F400AH Series
Front-Mounted Bedders

OPERATOR'S MANUAL

F400AH Front-Mounted Bedders

OMA15631 ISSUE 01SEP66 (ENGLISH)

Deere & Company
PRINTED IN U.S.A.

OPERATOR'S MANUAL

OM-A15631

JOHN DEERE

F400AH SERIES

FRONT-MOUNTED BEDDERS

YOUR NEW BEDDER

Behind your new bedder is an organization that has designed and built farm implements for over 125 years. This bedder was built in a John Deere factory by experienced men, many who have worked in this large plant for from 10 to 45 years, thus assuring the utmost in good design, high-grade workmanship, and thorough inspection, so essential to the production of good implements.



High-quality materials, precision production methods, and accurately-controlled heat-treating assure maximum strength and long life for every part.

This manual has been carefully prepared and illustrated so you may make the necessary adjustments for adapting your bedder to work properly in practically all types of soil and field conditions. These adjustments, such as row spacings, proper penetration, etc., are fully covered in this manual.

Study this manual carefully. Keep it handy, in a safe place, for future reference.

Occasionally your bedder may need new parts to replace worn parts, or require emergency service not covered in this manual. If so, we suggest that you take advantage of the facilities offered by your John Deere dealer, which assure you of genuine John Deere Parts and prompt "know-how" service in the field or in the shop.

If you will furnish your dealer with the information which should be recorded at the bottom of this page, when the bedder is delivered, he can give you prompt and efficient service.

JOHN DEERE F430AH AND F440AH FRONT-MOUNTED BEDDERS

No. of Rows . . . . . .

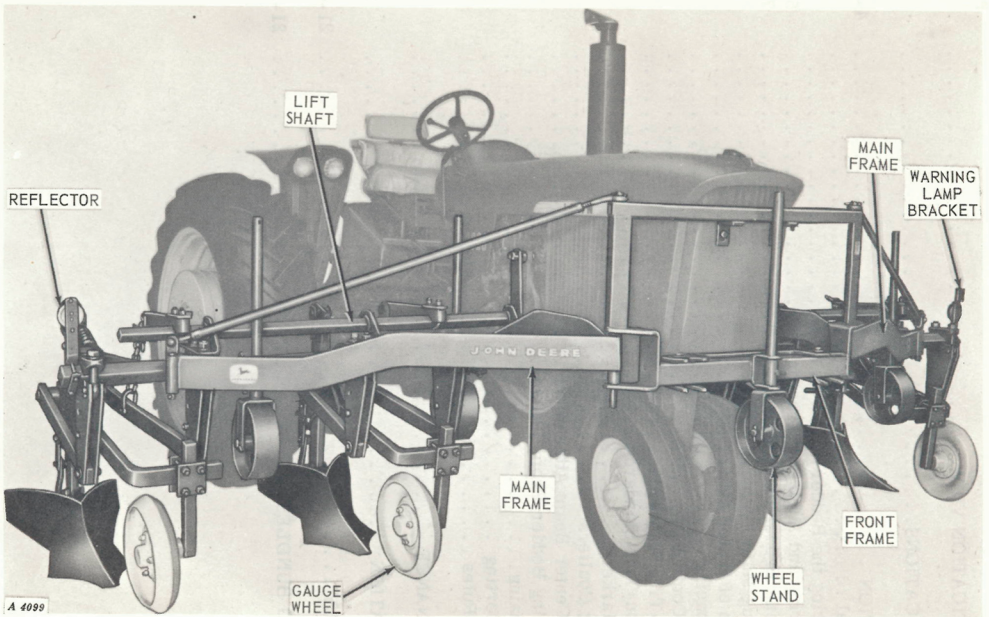
Date Purchased . . . . . 19 . . . . . .

(To be filled in by Purchaser)

Price $1.00

CONTENTS

	Page
IDENTIFICATION VIEW	2
SPECIFICATIONS	3
OPERATION	4-18
General	4
Preparing the Bedder	4
Preparing and Adjusting Tractor	5-6
Attaching Bedder to Tractor	7-9
Leveling Main Frame	9
Suction of Bottoms	10
Row Spacing	11
Depth Control	12
Safety-Trip Standards	13
Friction-Trip Standards	14
Disk Markers	14
Rolling Coulters	15
Front Center Beam Attachment	16
Detaching Bedder From Tractor	17
Lift Chains	18
Transporting	18
Safety Rules	18
MAINTENANCE	19
LUBRICATION	20
ASSEMBLY	21-43
SHIPPING BUNDLES	21-22



John Deere F440AH 5-Row Front-Mounted Bedder

SPECIFICATIONS

Types	F430AH 2- and 3-Row Bedders with Friction-Trip Standards for John Deere 2510, 3010, 3020, 4010, and 4020 Row-Crop Tractors. F430AH 5-Row Bedder with Friction-Trip Standards for John Deere 3020, 4010, and 4020 Row-Crop Tractors. F440AH 2- and 3-Row Bedders with Safety-Trip Standards for John Deere 2510, 3010, 3020, 4010, and 4020 Row-Crop Tractors. F440AH 5-Row Bedders with Safety-Trip Standards for John Deere 3020, 4010, and 4020 Row-Crop Tractors.
Row Spacing	36- to 42-inch Rows on 2- and 3-Row Bedders. 36- to 40-inch Rows on 5-Row Bedders.
Depth Control	Front units controlled by gauge wheels. Rear unit controlled hydraulically by tractor 3-point hitch with Load-and-Depth Control.
Lift	Front units are controlled by remote cylinder operating lever. Delayed lift of rear unit controlled by rockshaft control lever. Front units can be lifted independently by use of dual remote hydraulic system or together by use of single remote hydraulic system.
Bottoms	Open-Foot type as ordered.
Sweeps	Available as special equipment.
Gauge Wheels	General-Purpose Cast Gauge Wheel, regular for front units on all machines. Rubber-Tired Gauge Wheels, special equipment. Blackland Gauge Wheel, special equipment.
Coulters	15-Inch Rolling Coulters, special equipment.
Disk Marker Attachment	Available as special equipment.
Front Center Beam Attachment	Available as special equipment.

(Specifications and design subject to change without notice.)

NOTE: When the term "right" or "left" is used, it means from a position behind the bedder and facing the front.

OPERATION

GENERAL

Your new bedder has been designed to utilize the full power of your tractor and, when properly adjusted, will meet all the requirements of the bedder territory.

These bedders may be used for bedding, middlebreaking, breaking down old beds, and throwing up new beds. Sweeps may be used in place of bottoms for sweeping the centers of the beds prior to planting. These bedders are adaptable to practically all conditions and requirements under which equipment of this type is used.

PREPARING THE BEDDER

BOTTOMS, SWEEPS, AND COULTERS

The polished surfaces of the bottoms, sweeps, and coulters have been painted with protective black paint.

In most cases it is not necessary to remove the black paint because it will wear off quickly upon contact with the soil. In those soils where the black paint will not wear off, remove with gasoline, kerosene, or diesel fuel.

Be careful when using any of these fuels so they do not ignite. Bedder should be in a well-ventilated area and away from any sparks or flames.

If the bedder is not to be used immediately, protect the polished surfaces by applying a coat of cup or gun grease. If bedder is to be put in storage for a considerable length of time, see page 19.

LUBRICATION

Be sure bedder has been properly lubricated. See Lubrication Chart on page 20.

BOLTS AND SET SCREWS

Before starting to work with a new bedder or one which has been stored, check to see that all bolts and set screws are tight and all cotter pins spread to keep them from falling out. Check the bolts that hold the bottoms to see that they are drawn up very tight.

A good practice is to check for loose bolts, screws, or parts when lubricating the bedder. Loose bolts are easily lost or cause excessive wear on parts, resulting in possible serious damage to the bedder.

PREPARING AND ADJUSTING TRACTOR

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

TIRE INFLATION

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

TRACTOR DRAWBAR

Set the tractor drawbar in the short high position and pin to the extreme left-hand side of the support.

POWERSHAFT SHIELD

It is not necessary to remove the powershaft shield from the tractor.

REAR WHEEL WEIGHTING

Rear wheel weights may be necessary to eliminate excessive wheel slippage or for stability in rough or hillside fields. However, weights should not be added to the point where all slippage is eliminated. To do so would hinder maximum performance of the tractor.

The ideal amount of added weight can be determined by observing the tracks of the rear wheels. When the tractor is pulling its rated load, the soil between the tire lugs should be broken or shifted. If too much weight has been added, the tread marks will be clear and distinct. If too little weight has been added, the tread marks will be entirely obliterated.

Liquid Weights

Water and calcium chloride solution is an economical means of adding weight to rear wheels. Calcium chloride is recommended rather than water as it will not freeze. See your tractor operator's manual or your John Deere dealer.

Cast-Iron Weights

Where weight in addition to or in place of liquid weight is required, cast-iron weights can be bolted to the rear wheels. This type of weight can be secured from your John Deere dealer.

For maximum ballast, refer to your tractor operator's manual.

REAR WHEEL SETTING

Set the rear wheels of the tractor to conform to the row spacing of the bedder. See row spacing chart on page 11.

FRONT WHEEL SETTING

These Bedders are recommended for use on row-crop tractors with tricycle-type or adjustable-tread front axles.

To improve the steering and handling of tricycle-type tractors on old beds and when rebedding, reverse the front wheels on the wheel hubs to the wide setting.

On tractors equipped with adjustable-tread front axles set front wheels to the narrowest setting.

3-POINT HITCH AND HYDRAULIC SYSTEM

The 3-point hitch provides a fast, easy means of attaching the bedder to the tractor. See your tractor operator's manual for complete explanation of the hydraulic system.

Rockshaft Selector Lever

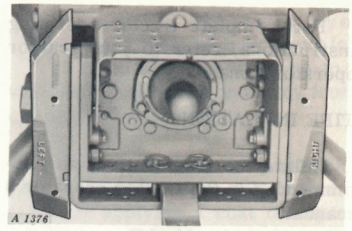
When using 3- and 5-row bedders, set the selector lever in the "D" position for most ground conditions. However, in some ground conditions it may be necessary to use the "LD" position.

Link Lengths

The rear section on 3- and 5-row bedders is adaptable to category 2, 3-point hitches. The center link may be used for adjusting suction of the rear bottom. For recommended setting of link lengths see the chart below.

Tractor	Left-Hand Lift Link	Right-Hand Lift Link	Center Link
2510 Row-Crop	29-3/4"	29-3/4"	26"
3010 Row-Crop	28-1/2"	28-1/2"	26"
3020 Row-Crop	29-3/4"	29-3/4"	26"
4010 Row-Crop	30-1/4"	30-1/4"	26"
4020 Row-Crop	30-1/4"	30-1/4"	26"

Sway Blocks



Sway Blocks Installed to Eliminate all Side Sway

On tractors used with 3- and 5-row bedders, set the sway blocks down along the drawbar support to eliminate all side sway.

