



# 600 HI-CYCLE SERIAL NO. 600-1601



JOHN DEERE

## OPERATORS MANUAL 600 HI-CYCLE SERIAL NO. 600-1601

OMN97692 L3 English



**OMN97692 L3**

LITHO IN THE U.S.A.  
ENGLISH

# TO THE PURCHASER

Your new Hi-Cycle was built to rigid manufacturing standards. Material and workmanship are the best. However, the machine will serve you only in direct proportion to the care you give it. How long it will last and continue its good work is a matter entirely in your hands.

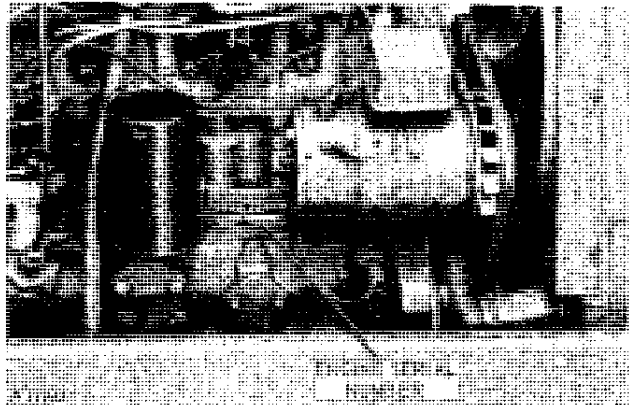
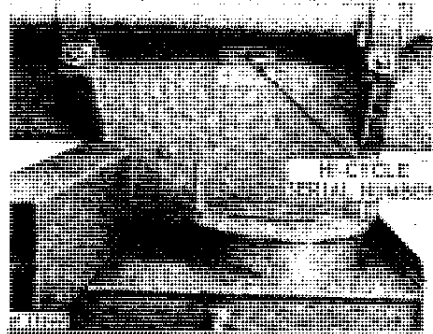
The way you operate your Hi-Cycle and the care you give it have much to do with the service and satisfaction you will get from it. This manual has been carefully prepared and illustrated to show you what to do and when to do it. It explains the adjustments that are built into the machine and gives instructions on when and how to make these adjustments. The information given in this manual will afford a clear understanding of fundamentals in the use of this Hi-Cycle and spraying operations. The best use of these fundamentals to suit the conditions in which the machine is operating is a responsibility that is completely up to the operator.

Suggestions in this manual on spraying practices are of a general nature and do not apply to any given area. If further questions arise regarding spraying operation, contact your local county agent.

If you find you need information not covered in this manual or if your Hi-Cycle requires special servicing, take advantage of the facilities offered by your John Deere dealer. He has trained mechanics, who are kept informed on the best methods of servicing and can give you prompt, "know-how" service in the field or in his shop.

Right-hand and left-hand reference is determined by standing at the rear of the Hi-Cycle and facing the direction of travel.

## SERIAL NUMBERS



You will find the serial number of your Hi-Cycle stamped on a plate located on the rear of the main frame. The engine serial number is stamped on a plate on the right-hand side of the engine block. Write these serial numbers in the space provided below for handy reference later.

HI-CYCLE SERIAL NO. ....

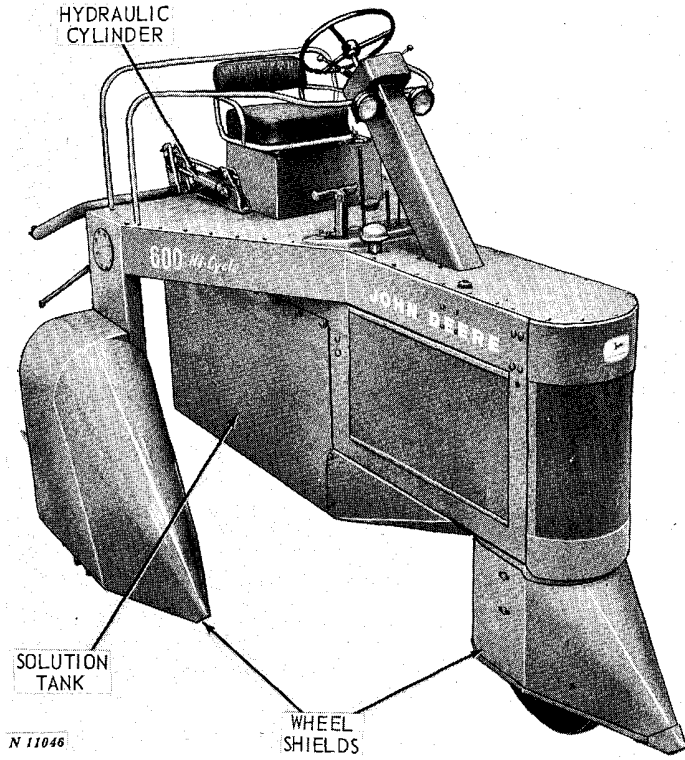
ENGINE SERIAL NO. ....

