

850 P

Dozer



JOHN DEERE



PACKED TO POWER YOUR PRODUCTIVITY

When you work in site development, roadbuilding, or aggregates, you need to get the most from your equipment and your operators. We've relied on input from real-world customers like you to design and manufacture our dozers for nearly 75 years. The John Deere 850 P-Tier features some of your best ideas, like impressive horsepower and torque, reliable systems and components, and flexible grade-control solutions that can be easily and economically upgraded. And because retaining skilled and productive operators is a priority, we've made the operating experience a main attraction of what the 850 P-Tier Dozer has to offer.

Take control in comfort

Designed to elevate operator comfort, the next-generation cab features ergonomic controls arranged to minimize hand and arm movements, advanced touchscreen displays with configurable settings, and optional automatic temperature control (ATC) system. Both the standard deluxe fabric-covered seat and optional premium leather-accented heated/ventilated seat are angled to maximize comfort when making ripping passes.

Muscle meets performance

With its 9.0L engine that delivers a whopping 225 horsepower plus 23-percent more peak torque than some earlier models, the 850 P-Tier is equipped to carry large loads far and fast. Standard Eco mode automatically adjusts engine speed and powertrain settings based on load, to optimize fuel efficiency compared to standard operating mode, without loss of performance.

Be aware of what's there

To enhance awareness for confident navigation of busy work areas, optional rearview (backup) camera helps the operator see what's behind the dozer on the in-cab monitor. Optional Advanced Vision System (AVS) includes two digital cameras mounted on the exterior left and right cab-light brackets plus an additional camera mounted to the front grille that integrate with the rearview (backup) camera for a single display on a dedicated in-cab monitor.

Put progress on display

Standard on electrohydraulic configurations, eight-inch touchscreen primary display reveals machine health and configurable settings plus rearview (backup) camera (if equipped). Secondary 12.8-inch display for navigating the grade-control interface is added when the machine is outfitted with SmartGrade™ Ready Including 2D Grade Control.





GRADE-MANAGEMENT SOLUTIONS

Our suite of factory-integrated grade-management technologies including standard EZ Grade and optional SmartGrade Ready Including 2D Grade Control, SmartGrade with Topcon, and SmartGrade with Leica simplify difficult grading tasks. These intuitive offerings are easy for operators of any experience level to master. All technology solutions are fully supported by the John Deere dealer network and can be efficiently upgraded as your operation evolves:

- **EZ Grade** aids operators in manually grading smooth finish passes by making small blade corrections automatically.
- **SmartGrade Ready Including 2D Grade Control** includes entry-level slope-control solutions and plug-and-play laser. Slope control assists in grading and maintaining flat, smooth, and sloping surfaces. Operators can view and set blade slope while the system automatically controls the blade to a desired slope. SmartGrade Ready also recognizes plugged-in laser receivers and activates the plug-and-play laser that enables operators to automatically control the blade to a specific slope and elevation using a rotating laser.
- Fully integrated **SmartGrade** features next-generation components and integration, enabling the highest levels of productivity and grading performance. SmartGrade is available in your choice of Topcon or Leica packages. SmartGrade enhancements for jobsites requiring tighter tolerances or with limited GNSS coverage include capabilities for integrated total-station control.
- **Electrohydraulic (EH) controls** make it easy to add the grade-control system of your choice.



GRADE-MANAGEMENT OPTIONS
**STREAMLINE GRADING
TASKS & LEARNING CURVES**

Hit the ground running

Eight-roller, 130-inch undercarriage puts maximum track on the ground to optimize machine stability and fine-grading capability.

Grade on the wide side

At 172 inches, the power-angle-tilt (PAT) blade is the widest in its class — helping to increase productivity, especially for grading applications on larger jobsites. A thumb roller on the right joystick enables precise, proportional control of PAT blade angle.

Hydrostatic dynamics

The John Deere hydrostatic system simplifies operation and redefines durability. Each track has its own independent hydrostatic pump and motor, and the blade and ripper functions have their own independent hydraulic pump, allowing both transmission and hydraulic operating characteristics to be tailored to individual preference without sacrificing hydraulic speed. And heavy loads can be carried through turns and counter-rotations while the dozer is in gear or neutral.

Ready for rugged

The 850 P-Tier retains the thick sheet metal, heavy-duty mainframe, and robust c-frame-to-mainframe joint of its proven 850L predecessor. A durable heavy-duty undercarriage comes standard. Or opt for Extended Life undercarriage with SC-2™-treated bushings, a proven parts coating that delivers up to twice the wear life.

Service is no big deal

Simplified routing of the electrical and hydraulic systems is designed for reliability and ease of maintenance. Operator station that tilts 65 degrees and enlarged service doors provide quick access to main components and checkpoints. Hydraulic and hydrostatic oil-change intervals extended from 2,000 to 4,000 hours help further minimize maintenance and expense.



172" PAT BLADE
WIDEST IN ITS CLASS



850 P-TIER DOZER



Now you mean business

Configurations including mechanical-angle blade plus forestry and waste-handler packages let you put this versatile dozer to work in a variety of specialized applications.