Rockshaft Control

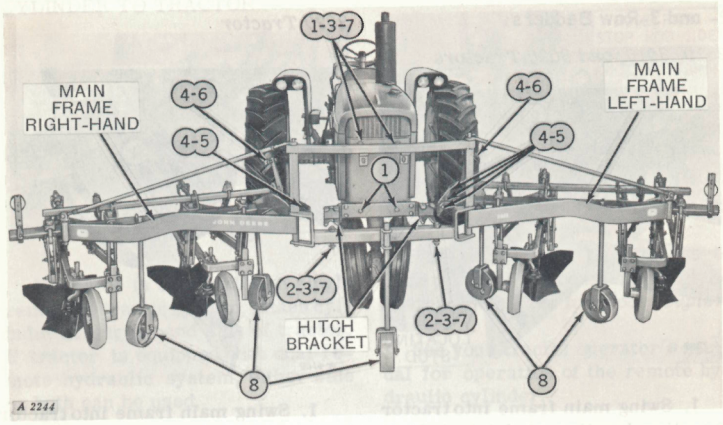
Tractors must be equipped with front rockshaft control, and also rear rockshaft for 3- and 5-row bedders.

See your tractor operator's manual for complete instructions for installation and operation of front rockshaft.

BE SAFE

It pays to be careful,
It costs to be careless!

ATTACHING BEDDER TO TRACTOR



If the bedder has been assembled but has not been in use for some time, make sure all parts are assembled properly and lubricated. Then attach to tractor as follows:

1. Attach the hitch bar bracket assembly to front of tractor using cap screws supplied in bracket. Remove two top cap screws from tractor grille at this time.

2. Drive tractor forward slipping hitch brackets over guide pipes in front frame.

3. Attach long bolts supplied in hitch brackets into guide pipes and attach upper front frame to tractor using cap screws supplied in tractor. Do not tighten these bolts at this time.

4. Remove main frame bolts from main frames. Remove 1-inch bolts from lift shaft arms.

5. Swing main frames into position at sides of tractor and attach with bolts removed from main frames. See page 8 for attaching to various tractors.

6. Attach lift shaft arms to rockshaft arms. See page 9 for attaching to various tractors.

NOTE: Place bushing between tractor rockshaft arm and lift shaft arm on side equipped with remote cylinder for clearance purposes.

7. Tighten guide pipe bolts and cap screws in front frame securely.

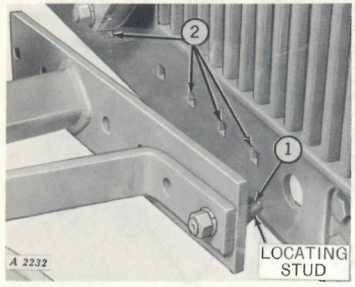
8. Raise stand wheels to transport position and tighten securely.

If using a 3- or 5-row bedder, attach rear beam to 3-point hitch. See page 33.

ATTACHING MAIN FRAME

2- and 3-Row Bedders

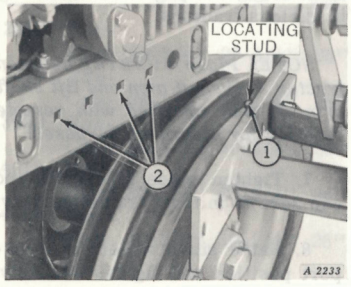
2510, 3010, and 3020 Tractors



1. Swing main frame into tractor inserting locating stud into hole in tractor.

2. Secure main frame mounting plate to tractor with carriage bolt and cap screws supplied.

4010 and 4020 Tractors

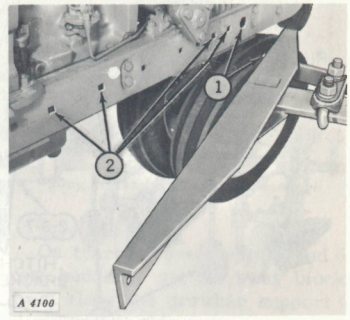


1. Swing main frame into tractor inserting locating stud into hole in tractor.

2. Secure main frame mounting plate to tractor with carriage bolt and cap screws supplied.

5-Row Bedders

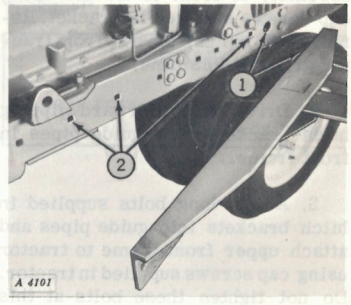
3020 Tractor



1. Swing main frame into tractor inserting locating stud into hole in tractor.

2. Secure main frame mounting plate to tractor with carriage bolt and cap screws supplied.

4010 and 4020 Tractors



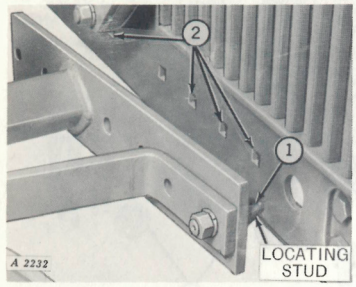
1. Swing main frame into tractor inserting locating stud into hole in tractor.

2. Secure main frame mounting plate to tractor with carriage bolt and cap screws supplied.

ATTACHING MAIN FRAME

2- and 3-Row Bedders

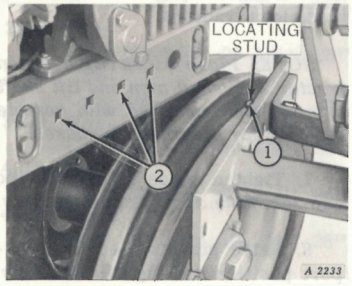
2510, 3010, and 3020 Tractors



1. Swing main frame into tractor inserting locating stud into hole in tractor.

2. Secure main frame mounting plate to tractor with carriage bolt and cap screws supplied.

4010 and 4020 Tractors

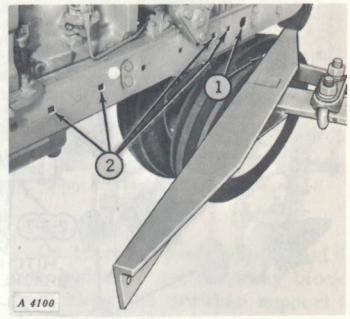


1. Swing main frame into tractor inserting locating stud into hole in tractor.

2. Secure main frame mounting plate to tractor with carriage bolt and cap screws supplied.

5-Row Bedders

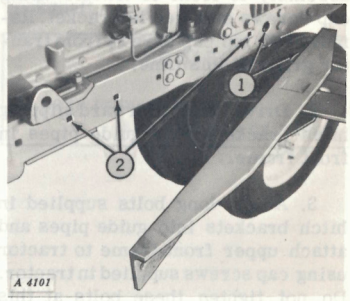
3020 Tractor



1. Swing main frame into tractor inserting locating stud into hole in tractor.

2. Secure main frame mounting plate to tractor with carriage bolt and cap screws supplied.

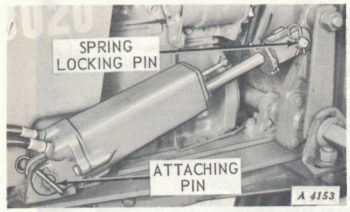
4010 and 4020 Tractors



1. Swing main frame into tractor inserting locating stud into hole in tractor.

2. Secure main frame mounting plate to tractor with carriage bolt and cap screws supplied.

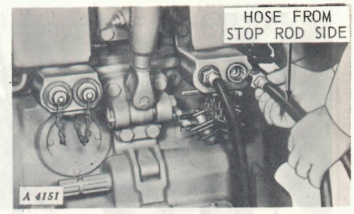
ATTACHING REMOTE HYDRAULIC CYLINDER TO TRACTOR



If tractor is equipped with single remote hydraulic system, attach cylinder on right-hand side of tractor. If tractor is equipped with dual remote hydraulic system, either side or both can be used.

NOTE: If two cylinders are used, an additional spacer (A11812A) and a 1 x 4-inch machine bolt are required to provide clearance for the cylinder between tractor rockshaft and bedder rockshaft.

CONNECTING HOSES



The hoses may be attached to either side of the coupler to suit the operator. *Be sure to relock coupler.*

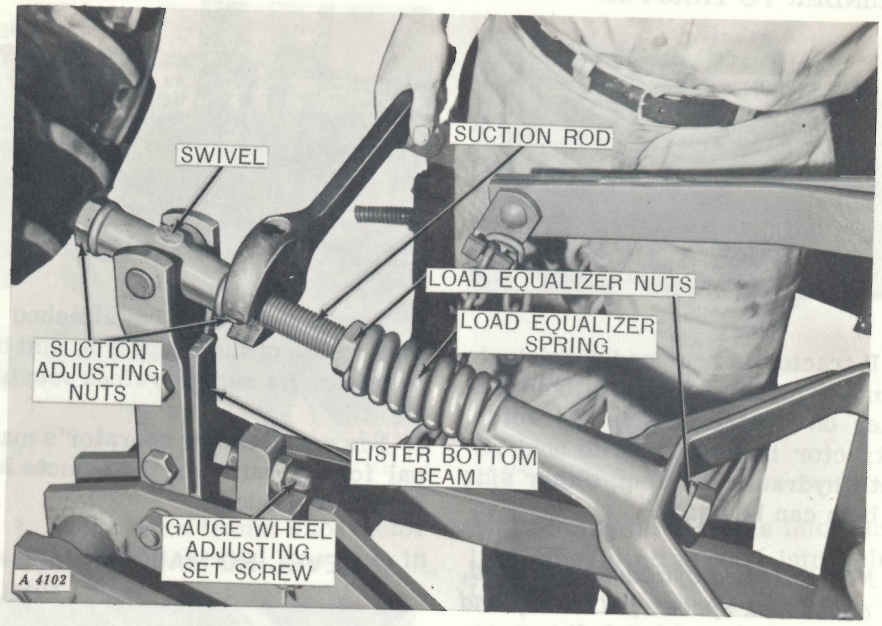
See your tractor operator's manual for operation of the remote hydraulic cylinder.

LEVELING MAIN FRAME



To level the main frame, raise the bedder, loosen jam nut and adjust truss pipe.

SUCTION OF BOTTOMS



FRONT UNITS

The suction of the bottoms is controlled by the suction rod and yoke.

To adjust the suction rod, loosen one nut and tighten the other against the swivel at the top of the lister bottom beam.