DATE PURCHASED .....



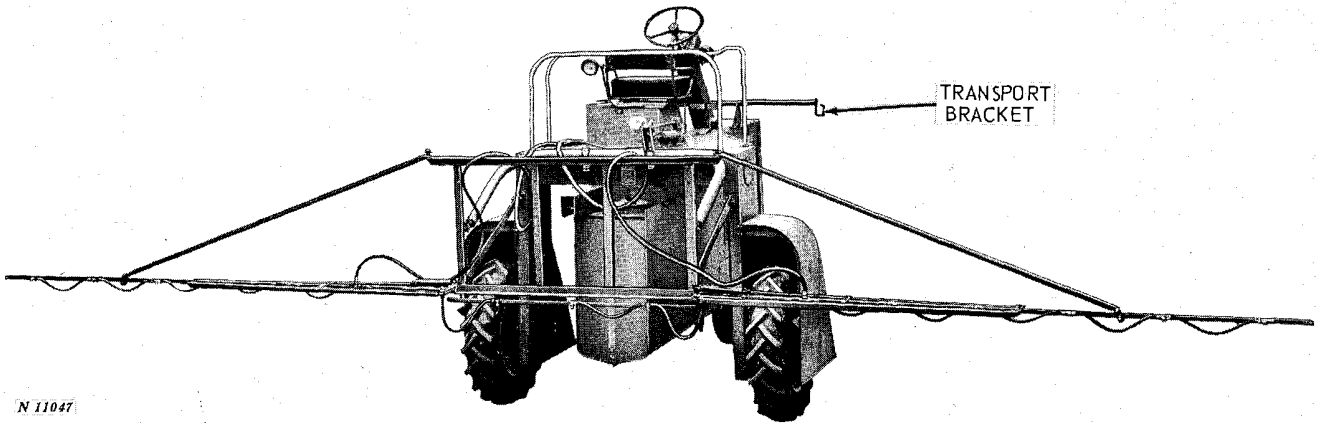
# CONTENTS

|  | Page  |  | Page  |
|--|-------|--|-------|
| <b>SPECIFICATIONS</b> . . . . .              | 6-7   | Defoliation booms . . . . .                  | 37-40 |
| Hi-Cycle . . . . .                           | 6-7   | Row spacing . . . . .                        | 37    |
| Sprayer . . . . .                            | 7     | Nozzles . . . . .                            | 37    |
| Special Equipment . . . . .                  | 7     | Defoliating cotton . . . . .                 | 38    |
| <b>OPERATION</b> . . . . .                   | 8-48  | Nozzle tip application rate charts . . . . . | 38-39 |
| Controls and instruments . . . . .           | 8     | Transporting defoliation boom . . . . .      | 39-40 |
| Operating the Hi-Cycle . . . . .             | 9-16  | Hand gun . . . . .                           | 40-41 |
| Prestarting checks . . . . .                 | 9     | Post emergence oiling boom . . . . .         | 41    |
| Starting the engine . . . . .                | 9-10  | Lay-by boom . . . . .                        | 42    |
| Cold weather starting . . . . .              | 10    | Sprayer calibration . . . . .                | 42-45 |
| Engine warm-up period . . . . .              | 10    | Daily sprayer care . . . . .                 | 46    |
| Engine speeds . . . . .                      | 10    | Care of V-belts . . . . .                    | 46    |
| Using the throttle . . . . .                 | 10    | Before and after storage . . . . .           | 47-48 |
| Stopping the engine . . . . .                | 10    | <b>SAFETY SUGGESTIONS</b> . . . . .          | 49    |
| Engine run-in period . . . . .               | 10-11 | <b>FUELS AND LUBRICANTS</b> . . . . .        | 50-51 |
| Selecting ground speed . . . . .             | 11    | <b>LUBRICATION AND PERIODIC SERV-</b>        |       |
| Brakes . . . . .                             | 11    | <b>ICES</b> . . . . .                        | 52-64 |
| Speed-hour meter . . . . .                   | 12    | <b>TROUBLE SHOOTING</b> . . . . .            | 65-70 |
| Lights . . . . .                             | 12-13 | <b>SERVICE</b> . . . . .                     | 71-88 |
| Tires . . . . .                              | 13    | Engine service . . . . .                     | 71-82 |
| Wheel shields . . . . .                      | 13    | Fuel system . . . . .                        | 71-72 |
| Seat and tool tray . . . . .                 | 13    | Cooling system . . . . .                     | 72-73 |
| Lift arms and control system . . . . .       | 14-16 | Ignition system . . . . .                    | 74-75 |
| Attaching spray booms to lift arms . . . . . | 16    | Electrical system . . . . .                  | 76-79 |
| Operating the sprayer . . . . .              | 17-48 | Cylinder head bolts . . . . .                | 79    |
| Spray tank . . . . .                         | 17-18 | Valve tappet adjustment . . . . .            | 80    |
| Strainer and valve . . . . .                 | 19    | Main drive belt adjustment . . . . .         | 80    |
| Spray pumps and control lever . . . . .      | 19-20 | Hydraulic pump belt adjustment . . . . .     | 80    |
| Use of wettable powders . . . . .            | 20    | Chassis service . . . . .                    | 81-82 |
| Hoses . . . . .                              | 20    | Clutch . . . . .                             | 81    |
| Decontamination . . . . .                    | 20    | Starter safety switch . . . . .              | 81    |
| Spray control lever . . . . .                | 20-21 | Brakes . . . . .                             | 81    |
| Pressure regulator and gauge . . . . .       | 21    | Final drive chain . . . . .                  | 82    |
| Capacity tabulations . . . . .               | 22    | Tires . . . . .                              | 82    |
| Using sprayer in field . . . . .             | 22    | Sprayer service . . . . .                    | 83-88 |
| General-purpose booms . . . . .              | 23-36 | Spray pumps . . . . .                        | 83-86 |
| Row-crop drops . . . . .                     | 23-24 | Pump drive belt . . . . .                    | 86    |
| Nozzles . . . . .                            | 24    | Pressure gauge . . . . .                     | 86    |
| Spraying for cotton insect control . . . . . | 24-25 | Pressure regulator . . . . .                 | 87    |
| Nozzle tip application rate charts . . . . . | 26-34 | Nozzles . . . . .                            | 87    |
| Boom, spring tension . . . . .               | 35    |  |       |
| Hydraulic boom folding attachment . . . . .  | 35    |  |       |
| Transporting General-Purpose Boom . . . . .  | 36    |  |       |



