

600 Hi-Cycle (Series No. 600-301)



JOHN DEERE

OPERATORS MANUAL 600 Hi-Cycle (Series No. 600-301)

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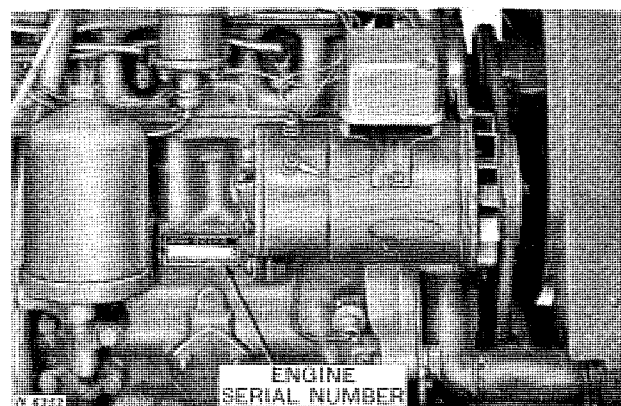
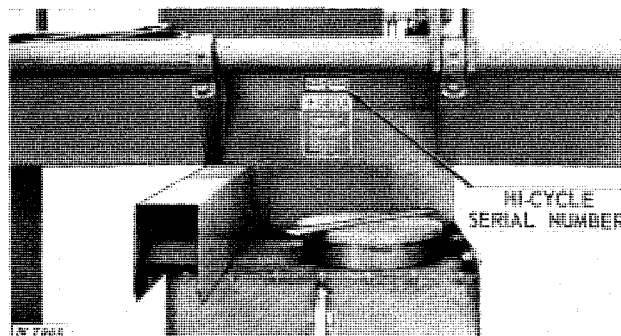
To the purchaser

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.

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.

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.

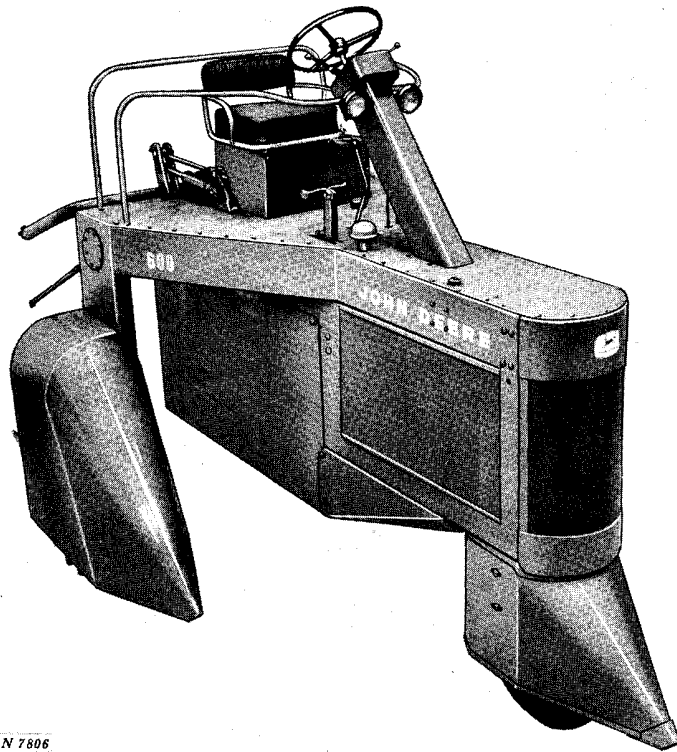
ENGINE SERIAL NO.