NOTE: After making a suction adjustment on the lister bottom, it may be necessary to readjust the gauge wheel fine adjustment set screw to maintain original depth.

Additional suction may be obtained on bedders equipped with friction-trip standards. Slots in the upper end of standards allow the bottoms to be set for proper suction. See page 14.

REAR UNIT

Suction of lister bottom on rear frame beam is controlled by adjustment of the center link on the 3-point hitch. By shortening or lengthening the center link, more or less suction on the bottom may be obtained.

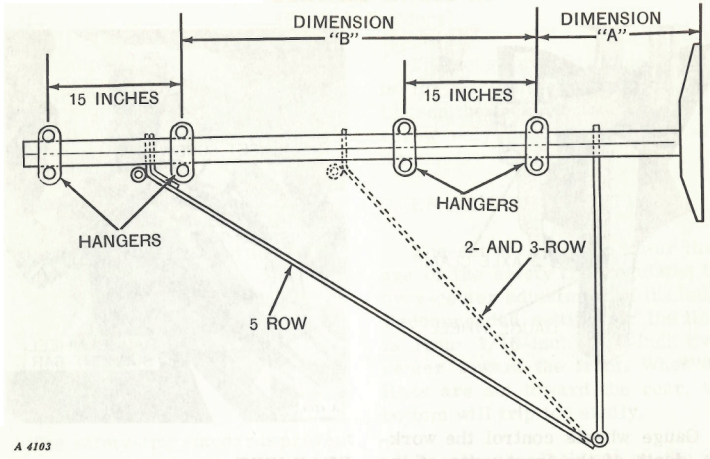
LOAD EQUALIZER

A load equalizer is provided as regular equipment on the outside suction rod and yoke on 5-row bedder front units. The load equalizer may be used as special equipment on 2- and 3-row bedders and also on the inside suction rod and yoke of 5-row bedders.

The load equalizer automatically adjusts the depth of the bottom to equalize the load and prevent tractor side draft when an outside bottom encounters heavy draft soil. Use of the load equalizer permits the operator to drive straight forward at all times.

No adjustment of the load equalizer spring is necessary. Set nuts to end of threads against spring on suction rod.

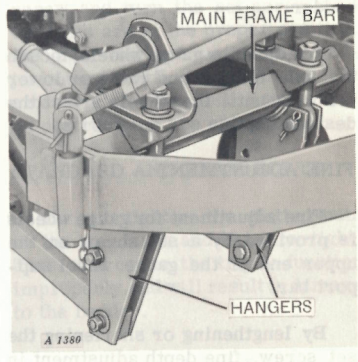
ROW SPACING



These bedders are adjustable for various row spacings depending on number of bottoms used.

Adjustments are made by sliding the hangers on the main frame bar to the desired row spacing. *See above illustration and chart below for measurements.*

Bedder	Row Space	Dimension "A"	Dimension "B"
2- and 3-Row	36"	14-1/2"	. . . .
2- and 3-Row	38"	16-1/2"	. . . .
2- and 3-Row	40"	18-1/2"	. . . .
2- and 3-Row	42"	20-1/2"	. . . .
5-Row	36"	14-1/2"	36"
5-Row	38"	16-1/2"	38"
5-Row	40"	18-1/2"	40"

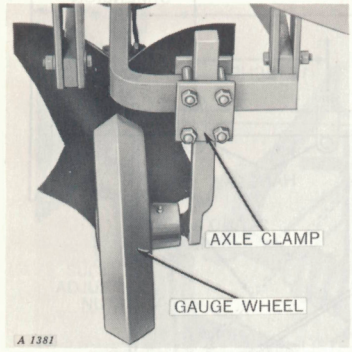


Hangers for 2- and 3-Row

The 2- and 3-row bedders are adjustable from 36- to 42-inch rows.

The 5-row bedders are adjustable from 36- to 40-inch rows.

DEPTH CONTROL





Gauge wheels control the working depth of the front units of the bedder.

To adjust the gauge wheels, loosen the axle clamps and raise or lower the axle until the wheels are at the desired depth.

FINE ADJUSTMENT

Fine adjustment for gauge wheels is provided by a set screw on the upper end of the gauge wheel support bar.

By lengthening or shortening the set screw, fine depth adjustment in the field may be accomplished without disturbing the initial setting of the gauge wheels.

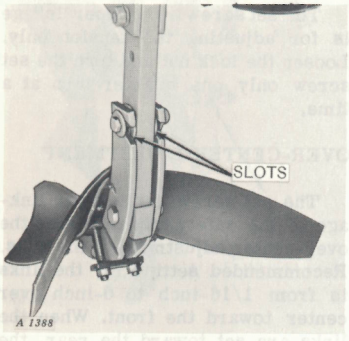
REAR UNIT

On 3- and 5-row bedders the depth of the rear bottom is controlled by the rockshaft control lever located on the tractor dash.

A depth stop is provided on the lever for precise adjustment and ease of control. The depth stop may be bypassed if greater depth of rear bottom is desired.

Delayed lift of the rear unit is easily accomplished by timing the lift with the rockshaft control lever after front units are raised with the remote cylinder operating lever.

FRICTION-TRIP STANDARD (F430AH Bedders)



The friction-trip standards are slotted at the top end to allow the bottom to trip when an obstruction is encountered, preventing damage to the bedder or the bottom.

To reset the bottom, loosen the bolts, push the standards back in position, and retighten bolts.

The tighter the bolts the more force it takes to trip the bottom. Be careful not to get the bolts too tight.

The slots at the upper end of the standards also allow standards to be set for proper suction. They should be set so the bottoms or sweeps work uniformly.

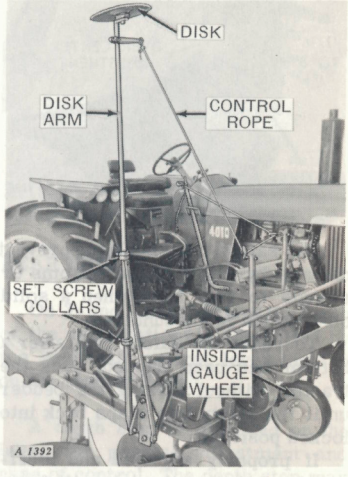
DISK MARKERS

Disk markers are available as special equipment.

The disk arm can be moved in or out for various row spacings. Set the disk marker out from the center of the tractor three times the row spacing on 2- and 3-row bedders. For example if the rows are spaced 40 inches apart, set the disk marker 120 inches from the center of the tractor.

On 2- and 3-row bedders, drive with the center of the tractor over the mark.

On the 5-row bedder, set the disk marker out approximately four times the row spacing and run the inside gauge wheel in the mark left by the disk marker.



To adjust the markers, loosen set screws in collars and slide arms to desired setting. Then tighten set screws.

The marker connecting rope should be tight enough to raise one marker to the locked position when the other marker is lowered.

Tie knots in the control ropes to hold markers up when not in use.

Be careful when walking under a raised disk marker. The edge of the marker is sharp enough to cause injury if it should drop accidentally.

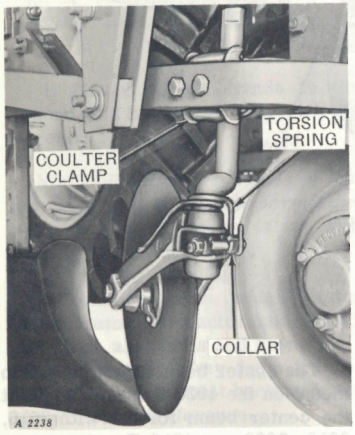
Disk markers should also be wired firmly to the bedder when not in use so they will not accidentally fall on anyone.

ROLLING COULTERS

Rolling coulters are available as special equipment. Set the rolling coulters so the coulter blade is directly in line with the center ridge on the bottom. Set the coulter blade just deep enough to cut trash yet high enough so that the coulter bearing will clear the trash.

To adjust the round shank coulter, loosen the clamp bolts and nuts and rotate the coulter shank until coulter blade is at proper position.

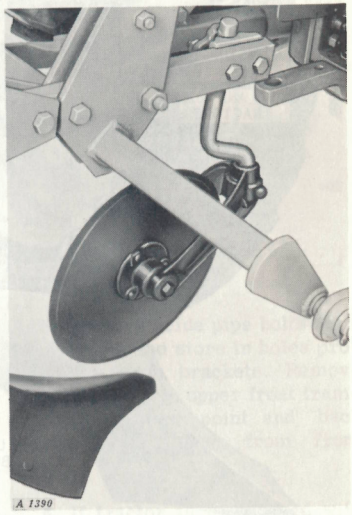
FRONT COULTER



When a major adjustment of a round shank coulter is made, it may be necessary to adjust the coulter shank collar so coulter is free to swing in the coulter yoke an equal distance on either side of the straight ahead position. When the machine is raised the torsion spring will push the coulter to the inside.

Be careful so coulter yoke and blade do not slip off shank.

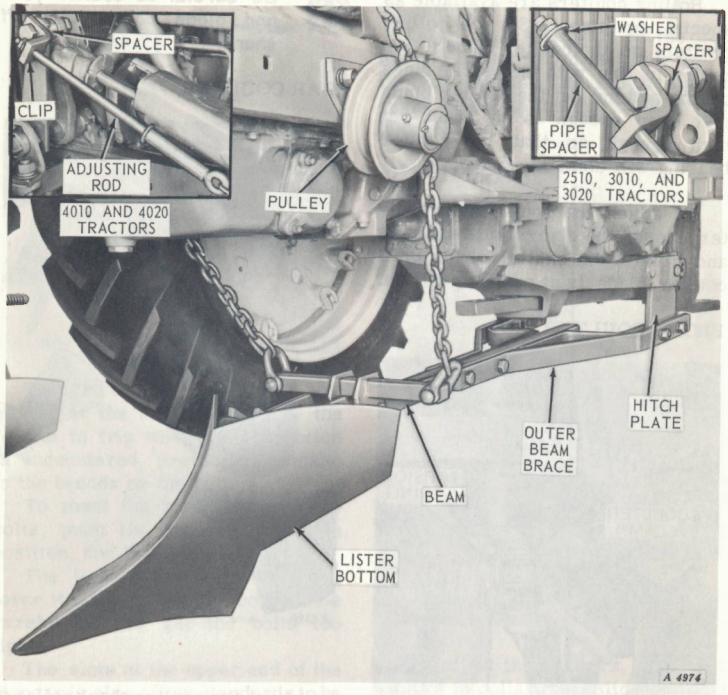
REAR COULTER



Adjust the coulter shank collar so coulter is free to swing an equal distance on either side of the "straight ahead" position.

To adjust, loosen bolt in collar and rotate collar until open end of collar faces front of bedder.