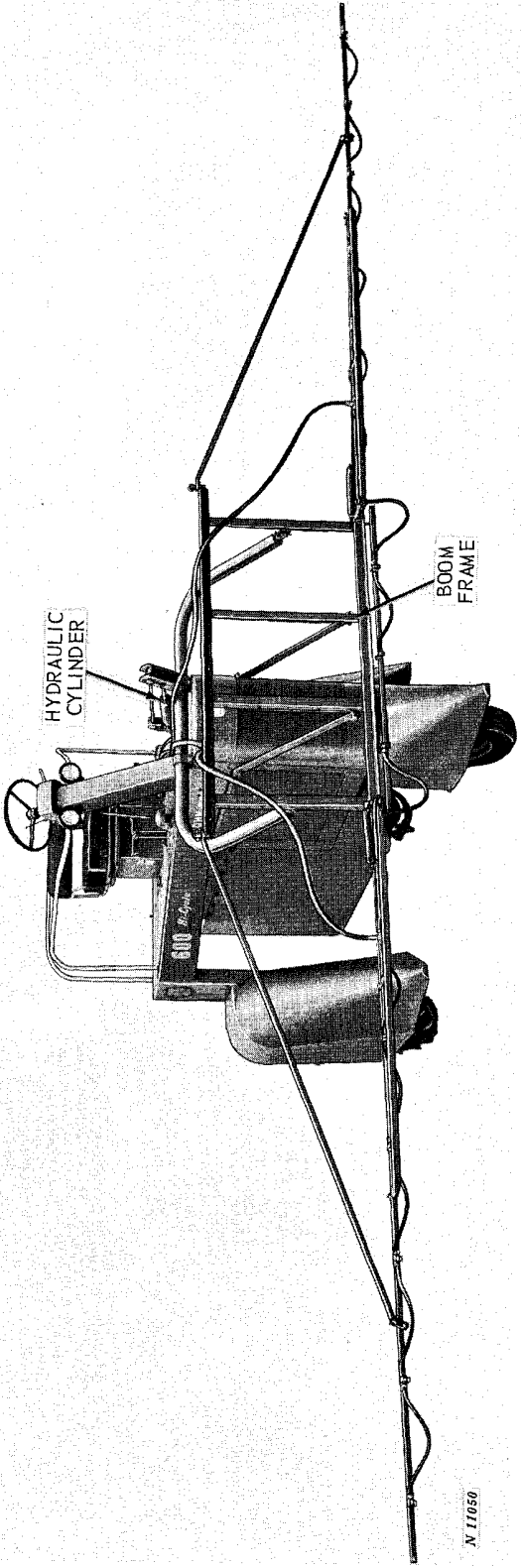
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*Front View of John Deere 600 Hi-Cycle*



