

450K

Engine	450K / 450K LGP
Blade Type	<i>Power-Angle-Tilt (PAT)</i>
Manufacturer and Model	John Deere PowerTech™ PWS 4045
Non-Road Emission Standard	EPA Final Tier 4/EU Stage IV
Displacement	4.5L (276 cu. in.)
SAE Net Rated Power	60 kW (80 hp) at 2,200 rpm
Net Peak Torque	354 Nm (261 ft.-lb.) at 1,400 rpm
Aspiration	Turbocharged with charge-air cooler
Air Cleaner	Dual-stage dry tube with tangential unloader

Cooling	
Type	Blower-type, direct-drive cooling fan
Engine Coolant Rating	-37 deg. C. (-34 deg. F)
Engine Radiator	8.47 fins per in.

Powertrain	
Transmission	Automatic, dual-path, hydrostatic (HST) drive; load-sensing feature automatically adjusts speed and power to match changing load conditions; each individually controlled track is powered by a variable-displacement piston pump and variable-displacement motor combination; ground-speed selection buttons on single-lever steering and direction control; independently selectable reverse speed ratios of 100%, 115%, or 130% of forward ground speed; decelerator pedal controls ground speed to stop
System Relief Pressure	34 887 kPa (5,060 psi)

Travel Speeds	
Forward and Reverse	8.0 km/h (5.0 mph)
Maximum (optional)	9.7 km/h (6.0 mph)

Steering	Single-lever steering, direction control, and counter-rotation; full power turns and infinitely variable track speeds provide unlimited maneuverability and optimum control; HST steering eliminates steering clutches and brakes
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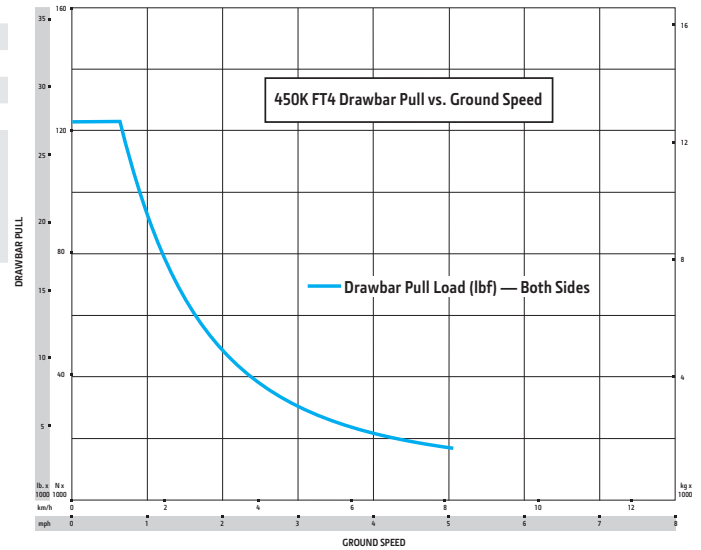
Final Drives	Triple-reduction final drives mounted independently of track frames and dozer push frames for isolation from shock loads
Total Ratio	48.4 to 1

Drawbar Pull	
Maximum	122 kN (27,500 lb.)
At 1.9 km/h (1.2 mph)	80 kN (17,900 lb.)
At 3.2 km/h (2.0 mph)	48 kN (10,900 lb.)

Brakes	
Service	HST (dynamic) braking stops the machine when the direction/steering control lever is moved to neutral or the decelerator is depressed to the detent