Connected machines

John Deere construction equipment comes with in-base connectivity — free from subscriptions or annual renewals. Analyze critical machine data, track utilization, review diagnostic alerts, and more from **the John Deere Operations Center™**. The Operations Center also enables John Deere Connected Support™, which uses data from thousands of connected machines to proactively address issues before they arise. With your approval, your dealer can also remotely monitor machine health, diagnose problems, and even update machine software without a trip to the jobsite.*

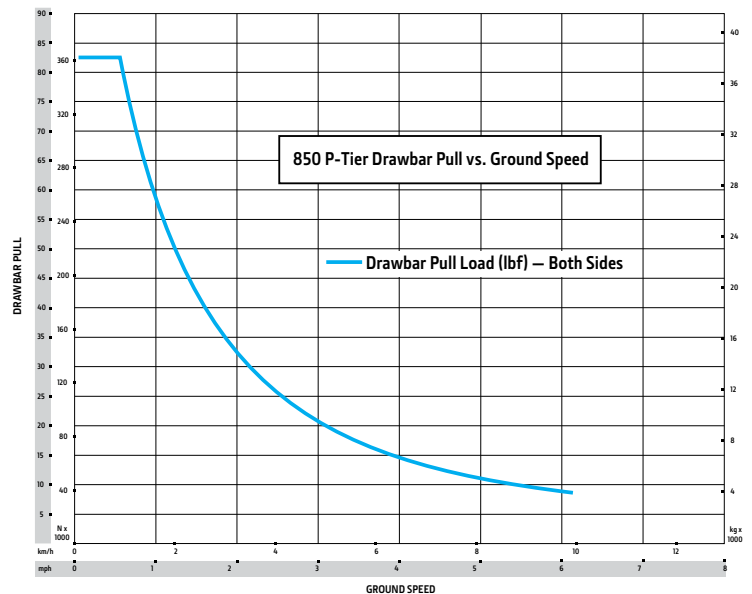
* Availability varies by region and product. Options not available in every country.





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Engine	850 P-TIER XLT / 850 P-TIER WLT / 850 P-TIER LGP	
Blade Type	Power-Angle-Tilt (PAT) / Outside Dozer (OSD)	
Manufacturer and Model	John Deere JD9	
Non-Road Emission Standard	EPA Final Tier 4/EU Stage V	
Displacement	9.0L (549 cu. in.)	
SAE Net Rated Power	168 kW (225 hp) at 1,700 rpm	
Aspiration	Turbocharged and air-to-air aftercooled	
Air Cleaner	Dual-element dry canister with external rotary ejector precleaner	
Cooling		
Type	Variable-speed suction fan with automatic reversing	
Engine Coolant Rating	-37 deg. C (-34 deg. F)	
Engine Radiator	7 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 motor combination; ground-speed selection buttons on single-lever steering and direction control; reverse speed ratio is fully operator customizable; decelerator pedal provides infinite speed control from full speed to complete stop	
System Relief Pressure	47 574 kPa (6,900 psi)	
Travel Speeds		
Forward and Reverse	9.7 km/h (6.0 mph)	
Maximum (operator selectable)	11.0 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 mounted independently of track frames and dozer push frames for isolation from shock loads	
Total Ratio	44.75 to 1	
Drawbar Pull		
Maximum	365 kN (82,000 lb.)	
At 1.9 km/h (1.2 mph)	226 kN (50,700 lb.)	
At 3.2 km/h (2.0 mph)	143 kN (32,000 lb.)	
Brakes	Decelerator/brake pedal; automatic power management with manual override for matching ground speed	
Service	HST (dynamic) braking stops the machine whenever 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 motion is detected while the transmission control is in neutral; machine cannot be driven with brake applied, minimizing wearout; spring applied, hydraulic release	
Hydraulics		
Blade Type	PAT	OSD
Type	Open-center load-sense hydraulic system with variable-displacement piston pump	
Pump Displacement	74 cc	74 cc
System Relief Pressure	24 993 kPa (3,625 psi)	24 993 kPa (3,625 psi)
Differential Pressure	1896 kPa (275 psi)	1896 kPa (275 psi)
Maximum Flow at Unloaded High Idle	155 L/m (41 gpm)	155 L/m (41 gpm)
Control	3-function electrohydraulic (EH) joystick with proportional roller-angle function	3-function EH joystick with proportional roller for optional power-pitch function
High-Flow Pump Option		
Pump Displacement	100 cc	100 cc
Maximum Flow at Unloaded High Idle	209 L/m (55 gpm)	209 L/m (55 gpm)
Electrical		
Blade Type	PAT / OSD	
Voltage	24 volts	
Capacity		
Battery	950 CCA	
Reserve	190 min.	
Alternator Rating	130 amp	



