

640L / 648L / 748L

JOHN DEERE

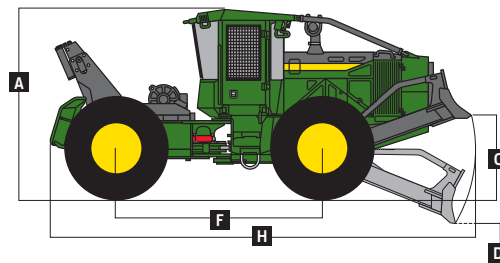
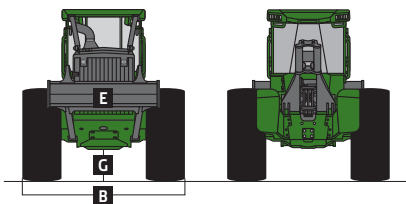
Engine	640L / 648L			748L	
Manufacturer / Model	John Deere PowerTech™ PVX 6068	John Deere PowerTech™ 6068H / John Deere PowerTech™ Plus 6068H	John Deere PowerTech 6068H	John Deere PowerTech PVX 6068	John Deere PowerTech 6068H
Off-Road Emission Standards	EPA Final Tier 4/ EU Stage IV	EPA Tier 3/EU Stage IIIA	EPA Tier 2/EU Stage II	EPA Final Tier 4/ EU Stage IV	EPA Tier 2/EU Stage II
Gross Power	177 kW (237 hp)	163 kW (218 hp)	157 kW (210 hp)	196 kW (263 hp)	172 kW (231 hp)
Gross Torque	1025 Nm (756 ft.-lb.)	979 Nm (722 ft.-lb.)	943 Nm (695 ft.-lb.)	1141 Nm (841 ft.-lb.)	1020 Nm (752 ft.-lb.)
Number of Cylinders	6	6	6	6	6
Valves per Cylinder	4	4	4	4	4
Engine Displacement	6.8 L (415 cu. in.)	6.8 L (415 cu. in.)	6.8 L (415 cu. in.)	6.8 L (415 cu. in.)	6.8 L (415 cu. in.)
Engine Bore and Stroke	106 x 127 mm (4.17 X 5.00 in.)				
Fuel System	High-pressure common rail				
Aspiration	Turbocharged and charge-air cooled				
Air Cleaner	Dual stage with safety element and dust unloader valve				
Engine Cold-Start System	Glow plugs				
Cooling	640L / 648L / 748L				
Cooling System	Heavy-duty radiator with continuous deaeration tank and recovery reservoir				
Fan Drive	Hydraulic, variable speed, reversing				
Powertrain	640L / 648L			748L	
Transmission	Continuously Variable Transmission (CVT)			CVT	
Speed Ranges, Forward and Reverse	6			6	
Maximum Travel Speed with 30.5-32 Tires	0–24.74 km/h (0–15.37 mph) — 6 speed-range configurations available			0–24.74 km/h (0–15.37 mph) — 6 speed-range configurations available	
Axles					
Front Axle Oscillation, Stop to Stop	30 deg.			30 deg.	
Options	1400 Extreme Duty and Super Wide Extreme Duty (SWEDA™)			1425 SWEDA and 1700 Outboard-Extreme™	
Differential (front and rear)	Hydraulic-locking, operated-on-the-go, closed-center differential lock			Hydraulic-locking, operated-on-the-go, closed-center differential lock	
Steering	Fully hydraulic, joystick or wheel			Fully hydraulic, joystick or wheel	