DATE PURCHASED



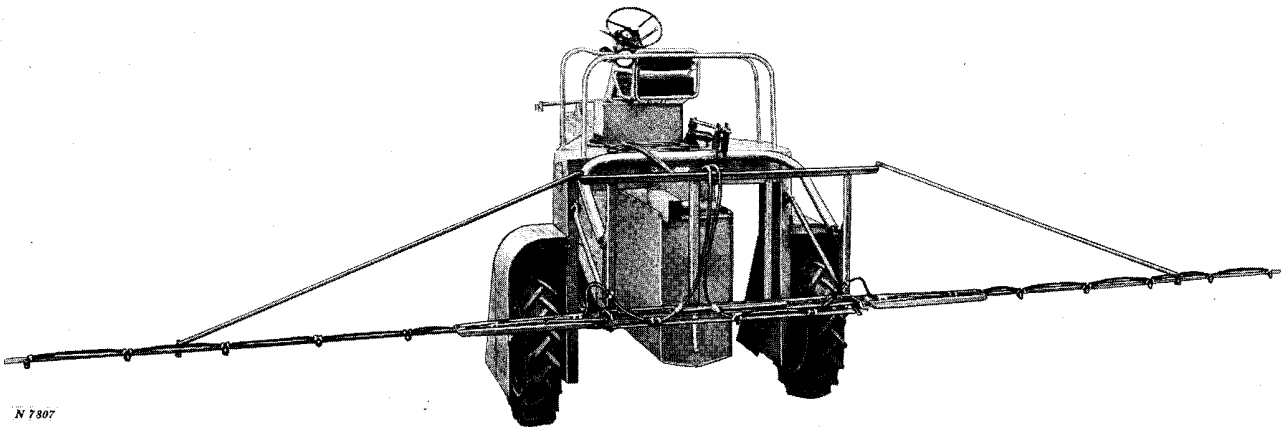
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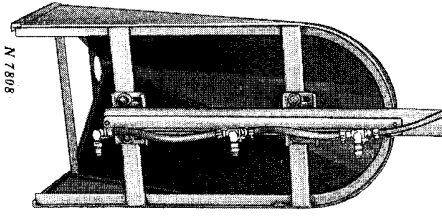
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Front view of John Deere 600 Hi-Cycle

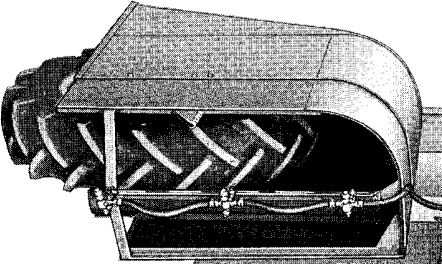


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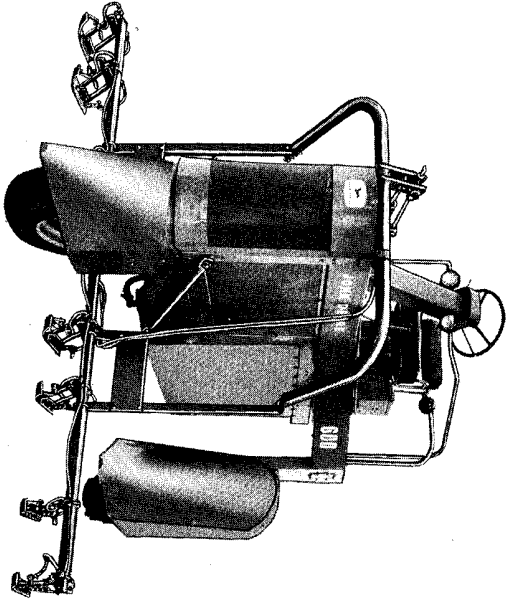
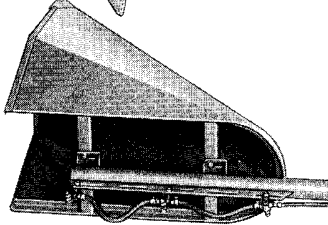
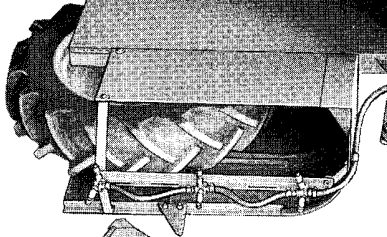
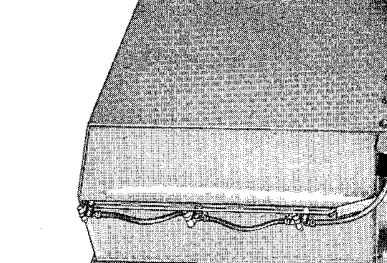
John Deere 600 Hi-Cycle equipped with 8-row General-Purpose Boom



