John Deere
1600 Series
Drawn Chisel Plow

JOHN DEERE

OPERATORS MANUAL

John Deere 1600 Series
Drawn Chisel Plow

OMN159437 G7 English

OMN159437 G7

LITHO IN U.S.A.
ENGLISH

To the Purchaser

This new chisel plow 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, or assembly. Read the Table of Contents to learn where each section is located.

In addition to the equipment furnished with your chisel plow, attachments are available to help you do a better job in special crop conditions. These are described in the attachments sections of this manual and can be purchased from your John Deere dealer.

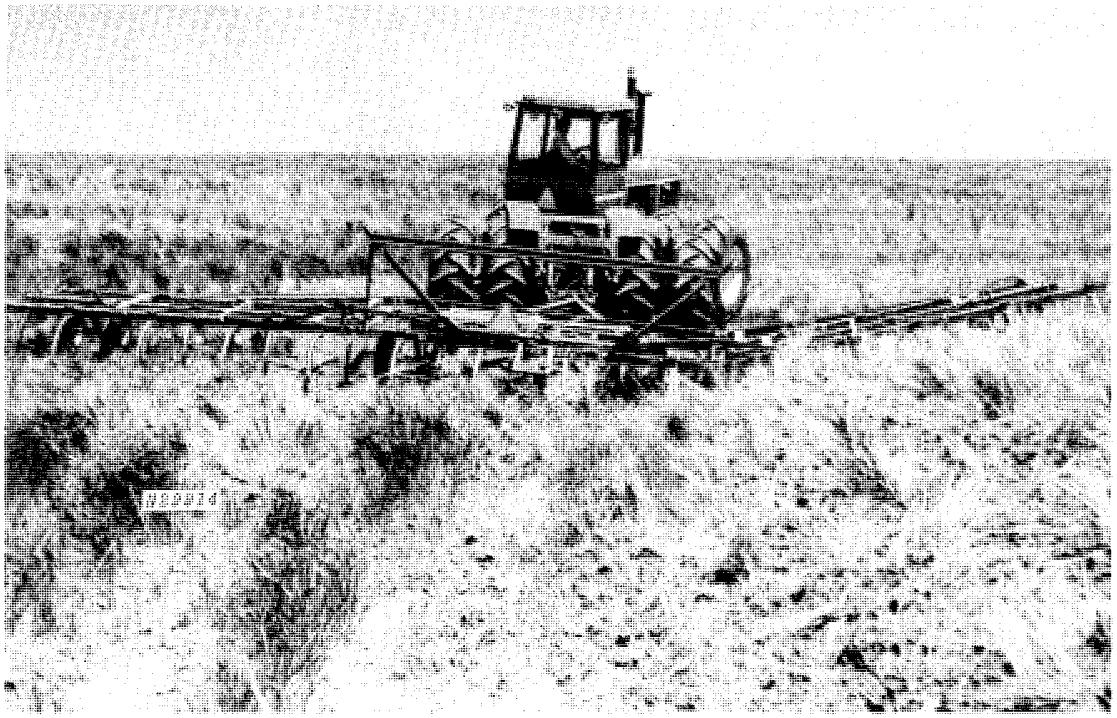
"Right-hand" and "left-hand" sides are determined by facing in the direction the chisel plow will travel when in use.

Record your chisel plow serial number in the space provided on page 56. Your dealer needs this information to give you prompt, efficient service when you order parts or attachments. If your chisel plow requires replacement parts, go to your John Deere dealer where you can obtain genuine John Deere parts—accept no substitutes.

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

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 measurement.



Contents

Safety Suggestions

The safety of the operator was one of the prime considerations in the minds of John Deere engineers when the Chisel Plow was designed. Simple adjustments and safety features were built into this Chisel Plow wherever possible.

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

Only one person—the operator—should be allowed on the tractor when the chisel plow is in operation.

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

Never allow anyone other than yourself on the tractor when operating or transporting the chisel plow.

Never allow anyone around the chisel plow when you are performing operating functions.

