

JOHN DEERE 22 AND 122 ONE-ROW COTTON PICKERS



JOHN DEERE

OPERATORS MANUAL JOHN DEERE 22 AND 122 ONE-ROW COTTON PICKERS

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ENGLISH



To the purchaser

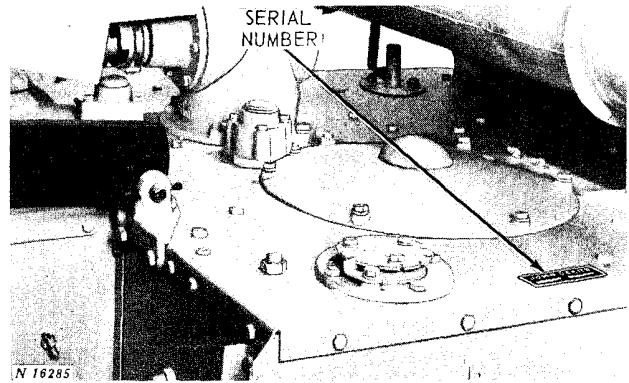
Your new cotton picker was built to rigid manufacturing standards. Material and workmanship are the best. However, the machine will serve you in only direct proportion to the care you give it. How long it will last and continue its good work is a matter entirely in your hands.

The way you operate your cotton picker and the care you give it have much to do with the service and satisfaction you will get from it. This manual has been carefully prepared and illustrated to show you what to do and when to do it. It explains the adjustments that are built into the machine and gives instructions on when and how to make these adjustments. The information given in this manual will afford a clear understanding of the fundamentals of cotton picker harvesting. The best use of these fundamentals to suit the conditions in which the machine is operating is a responsibility that is completely up to the operator.

If you find you need information not covered in this manual or if your cotton picker requires special servicing, take advantage of the facilities offered by your John Deere dealer. He has trained mechanics, who are kept informed on the best methods of servicing and can give you prompt, "know-how" service in the field or in his shop.

Location References. "Right" and "Left," "Front" and "Rear" refer to the operator's "Right" or "Left" and "Front" or "Rear" when facing the same direction the cotton picker is operated.

Serial number



You will find the serial number of your cotton picker stamped on a plate located on the right-hand side of the picking unit. Write this serial number in the place provided below for handy reference later.