FRONT CENTER BEAM ATTACHMENT
(Special Equipment)



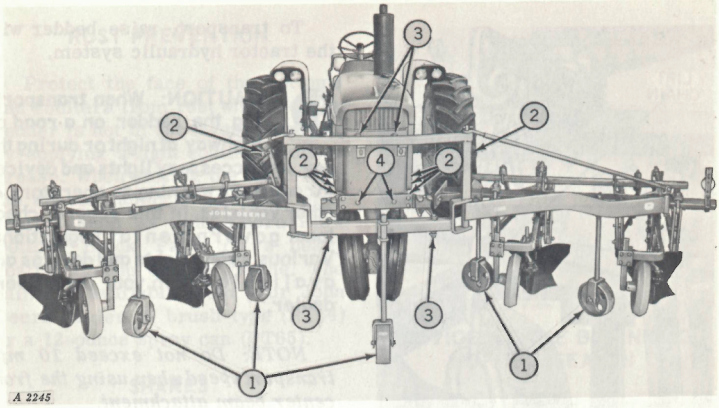
The front center beam is hydraulically controlled from the front rockshaft, which raises and lowers the center beam simultaneously with the other units. The center beam can be used only with a front rockshaft controlled by a single remote hydraulic cylinder.

The center beam is factory-set to mount on the 4020 Tractor. To adapt the center beam for use with 2510, 3010, 3020, or 4010 Tractors, see page 37.

To attach the center beam to the tractor, see pages 37 through 39.

NOTE: Do not exceed 10 mph transport speed when using the front center beam attachment.

DETACHING BEDDER FROM TRACTOR



1. Lower wheel stands to the ground and fasten securely with set screws.

NOTE: Position the wheels of the rear stands at an angle to permit the main frames to swing in an arc away from tractor.

2. Remove bolts which fasten main frame to tractor and 1-inch lift shaft arm bolts and swing main frames out and away from tractor far enough to permit backing tractor without interference.

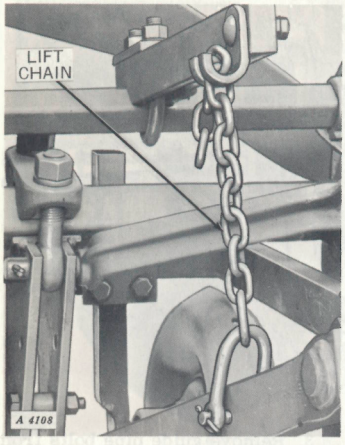
Store bolts removed from main frames and lift shaft arms in main frame holes.

3. Remove guide pipe bolts from front frame and store in holes provided in hitch brackets. Remove cap screws from upper front frame tractor attaching point and back tractor *slowly* away from front unit.

4. If tractor is to be used with other front-mounted equipment remove hitch bar bracket from front of tractor and secure cap screws in place in grille for safe keeping.

On 3- and 5-row units remove rear unit from 3-point hitch.

LIFT CHAINS



The lift chain is used for raising the bedder at the end of the rows and for transporting.

Adjust the chain to allow ample clearance when raising the bedder and so there is some slack when bedder is down in working position.

TRANSPORTING

To transport, raise bedder with the tractor hydraulic system.

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

NOTE: Do not exceed 10 mph transport speed when using the front center beam attachment.

SAFETY RULES

To avoid injury, always be careful while operating a tractor and bedder.

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

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

If spray can paint is used for protecting bottoms to be put in storage, be careful when discarding empty can. Do *not* incinerate or puncture can.

Remember: An accident is usually caused by someone's carelessness, neglect, or oversight.

MAINTENANCE

RUST PREVENTION

Protect the face of the bottoms and coulters from rust whenever the bedder is not in use (even overnight) by applying a light coating of oil or grease. When storing the bedder for the season, apply a good rust preventive such as John Deere Plow Bottom Black Paint or a heavy coating of cup or gun grease. The paint is available from your John Deere dealer in brush-type (PT64) or a 12-ounce spray can (PT65).

SHARES

Be sure to maintain a uniform shape of the cutting edge when worn shares are being sharpened. When replacing shares, insist on genuine John Deere Shares with the word "Deere" stamped on the back near the share number. "Deere" replacement shares fit like the originals and have more and better material in points and wearing surfaces to stay sharp longer.

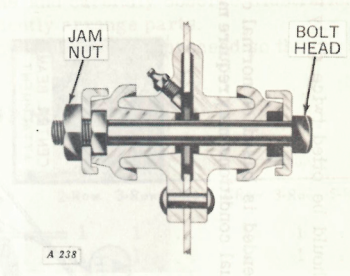
ROLLING COULTERS

It is important to keep the rolling coulter sharp and properly lubricated at all times.

ADJUSTING END PLAY IN COULTER HUBS

The rolling coulters have adjustable bearings which provide means for taking up wear.

To remove excessive end play in rolling coulter hubs, loosen jam nut and turn bolt head to right until end play is removed. Adjust so coulter blade will turn freely. Then tighten jam nut.



Cross-Section View of Coulter Bearing

SERVICE AT THE BEGINNING OF THE SEASON

Clean off any dirt or grease that may have accumulated on moving parts. This will prevent abrasive action that could cause excessive wear.

Thoroughly inspect the bedder for loose parts and adjust as necessary.

Lubricate as shown on page 20.

SERVICE AT THE END OF THE SEASON

The bedder's chief enemies, rust and corrosion, are busy the year around. A little time and effort spent protecting the bedder from destructive moisture will repay you in longer service, easier operation, and higher resale value.

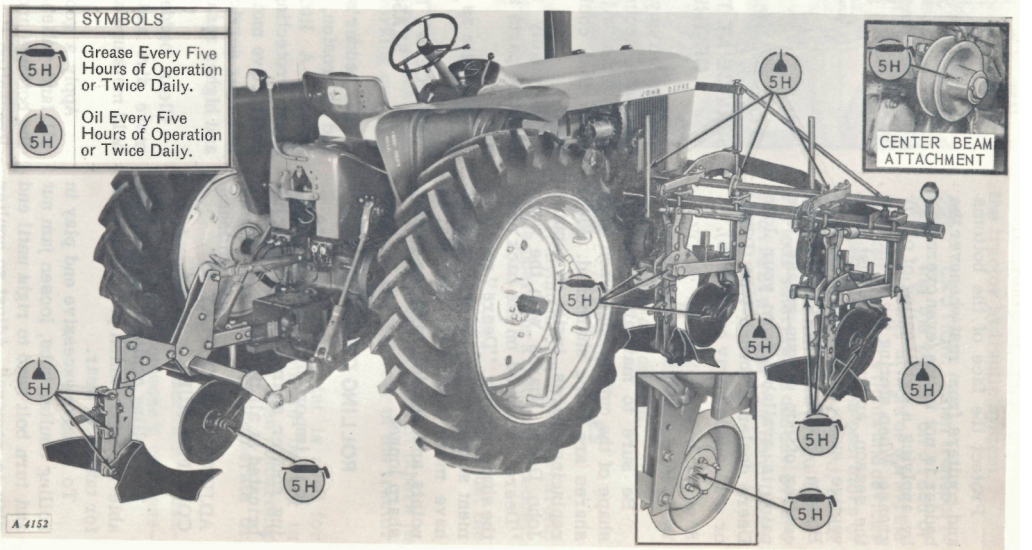
Clean bedder thoroughly to remove dirt and trash which would hold moisture and cause rusting.

Apply a good rust preventive to all land-polished surfaces such as the bottoms and coulters. See "Rust Prevention."

LUBRICATION

Grease fittings are provided at all points indicated in the lubrication chart. All parts provided with grease fittings should be lubricated as indicated with SAE Multipurpose-type grease. If any grease fittings are missing, replace them immediately. Clean fittings thoroughly before using grease gun. All other moving parts on the bedder should be oiled twice daily with SAE 30 lubricating oil.

The period recommended is based on normal conditions; severe or unusual conditions may require more frequent lubrication.



Lubrication Chart

ASSEMBLY

1. Read all assembly instructions and carefully observe illustrations.
2. Cut bundling wires and conveniently arrange parts.
3. Lubricate all bearings and moving parts as you proceed so they move freely.

REGULAR SHIPPING BUNDLES

Bundle No.	Description	F430AH 2-Row	F430AH 3-Row	F430AH 5-Row	F440AH 2-Row	F440AH 3-Row	F440AH 5-Row
BA 10783 A	Main Frame, R.H.	1	1	..	1	1	..
BA 10784 A	Main Frame, L.H.	1	1	..	1	1	..
BA 11124 A	Main Frame, R.H.	..	..	1	..	..	1
BA 11125 A	Main Frame, L.H.	..	..	1	..	..	1
BA 10500 A	Lift Shaft	1	1	..	1	1	..
BA 10501 A	Lift Shaft	..	..	1	..	..	1
BA 10502 A	Hanger	2	2	4	2	2	4
BA 11122 A	Bail, R.H.	1	1	2	1	1	2
BA 11123 A	Bail, L.H.	1	1	2	1	1	2
BA 10505 A	Wheel Stand	1	1	2	1	1	2
BA 10506 A	Rear Frame Bar	..	1	1	..	1	1
BA 10507 A	Front Standard—Friction-Trip	2	2	4	..	..	..
BA 10508 A	Rear Standard — Friction-Trip	..	1	1	..	..	..
BA 11080 A	Front Standard—Safety-Trip	..	..	..	2	2	4
BA 11081 A	Rear Standard—Safety-Trip	..	..	..	..	1	1
BA 10491 A	Suction Rod	1	1	1	1	1	1
BA 10492 A	Front Frame	1	1	1	1	1	1
BA 10511 A	Suction Rod with Load Spring	..	..	1	..	..	1
SD 1949 A	Gauge Wheel (General-Purpose)	2	2	4	2	2	4
SD 2332 A	Reflector Brackets	1	1	1	1	1	1
SD 2331 A	Reflectors—2	1	1	1	1	1	1
.....	Bottoms or Sweeps, as Ordered	2	3	5	2	3	5

