**Owner's Manual** 



# 2.1 cu. ft. (TOW) BROADCAST SPREADER

Model No. 486.243232



## **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 <u>info@agri-fab.com</u> Missing parts will be sent UPS in 24 hours directly to your home.

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

PRINTED IN U.S.A.

- Safety
- Assembly
- Operation
- Maintenance
- Parts

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## WARRANTY

### LIMITED ONE YEAR WARRANTY ON

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 frame.		486.243232
You should record both the serial number and the date of purchase and keep in a safe place for future reference.	SERIAL NUMBER: 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.

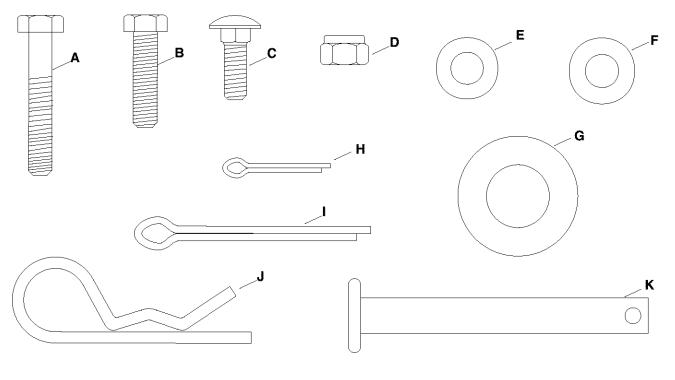
- Always begin with the transmission in first (low) gear and with the engine at low speed, and gradually increase speed as conditions permit. Maximum towing speed - 10 M.P.H.
- When towing broadcast spreader do not drive too close to a creek or ditch and be alert for holes and other hazards which could 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

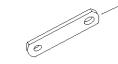


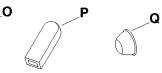
NOT SHOWN FULL SIZE

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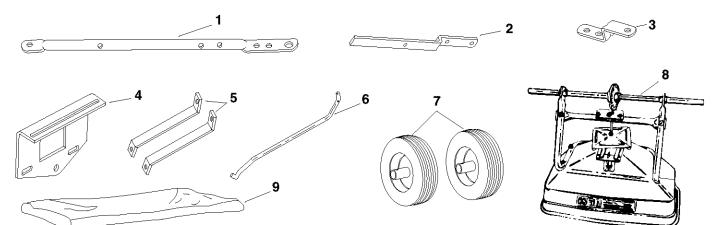
KEY	QTY.	DESCRIPTION	KEY	QTY.	DESCRIPTION
A B C D E F G H	54194641	Hex Bolt, 1/4-20 x 1-1/2" Hex Bolt, 1/4-20 x 1" Carriage Bolt, 1/4-20 x 3/4" Nylock Nuts, 1/4-20 Thread Nylon Washer Flat Washer, 5/16" Flat Washers, 5/8" Cotter Pin, 3/32" x 3/4"	I J K L M N O P Q	1 1 2 1 1 1 2	Cotter Pin, 5/32 x 2" Hair Cotter Pin Hitch Pin Spacers Nylon Wing Nut Adjustable Stop Flow Control Link Grip Hub Cap

## ASSEMBLY

#### **CARTON CONTENTS**

- 1. Hitch Tube
- 2. Flow Control Arm
- 3. Hitch Bracket
- 4. Flow Control Mount Bracket
- 5. Braces (2)

- 6. Flow Control Rod
- 7. Wheels (Drive and Idler)
- 8. Hopper Assembly
- 9. Vinyl Cover Hardware Package (see page 4)



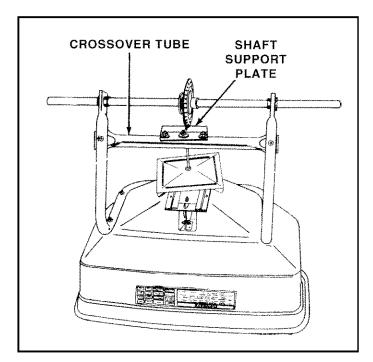
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#### TOOLS REQUIRED FOR ASSEMBLY

