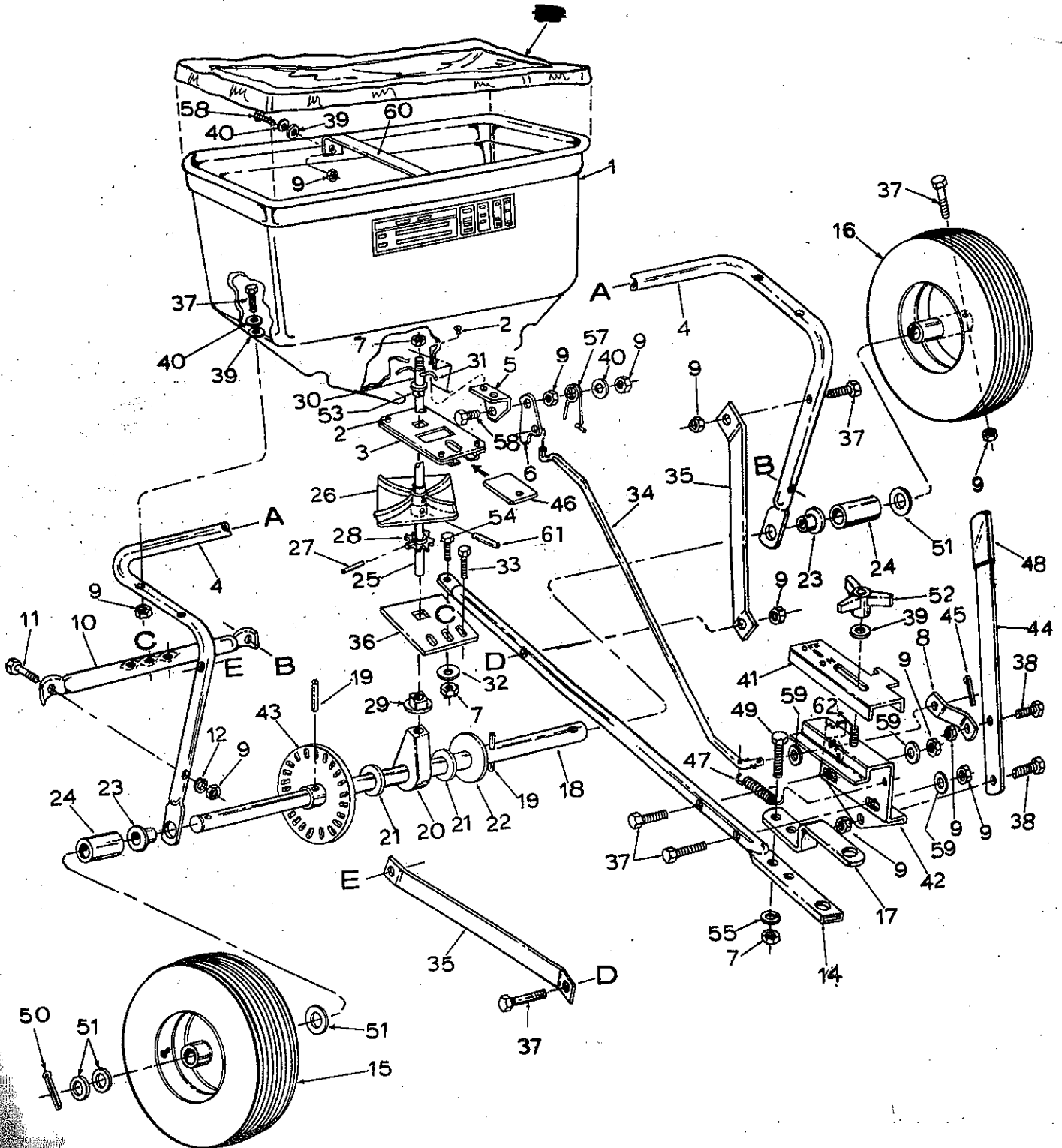


FIGURE 19

REPAIR PARTS FOR BROADCAST SPREADER MODEL 45-01871



REPAIR PARTS LIST FOR BROADCAST SPREADER MODEL 45-01871

REF. NO.	PART NO.	QTY.	DESCRIPTION	REF. NO.	PART NO.	QTY.	DESCRIPTION
1	44480	1	Hopper	32	43070	3	Washer, Flat 3/8"
2	43882	6	Rivet - Stainless	33	41576	2	Bolt, Hex 3/8-16 x 1-3/4" Lg. Gr. 5
3	62482	1	Ass'y - Guide Closure	34	44469	1	Rod, Flow Control
4	44462	1	Tube Frame	35	23525	2	Brace, Hitch
5	23753	1	Slide Gate Angle Bracket	36	23762	1	Shaft Support Plate
6	23758	1	Slide Gate Bracket	37	1509-069	12	Bolt, Hex 1/4-20 x 1-3/4"
7	43082	5	Nut, Hex Lock 3/8-16 Thd.	38	43866	2	Bolt, Hex 1/4-20 x 5/8" Lg. Gr. 5
8	23756	1	Flow Control Link	39	1543-069	9	Washer, Nylon
9	43013	18	Nut, Hex Lock 1/4-20 Thread	40	43088	11	Washer, Flat 1/4" Std.
10	43808	1	Tube Crossover	41	23755	1	Gauge, Flow Control
11	43084	2	Bolt, Hex 5/16-18 x 1-3/4" Lg.	42	23754	1	Bracket, Flow Control Mount
12	43086	2	Lock Washer, 5/16"	43	62474	1	Gear Ass'y.
13	43064	2	Nut, Hex Lock 5/16-18 Thd.	44	23757	1	Flow Control Arm
14	44487	1	Tube, Hitch	45	44101	1	Cotter Pin 3/32" x 3/4" Lg.