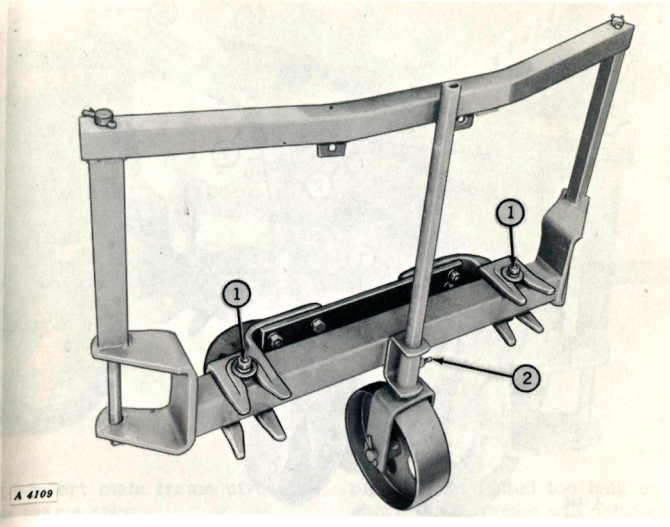
SPECIAL SHIPPING BUNDLES

SD 2509 A	Front Coulter Shank and Clamp	1	1	2	1	1	2
BA 10774 A	Torsion Spring	1	1	2	1	1	2
BA 10513 A	Rear Coulter Shank and Clamp	..	1	1	..	1	1
SD 2802 A	15-Inch Rolling Coulters	2	3	5	2	3	5

SPECIAL SHIPPING BUNDLES—Continued

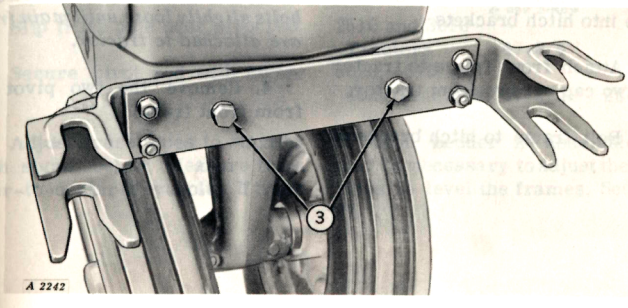
Bundle No.	Description	F430AH 2-Row	F430AH 3-Row	F430AH 5-Row	F440AH 2-Row	F440AH 3-Row	F440AH 5-Row
BA 10511 A	Suction Rod with Load Spring	1	1	1	1	1	1
SD 1950 A	Gauge Wheel (Blackland)	2	2	4	2	2	4
SD 2505 A	Rubber-Tired) Furnished						
	Gauge Wheel) in lieu of SD1949A	2	2	4	2	2	4
SD 2672 A	Wheel Box) or SD1950A	2	2	4	2	2	4
BA 11104 A	Front Center Beam (Furnished in lieu of BA10506A, BA10508A, or BA11081A)	..	1	1	..	1	1
No. 31 Disk Marker Attachment							
BA 10512 A	Disk Marker	1	1	1	1	1	1
BA 10698 A	Rope Support (3010 and 4010 Tractors)	1	1	1	1	1	1
BA 11195 A	Rope Support (2510, 3020, and 4020 Tractors)	1	1	1	1	1	1
SD 2657 A	Rope	1	1	1	1	1	1
8H 4074	Hex. Head Cap Screws 3/8" x 7" (Required when BA11195A Rope Support is used on tractors equipped with side-mounted hydraulic outlets)	4	4	4	4	4	4

HITCH BRACKETS



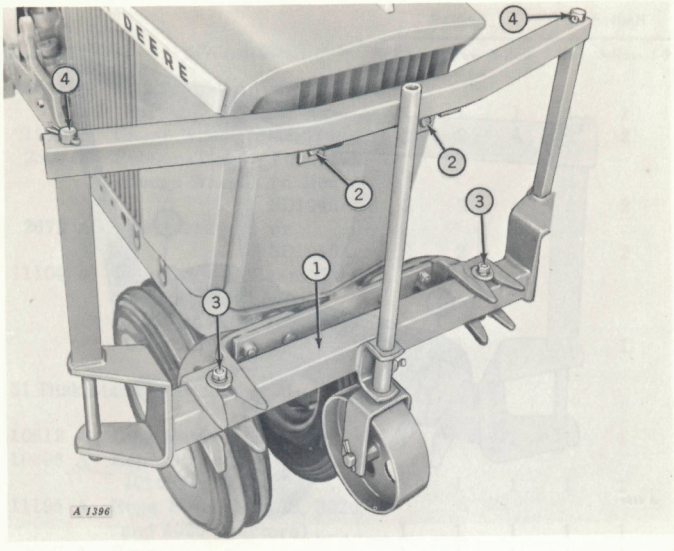
1. Remove hitch bracket assembly from front frame.

2. Slide wheel assembly through yoke and tighten set screw.



3. Remove lower studs from front end of tractor and attach hitch bracket with 3/4 x 3-inch cap screws supplied. Tighten cap screws securely.

FRONT FRAME



1. Slide lower crossbar of front frame into hitch brackets.

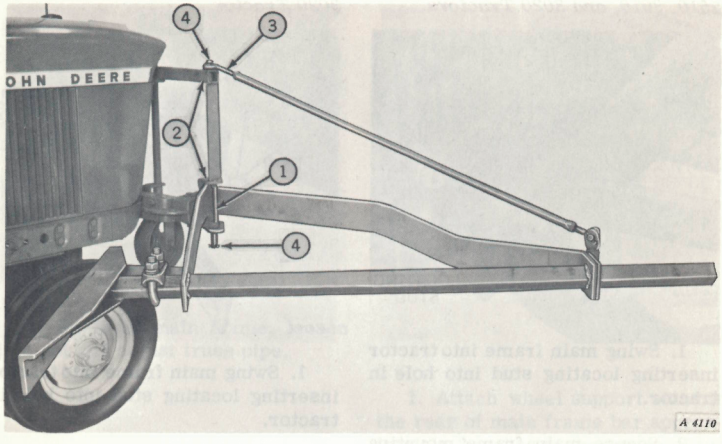
2. Attach front frame to tractor with two cap screws from tractor.

3. Bolt frame to hitch brackets.

NOTE: Leave cap screws and bolts slightly loose until main frames are attached to tractor.

4. Remove the two pivot rods from front frame.

MAIN FRAME



1. Insert main frame pivot into front frame yoke.

2. Slip pivot rod through front frame and main frame.

3. Slip truss pipe over pivot rod.

4. Secure pivot rod with cotter pins.

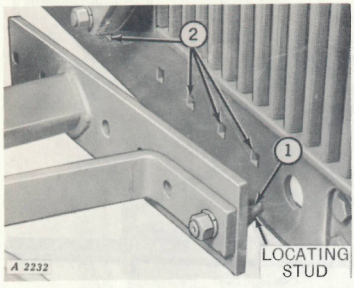
5. Adjust truss pipes to starting length shown below. Measure from center-to-center of eyebolts. If truss pipes are adjusted too long or too short, main frames will not position themselves properly when they are swung in.

	2- and 3-Row	5-Row
2510 and 3010 Tractors	47-3/4''	. . . . .
3020, 4010, and 4020 Tractors	47-3/4''	63-1/4''

After bedder is assembled, it may be necessary to adjust the truss pipes to level the frames. See page 27.

2- AND 3-ROW BEDDERS

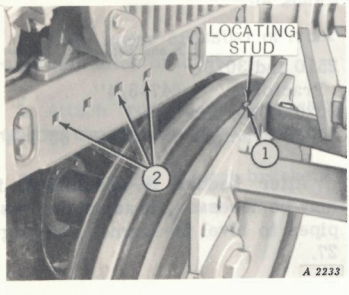
2510, 3010, and 3020 Tractors



1. Swing main frame into tractor inserting locating stud into hole in tractor.

2. Secure main frame mounting plate to tractor with carriage bolt and cap screws supplied.

4010 and 4020 Tractors

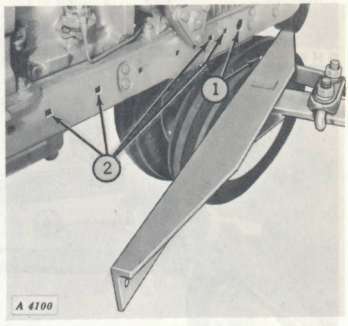


1. Swing main frame into tractor inserting locating stud into hole in tractor.

2. Secure main frame mounting plate to tractor with carriage bolt and cap screws supplied.

5-ROW BEDDERS

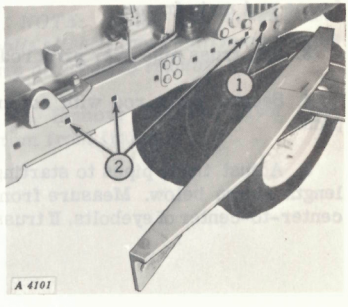
3020 Tractor



1. Swing main frame into tractor inserting locating stud into hole in tractor.

2. Secure main frame mounting plate to tractor with carriage bolt and cap screws supplied.

4010 and 4020 Tractors

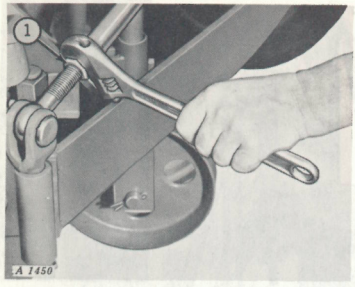


1. Swing main frame into tractor inserting locating stud into hole in tractor.

NOTE: Locating stud is factory-assembled for this application.

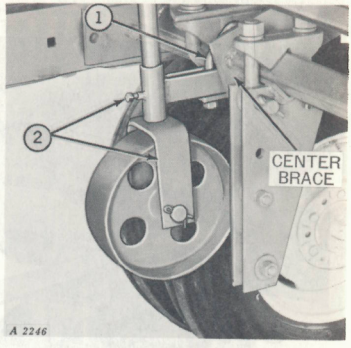
2. Secure main frame mounting plate to tractor with carriage bolt and cap screws supplied.

ADJUSTING TRUSS PIPE



1. To level main frame, loosen jam nut and adjust truss pipe.

WHEEL SUPPORT STAND

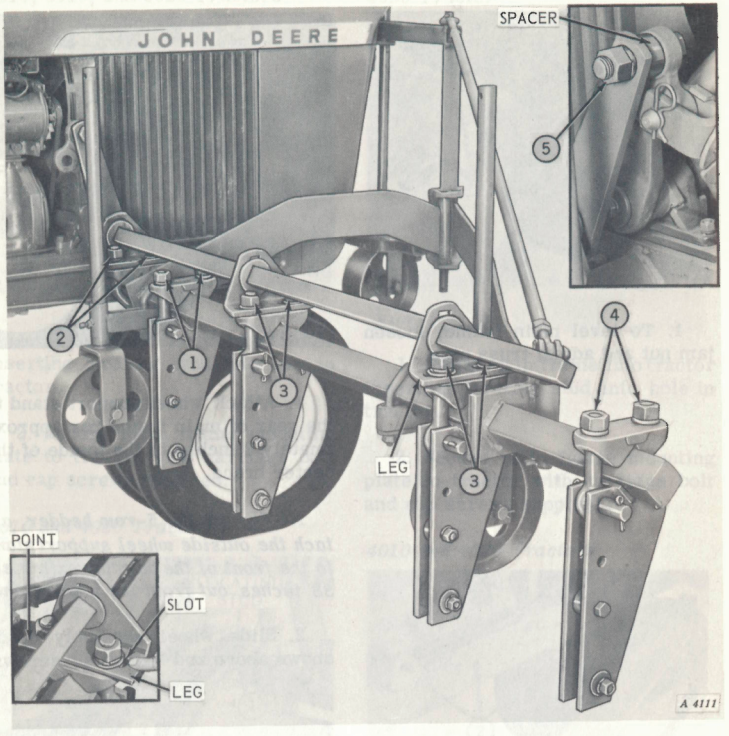


1. Attach wheel support stand to the rear of main frame bar approximately 2 inches to the inside of the center brace.

NOTE: On the 5-row bedder, attach the outside wheel support stand to the front of the bar approximately 38 inches out from the inner stand.

