

11 ONE-ROW COTTON PICKER SERIAL NO. 11-101



JOHN DEERE

OPERATORS MANUAL 11 ONE-ROW COTTON PICKER SERIAL NO. 11-101

OMN66559 (01MAY59) English

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ENGLISH



TO THE PURCHASER

Your new cotton picker was built to rigid manufacturing standards. Material and workmanship are the best. It will serve you in direct proportion to the care you give it. Depreciation, in a machine of this kind, is an item of expense that must be considered. 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 these Manuals 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 machine is headed or traveling.

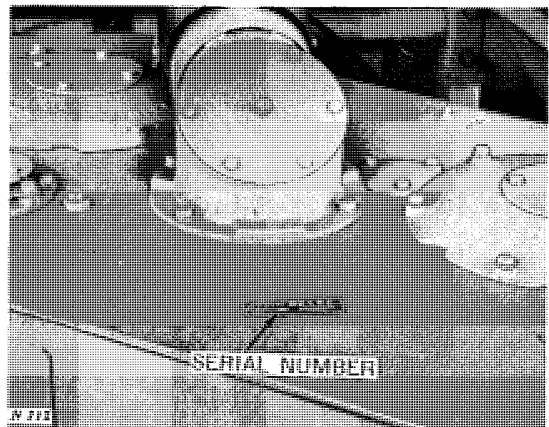
"Clockwise" refers to a shaft, screw, or similar part turning to the operator's "Right," or like the hands of a clock. "Counter-clockwise" refers to the operator's "Left."

SERIAL NUMBER

You will find the serial number of your cotton picker stamped on a plate located on the picking unit just behind the unit gear case. Write this serial number in the place provided below for handy reference later.

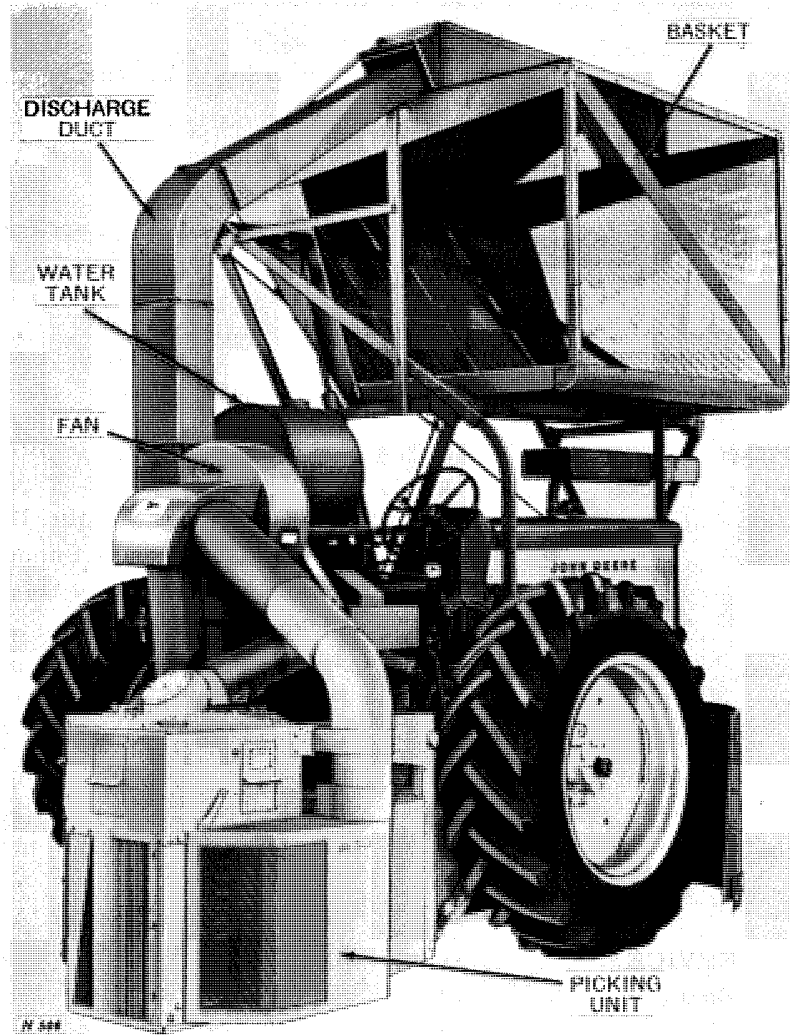
PICKER SERIAL No.....

Date Purchased....., 19....

