

# **30 SERIES POTATO DIGGER AND NO. 2 STONE PICKER ATTACHMENT**

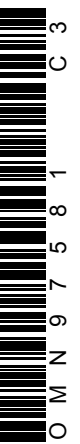


## **OPERATORS MANUAL 30 SERIES POTATO DIGGER AND NO. 2 STONE PICKER ATTACHMENT**

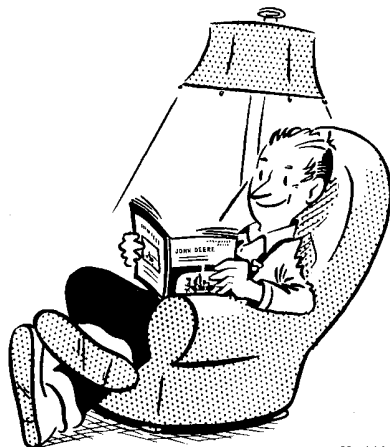
OMN97581 C3    English

**OMN97581 C3**

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ENGLISH



## To the purchaser



This manual contains valuable information about your new John Deere 30 Series Potato Digger. It has been carefully prepared and illustrated. In it you will find instructions and helpful suggestions for operating, adjusting, attaching, transporting, lubricating and servicing your new Potato Digger. You will also find instructions for adapting your potato digger to work properly in all types of field conditions.

Your new digger was built to rigid manufacturing standards. Material and workmanship are the best. Precision production methods and ac-

curately controlled heat-treating assure maximum strength and long life for every part.

Keep this manual in a convenient place for quick and easy reference. Study it carefully. You have purchased a dependable and sturdy implement, but only by proper care and operation can you expect to receive the service and long life designed and built into it.

Give your potato digger proper attention during slack periods. By doing this, it will always be ready, without delay, when you need it.

Sometime in the future, your potato digger may need new parts to replace those that are worn or broken. If so, go to your John Deere dealer. Provide him with the model number of your potato digger and the date purchased. Record this information in the space provided below, so it will be readily accessible when it is needed.

### Location references

Right-hand and left-hand references are determined by standing at the rear of the potato digger and facing in the direction of travel.

### JOHN DEERE 30 SERIES POTATO DIGGER

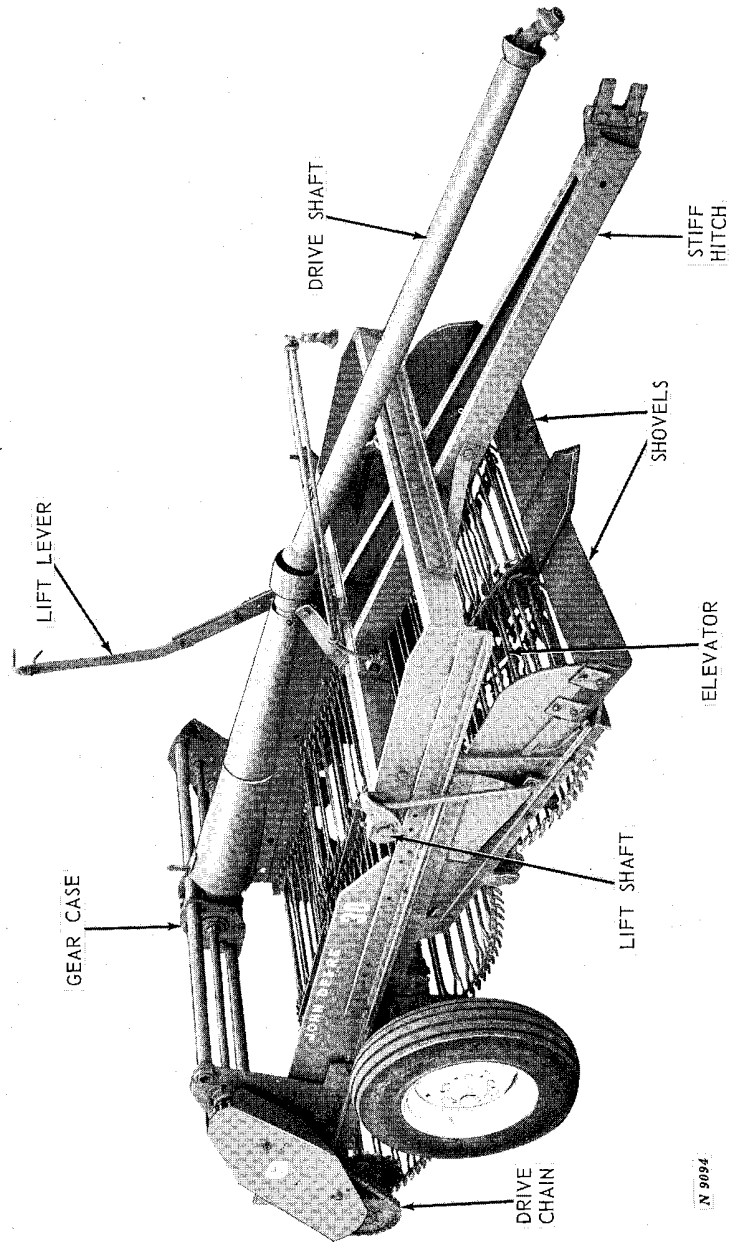
Potato Digger Model No. ....