850 P-TIER DOZER SPECIFICATIONS

850

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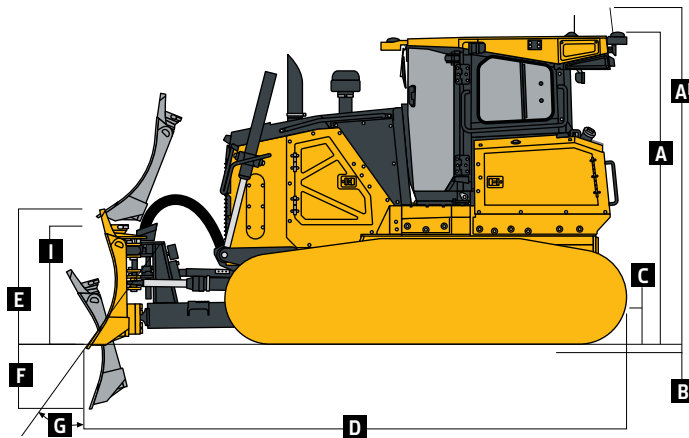
Electrical (continued)		850 P-TIER XLT / 850 P-TIER WLT / 850 P-TIER LGP						
		PAT / OSD						
Lights								
LED		Cab-mounted front (2) and cab-mounted rear (2)						
Premium LED		Cab-mounted front (4) and cab-mounted rear (4)						
Undercarriage	850 P-TIER XLT	850 P-TIER WLT	850 P-TIER LGP	850 P-TIER XLT	850 P-TIER WLT	850 P-TIER LGP		
Blade Type	PAT	PAT	PAT	OSD	OSD	OSD		
Tracks	Track frame with front and rear track guides and sprocket guard; John Deere DuraTrax™ features 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	2134 mm (84 in.)	2286 mm (90 in.)	2438 mm (96 in.)	1880 mm (74 in.)	2032 mm (80 in.)	2184 mm (86 in.)		
Grouser Width	610 mm (24 in.)	760 mm (30 in.)	910 mm (36 in.)	610 mm (24 in.)	760 mm (30 in.)	910 mm (36 in.)		
Chain	Sealed and lubricated		Sealed and lubricated		Sealed and lubricated			
Shoes, Each Side	45	45	45	45	45	45		
Track Rollers, Each Side	8	8	8	8	8	8		
Track Length on Ground	3300 mm (130 in.)	3300 mm (130 in.)	3300 mm (130 in.)	3300 mm (130 in.)	3300 mm (130 in.)	3300 mm (130 in.)		
Ground Contact Area	44 115 cm² (6,838 sq. in.)	54 963 cm² (8,519 sq. in.)	65 811 cm² (10,200 sq. in.)	44 115 cm² (6,838 sq. in.)	54 963 cm² (8,519 sq. in.)	65 811 cm² (10,200 sq. in.)		
Ground Pressure (ISO 16754)	49.1 kPa (7.1 psi)	40.4 kPa (5.9 psi)	34.4 kPa (5.0 psi)	47.9 kPa (6.9 psi)	39.7 kPa (5.8 psi)	34.4 kPa (5.0 psi)		
Track Pitch	203 mm (8 in.)	203 mm (8 in.)	203 mm (8 in.)	203 mm (8 in.)	203 mm (8 in.)	203 mm (8 in.)		
Oscillation at Front Roller	±168 mm (±6.6 in.)	±166.5 mm (±6.5 in.)	±168 mm (±6.6 in.)	±114 mm (±4.5 in.)	±114 mm (±4.5 in.)	±168 mm (±6.6 in.)		
Operator Station	850 P-TIER XLT / 850 P-TIER WLT / 850 P-TIER LGP							
Blade Type	PAT / OSD							
ROPS (ISO 3471 – 2008)								
Serviceability								
Refill Capacities			Refill Capacities (continued)					
Fuel Tank With Lockable Cap	439 L (116 gal.)		Reservoir With Filter					
Cooling System With Recovery Tank	39.7 L (10.5 gal.)		Transmission		105 L (27.6 gal.)			
Engine Oil With Filter	25 L (6.6 gal.)		Hydraulic		117 L (30.9 gal.)			
			Diesel Exhaust Fluid (DEF) Reservoir		23.7 L (6.3 gal.)			
Operating Weights	850 P-TIER XLT	850 P-TIER WLT	850 P-TIER LGP		850 P-TIER XLT	850 P-TIER WLT	850 P-TIER LGP	
Blade Type	PAT	PAT	PAT		OSD	OSD	OSD	
Base Weight (with standard equipment, rollover protective structures [ROPS], full fuel tank, and 79-kg [175 lb.] operator)	22 126 kg (48,779 lb.)	22 793 kg (50,250 lb.)	22 827 kg (50,325 lb.)	23 275 kg (51,313 lb.)	23 299 kg (51,365 lb.)	21 581 kg (47,578 lb.)	22 407 kg (49,400 lb.)	23 295 kg (51,356 lb.)
Optional Components								