Reduce speed when transporting over uneven or rough terrain.

Shift the tractor into a lower gear when transporting down hills or steep slopes.

Have the chisel plow stationary and on level ground when raising or lowering outriggers.

A protective four-post Roll-Gard is incorporated in each Sound-Gard Body. Your tractor may be equipped with a separate four-post Roll-Gard. Otherwise, a protective two-post Roll-Gard with seat belt is available for your tractor.

Under almost all operating conditions:

1. The use of a seat belt with the optional John Deere Roll-Gard is recommended.

2. Use of a seat belt without roll-over protective equipment is not recommended.

Always keep tractor in gear when driving down steep grades with chisel plow raised.

Refer to safety instructions outlined under "Transporting" before road transport of chisel plow. See page 14.

Always support chisel plow frame and rigs on stands or blocks before working under or around chisel plow.

Do not store chisel plow with rigs raised unless lockup pins are installed. See page 11.

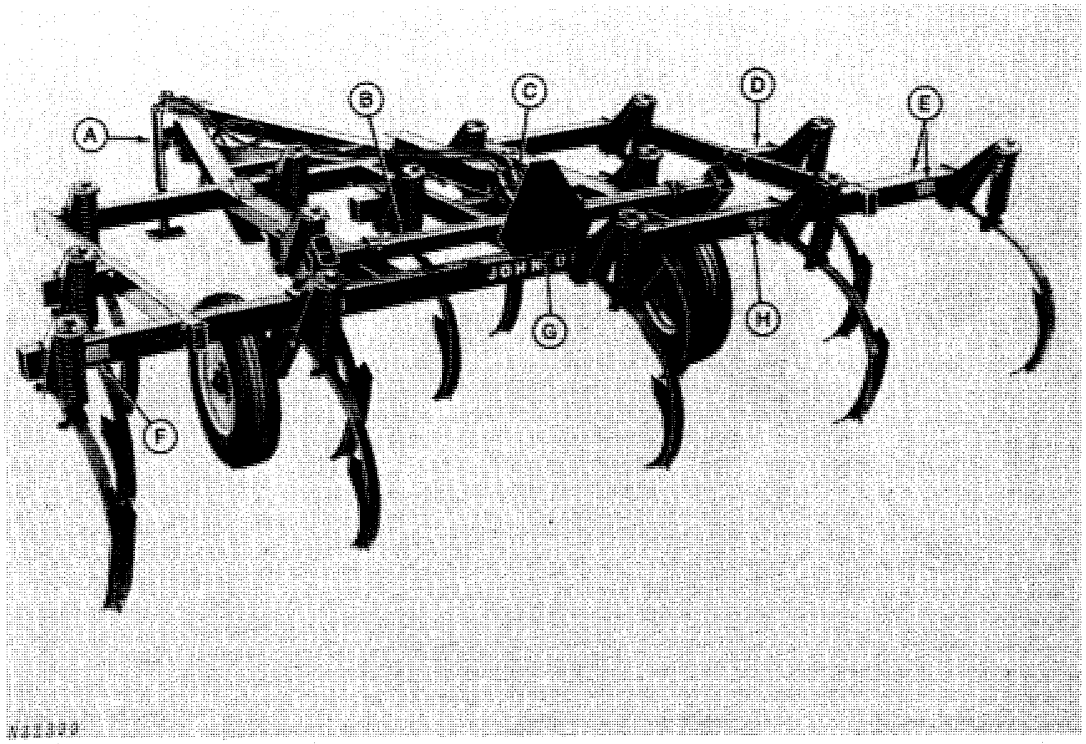
Escaping hydraulic fluid under pressure can have sufficient force to penetrate the skin, causing serious personal injury. Before disconnecting lines, be sure to relieve all pressure. Before applying pressure to the system, be sure all connections are tight and that lines, pipes, and hoses are not damaged.

Fluid escaping from a very small hole can be almost invisible. Use a piece of cardboard or wood, rather than hands, to search for suspected leaks.

