JOHN DEERE
23B TOOLBAR

JOHN DEERE

OPERATORS MANUAL

JOHN DEERE
23B TOOLBAR

OMA31450 L5 English

OMA31450 L5

LITHO IN THE U.S.A.
ENGLISH

To the Purchaser

This new toolbar was carefully designed and manufactured to give years of dependable service. To keep it operating efficiently, read the instructions in this operator's manual. Each section is clearly identified so you can easily find the information you need—whether it is operation or maintenance. Read "Contents" to learn where each section is located.

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

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

Attachments are available to help you do a better job in special conditions. These are described in the operation section of this manual and can be purchased from your John Deere dealer.

"Right-hand" and "left-hand" sides are determined by facing in the direction the toolbar will travel when in use.

Record the size of your toolbar in the space provided on page 23. Your dealer needs this information to give you prompt, efficient service when you order parts or attachments. If your toolbar or attachments require replacement parts, go to your John Deere dealer where you can obtain Genuine John Deere parts—accept no substitutes.

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

23B TOOLBAR

TO THE DEALER

Retain Your Shipping Packing List For Complete Shipping Bundle Information.

Pre-delivery service is the service John Deere recommends that a dealer perform on a machine before delivering it to a customer. This includes assembly, lubrication, adjustment, and test. The service assures that the machine will be delivered in good condition to the customer and that the customer will be fully satisfied with its performance right from the start.

The John Deere Delivery Receipt, when properly filled out and signed by the dealer and customer, verifies that the predelivery and delivery services were satisfactorily performed. When delivering this machine, give the customer a copy of the delivery receipt and the operator's manual. Explain their purpose.

PREDELIVERY CHECK LIST

The following check list is a reminder of points to inspect. Check off each item as it is found satisfactory or after proper adjustment is made.

☐ Inspect to be sure nuts on all bolts have been tightened and all cotter pins spread. See bolt torque chart on Page 19.

☐ Be sure all grease fittings are lubricated.

☐ Inflate tires to correct pressure.

☐ Adjust attachments to row width desired by customer.

☐ Paint all parts scratched in shipment.

☐ This toolbar has been thoroughly checked and to the best of my knowledge is ready for delivery to the customer.

_____

(Date Set Up)

_____

(Signature of Set-Up Person)

OM-A31450-L5

OWNER REGISTER

Name _____

Post Office _____

County _____ State_____

Date Sold _____

DELIVERY CHECK LIST

The following check list is a reminder of very important information which should be conveyed directly to the customer at time toolbar is delivered. Check off each item as it is fully explained to the customer.

☐ Tell the customer about all the safety precautions that must be observed while using this toolbar.

☐ When the toolbar is transported on a road or highway at night or during the day, accessory lights and devices should be used for adequate warning to operators of other vehicles. In this regard, tell customer to check local governmental regulations.

☐ Give the operator's manual to the customer and explain all operating adjustments.

☐ To the best of my knowledge this toolbar has been delivered ready for field use and customer has been fully informed as to proper care and operation.

