### **Owner's Manual**

# **CRAFTSMAN®**

### TOW BROADCAST SPREADER

Model No. 486.24595



#### **CAUTION:**

Before using this product, read this manual and follow all Safety Rules and Operating Instructions.

#### **IMPORTANT - READ THIS FIRST!!!**

For Missing Parts or Assembly Questions
Please Call 866-576-8388
Mon.-Fri. 7 am - 5 pm CST.
FAX 217-728-2032 or e-mail info@agri-fab.com
Missing parts will be sent UPS in 24 hours directly to your home.

- Safety
- Assembly
- Operation
- Maintenance
- Parts

Sears, Roebuck and Co., Hoffman Estates, IL 60179 U.S.A. www.sears.com/craftsman

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#### **WARRANTY**

#### LIMITED ONE YEAR WARRANTY ON CRAFTSMAN BROADCAST SPREADER

For one year from the date of purchase, when this spreader is maintained and lubricated according to the operating and maintenance instructions in the owner's manual, Sears will repair any defect in material or workmanship free of charge. If this spreader is used for commercial or rental purposes, this warranty applies for only 90 days from the date of purchase.

This warranty does not cover repairs necessary because of operator negligence or abuse, including the failure to maintain the equipment according to instructions contained in the owner's manual.

WARRANTY SERVICE IS AVAILABLE BY CONTACTING THE NEAREST SEARS SERVICE CENTER/DEPARTMENT IN THE UNITED STATES.

This warranty applies only while this product is in the United States.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Sears, Roebuck and Co. D/817 WA. Hoffman Estates, Chicago, IL 60179

The model number and serial numbers will be found on a decal attached to the tubular frame.	MODEL NUMBER: SERIAL NUMBER:	486.24595
You should record both the serial number and the date of purchase and keep in a safe place for future reference.	DATE OF PURCHASE:	



#### **SAFETY**



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 power equipment.

- Read the towing vehicle owners manual and towing vehicle safety rules. Know how to operate your tractor before using the broadcast spreader attachment.
- Read the chemical label instructions and cautions for handling and applying the chemicals purchased for spreading.
- Wear eye and hand protection when handling and when applying lawn or garden chemicals.
- Never operate tractor and spreader attachment without wearing substantial footwear, and do not allow anyone to ride or sit on spreader attachment frame.
- Never allow children to operate the tractor or spreader attachment, and do not allow adults to operate without proper instructions.

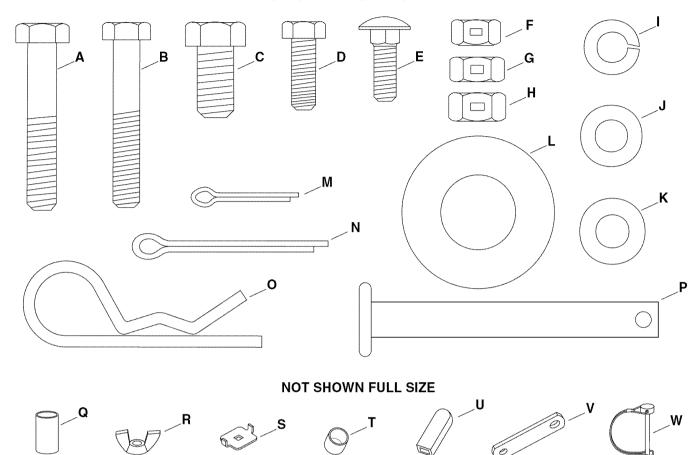
- Always begin with the transmission in first (low) gear and with the engine at low speed, and gradually increase speed as conditions permit. Maximum towing speed - 10 M.P.H.
- When towing broadcast spreader do not drive too close to a creek or ditch and be alert for holes and other hazards which could cause you to loose control of the broadcast spreader and tractor.
- 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!
- Follow maintenance and lubrication instructions as outlined in this manual.



Look for this symbol to point out important safety precautions. It mean--Attention!! Become alert!! Your safety is involved.