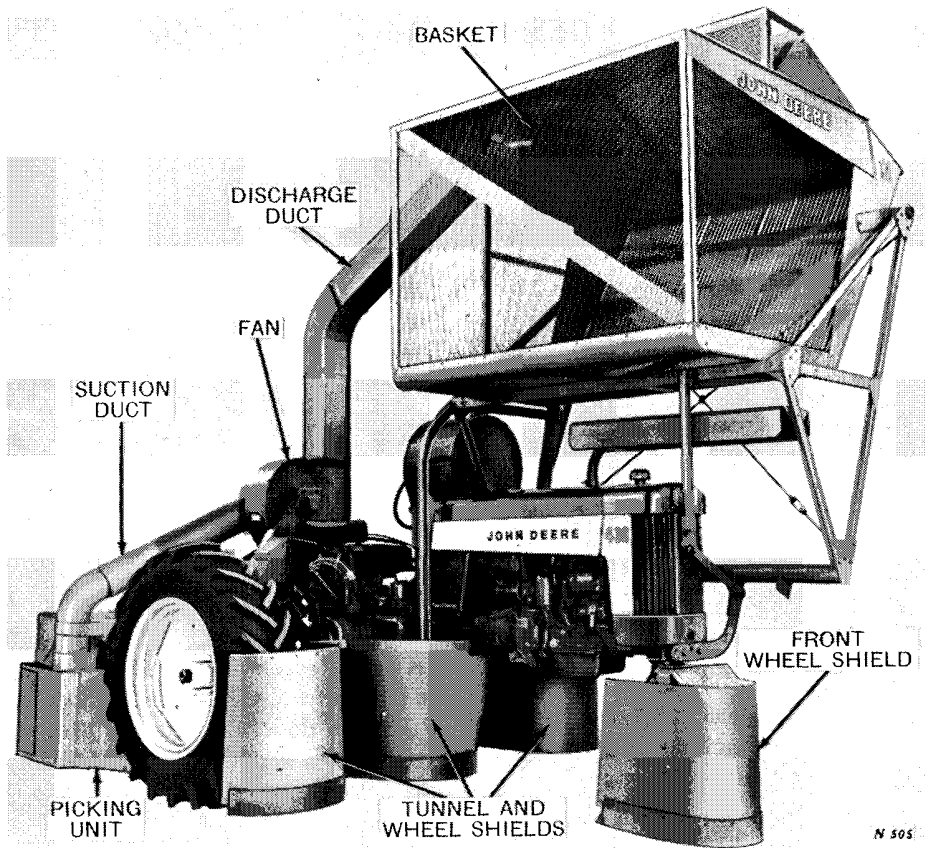


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Rear View of John Deere 11 Cotton Picker on John Deere "430" Tractor



Front View of John Deere 11 Cotton Picker on John Deere "430" Tractor

SPECIFICATIONS

Row Width

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

Picking Unit

No. of Picker Drums 2
 No. of Picker Bars:
 Front Drum 12
 Rear Drum 12
 No. of Spindles:
 Per Picker Bar 10
 Total 240

Ground Speeds

Picking Speed 2.25 mph on "530," "630,"
 "520," and "620" Tractors. 2
 mph on "430" and "420"
 Tractors.

Picking Unit Speeds (Speeds given for "530"
 Tractor equipped with 12.4 x 38 tires at 2.25
 mph. Speeds for other tractors vary slightly.)

Drums 103 rpm
 Doffers 1193 rpm

Spindles 2334 rpm

Fan 2429 rpm

Controls

Picking Unit Lift Tractor Rockshaft
 Basket Lift One Double Acting Hydraulic
 Cylinder Operated by Re-
 mote Cylinder Control Lever

Capacities

Cotton Basket 600 Lbs. Seed Cotton
 Water Supply Tank 25 U. S. Gallons

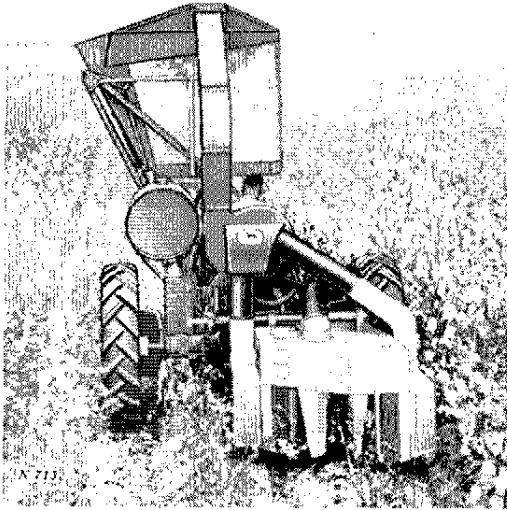
Dimensions (Mounted on John Deere "530" Trac- tor)

Length, Over-All 16 Ft.
 Width, Over-All 9 Ft. 2 In.
 Height:
 Basket Lowered 12 Ft. 4 In.
 Basket Raised 16 Ft. 4 In.

