1020, 1120 and 1630 Tractors

(1020 and 1120 Tractors from Serial No. 115000L)

Technical Manual
TM-4286 (Aug-73)

CONTENTS

SECTION 10 — GENERAL
- Group 5 - Specifications
- Group 10 - Pre-delivery, delivery and after-sales inspections
- Group 15 - Lubrication and periodic service
- Group 20 - Engine and tractor tune-up
- Group 25 - Tractor separation

SECTION 20 — ENGINE
- Group 5 - General information, diagnosing malfunctions
- Group 10 - Cylinder head and camshaft
- Group 15 - Cylinder block, liners, pistons and connecting rods
- Group 20 - Crankshaft, main bearings and flywheel
- Group 25 - Timing gear train
- Group 30 - Oil pump, oil pressure regulating valve, oil cooler and oil filter
- Group 35 - Engine cooling system
- Group 40 - Speed control linkage

SECTION 30 — FUEL SYSTEM
- Group 5 - Diagnosing malfunctions
- Group 10 - Fuel tank, water trap, transfer pump and fuel filter
- Group 15 - ROTO DIESEL fuel injection pump
- Group 20 - Fuel injection nozzles
- Group 25 - Cold weather starting aids

SECTION 40 — ELECTRICAL SYSTEM
- Group 5 - Diagnosing malfunctions
- Group 10 - "Bilux" lighting system
- Group 15 - Sealed-beam lighting system (on earlier tractor models)
- Group 16 - Sealed-beam lighting system (on later tractor models)
- Group 20 - Starting motor
- Group 25 - Alternator and regulator

SECTION 50 — POWER TRAIN
- Group 5 - Engine clutches and clutch linkage
- Group 10 - HIGH-LOW shift unit
- Group 15 - Collar-shift transmission
- Group 20 - Differential
- Group 25 - Final drives
- Group 30 - Independent PTO
- Group 35 - Continuous-running PTO

SECTION 60 — FRONT AXLE, STEERING SYSTEM AND BRAKES
- Group 5 - Front axle
- Group 10 - Steering system
- Group 15 - Hydraulic brakes

SECTION 70 — HYDRAULIC SYSTEM
- Group 5 - General information, diagnosing malfunctions, and pressure tests
- Group 10 - Oil reservoir, filter, valves and oil cooler
- Group 15 - Hydraulic pump and transmission oil pump
- Group 20 - Rockshaft
- Group 25 - Selective control valves
- Group 30 - Remote cylinder

SECTION 80 — MISCELLANEOUS
- Group 5 - Belt pulley
- Group 10 - Seats
- Group 15 - Front and rear wheels
- Group 20 - Roll guard

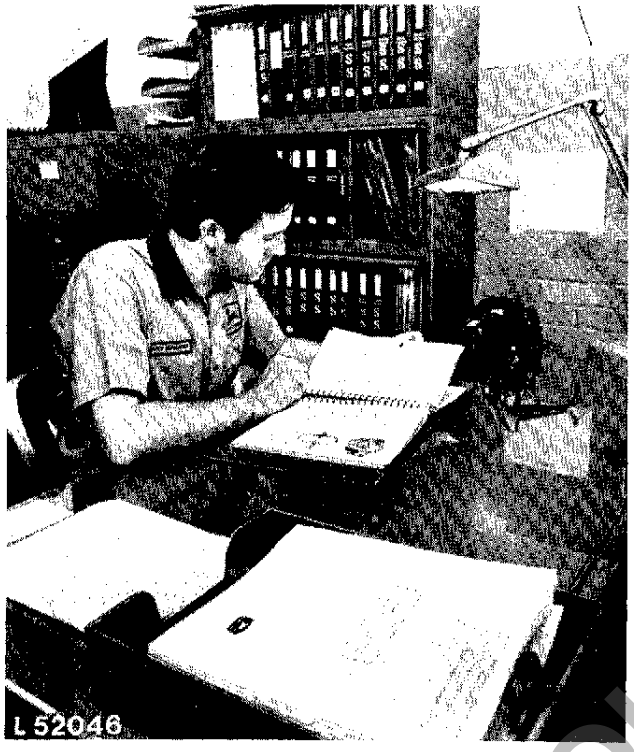
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INTRODUCTION



Use FOS Manuals for Reference



Use Technical Manuals for Actual Service

This technical manual is part of a twin concept of service:

- **FOS Manuals — for reference**
- **Technical Manuals — for actual service**

The two kinds of manuals work as a team to give you both the general background and technical details of shop service.

Fundamentals of Service (FOS) Manuals cover *basic* theory of operation, *fundamentals* of trouble shooting, *general* maintenance, and *basic* types of failures and their causes. FOS Manuals are for training new men and for reference by experienced men.

Technical Manuals are concise service guides for a *specific* machine. Technical Manuals are on-the-job guides containing only the vital information needed by a journeyman mechanic.