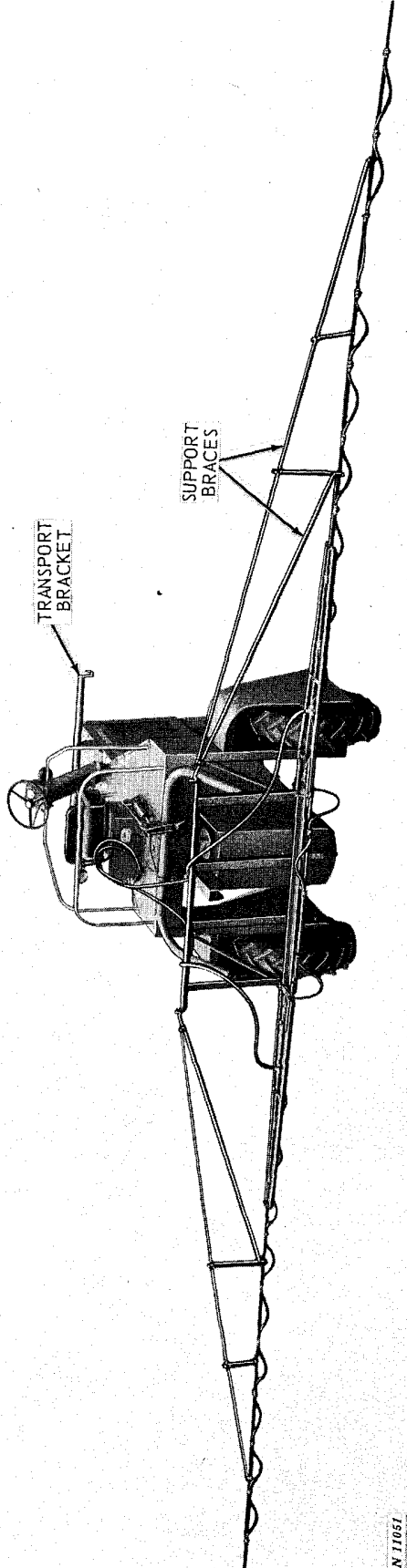
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*John Deere 600 Hi-Cycle Equipped with 8-Row General Purpose Boom*



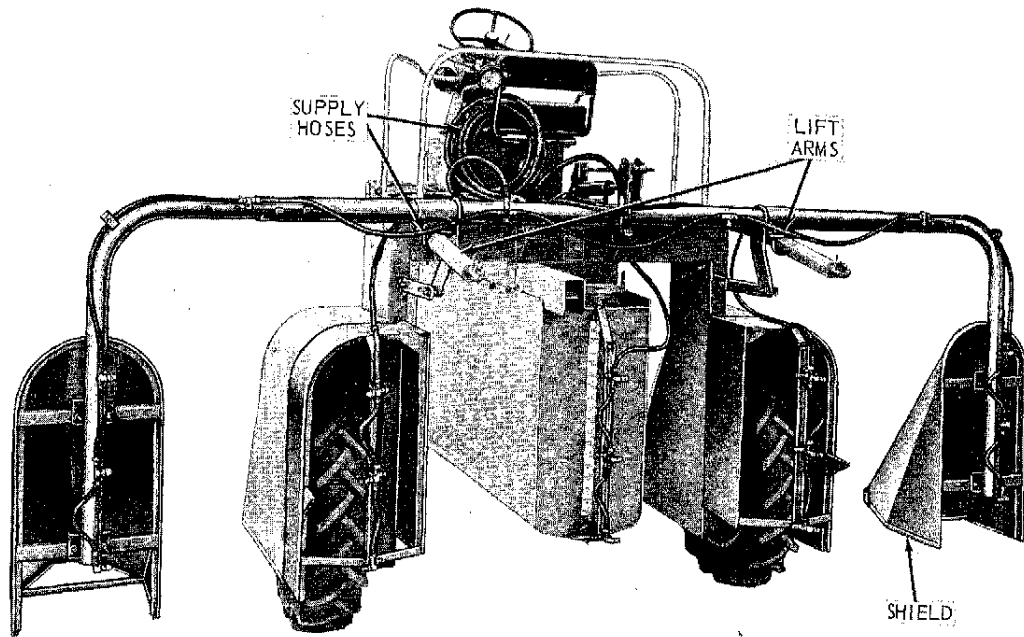
*John Deere 600 Hi-Cycle Equipped with 8-Row General-Purpose Boom on Front of Machine*

