



5020 Tractor



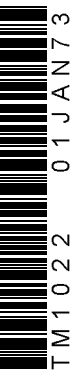
JOHN DEERE

TECHNICAL MANUAL 5020 Tractor

TM1022 (01JAN73) English

John Deere Tractor
TM1022 (01JAN73)

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ENGLISH



5020 TRACTOR TECHNICAL MANUAL TM-1022 (JAN-73)

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CAPACITIES:

Fuel tank 68 U.S. gals.
Crankcase (with filter change) . 20 U.S. qts.
Transmission-hydraulic system 16 U.S. gals.
Cooling system (add 2 qts. for
cab heater) 33 U.S. qts.

TRANSMISSION:

Type Syncro-Range, constant mesh
Clutch Heavy-duty, two 12 in. plate,
foot operated
Gear selections . . 8 forward and 2 reverse
Shifting 4 stations, synchronized
shifting within stations

POWER TAKE-OFF:

Type Independent, rear
Clutch Wet disk, hydraulically actuated
Speed (1900 engine rpm) 1010 rpm
PTO ahead of drawbar hitch point . . 16 in.

HYDRAULIC SYSTEM:

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

BRAKES Hydraulically power actuated,
disk-type operating in oil
Provision for manual operation
with brake accumulator to supply oil

STEERING Full power, hydrostatic type
Provision for manual operation

ELECTRICAL SYSTEM:

Type 12-volt, negative ground
Batteries Two 6-volt, 87-plate, 204
ampere-hour group 6T3A,
tractor-type, connected in series
Alternator 12-volt, 55-amp, with
integral transistorized regulator
. Tractors with air
conditioned cabs, 12-volt, 72-amp, with
integral or separate regulator (depending
on serial number)

FRONT TIRES:*

Standard 11.00-16, 8-ply
Row-Crop 9.50-20, 8-ply

REAR TIRES:*

Standard 24.5-32, 10-ply
Row-Crop 18.4-38, 12-ply

FRONT WHEEL TREAD:

Fixed tread 69 or 71 in.
Adjustable tread (11.00-16 tires). 68 to 80 in.

REAR WHEEL TREAD:

Standard:
24.5-32 tire 70 to 82 in.
18.4-34 tire (dual) 68 and 112 in.
18.4-38 tire (dual) 65 to 120 in.
Row-Crop:
18.4-38 tire 60 to 120 in.
24.5-32 tire 70 to 112 in.

GROUND SPEEDS IN MILES PER HOUR

(1900 engine rpm with 24.5-32 tires)
1st 1.7
2nd 2.6
3rd 3.5
4th 4.5
5th 5.6
6th 7.3
7th 9.4
8th 15.4
1st reverse 3.4
2nd reverse 5.4

DIMENSIONS:

Standard (Fixed tread front axle):
Wheel base 104 in.
Over-all length 172.3 in.
**Over-all height 98.3 in.
Height to steering wheel 82.4 in.
Width Regular wheel, 95.8 in.
Drawbar clearance 16 in.
Turning radius 12 ft. 6 in.
Row-Crop (81.5-inch tread front axle):
Wheel base 102 to 106 in.
Over-all length 172.3 in.
**Over-all height 98.3 in.
Height to steering wheel 82.4 in.
Over-all width 108.4 in.
Turning radius 13 ft.

SHIPPING WEIGHT (With equipment for

average field service, less fuel and ballast).
Add 575 lbs. if equipped with Roll-Gard.
Standard 15,600 lbs.
Row-Crop 14,480 lbs.

*Additional tire sizes available.
**Tractors with Air Conditioned Cab
and 20.8-38 tires 119.6 in.
Tractors with Cab and without
Air Conditioning (20.8-38 tires) . . 117.6 in.

(Specifications and design subject to change without notice.)

Group 10

PREDELIVERY, DELIVERY, AND AFTER-SALE SERVICES

PREDELIVERY SERVICE

Because of the shipping factors involved, plus extra finishing touches that are necessary to promote customer satisfaction, proper predelivery service is of prime importance to the dealer.

Tractors shipped from the factory with the alternator completely disconnected require an AR47860 Auxiliary Ignition Battery Kit to supply power for the fuel shutoff solenoid. The adapter on the battery harness kit plugs into the cigar lighter. Be sure to read the instructions at-

tached to the tractor before starting the engine.

After completing the factory-recommended dealer checks and services listed on the predelivery tag, remove the tag from the tractor and file it with the shop order for the job. The tag will certify that the tractor has received the proper predelivery service when that portion of the customer's John Deere Delivery Receipt is completed.

TEMPORARY TRACTOR STORAGE

Service	Specifications	Reference
Check radiator for coolant loss and antifreeze protection.	1-1/2 inches above baffle.	. . . . .
Reduce shipping pressure of tires. . .	. . . . .	Operator's manual
Cover tractor and tires for protection and cleanliness. . . . .	. . . . .	. . . . .

