

7000 FOLDING 8-ROW WIDE AND 12-ROW NARROW MAX-EMERGE® PLANTERS



JOHN DEERE

OPERATORS MANUAL 7000 FOLDING 8-ROW WIDE AND 12-ROW NARROW MAX-EMERGE® PLANTERS

OMA45598 E2 English

**PLOW & PLANTER WORKS
OMA45598 E2**

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ENGLISH





Introduction



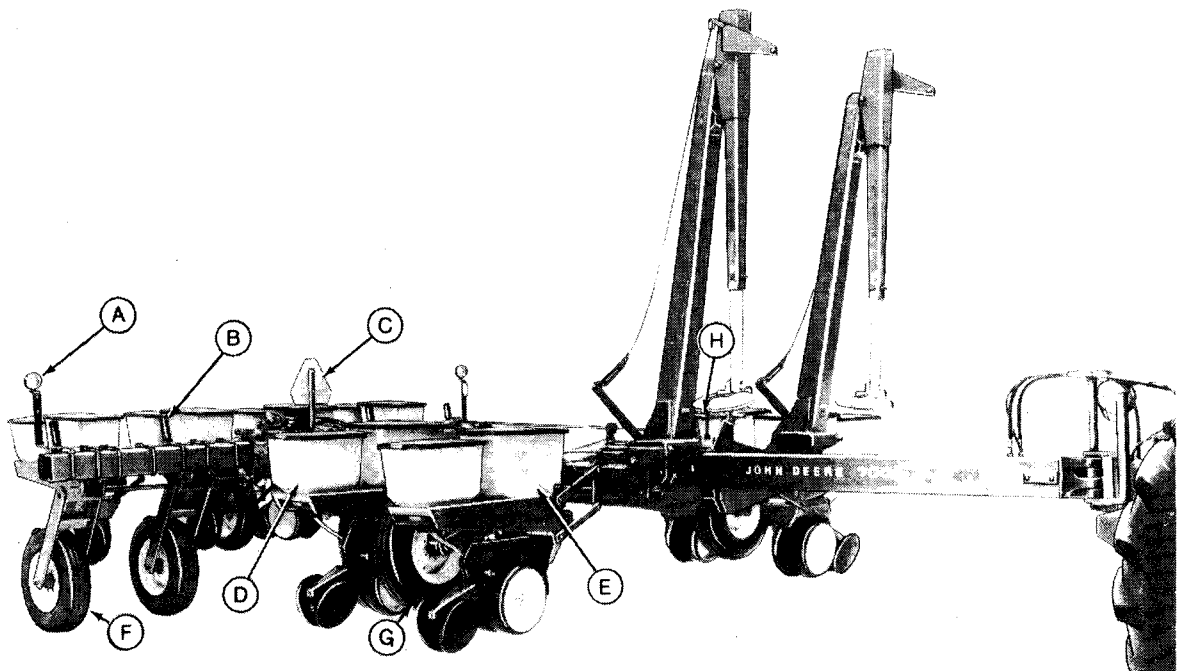
This safety alert symbol identifies important safety messages in this manual. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.

“Right-hand” and “left-hand” sides are determined by facing in the direction the planter will travel when being transported.

Record your planter serial number in the space provided on page 220. Your dealer needs this information to give you prompt, efficient service.

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

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



A22065

A22065

8-Row Wide Planter (Folded)

A—Safety Flasher
B—Wheel Module Hydraulic Cylinder
C—(SMV) Slow Moving Vehicle Emblem
D—Herbicide and/or Insecticide Hopper

E—Seed Hopper
F—Center Carrying Wheels
G—Wing Wheel
H—Latch Turnbuckle



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Safety

2-3

Operate the Planter Safely

If the planter must be in a raised position while working on or near it, be certain service locks are installed.

Never ride or permit others to ride on the drawbar of the tractor or on the planter.

Transport Safely

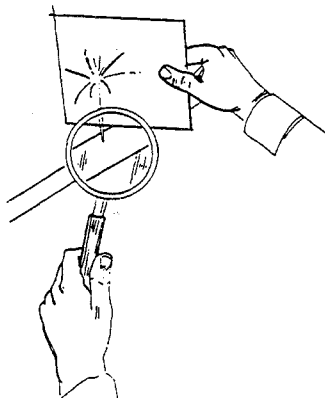
While transporting the planter on a public road, follow safety instructions outlined under "Transporting."

Use care when transporting across rough ground.

Avoid High-Pressure Hydraulic Fluid

Escaping fluid under pressure can have sufficient force to penetrate the skin, causing serious injury. Before disconnecting lines, be sure to relieve pressure. Before applying pressure, be sure connections are tight and lines, pipes and hoses are not damaged. Use a piece of cardboard or wood, rather than hands, to search for 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.



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Lubricate the Planter Safely

Do not grease, oil or adjust the planter while it is in motion.

Handle Chemicals Properly

Agricultural chemicals can be dangerous. Improper selection or use can injure persons, animals, plants, soils, or other property. BE SAFE: handle and apply with care. Follow instructions of the chemical manufacturer.

Do Not Modify Planter

Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

Free Dry Fertilizer Augers Safely

Do not use welding torch to free frozen dry fertilizer augers from auger shaft.

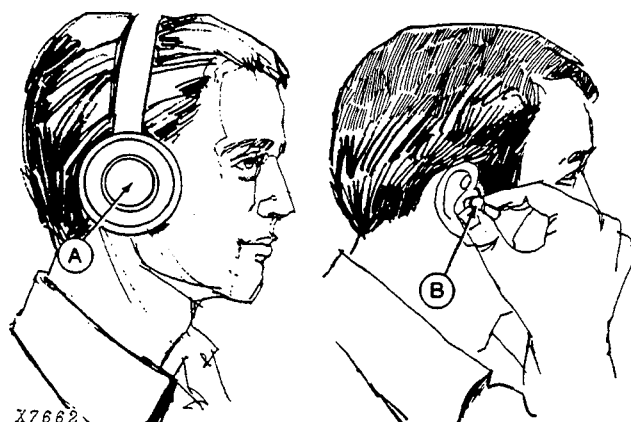
Fertilizer trapped inside augers could cause gas to form, which when heated, may cause augers to explode.

Protect Against Noise

Prolonged exposure to loud noise can cause impairment or loss of hearing.

Wear a suitable hearing protective device such as earmuffs (A) or earplugs (B) to protect against objectionable or uncomfortable loud noises.

A—Earmuffs
B—Ear Plugs



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Mount Tires Safely

Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion which may result in serious injury or death. Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job. Have it done by your John Deere dealer or a qualified tire repair service.

When sealing tire beads on rims, never exceed 35 psi or maximum inflation pressures specified by tire manufacturers for mounting tires. Inflation beyond this maximum pressure may break the bead, or even the rim, with dangerous explosive force. If both beads are not seated when the maximum recommended pressure is reached, deflate, reposition tire, relubricate bead, and reinflate.

Detailed agricultural tire mounting instructions, including necessary safety precautions, are contained in John Deere Fundamentals of Service (FOS) Manual 55, Tires and Tracks, available through your John Deere dealer. Such information is also available from the Rubber Manufacturers Association and from tire manufacturers.



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Preparing for Use

PREPARING THE TRACTOR

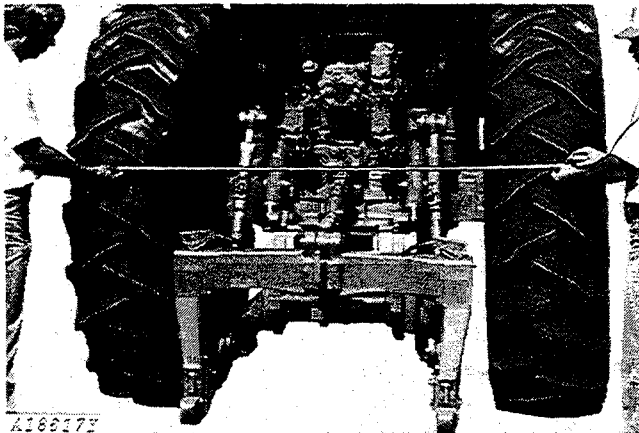
4-12

Hydraulic Pressure

IMPORTANT: The operating pressure of your tractor must be a minimum of 13 790 kPa (137.9 bar) (2000 psi) for the planter hydraulic system to function properly.

