



301 Spin Spreader



JOHN DEERE

OPERATORS MANUAL

301 Spin Spreader

OMC18272 A7 English

OMC18272 A7

LITHO IN U.S.A.
ENGLISH



TO THE PURCHASER

Your new John Deere 301 Spin Spreader is designed to give you many years of satisfactory service. Proper cleaning, operation and lubrication, service and adjustment will assure continued successful performance of your spreader.

When in need of new parts or service, consult your John Deere dealer. He is equipped to provide genuine John Deere replacement parts. His servicemen have the training and experience to service your equipment efficiently.

References in this manual to the right- and left-hand sides of the spreader have been determined by standing at the rear of the spreader, facing in the direction of travel.

The serial number of your new spin spreader is located on the apron drive housing at the front of the spreader. Record this number in the space below for reference when requesting information or ordering parts.



M 1201

Make this manual your guide and do what it recommends. These instructions have been written specifically for this spreader—other spreaders may operate differently. Do not rely on advice from others not familiar with this spreader.

JOHN DEERE 301 SPIN SPREADER

Serial No.

Date Purchased. 19 . . .

(To be filled in by Purchaser)

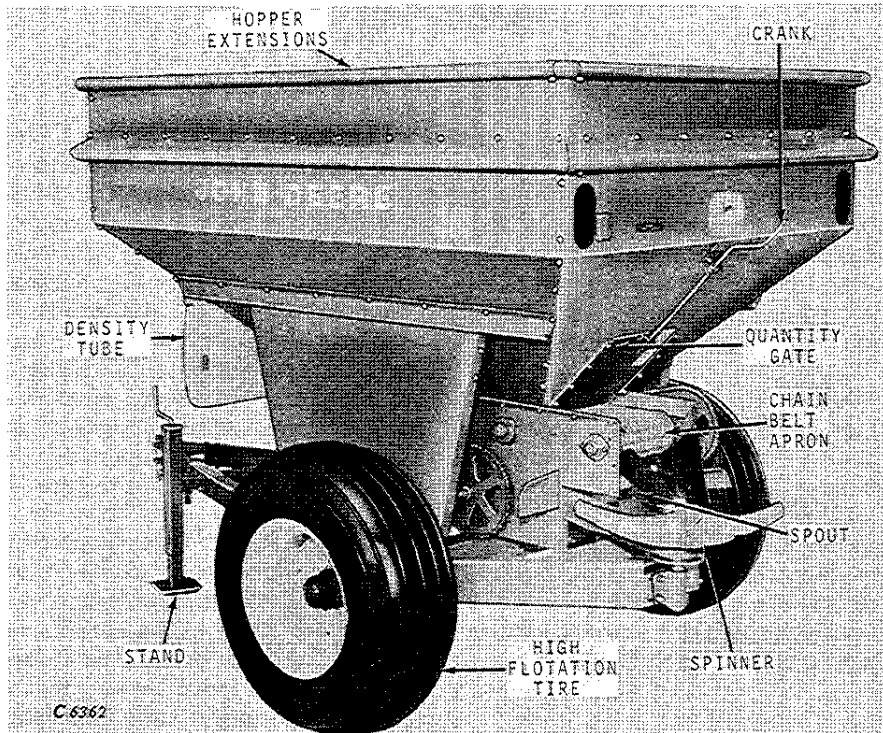
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SPECIFICATIONS

DRIVE	Ground Driven-Governor Controlled
FEED MECHANISM.	Hinged Stainless Steel Apron Cast Spinner with Constant Output Speed, Ground Driven-Governor Controlled
SPINNER SPEED	Approximately 500 rpm (at 4 through 16 mph ground speed)
CAPACITY	See Chart on Page 4
WEIGHT . . . (Basic Machine) . .	Approximately 868 Pounds
HEIGHT (With 7.60-15 Tires):	
Basic Hopper	58-1/2 Inches
With Hopper Extensions	71 Inches
WIDTH:	
Single Wheels	64 Inches
Single High-Flotation Wheels .	69 Inches
Dual Wheels (Outer Position) .	88-1/4 Inches
LENGTH	108 Inches
HOPPER:	
Length	79 Inches
Width	53 Inches
TIRE SIZE:	
Single Wheels	7.60-15, 6 Ply
Single High-Flotation Wheels .	11.00-15, 8 Ply
Dual Wheels	6.70-15, 4 Ply

(Specifications and Design Subject to Change Without Notice)



John Deere 301 Spin Spreader with Hopper Extensions and High-Flotation Tires

DESCRIPTION

The John Deere 301 Spin Spreader is designed primarily to spread dry commercial fertilizer in quantities ranging from 35 to 2000 pounds per acre, depending upon fertilizer type and density. Certain small grain seeds also may be spread as a broadcast application.

