

JOHN DEERE 81 UNIT PLANTER

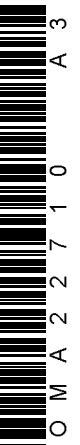


OPERATORS MANUAL JOHN DEERE 81 UNIT PLANTER

OMA22710 A3 English

DEERE HARVESTER WORKS
OMA22710 A3

LITHO IN THE U.S.A.
ENGLISH





To the Purchaser

This new planter was carefully designed and manufactured to give years of dependable service. To keep it running efficiently, read the instructions in this operator's manual. Each section is clearly identified so you can easily find the information you need - whether it is operation, lubrication, or service. Read the Table of Contents to learn where each section is located. Use the alphabetical index for fast reference.

In addition to the equipment furnished with your planter, attachments are available to help you do a better job in special crop conditions. These are described in the special equipment section of this manual and can be purchased from your John Deere dealer.

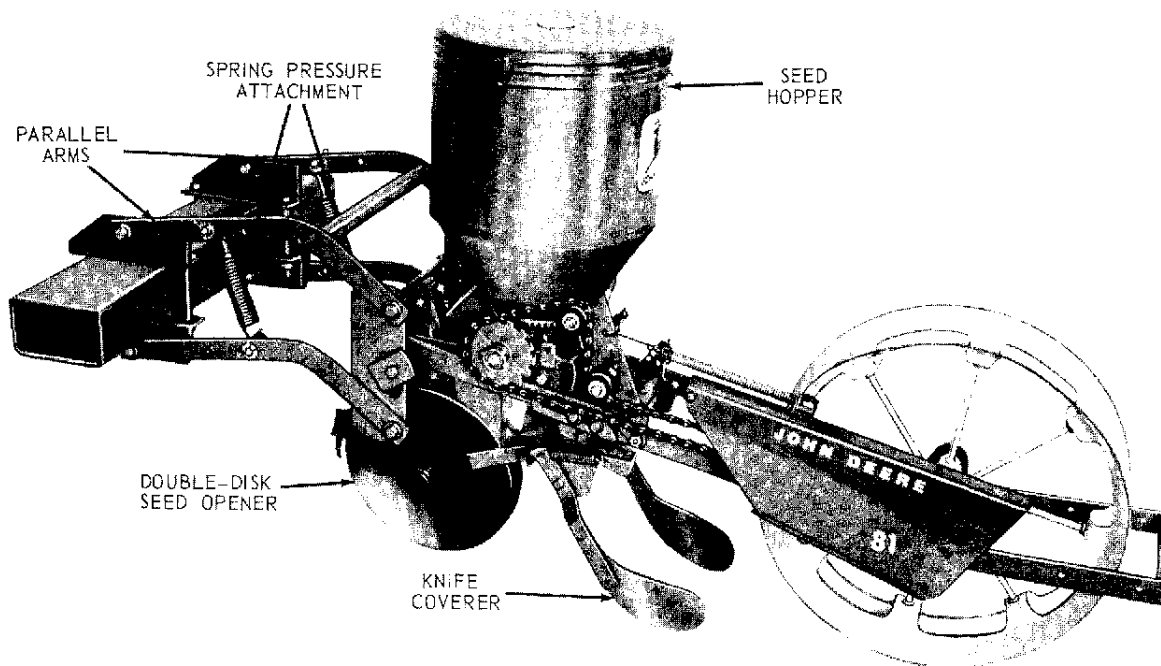
"Right-hand" and "left-hand" sides are determined by facing in the direction the planter will travel when in use.

Record your planter serial number in the space provided on page 61. Your dealer needs this information to give you prompt, efficient service when you order parts or attachments. If your planter requires replacement parts, go to your John Deere dealer where you can obtain genuine John Deere parts - accept no substitutes.

The warranty on this planter appears on your copy of the purchase order which you should have received from your dealer when you purchased the planter.



This safety alert symbol identifies important safety messages in this manual. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.



