

John Deere 3020 Row Crop Standard and Hi-Crop Tractors (Serial No. 123000-)



JOHN DEERE

OPERATORS MANUAL

John Deere 3020 Row Crop Standard and Hi-Crop
Tractors (Serial No. 123000-)

OMR46012 Issue B9 English

John Deere Waterloo Works
OMR46012 Issue B9

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



TO THE PURCHASER

Your versatile new John Deere Tractor meets the exacting requirements of modern farming.

Operating ease and comfort, hydraulic power when and where you need it, the ability to match engine power and transmission speed to any job, outstanding economy and dependability, modern styling, and simplicity of lubrication and service are all special features of this great tractor.

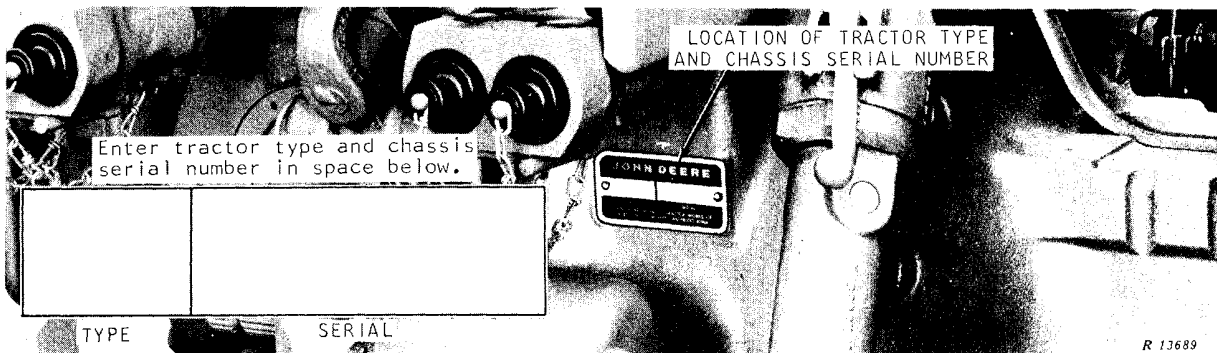
We are confident this modern tractor, combined with equally advanced John Deere tools and implements, will help you to farm better, easier, and more profitably.

At the time the tractor was delivered, the John Deere dealer discussed with you its safe operation and proper care. However, before putting the tractor to work, read this manual. It contains complete instructions for operating the tractor, caring for it, and taking full advantage of its many time- and labor-saving features. After reading the manual, keep it in a convenient place for quick and easy reference if questions arise concerning operation, lubrication, or service.

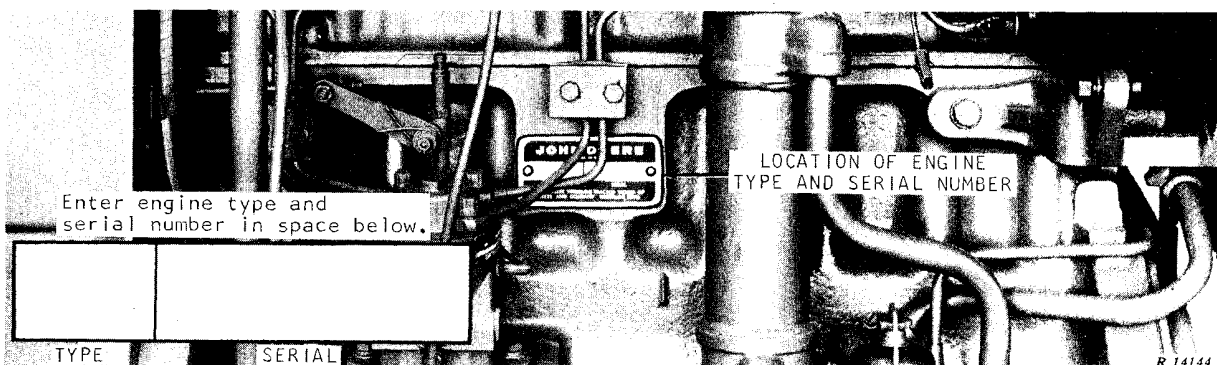
The warranty of this tractor appears on your copy of the purchase order which you should have received from your dealer when you purchased the tractor.

Your John Deere dealer wants to help you get the most value from your tractor. His skilled servicemen can handle every job efficiently. These men are trained in modern service methods; they have all necessary tools and equipment. If new parts are needed, only genuine John Deere parts will be installed. These parts are exact duplicates of the originals, made from the same patterns and of the same high-quality materials.

When in need of new parts, be prepared to furnish your dealer with the tractor type, complete tractor chassis serial number, engine type, and complete engine serial number. For ready reference, locate and record the above information in the spaces provided in the illustrations below.



