



# 4640 and 4840 Tractors



JOHN DEERE

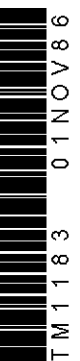
## TECHNICAL MANUAL 4640 and 4840 Tractors

TM1183 (01NOV86) English



John Deere Tractor Works  
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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
<b>FUEL SYSTEM:</b>		
Type	direct injection	direct injection
Injection pump type	in-line	in-line
Air cleaner	dry type with safety element	dry type with safety element
<b>COOLING SYSTEM:</b>		
Type	dual-pressure with centrifugal pump	dual-pressure with centrifugal pump
Temperature control	dual heavy duty thermostats	dual heavy duty thermostats
<b>CAPACITIES</b>		
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)
<b>POWER SHIFT TRANSMISSION:</b>		
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
<b>QUAD-RANGE TRANSMISSION</b>		
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	
<b>POWER TAKE-OFF:</b>		
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
<b>POWER FRONT-WHEEL DRIVE:</b>		
Type	hydraulic motor with planetary gear reduction, constant torque and variable speed	
Controls	solenoid-operated valves, synchronized with transmission controls	
<b>HYDRAULIC SYSTEM:</b>		
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)
<b>BRAKES:</b>		
Type	hydraulically-operated wet disk	hydraulically-operated wet disk



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