The maximum operating pressure for the planter hydraulic system is 15 513 kPa (155.1 bar) (2250 psi). Exceeding this pressure is not recommended.

For complete tractor operating instructions, refer to your tractor operator's manual.



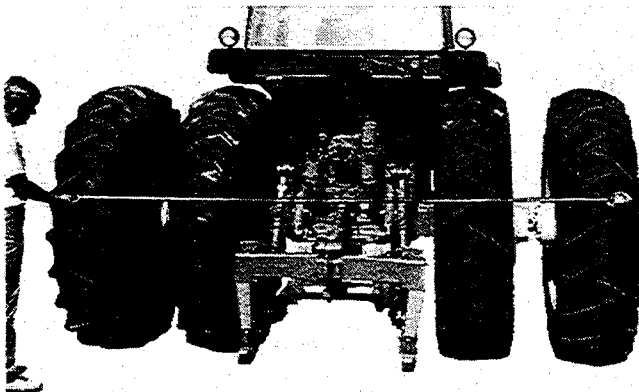
Tire Size

The minimum tire size is 20.8-34 x 8 ply-rated for 4040 and 4240 tractors and 20.8-38 x 8 ply-rated for 4440 tractors.

Setting Wheel Tread

Set two-wheel drive tractor tires (center to center of tread) at twice the row spacing. For two-wheel drive tractors with dual wheels, set outer wheels as close as possible to four times the row spacing. Set four-wheel drive tractor tires (center to center of tread) as close as possible to twice the row spacing.

NOTE: Certain tire combinations may require Category 3N Quik-Coupler to obtain 60-in. (1 524 mm) wheel tread setting.



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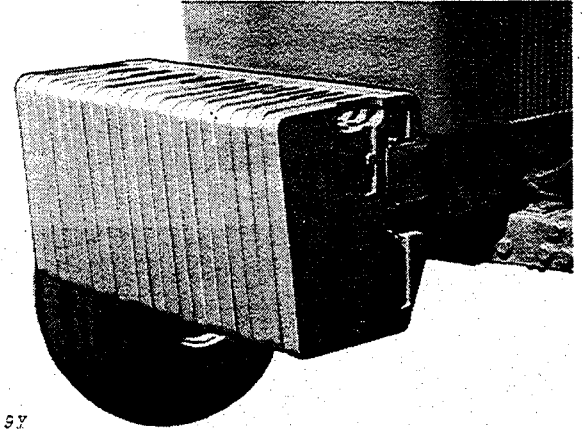
Tire Inflation

Inflate the tractor tires as recommended in the tractor operator's manual.

Front-End Weighting



CAUTION: 4040 and 4240 tractors require the maximum front end weights available. The weight is required for front end stability in transport position. Avoid quick starts and use gentle shifts when going up hills in folded transport position to prevent front end from raising.

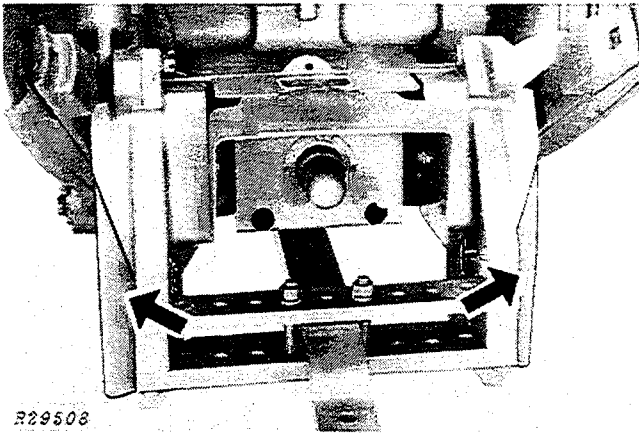


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4-12

Rear Wheel Weighting

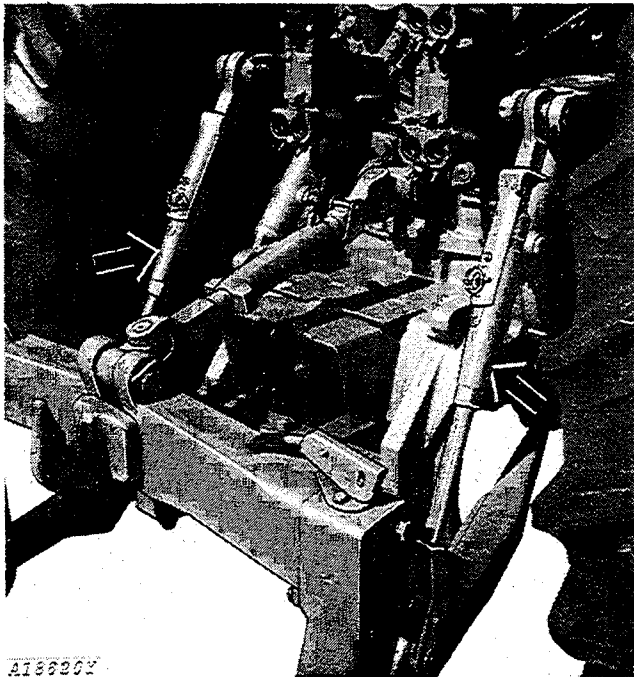
Do not use liquid in the rear tractor tires. This decreases the tire load carrying capacity which is needed to carry the planter when it is folded for transporting.



Sway Blocks

Set the sway blocks (bold arrows) in the down position to prevent side sway.

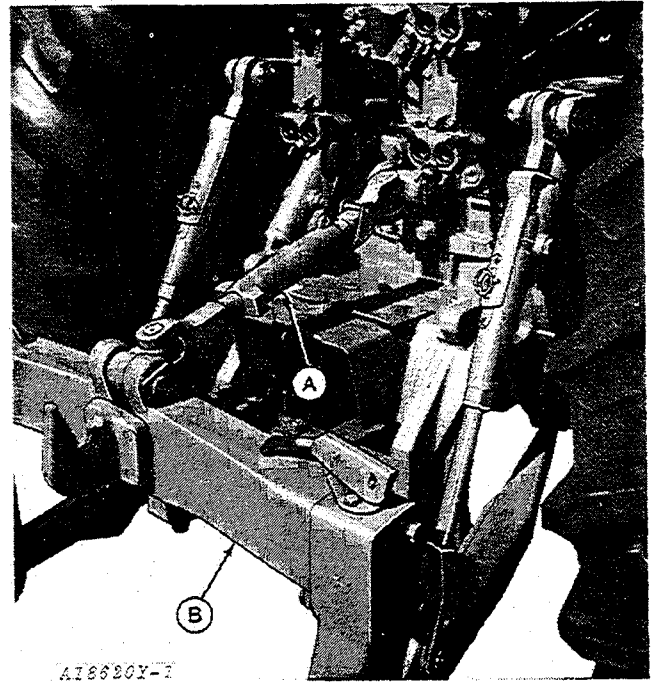
4-12



Link Lengths

Set the lift links (bold arrows) as short as possible to provide maximum transport clearance.

Adjust the center link (A) until the Quik-Coupler (B) is vertical when in planting position.

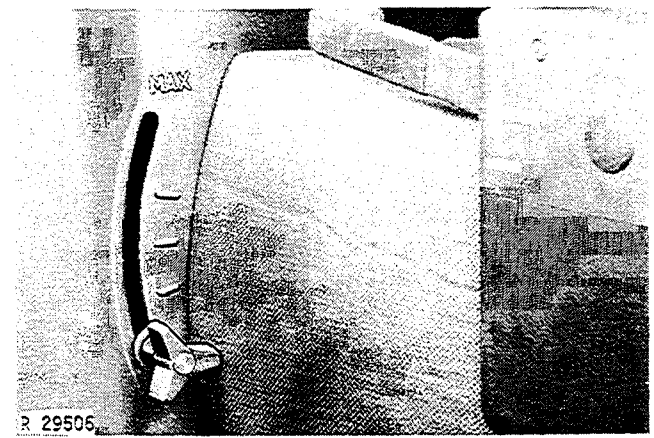


4-12

A—Center Link
B—Quik-Coupler

Setting Rockshaft Selector Lever

Set the rockshaft selector lever in the "MIN" position to prevent unexpected hitch movement.