### HARDWARE PACKAGE CONTENTS

### **SHOWN FULL SIZE**



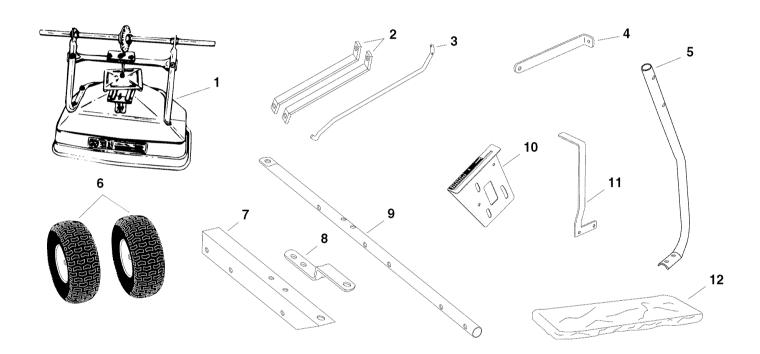
KEY	QTY.	DESCRIPTION	KEY	QTY.	DESCRIPTION
Α	4	Hex Bolt, 5/16" x 1-3/4"	L	4	Flat Washers 1-5/8"
В	5	Hex Bolt, 1/4" x 1-3/4"	М	1	Cotter Pin, 3/32" x 3/4"
С	2	Hex Bolts, 3/8" x 3/4"	Ν	2	Cotter Pin, 1/8 x 1-1/2"
D	2	Hex Bolt, 1/4" x 3/4"	0	1	Hair Cotter Pin, 1/8"
E	1	Carriage Bolt, 1/4" x 3/4"	Р	1	Hitch Pin
F	7	Hex Lock Nuts, 1/4"	Q	2	Spacers
G	4	Hex Lock Nuts, 5/16"	R	1	Nylon Wing Nut
Н	2	Hex Lock Nuts, 3/8"	S	1	Adjustable Stop
	4	Lock Washers, 5/16"	Т	1	Vinyl Cap
J	4	Nylon Washer	U	1	Grip
K	7	Flat Washer, 5/16"	V	1	Flow Control Link
			V	1	Drive Pin

#### **ASSEMBLY**

#### **CARTON CONTENTS**

- 1. Hopper Assembly
- 2. Braces (2)
- 3. Flow Control Rod
- 4. Tube Support Strap
- 5. Flow Control Mounting Tube
- 6. Wheels (2)

- 7. Hitch Extension Bracket
- 8. Hitch Bracket
- 9. Hitch Tube
- 10. Flow Control Mount Bracket
- 11. Flow Control Arm
- 12. Hopper Cover Hardware Package (see page 4)



#### **TOOLS REQUIRED FOR ASSEMBLY**

- (1) Pliers
- (2) 7/16" Wrenches
- (2) 1/2" Wrenches
- (2) 9/16" Wrenches

#### **REMOVAL OF PARTS FROM CARTON**

Remove all parts and hardware packages from the carton. Lay out all parts and hardware and identify using the illustrations on pages 4 and 5.

• Turn the spreader upside down as shown in figure 1.

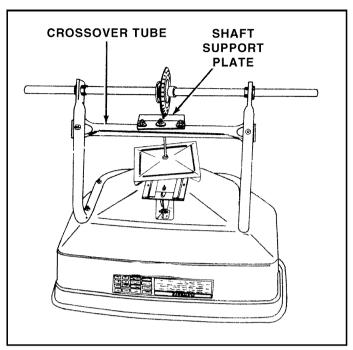


FIGURE 1

- Assemble the two hitch braces to the inside of the hopper frame using a 1/4" x 1-3/4" hex bolt and 1/4" hex lock nut on each side. DO NOT TIGHTEN YET. See figure 2.
- Remove the lock nut from the middle bolt in the crossover tube and shaft support plate. Leave the bolt in place. See figure 2.
- Assemble the hitch tube onto the middle bolt and secure it with the same lock nut you removed. DO NOT TIGHTEN YET. See figure 2.

**IMPORTANT:** The hitch tube must attach to the side of the crossover tube opposite the shaft support plate.

 Assemble the two hitch braces to the hitch tube using a 1/4" x 1-3/4" hex bolt and a 1/4" hex lock nut. DO NOT TIGHTEN YET. See figure 2.