Front and Door Screens	50 kg (110 lb.)	50 kg (110 lb.)	50 kg (110 lb.)	50 kg (110 lb.)	50 kg (110 lb.)	50 kg (110 lb.)	50 kg (110 lb.)	50 kg (110 lb.)
Rear Screen	20 kg (44 lb.)	20 kg (44 lb.)	20 kg (44 lb.)	20 kg (44 lb.)	20 kg (44 lb.)	20 kg (44 lb.)	20 kg (44 lb.)	20 kg (44 lb.)
Side Screens	36 kg (78 lb.)	36 kg (78 lb.)	36 kg (78 lb.)	36 kg (78 lb.)	36 kg (78 lb.)	36 kg (78 lb.)	36 kg (78 lb.)	36 kg (78 lb.)
Condenser Guard (cab with air conditioner)	53 kg (117 lb.)	53 kg (117 lb.)	53 kg (117 lb.)	53 kg (117 lb.)	53 kg (117 lb.)	53 kg (117 lb.)	53 kg (117 lb.)	53 kg (117 lb.)
Limb Risers	481 kg (1,061 lb.)	481 kg (1,061 lb.)	481 kg (1,061 lb.)	481 kg (1,061 lb.)	481 kg (1,061 lb.)	481 kg (1,061 lb.)	481 kg (1,061 lb.)	481 kg (1,061 lb.)
Heavy-Duty Grille	30 kg (80 lb.)	30 kg (80 lb.)	30 kg (80 lb.)	30 kg (80 lb.)	30 kg (80 lb.)	30 kg (80 lb.)	30 kg (80 lb.)	30 kg (80 lb.)
Counterweight								
Front	355 kg (783 lb.)	355 kg (783 lb.)	355 kg (783 lb.)	355 kg (783 lb.)	355 kg (783 lb.)	355 kg (783 lb.)	355 kg (783 lb.)	355 kg (783 lb.)
Rear	449 kg (990 lb.)	449 kg (990 lb.)	449 kg (990 lb.)	449 kg (990 lb.)	449 kg (990 lb.)	449 kg (990 lb.)	449 kg (990 lb.)	449 kg (990 lb.)
Retrieval Hitch	52 kg (114 lb.)	52 kg (114 lb.)	52 kg (114 lb.)	52 kg (114 lb.)	52 kg (114 lb.)	52 kg (114 lb.)	52 kg (114 lb.)	52 kg (114 lb.)
Drawbar, Extended Rigid	130 kg (286 lb.)	130 kg (286 lb.)	130 kg (286 lb.)	130 kg (286 lb.)	130 kg (286 lb.)	130 kg (286 lb.)	130 kg (286 lb.)	130 kg (286 lb.)
Center Chain Guides	85 kg (188 lb.)	85 kg (188 lb.)	85 kg (188 lb.)	85 kg (188 lb.)	85 kg (188 lb.)	85 kg (188 lb.)	85 kg (188 lb.)	85 kg (188 lb.)
Full-Length Rock Guards	242 kg (534 lb.)	242 kg (534 lb.)	242 kg (534 lb.)	242 kg (534 lb.)	242 kg (534 lb.)	222 kg (490 lb.)	222 kg (490 lb.)	242 kg (534 lb.)
Pre-Cleaner, Powered Cab Air	3 kg (7 lb.)	3 kg (7 lb.)	3 kg (7 lb.)	3 kg (7 lb.)	3 kg (7 lb.)	3 kg (7 lb.)	3 kg (7 lb.)	3 kg (7 lb.)
Track Shoes								
610-mm (24 in.) Moderate Duty	In base	–414 kg (–913 lb.)	–414 kg (–913 lb.)	–846 kg (–1,865 lb.)	–846 kg (–1,865 lb.)	In base	–414 kg (–913 lb.)	–846 kg (–1,865 lb.)
610-mm (24 in.) Extreme Duty	333 kg (734 lb.)	–81 kg (–179 lb.)	–81 kg (–179 lb.)	–513 kg (–1,131 lb.)	–513 kg (–1,131 lb.)	333 kg (734 lb.)	–81 kg (–179 lb.)	–513 kg (–1,131 lb.)
760-mm (30 in.) Moderate Duty	—	In base	In base	–432 kg (–952 lb.)	–432 kg (–952 lb.)	—	In base	–432 kg (–952 lb.)
760-mm (30 in.) Extreme Duty	—	459 kg (1,012 lb.)	459 kg (1,012 lb.)	27 kg (60 lb.)	27 kg (60 lb.)	—	459 kg (1,012 lb.)	27 kg (60 lb.)
910-mm (36 in.) Moderate Duty	—	—	—	In base	In base	—	—	In base
910-mm (36 in.) Extreme Duty	—	—	—	531 kg (1,171 lb.)	531 kg (1,171 lb.)	—	—	531 kg (1,171 lb.)