PREPARING THE PLANTER

Tire Inflation

Inflate 7.60x15 6 PR planter tires to 248 kPa (2.5 bar) (36 psi) of air pressure. Inflate 7.60x15 8 PR tires to 331 kPa (3.3 bar) (48 psi).

Lubrication

Be sure your planter has been properly lubricated. Consult the lubrication charts on pages 91-98 for lubricating instructions.

Row Widths

The 12-row narrow planter will plant on 30-in. (76 cm) row spacing only. The 8-row wide planter will plant on 36- or 38-in. (91 cm or 97 cm) row spacing.

Selecting Seed Plates (Plate Seed Hoppers Only)

As growing conditions change from year to year, the size of the seed may vary. Therefore, it is quite likely that different seed plates may be required to plant the same variety of seed from year to year.

There are two ways to select seed plates. One is to follow the recommendation of the seed supplier and the other is to take a sample of the seed to be planted to a John Deere dealer and let him recommend the seed plates.

In either case, the accuracy of the seed plate selected should be checked when installed in your planter and operated at the planting speed you intend to travel. The best check is to plant a short distance at the desired planting speed and then stop and dig up the seeds to determine the actual planting rate.

For a given spacing and travel speed, a 24-cell seed plate revolves slower than a 16-cell seed plate, resulting in better cell fill. It is therefore recommended that a 24-cell seed plate be used in all cases when available.

NOTE: See pages 64-66 for drilling distance conversion charts for 16-, 20- and 24-cell seed plates.

The following is a list of the most popular corn plates available with 16 and 24 cells.

PLATES FOR FLAT KERNELS OF CORN

16-Cell	24-Cell	Kind of Corn
H 697B	B 30070	Extra small corn
H 694B	H 1302B	Small corn
H 1572B	H 2711B	Small slender corn
H 695B	H 950B	Medium corn
H 2156B	H 2594B	Long thick corn
H 696B	H 2836B	Large corn
H 2504B	H 2848B	Medium flat slurry treated corn
H 2503B	H 2847B	Large flat slurry treated corn
*B 12498	Extra large flat slurry treated corn

*Turn H685B floor plate over (grooved side up.)

PLATES FOR ROUND KERNELS OF CORN

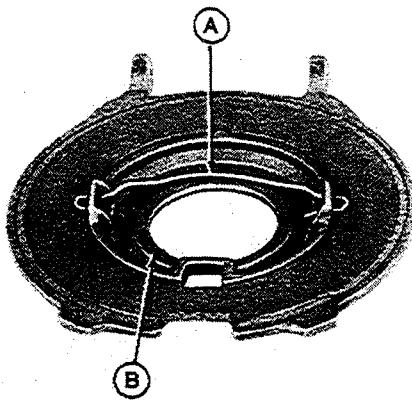
16-Cell	24-Cell	Kind of Corn
H 2295B	Extra small round corn
H 2043B	H 2824B	Small round corn
H 1933B	B 10853	Medium round corn
H 2044B	H 2712B	Large round corn
H 2820B	Extra large round corn

NOTE: A stepped false ring (B27054) is available for providing additional hole depth when planting the above sizes of seed.

The following is a list of the soybean plates and the edible bean plates:

PLATES FOR SOYBEANS		
20-Cell		
H 1255 B H 2527 B	(Use with H1279B Floor Plate)	
PLATES FOR EDIBLE BEANS		
16-Cell	20-Cell	24-Cell
..... H 956 B	H 1300 B H 954 B H 1315 B H 1258 B H 1254 B H 1255 B H 1084 B	H 1301 B H 983 B
30-Cell		40-Cell
H 2480 B		H 2441 B

4-12



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Use drive plate retainer (B30410) and retainer spring (B31562) when using AH306B, H1264B, H1279B, H1280B, H1323B, H1346B or H1354B Floor Plate.

- A—Retainer Spring
- B—Drive Plate Retainer

The following is a partial list of seed plates which require a special false ring or floor plate, or the regular floor plate turned over.

Key	Seed Plate No.	No. of Cells	Kind of Seed
(w)	B 27436	12	Large pumpkin seed
(u)	H 780B	16	Medium country gentleman sweet corn
(u)	H 961B	16	Spanish corn and small popcorn
(u)	H 963B	16	Large country gentleman sweet corn
(u)	H 964B	16	Small sweet corn, small sunflower seed
(u)	H 1238B	16	Medium shoe peg corn
(u)	H 1239B	16	Medium sweet corn, large sunflower seed
(u)	H 1240B	16	Extra small country gentleman tapered sweet corn
(k)	H 1262B	16	Cantaloupes and cucumbers
(o)	H 1263B	16	Beet seed (thin plate)
(o)	H 1316B	16	Extra small round corn
(s)	H 1322B	16	Extra, extra small corn
(s)	H 1345B	16	Small round corn
(s)	H 1352B	16	Extra small narrow corn
(n or r)	H 1353B	16	Tomato seed (machined plate)
(u)	H 2505B	16	Popcorn
(u)	H 2671B	16	Popcorn
(i)	B 12498	16	Extra large flat slurry treated corn
(n or r)	B 27768	16	Milo and grain sorghum
(u)	H 781B	20	Popcorn
(p)	H 2527B	20	Soybeans (heavy planting)
(s)	H 2672B	24	Milo and grain sorghum
(u)	B 27783	24	Acid Delinted Cotton
(n or r)	H 1256B	25	Onion seed (machined)
(n or r)	B 27769	32	Milo and grain sorghum
(z)	B 30456	32	Cucumber
(u)	H 3160B	48	Acid delinted cotton
(u)	H 776B	..	Blank plate 5/32" (4.0 mm) thick (holes can be drilled up to 1/4" [6.4 mm])
(k)	H 1211B	..	Blank plate 5/32" (4.0 mm) thick (cells can be filed in edge)
(n or r)	H 1259B	..	Blank plate 5/32" (4.0 mm) thick (machined)
(i)	Turn H685B Floor Plate over (grooved side up)		
(k)	Use with Y3313B False ring		
(n)	Use with AH306B Floor Plate and Y5055B False Ring*		
(o)	Use with H1264B Floor Plate*		
(p)	Use with H1279B Floor Plate*		
(r)	Use with AD10193 Floor Plate and B27767 False Ring		
(s)	Use with H1323B Floor Plate		
(u)	Use with Y2630B False Ring or for thick seed, use H1346B Floor Plate*		
(w)	Use with Y2630B False Ring and Y5064B special cutoff spring*		
(z)	Use with B30458 Floor Plate		

*Use drive plate retainer (B30410) and spring (B31562)

PLATES FOR BEET SEEDS
U.S. Measurement Given in In.
Metric Measurement (Enclosed by Parentheses) Given in mm

Part Number	Plate Thickness	Hole Size	Number of Cells	Segmented Beet Seed Size (Screened)	Monogerm Beet Seed Size Screened	
					Slot and Round Hole	Round Hole Only
B12732	.125 (3.18)	10/64 (3.97)	72	7/64 to 9/64 (2.78 to 3.57)	8/64 to 9/64 (3.18 to 3.57)	- -
B12733	.125 (3.18)	11/64 (4.37)	72	7/64 to 10/64 (2.78 to 3.97)	9/64 to 10/64 (3.57 to 3.97)	- -
B12734	.145 (3.68)	12/64 (4.76)	72	7/64 to 11/64 (2.78 to 4.37)	- -	- -
B29402	.125 (3.18)	12/64 (4.76)	72	7/64 to 11/64 (2.78 to 4.37)	- -	- -
B12735	.125 (3.18)	Blank	-	- -	- -	- -
B12736	.145 (3.68)	Blank	-	- -	- -	- -
B13298	.083 (2.11)	8/64 (3.18)	72	- -	6/64 to 7/64 (2.38 to 2.78)	- -
B13300	.083 (2.11)	10/64 (3.97)	72	- -	7/64 to 8/64 (2.78 to 3.18)	- -
B13302	.105 (2.67)	9/64 (3.57)	72	- -	- -	7/64 to 8/64 (2.78 to 3.18)
B13304	.105 (2.67)	10/64 (3.97)	72	- -	- -	8/64 to 9/64 (3.18 to 3.57)
B13931	.105 (2.67)	11/64 (4.37)	72	- -	- -	9/64 to 9.5/64 (3.57 to 3.77)
B14015	.083 (2.11)	9/64 (3.57)	72	- -	6/64 to 8/64 (2.38 to 3.18)	- -
B14016	.105 (2.67)	10.5/64 (4.17)	72	- -	7/64 to 10/64 (2.78 to 3.97)	- -
B16815	.083 (2.11)	10.5/64 (4.17)	72	- -	- -	11/64 to 12/64 (4.37 to 4.76)
B31558	.105 (2.67)	13/64 (5.16)	72	- -	10/64 to 12/64 (3.97 to 4.76)	- -
B30474	.145 (3.68)	13/64 (5.16)	72	- -	- -	10.5/64 to 12/64 (3.97 to 4.76)
B32135	.125 (3.18)	13/64 (5.16)	72	- -	- -	10.5/64 to 12/64 (3.97 to 4.76)

NOTE: A stepped false ring (B 27054) is available for providing additional hole depth when planting 9/64 (3.57) to 11/64 (4.37) diameter coated seed.

