



850J-II SPECIFICATIONS

Engine		850J-II with Outside-Dozer (OSD) Blade /850J-II WLT and 850J-II LGP with Power/Angle/Tilt (PAT) Blade		
Manufacturer and Model	John Deere PowerTech™ 6068 with Exhaust Gas Recirculation (EGR)	John Deere PowerTech™ Plus 6068 with EGR	John Deere PowerTech Plus 6090 with EGR	John Deere PowerTech Plus 6090 with EGR
Non-Road Emission Standard	EU Stage II emissions	EU Stage IIIA and Brazil MAR-I emissions	EU Stage IIIA and Brazil MAR-I emissions	EU Stage IIIA and Brazil MAR-I emissions
Cylinders	6	6	6	6
Displacement	6.8 L (414 cu. in.)	6.8 L (414 cu. in.)	9.0 L (548 cu. in.)	9.0 L (548 cu. in.)
SAE Net Rated Power	153 kW (205 hp) at 1,800 rpm	153 kW (205 hp) at 1,800 rpm	153 kW (205 hp) at 1,800 rpm	153 kW (205 hp) at 1,800 rpm
Net Peak Torque	915 Nm (675 lb.-ft.) at 1,500 rpm	915 Nm (675 lb.-ft.) at 1,500 rpm	915 Nm (675 lb.-ft.) at 1,500 rpm	915 Nm (675 lb.-ft.) at 1,500 rpm
Aspiration	Turbocharged with charge-air cooler	Turbocharged with charge-air cooler	Turbocharged with charge-air cooler	Turbocharged with charge-air cooler
Lubrication	Pressure system with full-flow spin-on filter and oil-to-water cooler	Pressure system with full-flow spin-on filter and oil-to-water cooler	Pressure system with full-flow spin-on filter and oil-to-water cooler	Pressure system with full-flow spin-on filter and oil-to-water cooler
Air Cleaner	Dual-stage dry type with tangential unloader	Dual-stage dry type with tangential unloader	Dual-stage dry type with tangential unloader	Dual-stage dry type with tangential unloader
Slope Operation, Maximum Angle	45 deg. fore-aft / 30 deg. side slope	45 deg. fore-aft / 30 deg. side slope	45 deg. fore-aft / 30 deg. side slope	45 deg. fore-aft / 30 deg. side slope
Cooling		850J-II / 850J-II WLT / 850J-II LGP		
Type	Variable-speed suction fan	Engine Coolant Rating	-37 deg. C. (-34 deg. F)	
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 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	45 850 kPa (6,650 psi)			
Travel Speeds	Forward and Reverse	9.7 km/h (6.0 mph)	Maximum (optional)	10.9 km/h (6.8 mph)
Steering	Single-lever steering, speed, 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			
Final Drives	Double-reduction, planetary final drives transfer torque loads over 3 gear sets; mounted independently of track frames and dozer push frames for isolation from shock loads			
Total Ratio	44.7 to 1			
Drawbar Pull	Maximum	344 kN (77,300 lb.)	At 1.9 km/h (1.2 mph)	178 kN (40,000 lb.)
			At 3.2 km/h (2.0 mph)	131 kN (29,500 lb.)
Brakes	Service	HST (dynamic) braking stops machine when the direction/steering control lever is moved to neutral or the decelerator is depressed to the end of travel		
	Parking	Exclusive safety feature engages wet, multiple-disc brakes whenever the engine stops, the decelerator is depressed to the end of travel, or the park-lock lever is placed in the start or neutral positions and motion is detected; machine cannot be driven with brake applied, reducing wear-out or need for adjustment; spring-applied hydraulic release		
Hydraulics		850J-II		
Blade Type	OSD	850J-II WLT / 850J-II LGP		
Type	Load-sense, piston pump	PAT		
Pump, 74-cc	174 L/m (46 gpm)	Load-sense, piston pump		
System Relief Pressure	24 993 kPa (3,625 psi)	174 L/m (46 gpm)		
Differential Pressure	1896 kPa (275 psi)	24 993 kPa (3,625 psi)		
Maximum Flow at Unloaded High Idle	163 L/m (43 gpm)	1896 kPa (275 psi)		
Control	T-bar hydraulic-pilot 2-function joystick	163 L/m (43 gpm)		
		T-bar hydraulic-pilot 2-function joystick with push-button angle function		
Cylinders		850J-II / 850J-II WLT / 850J-II LGP		
Type	Heat-treated, chrome-plated, polished cylinder rods; hardened steel (replaceable bushings) pivot pins			
Electrical				
Voltage	24 volts			
Capacity	Battery	950 CCA	Reserve	190 min.
Alternator Rating	Cab	80 amp	Canopy	55 amp
Lights	Grille mounted (2), rear mounted (1), and rear reflectors (2)			
Undercarriage		850J-II		850J-II WLT
Tracks	Track frame with front and rear track guides and sprocket guard; John Deere Dura-Trax™ features large deep-heat-treated, sealed, and lubricated track links and through-hardened, sealed, and lubricated rollers for maximum wear resistance; sprockets are segmented; extreme-duty shoes are available (on some models) for severe applications			
Track Gauge, Standard	1880 mm (74 in.)	2235 mm (88 in.)	2388 mm (94 in.)	
Grouser Width, Closed Center, Single Bar	610 mm (24 in.)	762 mm (30 in.)	914 mm (36 in.)	
Chain	Sealed and lubricated			
Shoes, Each Side	40	45	45	
Track Rollers, Single Flange, Each Side	7	8	8	
Track Length on Ground	2769 mm (109 in.)	3284 mm (129 in.)	3284 mm (129 in.)	
Ground Contact Area	33 755 cm ² (5,232 sq. in.)	50 052 cm ² (7,758 sq. in.)	60 064 cm ² (9,310 sq. in.)	
Ground Pressure, Outside Dozer (OSD)	52.5 kPa (7.61 psi)	39.0 kPa (5.65 psi)	33.3 kPa (4.83 psi)	
Track Pitch	203 mm (8 in.)	203 mm (8 in.)	203 mm (8 in.)	
Oscillation at Front Roller	±114 mm (±4.5 in.)	±166.5 mm (±6.5 in.)	±168 mm (±6.6 in.)	
Blades		850J-II		850J-II WLT
Blade Type	OSD with Semi-U	PAT		PAT
Weight	1326 kg (2,923 lb.)	1330 kg (2,932 lb.)		1397 kg (3,080 lb.)
Length	3251 mm (128 in. / 10 ft. 8 in.)	4013 mm (158 in. / 13 ft. 2 in.)		4267 mm (168 in. / 14 ft. 0 in.)
Capacity	5.57 m ³ (7.29 cu. yd.)	4.26 m ³ (5.57 cu. yd.)		4.49 m ³ (5.87 cu. yd.)