N 11050



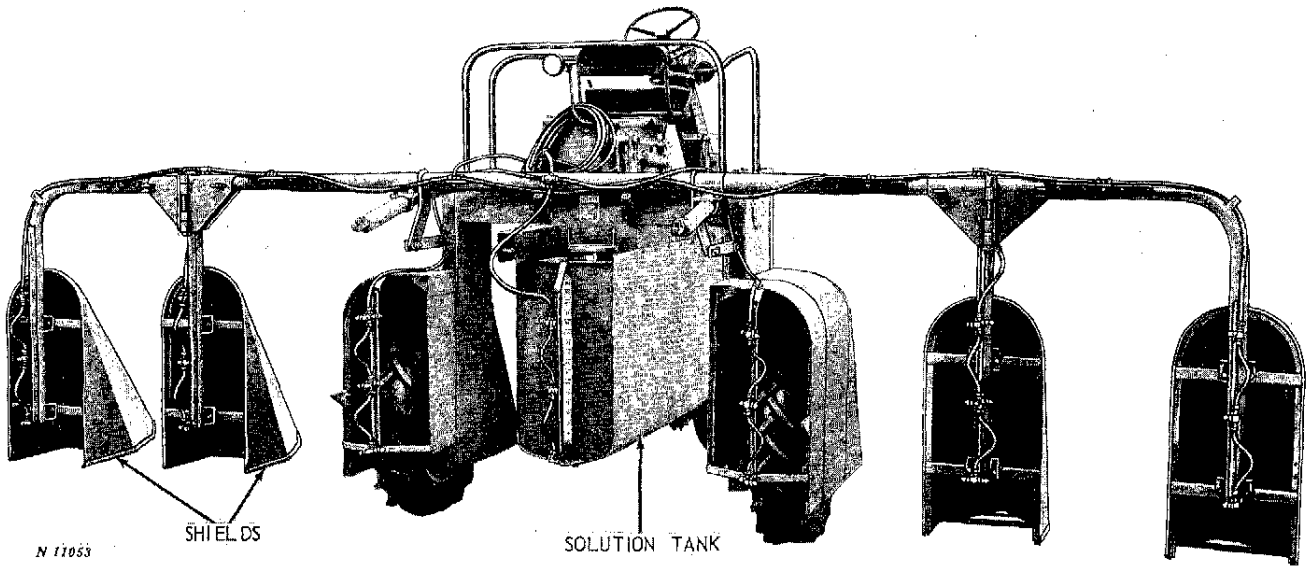
*John Deere 600 Hi-Cycle equipped with 12-Row General-Purpose Boom on rear of Machine*

N 11051



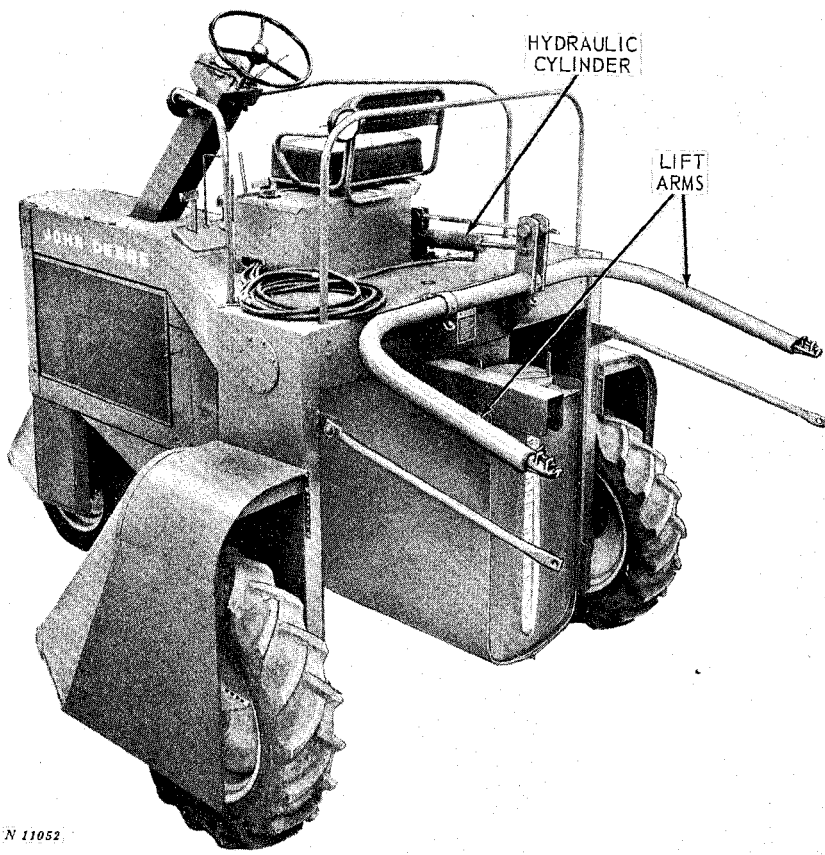
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*John Deere 600 Hi-Cycle Equipped with 4-Row Defoliation Boom*