When a serviceman should refer to a FOS Manual for more information, a FOS symbol like the one at the left is used in the TM to identify the reference.

Some features of this technical manual:

- *Table of contents at front of whole Manual.*
- *Contents at front of each Section*
- *Exploded views showing parts relationship*
- *Photos showing service techniques*
- *Specifications at end of each Group*
- *Special tools at end of each Group*

This technical manual was planned and written for you — a journeyman mechanic. Keep it in a permanent binder in the shop where it is handy. Refer to it whenever in doubt about correct service procedures or specifications.

Using the technical manual as a guide will reduce error and costly delay. It will also assure you the best in finished service work.



This safety alert symbol indicates 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.

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Section 10
General

CONTENTS OF THIS SECTION

GROUP 5 — SPECIFICATIONS

Page

Serial numbers 5-2
Model numbers 5-2
Engine 5-2
Engine clutch 5-2
Electrical system 5-2
Transmission 5-3
HIGH-LOW shift unit 5-3
Differential and final drives 5-3
Differential lock 5-3
PTO 5-3
Hydraulic system 5-3
Power steering 5-3
Manual steering 5-3
Hydraulic brakes 5-3
Handbrake 5-3
Capacities 5-3
Travel speeds 5-3
Front and rear wheels 5-3
Dimensions and weights 5-3

GROUP 10 — PREDELIVERY, DELIVERY AND AFTER-SALES INSPECTIONS

Predelivery inspection 10-1
Delivery inspection 10-4
After-sales inspection 10-4

GROUP 15 — LUBRICATION AND PERIODIC SERVICE

Page

Lubrication and periodic service 15-1

GROUP 20 — ENGINE AND TRACTOR TUNE-UP

General information 20-1
Preliminary engine testing 20-1
Engine tune-up 20-2
Checking engine performance 20-3
Tractor tune-up 20-3
Standard torques 20-5
Special tools 20-5

GROUP 25 — TRACTOR SEPARATION

Separating between engine and tractor front end 25-1
Removing and installing engine 25-3
Removing and installing clutch housing 25-5
Removing and installing final drives 25-7
Removing and installing rockshaft 25-8
Torques for hardware 25-9
Special tools 25-10

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Group 5
Specifications

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TRANSMISSION

Collar shift transmission with helical cut gears.

This transmission is available in two variations:

8 speed transmission with parking lock, without independent hand brake;
8 speed transmission without parking lock and with independent hand brake.

HYDRAULIC SYSTEM

Closed center, constant pressure system; also includes rockshaft, power steering and selective control valves.

Stand-by pressure	156 to 160 kp/cm^2 (2220 to 2280 psi)
Pump	4 or 8-piston pump driven by the engine

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Group 10

Predelivery, Delivery and After-Sales Inspections

PREDELIVERY SERVICE

Every new JOHN DEERE tractor leaves the factory in such a condition that it can be delivered to the customer after a minimum of service.

To promote complete customer satisfaction, proper predelivery service including mending of possible shipping damage and giving the finishing touches to the tractor, are of prime importance to the dealer.

A tag pointing out the factory-recommended procedure for predelivery service is attached to every new tractor before it leaves the factory. The reverse side of this tag is filled in by the factory after the tractor has undergone a thorough inspection prior to shipping.

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 then serve as a basis for certifying that the unit has received the proper predelivery service.

TEMPORARY TRACTOR STORAGE

Service	Specifications	Reference
Check radiator for coolant loss and antifreeze protection (gravity of antifreeze and rust inhibitor mixture)	Coolant level should be midway between radiator core and bottom edge of filler neck	Operator's manual
IMPORTANT: When the tractor is delivered, red cable is not connected to alternator terminal "B+". Further, the alternator three-terminal plug is not connected. Connect cable and plug before operating tractor for the first time.	. . . . .	Section 40, group 10
If the tractor is to be operated for a short time without battery (using a slave battery for starting), do not, under any circumstances, interrupt the circuit by switching off the key switch before stopping engine by means of fuel pump shut-off cable. Further, it is recommended to use additional current (lights) while engine is running. Insulating tape on battery cable end leading to starting motor should not be removed. If this advice is disregarded, damage to alternator and regulator may result.		
Remove batteries. Drain electrolyte and store batteries	Store at room temperature	. . . . .
Reduce shipping pressure of tires	. . . . .	Operator's manual
Cover tractor and tires for protection and cleanliness	. . . . .	. . . . .

