

## JOHN DEERE LL, LZ, HZ PRESS GRAIN DRILLS



### OPERATORS MANUAL JOHN DEERE LL, LZ, HZ PRESS GRAIN DRILLS

OMN159295 H4 English

JOHN DEERE DES MOINES WORKS OMN159295 H4

LITHO IN THE U.S.A. (REVISED)
ENGLISH





### To the Purchaser

Your grain drill was carefully designed and manufactured to give years of dependable service. To keep it running efficiently, read the instructions in this operator's manual. Each section is clearly identified so you can easily find the information you need—whether it is operation, lubrication, trouble shooting, or service. Read the Table of Contents to learn where each is located. Use the alphabetical index for fast reference.

Should your grain drill require replacement parts go to your John Deere dealer where you can obtain Genuine John Deere Parts—accept no substitutes. Genuine John Deere Parts fit properly and insure satisfactory service because they are made from the original patterns and from the same materials as used in the new machines.

''Right-hand'' and ''left-hand'' sides are determined by facing the direction the grain drill will travel when in use.

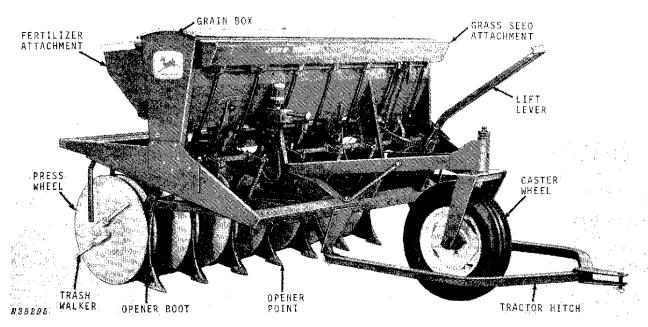
The warranty on your grain drill appears on your copy of the purchase order which you should have received from your dealer when you purchased the grain drill.

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.

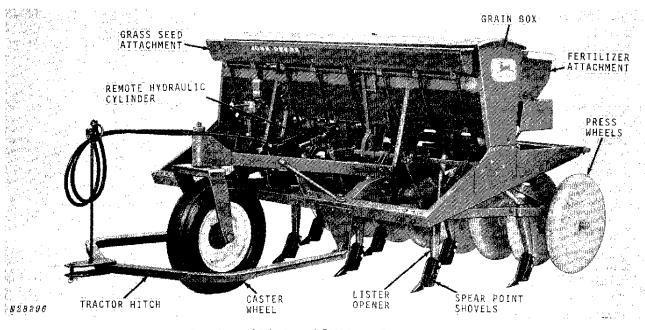


# **Contents**

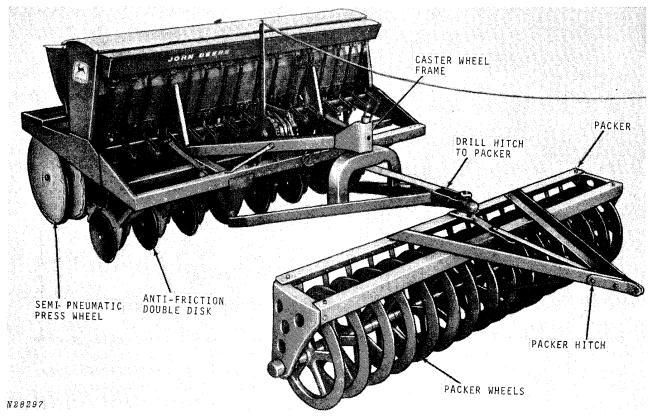
Specifications	Pag . 4-
Operation	. 7-3
Preparing Drill for Operation	
Transporting	•
Caster Wheel	
Grain Box and Feeds	
Planting Brome Grass	
Importance of Checking Quantities Drilled	
Safety Suggestions	
Gear Hanger	
Packer - LL Drills	. 1
Disk Furrow Openers - LL Drills	
Scraper Adjustment - LL Drills	
Helper Spring	
Mulch Hoe and Lister Furrow Openers - LZ Drills	
Mulch Hoe and Lister Shovels - LZ Drills	
Press Wheels - LZ Drills	. 2
Furrow Openers - HZ Drills	
Trash Walkers - HZ Drills	
Press Wheels - HZ Drills	
Acremeter	
Power Lift	
Remote Hydraulic Cylinder	
Hand Levers	
Multi-Luber	
Grain Agitator	
Grass Seed Box and Feeds	
Operation Chart	
Preparing Drill for Storage	
Attachments	. 40-4
ubrication	. 47-4
ervice	. 50-5
HZ Drills	
Assembly	. 60-7