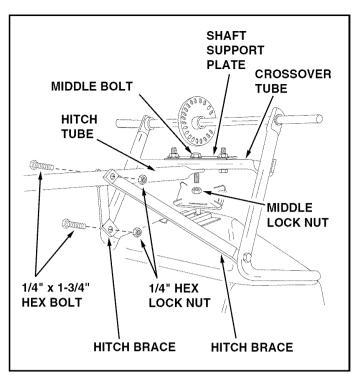


FIGURE 2

- Tighten the nuts and bolts fastening the hitch braces to the hopper frame and the hitch tube, then tighten the middle lock nut fastening the hitch tube to the crossover tube. DO NOT COLLAPSE TUBES WHEN TIGHTENING.
- Assemble a spacer, a 1-5/8" flat washer, a wheel (air valve facing out) and another 1-5/8" flat washer onto the end of the axle that has only the small hole. See figure 3.
- Install a 1/8" x 1-1/2" cotter pin into hole in the axle. See figure 3.

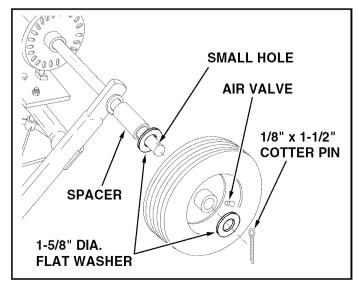
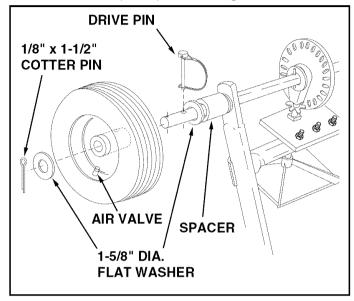


FIGURE 3

- Assemble a spacer, a 1-5/8" flat washer, a wheel (air valve facing out) and another 1-5/8" flat washer onto the end of the axle that has both the large and small holes. See figure 4.
- Install a 1/8" x 1-1/2" cotter pin into the small hole in the end of the axle. See figure 4.
- Open the bail on the drive pin and install it through the wheel and the large hole in the axle. Close the bail to lock the pin in place. See figure 4.



#### FIGURE 4

- Turn the spreader upright on its wheels.
- Assemble the flow control mounting tube to the hitch tube using two 5/16" x 1-3/4" hex bolts, 5/16" lock washers and 5/16" hex lock nuts. DO NOT TIGHTEN YET. See figure 5.
- Assemble the vinyl cap onto the flow control mounting tube. See figure 5.

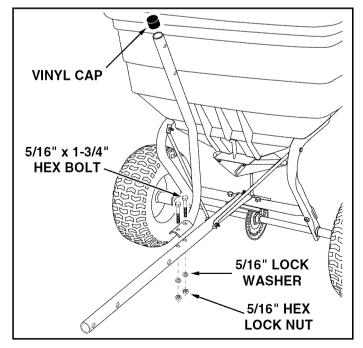


FIGURE 5

- Assemble the flow control mounting bracket and the tube support strap to the flow control mounting tube using two 5/16" x 1-3/4" hex bolts, four 5/16" washers, two 5/16" lock washers and two 5/16" hex lock nuts. **DO NOT TIGHTEN YET.** See figure 6.
- Remove the preassembled bolt and nut from the front of the hopper. Attach the tube support strap to the hopper and hopper strap using the bolt and nut you removed. TIGHTEN. See figure 6.

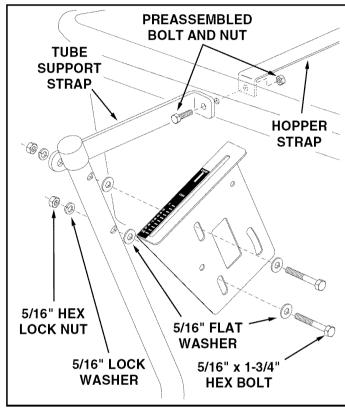


FIGURE 6

 TIGHTEN the two bolts which fasten the flow control mounting tube to the hitch tube. DO NOT TIGHTEN the two bolts which fasten the flow control mounting bracket to the flow control mounting tube.

