

JOHN DEERE 7020 TRACTOR



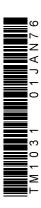
TECHNICAL MANUAL JOHN DEERE 7020 TRACTOR

TM1031 (01JAN76) English



TM1031 (01JAN76)

LITHO IN THE U.S.A. ENGLISH





7020 TRACTOR TECHNICAL MANUAL TM-1031 (Jan-76)

CONTENTS

SECTION 10 - GENERAL

Group 5 - Specifications

Group 10 - Predelivery, Delivery, and After-Sale Services

Group 15 - Tune-Up

Group 20 - Lubrication

Group 25 - Separation

SECTION 20 - ENGINE

Group 5 - General Information, Diagnosis, and Tests

Group 10 - Cylinder Head, Valve Train, and Camshaft

Group 15 - Cylinder Block, Liners, Pistons, and Rods

Group 20 - Crankshaft, Main Bearings, and Flywheel

Group 25 - Lubrication System

Group 30 - Cooling System

SECTION 30 - FUEL SYSTEM

Group 5 - Diagnosing Malfunctions

Group 10 - Air Intake System

Group 15 - Fuel Injection System

Group 20 - Control Linkage

SECTION 40 - ELECTRICAL SYSTEM

Group 5 - Information and Wiring Diagrams

Group 10 - Motorola Charging Circuit

Group 12 - Delcotron Charging Circuit

Group 15 - Delco-Remy Starting Circuit

Group 17 - John Deere Starting Circuit

Group 20 - Lighting and Accessory Circuits

SECTION 50 - POWER TRAIN

Group 5 - Clutch

Group 10 - Torque Divider

Group 15 - Syncro-Range Transmission

Group 20 - Differentials and Drive Shafts

Group 25 - Final Drives

Group 30 - PTO

SECTION 60 - STEERING AND BRAKES

Group 5 - General Information

SECTION 70 - HYDRAULIC SYSTEM

Group 5 - General Information, Diagnosis, and Tests

Group 10 - Main Reservoir, Filters, Valves, Oil

Cooler, and Oil Reservoir

Group 15 - Hydraulic Pumps Group 20 - Power Steering

Group 25 - Power Brakes

Group 30 - Rockshaft and Implement Hitches

Group 35 - Selective Control Valve, Breakaway

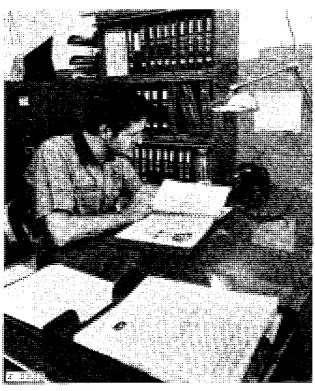
Couplers, and Remote Cylinders

SECTION 80 - MISCELLANEOUS

Group 5 - Hinge Assembly

All information, illustrations, and specifications contained in this technical manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

INTRODUCTION



Use FOS Manuals for Reference

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.



Use Technical Manuals for Actual Service

Some features of this technical manual:

- Table of contents at front of manual
- · Exploded views showing parts relationship
- · Photos showing service techniques
- Specifications grouped for easy reference

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 identifies 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.

Section 10 GENERAL

CONTENTS OF THIS SECTION

Page	Page
GROUP 5 - SPECIFICATIONS	GROUP 25 - SEPARATION
General Tractor Specifications 5-1	Removing Roll-Gard Cab
	Installing Roll-Gard Cab
GROUP 10 - PREDELIVERY, DELIVERY,	Separating Engine from Clutch
AND AFTER-SALE SERVICES	Housing
Predelivery Services	Separating Engine from Tractor
Delivery Services	Front End
After-Sale Services	Removing Engine
	Front Axle Assembly
GROUP 15 - TUNE-UP	Separating Transmission and
Preliminary Engine Testing 15-1	Differential from Torque Divider 25-7
Engine Tune-Up	Separating Torque Divider and
Engine Final Testing	Tractor Rear End from Hinge 25-9
Tractor Tune-Up	Separating Clutch Housing
	from Hinge
GROUP 20 - LUBRICATION	Removing Final Drive Assembly 25-10
Lubrication Chart	Installing Final Drive
Engine Lubricating Oils 20-2	Specifications
Transmission-Hydraulic Oil 20-2	Torques For Hardware 25-10
Greases	Special Tools
Storing Lubricants	

Group 5

GENERAL TRACTOR SPECIFICATIONS

HORSEPOWER: Maximum observed at PTO (2200	ENGINE (Continued) Bore and stroke
Engine rpm)* 146.17	Displacement
ENGINE:	Firing order
Type 6-cylinder, in-line, valve-in-head, diesel, turbocharged, and intercooled	Valve clearance .
Engine Speeds:	Injection pump tim
Slow idle 800 rpm	Lubrication System
Working range1500 to 2200 rpm	
Compression ratio	Fuel System:
Tractors (-2699)	Туре
Tractors (2700-)	Air cleaner
* In official test.	Cooling System:

ENGINE (Continued)
Bore and stroke 4-1/4 in. x 4-3/4 in.
Displacement 404 cu. in.
Firing order 1-5-3-6-2-4
Valve clearance
Ex0.028 in.
Injection pump timing TDC
Lubrication System Force-feed pres-
surized with full-flow oil filter
Fuel System:
Type Direct injection
Air cleaner Dry type
with safety element
Cooling System:
Type Pressurized with centrifugal pump
Temperature control Heavy-duty thermostats



Thank you very much for your reading.

Please click here to get more information.