

1900 Seeding Tiller



OPERATORS MANUAL

1900 Seeding Tiller

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LITHO IN U.S.A. ENGLISH





To the Purchaser

This new seeding tiller was carefully designed and manufactured to give years of dependable service. To keep it operating 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, service, or trouble shooting. Read "Contents" to learn where each section is located.

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.

In addition to the equipment furnished with your seeding tiller, attachments are available to help you do a better job in special conditions. These are described in the attachment 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 tiller will travel when in use.

Record your tiller serial number in the space provided on page 66. Your dealer needs this information to give you prompt, efficient service when you order parts or attachments. If your tiller requires replacement parts, go to your John Deere dealer where you can obtain Genuine John Deere parts—accept no substitutes.

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

Your operator's manual contains SI Metric equivalents which follow immediately after the U.S. and Canadian customary units of measure.





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Safety Suggestions

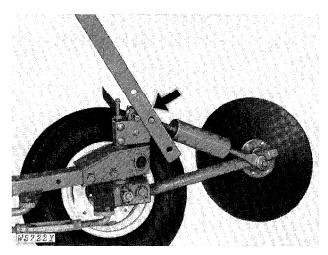
Simple adjustments and safety features were built into the 1900 Seeding Tiller wherever possible. Nevertheless, ordinary caution must be taken when operating the tiller. You can avoid many accidents by observing the suggestions for safety given here. Study them carefully and insist that they be followed by those working with you or for you. There is no substitute for a careful and safe-minded operator.

Disk blades are extremely sharp - be careful when making adjustments in the disk area.

Do not attempt to oil, grease or adjust a tiller that is in motion.

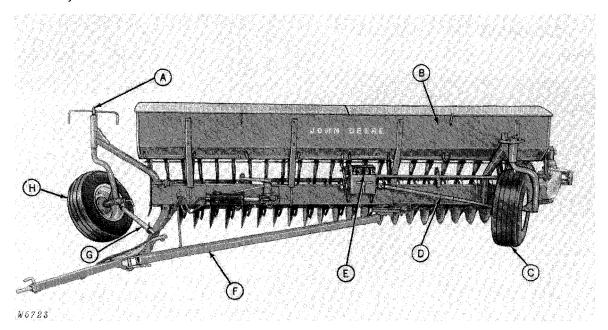
Never ride, or permit others to ride, on the drawbar of the tractor or on any part of the tiller.

When transporting the tiller on a road or highway at night or during the day, use accessory lights and devices for adequate warning to the operators of other vehicles. In this regard check local governmental regulations. Various safety lights and devices are available from your John Deere dealer.



Avoid injury to hands and feet. Always use the tiller wrench provided to raise or lower the coulter.

To prevent jackknifing of duplex or triplex machines during transport, position stop pin on each machine as indicated in "Changing From Working to Transport Position", pages 24 through 35.



A—Frame Leveling Screw B—Seed and Fertilizer Box

C-Land Wheel

D—Powershaft E—Seed and Fertilizer Drive F—Main Hitch G—Steering Arm H—Front Furrow Wheel



Operation

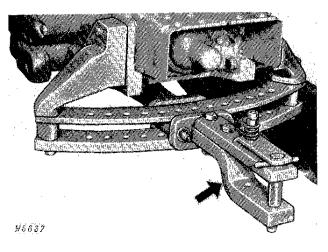
PREPARING THE TILLER

At the beginning of a use season, before entering the field:

- 1. Be sure disks are sharp and rust free.
- 2. Inflate 11L x 15 tires to 42 psi (290 kPa).
- 3. Tighten gang bolt nuts to 600 ft-lbs (813 Nm) torque.
 - 4. Lubricate tiller as shown on page 36.
- 5. Be sure seed and fertilizer compartments are empty.
- 6. Use a wrench to turn seed and fertilizer shafts several times in operating direction to ensure free motion.
 - 7. Lubricate and adjust drive chains.
- 8. Tighten hardware as specified in the bolt torque chart on page 37.

PREPARING THE TRACTOR

Drawbar



The tractor must be equipped with a wide swinging drawbar with clevis as shown above.