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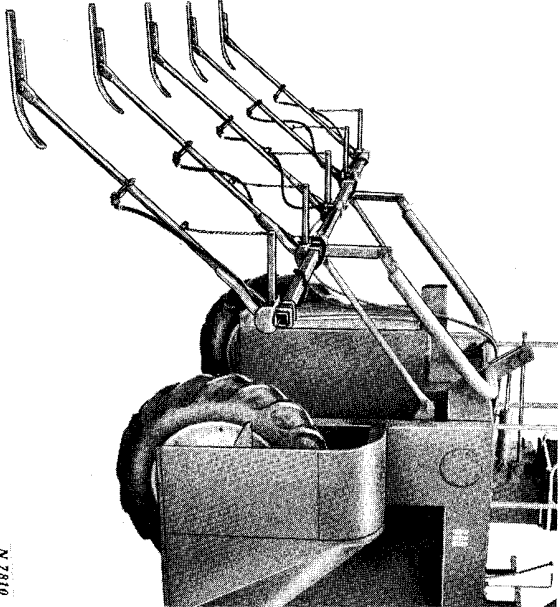


John Deere 600 Hi-Cycle equipped with 4-row Defoliation Boom



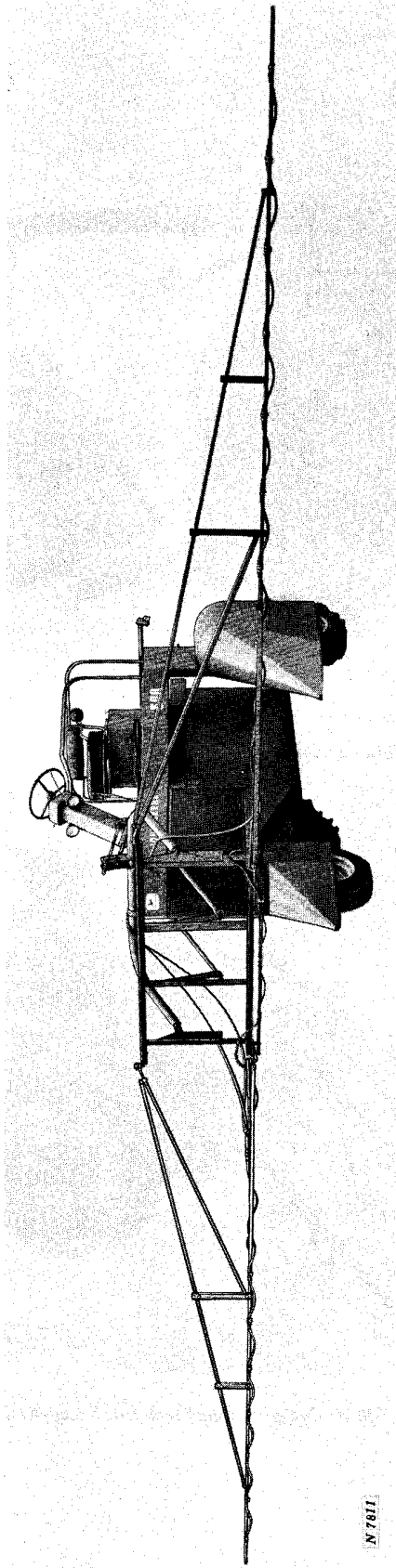
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John Deere 600 Hi-Cycle equipped with No. 4 Post
Emerge Oiling Boom