PICKER SERIAL No. 22

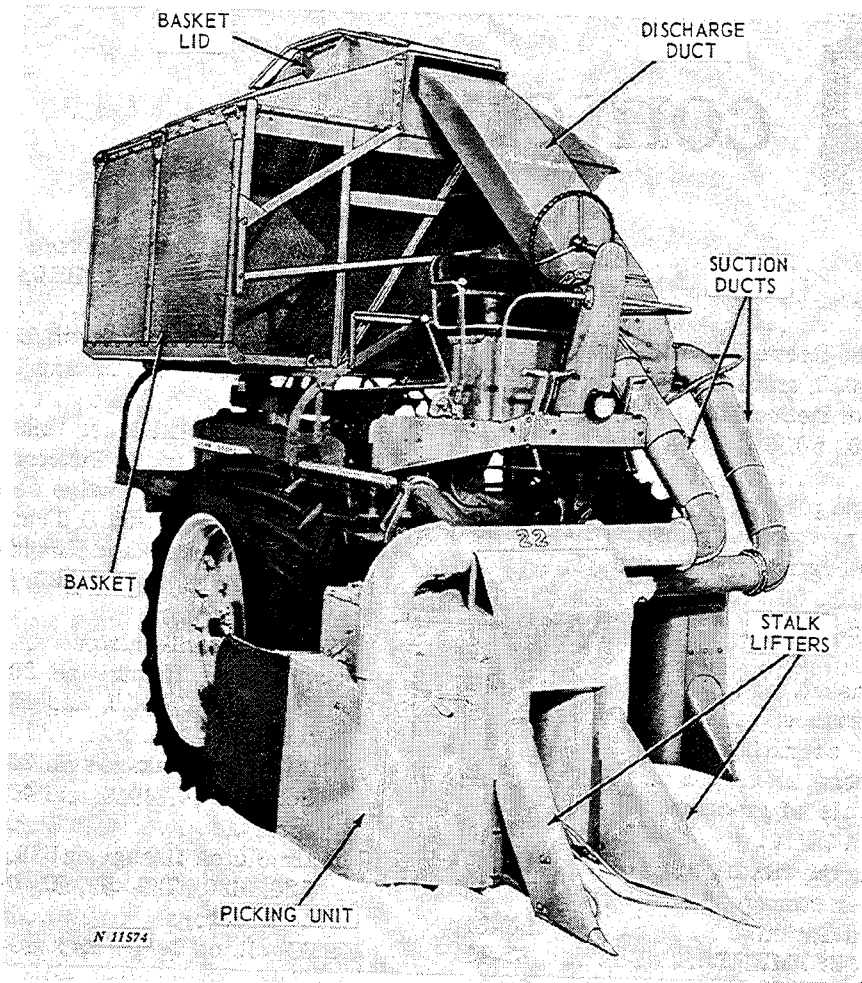
No. 122

Date Purchased 19

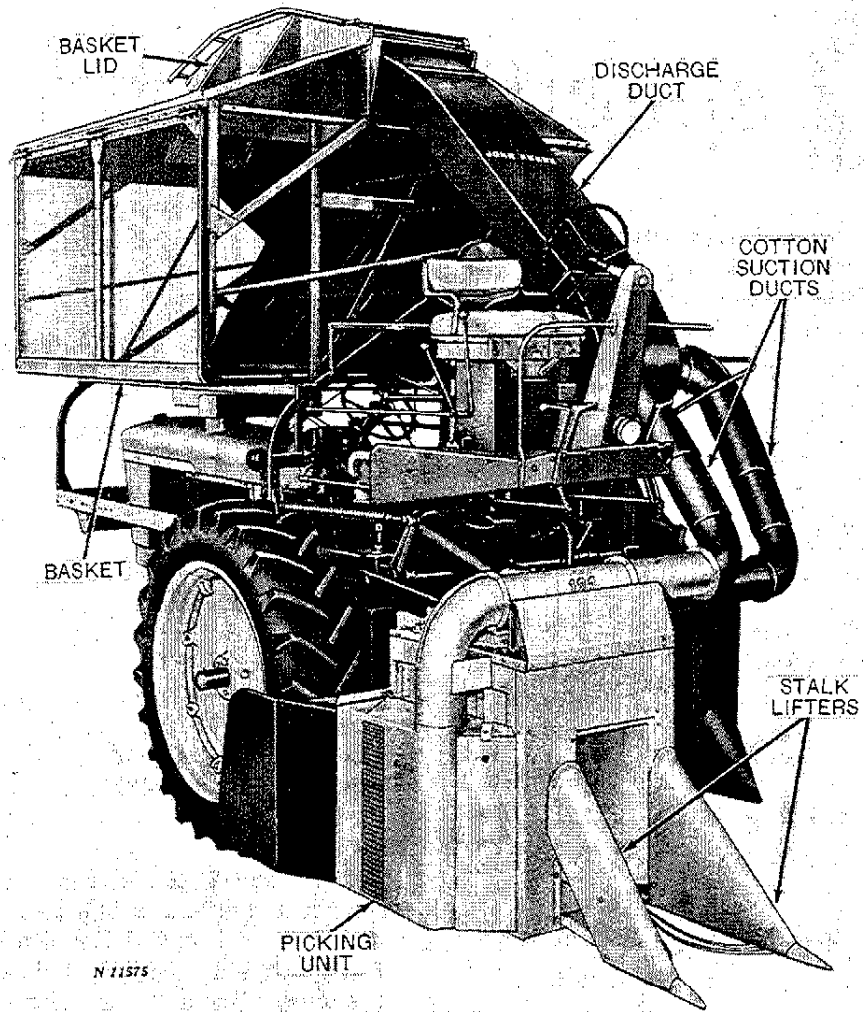


contents

	Page		Page
SPECIFICATIONS.	4	Basket lift lever linkage on 2010, 2510, 3010, 3020, 4010, and 4020 Tractors.	35
DESCRIPTION.	5-8	Picking unit lift lever linkage on 530, 630, 730, 520, and 720 Tractors.	36
OPERATION.	9-21	Picking unit lift lever linkage on 50, 60, 70, A, and G Tractors.	36
Controls on John Deere 2010, 2510, 3010, 3020, 4010, and 4020 Tractors	9-10	Hydraulic circuit valve selector on 50, 60, 70, A, and G Tractors.	37
Controls on John Deere 530, 630, 730, 520, 620, 720, 50, 60, 70, A, and G Tractors	10-11	Throttle linkage and throttle stop on 2010, 2510, 3010, 3020, 4010, and 4020 Tractors.	37
Know your cotton picker.	12	Water control linkage.	37-38
Running-in the new cotton picker.	12	Foot clutch linkage on 2010, 2510, 3010, 3020, 4010, and 4020 Tractors.	38
Before-after operation checks and adjustments.	12	Foot brake linkages on 2010, 2510, 3010, 3020, 4010, and 4020 Tractors.	38
Starting the picker.	13	Main clutch linkage on 530, 630, 730, 520, 620, 720, 50, 60, 70, A, and G Tractors.	38-39
Transporting.	13-14	PTO clutch lever linkage on 2010, 2510, 3010, 3020, 4010, and 4020 Tractors.	39
Dumping the basket.	14	PTO clutch lever linkage on 530, 630, 730, 520, 620, 720, 50, 60, 70, A, and G Tractors.	39
Tractor maintenance.	15	Gearshift linkage on 2010, 2510, 3010, 3020, 4010, and 4020 Tractors.	40
Cold weather operation.	15	Gearshift linkage on 530, 630, 730, 520, 620, 720, 50, 60, 70, A, and G Tractors.	40
Safety suggestions.	15	Brake pedal linkage on 530, 630, 730, 520, 620, 720, 50, 60, 70, A, and G Tractors.	40
The fundamentals of mechanical cotton picking	16	Steering mechanism.	41
Using picker in the field.	17-18	Drives.	42
Before and after storage.	19	Picking unit and fan drive belts.	42
Tire size and inflation.	20-21	Care of V-belts.	42