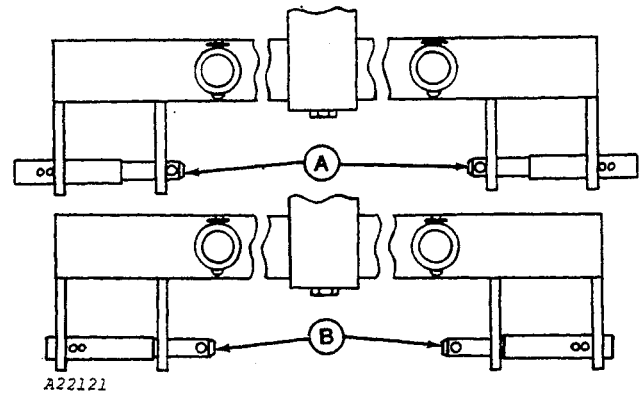


Attaching To Tractor

POSITIONING LOWER PINS ON PLANTER HITCH

All Tractors Except 4440 Tractor With Category 3N/2 Hitch Without Quik-Coupler and 8850 Tractors

- A—Lower Pins Positioned for Category 2 without Quik-Coupler or Category 3 with Quik-Coupler
- B—Lower Pins Positioned for Category 2 and 3N with Quik-Coupler

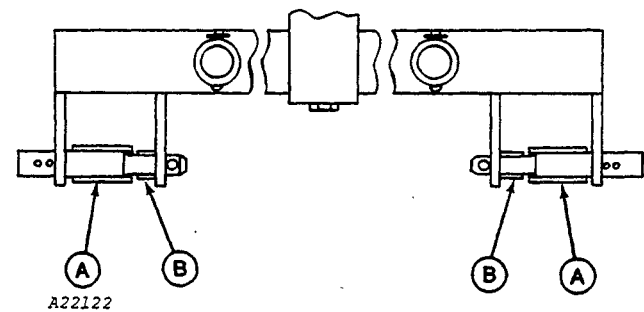


13-17

4440 Tractor with Category 3N/2 Hitch Without Quik-Coupler

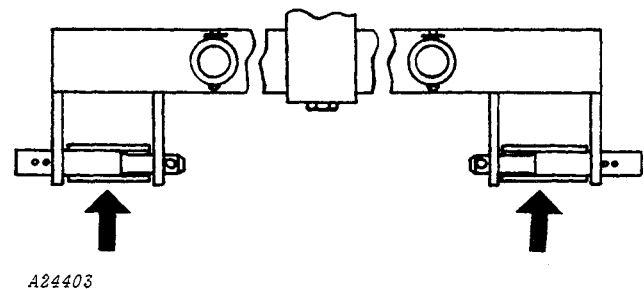
Bushings are required on the hitch pins as shown when attaching planter to 4440 Tractor with Category 3N/2 Hitch without Quik-Coupler. For parts, see your John Deere dealer.

- A—Bushing (Part No. A36380)
- B—Bushing (Part No. R45065)

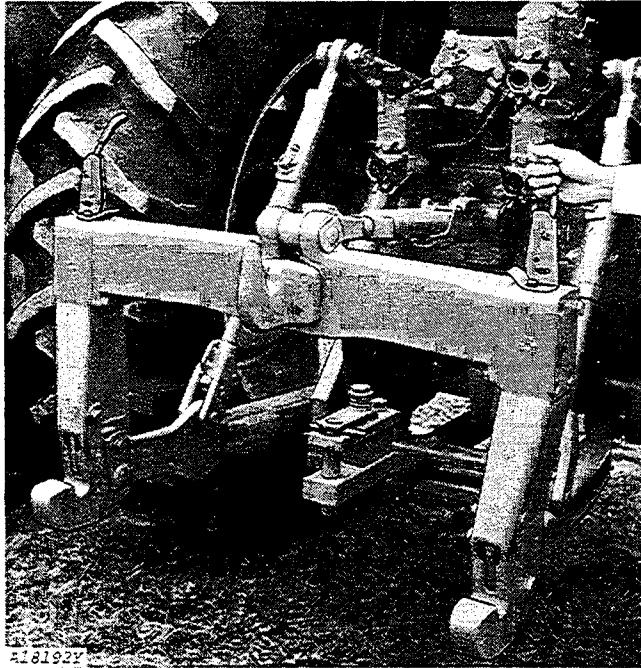


8850 Tractor - Category 4N Hitch

Bushings (bold arrows) (A30302) are required when attaching planter to 8850 Tractor. For parts, see your John Deere dealer.



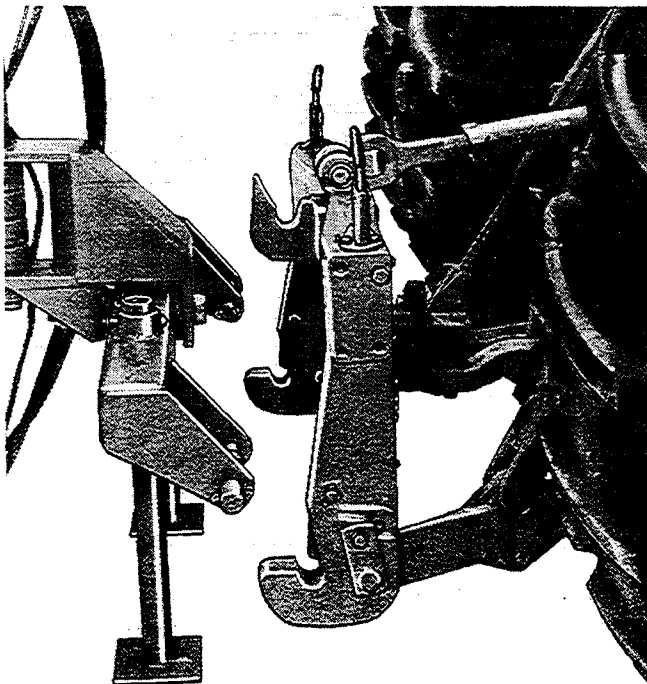
ATTACHING PLANTER HITCH TO TRACTOR HITCH



CAUTION: Do not stand between tractor and the planter unless the tractor transmission is in PARK.

Raise both latch control levers.


13-17

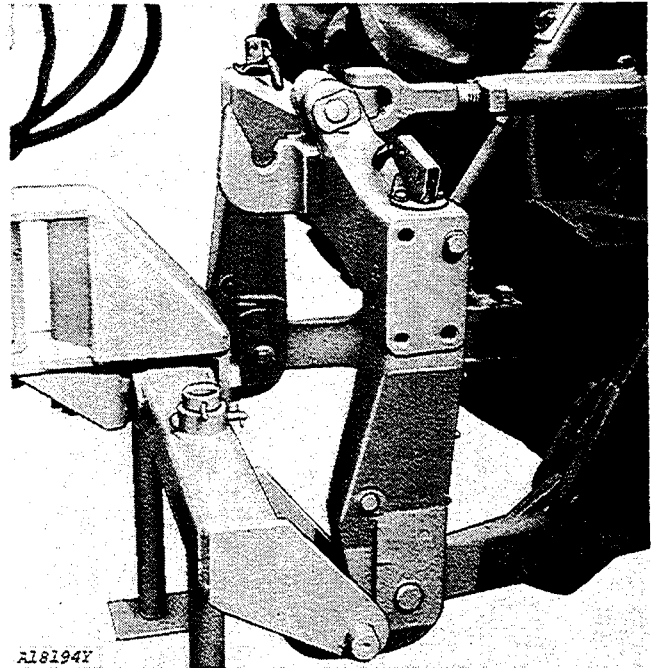


Lower the rockshaft until the Quik-Coupler hooks are lower than the planter hitch pins and slowly back the tractor up to the planter.

