

# 764 HSD



<b>Engine</b>		<b>764 HSD</b>
Manufacturer and Model	John Deere PowerTech™ Plus 6068H	
Non-Road Emission Standards	EPA Tier 3/EU Stage IIIA	
Cylinders	6	
Displacement	414 cu. in. (6.8 L)	
Horsepower at Maximum Travel Speeds	0–12.8 mph (0–20.6 km/h)      12.8–16.0 mph (20.6–25.7 km/h)	
Net Peak Power at 1,800 rpm (ISO 9249)	200 hp (149 kW)	210 hp (157 kW)
Net Gross Power at 1,800 rpm	210 hp (157 kW)	220 hp (164 kW)
Net Peak Torque at 1,500 rpm (ISO 9249)	704 lb.-ft. (954 Nm)	
Engine Bore and Stroke	4.19 x 5.00 in. (106.5 x 127.0 mm)	
Aspiration	Turbocharger with air-to-air aftercooler	
Air Cleaner	Dual-stage dry type with safety element, pre-cleaner, and under-hood restriction indicator	
Slope Operation (maximum angle)	45 deg.	
<b>Cooling</b>		
Variable-speed reversible fan		
Engine Coolant Rating	–34 deg. F. (–37 deg. C)	
<b>Powertrain</b>		
<b>Transmission</b>	Automatic, dual-path, hydrostatic 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 motor combination; ground-speed selection buttons on single-lever steering and direction control; independently selectable reverse speed ratios 100%, 115%, or 130% of forward ground speed; decelerator pedal controls ground speed to dead stops	
System Relief Pressure	6,650 psi (23 442 kPa)	
<b>Maximum Travel Speeds</b> (forward and reverse)	0–16.0 mph (0–25.7 km/h)	
<b>Steering</b>	Dual steering system; left-hand joystick and conventional steering wheel	
Maximum Articulation Angle	45 deg.	
<b>Final Drives</b>	Double-reduction, planetary final drives transfer torque loads over 3 gear sets	
Drawbar Pull		
Maximum	34,000 lb. (151.2 kN)	
At 1.5 mph (2.4 km/h)	21,000 lb. (93.4 kN)	
At 3.0 mph (4.8 km/h)	13,500 lb. (60.0 kN)	
At 10.0 mph (16.1 km/h)	2,200 lb. (9.8 kN)	
<b>Brakes</b>	Decelerator/brake pedal; automatic power management with manual override for matching ground speed	
<b>Service Brakes</b>	Hydrostatic (dynamic) braking stops machine when the direction controls are moved to neutral or the decelerator is depressed to the end of travel	
Type	Hydraulic	
<b>Parking Brakes</b>	Exclusive park-brake feature engages wet, multiple-disc brakes whenever the engine stops, whenever the combined decelerator/brake is fully depressed, whenever the park-brake switch is in the park position, or whenever the left-hand armrest is in the up position; machine cannot be driven with brake applied, reducing wear-out or need for adjustments; spring-applied, hydraulic release	
<b>Hydraulics</b>		
Load sense, piston pump		
Pump (147 cc)	70 gpm (265 L/m)	
System Relief Pressure	3,650 psi (25 166 kPa)	
Maximum Flow at Unloaded High Idle	73.8 gpm (279 L/m)	
Control	Electrohydraulic joystick with push-button angle function	
Cooling	Convective oil sump	
<b>Rear Hydraulics</b>	2 double-acting variable circuits, each capable of 34 gpm (128.7 L/m)	
Maximum Circuit Pressure	2,500 psi (17 237 kPa)	
<b>Cylinders</b>		
Heat-treated, chrome-plated, polished cylinder rods; hardened steel (replaceable bushings) pivot pins		
<b>Electrical</b>		
Voltage	24 volt	
Battery Capacity	950 CCA	
Reserve Capacity	190 min.	
Alternator Rating (cab)	80 amp	
<b>Work Lights</b>	8 total: cab-mounted (4 front and 2 rear) and platform-mounted (2)	
Warning Flashers	Platform-mounted (2)	
Turn Signals	Rear-mounted (2)	
Stoptlights	Rear-mounted (2)	



<b>Undercarriage</b>	<b>764 HSD</b>
<b>Track System</b>	Friction and positive-drive rubber track system equipped with 2 front idlers, 2 rear idlers, drive sprocket, and 4 mid-rollers per track frame
<b>Track</b>	
Gauge	78 in. (1981 mm)
Width	24 in. (610 mm)
Belts	Extra-thick rubber belt with continuous steel cables; extra-high and -wide tread bars for long life; large drive/guide lugs for long service life
Length on Ground (per track)	53 in. (1346 mm)
Ground Contact Area (per track)	1,272 sq. in. (8206 cm <sup>2</sup> )
Ground Pressure	6.68 psi (46.1 kPa)
<b>Oscillation</b>	
Track Frame	20 deg. (10 deg. up or down)
Front and Rear A-Frame	10 deg. (5 deg. up or down)
Rear Axle	12.4 deg. (6.2 deg. up or down)

<b>Serviceability</b>	
<b>Refill Capacities</b>	
Fuel Tank with Lockable Cap	106 gal. (401 L)
Cooling System with Recovery Tank	11.1 gal. (42 L)
Engine Oil with Filter	7 gal. (26.5 L)
Hydraulic and Transmission Reservoir with Filters	60 gal. (227.1 L)

<b>Operating Weights</b>	
With standard equipment, rollover protective structures, full fuel tanks, and 175-lb. (79 kg) operator	
Base Weight	34,000 lb. (15 422 kg)

<b>Machine Dimensions</b>	
<b>Blade Type: PAT</b>	

<b>A</b> Overall Height	
To Roof	10 ft. 3 in. (3124 mm)
To Exhaust Stack	9 ft. 9 in. (2972 mm)
<b>B</b> Tread Depth	1.4 in. (36 mm)
<b>C</b> Ground Clearance	13.1 in. (333 mm)
<b>D</b> Blade Width	11 ft. 0 in. (3353 mm)
<b>E</b> Blade Height	3 ft. 3 in. (991 mm)
<b>F</b> Blade Lift Height	29 in. (739 mm)
<b>G</b> Blade Digging Depth	29 in. (739 mm)
<b>H</b> Blade Tilt	18 in. (457 mm)
<b>I</b> Overall Length with Blade and Drawbar	22 ft. 10 in. (6962 mm)
<b>J</b> Overall Width with Blade Angled	10 ft. 1 in. (3073 mm)
<b>K</b> Blade Angle	25 deg.
<b>L</b> Cut Reach	2 in. (51 mm)
<b>M</b> Width Over Track	8 ft. 6 in. (2591 mm)
<b>N</b> Cast Reach	16 in. (406 mm)
<b>O</b> Blade Cutting-Edge Angle (adjustable)	7 deg.
Blade Capacity	3.75 cu. yd. (2.87 m <sup>3</sup> )
Clearance Circle with Blade	19 ft. 7 in. (5974 mm)

