



# 4320 Tractor



## TECHNICAL MANUAL 4320 Tractor

TM1029 (01DEC74) English



**John Deere Tractor Works**  
**TM1029 (01DEC74)**

LITHO IN U.S.A.  
ENGLISH





# 4320 TRACTOR

## TECHNICAL MANUAL TM-1029 (Aug-70)

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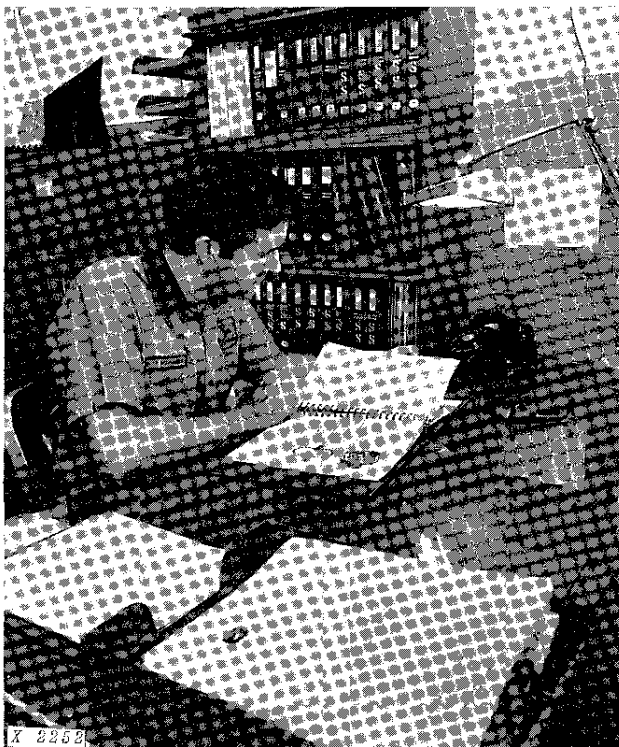
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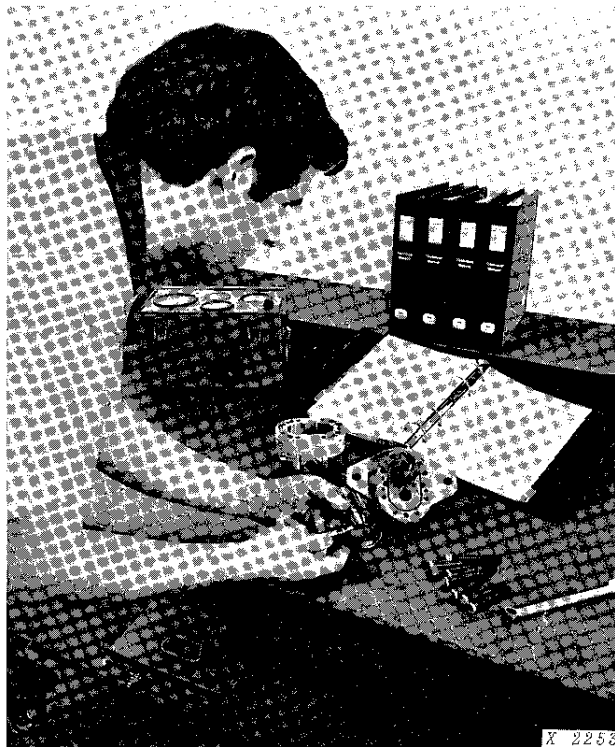
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## INTRODUCTION



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

### HORSEPOWER:

Observed at PTO . . . . . 115

### ENGINE:

Type . . . . . 6-cylinder, in-line, valve-in-head,  
diesel, turbocharged  
Bore and stroke . . . . . 4-1/4 in. x 4-3/4 in.  
Displacement . . . . . 404 cu. in.  
Compression ratio . . . . . 15.7 to 1  
Firing order . . . . . 1-5-3-6-2-4  
Valve clearance . . . . . Intake-0.018 in.  
Exhaust-0.022 in.

Injection pump timing . . . . . TDC

### Engine Speeds:

Working range . . . . . 1500 to 2200 rpm  
Maximum transport speed . . . . . 2500 rpm

### Engine speeds:

Slow idle . . . . . 800 rpm  
1900 rpm load . . . . . 2150 rpm idle  
2200 rpm load . . . . . 2400 rpm idle  
2500 rpm load . . . . . 2650 rpm idle

### LUBRICATION SYSTEM:

Full pressurized  
with full-flow micronic oil  
filter, water cooled oil  
cooler, and bypass valves  
for filter and cooler.

### FUEL SYSTEM:

Type . . . . . Direct injection  
Filter . . . . . Two-stage with replaceable  
impregnated paper element.  
Injection pump type . . . . . Inlet metering,  
distributing type  
Air cleaner . . Dry type with safety element

### COOLING SYSTEM:

Type . . . . . Pressurized with centrifugal pump  
Temperature control . . . . . Heavy-duty  
thermostat

### CAPACITIES:

Fuel tank . . . . . 44 U.S. gals.  
Cooling system . . . . . 28 U.S. qts.  
Crankcase (with filter change) . . . . . 16 U.S. qts.  
Transmission-hydraulic system (add 4-1/2  
gals. to capacity if equipped with Power Front  
Wheel Drive) . . . . . 14 U.S. gals.

### TRANSMISSION:

Type . . . . . Syncro-Range, constant mesh  
Clutch . . . . . Heavy-duty, 13-1/2 in. plate,  
foot operated  
Gear selections . . . . . 8 forward and 2 reverse  
Shifting . . . . . 4 stations, synchronized  
forward shifting within stations



Thank you very much  
for your reading.  
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to get more information.