- Assemble the vinyl grip onto the flow control arm.
   See figure 7.
- Insert the flow control arm down through the slot in the flow control bracket. Assemble the flow control link (small hole) to the flow control arm using a 1/4" x 3/4" hex bolt, a nylon washer and a 1/4" hex lock nut as shown in figure 7. Tighten carefully. The flow control link should be sung but should pivot with no more than slight resistance.

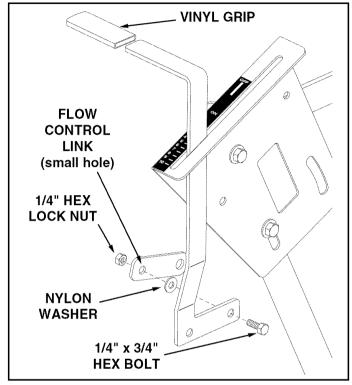


FIGURE 7

Assemble the flow control arm to the flow control mounting bracket using a 1/4" x 3/4" hex bolt, two nylon washers and a 1/4" hex lock nut. Tighten carefully. The flow control arm should be snug but should pivot with no more than slight resistance. See figure 8.

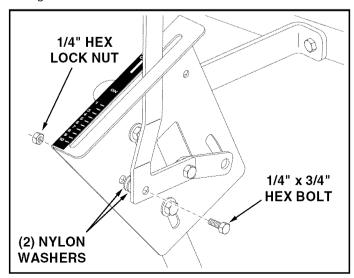


FIGURE 8

 Hook the double bent end of the flow control rod through the hole in the slide gate bracket located near the bottom of the hopper. See figure 9.

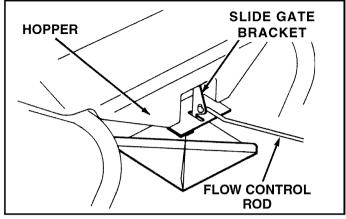


FIGURE 9

 Place a 5/16" flat washer onto the other end of the flow control rod. Insert the end of the rod through the curved slot in the flow control mounting bracket and through the hole in the flow control link. Secure with a 5/16" flat washer and a 3/32" x 3/4" cotter pin. See figure 10.

NOTE: You can leave off the second washer if there is not enough room on the end of the rod.

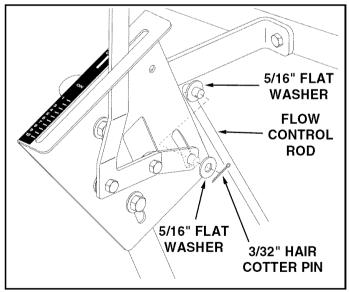
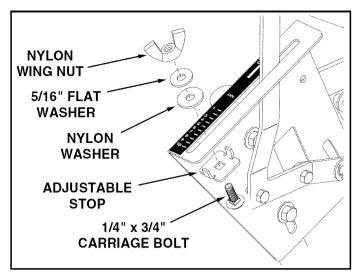


FIGURE 10

 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 11.



#### FIGURE 11

- Position the flow control mounting bracket (figure 12).
  - a. Push on flow control arm until it locks in "OFF" position.
  - 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, adjust position of flow control mounting bracket until closure plate will open about half way at "5" and will still close when arm is locked in "OFF" position. **Tighten** 1/4" lock nuts.

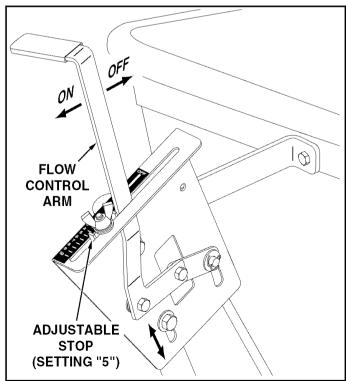


FIGURE 12

- Assemble the hitch bracket to the hitch extension bracket using two 3/8" x 3/4" hex bolts (inserted from the bottom) and two 3/8" hex lock nuts. See figure 13.
- Assemble the hitch pin through the hitch bracket and the hitch extension bracket and secure with the hair cotter pin. See figure 13.