Parking	Exclusive spring-applied, hydraulically released park-brake feature engages wet, multiple-disc brakes automatically whenever the engine stops, the operator depresses the decelerator pedal to the brake position, the unit is in neutral for 3 seconds (with detected motion), or the park-lock lever is in the park position; machine cannot be driven with brake applied, minimizing wearout or need for adjustment
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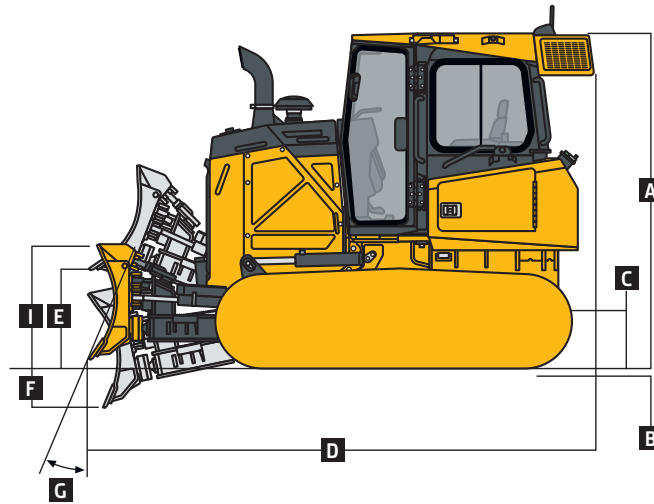
Hydraulics	
Type	Open-center hydraulic system with fixed-displacement gear pump
Pump Displacement	36.4 cc
System Relief Pressure	20 684 kPa (3,000 psi)
Maximum Flow at Unloaded High Idle	80 L/m (21 gpm)
Control	3-function direct-acting T-bar joystick with push-button angle function





Electrical	450K / 450K LGP	
Blade Type	PAT	
Voltage	24 volts	
Capacity		
Battery	950 CCA	
Reserve	190 min.	
Alternator Rating		
Cab	100 amp	
Canopy	100 amp	
Lights	Grille mounted (2), rear mounted (2), and rear reflectors (2)	
Undercarriage	450K	450K LGP
Blade Type	PAT	PAT
Tracks	John Deere DuraTrax™ features large deep-heat-treated components; pins and bushings are sealed for life; rollers and idlers are permanently sealed and lubricated; full-length track-frame covers reduce material buildup and ease cleaning	
Track Gauge	1448 mm (57 in.)	1651 mm (65 in.)
Grouser Width	406 mm (16 in.)	610 mm (24 in.)
Chain	Sealed and lubricated	Sealed and lubricated
Shoes, Each Side	40 standard and Extended Life / 37 Maximum Life	40 standard and Extended Life / 37 Maximum Life
Track Rollers, Each Side	6	6
Track Length on Ground	2184 mm (86 in.)	2184 mm (86 in.)
Ground Contact Area	17 755 cm ² (2,752 sq. in.)	26 632 cm ² (4,128 sq. in.)
Ground Pressure	43.9 kPa (6.4 psi)	31.3 kPa (4.5 psi)
Track Pitch	160 mm (6.3 in.) standard / 171 mm (6.7 in.) Maximum Life	
Operator Station	450K / 450K LGP	
ROPS (ISO 3471 – 2008) and FOPS (ISO 3449 – 2005)		
Serviceability		
Refill Capacities		
Fuel Tank with Lockable Cap	202 L (53.45 gal.)	
Diesel Exhaust Fluid (DEF) Tank	11.8 L (3.1 gal.)	
Cooling System with Recovery Tank	21.1 L (5.6 gal.)	
Engine Oil with Filter	19 L (20 qt.)	
Hydraulic/HST Oil (common reservoir) with Filters	100 L (26.42 gal.)	
Final Drive (per tractor)	17 L (4.6 gal.)	
Operating Weights	450K	450K LGP
Blade Type	PAT	PAT
<i>Base Weight (with standard equipment, rollover protective structure [ROPS], full fuel tank, and 79-kg [175 lb.] operator)</i>	7959 kg (17,510 lb.)	8522 kg (18,752 lb.)
Optional Components		
Cab with Pressurizer and Heater/Air Conditioner	306 kg (675 lb.)	306 kg (675 lb.)
ROPS Canopy		
Heater	12 kg (26 lb.)	12 kg (26 lb.)
Front and Door Screens	81 kg (179 lb.)	81 kg (179 lb.)
Rear Screen	34 kg (76 lb.)	34 kg (76 lb.)
Side Screens	43 kg (94 lb.)	43 kg (94 lb.)
Limb Risers (ROPS canopy and cab)	95 kg (209 lb.)	95 kg (209 lb.)
Counterweight		
Front	109 kg (240 lb.)	109 kg (240 lb.)
Rear	150 kg (330 lb.)	150 kg (330 lb.)
Retrieval Hitch	23 kg (50 lb.)	23 kg (50 lb.)
Drawbar, Extended Rigid	33 kg (72 lb.)	33 kg (72 lb.)
Winch	652 kg (1,437 lb.)	652 kg (1,437 lb.)
Fairlead, 4 Roller	85 kg (187 lb.)	85 kg (187 lb.)
Full-Length Rock Guards	117 kg (257 lb.)	131 kg (288 lb.)
Maximum Life Undercarriage	88 kg (193 lb.)	132 kg (290 lb.)
Track Shoes		
406 mm (16 in.)	In base	—
610 mm (24 in.)	—	In base