Tractor Type and Chassis Serial Number

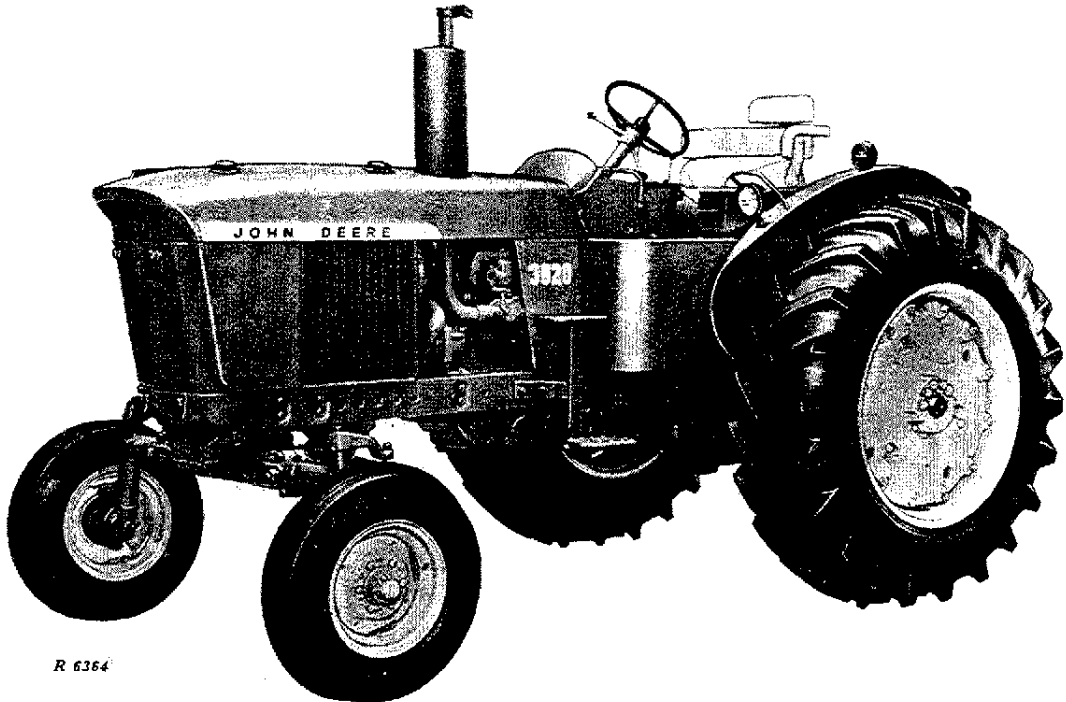


Engine Type and Serial Number



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R 6364

John Deere 3020 Standard Tractor with Gasoline Engine



SPECIFICATIONS

HORSEPOWER (observed):*	<i>Diesel</i>	<i>Gasoline</i>	<i>LP-Gas</i>
PTO (Syncro-Range Transmission) . .	70 h.p.	70 h.p.	70 h.p.
PTO (Power-Shift Transmission) . . .	65 h.p.	64 h.p.	64 h.p.
Drawbar (Power-Shift Transmission).	57 h.p.	55 h.p.	56 h.p.

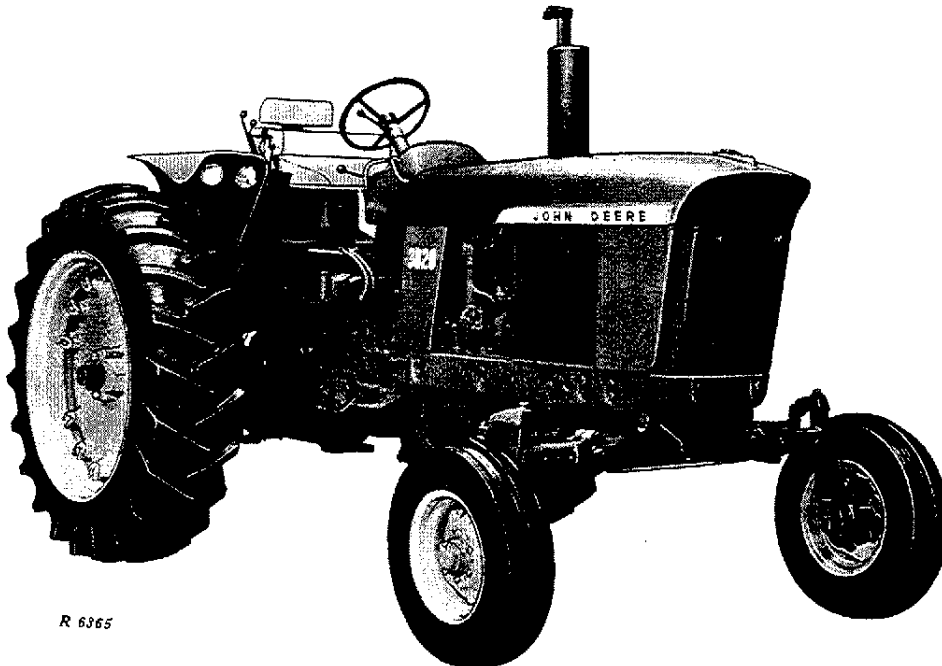
ENGINE:

Type	4-cylinder, in-line, valve-in-head		
Engine speeds:			
Normal slow idle.	800 rpm	800 rpm	800 rpm
Working range	1500 to 2500 rpm	1500 to 2500 rpm	1500 to 2500 rpm
Bore and stroke	4-1/4 in. x 4-3/4 in.	4-1/4 in. x 4-1/4 in.	4-1/4 in. x 4-1/4 in.
Displacement.	270 cu. in.	241 cu. in.	241 cu. in.
Compression ratio	16.5 to 1	7.5 to 1	9.0 to 1
Firing order	1-3-4-2	1-3-4-2	1-3-4-2
Intake valve clearance.	0.018 in.	0.015 in.	0.015 in.
Exhaust valve clearance	0.018 in.	0.028 in. (hot)	0.028 in. (hot)
Injection pump timing	TDC	.....	.....
Distributor timing (see page 64 for engine speed) . . . . .	.....	20° BTDC	25° BTDC
Distributor point gap. . . . .	.....	0.022 in.	0.022 in.
Spark plug gap. . . . .	.....	0.025 in.	0.015 in.

ELECTRICAL SYSTEM:

Electrical system voltage	12 volts	12 volts	12 volts
Batteries (see page 72)	Two (connected in series)	One	One

*Maximum observed horsepower at 2500 engine rpm (factory observed).



R 6365

John Deere 3020 Row-Crop Tractor with Gasoline Engine and Power Shift Transmission

COOLING SYSTEM

Type Pressurized with centrifugal pump
 Engine temperature control . . . Heavy-duty thermostat

LUBRICATION SYSTEM Force-feed pressurized type with full-flow oil filter

CAPACITIES:

Fuel tank Diesel and gasoline-- 29 U.S. gals.
 LP-Gas (80% full)-- 33.6 U.S. gals.
 Crankcase Dry system-- 9 U.S. qts.
 At service intervals-- 8 U.S. qts.
 Transmission-hydraulic system (add approx. 4-1/2 U.S. gals. for Power Front-Wheel Drive):
 Synchro-Range Dry system-- 11 U.S. gals.
 At service intervals-- 8 U.S. gals.
 Power Shift Dry system-- 14 U.S. gals.
 At service intervals-- 11 U.S. gals.
 Cooling system -- 19 U.S. qts.
 Hi-crop final drive housings -- 1-3/4 U.S. qts.
 Belt pulley -- 2-1/2 U.S. pints

SYNCHRO-RANGE TRANSMISSION:

Type Synchro-Range, constant mesh
 Gear selections 8 forward and 2 reverse
 Shifting 4 stations, synchronized shifting within stations

POWER SHIFT TRANSMISSION:

Type Planetary gears, hydraulically actuated wet disk clutches and brakes
 Gear selections 8 forward and 4 reverse
 Shifting Hydraulic, powershifting controlled by speed selector

POWER FRONT WHEEL DRIVE:

Type Hydraulic motor driven with planetary gear reduction in wheel hub, uses pressure oil from hydraulic system
 Torque Low (series connected) and high (parallel connected)
 Controls Solenoid operated control valves, synchronized with transmission controls

POWER TAKE-OFF:

Type Independent PTO with front and mid power take-off. Stub shafts used for rear PTO speed conversion on dual speed PTO.
 Speed (2100 engine rpm) Mid-1000 rpm
 Dual speed rear-540 or 1000 rpm
 Single speed rear-1000 rpm

HYDRAULIC SYSTEM:

Type Closed center, constant pressure. Includes power steering, power brakes, and implement control
 Maximum pressure 2250 psi

BRAKES Hydraulically power actuated, disk-type, operating in oil

GROUND SPEEDS See page 13

FRONT TIRES**

Row-crop 6.00 - 16, 6-ply
 Standard 7.50 - 16, 6-ply

REAR TIRES**

Row-crop 15.5 - 38, 6-ply
 Standard 18.4 - 30, 6-ply

FRONT WHEEL TREAD See page 18

REAR WHEEL TREAD:

Regular and offset wheels See page 19
 Double wheels See page 21

DIMENSIONS

	Row-Crop	Standard
Wheel base	90 in.	81-1/2 or 92-3/4 in.
Over-all length	140 in.	140-1/4 in.
Over-all height	87-1/2 in.	88-3/8 in.
Height to steering wheel	77-1/8 in.	77-1/8 in.
Width (regular axle)	89-5/8 in.	89-5/8 in.
Turning radius	101 in.	111 in.

SHIPPING WEIGHT (With equipment for average field service, less fuel and ballast). Add 225 lbs. if tractor has Power Shift transmission. Add 550 lbs. if equipped with Power Front Wheel Drive:

	Row-Crop	Standard
Diesel	7610 lbs.	7560 lbs.
Gasoline	7395 lbs.	7345 lbs.
LP-Gas	7545 lbs.	7495 lbs.

**Additional tires available for special purposes.

Specifications and design subject to change without notice.

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