If injured by escaping fluid, see a doctor at once. Serious infection or reaction can develop if proper medical treatment is not administered immediately.

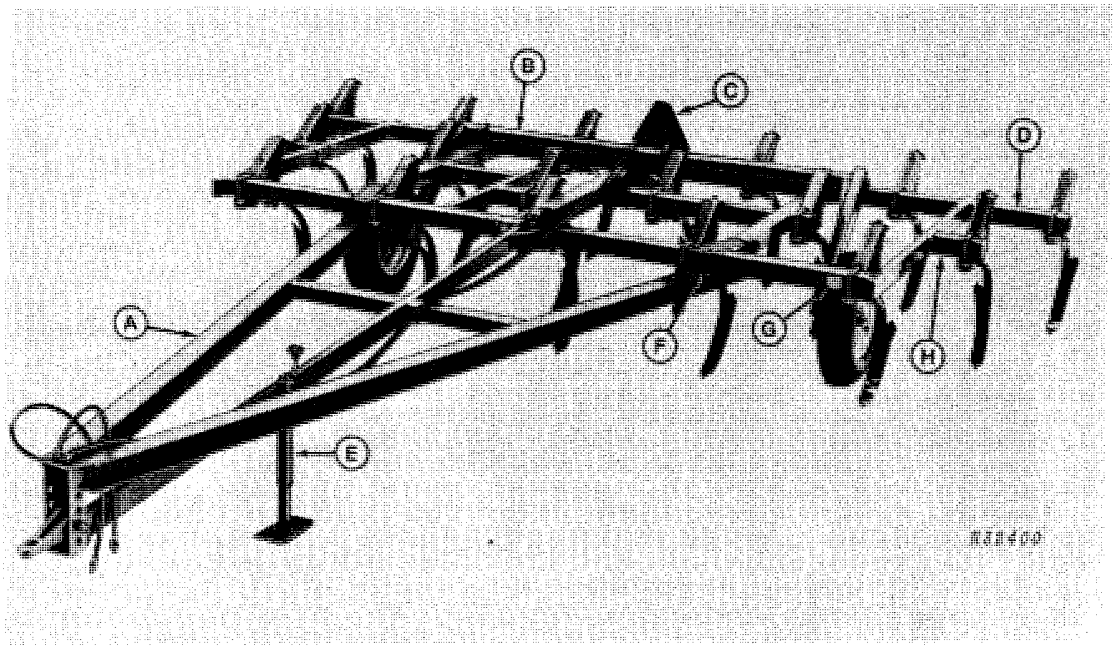
If spray can paint is used, be careful when discarding empty can. Do not incinerate or puncture can.

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



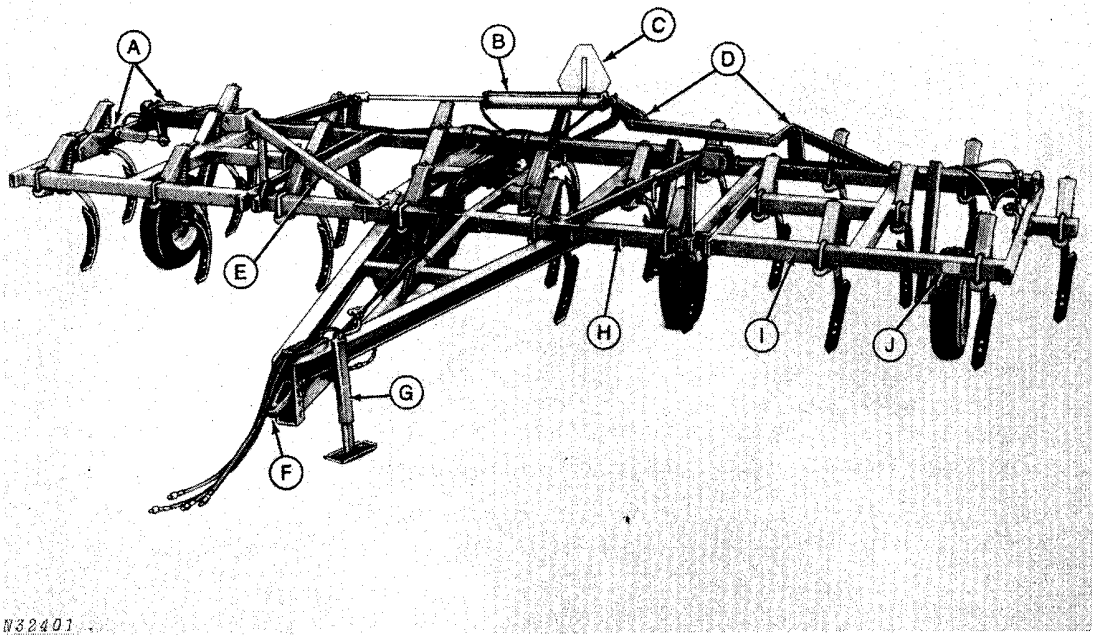
A—Hitch Jack
B—Center Rockshaft
C—Remote Cylinder, 8-Inch (203 mm)
D—Stub Bar, 11 Inch (279 mm)
E—Stub Bar, 22-1/2 Inch (572 mm)
F—Red Reflector
G—SMV Emblem
H—Main Frame, 10 Foot (3 048 mm)