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

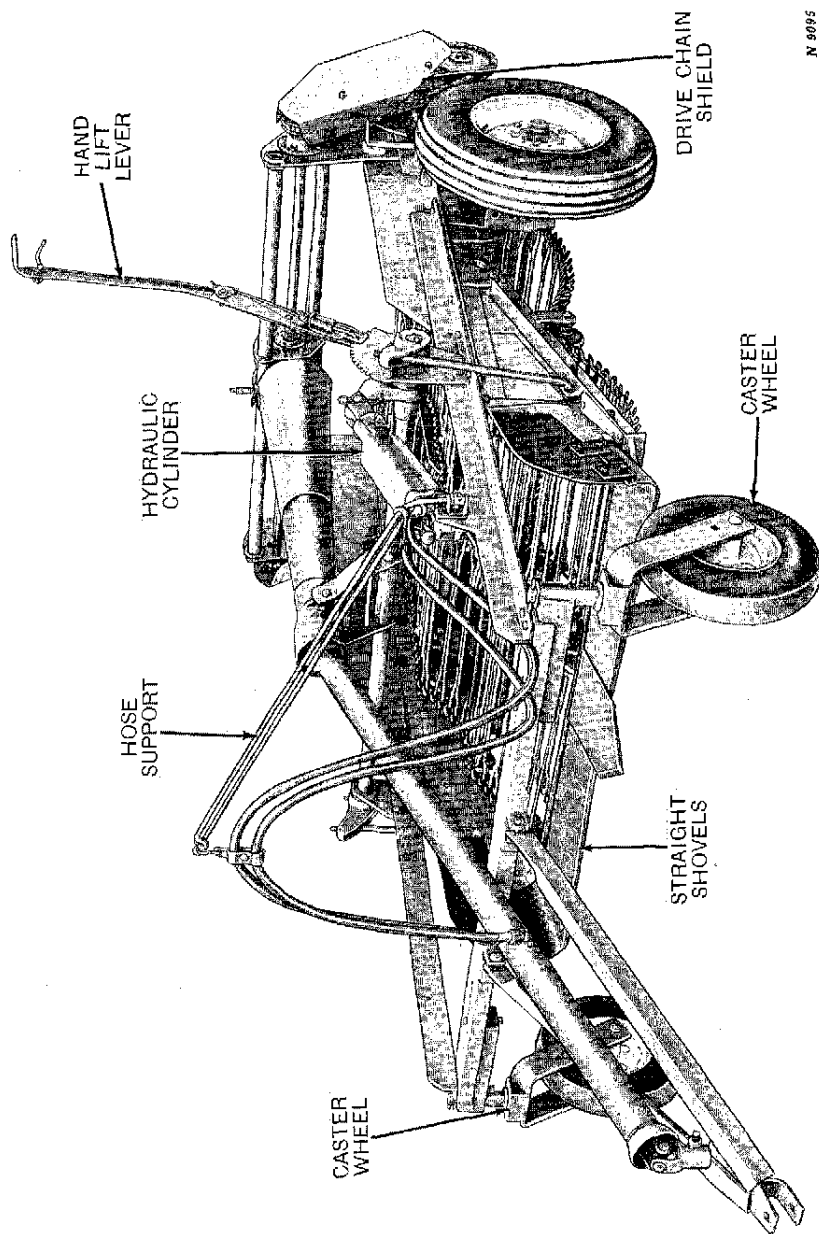
*(To be filled in