

3020 Tractor (123,000-)



TECHNICAL MANUAL

3020 Tractor
(123,000-)

TM1005 (01OCT73) English



John Deere Tractor Works
TM1005 (01OCT73)

LITHO IN U.S.A.
ENGLISH



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(123,000-Up)
Technical Manual
TM-1005 (Apr-70)

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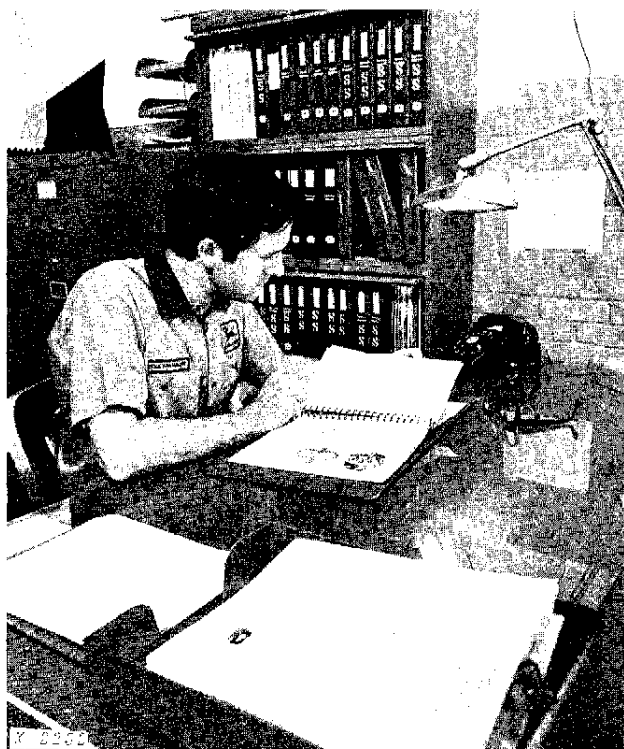
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INTRODUCTION



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*
- *Specifications at end of each Group*
- *Special tools at end of each Group*



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.

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.

Section 10

GENERAL

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Group 5

GENERAL TRACTOR SPECIFICATIONS

PTO HORSEPOWER (Official test at 2500 engine rpm with synchro-range transmission)

| | |
|--------------------|-----------|
| Diesel | 71.26 hp. |
| Gasoline | 71.37 hp. |
| LP-gas | 70.66 hp. |

ENGINE

Type . . . 4-stroke cycle, 4-cylinder in-line, valve-in-head

Bore and Stroke:

| | |
|-------------------------|-------------------|
| Diesel | 4-1/4 x 4-3/4 in. |
| Gasoline and LP-gas . . | 4-1/4 x 4-1/4 in. |

Displacement:

| | |
|-------------------------------|-------------|
| Diesel | 270 cu. in. |
| Gasoline and LP-gas | 241 cu. in. |

Compression ratio:

| | |
|--------------------|-----------|
| Diesel | 16.5 to 1 |
| Gasoline | 7.5 to 1 |
| LP-gas | 9.0 to 1 |

Firing order 1-3-4-2

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ENGINE—Continued

Engine speeds:

| | |
|----------------------------|------------------|
| Normal slow idle | 800 rpm |
| Working range | 1500 to 2500 rpm |

COOLING SYSTEM

Type. Pressurized system with centrifugal pump

Engine temperature control . . . Heavy-duty thermostat

LUBRICATION SYSTEM

Type Force-feed, pressurized with full-flow oil filter.

FUEL SYSTEM

Diesel . . . Direct injection, inlet metering, distributing-type.
Diaphragm-type fuel pump.



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