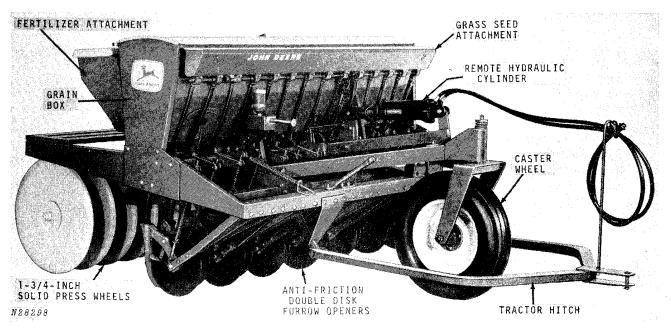
Front View of John Deere HZ616 Hillside Press Grain Drill



Front View of John Deere LZ812 Lister Press Grain Drill



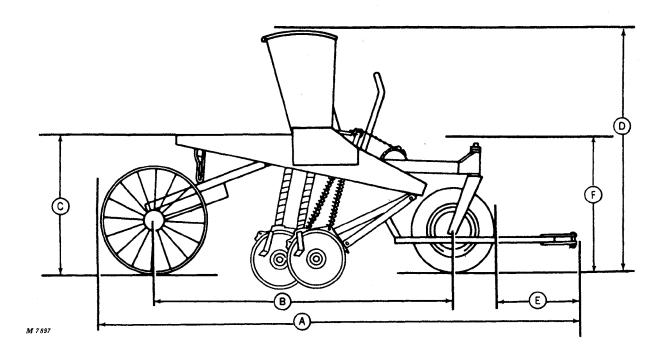
John Deere LL166 Press Drill with Packer



Front View of John Deere LL147 Press Drill

#### **SPECIFICATIONS**

#### LL DRILLS



Drill Dimensions 11' 1-1/4'' 6' 6-1/2''

C D E F 2' 4-1/4'' 4' 4'' 2' 4'' 3' 4''

No. of openers
Spacing between openers
Drilling width
Press wheel revolutions
per acre
\*Grain Box Capacity

\*Grain Box Capacity

\*Grain box capacity

\*\*Fertilizer box capacity

\*\*\*Approximate weight empty

\*Grain and grass seed box capacities are based on seeds weighing 60 lbs. per bushel.

\*\*Fertilizer capacities are based on fertilizer weighing 65 lbs. per cu. ft.

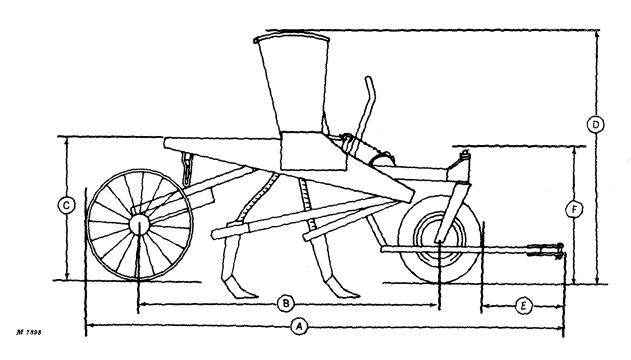
\*\*\*The approximate weight given is for a drill equipped with power lift, tractor hitch, footboard, tire and tube, furrow openers and spoke press wheels.