Shipping Weight 3100 Lbs. Approx.

(Specifications and design subject to change without
 notice.)

DESCRIPTION



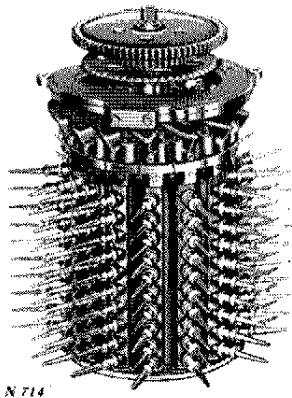
The No. 11 is a practical one-row cotton picker. The operating costs are low. It is easy to handle and transports fast. Attaching and detaching can be done quickly—without tractor conversion.

The picker consists of two basic elements.

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

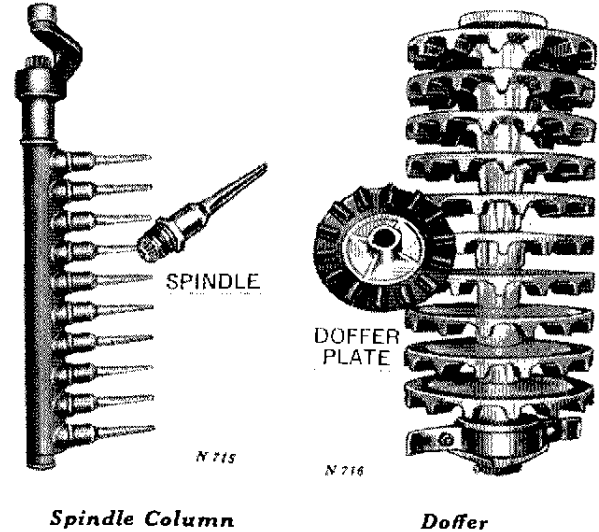
These basic components are mounted in such a way that the tractor operates in its regular forward gears during the picking operation.

PICKING UNIT



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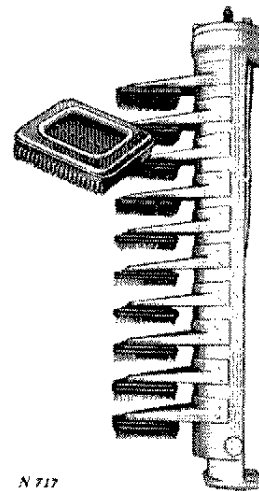
The heart of the picker is the highly efficient spindle-type picking unit. There are two drums of spindles. Both the drums consist of 12 cam-controlled spindle columns with 10 spindles on each column.



Spindle Column

Doffer

A doffer assembly for each spindle drum unwinds the cotton from the spindle and delivers it to a chute in the side door. Each doffer assembly consists of a shaft with a series of aluminum alloy doffer plates that have rubber doffers molded to the plates. Each unit has 10 doffers per shaft.



N 717

Moistener

There is also a spindle moistener column for each spindle drum that wipes 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.

