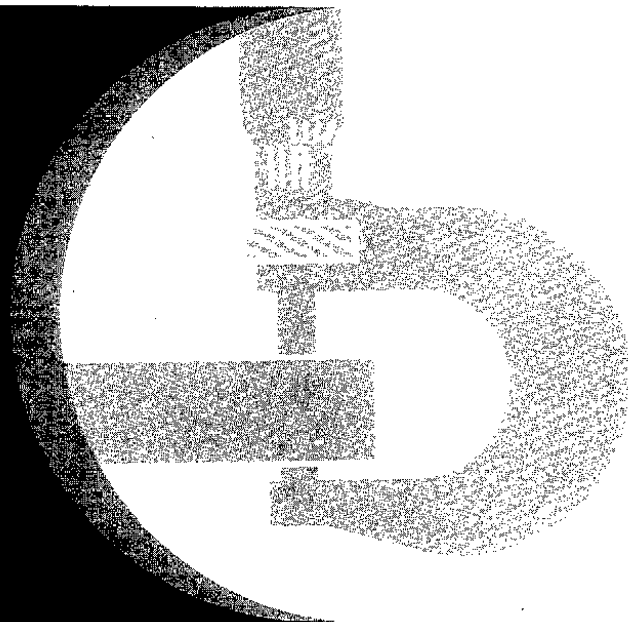


4040 & 4240 Tractors



PDF



DOWNLOAD



4040 AND 4240 TRACTORS TECHNICAL MANUAL TM-1181 (SEP-77)

CONTENTS—REPAIR SECTIONS

SECTION 10—GENERAL

- Group 00—Specifications and Special Tools
- Group 05—Predelivery, Delivery, and After-Sale Services
- Group 10—Tune-Up
- Group 15—Lubrication
- Group 20—Separation

SECTION 20—ENGINE REPAIR

- Group 00—Specifications and Special Tools
- Group 05—Cylinder Head, Valves, and Camshaft
- Group 10—Cylinder Block, Liners, Pistons, and Rods
- Group 15—Crankshaft, Main Bearings, and Flywheel
- Group 20—Lubricating System
- Group 25—Cooling System

SECTION 30—FUEL AND AIR REPAIR

- Group 00—Specifications and Special Tools
- Group 05—Air Intake System
- Group 10—Diesel Fuel System
- Group 15—Control Linkage

SECTION 40—ELECTRICAL REPAIR

- Group 00—Specifications and Special Tools
- Group 05—Harness Replacement
- Group 10—Charging Circuit
- Group 15—Starting Circuit
- Group 20—Lighting Circuits
- Group 25—Instrument and Accessory Circuits
- Group 30—Power Front-Wheel Drive

SECTION 50—POWER TRAIN REPAIR

- Group 00—Specifications and Special Tools
- Group 05—Perma-Clutch™
- Group 10—Syncro Range Transmission (Also 8-Speed Portion of Quad-Range and Creeper)

SECTION 50—POWER TRAIN REPAIR (Continued)

- Group 15—Creeper Planetary
- Group 20—Quad-Range Planetary and Shifter Assembly
- Group 25—Power Shift Transmission
- Group 30—Dual-Speed PTO
- Group 35—Differential
- Group 40—Final Drive
- Group 45—Power Front-Wheel Drive

SECTION 60—STEERING/BRAKES REPAIR

- Group 00—Specifications and Special Tools
- Group 05—Power Steering
- Group 10—Power Brakes

SECTION 70—HYDRAULIC REPAIR

- Group 00—Specifications and Special Tools
- Group 05—Miscellaneous Hydraulic Components
- Group 10—Hydraulic Pumps
- Group 15—Rockshaft and Implement Hitcher
- Group 20—Selective Control Valve and Remote Cylinder

SECTION 80—MISCELLANEOUS

- Group 00—Specifications and Special Tools
- Group 05—Front Axles
- Group 10—Wheels

SECTION 90—OPERATOR STATION REPAIR

- Group 00—Specifications and Special Tools
- Group 05—Air Conditioning System
- Group 10—Heating System
- Group 15—Seat
- Group 20—Miscellaneous Components
(Continued on page 2)

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.