LL166	LL147
16	14
5-15/16 in.	6-13/16 in.
8 ft.	8 ft.
800	800
11-1/4 bu.	11-1/4 bu.
70 lbs.	70 lbs.
457 lbs.	457 lbs.
1977 lbs.	1892 lbs.

All press wheels are 26-inch diameter. Caster wheel tire size is 6.70 - 15, 4PR or 7.60 - 15, 4PR

(Specifications and design subject to change without notice.)

#### LZ DRILLS



	A	₿ .	С	D	E	F
Drill Dimensions	12' 3''	7' 3-3/4''	2' 10''	יי0 יל	2' 8''	3' 4''
		LZ147	LZ	1010	LZ812	LZ714
No. of openers		14	10		8	7
Spacing between openers		7 in.	10 iı	10 in.		14 in.
Drilling width		8 ft.	8 ft.		8 ft.	8 ft.
Press wheel revolut	ions				**	
per acre		803	803		803	803
*Grain box capac	ity	11-1/4 bi	1. 11~1	1/4 bu.	11-1/4 bu	11-1/4 bu.
*Grass seed box	capacity	70 lbs.	70 11	bs.	70 lbs.	70 lbs.
**Fertilizer box o	apacity	457 lbs.	457	lbs.	457 lbs.	457 lbs.
***Approximate we	eight empty	1971 lbs.	1788	lbs.	1713 lbs.	1663 lbs.

\*Grain and grass seed box capacities are based on seeds weighing 60 lbs. per bushel.

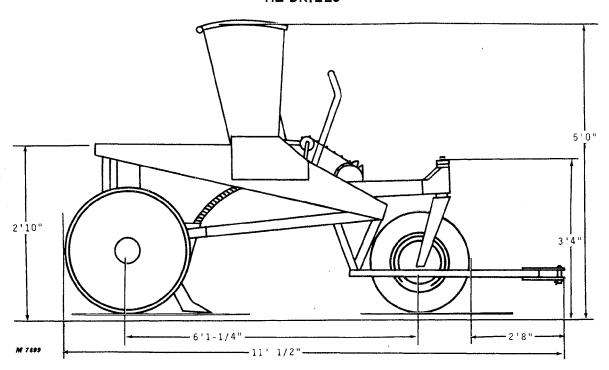
\*\*Fertilizer capacities are based on fertilizer weighing 65 lbs. per cu. ft.

\*\*\*The approximate weight given is for a drill equipped with power lift, tractor hitch, footboard, tires and tubes, furrow openers and spoke press wheels.

All press wheels are 26-inch diameter. Caster wheel tire size is 6.70 - 15, 4PR or 7.60 - 15, 4PR.

(Specifications and design subject to change without notice.)

#### HZ DRILLS



No. of openers
Spacing between openers
Drilling width
Press wheel revolutions
per acre
\*Grain box capacity
\*Grass seed box capacity
\*\*Fertilizer capacity

\*\*\*Approximate weight empty

- \*Grain and grass seed box capacities are based on seeds weighing 60 lbs. per bushel.
- \*\*Fertilizer capacities are based on fertilizer weighing 65 lbs. per cu. ft.
- \*\*\*The approximate weight given is for a drill equipped with hand lift lever, tractor hitch, footboard, tire and tube.

HZ714	HZ616
7	6
14 in.	16 in.
8 ft.	8 ft.
803	803
11-1/4 bu.	11-1/4 bu.
70 lbs.	70 lbs.
490 lbs.	
1917 lbs.	1800 lbs.

All press wheels are 26-inch diameter. Caster wheel tire size is 6.70 - 15, 4PR or 7.60 - 15,

(Specifications and design subject to change without notice.)