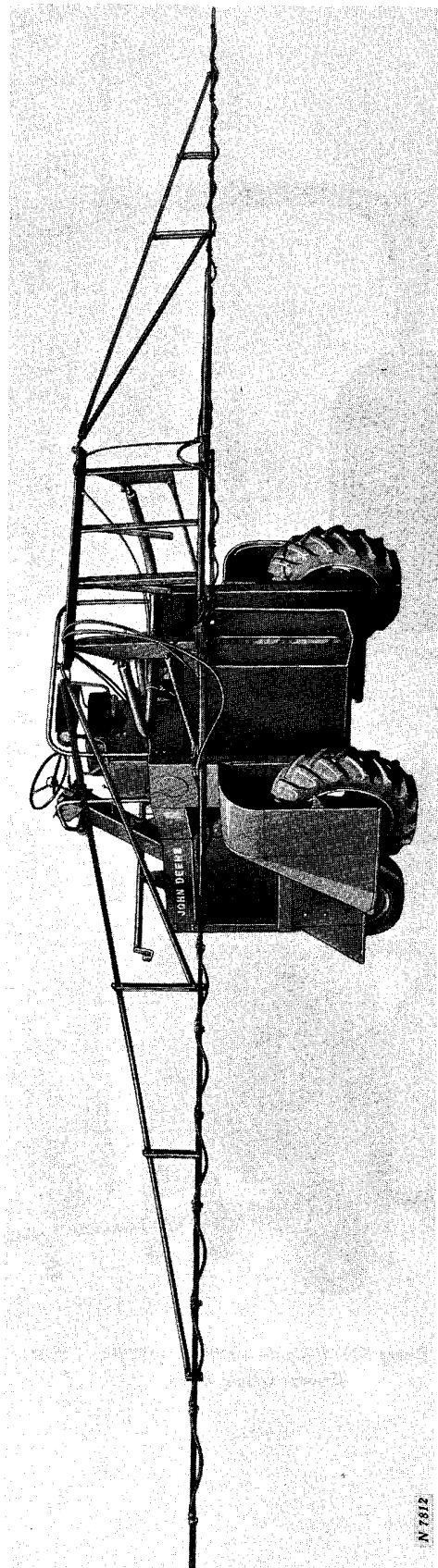


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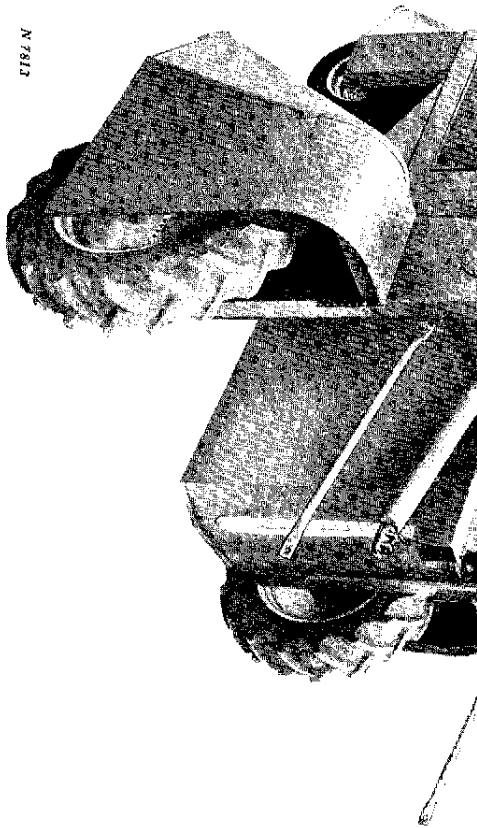
John Deere 600 Hi-Cycle equipped with No. 2 Lay-By Boom



John Deere 600 Hi-Cycle equipped with 12-row General-Purpose Boom on front of machine