Machine Dimensions	450K / 450K LGP
A Overall Height to Roof	2799 mm (9 ft. 2 in.)
B Tread Depth with Single-Bar Grouser	49 mm (1.9 in.)
C Ground Clearance in Dirt	329 mm (13 in.)
D Overall Length	4016 mm (158 in.) (13 ft. 2 in.)
E Blade Lift Height	772 mm (30.4 in.)
F Blade Digging Depth	528 mm (20.8 in.)
G Blade Cutting-Edge Angle, Adjustable	52 to 60 deg.



450K / 450K LGP WITH POWER-ANGLE-TILT (PAT) BLADE

Machine Dimensions (continued)	450K	450K LGP
Blade Type	PAT	PAT
Straight		
H Blade Width	2464 mm (97 in.) (8 ft. 1 in.)	2921 mm (115 in.) (9 ft. 7 in.)
I Blade Height	955 mm (3 ft. 2 in.)	955 mm (3 ft. 2 in.)
SAE Capacity	1.6 m ³ (2.1 cu. yd.)	2.0 m ³ (2.6 cu. yd.)
Weight	494 kg (1,090 lb.)	628 kg (1,385 lb.)
C-Frame Assembly Weight (without blade)	330 kg (727 lb.)	330 kg (727 lb.)
J Blade Angle	25.4 deg.	25.4 deg.
K Overall Width with Blade Angled	2225 mm (7 ft. 4 in.)	2639 mm (8 ft. 8 in.)
L Blade Tilt (uses tilt jack)	338 mm (13.3 in.)	399 mm (15.7 in.)
M Cut Reach	56 mm (2.2 in.)	58.4 mm (2.2 in.)
N Width Over Track	1854 mm (6 ft. 1 in.)	2261 mm (7 ft. 5 in.)
O Cast Reach	318 mm (12.5 in.)	320 mm (12.6 in.)
Straight (option)		
H Blade Width	2921 mm (115 in.) (9 ft. 7 in.)	3150 mm (124 in.) (10 ft. 4 in.)
I Blade Height	955 mm (3 ft. 2 in.)	894 mm (35 in.)
SAE Capacity	2.0 m ³ (2.6 cu. yd.)	1.9 m ³ (2.5 cu. yd.)
Weight	628 kg (1,385 lb.)	631 kg (1,391 lb.)
C-Frame Assembly Weight (without blade)	330 kg (727 lb.)	330 kg (727 lb.)
J Blade Angle	25.4 deg.	25.4 deg.
K Overall Width with Blade Angled	2639 mm (8 ft. 8 in.)	2845 mm (9 ft. 4 in.)
L Blade Tilt (uses tilt jack)	399 mm (15.7 in.)	429 mm (16.9 in.)
M Cut Reach	262 mm (10.3 in.)	163 mm (6.4 in.)
N Width Over Track	1854 mm (6 ft. 1 in.)	2261 mm (7 ft. 5 in.)
O Cast Reach	523 mm (20.6 in.)	424 mm (17.0 in.)