850 P-TIER

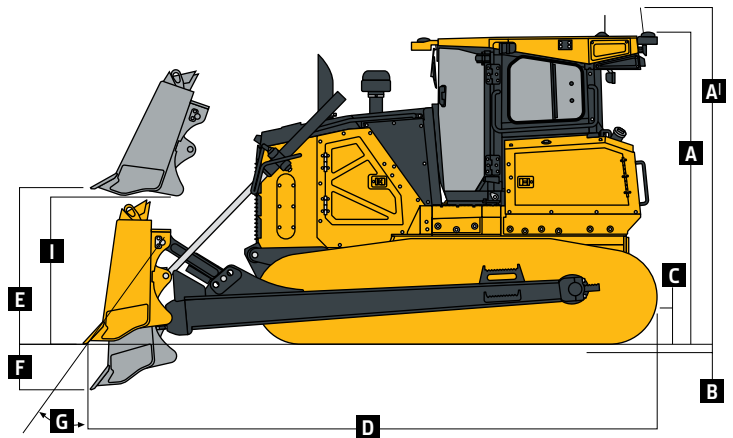
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Operating Weights <i>(continued)</i>		850 P-TIER			850 P-TIER LGP		850 P-TIER	850 P-TIER	850 P-TIER
Blade Type		XLT	850 P-TIER WLT		PAT		XLT	WLT	LGP
Waste Handler		Power-Angle-Tilt (PAT)			PAT		Outside Dozer (OSD)		OSD
Waste-Handler Grille		—	—	—	—20.5 kg (–45 lb.)	—	—	—	–20.5 kg (–45 lb.)
Heavy-Duty (HD) Fender Guards		211 kg (466 lb.)	211 kg (466 lb.)	211 kg (466 lb.)	211 kg (466 lb.)	211 kg (466 lb.)	235 kg (518 lb.)	235 kg (518 lb.)	235 kg (518 lb.)
Final-Drive Trash Guards		70 kg (155 lb.)	70 kg (155 lb.)	70 kg (155 lb.)	70 kg (155 lb.)	70 kg (155 lb.)	70 kg (155 lb.)	70 kg (155 lb.)	70 kg (155 lb.)
Rotary Ejector Engine Air		9 kg (20 lb.)	9 kg (20 lb.)	9 kg (20 lb.)	9 kg (20 lb.)	9 kg (20 lb.)	9 kg (20 lb.)	9 kg (20 lb.)	9 kg (20 lb.)
Blade Trash Rack		—	—	—	208 kg (458 lb.)	—	—	—	269 kg (593 lb.)
Striker Bars									
Front		—	—	—	60 kg (132 lb.)	—	—	—	76 kg (168 lb.)
With Storage Box, Rear		—	—	—	720 kg (1,584 lb.)	—	—	—	720 kg (1,584 lb.)
Machine Dimensions		850 P-TIER XLT	850 P-TIER WLT		850 P-TIER LGP		850 P-TIER XLT	850 P-TIER WLT	850 P-TIER LGP
Blade Type	PAT	PAT	PAT	PAT	OSD	OSD	OSD	OSD	Mechanical Angle
A Overall Height to Roof (includes antenna base and grouser height)*	3344 mm (11 ft. 0 in.)*	3344 mm (11 ft. 0 in.)*	3344 mm (11 ft. 0 in.)*	3344 mm (11 ft. 0 in.)*	3344 mm (11 ft. 0 in.)*	3344 mm (11 ft. 0 in.)*	3344 mm (11 ft. 0 in.)*	3344 mm (11 ft. 0 in.)*	3344 mm (11 ft. 0 in.)*
A ¹ Overall Height With Limb Risers (includes grousers)*	3438 mm (11 ft. 3 in.)*	3438 mm (11 ft. 3 in.)*	3438 mm (11 ft. 3 in.)*	3438 mm (11 ft. 3 in.)*	3438 mm (11 ft. 3 in.)*	3438 mm (11 ft. 3 in.)*	3438 mm (11 ft. 3 in.)*	3438 mm (11 ft. 3 in.)*	3438 mm (11 ft. 3 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.)	66 mm (2.6 in.)	66 mm (2.6 in.)	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.)	71 mm (2.8 in.)	71 mm (2.8 in.)	71 mm (2.8 in.)	71 mm (2.8 in.)	71 mm (2.8 in.)
C Ground Clearance in Dirt	394 mm (15.5 in.)	394 mm (15.5 in.)	394 mm (15.5 in.)	394 mm (15.5 in.)	394 mm (15.5 in.)	394 mm (15.5 in.)	394 mm (15.5 in.)	394 mm (15.5 in.)	394 mm (15.5 in.)
D Overall Length	5727 mm (225 in.) (18 ft. 9.5 in.)	5727 mm (225 in.) (18 ft. 9.5 in.)	5727 mm (225 in.) (18 ft. 9.5 in.)	5727 mm (225 in.) (18 ft. 9.5 in.)	5727 mm (225 in.) (18 ft. 9.5 in.)	5927 mm (233 in.) (19 ft. 5 in.)	5927 mm (233 in.) (19 ft. 5 in.)	5927 mm (233 in.) (19 ft. 5 in.)	6007 mm (236 in.) (19 ft. 8 in.)
With Standard Drawbar		5622 mm (221 in.) (18 ft. 5 in.)	5622 mm (221 in.) (18 ft. 5 in.)	5622 mm (221 in.) (18 ft. 5 in.)	5622 mm (221 in.) (18 ft. 5 in.)	5823 mm (229 in.) (19 ft. 1 in.)	5823 mm (229 in.) (19 ft. 1 in.)	5823 mm (229 in.) (19 ft. 1 in.)	5902 mm (232 in.) (19 ft. 4 in.)
With Extended Drawbar		5979 mm (235 in.) (19 ft. 7 in.)	5979 mm (235 in.) (19 ft. 7 in.)	5979 mm (235 in.) (19 ft. 7 in.)	5979 mm (235 in.) (19 ft. 7 in.)	6180 mm (243 in.) (20 ft. 3 in.)	6180 mm (243 in.) (20 ft. 3 in.)	6180 mm (243 in.) (20 ft. 3 in.)	6259 mm (246 in.) (20 ft. 6 in.)
E Blade Lift Height	1062 mm (42 in.) (3 ft. 6 in.)	1062 mm (42 in.) (3 ft. 6 in.)	1062 mm (42 in.) (3 ft. 6 in.)	1062 mm (42 in.) (3 ft. 6 in.)	1062 mm (42 in.) (3 ft. 6 in.)	1157 mm (46 in.) (3 ft. 10 in.)	1157 mm (46 in.) (3 ft. 10 in.)	1157 mm (46 in.) (3 ft. 10 in.)	1176 mm (46 in.) (3 ft. 10 in.)
F Blade Digging Depth	704 mm (28 in.)	704 mm (28 in.)	704 mm (28 in.)	704 mm (28 in.)	704 mm (28 in.)	596 mm (23 in.)	596 mm (23 in.)	596 mm (23 in.)	639 mm (25 in.)
G Blade Cutting-Edge Angle, Adjustable	54.8 to 59.9 deg.	54.8 to 59.9 deg.	54.8 to 59.9 deg.	54.8 to 59.9 deg.	54.8 to 59.9 deg.	52.5 to 60.5 deg.	52.5 to 60.5 deg.	52.5 to 60.5 deg.	58.5 deg.
*With antenna whip removed.									

*With antenna whip removed.



850 P-TIER XLT / 850 P-TIER WLT /
850 P-TIER LGP WITH POWER-ANGLE-TILT (PAT) BLADE



850 P-TIER XLT / 850 P-TIER WLT /
850 P-TIER LGP WITH OUTSIDE DOZER (OSD) BLADE

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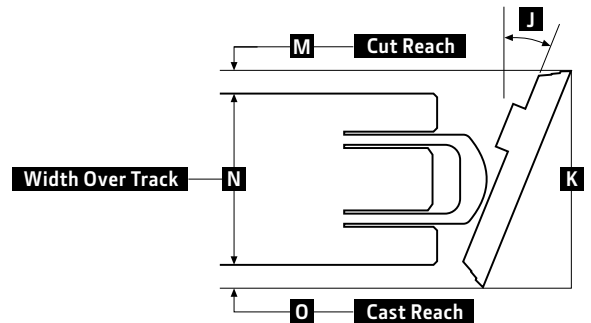
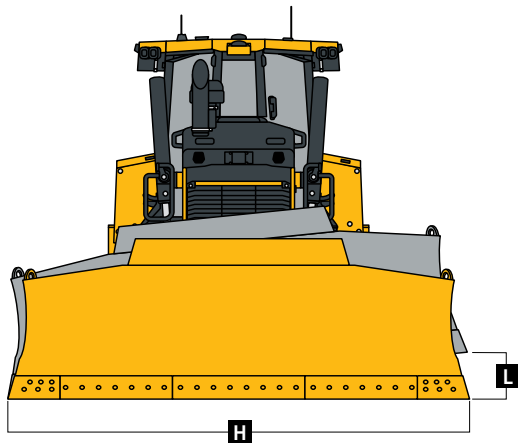
850 P-TIER