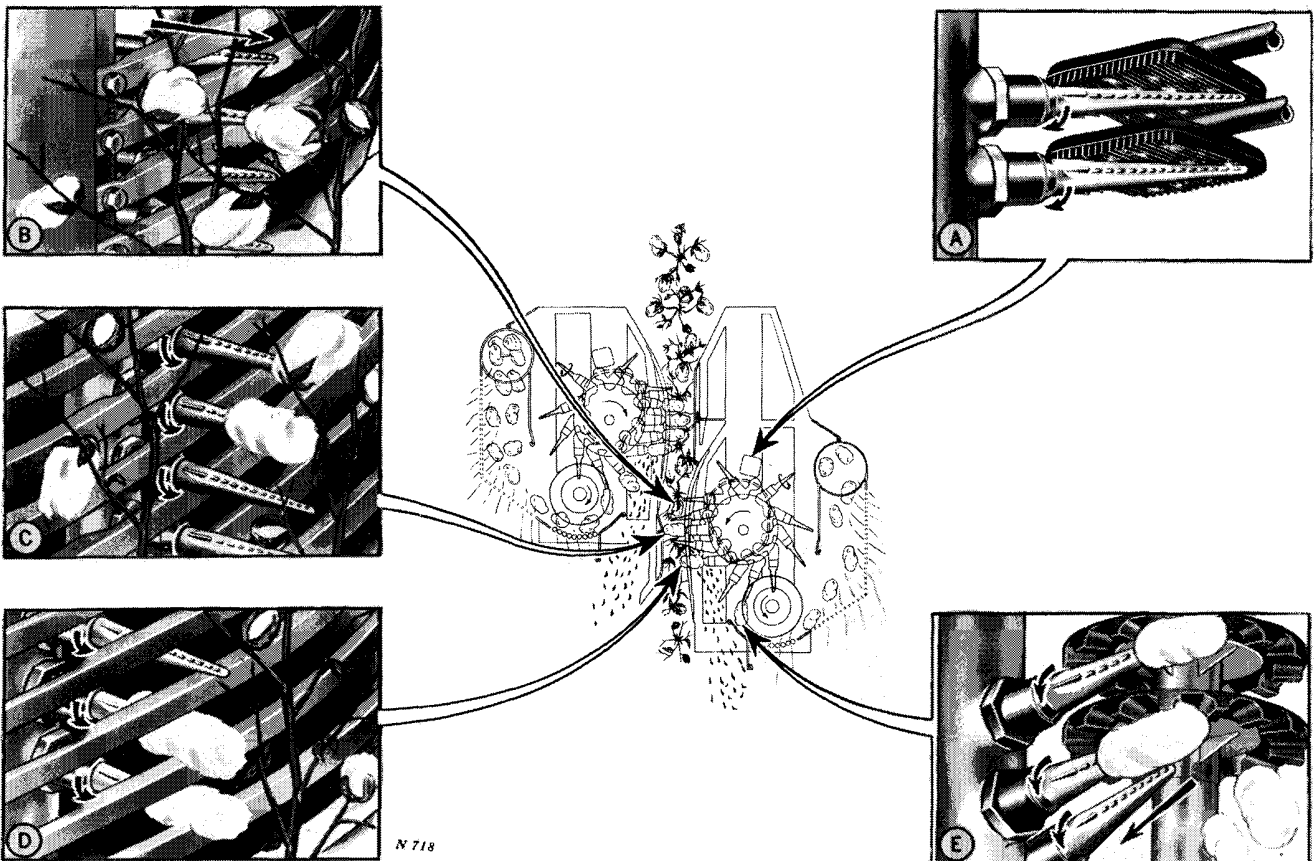
The illustration below shows what happens during the picking cycle. At "A" the spindles go under the moisteners and are cleaned of lint, plant sap, and stain by a film of water.

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 or 2-1/4 miles per hour, depending on the tractor

used) so the spindles have no forward or backward motion in relation to the cotton plant. The rotating spindles 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.

At "C" the spindles are all the way out and wrap the cotton fibre onto the spindle barbs. Then the spindles move back through the grid bars, pulling the cotton out of the open bolls and through the grid bars as shown at "D."

At "E" the cotton is being removed from the spindles by the doffer. The spindles move backwards under the doffer plates so the doffer pads can unwind the cotton from the spindles.



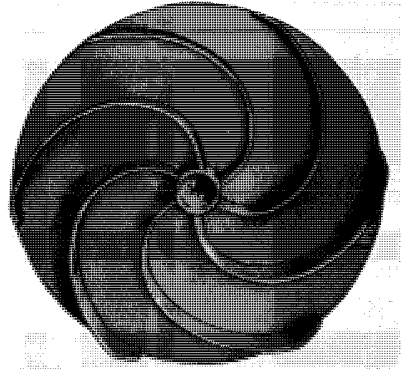
What Happens Inside the Picking Unit

FAN DELIVERY SYSTEM AND BASKET

A powerful rotor fan provides individual suction for each picking drum. The cotton is sucked out of the picking unit suction doors, through telescoping tubes to the fan and then is blown against the cleaning grates in the basket.