BEFORE DELIVERING TRACTOR

<u>Electrical System</u>		
Install electrolyte and charge batteries. . . . .	. . . . .	FOS-20
Punch date code on battery tag. . . . .	. . . . .	. . . . .
Connect alternator. Do not attempt to polarize. . . . .	. . . . .	Section 40, Group 10
Install light switch knob. . . . .	. . . . .	. . . . .
Clean terminals and connect battery cables. . . . .	. . . . .	Section 40, Group 5
Check alternator belt adjustment. . .	1-inch deflection, 20 lb. force. .	Operator's manual

BEFORE DELIVERING TRACTOR—Continued

Service	Specifications	Reference
<u>Cooling System</u>		
Inspect radiator for coolant loss. . . .	1-1/2 inches above baffle. . . .	. . . . .
Check antifreeze protection. . . . .	. . . . .	. . . . .
<u>Tires and Wheels</u>		
Adjust pressure of tires. . . . .	. . . . .	Operator's manual
Check front wheel hub bolts, rear wheel rim clamp nuts, and rear wheel retainer cap screws for tightness.	Front hub bolts - 100 ft-lbs Rear hub bolts - 300 ft-lbs Rim clamp nuts - 170 ft-lbs	. . . . .
<u>Lubrication</u>		
Check crankcase oil level.	To upper marks on dipstick. . . .	Operator's manual
Check transmission-hydraulic system oil level.	To top of "SAFE" range on dipstick. Type 303 Special-Purpose Oil.	Operator's manual
Lubricate grease fittings.	SAE multipurpose-type grease.	Operator's manual
<u>Engine</u>		
Check air cleaner. . . . .	. . . . .	Operator's manual
Fill fuel tank and start engine.	Capacity - 68 U.S. gallons . . .	Operator's manual
Check operation of gauges and indicator lamps. . . . .	. . . . .	Operator's manual
Check speed control linkage for free operation. . . . .	. . . . .	Section 30, Group 10
Check engine idle speeds. . . . .	. . . . .	Section 30, Group 10
<u>Operation</u>		
Shift transmission through all speeds. . . . .	. . . . .	Operator's manual
Check transmission clutch operation.	Clutch pedal free travel should be 1-1/2 inches.	Operator's manual
Check power take-off operation. . . . .	. . . . .	Operator's manual
Check differential lock operation. . .	. . . . .	Operator's manual
Check hydraulic system operation: Rockshaft, steering, remote cylinder, and brakes. . . . .	. . . . .	Operator's manual

BEFORE DELIVERING TRACTOR—Continued

Service	Specifications	Reference
Check 3-point hitch operation.	Operator's manual
Check seat operation	Operator's manual
Check cab pressurizer and wind- shield wiper operation, air conditioner and heater system operation (if equipped)	Operator's manual
Adjust headlights and check operation.	Operator's manual
<u>General</u>		
Adjust air conditioner drive belt tension.	1-inch deflection, 25 lb. force. .	Operator's manual
Tighten accessible nuts and cap screws.
Clean tractor and touch up paint.

DELIVERY SERVICE

A thorough discussion of the operation and service of a new tractor at the time of delivery helps to assure complete customer satisfaction. Proper delivery should be an important phase of a dealer's program. A portion of the John Deere Delivery Receipt emphasizes the importance of proper delivery service.

Many complaints have arisen simply because the owner was not shown how to operate and service his new tractor properly. Enough time should be devoted, at the customer's convenience, to introducing the owner to his new tractor and explaining to him how to operate and service it.

The following procedure is recommended before the serviceman and owner complete the delivery acknowledgments portion of the delivery receipt.

Using the tractor operator's manual as a guide, be sure that the owner understands these points thoroughly:

1. Controls and instruments.
2. How to start and stop the engine.
3. The importance of the break-in period.
4. How to use liquid or cast-iron ballast.
5. All functions of the hydraulic system.
6. Using the power takeoff.
7. The importance of safety.
8. The importance of lubrication and periodic services.

After explaining and demonstrating the above features, have the owner sign the delivery receipt and give him the operator's manual.

AFTER-SALE INSPECTION

The purchaser of a new John Deere tractor is entitled to a free inspection at some mutually agreeable time within the warranty period after the equipment has been "run in". The terms of this after-sale inspection are outlined on the back of the customer's John Deere Delivery Receipt.

The purpose of this inspection is to make sure that the customer is receiving satisfactory performance from his tractor. At the same time, the inspection should reveal whether or not the tractor is being operated, lubricated, and serviced properly.

If the recommended after-sale service inspection is followed, the dealer can eliminate needless service work by preventing minor irregularities from developing into serious problems later on. This will promote strong dealer-customer relations and present the dealer an opportunity to answer questions that may have arisen during the first few days of operation. During the inspection service, the dealer has the further opportunity of promoting the sale of other new equipment.

The following inspection program is recommended within the first 100 hours of tractor operation.

INSPECTION PROCEDURE

Service	Specifications	Reference
<u>Cooling System</u>		
Check radiator coolant level.	1-1/2 inches above baffle. . . . .	. . . . .
Clean external surface of radiator core. . . . .	. . . . .	. . . . .
Check hoses and connections for leaks. . . . .	. . . . .	. . . . .
<u>Fuel System</u>		
Remove water and foreign matter from filter sediment bowl. . . . .	. . . . .	Operator's manual
Bleed fuel system. . . . .	. . . . .	Operator's manual
Tighten loose connections and check entire system for leaks. Correct if necessary. . . . .	. . . . .	. . . . .
Check air cleaner element and clean it if necessary. . . . .	. . . . .	Operator's manual
<u>Electrical System</u>		
Check specific gravity and electrolyte level of batteries.	Full charge - 1.260 at 80° F.	Operator's manual
Check belt tension.	1-inch deflection with a 20-pound force.	Operator's manual
Start engine and check operation of starter, lights, and indicator lamps	Operator's manual

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