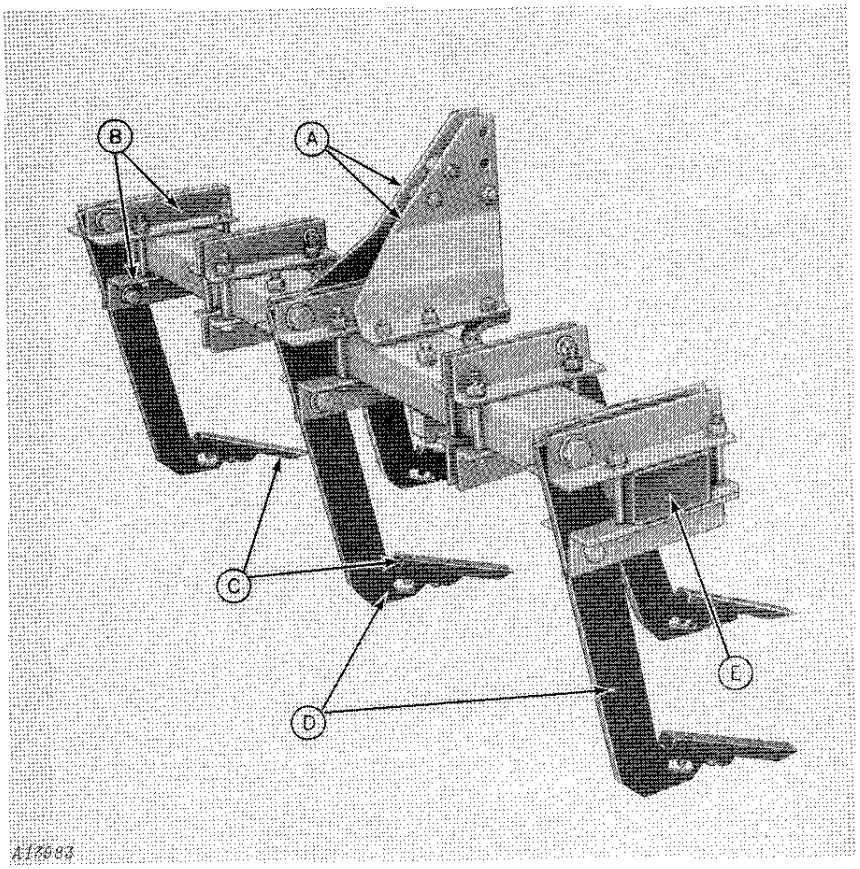
_____

(Date Delivered)

_____

(Signature of Delivery Person)

Contents



A—Mast Plates **C—Replaceable Points**
B—Standard Clamps **D—Chisel Standards**
E—Toolbar

John Deere 23B Toolbar Equipped with Chisel Standards

Safety Suggestions

GENERAL

⚠ The safety of the operator was one of the prime considerations in the minds of John Deere engineers when this toolbar was designed.

You can make your farm a safer place to live and work if you observe the safety suggestions given. Study these suggestions carefully and insist that they be followed by those working with you and for you.

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

TRANSPORTING

When transporting the toolbar 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.

Be careful when operating on hillsides because the tractor may tip sideways if it strikes a hole, ditch, or other irregularity.

OPERATION

For tractor stability and operator safety, tractor front end weights may be required. See page 4 under "Front End Weighting."

Do not adjust the toolbar while it is in motion.

Never permit any person other than the operator on the tractor or permit others to ride on the toolbar.

Always lower the support stands, when toolbar is so equipped, before unhitching from the tractor.

On toolbars equipped with flexible linkage, lock the linkage before detaching toolbar from tractor. Be sure to place lock pin in working position after attaching toolbar to tractor.

When servicing toolbar, block toolbar in raised position. Be sure rockshaft and remote cylinder operating levers are not bumped or touched by anyone.

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

Operation

GENERAL

The John Deere 23B Toolbar is designed to perform many jobs and withstand the strains of handling heavy-duty attachments. The operation, maintenance, and assembly instructions for the attachments are included in this manual.

IMPORTANCE OF PROPER ADJUSTMENT

Your new toolbar and attachments are adjustable and when properly adjusted to meet the field conditions on your farm, will do a good job at a minimum of expense.

Length of life and maximum operating efficiency depend largely on good care and proper adjustments.

Improper adjustment results in rapid wear, possible breakage of parts, and inefficient operation.

PREPARING THE TOOLBAR AND ATTACHMENTS

Bottoms, Sweeps, and Disks

The polished surfaces of the bottoms, sweeps, and disks used with some of the attachments have been painted with protective black paint.

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

Tire Inflation

On toolbars equipped with gauge wheels, check gauge wheel tires for correct tire inflation.