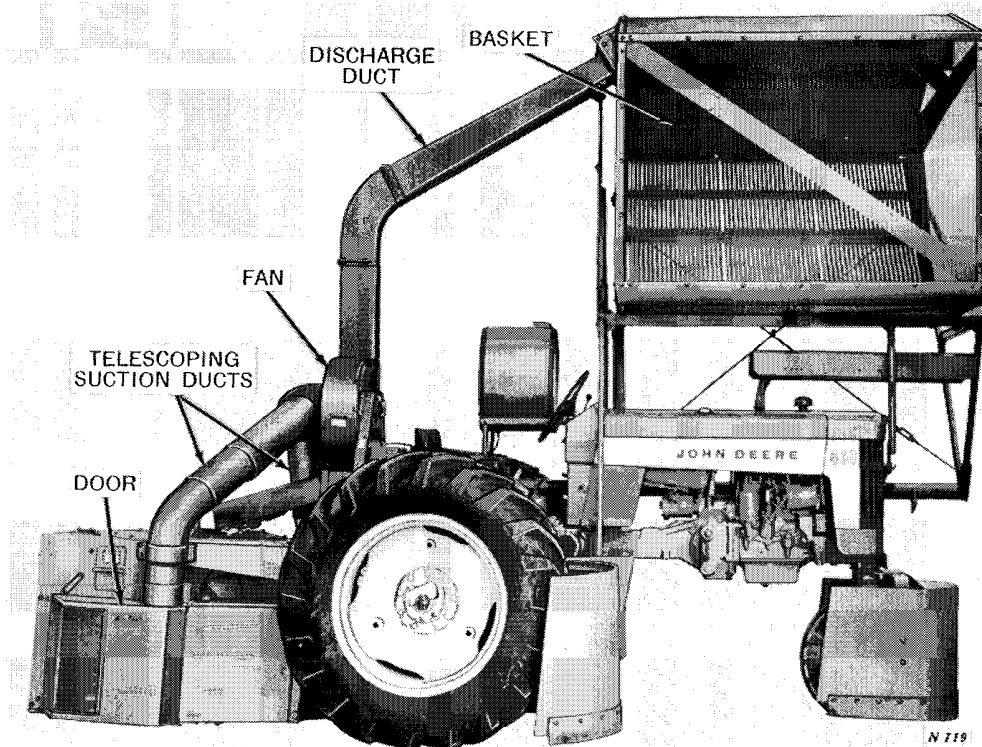
The fan has spiral-shaped blades so the cotton is handled with the least amount of damage to the seed.

The big-capacity basket will hold 600 pounds of seed cotton so you will have to dump it fewer times during a day. A powerful double-acting hydraulic cylinder raises and lowers the basket for dumping. The lid opens and closes automatically as the basket is raised and lowered.



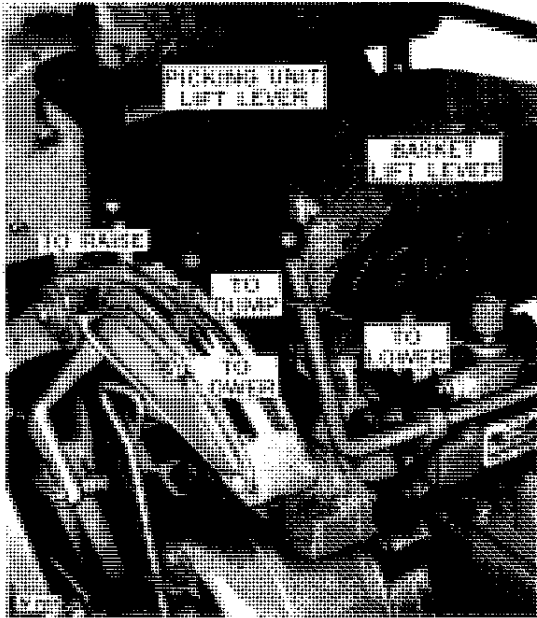
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Fan Rotor

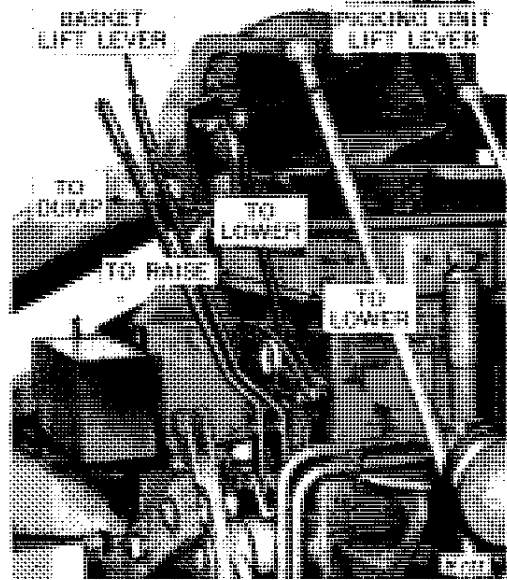


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OPERATION CONTROLS



John Deere "430" and "420" Tractors



John Deere "530," "630," "520," and "620" Tractors

The regular tractor controls are used for all operations of the 11 Cotton Picker. That is, no additional linkages and levers are required to operate the picker.