Machine Dimensions (continued) (see line art below and at bottom right of page 8)									
	850 P-TIER					850 P-TIER	850 P-TIER		
	XLT	850 P-TIER WLT		850 P-TIER LGP		XLT	WLT	850 P-TIER LGP	
Blade Type	PAT	PAT	PAT	PAT	PAT	OSD	OSD	OSD	OSD
	Straight	Straight	Straight	Straight	Straight	Straight	Straight	Straight	Mechanical Angle
H Blade Width	3708 mm (146 in.) (12 ft. 2 in.)	4013 mm (158 in.) (13 ft. 2 in.)	4267 mm (168 in.) (14 ft. 0 in.)	4267 mm (168 in.) (14 ft. 0 in.)	4359 mm (172 in.) (14 ft. 4 in.)	—	—	3912 mm (154 in.) (12 ft. 10 in.)	—
I Blade Height	1473 mm (58 in.) (4 ft. 10 in.)	1473 mm (58 in.) (4 ft. 10 in.)	1473 mm (58 in.) (4 ft. 10 in.)	1473 mm (58 in.) (4 ft. 10 in.)	1473 mm (58 in.) (4 ft. 10 in.)	—	—	1264 mm (50 in.) (4 ft. 2 in.)	—
SAE Capacity	4.8 m³ (6.3 cu. yd.)	5.2 m³ (6.8 cu. yd.)	5.4 m³ (7.1 cu. yd.)	5.4 m³ (7.1 cu. yd.)	5.5 m³ (7.2 cu. yd.)	—	—	4.8 m³ (6.2 cu. yd.)	—
Capacity With Optional Trash Rack	8.8 m³ (11.5 cu. yd.)	9.3 m³ (12.2 cu. yd.)	9.9 m³ (12.9 cu. yd.)	9.9 m³ (12.9 cu. yd.)	—	—	—	—	—
Weight	1323 kg (2,917 lb.)	1402 kg (3,092 lb.)	1469 kg (3,239 lb.)	1469 kg (3,239 lb.)	1493 kg (3,291 lb.)	—	—	1606 kg (3,541 lb.)	—
With Optional Trash Rack	1504 kg (3,315 lb.)	1595 kg (3,520 lb.)	1677 kg (3,697 lb.)	1677 kg (3,697 lb.)	—	—	—	—	—
C-Frame Assembly Weight (without blade)	1695 kg (3,737 lb.)	1695 kg (3,737 lb.)	1695 kg (3,737 lb.)	1695 kg (3,737 lb.)	1695 kg (3,737 lb.)	—	—	1927 kg (4,248 lb.)	—
J Blade Angle	25 deg.	25 deg.	25 deg.	25 deg.	25 deg.	—	—	—	—
K Overall Width With Blade Angled	3358 mm (132 in.) (11 ft. 0 in.)	3634 mm (143 in.) (11 ft. 11 in.)	3864 mm (151 in.) (12 ft. 7 in.)	3864 mm (151 in.) (12 ft. 7 in.)	3948 mm (155 in.) (12 ft. 11 in.)	—	—	—	—
L Blade Tilt	471 mm (19 in.)	510 mm (20 in.)	541 mm (21 in.)	541 mm (21 in.)	553 mm (22 in.)	—	—	—	—
M Cut Reach	86 mm (3.4 in.)	73 mm (2.9 in.)	188 mm (7.4 in.)	37 mm (1.5 in.)	79 mm (3.1 in.)	—	—	—	455 mm (18 in.)
N Width Over Track	2744 mm (108 in.) (9 ft. 0 in.)	3046 mm (120 in.) (10 ft. 0 in.)	3046 mm (120 in.) (10 ft. 0 in.)	3348 mm (132 in.) (11 ft. 0 in.)	3348 mm (132 in.) (11 ft. 0 in.)	—	—	—	3099 mm (122 in.) (10 ft. 2 in.)
O Cast Reach	528 mm (21 in.)	515 mm (20 in.)	630 mm (25 in.)	479 mm (19 in.)	521 mm (21 in.)	—	—	—	921 mm (36 in.)

850 P-TIER

While general information, pictures, and descriptions are provided, some illustrations and text may include product options and accessories NOT AVAILABLE in all regions, and in some countries products and accessories may require modifications or additions to ensure compliance with the local regulations of those countries.