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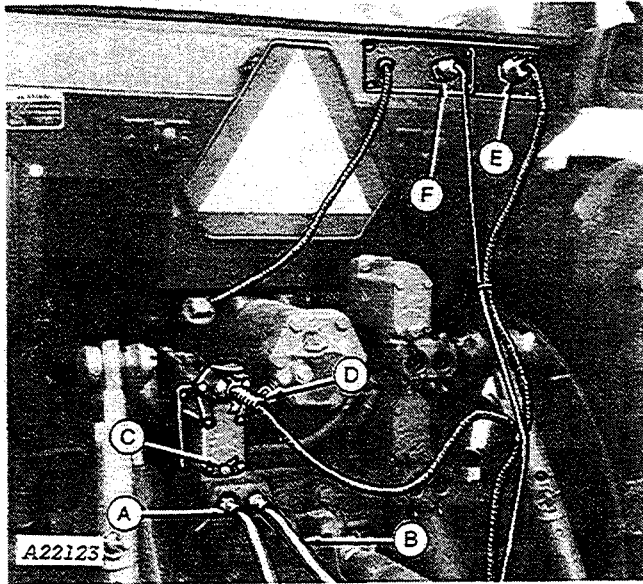
Raise the rockshaft enough to engage the planter hitch pins in the Quik-Coupler hooks. Push both latch control levers down to lock the planter to the Quik-Coupler.

 **CAUTION:** When latches are properly locked, handles will be horizontal and against coupler frame.



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CONNECTING PLANTER HYDRAULIC HOSES, WIRING HARNESS AND POWER LEAD TO TRACTOR



Two-Wheel Drive Tractor Illustrated

A22123

Connect hydraulic hose (A) from the left draft tube to the left side of breakaway coupler number 1. Connect hydraulic hose (B) from the right draft tube to the right side of breakaway coupler number 1. Set the flow control valve (C) on the tractor to full open.

Connect the planter wiring harness (D) to the seven pin connector.

Connect the planter wiring harness (E) to the twenty pin connector from the control console.

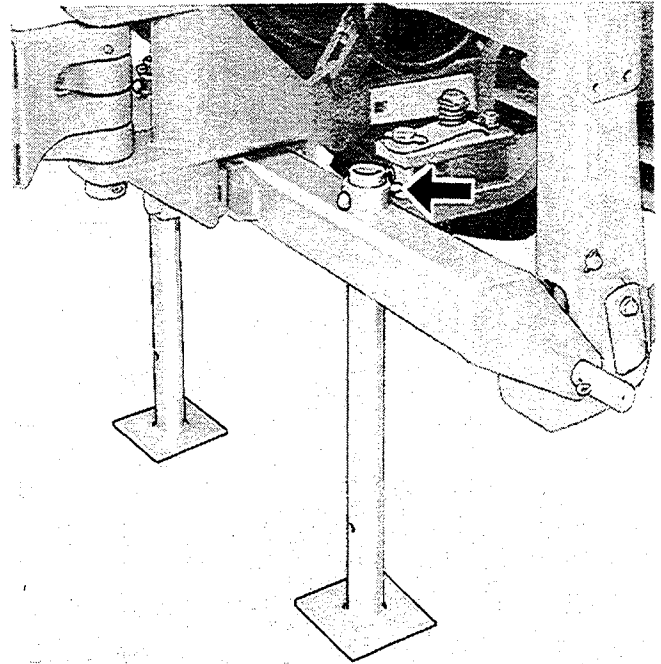
Line up grooves and tabs between connectors. Push monitor harness connector (F) onto power module connector and turn collar clockwise.

IMPORTANT: Planter must be connected to tractors with 12-volt negative ground systems only.

- A—Hydraulic Hose
- B—Hydraulic Hose
- C—Flow Control Valve
- D—Planter Wiring Harness
- E—Planter Wiring Harness
- F—Monitor Harness Connector

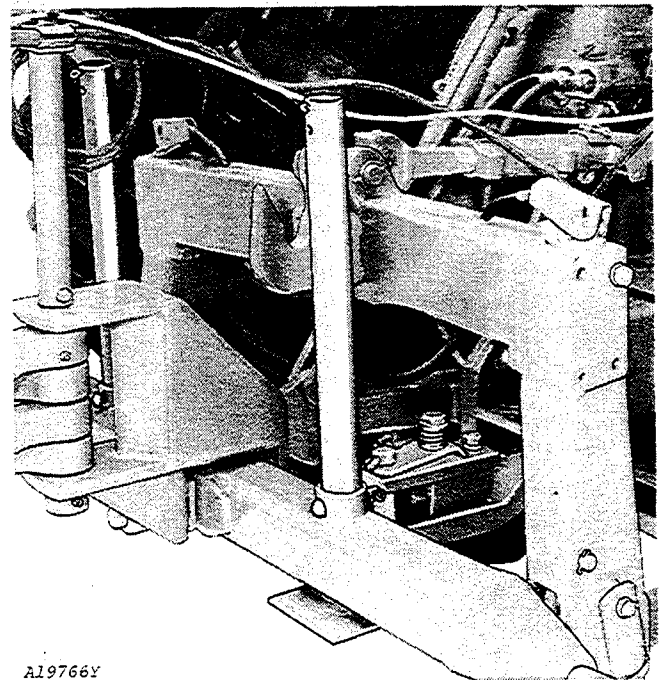
POSITIONING PLANTER STANDS FOR TRANSPORT OR OPERATION

Remove spring locking pin and drilled pin (bold arrow) securing stands to hitch crossbar.



13-17

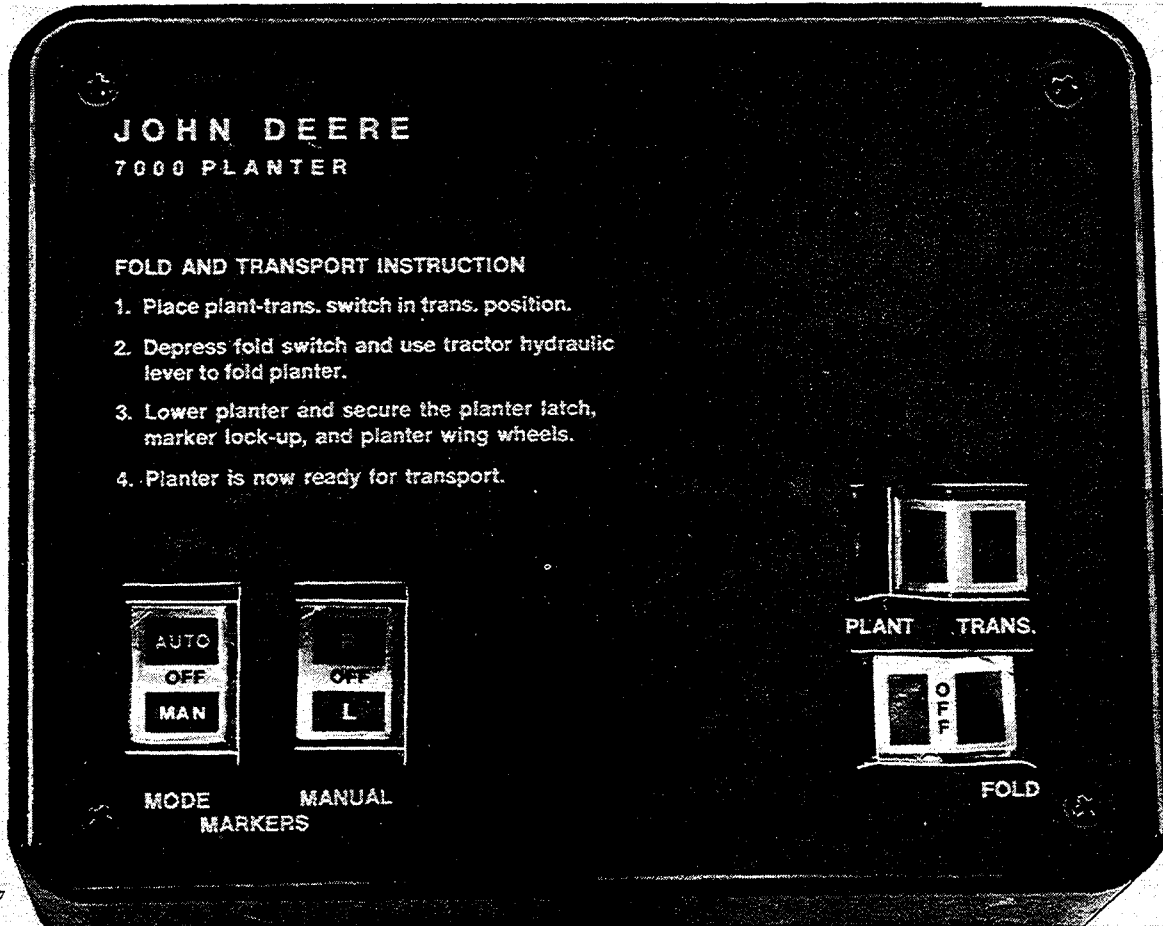
Raise and secure stands to hitch crossbar with drilled pin and spring locking pin.