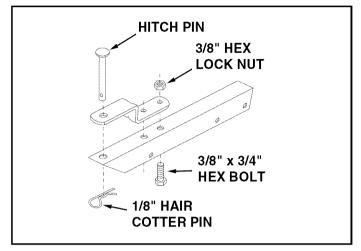


FIGURE 13

• For most vehicles, assemble the hitch extension bracket to the holes in the hitch tube shown at the **top** of figure 14. Use two 1/4" x 1-3/4" hex bolts and 1/4" hex lock nuts tightened only finger tight. Attach the spreader hitch to your vehicle hitch. Check for interference with the spreader directly behind and out to both sides of the vehicle. Lift the spreader at each position to make sure there is no interference with the spreader's flow control. If there is interference with the rear of the vehicle, assemble the hitch extension bracket as shown at the **bottom** of figure 14. **Tighten** the bolts and nuts when finished.

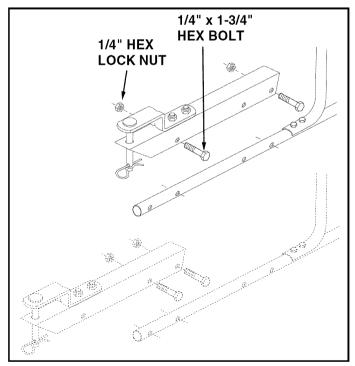


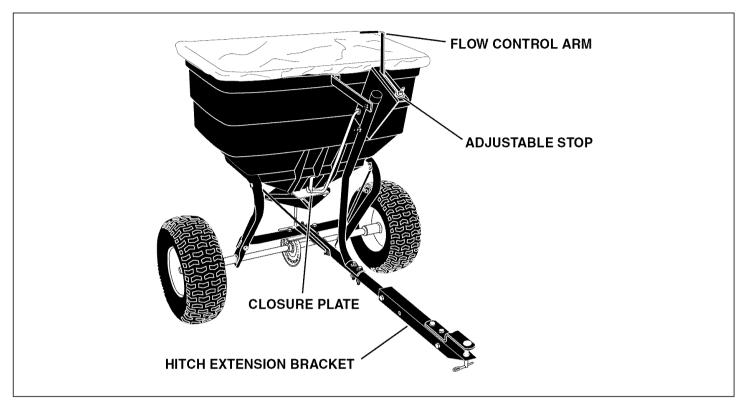
FIGURE 14

#### **OPERATION**

#### **KNOW YOUR SPREADER**

#### Read this owner's manual and safety rules before operating your spreader.

Compare the illustration below with your spreader to familiarize yourself with the various controls and their locations.



FLOW CONTROL ARM - Opens and closes the closure plate in the bottom of the hopper.

ADJUSTABLE STOP - Limits how far the closure plate opens.

CLOSURE PLATE - Slides to open or close the opening in the bottom of the hopper.

HITCH EXTENSION BRACKET - Adjusts to allow more clearance between the spreader and towing vehicle

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

#### SETTING THE FLOW CONTROL

(Refer to figure 12 on page 9.)

- 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.
- Refer to the application chart on page 11 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.

### **DISENGAGING THE DRIVE WHEEL (Freewheeling)** (Refer to figure 4 on page 7.)

Remove the drive pin from the left wheel to disengage the wheel from the axle and gear mechanism.
 This prevents excessive wear or damage to the spreading mechanism when transporting the spreader in excess of 6 mph or when transporting for more than a short distance.