## **Operation**

#### PREPARING DRILL FOR OPERATION

This section of your operator's manual explains and illustrates how to prepare the drill for field operation and how the many settings and adjustments should be made.

#### GRAIN BOX AND FEEDS

Before filling grain box, make sure that foreign objects such as bolts or stones are not lodged in the feeds. Turn feed shaft several revolutions with a wrench (page 9).

Make sure drive gears are fully engaged when furrow openers are lowered (page 14).

See that all feed gates on the feed cups are set in the same position, see page 10.

Refer to chart inside grain box cover and instructions on page 9 and set grain feed shaft shifter lever.

NOTE: Some slight change in the setting may be necessary once you start drilling, see pages 12 and 13.

#### FERTILIZER BOX AND FEEDS

Keep fertilizer dry. Break up lumps when filling box. Refer to chart in the fertilizer box and set indicator according to quantity to be drilled. Make sure fertilizer drive is engaged. Use wrench to turn countershaft several revolutions. Refer to fertilizer attachment operator's manual for additional instructions.

#### GRASS SEED BOX AND FEEDS

Thoroughly mix grass seed and legume seed when filling box. Turn feed shaft several revolutions with a wrench. Refer to charts in grass seed box and instructions on page 35 and set shifter lever. Make sure drive is engaged when furrow openers are lowered.

## DISK FURROW OPENERS AND DEPTH OF SEEDING

Check location of pressure rod collar and adjusting washer (page 17).

Inspect and disconnect scrapers if they are not required (page 18).

Set power lift hand wheel and connecting link (page 31), remote hydraulic cylinder stop (pages 32 and 33), or hand lever (page 34) to secure desired depth of seeding.

#### LISTER OPENERS AND MULCHHOEOPENERS

Adjust openers for shallow, normal, or deep penetration as required. See pages 20 and 21. Be sure cotter pins are used as shear pins.

#### GRAIN, FERTILIZER, AND GRASS SEED TUBES

Inspect all tubes to make sure they are all in place, clean, and are free of obstructions. Replace defective tubes.

#### TIRE INFLATION

Check caster wheel tire inflation as instructed on page 8.

#### DISENGAGING DRIVES

Seed and fertilizer combinations being drilled may require the use of only one or two of the three boxes. To eliminate unnecessary wear, the grass seed, grain, and fertilizer drives should be locked out of gear when they are not being used. Make sure drives being used engage when furrow openers are lowered and disengage when furrow openers are raised.

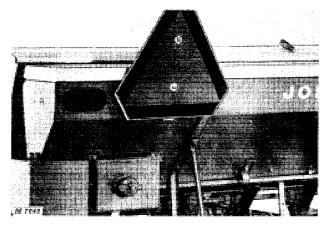
#### GEAR HANGER

Be sure gear hangers and gears operate freely. Gears should engage when openers are lowered and disengage when openers are raised. See page 14.

#### ACREMETER

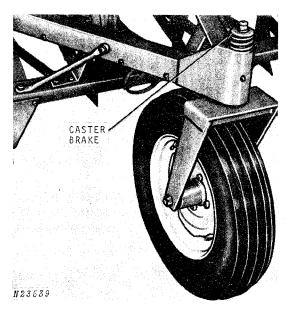
Adjust and time acremeter as instructed on pages 29, 30, and 53.

#### TRANSPORTING DRILL



When transporting the drill 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 your local governmental regulations. Various safety lights and devices are available from your John Deere dealer. Among these is the SMV (Slow Moving Vehicle) emblem. A bracket for mounting the SMV emblem on the rear of the fertilizer box is provided with each drill. Be sure the painted surface faces the rear as shown to provide proper light reflection.