A spinner, on the back of the distributor, is designed to establish an accurate uniform spread pattern of most all materials. The spread pattern remains uniform due to an exclusive governor feature inside the spinner. The spinner rotates at operating speed when the spreader ground speed reaches 4 miles per hour. Proper spinner rate is maintained at any rate of travel between 4 and 16 miles per hour.

The rope-operated throw-out clutch engages and disengages the fertilizer apron to start and stop the flow of fertilizer to the spinner.

A wheel clutch on the left-hand wheel hub disengages the spinner and spreader drive for transporting long distances.

Three possible apron speeds, together with an adjustable quantity gate, make possible accurate distribution of either fertilizer or grain seed in widths up to 60 feet.

A number of extra equipment items are available to adapt the spin spreader to your particular operation. See Extra Equipment section on pages 16 through 20.

OPERATION

PREPARING THE SPREADER

Always check the spreader to be sure all foreign material has been removed from inside the fertilizer hopper. Operating the spreader with foreign material, such as metal parts, lumber, stones or other debris can cause damage to the chain-belt apron, resulting in costly repairs.

Be sure the spreader is clean of oil or grease, which may have been applied to prevent rust. Lubricate the spreader as instructed on page 22.

Inflate the spreader tires properly before loading with fertilizer. Use either the high-flotation tires or dual wheels when using hopper extensions, especially when spreading a heavy, high-density fertilizer.

See the following chart for hauling capacity and correct tire inflation pressures. The ASAE-rating columns may be used as a guide in determining net load. The "net load" column is based on the spreader being filled level with fertilizer weighing 65 pounds per cubic foot. Density and weight of fertilizer or other material will vary. Never exceed maximum allowable gross load (total weight of spreader and fertilizer) as shown in last column of chart.



CAUTION: The recommendations made in this manual are based on a maximum speed of 20 mph. This spreader is not equipped with brakes; therefore, always limit travel speed to that which will permit a controlled stop.

Hauling Capacity and Tire Inflation Pressure Chart

Type of Spreader	Tire Size	Tire Inflation Pressure	ASAE Rating		Maximum Allowable Gross Load
			Volume Cubic Feet	Net Load (65 lbs per Cubic Foot Fertilizer)	
Spreader with Single Wheels	7.60-15, 6-ply	36 psi	40.8	2640 lbs.	*3530 lbs.
	11.00-15, 8-ply	40 psi			**5310 lbs.
Spreader with Dual Wheels	7.60-15, 6-ply	36 psi	40.8	2640 lbs.	**5360 lbs.
	6.70-15, 4-ply	24 psi			
Spreader with 8-Inch Hopper Extensions and Single Wheels	11.00-15, 8-ply	24 psi	58.7	3800 lbs.	**5390 lbs.
Spreader with 8-Inch Hopper Extensions and Dual Wheels	7.60-15, 6-ply	36 psi	58.7	3800 lbs.	**5440 lbs.
	6.70-15, 4-ply	24 psi			

*Maximum load limited by tire safety standards.

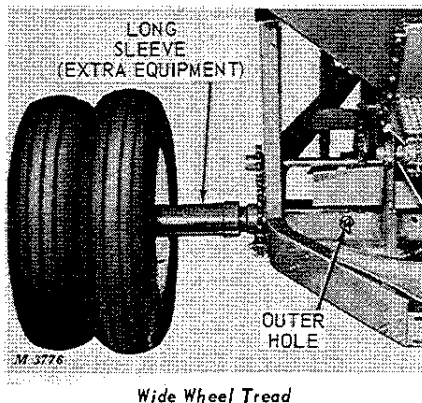
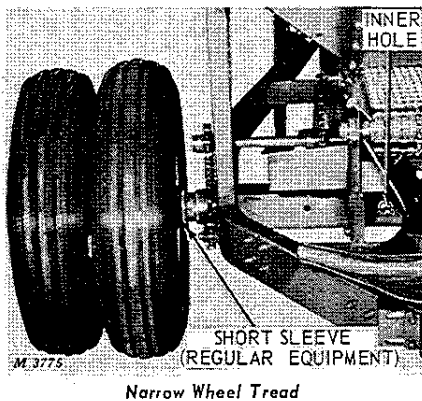
**Maximum allowable gross vehicle weight.

ADJUSTING WHEEL TREAD

Wheel Tread Chart			
Wheel Position	Center of Single Wheel	Center of Dual Wheels	Center of High Flotation Tire
Narrow Tread	56-1/4"	58"	58-1/4"
Wide Tread	71-1/4"	73"	73-1/4"

The narrow wheel tread is recommended for normal operation.

For row-crop work or other tire clearance requirements, the spreader wheels may be adjusted to the wide-tread position by installing a longer drive sleeve (extra equipment) to replace the regular short sleeve.



