

216 Two-Row 416 Four-Row Potato Planters



OPERATORS MANUAL

216 Two-Row 416 Four-Row Potato Planters

OMN97524 L1 English

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To the purchaser

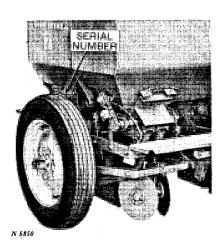
Your new potato planter was built to rigid manufacturing standards. Material and workmanship are the best. However, the way you operate your potato planter and the care you give it have much to do with the service and satisfaction you will get from it.

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.

If you find you need information not covered in this manual or if your potato planter 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 as "right," "left," "front," or "rear" are determined when facing the same direction the potato planter travels in the field.

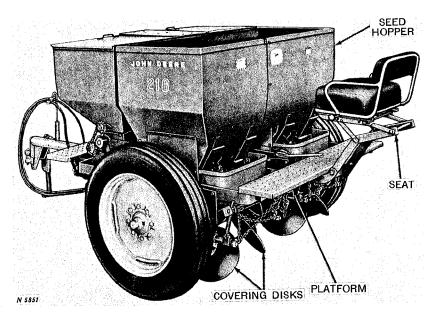
Serial number



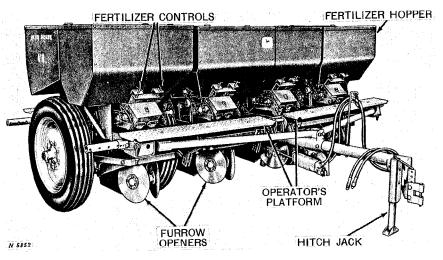
You will find the serial number on a plate located on the right-hand seed hopper of the basic two-row unit just above the wheel. Write this serial number in the space provided below for handy reference. It is important that you know the serial number of your machine when ordering parts.

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John Deere 216 Two Row Potato Planter



John Deere 416 Four Row Potato Planter

Specifications

Model No	216, two-row Potato Planter
Picking Mechanism	416, four-row Potato Planter Automatic pick-type, 16 picks per
	wheel.
Row Spacing	216 Planter, 32 to 42-inches
	416 Planter, 34 to 42-inches
	Shipped with 34-inch row spacing.
Lift	Hydraulic Cylinder; hose extensions
	not required.
Throwout Control	Automatic, cam operated.
Seed Spacing	5 to 26-inches; shipped with sprockets
	for 9-inch spacing; will plant 10-1/2"
	and 12" spacing without additional
Seed Hopper	sprockets. Single hopper for both units on 216
beed hopper	Planter, telescopes for changing row
	spacing; 20 bushels capacity or 30
	bushels with extensions. Capacity
	doubled on 416 Planter.
Fertilizer Hopper	Single hopper for both units on 216
	Planter, telescopes for changing row
	spacing; 1,200 pound capacity. Capa-
	city doubled on 416 Planter.
Wheels	7.50 x 24, 4-ply rib implement tires on
	disk wheels, adjustable for row spacing;
	adjustable 3-1/4-inches vertically for
E-utili Out - Diel-	ridge planting.
Fertilizer Opener Disks	14-inch diameter.
Covering Disks	14-inch diameter.
Opener Shoe	Makes V-type furrow. 100 to 3,000 pounds per acre.
Fertilizer Feed	Endless belt type with no lacings, 9-
	inches wide; rubberized, 4-ply duck.
Minimum Power Requirement	John Deere 2010 or equivalent for 216
	Planter
	John Deere 3010 or equivalent for 416
	Planter

Special equipment

Scratch Marker
Disk Marker
Fertilizer Hopper Cover
Operator's Seat
Stone and Trash Deflector
Hitch Jack
Fertilizer Drive Sprocket
Hose Support for 216 Planter
Seed Spacing Sprockets
without marker
Seed Hopper Extensions
6-inch Covering Disks
(Specifications and Design Subject to Change Without Notice)

Operation

Preparing the planter for use



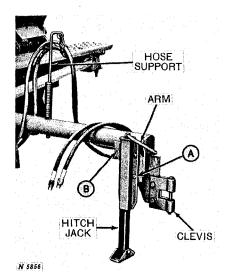
Before starting your potato planter in the field, be sure you are thoroughly familiar with the function of your machine. A careful study of the adjustments and what they will accomplish under the wide variety of field conditions will allow you to reap the many benefits that a 216 or 416 Potato Planter can provide.

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

- 1. Perform the lubrication services (pages 18 through 20).
- 2. Inspect all drive chains for proper tension. Tighten chains only enough to prevent links from climbing sprocket teeth.
- 3. Check for loose bolts and connections.
- 4. Check tire inflation. The correct air pressure is 20 psi.

Attaching to the tractor

Tractor must be equipped for remote hydrualic cylinder operation.



Hitch jack

Use the adjustable hitch jack (special equipment) to raise the hitch to the proper height for attaching to the tractor drawbar. Turn the arm on the jack to raise or lower the hitch.