2. Slide wheel assembly up as shown above and tighten set screws.

LIFT SHAFT AND HANGERS



1. Attach inside hanger to main frame bar with eyebolts and cap supplied. See page 11 for measurements and location of hangers for various row spacings.

2. Attach inside lift shaft bearing to main frame bar with U-bolt supplied.

Bearings are attached with leg of bearing toward the outside and the point toward the rear. See inset. Right-hand side is illustrated.

3. Attach center hangers, caps, and lift shaft bearings with eyebolts supplied.

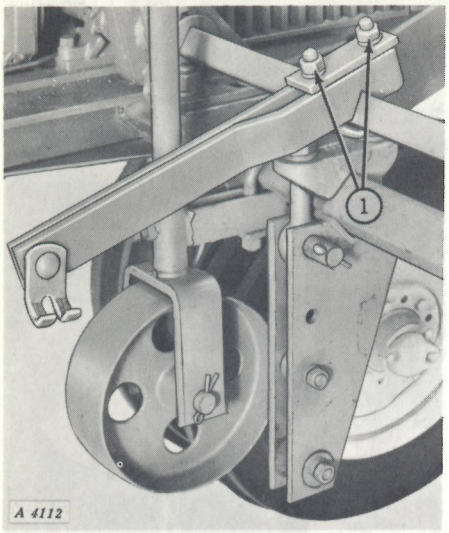
4. Attach outside hanger to main frame bar with eyebolts and cap supplied.

5. Attach rockshaft crank to tractor rockshaft arm.

NOTE: A spacer bushing is required between bedder rockshaft and tractor rockshaft arm on side where remote cylinder is used. See inset.

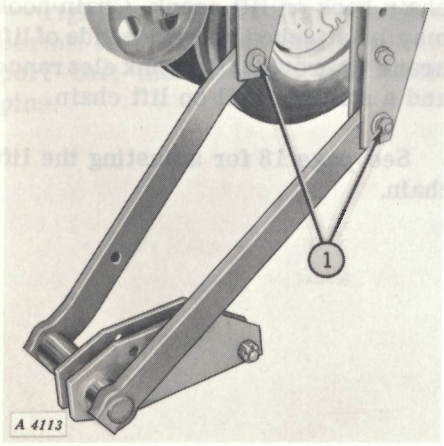
A slot in the lift shaft bearings provides adjustment for aligning bedder rockshaft with tractor rockshaft.

LIFT CRANK



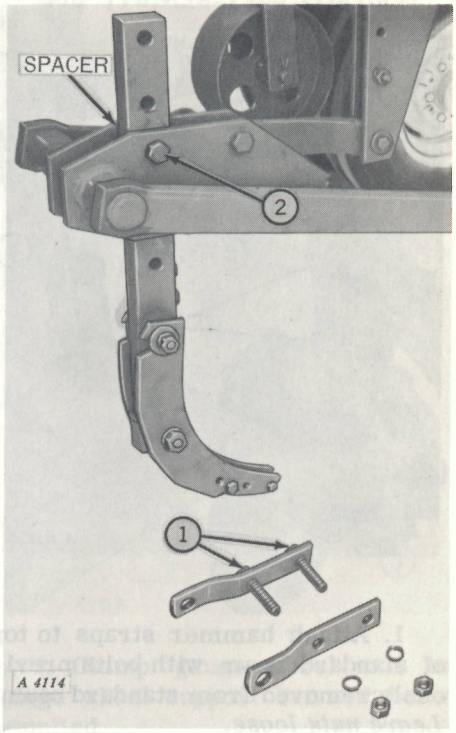
1. Attach lift crank to rockshaft, approximately 3 inches to outside of inner hanger, with clips supplied. Tighten nuts securely.

DRAFT BAR ASSEMBLY



1. Attach draft bars to hanger straps with bushings and bolts supplied in hanger straps.

STANDARD BEAM



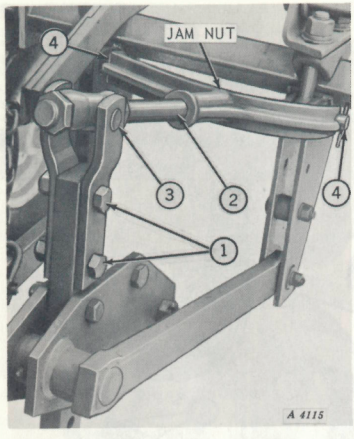
1. Remove hammer straps from standard beam.

2. Insert standard beam in draft bar assembly.

NOTE: Place spacer between beam and inside plate of draft bar assembly.

Tighten bolt securely.

SUCTION ROD AND YOKE



1. Attach hammer straps to top of standard beam with bolts previously removed from standard beam. *Leave nuts loose.*

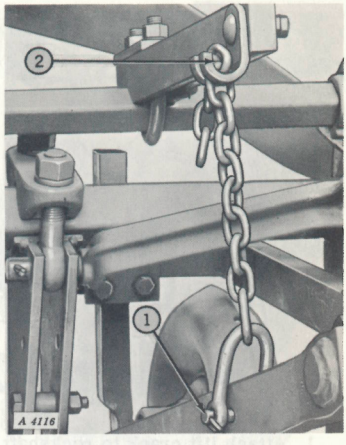
2. Insert suction rod into yoke and secure with jam nut.

3. Attach suction rod with swivel to hammer strap and tighten nuts holding hammer strap to standard beam securely.

4. Attach yoke to hangers with drilled pins and cotter pins.

NOTE: Yoke arms must attach to outside of hangers as shown above.

LIFT CHAIN

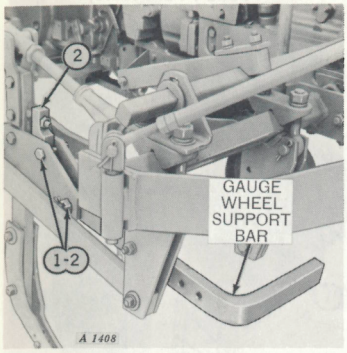


1. Attach U-bolt end of chain to draft bar with drilled pin and cotter pins.

2. Slip other end of chain over chain hook on lift crank. Chain hook may be attached on either side of lift crank to provide lift crank clearance and a straight pull on lift chain.

See page 18 for adjusting the lift chain.

GAUGE WHEEL SUPPORT BAR (For Tricycle-Type Tractors)

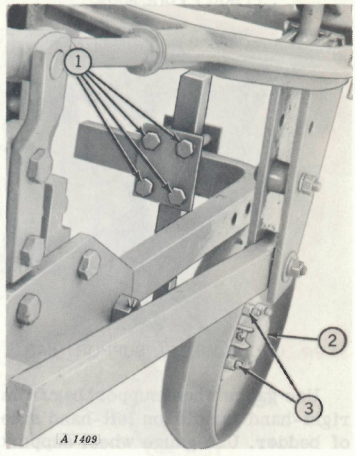


1. Remove pivot and stop bolts with slotted nuts from draft bar assembly.

2. Insert support bar up through draft bar assembly and secure with bolts removed in Step 1.

Tighten nuts just tight enough to permit freedom of movement of support bar; then secure with cotter pins.

GAUGE WHEEL (For Tricycle-Type Tractors)

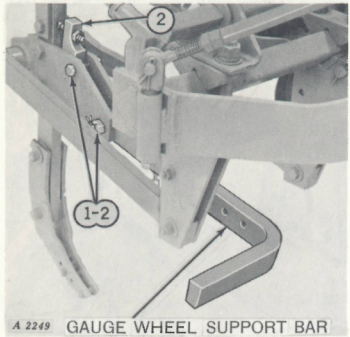


1. Clamp gauge wheel axle to gauge wheel support bar with bolts supplied.

2. Remove outside wheel box and attach the inside gauge wheel box, sleeve, and wheel to axle with pin.

3. Replace outside wheel box and secure with lock washers and nuts.

GAUGE WHEEL SUPPORT BAR (For Tractors with Adjustable-Tread Front Axle)



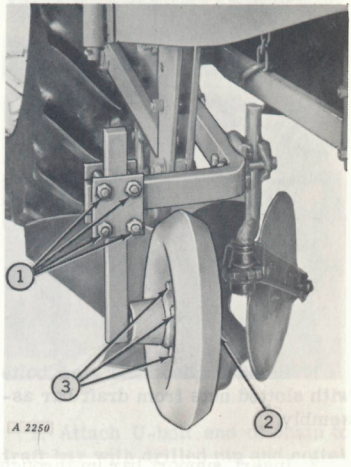
Use gauge wheel support bar from right-hand bundle on left-hand side of bedder. Use gauge wheel support bar from left-hand bundle on right-hand side of bedder. This will provide clearance for front wheels. On 5-row bedder change the two inside support bars only.

1. Remove pivot and stop bolts with slotted nuts from draft bar assembly.

2. Insert support bar up through draft bar assembly and secure with bolts removed in Step 1.

Tighten nuts just tight enough to permit freedom of movement of the support bar; then secure with cotter pins.