#### **OPERATING TIPS**

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

- Determine approximate square footage of area to be covered and estimate amount of material required.
- Before filling the hopper make sure the flow control arm is in the off position and the closure plate is shut.
- Break up any lumpy fertilizer as you fill the hopper.
- 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.
- The application chart is calculated for light to heavy application at a vehicle 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 drive, the wider the broadcast width.
- Make sure the drive pin is installed in the left (drive) wheel before starting the spreader.
- Always start the vehicle in motion before opening closure plate.
- Always shut the closure plate before turning or stopping the vehicle.
- 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.
- To insure uniform coverage, make each pass so that the broadcast pattern slightly overlaps the pattern from the previous pass as shown in figure 15. The approximate broadcast widths for different materials are shown in the application chart on this page.
- REFER TO CHARTS

  OVERLAP

FIGURE 15

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

**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	SPREAD WIDTH					
FERTILIZER Powder Granular Pelleted Organic GRASS SEED	3 - 5 3 - 5 3 - 5 6 - 8	3' - 4' 8' - 10' 10' - 12' 6' - 8'					
Fine Coarse ICE MELTER	3 - 4 4 - 5 6 - 8	6' - 7' 8' - 9' 10' - 12'					

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

#### **MAINTENANCE/STORAGE**

#### **CUSTOMER RESPONSIBILITIES**

• Read and follow the maintenance schedule and the maintenance procedures listed in this section.

MAINTENANCE SCHEDULE Fill in dates as you complete regular service.	<b>/</b> ⊗	31018 S	20 N	\$ 15°	\$1010 P	Service Dates							
Check for loose fasteners	X												
Check for worn or damaged parts	Х			Χ									
Check tire inflation	Х												
Cleaning		Х		Х									
Lubricate			Χ		Χ								

#### 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 beyond maximum recommended pressure.



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

#### **CLEANING**

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

#### **LUBRICATE** (See figure 16.)

- Lightly apply automotive grease as needed to the sprocket and gear.
- 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 bearing at least once a year or more often as needed.

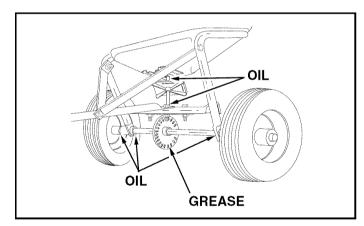


FIGURE 16

#### **STORAGE**

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

### **SERVICE AND ADJUSTMENTS**

- 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 4 on page 5.) Use shim washers (Ref. no. 21 on pages 10 and 11) as needed for minimum backlash. Add grease to gear and sprocket.
- If the agitator hairpin becomes damaged or worn it can be replaced. See figure 17.