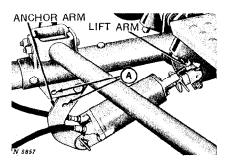
Hitch clevis

Adjust the hitch clevis so the machine will be level during operation.

After the planter is attached to the tractor, remove bolt "A" from the jack, and swing the jack up so it can be attached to hole "B" while planting.

NOTE: The hydraulic cylinder hose support is available as special equipment for 216 Planters without markers.

Hydraulic cylinder

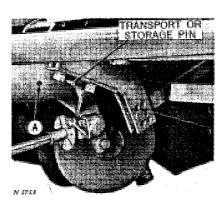


Attach the rear of the hydraulic cylinder to the anchor arm on the planter hitch. Let the arm swing free, and attach the cylinder to the planter lift arm.

After both ends of the cylinder have been attached, extend the cylinder by operating the tractor hydraulic system until the anchor arm has pivoted upward. Insert a pin through holes "A" to secure the anchor arm in position.

Remove the storage or transport pin as shown below before operating hydraulic cylinder.

Transport or storage pin



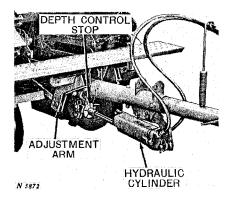
A transport or storage pin in the hitch pipe is used to lock the planter

in the raised position so the hydraulic cylinder can be removed. Remove the pin from the hitch pipe and position it in hole "A" before attempting to lower the units.

Controls

The remote hydraulic cylinder, operated from the tractor, is used to raise or lower the planter at row ends and to control the planting depth.

Height of lift and depth control



The depth of operation is controlled by the depth control stop on the hydraulic cylinder. Adjust the stop so the planter is operating at the desired depth.

Additional height of lift and depth of operation can be obtained by repositioning the lift straps in the adjustment arms. The front row of three holes allows the planter to operate deeper in the ground. The rear row of three holes gives more height of lift.

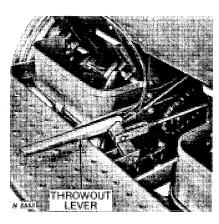
The bottom hole in each row gives the greatest operating depth. The middle and upper holes in each row give shallower operating depths.

6 operation

Main drive clutch

Operation of the picker wheels and fertilizer belts is controlled automatically by the main drive clutch. The clutch is engaged when the planter is lowered into the ground and disengaged when the planter is raised.

Throwout levers



Foot operated throwout levers, for use by an operator on the rear of the machine, are available as special equipment. They permit the planter operator to disengage the planting and fertilizing mechanisms before the planter is raised, making sure all seed and fertilizer is covered at the end of the field.

Planting speed

The planter can be operated at speeds up to six miles per hour, however, greater accuracy will be obtained by planting at slower speeds.

Fertilizer application

Handling fertilizer

Keep fertilizer dry. Do not store it in a damp place.

Do not leave fertilizer in the hopper when planter is not in use.

Most fertilizers readily accumulate moisture and cause metal to corrode. This corrosion not only shortens metal life but leads to unnecessary expense for parts broken because of binding or "freezing." Deposits of fertilizer will build up in the hopper and interfere with working parts. Therefore, the hopper should be cleaned frequently. (See page 21.)



Agricultural chemicals can be dangerous. Improper selection or use can injure per-

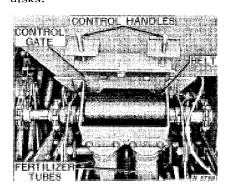
sons, animals, plants, soils, or other property. BESAFE: Select the right chemical for the job. Handle and apply it with care. Follow instructions of the chemical manufacturer.

Filling fertilizer hopper

Fill the fertilizer hopper in the field. Never transport planter with fertilizer in the hopper because it will pack, causing faulty feeding.

Rate of application

Fertilizer is conveyed from the hopper by a continuous rubber belt. It delivers the fertilizer to two rubber tubes that guide the fertilizer into the furrow made by the opener disks.

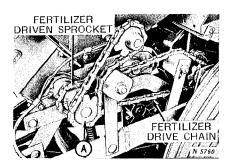


The rate of application for each row is governed by the setting of the control gates. Turn the control handles clockwise to decrease the flow of fertilizer and counter-clockwise to increase the flow.

The rate of fertilizer application can be varied from 200 to 3,000 pounds per acre by adjusting the control handles.

Fertilizer drive

A special 16-tooth (N71364N) sprocket is required to obtain a fertilizer application rate of less than 200 pounds per acre.



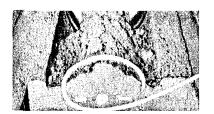
To install the sprocket, remove sprocket "A" from the shaft, remove the old sprocket and replace with the new sprocket.

Install sprocket "A" and drive chain for proper tension before operating the planter.

Remove the fertilizer drive chain if potatoes are being planted without fertilizer.

Fertilizer depth

The depth of fertilizer, in relation to the seed, can be altered by adjusting the operating depth of the fertilizer opener disks.



Fertilizer Level with Seed



Fertilizer Above Seed



Fertilizer Below Seed

Fertilizer depth adjustment should not be judged by relation of the opener disks to the opener shoe, but by trial in the field.

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