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

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

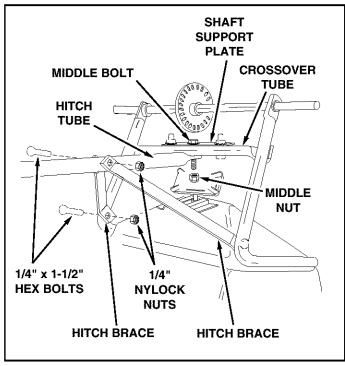
 Remove all parts and hardware packages from the carton. Lay out all parts and hardware and identify using the illustrations on pages 4 and 5.



Turn the spreader upside down as shown in figure 1.

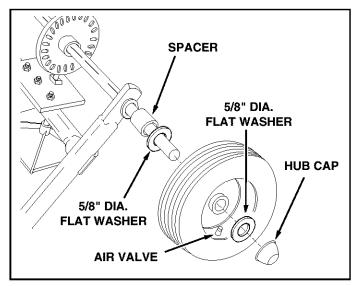


- Assemble the two hitch braces to the inside of the hopper frame, one on each side, using two 1/4" x 1-1/2" hex bolts and two 1/4" nylock nuts. DO NOT TIGHTEN YET. See figure 2.
- Remove the nut from the middle bolt in the crossover tube and shaft support plate. Leave the bolt in place. See figure 2.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



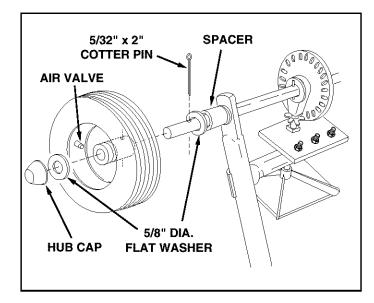
**FIGURE 2** 

- Select the end of the axle with no cross hole. Assemble a spacer, a 5/8" flat washer, a wheel (air valve facing out) and then another 5/8" flat washer onto the axle. See figure 3.
- Install a hub cap by tapping it carefully onto the axle with a hammer. See figure 3.



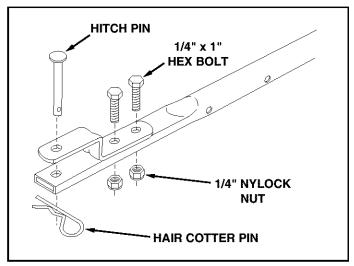
**FIGURE 3** 

- Select the end of the axle containing the cross hole. Assemble a spacer, a 5/8" flat washer, a wheel (air valve facing out) and then another 5/8" flat washer onto the axle. Insert the 5/32" x 2" cotter pin through the wheel hub and the axle and then spread the ends of the pin. See figure 4.
- Install a hub cap by tapping it carefully onto the axle with a hammer. See figure 4.



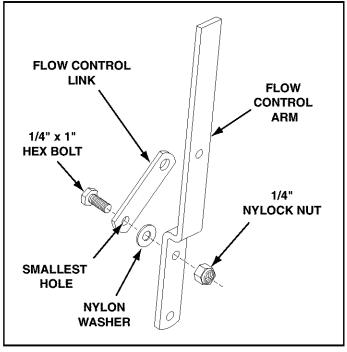
**FIGURE 4** 

- Turn the spreader upright on its wheels.
- Assemble the hitch bracket to the top of the hitch tube using two 1/4" x 1" hex bolts and 1/4" nylock nuts. See figure 5.
- Assemble the hitch pin through the hitch bracket and the hitch tube and secure with the hair cotter pin. See figure 5.



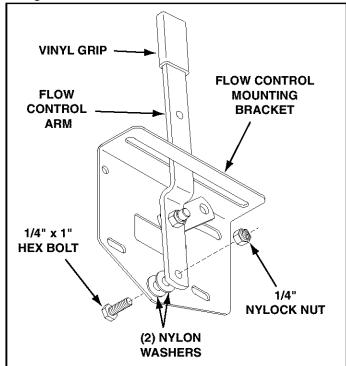
**FIGURE 5** 

 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 hex nut as shown in figure 6. Tighten carefully. The flow control link should not be loose but should pivot with no more than slight resistance.