6.70-15 4-ply rating - 28 psi (1.9 bar)
7.60-15 4-ply rating - 24 psi (1.7 bar)
11L-14 6-ply rating - 24 psi (1.7 bar)

Lubrication

If gauge wheels or disk border makers are used, see "Service" on page 10.

Bolts and Set Screws

Before starting to work with a new toolbar 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. On toolbars equipped with beams or standards, check the bolts that hold them to see that they are drawn up very tight.

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

PREPARING AND ADJUSTING THE TRACTOR

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

Tractor Drawbar

Remove the tractor drawbar or place it in the short high position and set to the extreme right or left side of the support.

Tire Inflation

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

Rear Wheel Setting

When using the toolbar equipped with lister or middlebreaker bottoms to freshen (hip up) old beds, the rear wheels should be set equidistant from the center line of the tractor to conform with the row spacing of the beds.

For flat land bedding or when using other attachments, adjust the rear wheels of the tractor equidistant from the center line of the tractor to the inside edge of the tire.

Front Wheel Setting

On wide-front-end tractors, to get proper field maneuverability, set the front wheels to conform to the rear wheel setting, center-to-center of tread.

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.

Front End Weighting

Transport Stability

Ordinarily, tractor front end weights are not required for transport stability. If the size of the tractor used has the lifting capacity and is able to perform satisfactorily while working in the field with toolbar and attachments, additional front end weights should not be required for transport stability. When weighting is desired, see your tractor operator's manual.

Field Operation

When working in the field, the exact amount of added front-end weight must be determined by the toolbar with attachments, field operating conditions, and the gear in which the tractor is operated.

Enough weight should be added to hold the tractor front wheels on the ground at all times. This insures maximum performance of the tractor and toolbar in the field.

⚠ CAUTION: When operating the tractor in lower gears below 4 mph (6.5 km/h), front-end weights up to the maximum permissible, regardless of toolbar size, are necessary to avoid possible front-end tip-up.

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

be careful.....
avoid accidents

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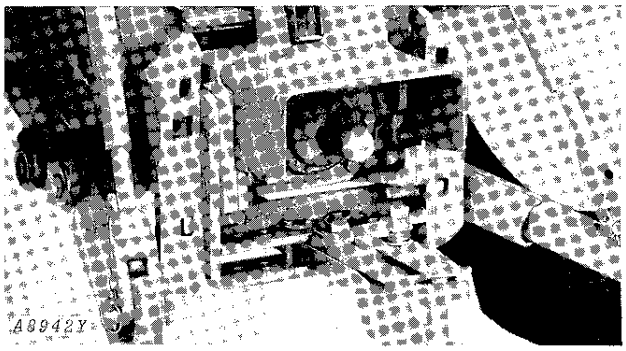
3-Point Hitch and Hydraulic System

Once the toolbar is attached, the depth or the load is maintained by the tractor hydraulic system according to the setting of the selector lever. See your tractor operator's manual for complete explanation of the hydraulic system.

Instructions for preparing the hydraulic system and 3-point hitch on 2010, 2020, 2030, 2440, 2510, 2520, 2630, 2640, 3010, 3020, 4000, 4010, 4020, 4030, 4230, 4320, and 4430 Tractors are similar except that on the 2010 the hydraulic system must be adjusted for parallel lift arm operation. See your tractor operator's manual for instructions on setting the 2010 Tractor for parallel lift arm operation.

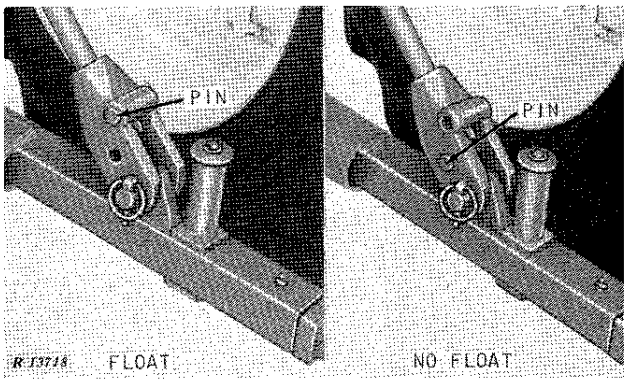
Sway Blocks



Sway Blocks Installed to Eliminate Side Sway

Install sway blocks in the down and wide setting. This will prevent side sway when the toolbar is working and will also prevent side sway when the toolbar is being transported. See illustration above.