GAUGE WHEEL (For Tractors with Adjustable-Tread Front Axle)

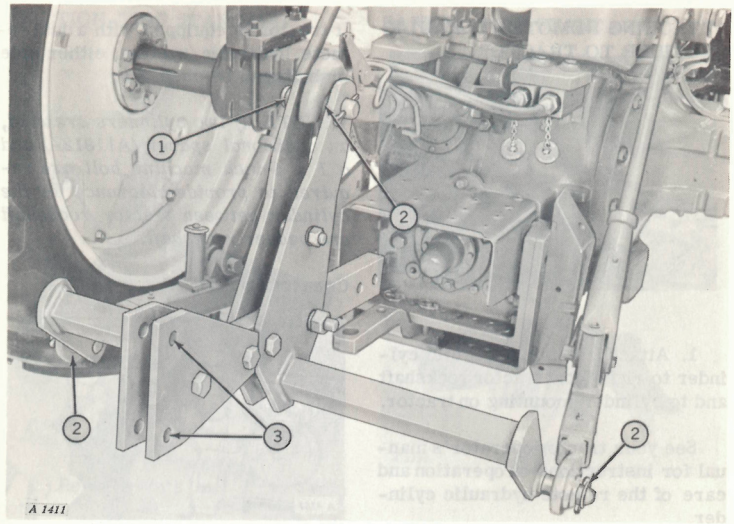


1. Clamp gauge wheel axle to gauge wheel support bar with bolts supplied.

2. Remove outside wheel box and attach the inside gauge wheel box, sleeve, and wheel to axle with pin.

3. Replace outside wheel box and secure with lock washers and nuts.

REAR FRAME BAR



1. Attach ball and pin to mast.

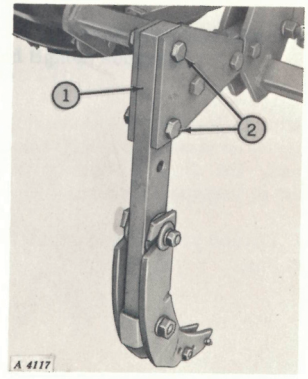
2. Attach rear frame bar to 3-point hitch.

3. Remove the two bolts from standard plates.

REAR STANDARD BEAM

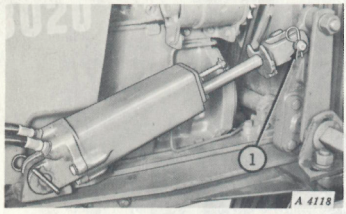
1. Insert standard beam between rear standard plates.

2. Attach beam to standard plates using the two bolts removed above.



ATTACHING BEDDER TO TRACTOR HYDRAULIC SYSTEM

ATTACHING REMOTE HYDRAULIC CYLINDER TO TRACTOR



1. Attach remote hydraulic cylinder to right front tractor rockshaft and to cylinder mounting on tractor.

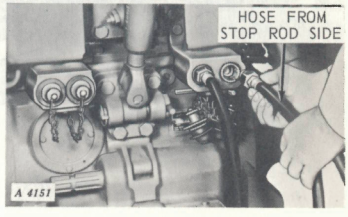
See your tractor operator's manual for instructions on operation and care of the remote hydraulic cylinder.

If tractor is equipped with single remote hydraulic system, attach cylinder on right-hand side of tractor.

If tractor is equipped with a dual remote hydraulic system, either side or both can be used.

NOTE: If two cylinders are used, an additional spacer (A11812A) and a 1 x 4-inch machine bolt are required to provide clearance for the cylinder between tractor rockshaft and bedder rockshaft.

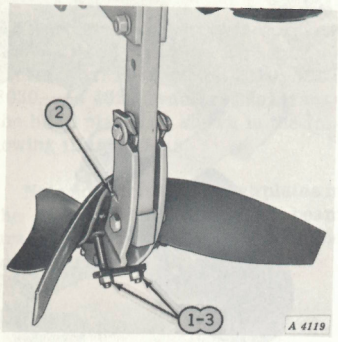
Connecting Hoses



The hoses may be attached to either side of the coupler to suit the operator. *Be sure to relock coupler.*

ATTACHING BOTTOMS

FRICTION-TRIP STANDARD



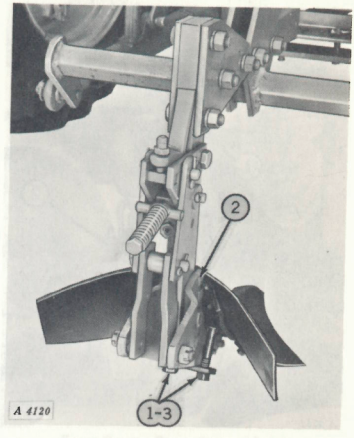
Raise bedder.

1. Remove nuts and strap from bottom.

2. Place bottom on standard making sure that the top of the frog fits into notches in standard.

3. Replace strap and nuts on bolts and tighten securely.

SAFETY-TRIP STANDARD



Raise bedder.

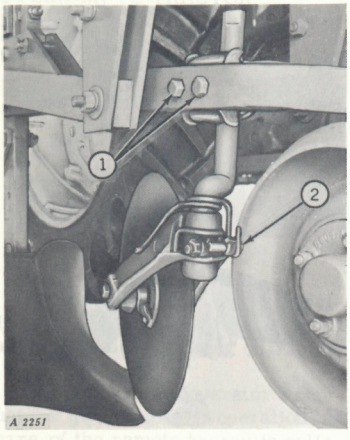
1. Remove nuts and strap from bottom.

2. Place bottom on standard making sure that the top of the frog fits into notches in standard.

3. Replace strap and nuts on bolts and tighten securely.

ROLLING COULTERS

FRONT ROLLING COULTER

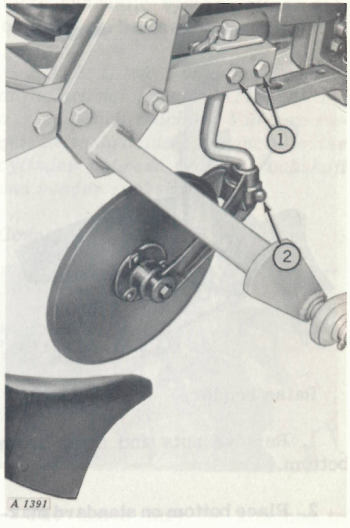


1. Bolt coulter shank and clamp to frame.

2. Attach coulter and torsion spring to coulter shank with collar.

See page 15 for adjustments. *Final adjustments must be made in the field.*

REAR ROLLING COULTER



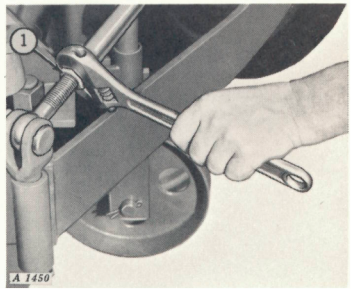
1. Bolt coulter shank and clamp to rear beam as shown above.

2. Attach coulter to shank with yoke and shank collar. See page 15 for adjustments. *Final adjustment must be made in the field.*

LEVELING MAIN FRAME

After bedder has been assembled it may be necessary to level the main frames. Be sure bedder is fully raised to transport position.

1. Loosen jam nut and adjust the truss pipe.

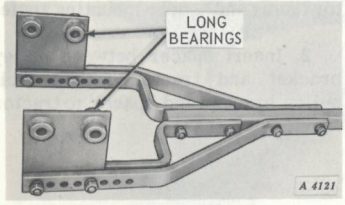


FRONT CENTER BEAM ATTACHMENT

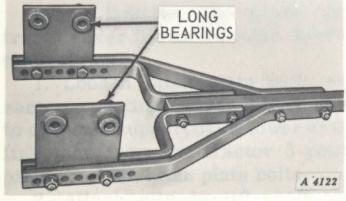
PREPARING THE FRONT CENTER BEAM ATTACHMENT

The center beam is factory-set for the 4020 Tractor. To adapt the center beam for use on 2510, 3010, 3020, and 4010 Tractors, rearrange the hitch plates as shown in the following illustrations.

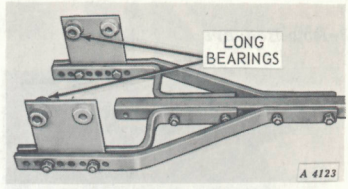
Note location of the hitch plates in the various holes in outer beam brace and also the location of the long bearings in the hitch plates.



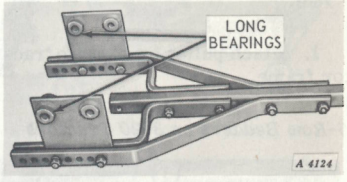
Front Center Beam Factory-Set for 4020 Tractor



Front Center Beam Assembled for 4010 Tractor



Front Center Beam Assembled for 3020 Tractor



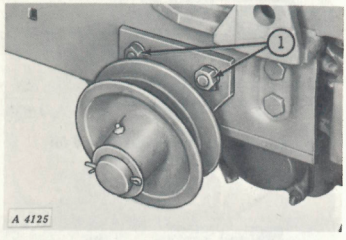
Front Center Beam Assembled for 2510 and 3010 Tractors

PREPARING THE TRACTOR

The lift links and lower draft links must be removed from the tractor 3-point hitch.

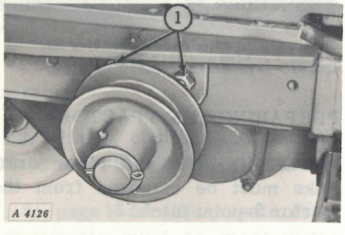
ATTACHING PULLEY BRACKETS TO TRACTOR

3-Row Bedders



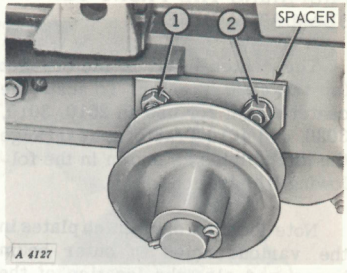
1. Attach pulley brackets to tractor frame.

5-Row Bedders on 3020 Tractors



1. Attach pulley brackets to tractor frame and bedder mounting angle.

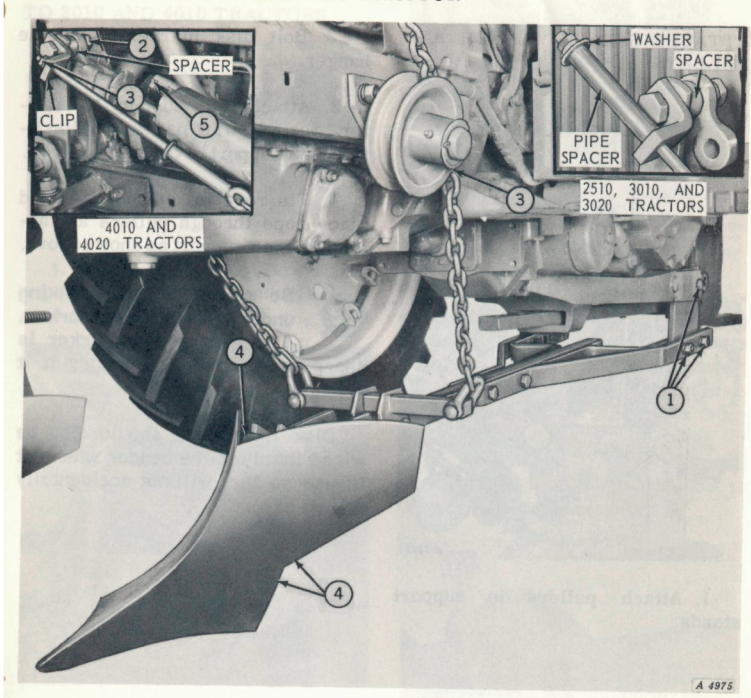
5-Row Bedders on 4010 and 4020 Tractors



1. Attach pulley brackets to tractor frame and bedder mounting angle.

2. Insert spacer between pulley bracket and tractor frame. Bolt pulley bracket and spacer to tractor frame.

ATTACHING CENTER BEAM TO TRACTOR



Raise bottoms and center the tractor over the attachment. Lower the bottoms.