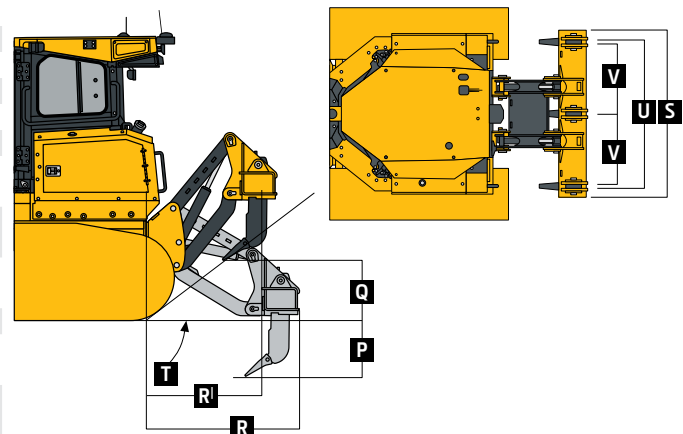
Machine Dimensions (continued) (see line art below and at bottom right of page 8)							
	850 P-TIER XLT	850 P-TIER WLT	850 P-TIER LGP	850 P-TIER XLT	850 P-TIER WLT	850 P-TIER LGP	
Blade Type	Power-Angle- Tilt (PAT)	PAT	PAT	Outside Dozer (OSD)	OSD	OSD	OSD
	Semi-U	Semi-U	Semi-U	Semi-U	Semi-U	Semi-U	Mechanical Angle
H Blade Width	—	—	—	3266 mm (129 in.) (10 ft. 9 in.)	3571 mm (141 in.) (11 ft. 9 in.)	3875 mm (153 in.) (12 ft. 9 in.)	4935 mm (194 in.) (16 ft. 2 in.)
I Blade Height	—	—	—	1422 mm (56 in.) (4 ft. 8 in.)	1374 mm (54 in.) (4 ft. 6 in.)	1321 mm (52 in.) (4 ft. 4 in.)	1174 mm (46 in.) (3 ft. 10 in.)
SAE Capacity	—	—	—	5.6 m ³ (7.3 cu. yd.)	5.8 m ³ (7.6 cu. yd.)	6.2 m ³ (8.0 cu. yd.)	4.9 m ³ (6.4 cu. yd.)
Capacity With Optional Trash Rack	—	—	—	11.1 m ³ (14.5 cu. yd.)	11.5 m ³ (15.0 cu. yd.)	11.7 m ³ (15.3 cu. yd.)	—
Weight	—	—	—	1589 kg (3,503 lb.)	1669 kg (3,680 lb.)	1743 kg (3,843 lb.)	—
With Cylinders and Struts	—	—	—	—	—	—	2522 kg (5,560 lb.)
With Optional Trash Rack	—	—	—	1814 kg (4,000 lb.)	1914 kg (4,220 lb.)	2012 kg (4,436 lb.)	—
Push-Beam Assembly Weight (without blade)	—	—	—	1782 kg (3,929 lb.)	1825 kg (4,023 lb.)	1927 kg (4,248 lb.)	1698 kg (3,743 lb.)
L Blade Tilt (uses tilt jack)	—	—	—	807 mm (32 in.)	799 mm (31 in.)	782 mm (31 in.)	822 mm (32 in.)
N Width Over Track	—	—	—	2489 mm (98 in.) (8 ft. 2 in.)	2794 mm (110 in.) (9 ft. 2 in.)	3099 mm (122 in.) (10 ft. 2 in.)	—



Rear Ripper		850 P-TIER XLT / 850 P-TIER WLT / 850 P-TIER LGP	
Blade Type		PAT / OSD	
Multi-shank parallelogram ripper with hydraulic pitch adjustment and ESCO® ripper tips			
	3 Shank	5 Shank	
Weight	2155 kg (4,750 lb.)	2714 kg (5,983 lb.)	
P Maximum Penetration	724 mm (28.5 in.)	724 mm (28.5 in.)	
Q Maximum Clearance Under Tip	610 mm (24 in.)	610 mm (24 in.)	
R Overall Length, Lowered Position	1626 mm (64 in.) (5 ft. 4 in.)	2076 mm (82 in.) (6 ft. 10 in.)	
R ^I Overall Length, Raised Position	1525 mm (60 in.) (5 ft. 0 in.)	1975 mm (78 in.) (6 ft. 6 in.)	
S Overall Beam Width	2400 mm (94 in.) (7 ft. 10 in.)	2400 mm (94 in.) (7 ft. 10 in.)	
T Slope Angle (full raise)	26 deg.	19 deg.	
U Ripping Width	2146 mm (85 in.) (7 ft. 1 in.)	2146 mm (85 in.) (7 ft. 1 in.)	
V Distance Between Shanks	1041 mm (41 in.) (3 ft. 5 in.)	509 mm (20 in.)	

The diagram illustrates the rear ripper assembly. The main view shows the ripper head attached to the excavator arm. The side view shows the ripper head from the side, highlighting the three shanks and the beam. Labels P, Q, R, R^I, S, T, U, and V are used to indicate specific dimensions and components.

- P**: Maximum Penetration
- Q**: Maximum Clearance Under Tip
- R**: Overall Length, Lowered Position
- R^I**: Overall Length, Raised Position
- S**: Overall Beam Width
- T**: Slope Angle (full raise)
- U**: Ripping Width
- V**: Distance Between Shanks



Additional equipment

Key: ● Standard ▲ Optional or special

See your John Deere dealer for further information.