Articulation Angle	45 deg. each direction			45 deg. each direction	
Service Brakes	Inboard-mounted, wet-disc, oil-cooled, self-adjusting and self-equalizing front and rear axles				
Parking Brake	Automatically spring-applied, hydraulically released, sealed and lubricated, wet multi-disc				
Hydraulics	640L / 648L / 748L				
Main Pump	Open circuit, axial piston, variable displacement				
Maximum Displacement	60 cc/rev (3.66 ci/rev)				
Electrical System					
Voltage	24 volt				
Number of Batteries (12 volt)	2				
Battery Capacity (each)	950 CCA				
Alternator Rating	150 amp				
Lights (optional)	11				
Grapples	640L	648L		748L	
		Single Function	Dual Function	Dual Function	
Standard Capacity					
Area	N/A	1.00 m² (10.8 sq. ft.)	1.24 m² (13.3 sq. ft.)	1.48 m² (15.9 sq. ft.)	
Opening	N/A	3022 mm (119.0 in.)	3886 mm (153.0 in.)	3251 mm (128.0 in.)	
Optional Capacity					
Area	N/A	1.24 m² (13.3 sq. ft.)	1.48 m² (15.9 sq. ft.)	1.63 m² (17.5 sq. ft.)	
Opening	N/A	3226 mm (127.0 in.)	3251 mm (128.0 in.)	3886 mm (153.0 in.)	
High Capacity					
Area	N/A	N/A	1.63 m² (17.5 sq. ft.)	1.77 m² (19.1 sq. ft.)	
Opening	N/A	N/A	3226 mm (127.0 in.)	3785 mm (149.0 in.)	
Control	N/A	Joystick	Joystick	Joystick	
Refill Capacities					
Fuel Tank					
Standard	342.2 L (90.4 gal.)	342.2 L (90.4 gal.)	391.8 L (103.5 gal.)	391.8 L (103.5 gal.)	
Optional	N/A	406.9 L (107.5 gal.)	457.7 L (120.9 gal.)	457.7 L (120.9 gal.)	
Hydraulic Reservoir	123.6 L (32.6 gal.)	123.6 L (32.6 gal.)	123.6 L (32.6 gal.)	123.6 L (32.6 gal.)	
Diesel Exhaust Fluid (DEF) Tank	19.9 L (5.2 gal.)	19.9 L (5.2 gal.)	19.9 L (5.2 gal.)	19.9 L (5.2 gal.)	
Operating Weights					
Machine Weight	16 686 kg (36,787 lb.)	17 844 kg (39,340 lb.)	19 054 kg (42,009 lb.)	19 713 kg (43,460 lb.)	
Dozer Blade					
		Single Function	Dual Function	Dual Function	
Width	2192 mm (86.3 in.) or 2962.4 mm (116.6 in.)	2192 mm (86.3 in.) or 2962.4 mm (116.6 in.)	2192 mm (86.3 in.) or 2962.4 mm (116.6 in.)	2962.4 mm (116.6 in.)	
Height	687.6 mm (27.1 in.)	687.6 mm (27.1 in.)	687.6 mm (27.1 in.)	687.6 mm (27.1 in.)	