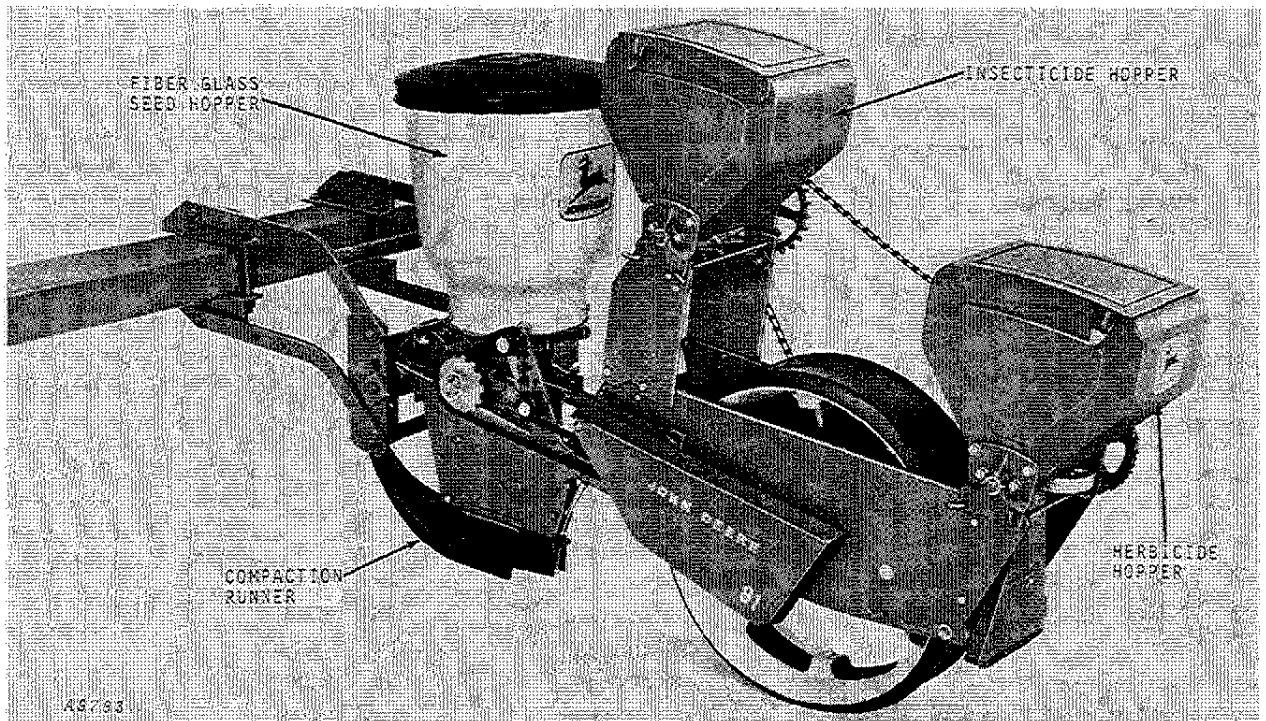
89584

John Deere 81 Unit Planter with Double-Disk Seed Opener, Metal Seed Hopper, Knife Covering Attachment, and Regular Spring Pressure Attachment



Contents

	Page
IDENTIFICATION VIEW	1
OPERATION	2-15
SAFETY SUGGESTIONS	16
LUBRICATION	17
TROUBLE SHOOTING	18-19
SERVICE	20
SPECIAL EQUIPMENT	21-39
ASSEMBLY	40-58
SPECIFICATIONS	59-61
INDEX	62-63



John Deere 81 Unit Planter with Runner Seed Opener, Fiberglass Seed Hopper and Insecticide and Herbicide Combination Attachment



Operation

PREPARING THE TRACTOR

All Tractors

For complete operating instructions concerning the tractor, refer to the tractor operator's manual.

Rear Wheel Tread

When an even number of units are being used, set tractor wheel tread as nearly as possible twice the distance of the row width. For example: for 40-inch row widths, set the tractor wheel tread at 80 inches.