Adjusting For Lateral Float



Toolbars without gauge wheels must use the "NO FLOAT" position to permit the tractor to control the toolbar. To place the lift links in the "NO FLOAT" position, install the pins in the lower hole in the lower lift-link-to-draft-link yokes.

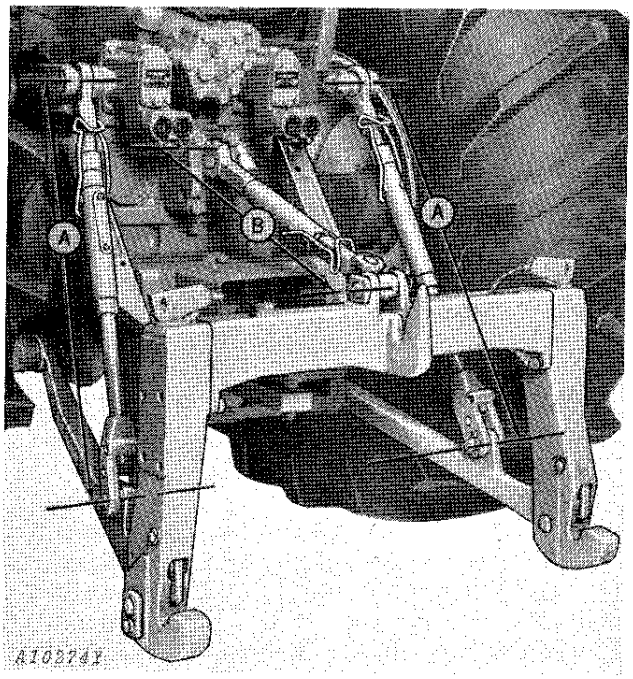
Toolbars with gauge wheels must use the "FLOAT" position to permit the toolbar gauge wheels to gauge and level the toolbar. To place the lift links in the "FLOAT" position, install the pins in the upper hole in the lower lift-link-to-draft-link yokes.

Rockshaft Selector Lever

Place the rockshaft selector lever in the "LD" or Middle position for field operation.

PREPARING AND ADJUSTING THE TRACTOR—Continued

Link Lengths



Lift Link Dimensions

It is important that the length of the lift links and center link be adjusted properly. Measure from center-to-center of pins as illustrated.

Both lift links should be set the same length.

After the toolbar has been attached to the tractor, lengthen or shorten the center link as required to level the toolbar from back to front so the attachments on the toolbar will be working at the same depth.

⚠ CAUTION: It may be necessary to shorten the lift links to provide additional transport clearance.

The nominal length for the lift links and center link are given in the following chart at right.

STARTING LINK LENGTHS

Tractor	Dimensions in Inches (mm)	
	Left & Right Lift Link (Dimension "A")	Center Link (Dimension "B")
2010	24-1/2 (622)	26 (660)
2020	24-1/2 (622)	26 (660)
2030	23-3/4 (603)	26 (660)
2440	23-3/4 (603)	26 (660)
2510	29-1/2 (749)	26-3/8 (670)
2520	29-1/2 (749)	26-3/8 (670)
2630	25-3/4 (654)	25-7/8 (657)
2640	25-3/4 (654)	25-7/8 (657)
3010	29-1/2 (749)	26-3/8 (670)
3020	29-1/2 (749)	26-3/8 (670)
4000*	29-1/2 (749)	26-3/8 (670)
4010	29-3/4 (756)	26-1/4 (667)
4020*	29-1/2 (749)	26-3/8 (670)
4030	29-1/2 (749)	26-3/8 (670)
4230*	29-1/2 (749)	26-3/8 (670)
4320*	29-1/2 (749)	26-3/8 (670)
4430	32-1/4 (819)	28 (711)