Straight end bits included in weights.

850J-II SPECIFICATIONS



Operator Station 850J-II / 850J-II WLT / 850J-II LGP

ROPS (ISO 3471 – 2008) and FOPS (ISO 3449 – 2005)

Serviceability 850J-II 850J-II WLT 850J-II LGP

ROPS (ISO 3471 – 2008) and FOPS (ISO 3449 – 2005)			
Fuel Tank with Lockable Cap	371 L (98 gal.)	371 L (98 gal.)	371 L (98 gal.)
Cooling System with Recovery Tank	35 L (9.2 gal.)	35 L (9.2 gal.)	35 L (9.2 gal.)
Engine Oil with Filter	26 L (7 gal.)	26 L (7 gal.)	26 L (7 gal.)
Reservoir with Filter			
Transmission	106 L (28 gal.)	106 L (28 gal.)	106 L (28 gal.)
Hydraulic	106 L (28 gal.)	106 L (28 gal.)	106 L (28 gal.)
Final Drive (per tractor)			
Inner	19 L (5 gal.)	31.8 L (8.4 gal.)	37.8 L (10 gal.)
Outer	31.8 L (8.4 gal.)	31.8 L (8.4 gal.)	31.8 L (8.4 gal.)

Operating Weights 850J-II 850J-II WLT 850J-II LGP

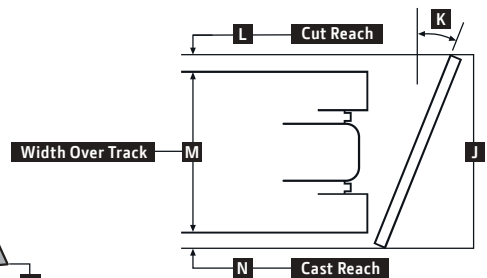
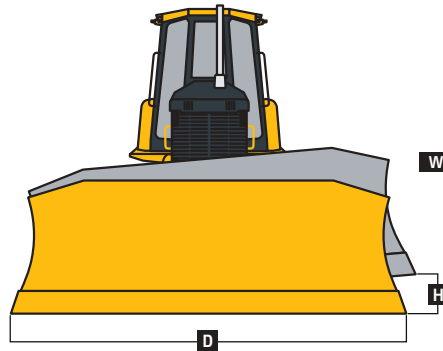
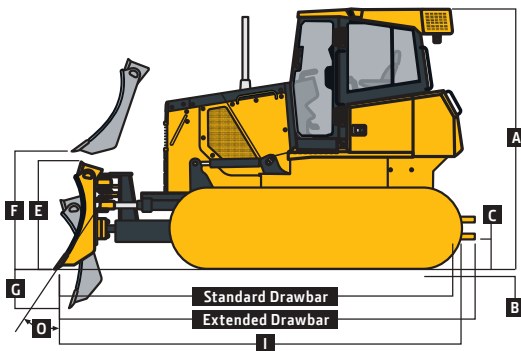
Blade Type	850J-II	850J-II WLT	850J-II LGP
Blade Type	OSD	PAT	PAT
Base Weight (with standard equipment, rollover protective structure [ROPS], full fuel tank, and 79-kg [175 lb.] operator)	18 219 kg (40,165 lb.)	20 060 kg (44,225 lb.)	20 146 kg (44,414 lb.)