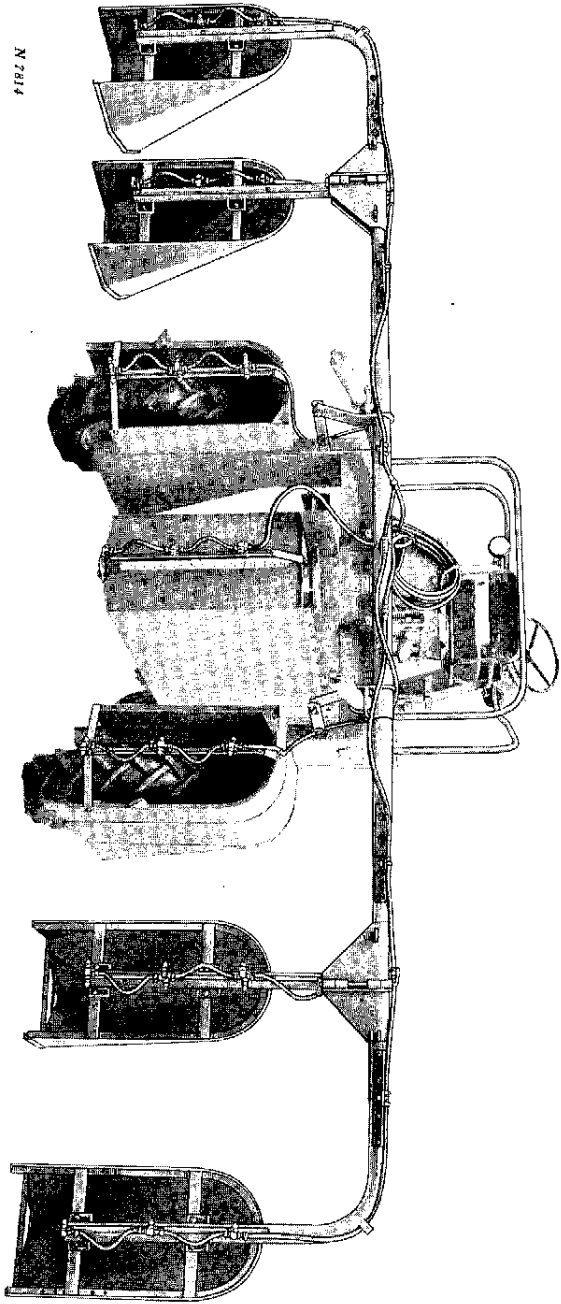


John Deere 600 Hi-Cycle equipped with 12-row General-Purpose Boom on rear of machine



N 7812

Rear view of John Deere 600 Hi-Cycle



N 7814

John Deere 600 Hi-Cycle equipped with 6-row Defoliation 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
 Horsepower at flywheel (factory observed) 35
 Compression ratio 7.9 to 1
 Type of fuel gasoline

Engine speeds

Slow idle 600 rpm
 Full load 2500 rpm
 Fast idle (no load) 2600 rpm

Ground speeds

MPH based on 9.5 x 24 tires with no wheel slippage

Engine speed (rpm)	Gear			
	1st	2nd	3rd	R
1100	1.23	2.62	6.00	3.26
1250	1.39	2.98	6.90	3.70
1500	1.67	3.57	8.18	4.45
1750	1.95	4.17	9.66	5.18
2000	2.23	4.77	11.04	5.92
2250	2.50	5.34	12.43	6.66
2500	2.79	6.00	13.80	7.30

Transmission

Selective sliding gear type with 3 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

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

Full pressure to all crankshaft and camshaft bearings. Filter arrangement will provide approximately 1 gallon per minute bypass filtration.

Over-all length (tire to tire) 120 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 6.70x15, 4-ply implement rib
 Rear 9.5x24, 4-ply cleat

Optional
 Front 7.50x16, 4-ply implement rib
 Rear 11.2x24, 4-ply cleat

Weight

Hi-Cycle only 2900 pounds
 Hi-Cycle with 8-row general-purpose sprayer 3420 pounds

Sprayer

Tank
 200 U.S. gallons capacity, aluminumized steel to prevent corrosion. 9-1/4-inch filler opening at rear with bucket type strainer.

Pump

Hypro Ni-Resist pump with 8 nylon rollers. Rubber rollers optional. "Live" belt-driven, 20 gallons per minute capacity.

Line strainer

Located between spray tank and pump, equipped with 50-mesh screen, 100 mesh screen (B11910B) optional.

Calibrated up to 200 psi

Hoses

Braided, chemical resistant, rated 200 psi (general-purpose and defoliator booms only)

Booms

General purpose—8-row and 12-row front or rear mounted
 Defoliation—4-row and 6-row rear mounted.
 No. 4 Post Emerge Oiling Applicator—4-row, front mounted
 No. 2 Lay-By—4-row, rear mounted

Nozzle tips

Variety of nozzle tips for either cone or fan spray patterns, calibrated for different application rates.