#### CASTER WHEEL



#### TIRE INFLATION

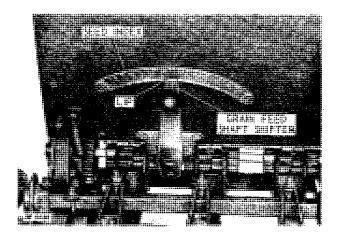
For proper flotation, longer tire life, and proper frame height, inflate tire to 30 psi.

#### CASTER WHEEL BRAKE

Tighten nuts on caster brake just enough to prevent wheel from pivoting excessively while transporting drill. Be sure lock nut is turned down tight after adjusting.

#### GRAIN BOX AND FEEDS

#### SETTING GRAIN FEEDS



The amount of seed drilled per acre is controlled by the feed shaft shifter on the outside of the box. Moving the feed shaft shifter adjusts the feeds for small or large quantities. Use the drilling chart fastened to box cover as your guide.

Because the quantity drilled will vary according to the size and variety of grain being drilled, it may be necessary to set the grain feed shaft shifter at a larger or smaller quantity setting than shown on the chart. See page 12.

The lip of the feed shaft shifter is the indicator. Pull feed shaft shifter past the desired notch on seed index, then bring shifter back slowly and set lip into desired notch.

#### **Using Mixtures**

Frequently, a mixture containing a variety of grasses, legumes, and grain is used. To arrive at the feed shaft shifter setting, select the setting from the drilling chart that will give the desired quantity for each kind of seed and add them together. Set the shifter in the notch that represents the total of all the settings. Check quantities drilled as explained on page 13.

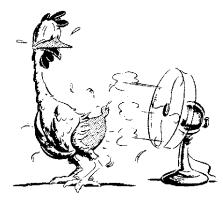
NOTE: When seed being drilled is not shown on the grain chart, select a seed on the chart of comparable weight and size and use the setting recommended for it.

#### CHECKING GRAIN FEEDS



Turning Feed Shaft

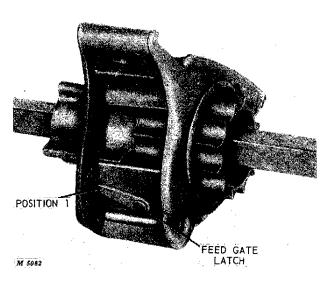
Before putting seed in box, turn feed shafts with wrench in direction feeds normally turn. If feeds stick, check for foreign objects in feeds. If they turn hard, loosen moving parts of feed shaft with diesel fuel. During the season, the feeds should be loosened every day by turning the feed shaft with a wrench. When using treated seed, turn feeds with wrench whenever the machine has been standing for an hour or more.





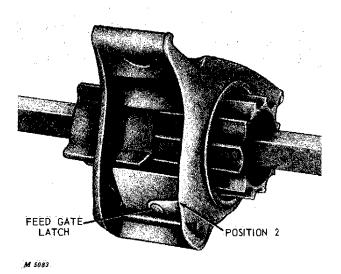
#### GRAIN BOX AND FEEDS\_Continued

#### SETTING FEED GATES



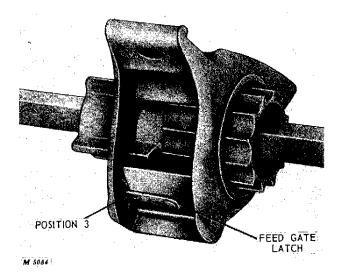
Position 1

Set feed gate latch in Position 1 when drilling wheat, oats, barley, rye, flax, rice and similar seeds.



Position 2

Set feed gate latch in Position 2 when drilling small size peas, common beans, soybeans, corn, and extra large quantities of trashy oats.



Position 3

Set feed gate latch in Position 3 when drilling large size peas, soybeans, kidney beans, and lima beans.

It is very important that the feed gates be set alike and that the proper setting be used for the particular seed being drilled. Improper setting of the gates will result in uneven drilling, wrong quantities being drilled, and crushing of the seed.



The above tool is available for changing the settings of the feed gate latches.

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