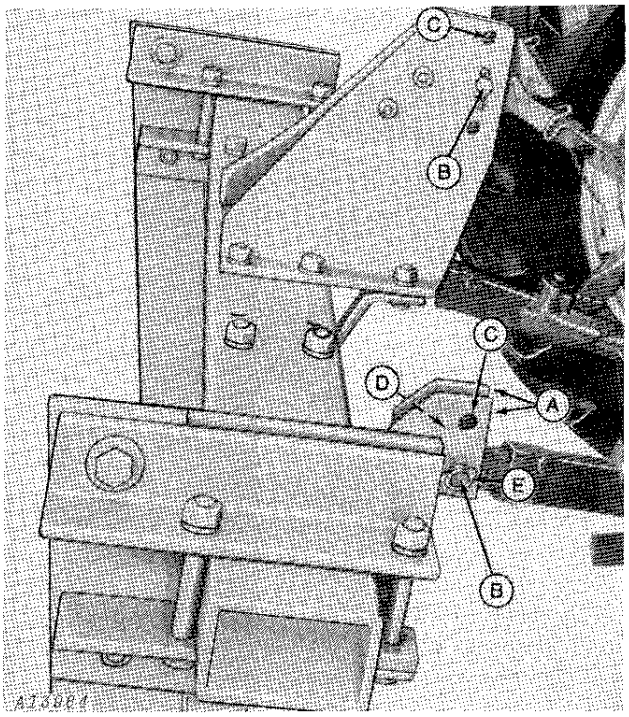
** On 4000, 4020, 4230 and 4320 Tractors factory-equipped with 18.4-38 or 20.4-34 tires, use the following link length dimensions: Right- and left-hand links, 32 inches (813 mm). Center link, 29 inches (737 mm).*

IMPORTANT: The 3-Point Hitch or the Quik-Coupler use the same link dimensions.

Final adjustment should be made in the field.

ATTACHING TOOLBAR TO TRACTOR

Attaching with 3-Point Hitch



A—Hitch Bar Plates
B—Average Penetration Setting
C—Maximum Penetration Setting
D—Cotter Pins
E—Quik-Lock Pins

Before attaching toolbar to tractor, make sure the hitch bars are set to prevent interference when spacing attachments on toolbar. See "Attaching Mast to Toolbar", Step 4, page 20.

Place the rockshaft selector lever in the "D" or Zero position.

Raise draft links between the hitch bar plates (A) and line up holes. For average penetration (B) use the lower set of holes; for maximum penetration (C) use the upper set of holes. See illustration above.

Insert the hitch pins through hitch bar plates. Secure with cotter pins (D) to the inside of the inner hitch bar plates and with the Quik-Lock pins (E) to the outside of the outer hitch bar plates.

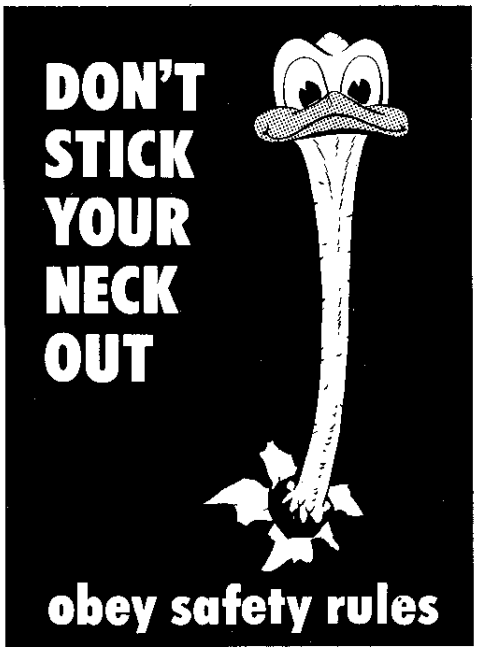
Connect center link to toolbar mast. For average penetration use the center holes in the mast plates. For maximum penetration use upper holes. Before connecting, it may be necessary to change length of center link by means of the adjusting handle.