by Purchaser)*

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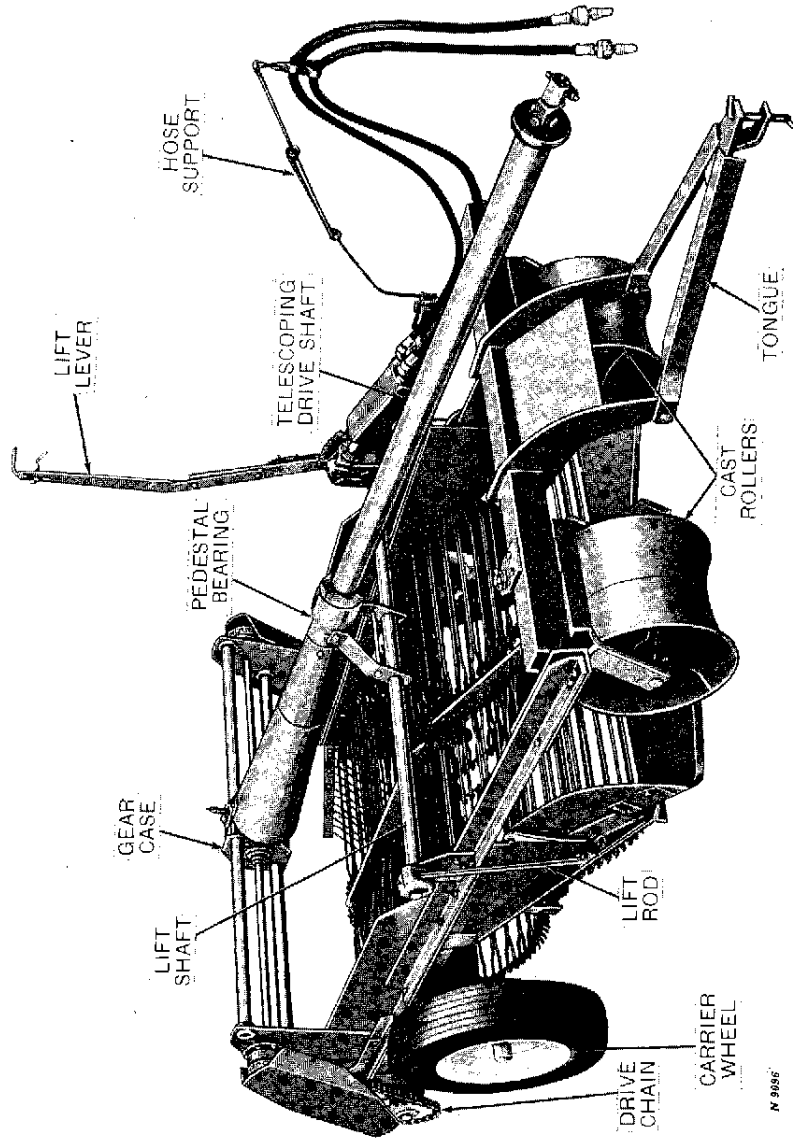