Machine Dimensions

A Overall Height to Roof	3175 mm (125 in. / 10 ft. 5 in.)	3175 mm (125 in. / 10 ft. 5 in.)	3175 mm (125 in. / 10 ft. 5 in.)
Overall Height to Exhaust Stack	3188 mm (125.5 in. / 10 ft. 5.5 in.)	3188 mm (125.5 in. / 10 ft. 5.5 in.)	3188 mm (125.5 in. / 10 ft. 5.5 in.)
B Tread Depth with Single-Bar Grouser			
Moderate Duty	66 mm (2.6 in.)	66 mm (2.6 in.)	66 mm (2.6 in.)
Extreme Duty	71 mm (2.8 in.)	71 mm (2.8 in.)	71 mm (2.8 in.)
C Ground Clearance with Grousers	409 mm (16.1 in.)	409 mm (16.1 in.)	409 mm (16.1 in.)
D Blade Width	3251 mm (128 in. / 10 ft. 8 in.)	4013 mm (158 in. / 13 ft. 2 in.)	4267 mm (168 in. / 14 ft. 0 in.)
E Blade Height	1422 mm (56 in. / 4 ft. 8 in.)	1229 mm (48 in. / 4 ft. 0 in.)	1229 mm (48 in. / 4 ft. 0 in.)
F Blade Lift Height	1151 mm (45 in. / 3 ft. 9 in.)	1072 mm (42 in. / 3 ft. 6 in.)	1072 mm (42 in. / 3 ft. 6 in.)
G Blade Digging Depth	599 mm (24 in.)	704 mm (28 in.)	704 mm (28 in.)
H Blade Tilt (uses tilt jack)	753 mm (30 in.)	533 mm (21 in.)	572 mm (23 in.)
I Overall Length with Blade	5384 mm (212 in. / 17 ft. 8 in.)	5740 mm (226 in. / 18 ft. 10 in.)	5740 mm (226 in. / 18 ft. 10 in.)

Machine Dimensions (continued) 850J-II 850J-II WLT 850J-II LGP

Blade Type	850J-II	850J-II WLT	850J-II LGP
Blade Type	OSD	PAT	PAT
J Overall Width with Blade Angled	—	3658 mm (144 in. / 12 ft. 0 in.)	3901 mm (154 in. / 12 ft. 10 in.)
K Blade Angle	—	23.8 deg.	23.8 deg.
L Cut Reach	—	145 mm (5.7 in.)	109 mm (4.3 in.)
M Width Over Track	2489 mm (98 in. / 8 ft. 2 in.)	2997 mm (118 in. / 9 ft. 10 in.)	3302 mm (130 in. / 10 ft. 10 in.)
N Cast Reach	—	271 mm (10.7 in.)	234 mm (9.2 in.)
O Cutting Edge Angle	51.5–61 deg.	55.1–60.2 deg.	55.1–60.2 deg.



Rear Ripper 850J-II / 850J-II WLT / 850J-II LGP

Multi-shank (3) parallelogram ripper with hydraulic pitch adjustment and ESCO® ripper tips

Weight	2032 kg (4,480 lb.)
P Maximum Penetration	723.9 mm (28.5 in.)
Q Maximum Clearance Under Tip	610 mm (24 in.)
R Overall Length (lowered position)	1626 mm (5 ft. 4 in.)
R^l Overall Length (raised position)	1525 mm (5 ft. 0 in.)
S Overall Beam Width	2400 mm (7 ft. 10 in.)
T Slope Angle (full raise)	24 deg.
U Ripping Width	2146 mm (7 ft. 1 in.)
V Distance Between Shanks	1041 mm (3 ft. 5 in.)