To set the wheels in the wide tread position, first jack up the spreader.

Remove the left-hand axle and wheel assembly by removing the bolt from the inner hole in spreader frame. Replace short drive sleeve with the long sleeve and reassemble bolt through outer hole.

Move the right-hand axle to the wide tread position and bolt in place through outer hole. A long drive sleeve is not required on the right-hand axle.

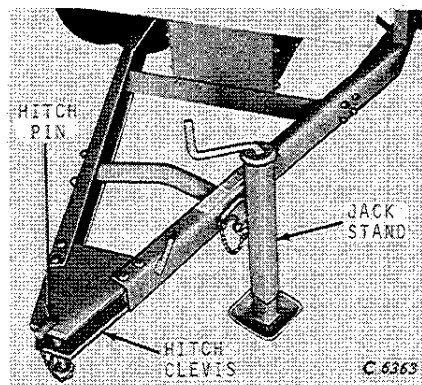
PREPARING THE TRACTOR

Check front and rear tractor tires to be sure they are inflated according to the recommendations given in the tractor operator's manual.

Provide sufficient weighting to stabilize front end of tractor when operating on hilly land or other adverse conditions. See your tractor operator's manual for front end weighting information.



HITCHING TO TRACTOR




Your spreader can be attached to any tractor having a drawbar that conforms to ASAE-SAE standards. The top of the rear end of the drawbar should be 13 to 17 inches from the ground.


Use the jack stand to raise or lower the spreader hitch clevis into position to engage the tractor draw-

6 Operation

HITCHING TO TRACTOR— Continued


bar. Back the tractor so drawbar is positioned between the upper and lower parts of the hitch clevis. Insert hitch pin. Secure the hitch pin with the spring locking pin.

 Do not transport the spreader unless the spring locking pin is installed in the hitch pin.

 When hitching tractor or vehicle to spreader, back past the spreader hitch. Then drive forward so that in making the connection, the tractor or vehicle will be moving away from you.

Raise the Jack stand and secure the jack pin and spring locking pin before transporting or operating the spreader.

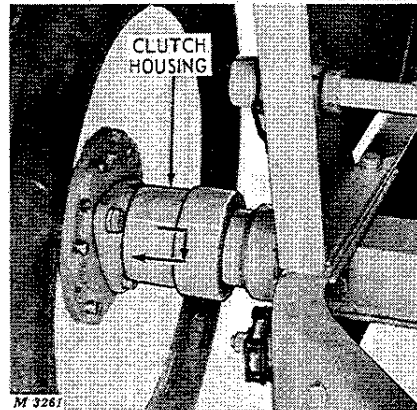
NOTE: Loop safety tie chains through frame when required and fasten securely.

 **CAUTION:** Always lower jack stand before unhitching spreader from tractor or towing vehicle. When the fertilizer spreader is in operation, the material will be removed from the front part of the box first. Do not unhitch the spreader without blocking the rear end of the spreader unless it is completely empty. A partly filled spreader will be unstable and tend to tip backward, resulting in possible injury to the operator or damage to the spreader.

When transporting the spreader for long distances or at high speeds, disengage the spreader drive by disengaging the clutch on the left-hand wheel axle. See next column.

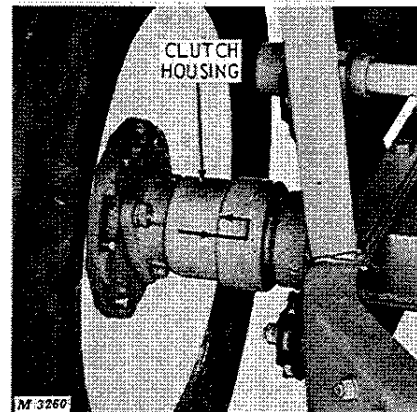
DRIVE WHEEL CLUTCH

A clutch on the left-hand wheel hub is provided to disengage the entire spreader drive when transporting to or from the field or for long distances.



Engaged

The spreader drive is engaged by pushing the clutch housing in toward the center of the machine slightly, revolving the housing and releasing as it slides back toward the wheel hub.



Disengaged

To disengage the spreader drive, force the clutch housing toward the

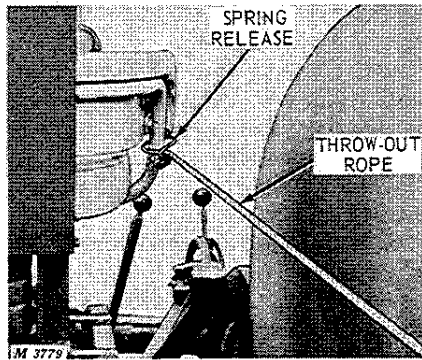
spreader as far as possible. Revolve the housing until it positions in a detent inside the clutch.