Horsepower Requirement

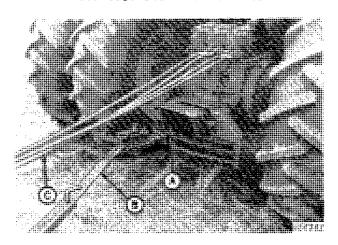
At a working depth of 3 in. (7.6 cm) and a speed of 4.5 mph (7.2 Km/h), 3 - 4 hp (22.9 - 32.8 kW) at the PTO is required per foot (meter) of tiller width.

If packers or harrows are used, an additional 1/2 hp (1.2 kW) is required per foot (meter) of tiller width.

Ballast

Add ballast as specified in your tractor operator's manual.

TRANSPORTING TILLER



A—Drawbar Retaining Pin

B--Front Hitch C--Cylinder Hoses

Install drawbar retaining pin (A) to secure drawbar at desired position and stabilize tiller during transport.

Extend front hitch (B) and attach to tractor. Pin hitch in extended position as shown above.

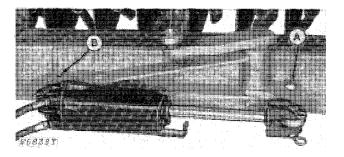
Do not back up with the front hitch extended.

Attach cylinder hoses (C) to tractor selective control valves so gangs raise when the control levers are moved rearward.

CAUTION: Escaping fluid under pressure can have sufficient force to penetrate the skin, causing serious personal injury. Before disconnecting lines, be sure to relieve all pressure. Before applying pressure to the system, be sure all connections are tight and that lines, pipes and hoses are not damaged. Fluid escaping from a very small hole can be almost invisible. Use a piece of cardboard or wood, rather than hands, to search for suspected leaks.

If injured by escaping fluid, see a doctor at once. Serious infection or reaction can develop if proper medical treatment is not administered immediately.

IMPORTANT: To prevent cylinder damage, install cylinder with the rod end toward the rear of the tiller.



A-Transport Position

B—Working Position

Raise the gangs and install support pin in transport position (A) to prevent gangs from dropping in case of hose or pin failure. Position (B) is for working.

CAUTION: When transporting a tiller on a road or highway at night or day, use accessory lights and devices for adequate warning to the operators of other vehicles. In this regard, check local governmental regulations. Various safety lights and devices are available from your John Deere dealer.

Never transport tiller over 20 mph (32 km/h).

CHANGING FROM TRANSPORT TO WORKING POSITION

General

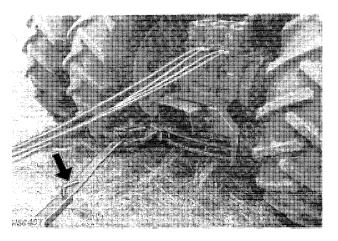
The tiller may be in semi or full transport position. The following instructions specify how to convert a tiller from full transport to working position.

If the tiller is in semi-transport position, the hitch brace and steering arm will be extended, the cylinder support pin will be in the working position, and the furrow wheels will be in the tilted working position.

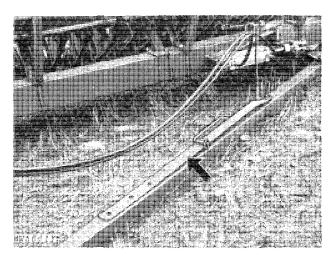
Single, duplex, and triplex tillers are described individually on pages 5, 8, and 11 respectively.

Proceed to the page that applies to your tiller.

Single Tiller



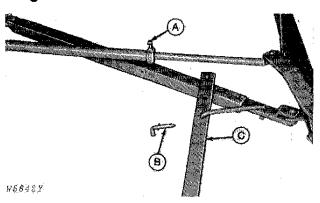
Remove pin from hitch extension.



Remove tiller wrench from storage position.

CHANGING FROM TRANSPORT TO WORKING POSITION—Continued

Single Tiller—Continued



A—Steering Arm Collar B—Hitch Brace Pin

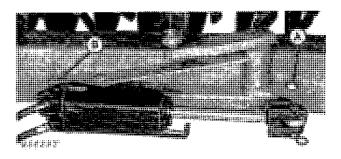
C-Tiller Wrench

Loosen steering arm collar (A) and remove hitch brace pin (B). Use tiller wrench (C) to extend hitch brace.