Tire Pressure

Consult your tractor operator's manual for front and rear tire pressure.

Attaching Toolbar To Tractor

Attach the toolbar mounting brackets to the hitch draft links and secure side with quik-lock pin. Secure tractor center link to toolbar hitch mast.

Adjusting Speed of Rockshaft Drop

Set the speed of the rockshaft drop on tractor on which the rockshaft and implement drop can be regulated. Adjust the throttle valve to give a smooth drop of the planter.

Front-End Weighting for Integral or Semi-Integral Implements

Front ballast (added weight) may be required for stability and steering control when operating.

The total maximum amount of weight recommended at the front wheels for normal field operation is approximately 1/3 of the total tractor weight.

The table on page 3 was developed on this basis to provide maximum safety for the operator and maximum efficiency of the tractor-implement combination.

Add additional ballast, when needed, for safe transport stability.

⚠ CAUTION: Front end ballast may not always maintain the required stability if the tractor is driven too fast over rough ground with planter in the raised position. Be safe and drive slowly under these conditions.

To determine if additional front ballast is necessary for transport stability, refer to the code number listed on the following page pertaining to your size planter. Using this number, see "Front Ballast" in your tractor operator's manual for proper weighting.

IMPLEMENT CODES FOR INTEGRAL PLANTERS

Planting Units								
Equipped With:	Number of Rows							
	1	2	4	6	8	12		
Unit Only	27	54	108	162	216	324		
With Insecticide	32	64	128	192	256	384		
With Herbicide	33	66	132	198	264	396		
With Insecticide & Herbicide	37	74	148	222	296	444		

Toolbar, Hitch, Gauge Wheels and Markers*								
Marker Alternatives	Gauge Wheel Mounting	Toolbar Size						
		5'6" x 4" x 7"	12'6" x 4" x 7"	15' x 4" x 7"	18' x 4" x 7"	22' x 5" x 7"	26'6" x 5" x 7"	30'6" x 5" x 7"
Mechanical or Medium Straight Hydraulic	To Front	34	42	45	49	53	62	67
	To Rear	48	56	59	63	67	76	81
Long Straight Hydraulic	To Front	35	43	46	50	54	63	68
	To Rear	49	57	60	64	68	77	82
Folding Hydraulic	To Front	40	48	51	55	59	68	73
	To Rear	54	62	65	69	73	82	87

* If endwise transport attachment is used, add 11 to total code in table.

IMPLEMENT CODES FOR SEMI-INTEGRAL PLANTERS

Planting Units							
Equipped With:	Number of Rows						
	1	2	4	6	8	12	
Unit Only:	14	28	56	84	112	168	
With Insecticide	17	34	68	102	136	204	
With Herbicide	17	34	68	102	136	204	
With Insecticide & Herbicide	19	38	76	114	152	228	

Toolbar, Hitch, Gauge Wheels, Markers and Hydraulic Lift Assist Wheels* *					
Marker Alternatives	Toolbar Size				
	15' x 4" x 7" (1) * * *	18' x 4" x 7" (1) * * *	22' x 5" x 7" (2) * * *	26'6" x 5" x 7" (2) * * *	30'6" x 5" x 7" (2) * * *
Medium Straight Hydraulic	17	19	21	26	28
Long Straight Hydraulic	18	20	22	27	29
Folding Hydraulic	20	22	24	29	31

* * If endwise transport attachment is used, add 5 to total code in table.
 * * * Quantity of Lift Assist Wheels

Example:

Let's assume you have six rows of integrally mounted units with insecticide attachments. By checking the above chart, you will find an implement code of 192. Add to this the implement code for your toolbar combination.

Assuming that you have a 22-foot by 5- x 7-inch toolbar with long, straight hydraulic markers and

gauge wheels mounted to the front, your toolbar combination implement code shown in the above chart would be 54. Adding 192 and 54 would give you a total implement code of 246.

Check your tractor operator's manual to see how much front end weight will be required using the total implement code calculated from the above charts.

PREPARING THE TRACTOR—Continued

Belt Pulley

The belt pulley must be removed if the tractor is so equipped.