OPERATING ADJUSTMENTS.	22-42	Tractor Engine Speeds.	43-44
Picking Unit.	22-29	ATTACHMENTS.	45-46
Stalk lifters.	22	LUBRICATION AND PERIODIC SERVICE.	47-57
Spring fingers and grid bars.	23	TROUBLE SHOOTING.	58-67
Pressure plates.	23-24	SERVICE.	68-70
Drum clutch.	25	Spindles and picker bars.	68-70
Spindles and picker bars.	25-26	Moisteners.	70
Doffer.	26-28	REMOVING AND ATTACHING PICKER	71-105
Spindle moisteners.	28-29		
Water system.	30-32		
Selective moisture control.	30		
Water metering valves.	31		
Water tank.	32		
Water strainer.	32		
Picking unit controls.	32-35		
Speed of picking unit drop.	32		
Picking unit stop screw.	33		
Height of lift adjustment.	33		
Picking unit balance spring.	34		
Picking unit stabilizers.	34-35		
Controls and linkages.	35-41		
Picking unit lift linkage on 2010, 2510, 3010, 3020, 4010, and 4020 Tractors.	35		



John Deere 22 Cotton Picker and 3020 Tractor



John Deere 122 Cotton Picker and 3010 Tractor



specifications

22 Picking Unit (Low and high drum)

No. of Picker Drums	2
No. of Picker Bars:	
Front Drum	16
Rear Drum	12
No. of Spindles:	
Low-Drum:	
Per Picker Bar	14
Total	392
High-Drum:	
Per Picker Bar	20
Total	560

122 Picking Unit (Low drum only)

No. of Picker Drums	2
No. of Picker Bars:	
Front Drum	12
Rear Drum	12
No. of Spindles:	
Per Picker Bar	14
Total	336

Performance

Will Pick . . . 36-, 38-, 40-, or 42-Inch Rows

Ground Speeds

Picking Speed 2-1/2 mph
 Transport Speed 9 to 12 mph
 Reverse Speed 1-1/2 to 2 mph

Capacities

Cotton Basket . . 271 Cu. Ft.—approximately
 1,200 Lbs. Seed Cotton*
 Water Supply Tank 40 U.S. Gallons

Shipping Weight

22 Low-Drum, Picker Alone,
 Approx. 4,330 Lbs.
 22 High-Drum, Picker Alone,
 Approx. 4,970 Lbs.
 122 Picker Alone, (Approx) 4,135 Lbs.

**These figures are based on approximately five pounds of seed cotton per cubic foot. The weight of seed cotton varies depending upon area and crop conditions.*

Dimensions

Length, Over-All 18 Ft., 8 In.
 Width, Over-All 9 Ft., 7 In.