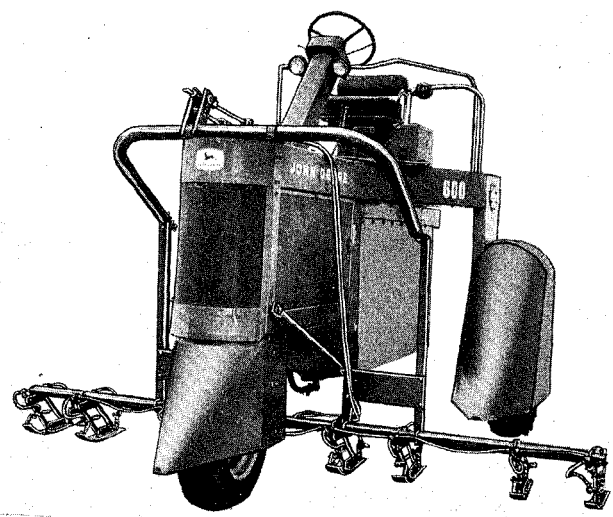
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*John Deere 600 Hi-Cycle Equipped with 6-Row Defoliation Boom*



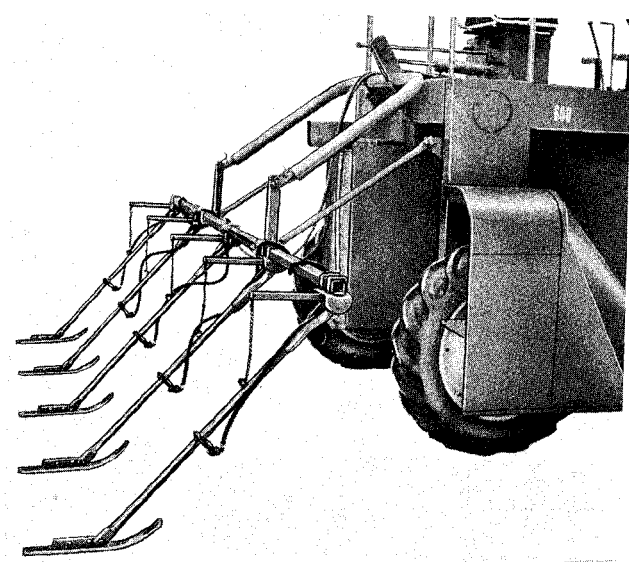
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Rear View of John Deere 600 Hi-Cycle



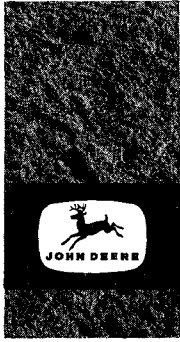
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John Deere 600 Hi-Cycle Equipped with No. 4 Post Emerge Oiling Boom



N 7810

John Deere 600 Hi-Cycle Equipped with No. 2 Lay-By Boom



# SPECIFICATIONS

## HI-CYCLE

### ENGINE

Make of engine . . . . . John Deere NA115G  
 Number of cylinders . . . . . 4  
 Bore and stroke, inches . . . . . 3-1/2 x 3  
 Piston displacement, cubic inches . . . . . 115  
 \*Brake horsepower . . . . . 42  
 Compression ratio . . . . . 7.9 to 1  
 Type of fuel . . . . . gasoline

### ENGINE SPEEDS

Slow idle . . . . . 600 rpm  
 Fast idle (no load) . . . . . 2600 rpm

### GROUND SPEEDS

MPH based on 24-inch tires with no wheel slippage

| Engine Speed (RPM) | Gear |     |     |      |     |
|--------------------|------|-----|-----|------|-----|
|                    | 1st  | 2nd | 3rd | 4th  | R   |
| 1500               | 2.9  | 4.0 | 5.7 | 7.7  | 4.0 |
| 1750               | 3.4  | 4.6 | 6.7 | 9.0  | 4.6 |
| 2000               | 3.9  | 5.3 | 7.6 | 10.3 | 5.3 |
| 2250               | 4.4  | 5.9 | 8.6 | 11.6 | 5.9 |
| 2500               | 4.8  | 6.6 | 9.5 | 12.8 | 6.6 |

### TRANSMISSION

Selective sliding gear type with 4 speeds forward and 1 speed reverse

### TRANSMISSION CLUTCH

Single 8-1/2-inch plate automotive type, foot operated

### DIFFERENTIAL

Spiral bevel type gears

### BRAKES

Self-energizing disk-type, foot-operated individually or simultaneously  
 \*Calculated at 60° F. and 29.92 inches of HG. at sea level and 2500 rpm full load.