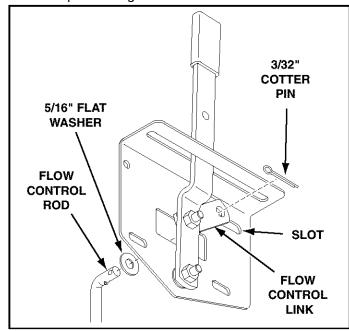
**FIGURE 6** 

- 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 hex nut as shown in figure 7. Tighten carefully. The flow control arm should not be loose but should pivot with no more than a slight resistance.
- Place the vinyl grip onto the flow control arm. See figure 7.



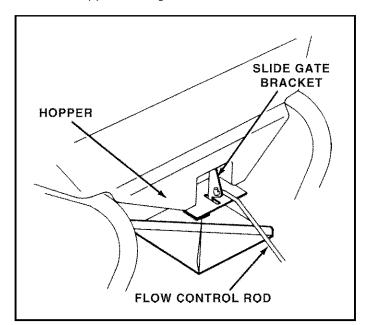
#### FIGURE 7

 Place a 5/16" flat washer onto the end of the flow control rod. Insert the end of the 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 8.



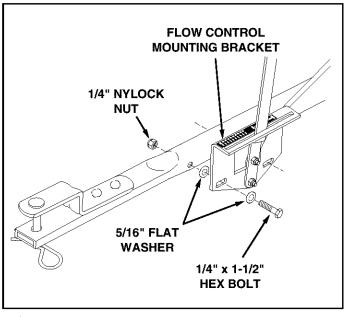


• Hook the free end of the flow control rod through the hole in the slide gate bracket located near the bottom of the hopper. See figure 9.



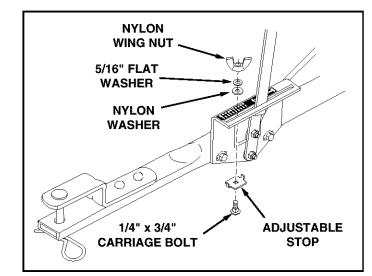
#### **FIGURE 9**

 Assemble the flow control mounting bracket to the hitch tube using two 1/4" x 1-1/2" hex bolts, four 5/16" flat washers and two 1/4" nylock hex nuts as shown in figure 10. Do not tighten at this time.



**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.
  - b. Slide flow control mounting bracket along tube until closure plate in bottom of hopper just closes.
  - c. Snug the mounting bolts and 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 half way.
  - e. If closure plate is not open half way, adjust position of flow control mounting bracket until closure plate is open half way at "5" and closed when arm is locked in "OFF". **Tighten** the mounting bolts and nuts.

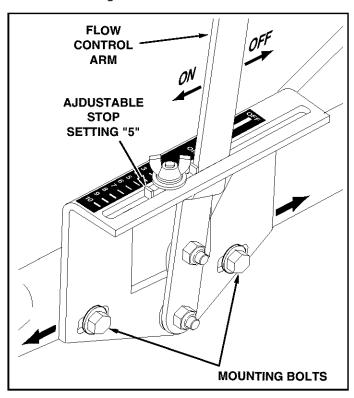


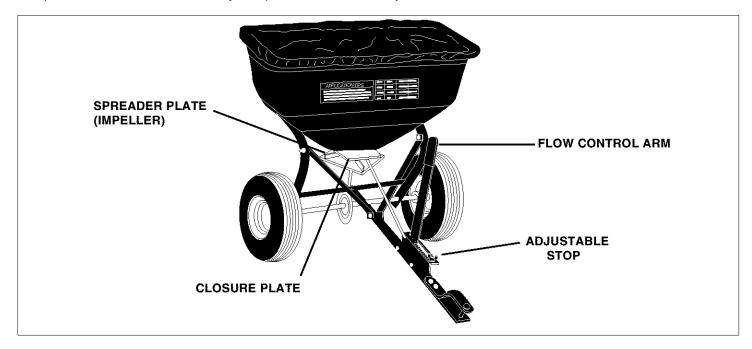
FIGURE 12

## 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.

#### HOW TO USE YOUR SPREADER

#### SETTING THE FLOW CONTROL

(Refer to figure 12 on page 8.)