Model 1614R Rigid Chisel Plow with Twisted Shovels, Spring-Trip Standards and Single Wheel Center Rockshaft



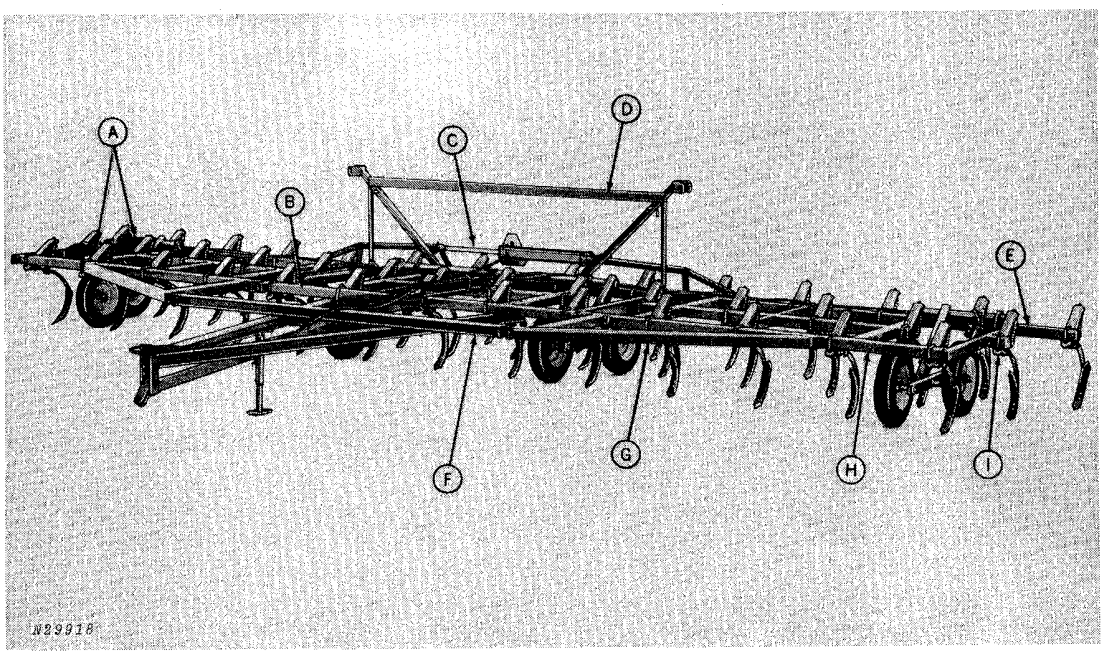
A—Hitch
B—Center Rockshaft
C—SMV Emblem
D—Stub Bar, 22-1/2 Inch (572 mm)
E—Hitch Jack
F—Main Frame, 13 Foot (3 962 mm)
G—Amber Reflector
H—Stub Bar, 11 Inch (279 mm)