Follow the direction of the arrows shown in illustrations on page 6, for clutching and declutching.

If fertilizer begins to build up around both ends of the wheel clutch and clutching becomes more difficult, apply grease to grease fitting to force fertilizer out and to make operation of the clutch easier. See lubrication instructions on page 22.

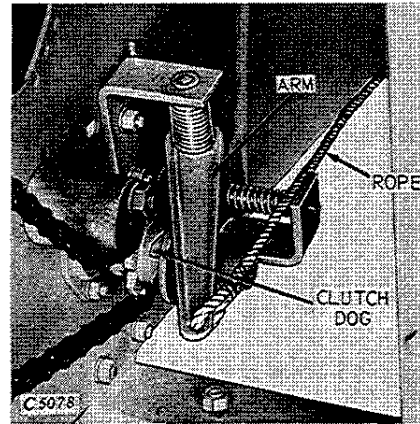
When cleaning the spreader, also clean the wheel clutch with water. At the same time remove any hard and caked fertilizer from around the clutch housing.

THROW-OUT CLUTCH



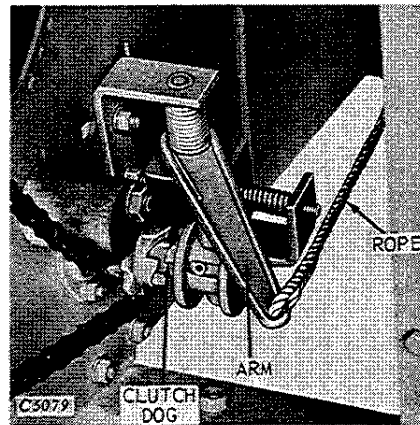
The throw-out clutch engages and disengages the apron drive, starting or stopping the flow of fertilizer. The throw-out is controlled by a rope, attached to the tractor seat.

A spring release on the end of the rope prevents damage to the throw-out if you uncouple the tractor without removing the rope, or whenever the rope becomes too tight.



Engaged

To engage the apron and drive, pull the throw-out rope.



Disengaged

To disengage the clutch and stop the apron, pull the rope again. When reaching the end of the field, disengage the apron before slowing down. A more uniform application can be obtained by disengaging the apron to stop the flow of fertilizer to the spinner rather than operating slower than 4 miles per hour (the rated governor speed).

8 Operation

THROW-OUT CLUTCH—Continued

Before stopping the tractor, disengage the throw-out clutch. This will prevent fertilizer on the apron from spilling out onto the spinner and then leaving a buildup of fertilizer on the ground.

Keep the throw-out mechanism clean at all times.

IMPORTANT: To keep parts working properly, add a few drops of oil to all pivot points in throw-out mechanism after each day's operation.

STARTING SPREADER IN THE FIELD

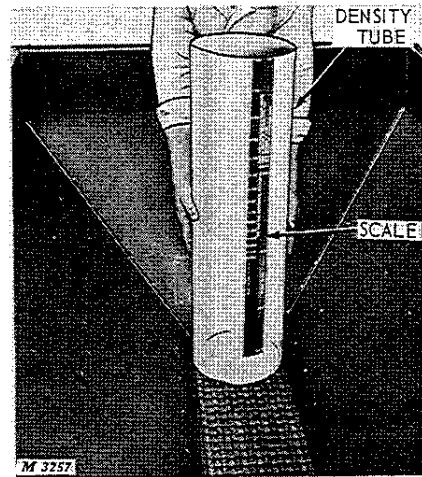
If acre counter (extra equipment) is used, set indicator at zero.

IMPORTANT: Before filling the hopper with either fertilizer or grain, be sure to determine material density using the density tube as follows.

Before starting the spreader in the field it is necessary to (A) determine the density of the material to be spread, (B) measure the width of spread, (C) use the rate calculator to calculate the index setting for the quantity of fertilizer or grain to be applied per acre.

These factors must be known before you can adjust the spreader for quantity of distribution as explained on page 11.

A. USING DENSITY TUBE



A density tube has been provided with your spreader to accurately compensate for the variations in the weights of the many varieties of commercial fertilizer as well as that of grains.

The density tube will save you many hours of calibrating and recalibrating your spreader to obtain the exact quantity per acre you desire each time you change types and brands of fertilizer.

Use the density tube in the following manner:

1. Before filling the spreader, place the density tube inside the spreader hopper on top of the chain-belt apron. The chain-belt apron must be thoroughly clean. Position the tube closest to the rear of the spreader with the numbers on the scale right-side-up.

2. Pour in the contents from either a 50 or 80-pound bag of material to be spread. If material is not bagged, weigh either 50 or 80 pounds on a scale and pour it into the density tube.

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