Sway Blocks

Sway blocks must be attached to eliminate all side sway except for contour farming.

Setting the Rockshaft Selector Lever

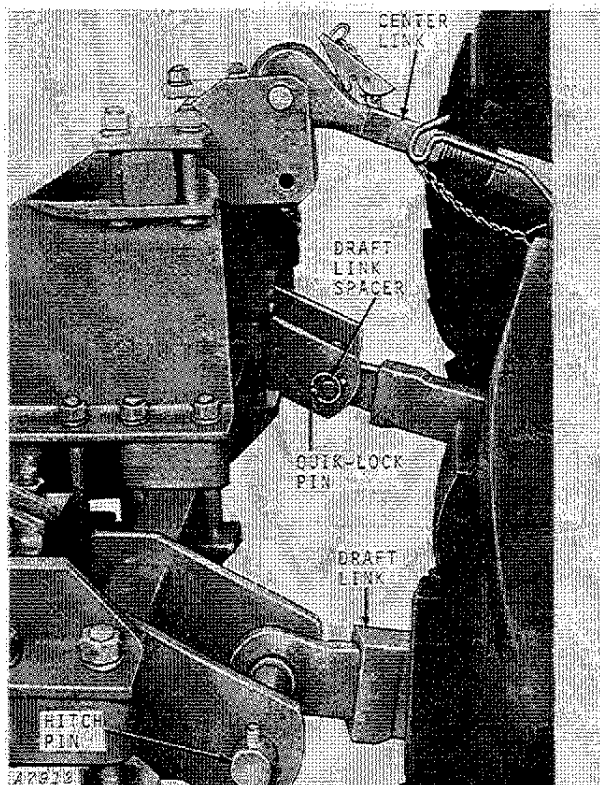
Set the selector lever in the "Zero" or "D" position, depending upon your model tractor.

Lift Links

Adjust the lift links for transport clearance and lateral float. See Tractor operator's manual.

ATTACHING TO TRACTOR

3-Point Hitch



Be certain rockshaft selector lever is in the "Zero" or "D" position.

Raise draft links between inside and outside supports, line up holes, and insert hitch pins through outside hitch supports. Push hitch pins through draft link ball sockets and inside hitch supports.

Position draft link spacer on hitch pin as shown at lower left and secure with Quik-Lock pin.

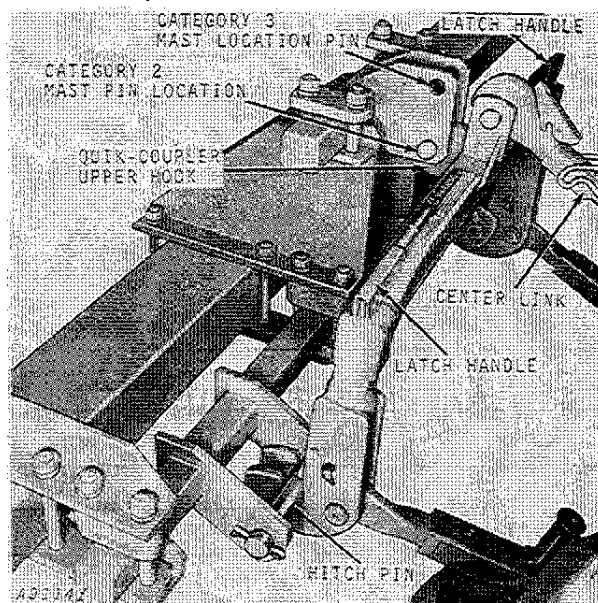
If tractor is equipped with telescoping draft links, close draft links either by raising and lowering planter with rockshaft control lever or by backing up tractor.

Be sure lock pins snap into place.

Connect center link to mast. It may be necessary to change length of center link with adjusting handle.

When using semi-integral hitch, **the center link is not used.** See page 6.

Quik-Coupler



Be certain mast pin of integral hitch is in lower hole of mast before attaching to category 2 Quik-Coupler, or in upper hole of mast before attaching to category 3 Quik-Coupler.