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PREDELIVERY INSPECTION

Service	Specifications	Reference
COOLING SYSTEM		
Check radiator for coolant loss	Coolant level should be midway between radiator core and bottom edge of filler neck	Operator's manual
Check gravity of antifreeze and rust inhibitor mixture	. . . . .	Operator's manual
ELECTRICAL SYSTEM		
IMPORTANT: When the tractor is delivered, red cable is not connected to alternator terminal "B+". Further, the alternator three-terminal plug is not connected. Connect cable and plug before operating tractor for the first time.	. . . . .	Section 40, group 10
If the tractor is to be operated for a short time without battery (using a slave battery for starting), do not, under any circumstances, interrupt the circuit by switching off the key switch, before stopping engine by means of fuel pump shut-off cable. Further, it is recommended to use additional current (lights) while engine is running. Insulating tape on battery cable end leading to starting motor should not be removed.		
If this advice is disregarded, damage to alternator and regulator may result.		
If the batteries are to be installed in the tractor, remove insulating tape on terminal of battery cable. This is to be done if the tractor was shipped with dry- charged batteries or without batteries.	. . . . .	. . . . .
Connect batteries in the proper polarity. If they are improperly connected ("+" and "-"), the rectifier diodes will be immediately destroyed.	. . . . .	Section 40, group 10
First connect positive (+) cable and then ground (-) strap of each battery. Only then start tractor engine.	. . . . .	Section 40, group 10

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PREDELIVERY INSPECTION — Continued

Service	Specification	Reference
TIRES AND WHEELS		
Check tire inflation pressure	. . . . .	Operator's manual
Retighten wheel bolts	. . . . .	Section 80, group 15 and Operator's manual
LUBRICATION		
Check crankcase oil level	Top mark on dip stick	Operator's manual
Check transmission-hydraulic system oil level	. . . . .	Operator's manual
Lubricate all lubrication points on the tractor	. . . . .	Operator's manual
ENGINE		
Check dry type air cleaner	. . . . .	Operator's manual
Fill fuel tank and start engine 1020 and 1120 1630	Fuel tank capacity: 62.5 liters (16.5 U.S.gals., 13.75 Imp.gals.) 74 liters (19.5 U.S.gals., 16.3 Imp.gals.)	Operator's manual
Check lighting system, indicator lights and instruments for proper operation	. . . . .	Operator's manual
Check if speed control linkage moves easily	. . . . .	Section 20, group 40
Check engine idle speeds	. . . . .	Section 20, group 40
Check injection timing	. . . . .	Section 30, group 15
OPERATION		
Check clutch pedal adjustment	Approx. 25 mm (1 in.) clutch pedal free travel	Section 50, group 5
Check operation of HIGH-LOW shift unit	. . . . .	Section 50, group 10
Shift transmission through all gears	. . . . .	Operator's manual
Check differential lock operation	. . . . .	Operator's manual
Check PTO operation	. . . . .	Operator's manual
Check 3-point hitch operation	. . . . .	Operator's manual
Check hydraulic system operation	. . . . .	Section 70, group 5
Check brake operation	. . . . .	Section 60, group 15

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PREDELIVERY INSPECTION — Continued

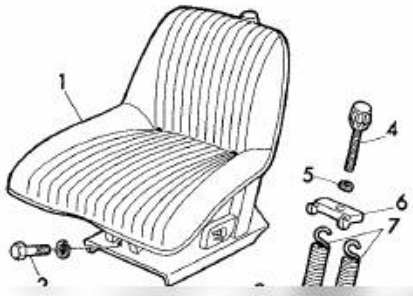
Service	Specifications	Reference
Check steering operation	. . . . .	Section 60, group 10
Check seat adjustment	. . . . .	Operator's manual
Check operation of remote cylinder (if equipped)	. . . . .	Section 70, group 5

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GENERAL INFORMATION

The DE LUXE seat is adjustable both horizontally and vertically, as well as for operator's weight. Range of adjustment is from 70 to 120 kp (154 to 265 lbs.)

Shocks are absorbed by means of two adjustable springs and a shock absorber mounted on the rear



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Group 15
Front and Rear Wheels

Front Wheels



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ADJUSTING FRONT WHEEL BEARINGS

Tighten slotted nut to the specified torque.

Rotate wheel several times to align bearings and retighten slotted nut to the specified torque. Then back off nut to nearest slot and insert cotter pin.

NOTE: If a slot in the nut just lines up with cotter pin hole in spindle after applying the specified torque, back off nut one slot.

Install hub cap.

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REMOVAL

Remove snap ring from outer end of rack-and-pinion axle.

Loosen wheel bolts 13 (fig. 2) sufficiently. Lift up on right or left rear of tractor, using a floor jack, until relative rear wheel comes off ground. Support tractor safely.

Remove snap rings 12 of the two jack screws 11 and turn jack screws out of wheel disk. Remove wheel disk from rim.

Check rear wheel parts for wear, scores, cracks or other damage.

Attach wheel disk to rear wheel rim and tighten hex. nuts 5 (fig. 2) to the specified torque.

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Group 20
Roll Guard



INSTALLATION

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