Copyright© 1977
DEERE & COMPANY
Moline, Illinois
All rights reserved

CONTENTS—OPERATION AND TESTS SECTIONS**SECTION 220—ENGINE OPERATION AND TESTS**

- Group 00—Specifications and Special Tools
- Group 05—System Operation
- Group 10—System Tests and Diagnosis

SECTION 230—FUEL/AIR OPERATION AND TESTS

- Group 00—Specifications and Special Tools
- Group 05—Air Intake System
- Group 10—Diesel Fuel System
- Group 15—Control Linkage

SECTION 240—ELECTRICAL OPERATION AND TESTS

- Group 00—Specifications and Special Tools
- Group 05—General Information and Diagrams
- Group 10—Charging Circuit
- Group 15—Starting Circuit
- Group 20—Lighting Circuits
- Group 25—Instrument and Accessory Circuits
- Group 30—Power Front-Wheel Drive
- Group 35—Electrical Remote Control and Outlet Socket

SECTION 250—POWER TRAIN OPERATION AND TESTS

- Group 00—Specifications and Special Tools
- Group 05—Perma-Clutch Systems Operation
- Group 10—Perma-Clutch Systems Tests
- Group 15—Power Shift Transmission Operation
- Group 20—Power Shift Transmission Tests
- Group 25—Differential and Final Drive
- Group 30—Power Front-Wheel Drive

SECTION 260—STEERING/BRAKES OPERATION AND TESTS

- Group 00—Specifications and Special Tools
- Group 05—Power Steering
- Group 10—Power Brakes

SECTION 270—HYDRAULIC OPERATION AND TESTS

- Group 00—Specifications and Special Tools
- Group 05—Hydraulic System Operation
- Group 10—Hydraulic System Tests
- Group 15—Miscellaneous Hydraulic Components
- Group 20—Hydraulic Pumps
- Group 25—Rockshaft and Implement Hitches
- Group 30—Selective Control Valve and Remote Cylinder

SECTION 290—OPERATOR STATION OPERATION AND TESTS

- Group 00—Specifications and Special Tools
- Group 05—Air Conditioning System
- Group 10—Heating System

Section 10 GENERAL

CONTENTS OF THIS SECTION

| | Page | | Page |
|--|----------|---|----------|
| GROUP 00—SPECIFICATIONS | | GROUP 15—LUBRICATION | |
| General Tractor Specifications | 10-00-1 | Lubricants | 10-15-1 |
| Predelivery | 10-00-4 | Engine | 10-15-2 |
| Tune-Up | 10-00-5 | Transmission-Hydraulic System | 10-15-3 |
| Lubrication | 10-00-5 | Hi-Crop Final Drive Housings | 10-15-5 |
| Separation | 10-00-6 | Front Wheel Bearings | 10-15-6 |
| Special Tools | 10-00-7 | Grease Fittings | 10-15-6 |
| GROUP 05—PREDELIVERY, DELIVERY, AND AFTER-SALE SERVICES | | GROUP 20—SEPARATION | |
| Dealer Predelivery Service | 10-05-1 | Removing SOUND-GARD® Body without Control Support | 10-20-1 |
| Inspection Checks | 10-05-11 | Removing SOUND-GARD Body with Control Support | 10-20-5 |
| Dealer Service | 10-05-13 | Separating Engine from Clutch Housing | 10-20-10 |
| After-Sale Inspection | 10-05-14 | Removing Front End | 10-20-14 |
| GROUP 10—TUNE-UP | | Removing Engine | 10-20-18 |
| Preliminary Engine Testing | 10-10-1 | Separating Clutch Housing from Power Shift Transmission Case | 10-20-21 |
| Engine Tune-Up | 10-10-1 | Separating Clutch Housing from QUAD-RANGE™ Transmission Case .. | 10-20-24 |
| Operation | 10-10-7 | Removing Rear Axle Housing | 10-20-26 |
| General | 10-10-7 | | |

Group 00 SPECIFICATIONS AND SPECIAL TOOLS GENERAL TRACTOR SPECIFICATIONS

| | 4040 | 4240 |
|---|---|---|
| HORSEPOWER (Factory observed PTO horsepower at 2200 rpm) | 90 hp (67 kW) | 110 hp (82 kW) |
| ENGINE: | | |
| Type | 6-cylinder, in-line, valve-in-head, diesel | 6-cylinder, in-line, valve-in-head, diesel |
| Slow idle speed | 800 rpm | 800 rpm |
| Working speed range | 1500 to 2200 rpm | 1500 to 2200 rpm |
| Bore and stroke | 4.25 x 4.75 in. (108 x 121 mm) | 4.56 x 4.75 in. (116 x 121 mm) |
| Displacement | 404 cu. in. (6.6 L) | 466 cu. in. (7.6 L) |
| Compression ratio | 16.7 to 1 | 17.0 to 1 |
| Firing order | 1-5-3-6-2-4 | 1-5-3-6-2-4 |
| Valve clearance | | |
| Intake | 0.018 in. (0.46 mm) | 0.018 in. (0.46 mm) |
| Exhaust | 0.028 in. (0.71 mm) | 0.028 in. (0.71 mm) |
| Injection pump timing | TDC | TDC |
| Lubrication system | force-feed, pressurized with full-flow filter | force-feed, pressurized with full-flow filter |