- 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 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.

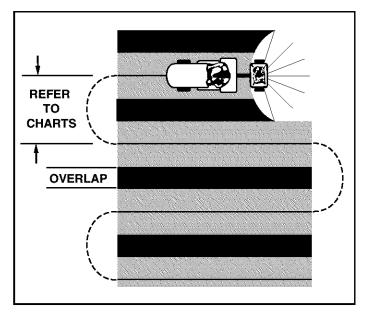
- CLOSURE PLATE Slides to open or close the opening in the bottom of the hopper.
- SPREADER PLATE Spins when spreader is in motion to disperse the material in an even pattern.

#### **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.

- 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 page 10 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.
- Always start the tractor in motion before opening closure plate.
- Always shut the closure plate before turning or stopping the tractor.

- 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 13. The approximate broadcast widths for different materials are shown in the application chart on this page.



#### **FIGURE 13**

- 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 (shown in figure 14) acts as a wind and moisture shield, but not 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	SPREAD						
MATERIAL	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	3 - 4	6' - 7'					
Coarse	4 - 5	8' - 9'					
ICE MELTER	6 - 8	10' - 12'					

## 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.		alore a	ach u	Se use	Season s	srage Instructed		Serv	vice Da	tes		
Check for loose fasteners	X			Í								
Check for worn or damaged parts	X			X								
Check tire inflation	X											
Cleaning		Х		Х								
Lubricate			Х		Х							

#### **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.



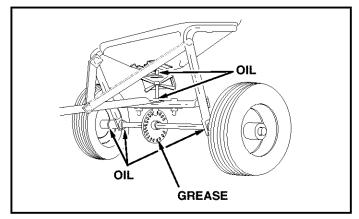
**CAUTION: DO NOT** inflate tires beyond the maximum recommended pressure printed on side of tire.

#### CLEANING

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

#### LUBRICATE (See figure 15.)

- 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.



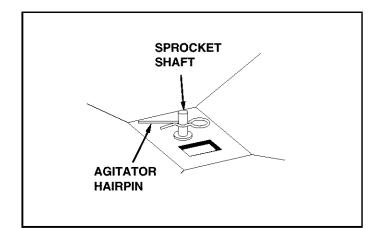
#### **FIGURE 15**

#### 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 6.) Use shim washers (Ref. no. 21 on pages 14 and 15) 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 16.



**FIGURE 16** 

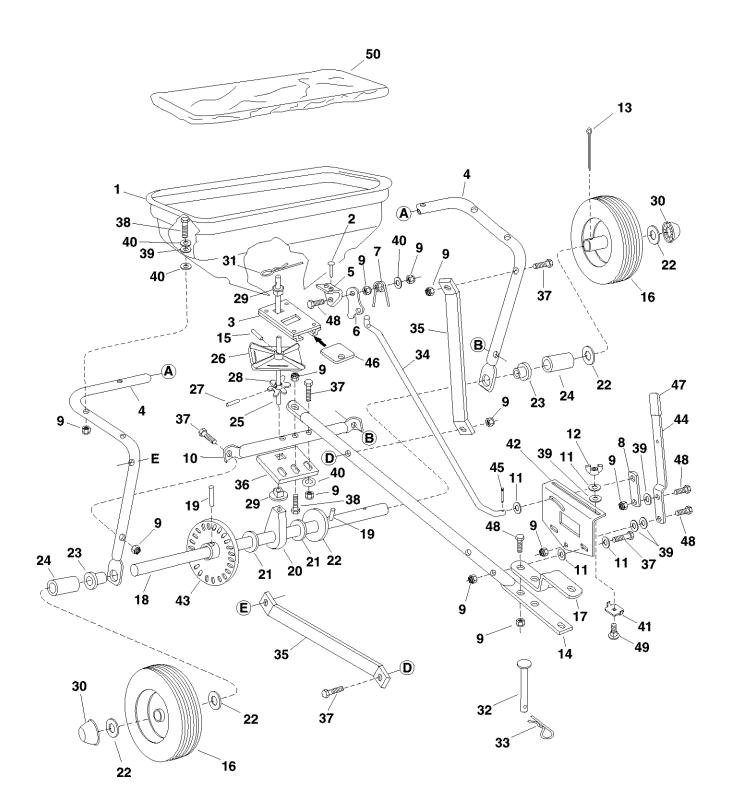
## TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTION
Flow rate is not accurate.	1. Flow controls out of adjustment.	<ol> <li>Adjust the flow control bracket as described at the end of page 8.</li> </ol>
Material will not flow out of bottom of hopper properly.	<ol> <li>Closure plate in bottom of hopper is not open enough.</li> <li>Material is clumping at bottom of hopper.</li> </ol>	<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>