Be certain rockshaft selector lever is in the "Zero" or "D" position.

Lift latch handles to vertical position to lock latches in released position. Lower Quik-Coupler until the attaching hooks are lower than the planter hitch pins.

Back tractor up until Quik-Coupler attaching hooks are in position to engage planter hitch. Slowly raise rockshaft until spring-loaded latches automatically lock hitch pins in place. Push inward on latch handles until they are flat against coupler frame to lock lower attaching hooks.

DETACHING FROM TRACTOR

3-Point Hitch

With planter and tractor on firm level ground, lower planter to ground.

If planter is equipped with parking stand, secure stand in lowered position. See page 7.

Continue lowering planter until weight of planter is supported by parking stand.

Remove Quik-Lock pins from planter hitch pins and remove hitch pins to free tractor draft links.

If planter is equipped with hydraulic disk marker attachment, secure marker arms with transport locking pins and disconnect hydraulic hoses from tractor.

Drive tractor forward away from planter.

Replace hitch pins and Quik-Lock pins in planter hitch.

Quik-Coupler

With planter and tractor on firm level ground, raise tractor rockshaft far enough to reach latch handles. Raise handles to vertical position to release latches. Lower planter to ground.

If planter is equipped with parking stand, secure stand in lowered position. See page 7.

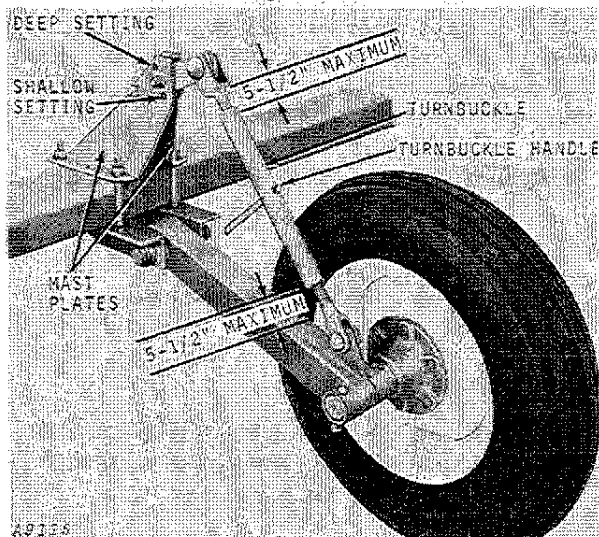
Continue lowering Quik-Coupler until coupler hooks clear planter hitch.

If planter is equipped with hydraulic disk marker attachment, secure marker arms with transport locking pins and disconnect hydraulic hoses from tractor. Drive tractor forward away from planter.

PREPARING THE PLANTER

Toolbar Gauge Wheels (4- x 7-Inch or 5- x 7-Inch Toolbar)

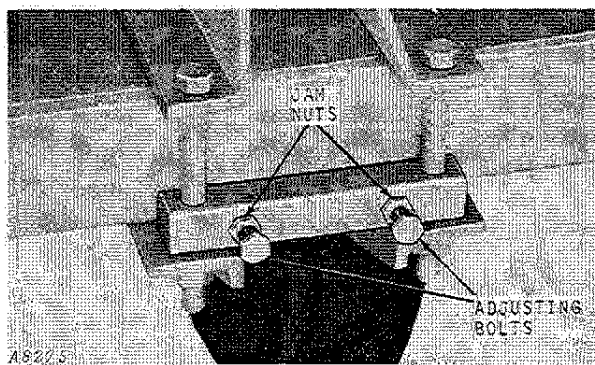
The toolbar gauge wheels regulate toolbar height. For best results, the toolbar should be held in a fixed working position 20 inches above the **seed planting depth**. As an example, if the planter unit is set for 2-inch planting depth, the bottom of the toolbar should be 18 inches above the ground.



Three holes in the mast plates provide for deep, medium, or shallow depth settings.