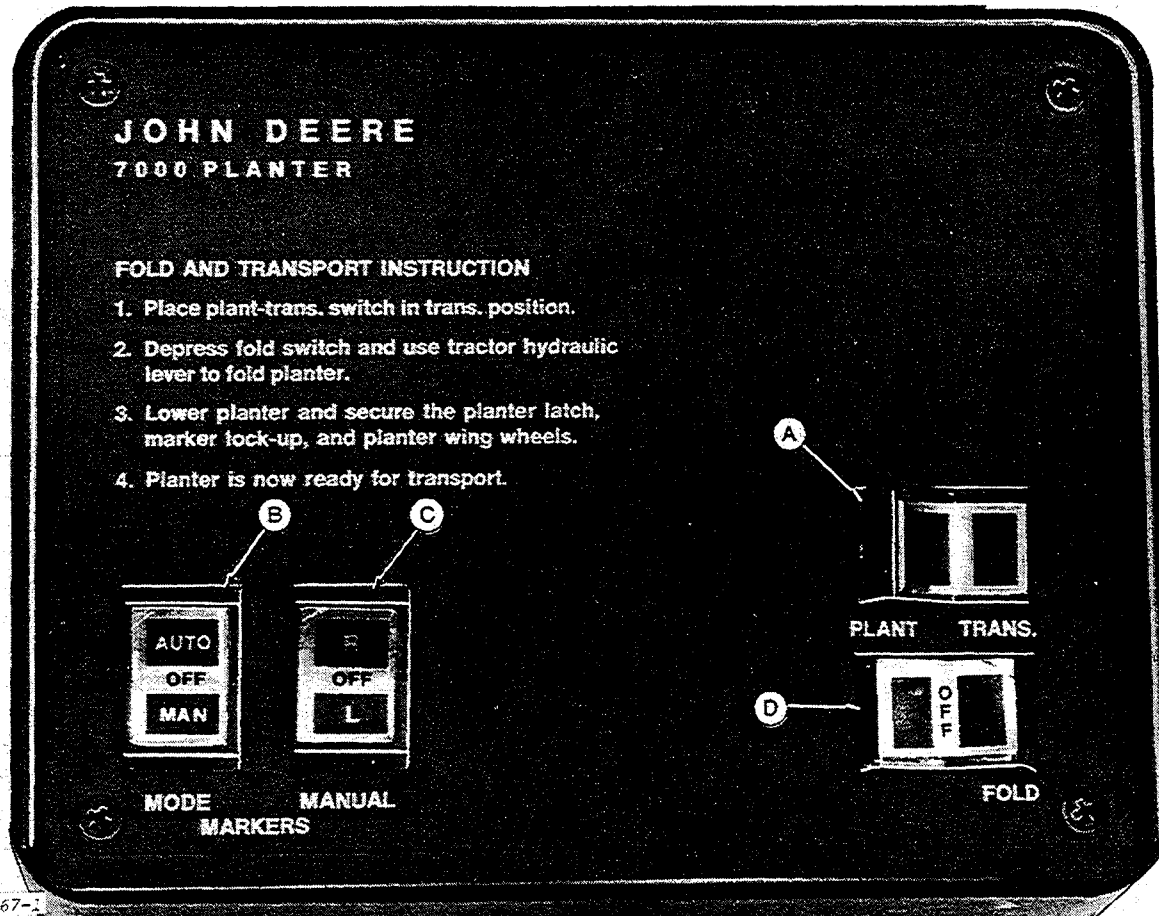


Control Console

18-19



The console switches operate solenoid hydraulic valves. These solenoid valves prevent a cylinder from operating unless the valves are energized. All the planter cylinders are connected to one tractor selective control valve, but only the cylinders which have been selected by the control console switches can be controlled by the tractor selective control valve. You select the function with the switch but you control the function with the tractor selective control valve.



A19767-2

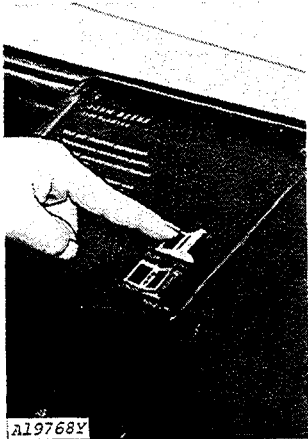
A—Plant or Transport Switch
 B—Automatic or Manual Control of
 Markers Switch

C—Right or Left-Hand Marker Manual
 Control Switch
 D—Fold Switch

- A - PLANT—TRANS. switch - When in PLANT position, it allows the planter to be raised or lowered and the markers to be controlled with their console switches. When in TRANS. position, it allows the planter to be raised or lowered and folded or unfolded.
- B - MARKERS (MODE) AUTO-MAN switch - Allows either automatic marker alternating or manual control of the markers.
- C - MARKERS (MANUAL) R-L switch - Used in conjunction with the manual mode switch. It allows you to continuously lower the right- or left-hand markers.
- D - FOLD switch - Used to fold or unfold the planter.



Folding the Planter



20-24

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CAUTION: Be certain everyone is clear of planter.

CAUTION: Serious injury or death can result from contact with electric lines. Use care when moving or operating this machine near electric lines to avoid contact.

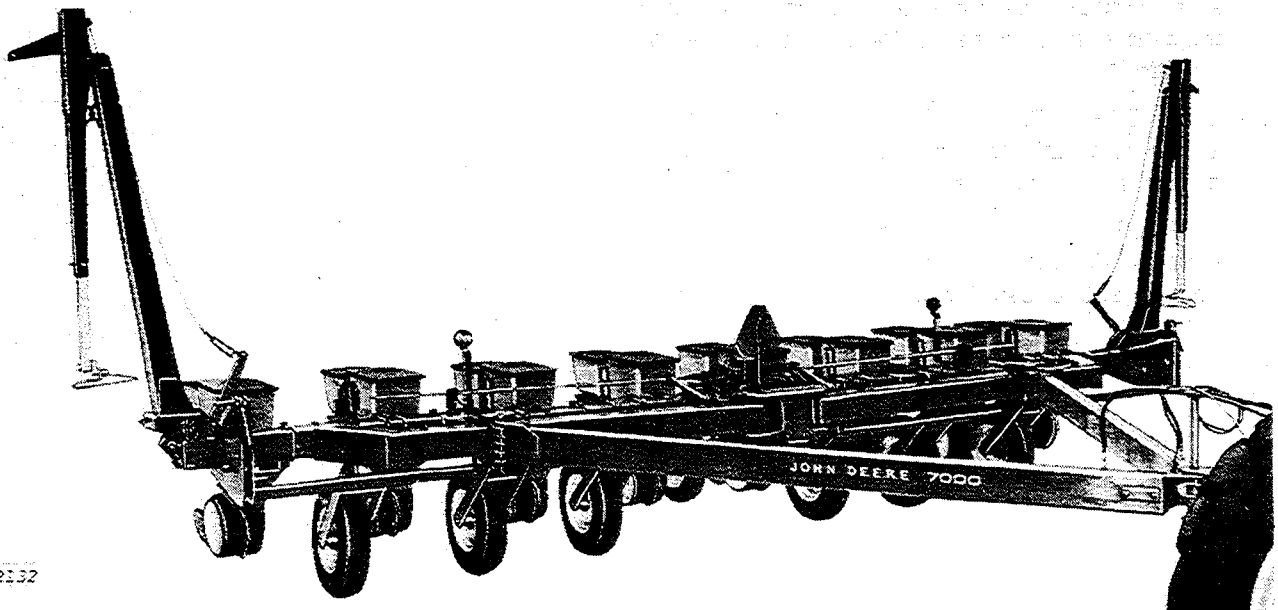
Use firm level ground when possible to make folding easier. Tractor must be in neutral to allow the tractor to roll slightly when folding. Raise the tractor rockshaft to approximately 3/4 raised position.