John Deere 31 Potato Digger with Stiff Hitch

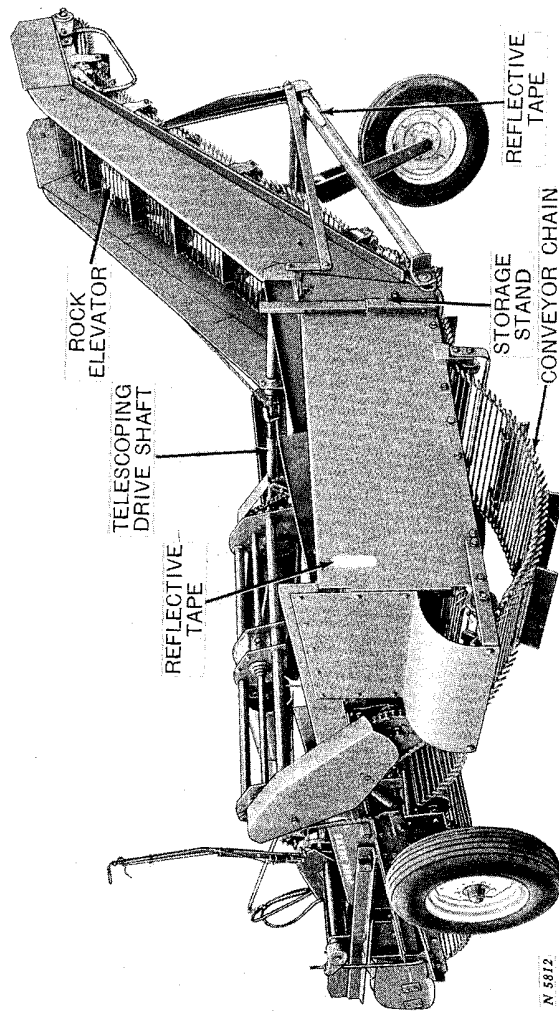


N 9095

*John Deere 32 Potato Digger with Caster Wheels*



John Deere 33 Potato Digger with Cast Rollers



*John Deere No. 2 Stone Picker Attachment on 31 Potato Digger*

## Specifications

Series . . . . .	30 Series consisting of three models
Models . . . . .	31 Digger with stiff hitch
	32 Digger with caster wheels; wheel size - 4.00 x 8-inch, smooth*
	33 Digger with cast rollers (made of cast iron)*
Capacity . . . . .	Two-row
Row width . . . . .	32-, 34-, 36-, and most 38-inch rows
Power requirement . . . . .	John Deere 3010 Tractor, its equivalent or larger.
	In some light soil areas, it is possible to use a 2010 Tractor.
Power lift . . . . .	Front section operated by hydraulic con- trol lever on tractor
Tire size . . . . .	6.70 x 15—4-ply implement tire
Wheel tread . . . . .	Angled position - 65 inches
	Vertical inner position- 72 inches
	Vertical outer position- 76 inches
Over-all length with stiff hitch (31 digger) . . . . .	14 feet, 8 inches
Over-all length with foretruck (32 and 33 digger) . . . . .	16 feet
Maximum over-all width . . . . .	7 feet, 1-1/2 inches with 76-inch tread
	6 feet, 9-1/2 inches with 72-inch tread
Shovels . . . . .	Straight, 3 piece (regular equipment)
	Pointed, 3 piece (optional equipment)
Shovel width . . . . .	68 inches (over-all)
Bed width . . . . .	59 inches
Potato chain . . . . .	Consists of 129 links, 29 inches long. 64 links project up, and 65 links project down.
Length of chain . . . . .	Over-all length each side 16.8 feet
Weight . . . . .	31 Potato Digger - 2,037 pounds (approx- imately)
	32 Potato Digger - 2,065 pounds (approx- imately)
	33 Potato Digger - 2,267 pounds (approx- imately)
Torque limit clutch . . . . .	Adjustable friction type
Cone rollers . . . . .	White iron