The turnbuckle provides fine adjustment within the three settings in the mast plates.

CAUTION: Do not extend turnbuckle so there is more than 5-1/2 inches of thread showing on either end.

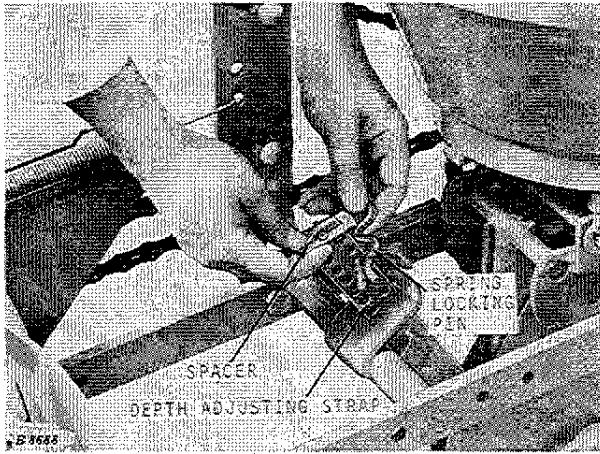


An adjuster block is used to insure the gauge wheels maintain straight-ahead alignment.

To adjust, loosen jam nuts and loosen one adjusting bolt, then tighten the remaining bolt. When gauge wheel is in the straight-ahead position, tighten jam nuts.

Depth of Planting

The planting depth is gauged by the planter press wheel except when using a gauge shoe, gauge wheel, or V-wing.



When the press wheel is used for gauging depth, the planting depth of each unit is determined by the setting of the spring locking pin in the depth adjusting strap. To change the planting depth, move the pin up to increase the depth or down to decrease the depth.

NOTE: When gauging depth with gauge shoes or gauge wheels, spring locking pin should be in top hole of adjusting strap.

Each hole in the depth adjusting strap represents a change of approximately 1/2 inch in the planting depth. To increase the planting depth by 1/4 inch, remove the spacer from under the locking pin.

Adjust all units to plant at the same depth.

When V-wings, gauge shoes, or gauge wheels are used, the depth of planting depends upon the position of each V-wing, gauge shoe, or gauge wheel in relation to the runner.

NOTE: The location of the spring locking pin in the adjusting strap may not necessarily be the same on each planting unit for even planting.

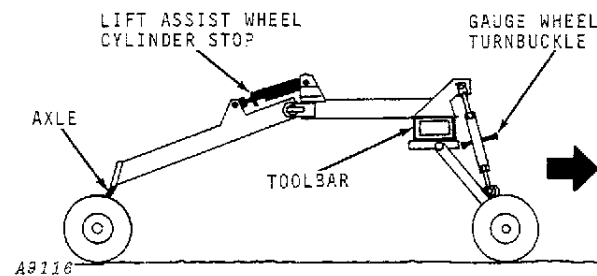
Leveling Planter

Integral

The integral toolbar planter is leveled by adjusting the center link of the 3-point hitch of the tractor.

THE TOP EDGE OF RUNNER OF THE PLANTING UNITS MUST BE PARALLEL TO THE GROUND WHEN THE TOOLBAR IS LOWERED TO THE OPERATING POSITION.

Semi-Integral



To level the semi-integral toolbar planter, proceed as follows:

Adjust gauge wheel turnbuckle so bottom front edge of toolbar is approximately 20 inches above seed planting depth.

Adjust remote cylinder stop on each lift assist wheel so with cylinder retracted the toolbar is level. Additional adjustment may be obtained by raising or lowering the lift assist wheel axle.