IMPORTANT: (8-Row Planters) If planter is equipped with fertilizer attachment and tine-tooth attachment, be sure four center openers are in the working position (not raised position) before folding or unfolding the planter.

(12-Row Planters) If planter is equipped with fertilizer attachment and tine-tooth attachment, be sure six center openers are in the working position (not raised position) before folding or unfolding the planter.

Press the PLANT-TRANS. switch to PLANT.

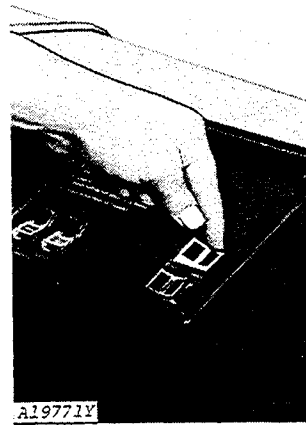
Pull back on the number 1 remote cylinder operating lever and raise the planter.



A22132

A22132

Press the PLANT-TRANS switch to TRANS.

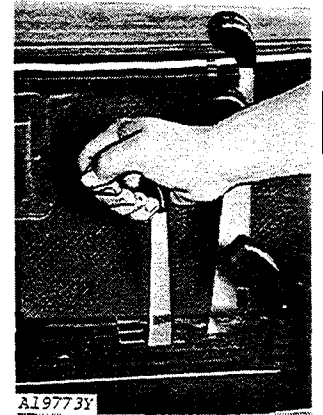
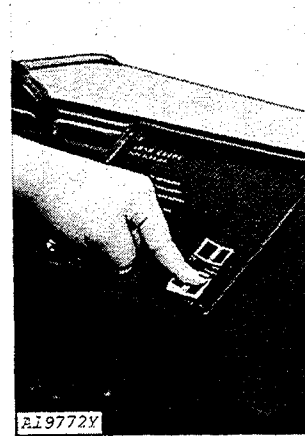


Press the FOLD switch and hold.

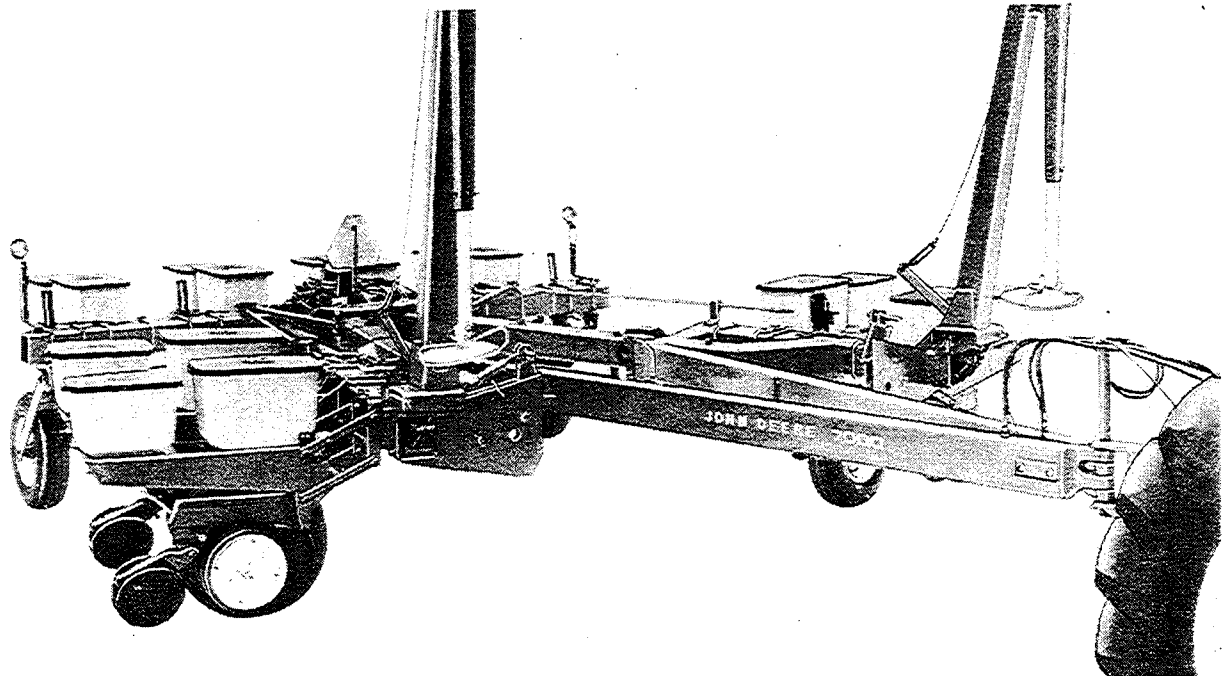
Fold the planter by pushing the number 1 remote cylinder operating lever forward.

NOTE: The rockshaft should be low enough to allow the planter wing latches to rest on the top of the hitch tubes.

When planter is completely folded, release FOLD switch.



20-24



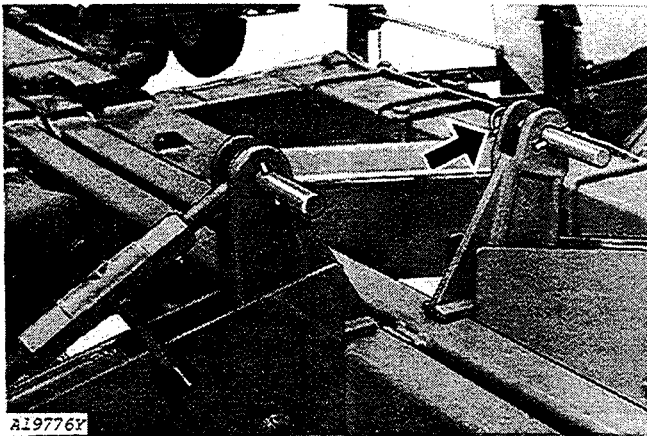
A22153

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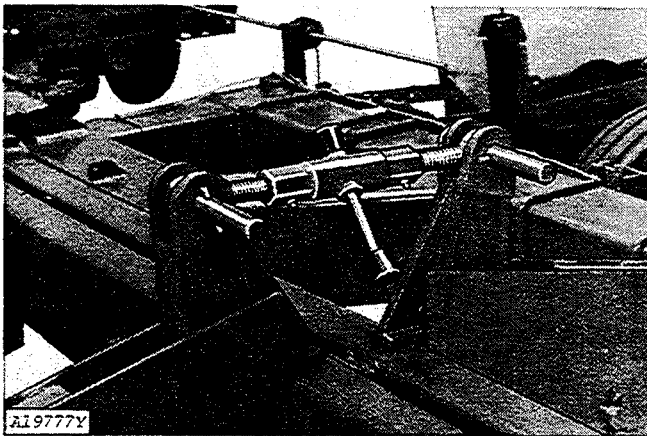
22 Folding the Planter



Lower the planter to the ground by pushing the number 1 remote cylinder operating lever and rockshaft control lever forward simultaneously.