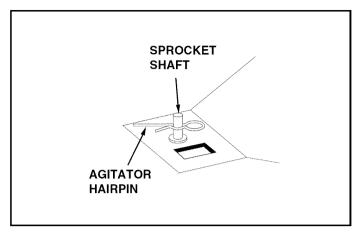


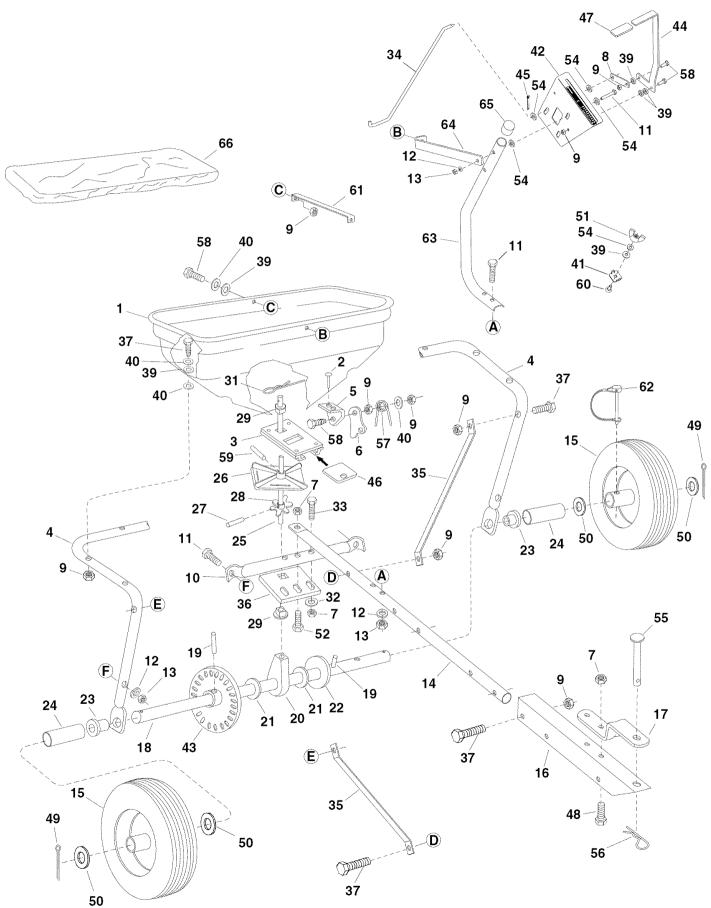
FIGURE 17

### **TROUBLESHOOTING**

PROBLEM	CAUSE	CORRECTION			
Flow rate is not accurate.	Flow controls out of adjustment.	Adjust the flow control bracket as described on page 9.			
Material will not flow out of bottom of hopper properly.	hopper is not open enough.	<ol> <li>Change the flow control setting to match the application chart.</li> <li>a. Stir or sift to break up clumps. b. Wait for drier weather.</li> </ol>			

### **PARTS**

### **REPAIR PARTS FOR MODEL 486.24595**



### **REPAIR PARTS FOR MODEL 486.24595**

REF. NO.	PART NO.	QTY.	DESCRIPTION	REF. NO.	PART NO.	QTY.	DESCRIPTION
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 31 32 33 34	44480 43882 62482 44462 23753 23758 43082 24857 43013 43808 43084 43086 43064 48864 48511 25080 23014 24914 43851 43871 1540-032 1540-162 47615 47683 25305 04367 43850 44468 44285 48934 43070 41576 48586		Hopper Rivet, Stainless Ass'y, Guide Closure Tube, Frame Slide Gate Angle Bracket Slide Gate Bracket Nut, Hex Lock 3/8-16 Thd.* Flow Control Link Nut, Hex Lock 1/4-20 Thd.* Tube, Crossover Bolt, Hex 5/16-18 x 1-3/4" Lg. Lock Washer, 5/16" Nut, Hex Lock, 5/16-18 Thd.* Tube, Hitch Wheel Bracket, Hitch Extension Bracket, Hitch Extension Bracket, Hitch Shaft, Axle Pin, Spring 3/16" Dia. x 1-1/4" Lg. Bushing, Axle Shaft Washer, Flat 1/2" Bearing, Flange Tube, Spacer Shaft, Sprocket Spreader Plate Pin, Spring 1/8" Dia. x 5/8". Sprocket, 6 Tooth Bushing, Delrin Hairpin, Agitator Washer, Flat 3/8" * Bolt, Hex 3/8-16 x 1-3/4" Lg.* Rod, Flow Control	35 36 37 39 40 41 42 43 44 45 46 47 48 49 50 51 52 56 57 58 59 60 61 66 66 66	23525 23762 1509-069 1543-069 43088 24858 24915 62474 24917 44101 23533 43848 43407 43099 47141 43054 R191111116 47623 43343 44566 43012 46055 44950 23697 48515 48514 24916 44481 43962 48849	2 1 11 14 1 1 1 1 1 2 2 4 1 1 7 1 1 1 5 1 1 1 1 1 1 1 1	Brace, Hitch Shaft Support Plate Bolt, Hex 1/4-20 x 1-3/4" Washer, Nylon Washer, Flat 1/4" Std. Stop, Adjustable Bracket, Flow Control Mount Gear Assembly Flow Control Arm Cotter Pin 3/32" x 3/4" Lg.* Plate, Closure Grip, Flow Control Arm Bolt, Hex 3/8-16 x 3/4" Lg. * Pin, Cotter 1/8" x 1-1/2" Washer, Flat 1-5/8" O.D. Wing Nut, Nylon Bolt, Hex 3/8-16 x 2" Lg. * Washer, 5/16 SAE Hitch Pin Hair Cotter Pin, 1/8" Spring, Torsion Bolt, Hex 1/4-20 x 3/4" Lg.* Pin, Spring 1/8" Dia. x 1" Lg. Bolt, Carriage 1/4-20 x 3/4" Strap, Hopper Drive Pin W/Bail, 1/4" x 2" Flow Control Mounting Tube Tube Support Strap Vinyl Cap Vinyl Cover Owner's Manual

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