*\*Should be used with Crawler Type Tractor*



Agitators . . . . .	Triangular type (regular on front section)
	Short oblong (regular on bed section)
	Long oblong (special equipment for bed section)
	High frequency smooth roller (special equipment for bed section)
Optional equipment . . . . .	540 or 1000 rpm drive parts
	Colorado special with 2-1/8-inch apron chain and oblong shaker sprockets instead of regular
	28- or 37-tooth elevator drive sprockets
Special equipment . . . . .	Agitator control shaft
	Short oblong shaker sprockets
	Long oblong shaker sprockets
	High frequency agitator
	Cone rollers (required when running potato chain inverted)
	Drive sprockets—23, 28, 33, 37, or 42* tooth (28-tooth regular)
	No. 2 stone picker attachment
	18-inch bed extension
	Adjustable wheel (tractor must be equipped with a dual hydraulic system)

### No. 2 stone picker attachment

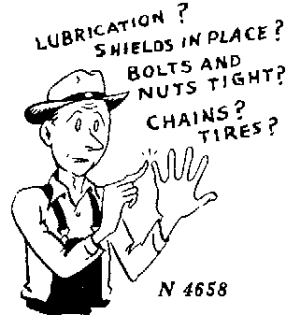
Potato digger required . . . . .	31 Potato Digger Only
Capacity . . . . .	Up to 350 tons per day
Size of stones handled . . . . .	1-1/2-inch to 8-inch diameter
Working depth . . . . .	six inches
Shovel width . . . . .	68 inches
Caster tire size . . . . .	5.90 x 15-inch
Picker weight . . . . .	1,530 pounds (approximately)
Dimensions of digger with stone picker attachment	
Maximum height . . . . .	8 feet, 7 inches
Height with elevator extension removed . . . . .	7 feet, 3 inches
Maximum width . . . . .	14 feet, 2 inches
Width with elevator extension removed . . . . .	12 feet, 10 inches
Length . . . . .	15 feet, 6 inches
Flights . . . . .	3-1/2 inches high, 13-3/4 inches apart
Speed of elevator chain . . . . .	233 feet per minute
Width of elevator . . . . .	24 inches
Special equipment . . . . .	Rock elevator extension
	Hook-up bundle for diggers prior to 1959 production

\*The 42-tooth drive sprocket cannot be used with the stone picker attachment.

*(Specification and design subject to change without notice.)*

## Operation

### Preparing potato digger for use

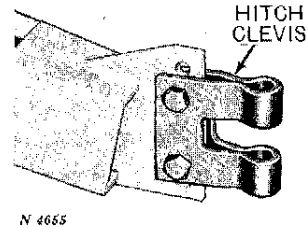


Before starting potato digger in the field, be sure you are thoroughly familiar with the function of each working unit. A careful study of the adjustments and what they will accomplish under the wide variety of field conditions will allow you to reap the many benefits that a 30 Series Potato Digger can provide.

Careful inspection of the potato digger before starting work each day will prevent needless delays and break-downs in the field. Make the following checks and adjustments.

1. Perform the lubrication services (pages 30 through 32).
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 24 psi. If you have a 32 Potato Digger, the tire inflation pressure of the foretruck wheels is 40 psi.

### Hitch clevis



The bed of the potato digger should be level when in the operating position. Set the hitch clevis to maintain this level position when the potato digger is hitched to the tractor.

The center position is shown above. Use whichever of the three settings is necessary to keep the digger bed level.

### Tractor drawbar

The tractor drawbar should be secured in a center position, parallel to the PTO shaft, with the offset down.

Adjust the length of the drawbar so the end hole is 14 inches from the end of the powershaft, if digger is to be operated by a 540 rpm PTO shaft or 16 inches if digger is to be operated by a 1000 rpm PTO shaft.

### SAFETY FIRST

Every operator must cooperate fully in the shielding of rotating Powershafts—an exposed Powershaft can be deadly.

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