If the tiller has been previously used and the hitch brace setting marked, extend brace to that mark.

If tiller is being used for the first time, extend hitch brace as specified under "Hitch Brace," page 17.

Replace hitch brace pin. Tighten steering arm collar (A).

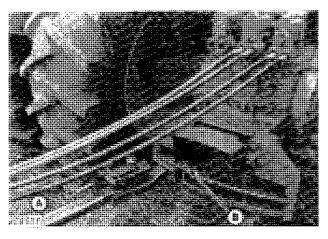


A-Transport Position

B—Working Position

Remove support pin from transport position (A) and install it in working position (B).

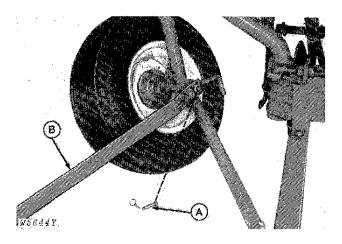
Lower gangs to remove weight from tiller wheels and unlock land wheel transport lock. (See page 7.)



A-Hitch Extension Pin

B-Drawbar Pin

Back tractor to shorten hitch extension and replace pin (A). Remove pin (B) to allow drawbar to swing free.



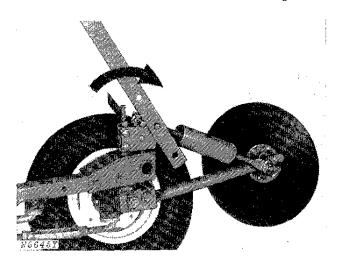
A-Lock Pins

B-Tiller Wrench

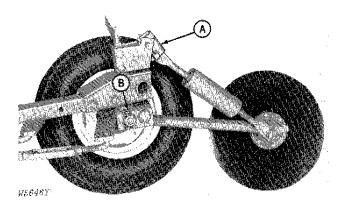
Remove headed pin and quick-lock pins (A) from front furrow wheel spindle. Use tiller wrench (B) to turn spindle and tilt wheel to the working position. Replace pins to lock wheel in position.

CAUTION: Keep feet and hands from under coulter (attachment). When lowering coulter always use the wrench provided with the tiller.

The coulter (attachment) is held in the upper or transport position by an over-center latch. When the latch is released, the coulter will fall to the ground.



To lower coulter, position wrench as shown above and rotate it rearward.

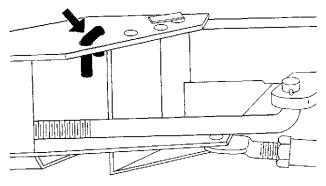


A-Latch Locked Over-Center

B—Lock Pins

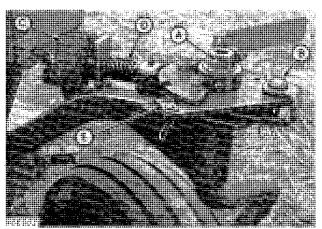
Be sure latch (A) is locked over-center in the working position to maintain downward force.

Remove headed pin and quik-lock pins (B) from rear furrow wheel spindle. Use tiller wrench to turn spindle and tilt wheel to the working position. Replace pins to lock wheel in position.



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Position transport stop as shown above to allow the rear furrow wheel to swing when turning. Secure stop with a quik-lock pin.



A---Nut B-Work Lock Pin C-Spring Locking Pin

D-Transport Lock E-Stop

To help prevent the rear furrow wheel from coming out of the furrow in extreme working conditions, place the tiller wrench over nut (A) and turn land wheel far enough to install pin (B). Adjust land wheel lead according to instructions on page 16.

If desired to prevent the land wheel lock from locking in transport when turning right with the gangs raised, lower gangs, remove spring locking pin (C) from storage position and insert it in transport lock at (D).

Position stop (E) as shown to prevent powershaft damage during sharp right turns.

Drive ahead until front furrow wheel leads slightly to the right. Retighten steering arm collar.

See "Field Operation," page 20, for tiller adjustment procedure.



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