RAISING AND LOWERING PLANTER

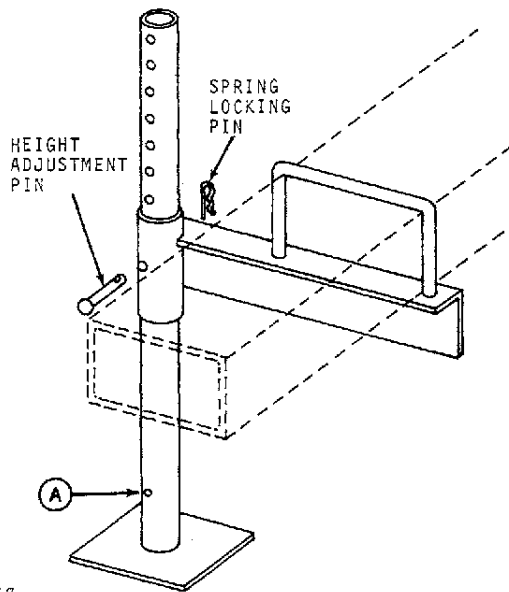
Integral

The planter is raised or lowered with the rear-mounted toolbar by the tractor hydraulic system.

Semi-Integral

Extend remote hydraulic cylinder on the lift assist wheel to lift rear of planter, then raise rockshaft on tractor to lift front of planter.

PARKING STANDS



49117

For 4- x 7- or 5- x 7-Inch Toolbars

Remove height adjustment pin and spring locking pin from parking stand and raise or lower stand to desired height. Replace height adjustment pin and spring locking pin.

Position height adjustment pin in hole "A" for transport. Secure with spring locking pin.

MARKERS

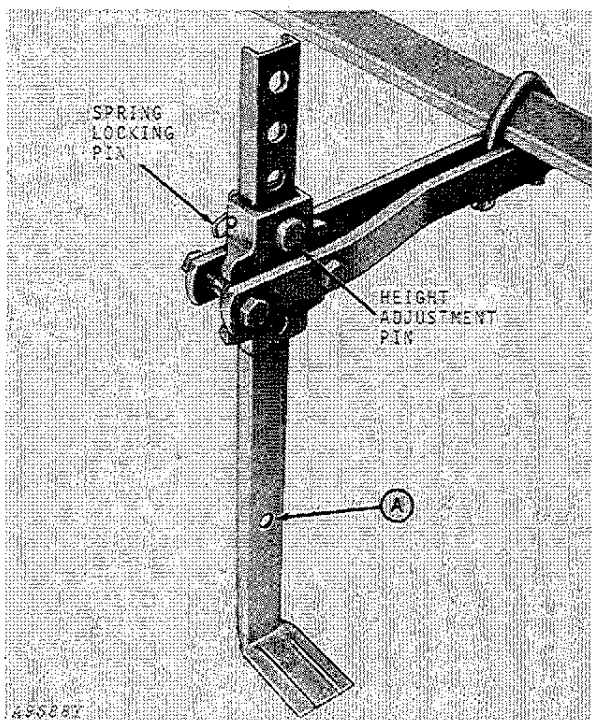
Disk-Type

Two- or four-row mechanical disk markers, or straight or folding hydraulic markers are available.

For operation and assembly instructions, see directions accompanying the marker.

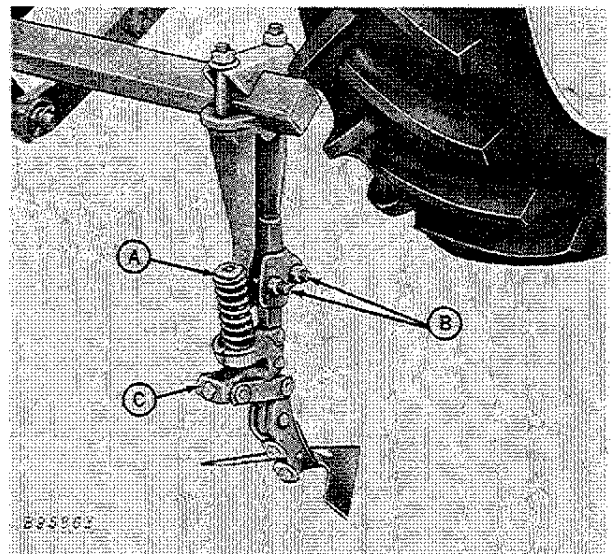
Spring-Trip Sweep-Type For Wide Front-End Tractor (Two-Row Only)

The two-row sweep-type marker should be mounted at the desired row width from the center of the toolbar so it will follow directly behind the tractor tire. The marker makes a furrow which can be easily followed with the wide front end tractor tire.