Model 1617R Rigid Chisel Plow with Twisted Shovels, Spring-Trip Standards and Single Wheel Center Rockshaft



A—Outrigger Rockshaft and Depth Control Cylinder
B—Cylinder, 4 x 32 Inches (102 x 813 mm)
C—SMV Emblem
D—Outrigger Lift Linkage
E—Outrigger Lockup
F—Hitch Link
G—Hitch Jack
H—Main Frame, 10 Foot (3 048 mm)
I—Hinged Outrigger, 6 Foot (1 829 mm)
J—Red Reflector

Model 1624 Flexible Chisel Plow with Twisted Shovels, Spring-Trip Standards and Single Wheel Rockshafts



A—Outrigger Rockshaft and Depth Control Cylinder
B—Main Frame, 13 Foot (3 962 mm)
C—Cylinder, 5 x 32 Inches (127 x 813 mm)
D—Truss
E—Stub Bar, 22-1/2 Inch (572 mm)
F—Hitch Cross Member
G—Hitch A-Frame
H—Hinged Outrigger, 12 Foot (3 658 mm)
I—Stub Bar, 7 Inch ((178 mm)

Model 1641 Flexible Chisel Plow with Twisted Shovels, Spring-Trip Standards and Tandem Wheel Rockshafts

Operation

GENERAL

The 1600 Series Drawn Chisel Plow is ideally suited for seed-bed preparation, stubble-mulch and deep fallow tillage, roughing fields to reduce erosion and increase moisture absorption. The chisel plow can also be used for killing persistent weeds, heavy-duty field cultivating, and renovating pastures.

The 1600 Series Drawn Chisel Plow can be used with John Deere Tractors (see specifications page 54) and competitive tractors with equivalent horsepower rating.

Flexible Model Chisel Plows

Three hydraulic cylinders are used to control the depth of penetration. The three hydraulic depth control cylinders are connected in series which requires only one set of hydraulic outlets on the tractor.

A hydraulically operated outrigger lift can be installed on the chisel plow providing full lift (near vertical position) for highway transporting. See page 11 and 12 for illustration of the chisel plow with out-riggers raised for transporting.

Rigid Model Chisel Plows

One 8-inch (203 mm) stroke remote hydraulic cylinder is used to control the depth of penetration.

PREPARING THE CHISEL PLOW

Before taking the chisel plow to the field, be sure the machine is in good field working condition. The following preventive maintenance checks will save you time from possible field failures.

Bolts and Nuts

Before starting to work with your new chisel plow or one which has been stored, check to see that all nuts on bolts are tight. After the chisel plow has been operated for a short period of time, check to be sure that bolts are tight.

Recommended Torque Values in Foot-Pounds (Nm)
Coarse and Fine Threads

Bolt Diameter (Inches)	Three Radial Dashes	Six Radial Dashes
1/4	10 (15)	14 (19)
5/16	20 (25)	30 (40)
3/8	35 (45)	50 (70)
7/16	55 (75)	80 (110)
1/2	85 (115)	120 (165)
9/16	130 (175)	175 (240)
5/8	170 (230)	240 (325)
3/4	300 (405)	425 (575)
7/8	445 (605)	680 (930)
1	670 (910)	1030 (1395)

N27343

Torque Chart

Tighten all bolts to the torques specified in the chart above. It is important that bolts be kept tight at all times. Loose bolts can cause breakage of parts. Check the tightness of bolts periodically and keep them tightened to the torques specified above. All bolts used in the 1600 Series Drawn Chisel Plow are "high-strength" bolts, and when replaced, bolts of equal or higher strength should be used. "High-strength" bolts are identified by three radial dashes on the bolt head.

Tire Inflation

Check tires for proper inflation pressure. See page 14 for recommended tire inflation pressure.

Lubrication

Lubricate the chisel plow at recommended intervals given on page 21.

