

# 930 Series Roller Harrows



### **OPERATORS MANUAL**

930 Series Roller Harrows

OMA26259 Issue L3 English



OMA26259 Issue L3

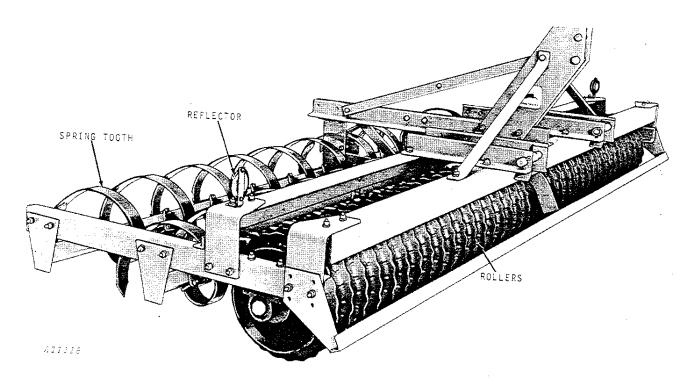
LITHO IN U.S.A. ENGLISH



# Contents

IDENTIFICATION VIEW	2
OPERATION	3-8
SAFETY SUGGESTIONS	9
LUBRICATION	
SERVICE	
SPECIAL EQUIPMENT	
ASSEMBLY	
SPECIFICATIONS	
INDEX	

Page



John Deere 930 Roller Harrow

.

2



# Operation

#### GENERAL

Your new 930 Roller Harrow is designed to provide once-over seedbed preparation.

The action of the roller harrow wheels breaks up the surface clods. Two rows of heavy teeth break up the soil leaving it loose, but slightly corrugated to resist water and wind erosion. There is also less chance for crusting of the soil following heavy rains.

Crowfoot wheel gangs are available as optional equipment in place of the roller harrow wheel gangs.

#### PREPARING THE ROLLER HARROW

To insure proper performance of the roller harrow, check to see that the gang bolt and nut is tightened to 330 ft-lbs torque at all times. Refer to "Service" page 12 and "Assembly" page 18 for complete details.

Be sure all other bolts on the roller harrow are torqued in accordance with the torque chart on page 17.

#### PREPARING AND ADJUSTING THE TRACTOR

#### General

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

#### **Rockshaft Selector Lever**

If the tractor is equipped with a load-and-depth control selector lever, set the lever in the "D" or Zero position before attaching the roller harrow to the tractor. Keep the lever in this position while working with the roller harrow.

#### **Tire Inflation**

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

#### **Tractor Drawbar**

Place the tractor drawbar in the short position.

#### **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 track 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.

#### 4 Operation

#### Front Ballast Information

Tractor front end stability is necessary for safe and efficient operation. Therefore, it is important that the proper amount of weight be installed on the front of the tractor as recommended in your tractor operator's manual.

CAUTION: Ballast recommendations provide for adequate transport stability. Additional front ballast may be required for satisfactory field operation. See tractor operator's manual.

#### Instructions

Step 1 - Find your roller harrow model in the IM-PLEMENT CODE TABLE and enter its code on line 1 below.

Step 2 - Enter an Implement Code for each attachment on line 2.

Step 3 - Add these codes to obtain Total Implement Code.

Step 4 - Select additions or subtractions from tractor operator's manual.

Step 5 - Refer to tractor operator's manual to determine required tractor front ballast.

#### IMPLEMENT CODE TABLE

Implement or Attachment	10-Ft.	12-Ft.	15-Ft.
Basic Harrow	137	159	200
Tine-Tooth Att.	22	27	31
or Harrow Att.	33	41	45
EXAMPLE		YOU	R CODE
Step 1 159 Step 2 27		Step 1 Step 2	
Step 3 186 (sub total) Step 4 Step 5 (total)		Step 3 Step 4 Step 5	1

Our example is a 12-foot roller harrow (159) with a tine-tooth attachment (27) = 186 for your implement code. Refer to your operator's manual for step 4 and 5 for your recommended front end ballast.

IMPORTANT: Refer to tractor operator's monual: 1. If the total implement code exceeds maximum implement code listed for a particular tractor model, the implement-attachment combination is not recommended for that tractor. 2. The total load on any tractor wheel due to the weight of the implement-attachment combination and tractor equipment, should not exceed the carrying capacity of the tractor tires.

CAUTION: When operating the tractor in third or lower gears, front-end weights up to the maximum permissible, regardless of size and equipment of roller harrow, are recommended to avoid possible front-end tip-up.

For maximum permissible ballast, see your tractor operator's manual.