Special equipment

BB 10339 B Handgun with 25-foot hose
 BB 10559 B Handgun with 50-foot hose
 BN 85004 N Row-Crop drops, long (9) (for 8-row general-purpose boom)
 BN 85005 N Row-Crop drops, short (9) (for 8-row general-purpose boom)
 BN 85019 N Boom folding brackets for 8- or 12-row general-purpose booms
 AN 85202 N Rubber pump rollers
 BN 85035 N* Row-Crop drops, long (4) (for 12-row general-purpose boom)
 BN 85036 N** Row-Crop drops, short (4) (for 12-row general-purpose boom)

* Must be used with BN85004N
 **Must be used with BN85005N

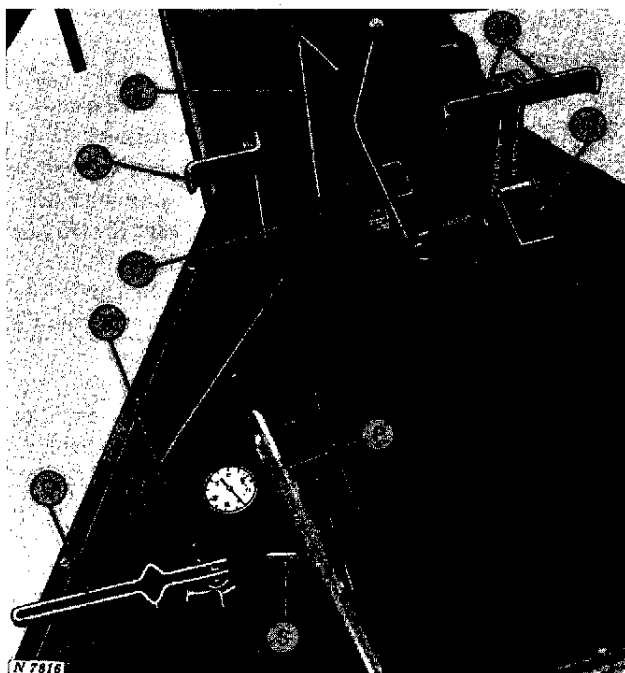
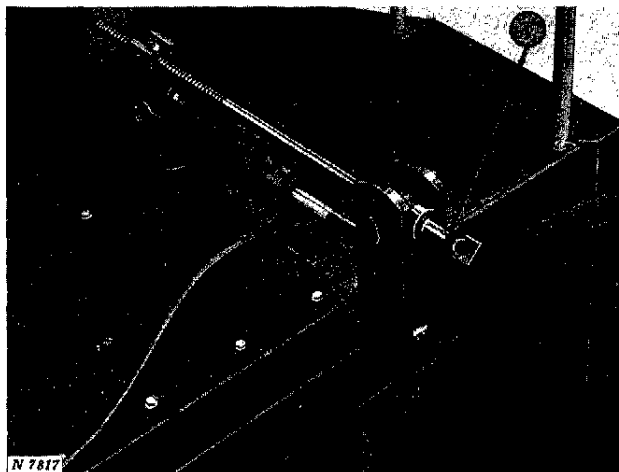
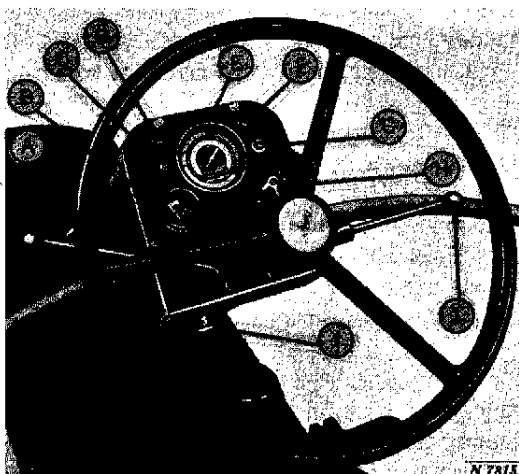
Specifications and design subject to change without notice.



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 68)
- D — Generator tel-light (page 10)
- E — Speed-hour meter (page 12)
- F — Oil pressure 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 18)
- M — Brake pedals (page 11)
- N — Brake lock (page 11)
- O — Gearshift lever (page 11)
- P — Pressure gauge (page 19)
- Q — Spray control lever (page 19)
- R — Pressure regulator (page 19)
- S — Seat adjusting lever (page 13)
- T — Hydraulic cylinder stop (page 15)

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