The tractor controls as used with the cotton picker are described below.

PICKING UNIT LIFT LEVER.

The picking unit lift is controlled by the tractor hydraulic system.

By means of the right-hand Touch-o-matic lever on the "430" and "420" Tractors or the rockshaft lever on the "530," "630," "520," and "620" Tractors the picking unit can be raised and lowered to any desired height within the range of the quadrant stops.

To raise the picking unit, move the lever to the rear; to lower the unit, move the lever forward.

BASKET LIFT LEVER.

The basket is operated by a double-acting hydraulic cylinder which is controlled by the remote cylinder control lever on the "430" and "420" Tractors.

The remote cylinder operating lever is used on the "530," "630," "520," and "620" Tractors. If the tractor is equipped with two remote cylinders, the left-hand lever will be used. Move the lever to rear to dump the basket and forward to return the basket into picking position.

THROTTLE LEVER.

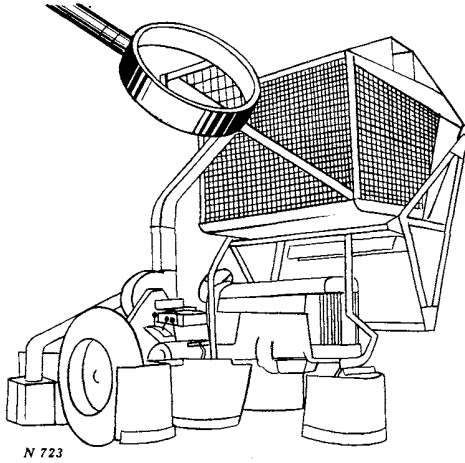
Push the tractor throttle lever to full speed position to obtain the proper ground speed as well as proper powershaft speed. On some tractors it is necessary to change the governor setting as shown on page 30.

GEAR SHIFT LEVER

The picker is designed for operating at 2 or 2-1/4 mph depending upon the tractor being used. On the "430" and "420" Tractors, first gear is used which will give the picking speed of 2 mph.

On "530," "630," "520," and "620" Tractors, second gear is used which will give 2-1/4 mph.

KNOW YOUR COTTON PICKER



Before starting to pick cotton, read this manual. The information in it is the result of years of experience in the design and operation of mechanical cotton pickers. We want you to be satisfied with your new John Deere 11 Cotton Picker. We know it will do good work for a long time if operated and adjusted properly. This manual tells you how to get the splendid performance and long life out of the picker.

BREAKING IN THE NEW COTTON PICKER

Lubricate the entire picker before starting for the first time. See pages 15 through 18.

Check the drive chain and the fan belt carefully for proper alignment and tension. Keep the belt tight enough to prevent slippage. Belts can be ruined very quickly if allowed to slip in the grooves. Excessive heating of a sheave is a sign of belt slippage. New belts will stretch slightly after the final run-off. Check tension frequently.

Be sure all shafts turn freely.

Run the picker for three hours with the engine throttle open just enough so picker will run smoothly. This will allow the moving parts to work in gradually.

After a short run at slow speed, stop the picker and inspect it completely for loose bolts, heating bearings, binding parts, loose belts, etc. Start the picker again and complete the three-hour slow-speed

run. Then bring the picker up to a full throttle speed and run it at this speed for at least 15 minutes. After the full speed run-off, again inspect the picker for loose bolts, heating bearings, or similar undesirable conditions.

BEFORE-OPERATION CHECKS AND ADJUSTMENTS



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Careful inspection of the cotton picker and tractor before starting work each day will prevent needless delays and breakdowns in the field. Make the following checks and adjustments.

1. Make the usual before-operation checks of the tractor. See your tractor Operator's Manual for detailed instructions.
2. Wash out the area around the doffers and moisteners. Sand lodged in the fluted moistener pads will cause excessive spindle wear.
3. Check the grid bars. If necessary, adjust their position between the rows of spindles to prevent wear. See page 19.
4. Lubricate the cotton picker. See the instructions on pages 15 through 18.
5. Fill the water supply tank. Use a wetting agent if desired. (See page 12.)
6. Inspect fan belt and drive chain for proper tension and alignment. Be sure there are no loose bolts or missing cotter pins.

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