PREPARING THE TRACTOR

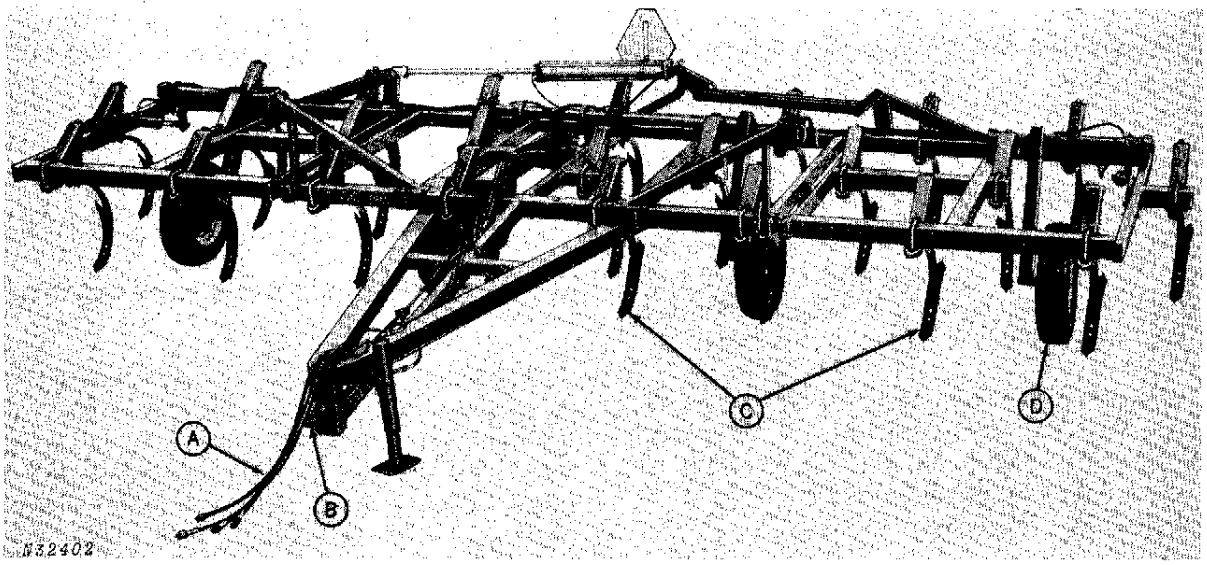
Before hitching the chisel plow to the tractor, pin the tractor drawbar in a fixed, center position. Although a swinging drawbar aids turning when pulling a large implement, a fixed drawbar will provide greater stability.

See your tractor operator's manual for proper ballast and tire inflation pressure when tractor is used to tow heavy implements.

For chisel plows equipped with a single acting hydraulic cylinder for outrigger lift, see your tractor operator's manual and adjust the tractor hydraulic control lever so it will remain in the float position while operating the chisel plow in the field.

Check to be sure that the tractor hydraulic system is functioning properly and that the hydraulic oil reservoir has an adequate supply of oil.

ATTACHING CHISEL PLOW TO TRACTOR



A—Hydraulic Hoses **B—Hitch Link** **C—Shovels** **D—Tire**

Model 1624 Flexible Chisel Plow Illustrated

The 1600 Series Flexible Chisel Plow must have the hydraulic cylinders and hoses installed as shown above, see pages 35, 36, or 37.

Back the tractor into position and attach the hitch link (B) or clevis to the tractor drawbar.

Connect the hydraulic hoses (A) to couplers on the tractor. Raise and lower the chisel plow several times to be sure the cylinders are working properly and that hoses are attached correctly and tightly to cylinders.

The chisel plow should raise when the tractor remote cylinder lever is moved forward and lower when the remote cylinder lever is pulled back.

IMPORTANT: If hydraulic hoses are not attached to cylinders as outlined on pages 35, 36 or 37, the hydraulic cylinders will not function properly. Check to be sure tractor hydraulic oil reservoir has an adequate supply of 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