15	44458	1	Wheel, Ass'y 16" x 4"	46	23533	1	Plate, Closure
16	44459	1	Wheel, Ass'y 16" x 4" W/ Hole	47	43000	1	Spring, Extension
17	23687	1	Bracket, Hitch	48	43848	1	Grip, Flow Control Arm
18	23522	1	Shaft, Axle	49	43087	2	Bolt, Hex 3/8-16 x 1-1/4" Lg.
19	43851	2	Pin, Spring 3/16" Dia. x 1.25" Lg.	50	43093	1	Cotter Pin, 1/8" x 1-1/2" Lg.
20	43871	1	Bushing, Axle Shaft	51	43009	4	Washer 1-5/8" O.D. x 25/32" I.D.
21	1540-032	5	Washer, Flat .78" I.D.	52	43849	1	Knob, Plastic 1/4-20 Thread
22	1540-162	1	Washer, Flat 3/4"	53	44285	1	Bushing Delrin 3/8 I.D.
23	44798	2	Bearing Flange	54	43054	1	Bolt, Hex 3/8-16 x 2" Lg. Gr. 5
24	44474	2	Spacer	55	43003	2	Lock Washer, 3/8"
25	23524	1	Shaft, Sprocket	56	43962	1	XXXXXXXXXXXX
26	04367	1	Spreader Plate	57	44566	1	Spring, Torsion
27	43850	1	Pin, Spring 1/8" x 5/8" Lg.	58	43012	3	Bolt, Hex 1/4-20 x 3/4" Lg. Gr. 5
28	44468	1	Sprocket - 6 T.	59	R19111116	3	Washer, 5/16" SAE
29	43852	1	Bushing, Nylon 3/8 ID	60	23697	1	Strap, Hopper
30	23766	1	Sleeve, Agitator	61	46055	1	Pin, Spring 1/8" x 1" Lg.
31	43878	1	Wire, Agitator	62	44950	1	Bolt, Carriage 1/4-20 x 3/4" Lg.
					46513	1	Owner's Manual