1. Loosen hitch plate bolts for easier mounting. Attach hitch plates to drawbar support using lower draft link pins from the tractor 3-point hitch. Tighten hitch plate bolts.

2. Attach clip to lift shaft and tractor rockshaft with bolts supplied. Position spacer between lift shaft and tractor rockshaft on side equipped with remote cylinder.

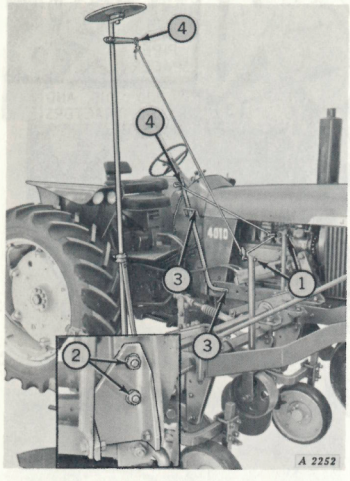
3. Place chain over pulley and attach adjusting rod to clip. *NOTE: When center beam is mounted on 2510, 3010, or 3020 Tractors, place the pipe spacer and washer ahead of clip. See right-hand inset in illustration above. The pipe spacer and washer are not used on the 4010 or 4020 Tractors.*

4. Raise center beam. Attach bottom to standard.

5. Set the adjustable stop on the remote cylinder controlling the front rockshaft to position center bottom in relation to the other bottoms.

DISK MARKER

ATTACHING DISK MARKER AND PULLEYS



1. Attach pulleys to support stands.

2. Bolt disk marker to outside hanger.

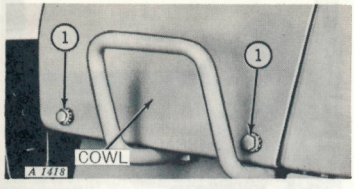
3. Attach rope support to tractor. See following pages for attaching rope support to various tractors.

4. Tie rope to disk marker and place rope through pulleys and attach to rope support as shown above.

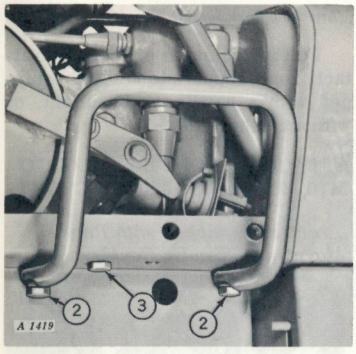
Be careful when walking under a raised disk marker. The edge of the marker is sharp enough to cause injury if it should drop accidentally.

Disk markers should also be wired firmly to the bedder when not in use so they will not accidentally fall on anyone.

ATTACHING ROPE SUPPORTS TO 3010 AND 4010 TRACTORS

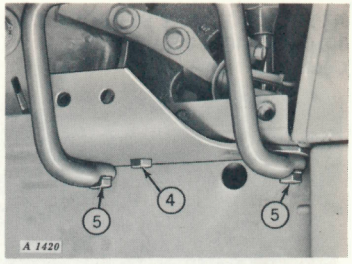


1. Remove the cowl-retaining cap screws on both sides and lift the cowl from the tractor.



2. Remove screws holding handle on tractor.

3. Remove remaining cap screws.



Attaching Bracket and Handle on 3010 Tractor

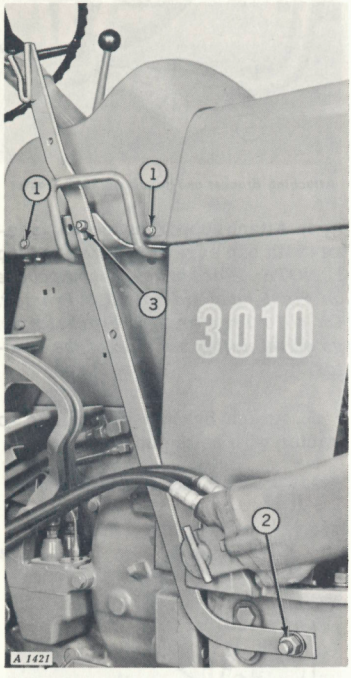
4. Attach support bracket to tractor with cap screw removed in Step 3. *NOTE: Place bracket shown above on right-hand side of 3010 Tractor. On 4010 Tractor, this bracket must go on the left-hand side of the tractor.*

5. Attach bracket and handle to tractor with bolts supplied.

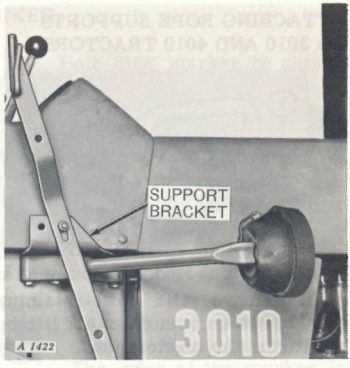


Support Bracket on 4010 Tractor

ATTACHING ROPE SUPPORT TO 3010 AND 4010 TRACTORS—Continued



1. Replace cowl and secure with cap screws.
2. Insert rope support through handle and bolt to tractor.
3. Bolt support to bracket.

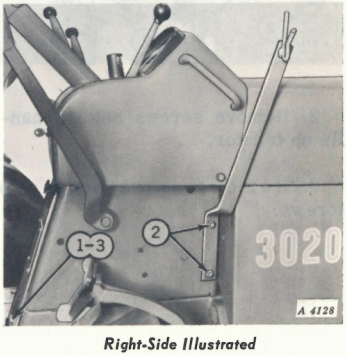


Attaching Rope Support When Using Headlight

Follow the same procedure to attach rope support to tractor equipped with a handle or headlight, or without either one.

ATTACHING ROPE SUPPORT TO 2510, 3020, AND 4020 TRACTORS

Tractors Equipped with Rear-Mounted Hydraulic Couplers

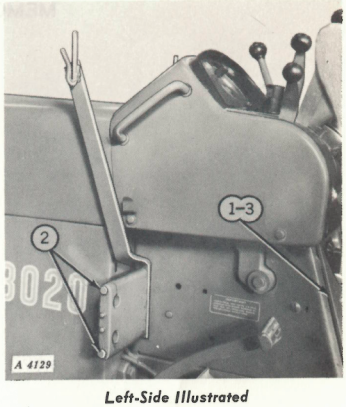


Right-Side Illustrated

1. Remove lower front panel from tractor.
2. Attach rope supports as as shown above.
3. Replace lower front panel on tractor.

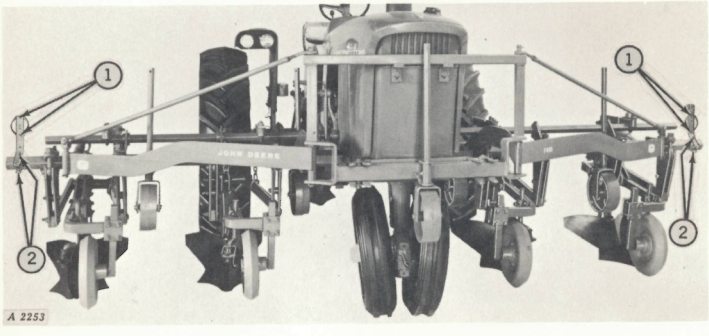
Tractors Equipped with Side-Mounted Hydraulic Outlets

1. Remove lower front panel from tractor.
2. Remove the 3/8- x 6-3/4-inch cap screws and front coupler brackets. Attach front coupler brackets and rope supports to side shield using 3/8- x 7-inch cap screws.
3. Replace lower front panel on tractor.



Left-Side Illustrated

WARNING LAMP AND REFLECTOR BRACKETS



1. Bolt reflectors to brackets.

2. Attach brackets to outside of main frames with strap and cap screws supplied.

NOTE: Be sure to place the bracket with lamp socket on the left-hand side of the bedder.

GREASE FITTINGS

Insert grease fittings in all locations shown in the Lubrication Chart on page 20. Apply grease and oil to all points as indicated in the chart.

MEMORANDA

INFORMATION ABOUT UNITED STATES AND CANADIAN WARRANTY

The warranty on this machine or equipment comes from your John Deere dealer and is contained in the purchase agreement you sign. If you are purchasing the machine or equipment new, the dealer's warranty ordinarily contains the following provisions.

He agrees to replace parts which prove defective with normal and proper use within:

TWELVE MONTHS from date of delivery to you unless the machine or equipment is sold for industrial, construction or logging use.

SIX MONTHS from the first day of the month following the date on which you first use the machine or equipment if the machine is sold for industrial, construction or logging use.

He agrees to give a special warranty for sweeps, shovels, and extra-heavy-duty high-speed shares, based on wear instead of time of use.

He has no obligation to replace parts whose failure is related to modification or alteration of this machine or equipment in ways not recommended by the manufacturer. It is your obligation to bring the machine or equipment to his service shop or, if this is not possible, to reimburse him for his travel expense in fulfilling the warranty.

The dealer's warranty in the purchase agreement ordinarily does not cover batteries, rubber tires, radios, engines not of John Deere manufacture or used machines or equipment, and there is no warranty or other obligation on such items unless your dealer has delivered to you a certificate or other written statement which is separate from the purchase agreement and is designated "Warranty."

Certain other limitations on the obligation of the dealer and of others may be contained in the warranty in your purchase agreement.

Be sure to read the "Warranty and Agreement" in your purchase agreement, or your separate "Warranty," as there is no other warranty obligation, express or implied, including the implied warranties of merchantability and fitness, on this machine or equipment.

Note: The above summary of the provisions ordinarily found in the dealer's warranty was correct on the date of printing of this manual. The warranty you actually receive governs in case of any inconsistency with the summary.

To order these publications fill out this form and the payment information and mail it to the address above. Make checkes payable to Deere & Co. Service Publications. Please allow three weeks for delivery. No COD orders, please. Do not send cash or stamps. To place credit card orders, call **1-800-522-7448**. If you want manuals or catalogs for equipment not shown on this list, provide the model number, serial number, and name of the product.

John Deere Distribution Service Center
Department S/P
P.O. Box 186, Moline, IL 61266-0186

For current prices of John Deere Service Literature, please call 1-800-522-7448