### FINAL DRIVES

Heavy-duty roller chain with run-in-oil lubrication

### COOLING SYSTEM

Pressurized, with water pump, thermostat and fixed bypass

### ELECTRICAL SYSTEM

Battery . . . . . 12 volts  
 Battery terminal grounded . . . . . positive  
 Starting . . . . . 12-volt electric motor

### IGNITION SYSTEM

Type . . . . . Battery-distributor  
 Spark plug size . . . . . 14 mm

### FUEL SYSTEM

Type of fuel . . . . . Regular grade gasoline  
 Carburetor . . . . . Conventional up-draft  
 Air cleaner . . . . . Oil wash type

### ENGINE LUBRICATION

Oil filter is a full-flow, "spin-on" type with special bypass valve.

### LIFTING MECHANISM

Lift arms mounted on either front or rear of Hi-Cycle. They are either manually or hydraulically operated.

### DIMENSIONS

Wheel base . . . . . 90 inches  
 Wheel tread . . . . . 80 inches  
 Under axle clearance . . . . . 60 inches  
 Over-all height . . . . . 110 inches  
 Over-all length (tire to tire) . . . . . 128 inches  
 Over-all length (front wheel shield to rear of lift arms-straight out) . . . . . 163 inches  
 Over-all width (tires only) . . . . . 92 inches  
 Over-all width (wheel shields) . . . . . 98 inches



Capacities

Fuel tank . . . . . 13 U.S. gallons  
 Cooling system . . . . . 2-1/2 U.S. gallons  
 Crankcase (including filter) . . . . . 5 U.S. quarts  
 Air cleaner . . . . . 1 U.S. quart  
 Transmission . . . . . 4 U.S. quarts  
 Differential . . . . . 3 U.S. quarts  
 Hydraulic system . . . . . 3 U.S. quarts  
 Final drives . . . . . 2-1/2 U.S. gallons each

TIRES

Regular

Front . . . . . 6.70 x 15, 4-ply implement  
 Rear . . . . . 9.5 x 24, 4-ply tractor

Optional

Front . . . . . 7.50 x 16, 4-ply implement  
 Rear . . . . . 11.2 x 24, 4-ply tractor  
 Or  
 Front . . . . . 7.50 x 16, 4-ply implement  
 Rear . . . . . 9.5 x 24, 4-ply tractor

WEIGHT

Hi-Cycle (less boom, with tank and wheel shields) . . . . . 3450 pounds  
 Hi-Cycle with 8-row general-purpose sprayer . . . . . 3700 pounds

SPRAYER

TANK

200 U.S. gallons capacity, aluminized steel.  
 9-1/4-inch filler opening at rear with bucket-type strainer.

PUMP

Gear Pump - 25 gallons per minute at 50 psi  
 NI-Resist 8-Roller Pump - 20 gallons per minute at 50 psi with Nylon Rollers, Rubber Rollers Optional  
 "Live" belt driven

LINE STRAINER

Located between spray tank and pump, equipped with 50-mesh screen. 100 mesh screen optional.

BOOM SELECTOR VALVE

One handle control which controls spray delivery to full length of boom or either section individually. Also handle controls turning "on" or "off" in any of the selected positions.

PRESSURE REGULATOR

Adjustable up to 200 psi

PRESSURE GAUGE

Calibrated up to 200 psi

HOSES

Braided, chemical resistant, rated 275 psi (general-purpose and defoliation booms only)

BOOMS

General purpose—8-row and 12-row front or rear mounted (8-row into 12-row conversion kit available)  
 Defoliation—4-row and 6-row rear mounted. (4-row into 6-row conversion kit available)  
 No. 4 Post emerge Oiling Applicator—4-row, front mounted  
 No. 2 Lay-By—4-row, rear mounted

NOZZLE TIPS

Adequate selection of hollow-cone or fan nozzle tips to spray agricultural chemicals at the application rate desired at speeds up to 12 mph  
 Fan nozzle tips—Brass or stainless steel  
 Hollow-cone tips—Hardened stainless steel