| | 4040 | 4240 |
|---|---|---|
| FUEL SYSTEM | | |
| Type | direct injection | direct injection |
| Injection pump type | distributor | distributor |
| Air cleaner | dry type with safety element | dry type with safety element |
| COOLING SYSTEM | | |
| Type | dual-pressure with centrifugal pump | dual pressure with centrifugal pump |
| Temperature control | dual heavy duty thermostats | dual heavy duty thermostats |
| CAPACITIES | | |
| Fuel tank | 37 U.S. gal. (140 L) | 46 U.S. gal. (176 L) |
| Cooling system | 24 U.S. qts. (23 L) | 30 U.S. qts. (28 L) |
| Crankcase (with filter change) | 17 U.S. qts. (16 L) | 17 U.S. qts. (16 L) |
| Transmission-hydraulic system (Drain and fill): | | |
| Power Shift Transmission | 11.0 U.S. gal. (41.6 L) | 11.0 U.S. gal. (41.6 L) |
| QUAD-RANGE or Syncro-Range Transmission | 13.0 U.S. gal. (49.2 L) | 13.0 U.S. gal. (49.2 L) |
| Add for power front-wheel drive Transmission-hydraulic system (Dry, production fill): | 4.0 U.S. gal. (15.1 L) | 4.0 U.S. gal. (15.1 L) |
| Power Shift Transmission | 15.9 U.S. gallons (60.3 L) | 15.9 U.S. gallons (60.3 L) |
| QUAD-RANGE or Syncro-Range Transmission | 15.9 U.S. gal. (60.3 L) | 15.9 U.S. gal. (60.3 L) |
| Add for power front-wheel drive | 5.0 U.S. gallons (18.9 L) | 5.0 U.S. gal. (18.9 L) |
| POWER SHIFT TRANSMISSION: | | |
| Type | planetary gears, hydraulically actuated wet disk clutches and brakes | planetary gears, hydraulically actuated wet disk clutches and brakes |
| Gear selections | 8 forward and 4 reverse | 8 forward and 4 reverse |
| Shifting | hydraulic, on-the-go and under load | hydraulic, on-the-go and under load |
| QUAD-RANGE TRANSMISSION | | |
| Type | 2-speed, power-shifted planetary and 8-speed synchronized 16 forward and 6 reverse hydraulically-operated, multiple-disk wet clutch | 2-speed, power-shifted planetary and 8-speed synchronized 16 forward and 6 reverse hydraulically-operated, multiple-disk wet clutch |
| Gear selections | | |
| Perma-Clutch | | |
| SYNCRO-RANGE TRANSMISSION | | |
| Type | synchronized, constant mesh | synchronized, constant mesh |
| Gear selections | 8 forward and 2 reverse | 8 forward and 2 reverse |
| Shifting | 4 stations; synchronized forward speed shifting within stations | 4 stations; synchronized forward speed shifting within stations |
| CREEPER TRANSMISSION | | |
| Type | 8-speed Syncro-Range plus 2-speed collar-shifted planetary | 8-speed Syncro-Range plus 2-speed collar-shifted planetary |
| Gear selections | 13 forward and 4 reverse | 13 forward and 4 reverse |
| Shifting | same as Syncro-Range plus collar shift between ranges | same as Syncro-Range plus collar shift between ranges |
| POWER TAKE-OFF: | | |
| Type | fully independent, dual-speed | fully independent, dual-speed |
| Speeds (2200 engine rpm) | 1000 rpm or independent 540 and 1000 rpm | 1000 rpm or independent 540 and 1000 rpm |
| Size | 1-3/8 in. (35 mm) | 1-3/8 in. (35 mm) |
| Clutch | hydraulically-operated, multiple-disk wet clutch | hydraulically-operated, multiple-disk wet clutch |
| POWER FRONT-WHEEL DRIVE: | | |
| Type | hydraulic motor with planetary gear reduction, constant torque and variable speed | hydraulic motor with planetary gear reduction, constant torque and variable speed |
| Controls | solenoid-operated valves, synchronized with transmission controls | solenoid-operated valves, synchronized with transmission controls |



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