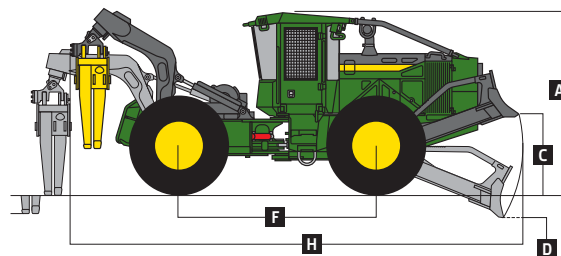
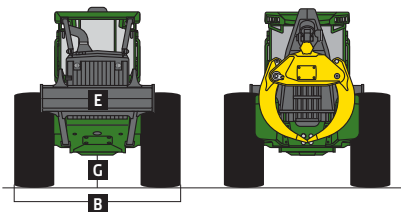
Boom Options	640L	648L	748L	
Size	N/A	2.6 m (8.5 ft.)	2.6 m (8.5 ft.)	
Winch	640L / 648L / 748L			
Winch Control	Joystick control, hydraulically driven			
Cable Capacity	4000 with 204-mm (8 in.) Drum		6000 with 279.5-mm (11 in.) Drum – 2 Speed	
15.8 mm (5/8 in.)	77.4 m (252 ft.)		119.0 m (390 ft.)	
19.1 mm (3/4 in.)	54.6 m (177 ft.)		81.4 m (267 ft.)	
22.2 mm (7/8 in.)	39.3 m (128 ft.)		60.3 m (197 ft.)	
25.4 mm (1 in.)	30.7 m (100 ft.)		46.0 m (150 ft.)	
Line Pull at Stall – 15.8-mm (5/8 in.) Cable	Bare Drum		Bare Drum	
Standard Speed	182.3 kN (41,000 lb.)		N/A	
Low Speed	N/A		221.0 kN (49,696 lb.)	
High Speed	N/A		147.3 kN (33,131 lb.)	
Winch	640L	648L / 748L		
Line Speed at 1,800 rpm – 15.8-mm (5/8 in.) Cable	4000 with 204-mm (8 in.) Drum	6000 with 279.5-mm (11 in.) Drum – 2 Speed	4000 with 204-mm (8 in.) Drum	6000 with 279.5-mm (11 in.) Drum – 2 Speed
Standard Speed	19.2 m/min. (63 fpm)	N/A	14.0 m/min. (46 fpm)	N/A
Low Speed	N/A	18.2 m/min. (60 fpm)	N/A	13.4 m/min. (44 fpm)
High Speed	N/A	27.4 m/min. (90 fpm)	N/A	20.1 m/min. (66 fpm)
Machine Dimensions	640L	648L	748L	
		Single Function	Dual Function	Dual Function
Tire Size	30.5-32	30.5-32	30.5-32	30.5-32
A Overall Height	3365 mm (132.5 in.)	3365 mm (132.5 in.)	3365 mm (132.5 in.)	3365 mm (132.5 in.)
B Overall Width	3233 mm (127.3 in.)	3233 mm (127.3 in.)	3233 mm (127.3 in.)	3239 mm (127.5 in.)
C Maximum Blade Lift Above Ground	1517 mm (59.7 in.)	1517 mm (59.7 in.)	1517 mm (59.7 in.)	1517 mm (59.7 in.)
D Maximum Blade Dig Below Ground	359 mm (14.1 in.)	359 mm (14.1 in.)	359 mm (14.1 in.)	359 mm (14.1 in.)
E Dozer Blade Width	2192 mm (86.3 in.)	2192 mm (86.3 in.)	2192 mm (86.3 in.)	2962.4 mm (116.6 in.)
Optional Dozer Blade Width	2962.4 mm (116.6 in.)	2962.4 mm (116.6 in.)	2962.4 mm (116.6 in.)	N/A
F Wheelbase	3680 mm (144.8 in.)	3680 mm (144.8 in.)	3680 mm (144.8 in.)	3925 mm (154.5 in.)
G Ground Clearance	555 mm (21.8 in.)	557 mm (21.9 in.)	557 mm (21.9 in.)	557 mm (21.9 in.)
H Overall Length*	7591 mm (298.9 in.)	7685 mm (302.5 in.)	8029 mm (316.1 in.)	8384 mm (330.0 in.)
*Length based on 2.6-m (8.5 ft.) boom				

*Length based on 2.6-m (8.5 ft.) boom

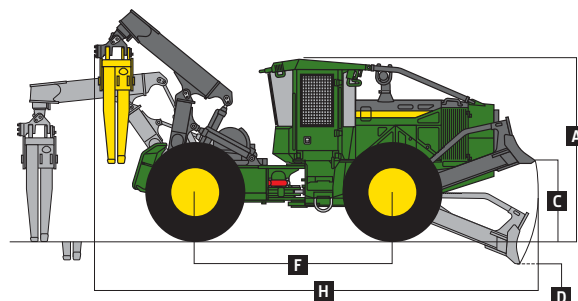
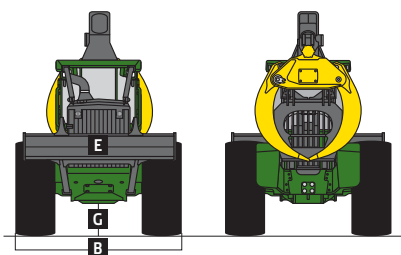
640L Skidder



648L Single-Function Grapple



648L / 748L Dual-Function Grapple



Machine not exactly as shown. Illustrations for dimensioning purposes only. Specifications are subject to change without notice.