SPECIAL EQUIPMENT

- BB 11381 B Handgun with 25-foot hose
- BB 11382 B Handgun with 50-foot hose
- B 13912 B Hose adapter (required for BB11381B and BB11382B)
- BN 85004 N Row-Crop drops, long (9) (for 8-row general-purpose boom)
- BN 85035 N\* Row-Crop drops, long (4) (for 12-row general-purpose boom)
- BN 85005 N Row-Crop drops, short (9) (for 8-row general-purpose boom)
- BN 85036 N\*\* Row-Crop drops, short (4) (for 12-row general-purpose boom)
- BN 85062 N Hydraulic boom folding attachments for 8- or 12-row general-purpose booms
- AN 85202 N Rubber pump rollers
- BN 85043 N Spring drops (4) for general-purpose spray booms
- BN 85038 N Hand Lift conversion parts (for machines equipped with hydraulic lift)
- BN 85041 N Hydraulic kit (for machines equipped with hand lift)
- BN 85064 N Wheel Shields
- B 11910 B Line strainer screen - 100 mesh

\*Must be used with BN85004N

\*\*Must be used with BN85005N

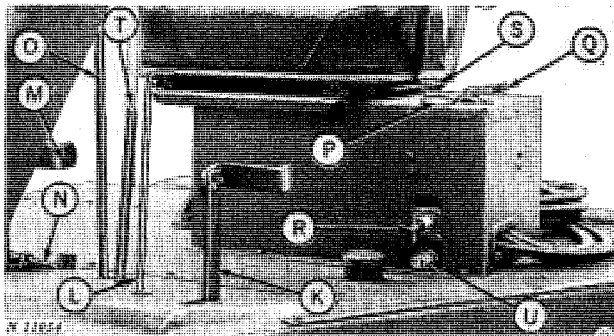
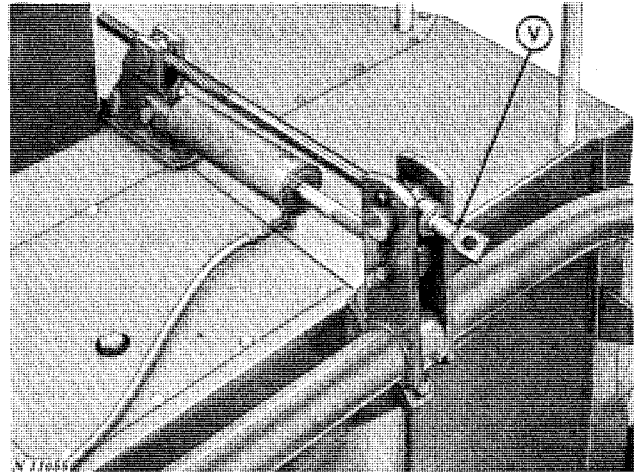
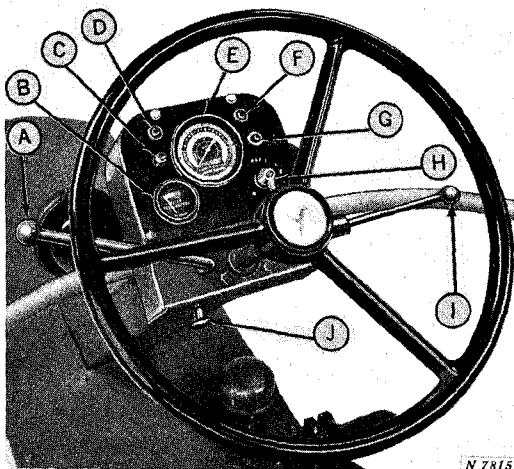
Specifications and design subject to change without notice.



# OPERATION

## CONTROLS AND INSTRUMENTS

Before attempting to operate your new Hi-Cycle, become familiar with the location and purpose of all controls and instruments. See the pages indicated for detailed information.



- A - Lift Arm Control Lever (Page 15)
- B - Engine Temperature Gauge
- C - Fuse (Page 78)
- D - Oil Pressure Tel-Light (Page 10)
- E - Speed-Hour Meter (Page 12)
- F - Generator Tel-Light (Page 10)
- G - Starter Button (Page 9)
- H - Ignition and Light Switch (Pages 9 and 12)
- I - Hand Throttle (Page 10)
- J - Choke Control (Page 9)
- K - Clutch Pedal (Page 11)
- L - Spray Pump Control Lever (Page 20)
- M - Brake Pedals (Page 11)
- N - Brake Lock (Page 11)
- O - Gearshift Lever (Page 11)
- P - Pressure Gauge (Page 21)
- Q - Spray Control Lever (Page 20)
- R - Pressure Regulator (Page 21)
- S - Seat Adjusting Lever (Page 13)
- T - "Hi-La" Gearshift Lever (Page 11)
- U - Hand Gun Port (Page 40)
- V - Hydraulic Cylinder Stop (Page 15)

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