# NOTES

## PARTS

## **REPAIR PARTS FOR MODEL 486.243232**



## **REPAIR PARTS FOR MODEL 486.243232**

REF. NO.	PART NO.	QTY.	DESCRIPTION	REF. NO.	PART NO.	<b>Q</b> ΤΥ.	DESCRIPTION
1 2 3 4 5 6 7 8 9 10 11 23 14 15 16 17 18 9 20 21 22	44466 C-9M5732 62482 48842 23753 23758 44566 24857 47189 48841 R19111116 47141 47063 44586 46055 48954 23818 25067 44665 48954 23818 25067 44665 48916 44125 R19212016 741-0249 48857 25305	$1 \\ 2 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 2 \\ 1 \\ 1$	Hopper Rivet, Pop Ass'y, Guide Closure Tube, Frame Slide Gate Angle Bracket Slide Gate Bracket Spring, Torsion Flow Control Link Nut, Nylock 1/4-20 Tube, Crossover Washer, 5/16 SAE Wing Nut, Nylon Pin, Cotter 5/32" x 2"* Tube, Hitch Pin, Spring 1/8" Dia. x 1" Lg. Wheel Bracket, Hitch Shaft, Axle Pin, Spring 5/32" x 1-1/4" Bushing, Axle Shaft Washer, Flat 5/8" x 1" Washer, Flat 5/8" x 1-1/4" Bearing, Flange Tube, Spacer Shaft, Sprocket	26 27 28 29 30 31 32 33 4 35 36 37 38 39 40 41 42 43 44 50	04367 43850 44468 44285 48499 48934 47623 43343 44469 23525 23780 43648 1509-69 1543-69 43088 24858 24855 48888 24855 48888 24855 48888 24855 48888 24855 48888 24855 48888 24855 48888 24855 48888 24855 4888 24855 4890 44101 23533 43848 43661 44950 43962 49100	1 1 2 2 1 1 1 1 2 1 9 7 10 16 1 1 1 1 1 1 5 1 1 1	Spreader Plate Pin, Spring 1/8" Dia. x 5/8". Sprocket, 6 Tooth Bushing, Delrin Hub Cap Hairpin, Agitator Hitch Pin Hair Cotter Pin, 1/8"* Rod, Flow Control Brace, Hitch Shaft Support Plate Bolt, Hex 1/4-20 x 1-1/2"* Bolt, Hex 1/4-20 x 1-3/4"* Washer, Nylon Washer, Flat 1/4" Std.* Stop, Adjustable Bracket, Flow Control Mount Gear, Slotted Flow Control Arm Cotter Pin 3/32" x 3/4" Lg.* Plate, Closure Grip, Flow Control Arm Bolt, Hex 1/4-20 x 1" Lg. * Bolt, Carriage 1/4-20 x 3/4"* Vinyl Cover Owner's Manual

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