850 P-TIER	Engine
●	Meets EPA Final Tier 4/EU Stage V emissions
●	John Deere JD9 9.0L engine
●	Wet-sleeve cylinder liners
●	Eco mode
▲	Exhaust stack, black
▲	Exhaust stack, chrome
●	Turbocharged and air-to-air aftercooled
●	Dual-element dry canister with external rotary ejector precleaner
●	Programmable auto engine shutdown
●	Automatic turbo cool-down timer
●	Exhaust filter, under hood, with vertical stack
●	Fuel filters with automatic electronic priming
▲	Severe-duty fuel filter
▲	Engine coolant heater, 120 volt
●	130-amp alternator
Cooling	
●	Hydraulically driven cooling fan, variable-speed suction type
●	Engine cooling rated -37 deg. C (-34 deg. F)
●	Automatic, programmable reversing fan
●	Engine radiator, hydrostatic (HST) cooler, and hydraulic cooler, 7 fins per in.
●	Single-plane non-stacked cooler design
Powertrain	
●	Dual-path HST transmission
●	Reverse-speed ratios (100%, 115%, and 130% presets or operator defined)
●	Operator-selectable decelerator function (hydrostats and engine or hydrostats only)
●	Single-lever steering with counter-rotate function
●	Full power turns with infinitely variable track speed
●	HST (dynamic) service brakes
●	Wet, multi-disc parking brake
●	Remote diagnostic test ports
●	Sealed dedicated transmission reservoir and filtration system separate from hydraulic system
Hydraulic System	
●	Load-sense electrohydraulic (EH) system with variable-displacement piston pump
●	2-spool EH control valve for outside dozer (OSD)
▲	3-spool EH control valve for OSD with single auxiliary
●	3-spool EH control valve for Power-Angle-Tilt (PAT)
▲	4-spool EH control valve for PAT with single auxiliary
●	Electrohydraulics with EZ Grade

850 P-TIER	Hydraulic System (continued)
●	Hydrau™ All-Season Hydraulic Oil, -15 deg. C to 50 deg. C (5 deg. F to 122 deg. F)
▲	Hydrau™ XR Hydraulic Oil, -40 deg. C to 40 deg. C (-40 deg. F to 104 deg. F)
▲	Threaded pitch jack (OSD only)
▲	Power pitch for programmable return to pitch settings (OSD only)
●	Hydraulic pump, standard
▲	Hydraulic pump, high flow (for use with hydraulic winch)
▲	Cylinder rod scrapers (PAT only)
●	Sealed dedicated hydraulic reservoir and filtration system separate from transmission system
Precision Construction Solutions	
▲	John Deere G5 Plus 325-mm (12.8 in.) touch-screen dedicated grade-control display
▲	SmartGrade™ Ready Including 2D Grade Control system
▲	SmartGrade with Topcon
▲	SmartGrade with Leica
Undercarriage	
●	Full-length, smooth-surface track frame
●	Double-flange rollers
●	Oscillating undercarriage
●	Heavy-duty sealed and lubricated undercarriage
▲	Extended Life undercarriage with SC-2™ bushings
▲	Full-length rock guards
Operator's Station	
●	Enclosed cab with air conditioner/heater
▲	Automatic temperature control (ATC)
●	Deluxe seat, cloth with heavy-duty air suspension
▲	Premium seat, leather accented, heat and ventilation, with heavy-duty air suspension
●	AM/FM/Weather-Band (WB) radio
▲	Premium radio with Bluetooth, AM/FM/WB radio, remote auxiliary, and remote USB port
●	203-mm (8 in.) touchscreen multifunction/multilanguage color LCD monitor: Tachometer, hour meter, transmission direction and speed (forward/reverse), exhaust filter status, ambient temperature, and clock
▲	Rearview camera
▲	HVAC-powered precleaner
●	Backup alarm
▲	Advanced Vision System with dedicated display
●	12-volt accessory plug (1)
▲	Additional 12-volt accessory plug
▲	Fire extinguisher mounting bracket
●	Keyless start with multiple security codes
●	Front, door, and rear wipers and washers

850 P-TIER Overall Vehicle			
●	Tilt operator station service access		
●	Environmental drain package		
●	Fluid-sampling ports		
●	JDLINK™ wireless machine communication system (available in specific countries; see your local dealer for details)		
▲	Quick service ports (HST, hydraulic, and engine oil, and coolant)		
▲	Fast-fuel system		
●	LED lights (configuration dependent on cab-trim package)		
▲	Premium LED lights (configuration dependent on cab-trim package)		
●	Engine-compartment light		
▲	Beacon light		
●	Lockable master electrical disconnect switch		
▲	Waste-handler package (LGP only)		
▲	Large debris prescreen		
▲	Recessed sprockets		
▲	Final-drive trash guards (waste applications)		
▲	Fender guards		
●	Foldout front grille		
▲	Heavy-duty foldout front grille		
▲	Forestry limb risers (sweeps)		
▲	Cab screens, full enclosure		
▲	Rear window screen		
Attachments			
▲	Rear ripper, parallelogram, 3 shank		
▲	Rear ripper, parallelogram, 5 shank		
▲	Counterweight, front, 355 kg (783 lb.)		
▲	Rear counterweight (1 or 2)		
▲	Retrieval hitch with pin		
▲	Retrieval hitch with 1 or 2 counterweights		
▲	Extended rigid drawbar		
▲	Rear storage compartment with strikers		
XLT	WLT	LGP	850 P-Tier Shoes
●	▲	▲	610-mm (24 in.) moderate service with clipped corners
▲	▲	▲	610-mm (24 in.) extreme service with clipped corners
	●	▲	760-mm (30 in.) moderate service with clipped corners
	▲	▲	760-mm (30 in.) extreme service with clipped corners
	▲	▲	760-mm (30 in.) extreme service with trapezoidal holes and clipped corners
	●		910-mm (36 in.) moderate service with clipped corners
	▲		910-mm (36 in.) extreme service with clipped corners
	▲		910-mm (36 in.) extreme service with trapezoidal holes and clipped corners

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Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan at test conditions specified per ISO9249. No derating is required up to 3050-m (10,000 ft.) altitude. Also available: winches, fair-leads, log arches, skidding grapples, trash packages, landfill protection packages, cable plows, side booms, field-installed cab for canopy, canopy heater, and fire-suppression systems. Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with SAE standards. Except where otherwise noted, these specifications are based on a unit with ROPS, full fuel tank, and 79-kg (175 lb.) operator. Operator station ROPS and FOPS certified.



MD850PAU (25-05)



JOHN DEERE