



4640 and 4840 Tractors



JOHN DEERE

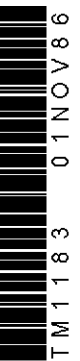
TECHNICAL MANUAL 4640 and 4840 Tractors

TM1183 (01NOV86) English



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4640 AND 4840 TRACTORS TECHNICAL MANUAL TM-1183 (OCT-85)

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Group 00 SPECIFICATIONS AND SPECIAL TOOLS GENERAL TRACTOR SPECIFICATIONS

4640

4840

HORSEPOWER (Factory observed PTO
horsepower at 2200 rpm)

155 hp (116 kW)

180 hp (134 kW)

ENGINE:

| | | |
|-----------------------|--|--|
| Type | 6-cylinder, in-line, valve-in-head, diesel, turbocharged, intercooled | 6-cylinder, in-line, valve-in-head, diesel, turbocharged, intercooled |
| Slow idle speed | 800 rpm | 800 rpm |
| Working speed range | 1500 to 2200 rpm | 1500 to 2200 rpm |
| Bore and stroke | 4.56 x 4.75 in. (116 x 121 mm) | 4.56 x 4.75 in. (116 x 121 mm) |
| Displacement | 466 cu. in. (7.6 L) | 466 cu. in. (7.6 L) |
| Compression ratio | 14.9 to 1 | 14.9 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 |

| | 4640 | 4840 |
|---|---|--|
| FUEL SYSTEM: | | |
| Type | direct injection | direct injection |
| Injection pump type | in-line | in-line |
| 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 | 83 U.S. gal. (314 L) | 103 U.S. gal. (390 L) |
| Cooling system | 38 U.S. qt. (36 L) | 40 U.S. qt. (38 L) |
| Crankcase (with filter change) | 20 U.S. qt. (19 L) | 20 U.S. qt. (19 L) |
| Transmission-hydraulic system (Drain and fill) | | |
| Power Shift Transmission | 16.5 U.S. gal. (62.5 L) | 16.5 U.S. gal. (62.5 L) |
| QUAD-RANGE Transmission | 22.5 U.S. gal. (85.2 L) | |
| Add for Power Front-wheel Drive | 4.0 U.S. gal. (15.1 L) | 4.0 U.S. gal. (15.1 L) |
| Transmission-hydraulic system (Dry, production fill) | | |
| Power Shift Transmission | 20.8 U.S. gal. (78.8 L) | 20.8 U.S. gal. (78.8 L) |
| QUAD-RANGE Transmission | 26.0 U.S. gal. (98.4 L) | |
| Add for Power Front-wheel Drive | 5.0 U.S. gal. (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 | |
| Gear selections | 16 forward and 6 reverse | |
| Perma-Clutch | hydraulically-operated, multiple-disk wet clutch | |
| POWER TAKE-OFF: | | |
| Type | fully independent | fully independent |
| Speed (2200 engine rpm) | 1000 rpm | 1000 rpm |
| Size | 1-3/4 in. (45 mm) | 1-3/4 in. (45 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 | |
| Controls | solenoid-operated valves, synchronized with transmission controls | |
| HYDRAULIC SYSTEM: | | |
| Type | closed-center, constant-pressure | closed-center, constant-pressure |
| Standby pressure | 2250 psi (155 bar) (15 500 kPa) | 2250 psi (155 bar) (15 500 kPa) |
| BRAKES: | | |
| Type | hydraulically-operated wet disk | hydraulically-operated wet disk |



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