Height:

22 Low-Drum and 122:
 Basket Lowered 13 Ft., 10 In.
 Basket Raised 17 Ft., 7 In.

22 High-Drum:

Basket Lowered 14 Ft., 10 In.
 Basket Raised 18 Ft., 7 In.

Speeds (Approx.)

Front Drum--22 86 rpm
 Front Drum-122 115 rpm
 Rear Drum (22 and 122) 115 rpm
 Spindles (22 and 122) 2980 rpm

Tractors

John Deere 2010 Tractor with single or dual hydraulic system, single remote cylinder control with breakaway coupling, single or dual front wheels, Power Take-off and Power Steering. Tire sizes as recommended on page 20. The 2010 Tractor must also be equipped with heat treated rear axles.

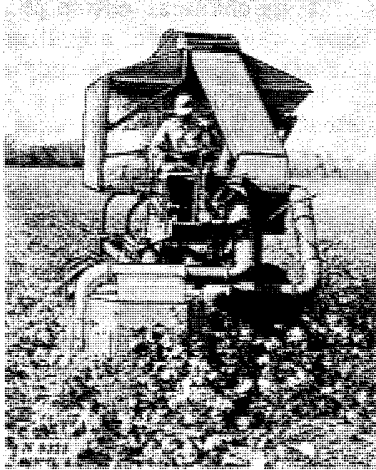
John Deere 2510, 3010, 3020, 4010 and 4020 Tractors with rear rockshaft, single or dual remote cylinder control valve with breakaway coupling. Single or dual front wheels and Power Take-off. Tire sizes as recommended on page 20.

John Deere 530, 630, 730, 520, 620, 720, 50, 60, 70, A, and G Tractors with rear rockshaft, single or dual remote cylinder control, single or dual front wheels, 540 or 1000 rpm transmission driven or engine driven Power Take-off. Tire sizes as recommended on pages 20-21. External speed changer cannot be used on PTO.

(Specifications and design subject to change without notice.)



description



Your new picker is a practical one-row cotton picker. The operating costs are low. It is easy to handle and transports fast. Attaching and detaching can be done quickly—without costly tractor conversion.

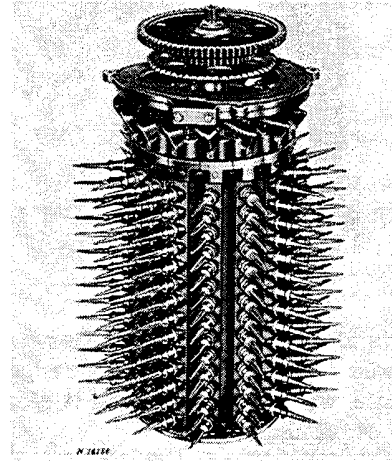
The picker consists of three basic elements.

1. One-Row Picking Unit
2. Platform and Controls
3. Fan Delivery System and Basket

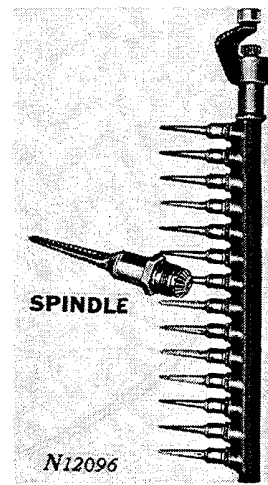
These three basic components are mounted in such a way that the tractor operates in reverse gear during the picking operation. For transporting, the picker is driven from the tractor seat, using the regular tractor forward speeds. However, on 2010, 2510, 3010, 3020, 4010, or 4020 Tractor, the picker may be transported from the operator's platform at transport speeds.

Picking unit

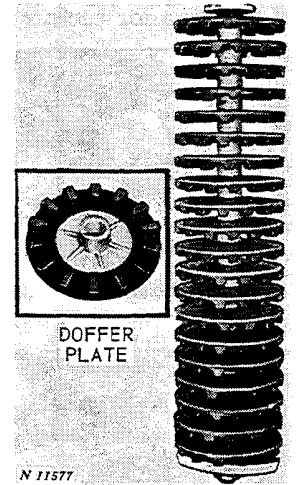
The heart of the picker is the highly efficient spindle-type picking unit. There are two drums of spindles. On the 22 Picker, the front drum consists of 16 cam-controlled spindle columns with 14 spindles on each column of the low-drum and 20 spindles on each column of the high-drum.



