

643L / 843L

Engine	643L	John Deere PowerTech™ 6.8L	843L	John Deere PowerTech PSS 6.8L
Manufacturer / Model	John Deere PowerTech™ PSS 6.8L	John Deere PowerTech™ 6.8L	John Deere PowerTech PSS 6.8L	John Deere PowerTech PSS 6.8L
Off-Road Emission Standards	EPA Final Tier 4 / EU Stage IV	EPA Tier 2 / EU Stage II	EPA Final Tier 4 / EU Stage IV	EPA Final Tier 4 / EU Stage IV
Gross Power	157 kW (211 hp)	157 kW (211 hp)	201 kW (270 hp)	201 kW (270 hp)
Gross Torque	923 Nm (680 ft.-lb.)	923 Nm (680 ft.-lb.)	1141 Nm (841 ft.-lb.)	1141 Nm (841 ft.-lb.)
Number of Cylinders	6			
Valves per Cylinder	4			
Engine Displacement	6.8 L (414 cu. in.)			
Engine Bore and Stroke	106 x 127 mm (4.19 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	643L / 843L			
Cooling System	Heavy-duty radiator with continuous deaeration tank and recovery reservoir			
Fan Drive	Hydraulic, variable speed, reversing			
Powertrain				
Transmission	Infinite variable hydrostatic with 2-speed gearbox			
Number of Gears, Forward and Reverse	2			
Maximum Speed with 28L-26 Tires				
Low Gear	8.0 km/h (5.0 mph)			
High Gear	17.5 km/h (10.8 mph)			
Axles				
Front Axle Oscillation, Stop to Stop	30 deg.			
Options	1400 Extreme Duty and SWEDA™			
Differential (front and rear)	Hydraulic-locking, operated-on-the-go, closed-center differential lock			
Steering	Fully hydraulic, joystick			
Articulation Angle	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				
Main Pump	Open circuit, axial piston, variable displacement			
Maximum Displacement	90 cc/rev. (5.49 ci/rev.)			
Electrical System				
Voltage	24 volt			
Number of Batteries (12 volt)	2			
Battery Capacity (each)	950 CCA			
Alternator Rating	150 amp			
Lights	6 (10 optional)			
Refill Capacities				
Fuel Tank	396 L (104.6 gal.)			
Hydraulic Reservoir	169.1 L (44.7 gal.)			
Diesel Exhaust Fluid (DEF) Tank	20.9 L (5.5 gal.)			
Operating Weights				
Machine Weight (less felling head)	13 910 kg (30,704 lb.)			
With Saw, FD45	16 383 kg (36,120 lb.)			
With Saw, FD22B	17 081 kg (37,659 lb.)			
With Saw, FD55	17 000 kg (37,480 lb.)			

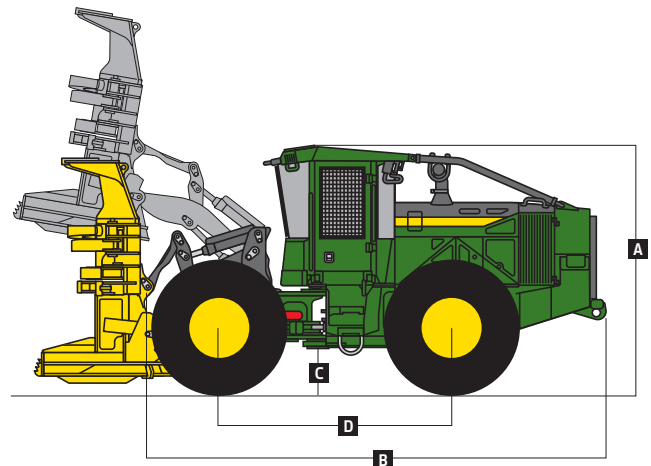
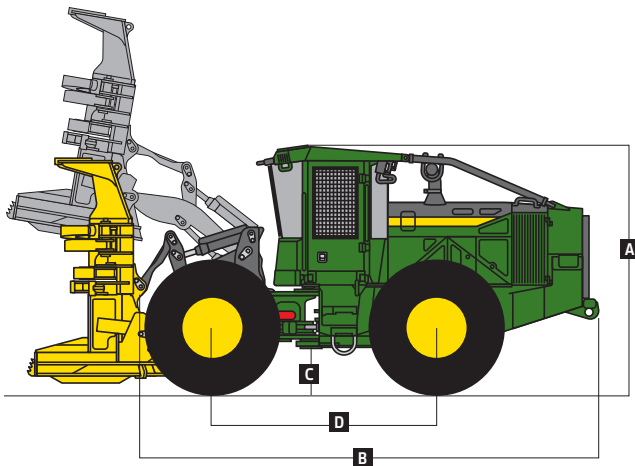
Specifications are subject to change without notice.



Machine Dimensions		643L	843L
Tire Size		28L-26	28L-26
A	Overall Height	3216 mm (126.6 in.)	3216 mm (126.6 in.)
	Overall Width (with 711-mm [28 in.] tires [1400 axles])	2913 mm (114.7 in.)	2913 mm (114.7 in.)
B	Overall Length (less felling head)	6293 mm (247.7 in.)	6293 mm (247.7 in.)
C	Ground Clearance	484 mm (19 in.)	484 mm (19 in.)
D	Wheelbase	3023 mm (119 in.)	3175 mm (125 in.)
Felling Head Information		643L / 843L	
Head		<i>FD45 DSFH – Twin Post</i>	<i>FD22B DSFH – Single Post</i>
	Maximum Cutting Capacity	508 mm (20.0 in.)	559 mm (22.0 in.)
	Maximum Accumulation Capacity	0.65 m ² (7.0 sq. ft.)	0.48 m ² (5.2 sq. ft.)
	Opening at Front of Housing	864 mm (34.0 in.)	1290 mm (50.8 in.)
	Blade Diameter	1346 mm (53.0 in.)	1422 mm (56.0 in.)
	Number of Teeth	18	18
	Width at Saw Housing	1582 mm (62.3 in.)	1618 mm (63.7 in.)
	Height	2515 mm (99.0 in.)	2954 mm (116.3 in.)
	Weight (no blade cover or tilt links)	2424 kg (5,345 lb.)	3071 kg (6,770 lb.)

643L Wheeled Feller Buncher

843L Wheeled Feller Buncher



Machine not exactly as shown. Illustrations for dimensioning purposes only.