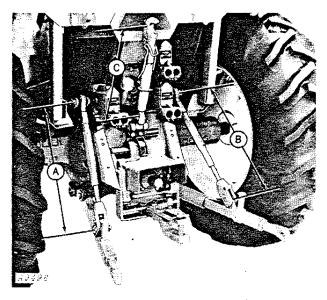
#### 3-Point Hitch and Hydraulic System

The front depth of the roller harrow is determined by the roller wheels. The depth of the spring teeth is controlled by the tractor hydraulic system and the hydraulic tooth control cylinder. See your tractor operator's manual for complete explanation of the hydraulic system.

#### Link Lengths

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

#### Both lift links should be set the same length.



The chart below shows the recommended starting lengths of the links for various tractors used with this roller harrow.

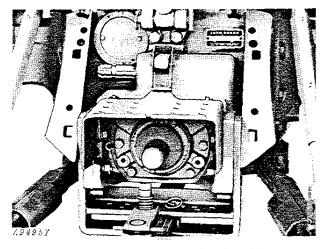
#### STARTING LINK LENGTHS

	Left & Right Lift Línk	
Tractor	(Dimension "A" & "B")	(Dimension "C")
2520 Row-Crop	29-1/2"	26-3/8″
3020 Row-Crop	29-1/2″	26-3/8″
3020 Standard	29-1/2″	26-3/8″
4000 Row-Crop	29-3/8″	26-3/8″
4020 Row-Crop wit	th	
Long Draft Links*	· 31-7/8″	29″
4020 Row-Crop	29-1/2"	26-3/8″
4020 Standard	29-1/2"	26-3/8″
4030 Row-Crop	29-1/2"	26-3/8″
4230 Row-Crop	32-1/4"	28″
4320 Row-Crop	29-1/2″	26-3/8″
4320 Row-Crop wit	th	
Long Draft Links*	31-7/8"	29″
4430 Row-Crop	32-1/4″	28″
4520 Row-Crop	34-7/8″	31-5/8″
4620 Row-Crop	34-7/8″	31-5/8″
4630 Row-Crop	34-7/8"	31-5/8″
5020 Row-Crop	39-1/2"	31-5/8″
5020 Standard	39-1/2″	31-5/8″
6030 Standard	39-1/2″	31-5/8″
7020 Standard	34-7/8″	31-5/8″
7520 Standard	34-7/8″	31-5/8″

\* On 4020 and 4320 Tractors factory-equipped with 18.4-38 or 20.8-34 tires.

NOTE: For horizontal leveling, shorten or lengthen center link as required.

#### Sway Blocks

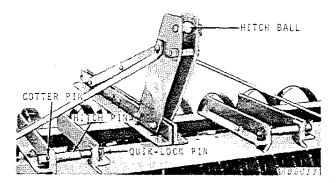


Sway Blocks Installed to Permit Side Sway When Implement is Working

Sway blocks must be attached in upper position as shown in illustration above. This will eliminate side sway when the roller harrow is raised for transport, but will permit lateral flexibility when working. 6 Operation

#### ATTACHING TO TRACTOR

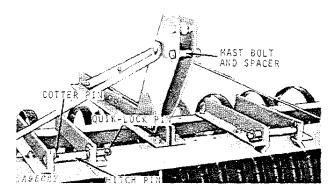
#### Category II-3-Point Hitch



Secure hitch ball and pin in top hole of mast plate. Secure hitch pins in hitch plates as shown above.

#### Category II-Quik-Coupler

2520, 3020, 4000, 4010, 4020, 4030, 4230, 4320, and 4430  $\ensuremath{\mathsf{Tractors}}$ 

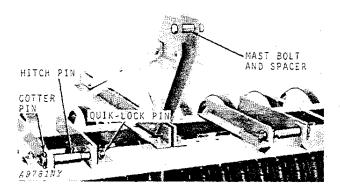


Secure mast pin in lower hole of the mast plate.

Secure hitch pins in hitch plates as shown in the above illustration.

#### Category III-Quik-Coupler

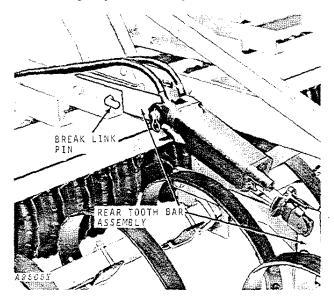
 $4520,\ 4620,\ 4630,\ 5010,\ 5020,\ 6030,\ 7020,\ and 7520$  Tractors.



Secure mast pin in top hole of the mast plate.

Secure hitch pins in hitch plates as shown in the above illustration.

#### Attaching Hydraulic Cylinder



Extend hydraulic cylinder and attach to hydraulic cylinder break link and to rear tooth bar arm assembly.

Retract hydraulic cylinder and install break link lock pin.

NOTE: See safety rules on page 9 for checking escaping hydraulic oil.

Thank you so much for reading. Please click the "Buy Now!" button below to download the complete manual.



After you pay.

You can download the most perfect and complete manual in the world immediately.

Our support email:

ebooklibonline@outlook.com