495887

For 2-1/4-Inch Square Toolbars



895965

Trip the spring trip marker to be sure it functions properly. If trip requires adjustment, adjust at "A".

Adjust marker depth at "B".

Adjust angle of sweep at "C".

The parking stand should be used to prevent the planter from tipping when unhitching from tractor.

SEED PLATES

The selection of the seed plates is one of the most important steps in preparing the planter for the field.

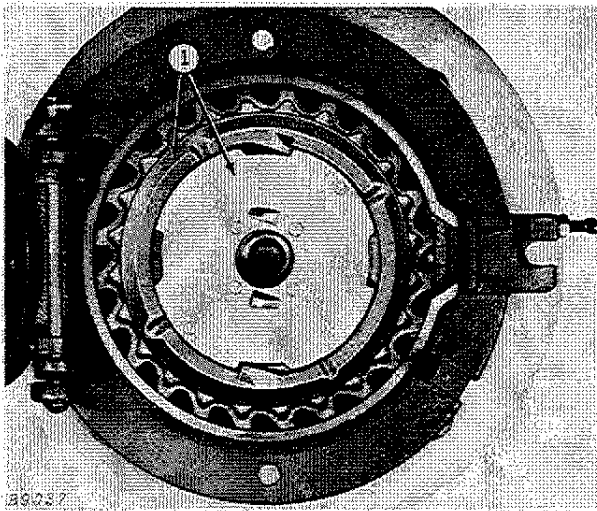
There is a large variety of John Deere seed plates available in various cell sizes and number of cells.

Growing conditions change from year to year, and the size of the seed will also vary. Therefore, it is quite likely that different seed plates are required to plant the same variety of seed from year to year.

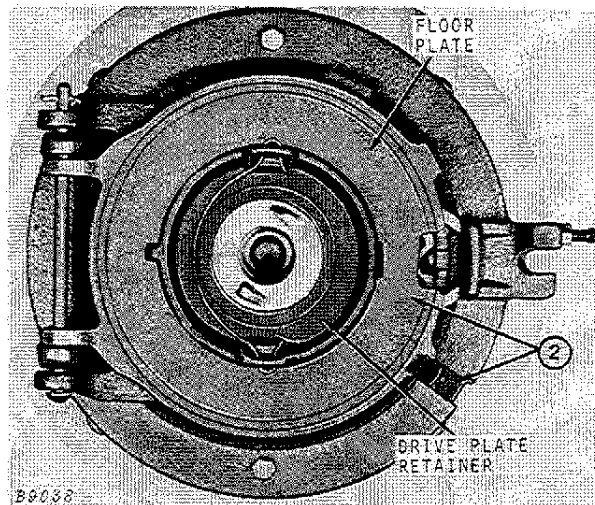
There are two ways to select seed plates. One is to follow the recommendation of the seed supplier and the other is to take a sample of the seed to be planted to a John Deere dealer and let him recommend the seed plates.

In either case the accuracy of the seed plate selected should be checked when installed in your planter and operated at the planting speed you intend to travel. The best check is to plant a short distance, at the desired planting speed, and then stop and dig up the hills of seed to determine the actual planting rate.

To install or change seed plates, proceed as follows:



1. Install recommended seed plate and drive plate.



2. Close recommended floor plate and hold in place with floor plate hinge.

NOTE: Drive plate and/or floor plate may have to be turned over as recommended.

False ring may be used as recommended.

The following are lists of the most popular seed plates.

PLATES FOR SOYBEANS

20-Cell

H1255B

H2527B (Use with H1279B
Floor Plate)

Thank you so much for reading.
Please click the “Buy Now!”
button below to download the
complete manual.



After you pay.

You can download the most
perfect and complete manual in
the world immediately.

Our support email:

ebooklibonline@outlook.com