IMPORTANT: For correct draft, both the draft links and the center link must be attached to corresponding settings in hitch bars.

Close the telescoping draft links either by raising and lowering the toolbar with the rockshaft control lever or by backing up the tractor.

After hitching, return rockshaft lever to "LD" or middle position.

IMPORTANT: If the center link is adjusted to a short length, check clearance between tractor and mast by raising toolbar slowly.



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Please download this document

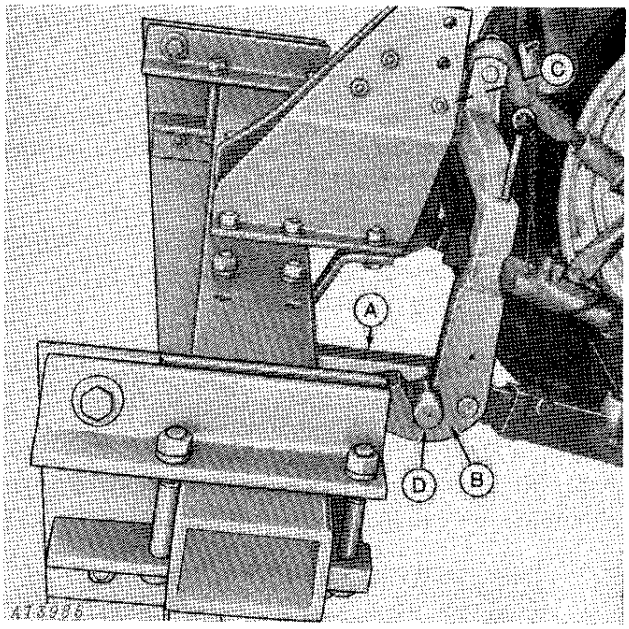
first, and then click the above link

to download the complete manual.

Thank you so much for reading

ATTACHING TOOLBAR TO TRACTOR—Continued

Attaching With Quik-Coupler (Optional Equipment)



A—Hitch Bar
B—Lower Hook
C—Upper Hook
D—Trunnion

Before attaching toolbar to tractor, make sure the hitch bars (A) are set to prevent interference when spacing attachments on toolbar. See "Attaching Mast to Toolbar," step 4, page 21.

Be sure the rockshaft selector lever is in the "D" or Zero position.

With the latches on the coupler in the released position, back the tractor until the Quik-Coupler lower hooks (B) are below the hitch bar trunnions (D) and the upper hook (C) is below the spacer in the mast plates. The spacer must be in the bottom hole of the mast plates.

Raise the coupler with the tractor rockshaft control lever until the hitch bar trunnions are resting in the coupler lower hooks.

The welded steel Quik-Coupler with the straight rod spring-loaded latches and the cast iron Quik-Coupler automatically latch the toolbar hitch pins in place by the spring-loaded latches as the Quik-Coupler receives the weight of the toolbar.

NOTE: When the spring-loaded latches are properly locked, the indicator rod will protrude through the slot in the coupler frame adjacent to the latch rods.

To latch the welded steel Quik-Coupler with the latch handles, push down on the handles after the coupler receives the weight of the toolbar.

NOTE: Latch lock pins must be used when using these toolbars with a welded steel Quik-Coupler with the straight rod spring-loaded latches. If the Quik-Coupler is not equipped with latch lock pins (Kit AR31984), see your John Deere dealer.

Latch lock pins are not used on cast iron Quik-Couplers or the welded steel Quik-Coupler with the latch handles.

After hitching, return rockshaft lever to "LD" or middle position.

If toolbar is equipped with support stands, raise stands to highest setting.