Low-drum front picking drum



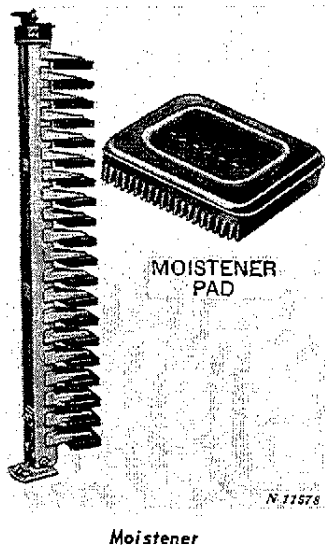
Spindle column



Doffer

On the 122 Picker, each drum consists of 12 cam-controlled spindle columns with 14 spindles on each column.

There is a doffer assembly for each spindle drum to unwind the cotton from the spindles and deliver it to a chute in the side door. Each assembly consists of a shaft with a series of aluminum alloy doffer plates that have rubber doffers molded to the plates. The low-drum unit has 14 doffers per shaft; the high-drum unit has 20.



Moistener

There is also a spindle moistener column for each spindle drum. The moistener pads wipe each spindle with water to keep it clean, for a better job of picking cotton.

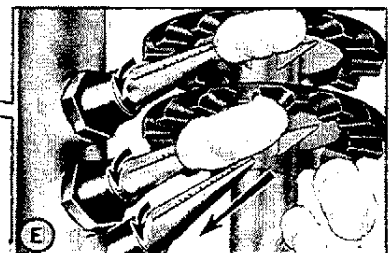
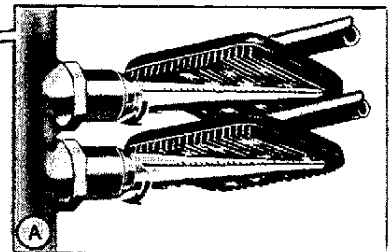
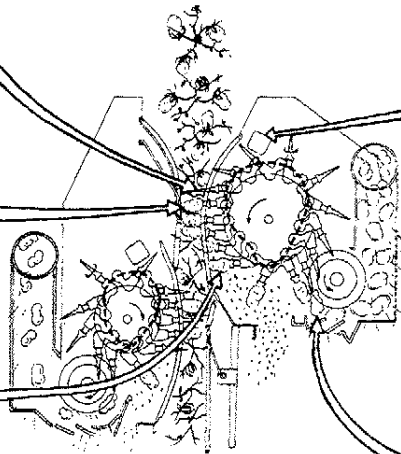
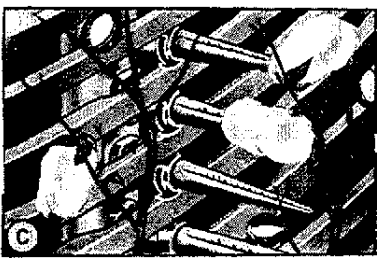
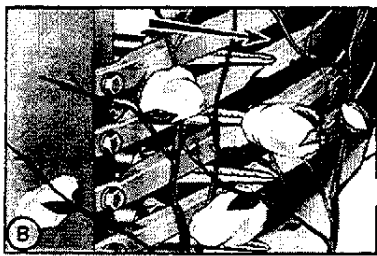
The stalk lifters guide the cotton plant into the picking zone of the unit where the grid bars and pressure plates take over to hold the plant in position for picking.

How the picking unit works

Knowing what is going on inside the picking unit will be a great help to you. It will give you a better understanding of the capabilities and limitations of a mechanical cotton picker. You will also know why certain adjustments are necessary and when to make the adjustments.

The illustration below shows what happens during the picking cycle. At "A" the spindles go under the moisteners and are cleaned of lint, plant sap and stain by a film of water.

Next the cleaned spindles start through the grid bars at "B." The speed of the spindle drums is synchronized with the picking speed of the tractor (2-1/2 miles per hour) so the spindles have no forward or backward motion in relation to the cotton plant. The rotating spindles simply poke straight into the cotton plant and then pull straight back. Because of this, the spindles can brush past unopened bolls and the stalks, leaving them undamaged.



N 11579

22 Cotton Picker Unit

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