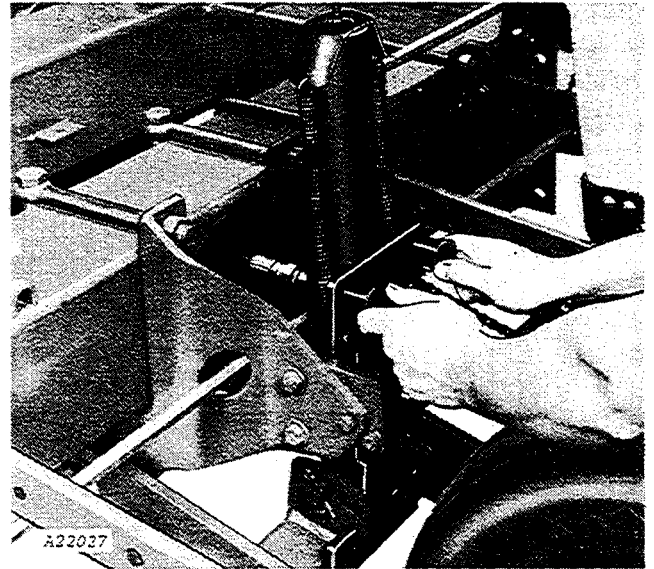
Remove Quik-Lock pin (bold arrow) from drilled pin on wing latch.



Latch wings together with turnbuckle, drilled pin and Quik-Lock pin.

NOTE: It may be necessary to extend the turnbuckle to insert the drilled pin.

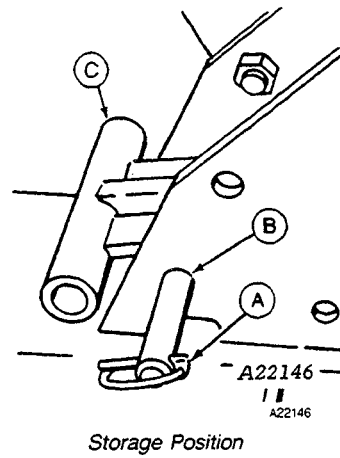
Lock the wing wheels for transport by pushing down on the wing wheel locks until they engage the cylinder supports as shown at right.



A22027

Lock markers for transport as follows:

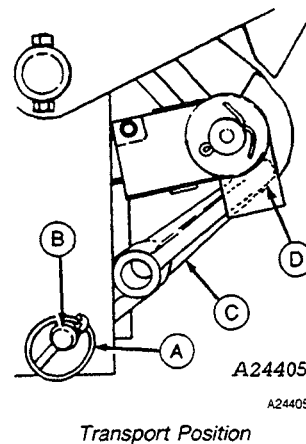
Remove Quik-Lock pin (A), pin (B) and marker support (C) from storage position on top of main frame.



- A—Quik-Lock Pin
- B—Pin
- C—Marker Support

Insert pointed end of marker support into hollow area of marker clevis assembly (D) as shown.

Align end hole in marker support with hole in main frame marker plate. Secure with pin and Quik-Lock pin.



- A—Quik-Lock Pin
- B—Pin
- C—Marker Support
- D—Marker Clevis Assembly

24 *Folding the Planter*

Raise the planter by pulling the number 1 remote cylinder operating lever and rockshaft control lever rearward simultaneously.

The planter is now ready for transport.

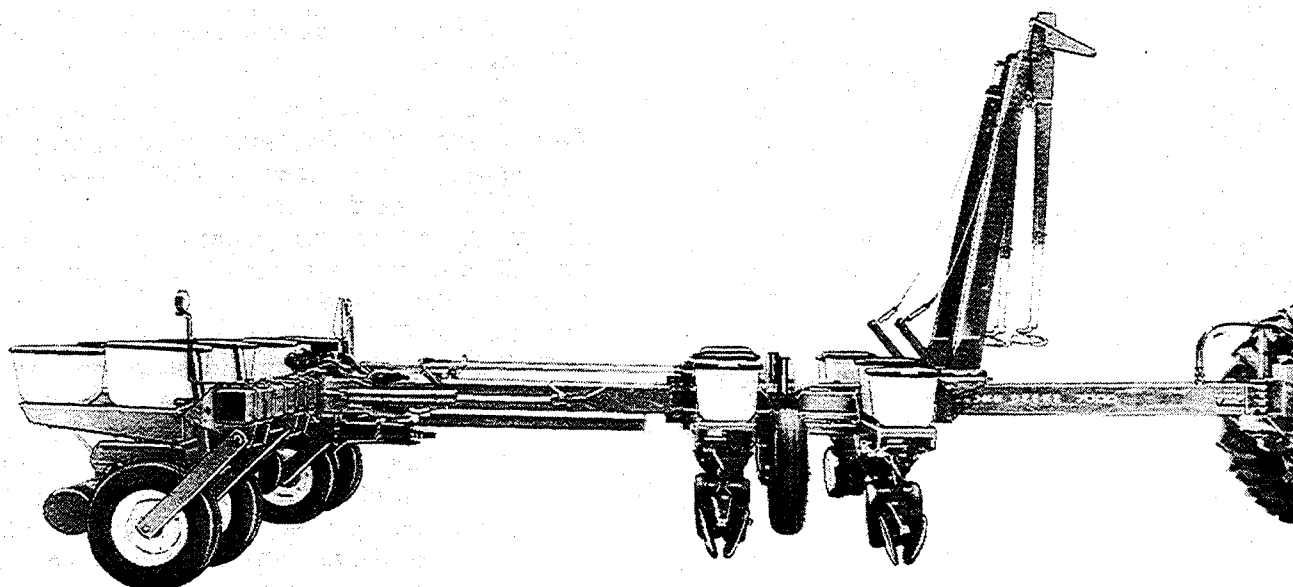


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Transporting



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25

A22134

⚠ CAUTION: Serious injury or death can result from contact with electric lines. Use care when moving or operating this machine near electric lines to avoid contact.

⚠ CAUTION: When transporting the planter with fertilizer, the hoppers or tanks should be half-full or less. For two-wheel drive tractors, exceeding this weight will mean poor front end stability and possible front end raising. For four-wheel drive tractors, this will prevent excessive frame loading. When transporting 12-Row planters with fertilizer, do not exceed 10 mph (16.1 km/h).

The planter is towed like a two-wheel cart in the folded transport position. Use caution in learning the tracking path of the planter behind the tractor when turning corners. The long wheelbase of the planter will make rear planter wheels “cut the corner”.

⚠ CAUTION: When transporting the planter on a smooth surface road, do not exceed maximum tractor speed. Reduce speed considerably when traveling over rough ground.

⚠ CAUTION: Use of flashing warning lights and turn signals are recommended when towing this equipment on public roads unless prohibited by state or local regulations.



Unfolding the Planter



CAUTION: Be certain everyone is clear of planter.



CAUTION: Serious injury or death can result from contact with electric lines. Use care when moving or operating this machine near electric lines to avoid contact.

Use firm level ground when possible to make unfolding easier. Tractor must be in neutral to allow the tractor to roll slightly when unfolding.

Press the PLANT-TRANS. switch to TRANS.

IMPORTANT: On 8-Row Planters equipped with fertilizer attachment and tine-tooth attachment, be sure four center openers are in the working position (not raised position) before folding or unfolding the planter. On 12-Row Planters equipped with fertilizer attachment and tine-tooth attachment, be sure six center openers are in the working position (not raised position) before folding or unfolding the planter.

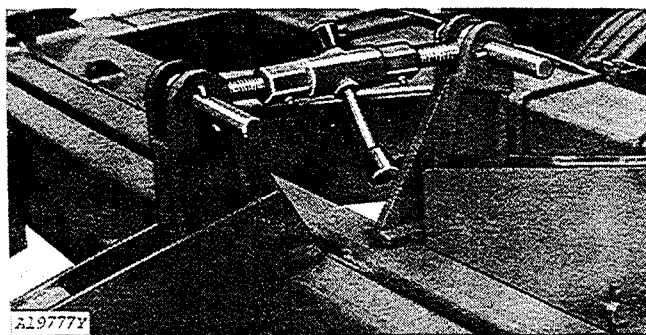
26-30



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Lower the planter to the ground by pushing the number 1 remote cylinder operating lever and rockshaft control lever forward simultaneously.



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Unlatch wings by removing Quik-Lock pin and drilled pin from one end of the turnbuckle.

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