

L-II SERIES
SKIDDERS



JOHN DEERE

640L-II / 648L-II / 748L-II / 848L-II / 948L-II



RELIABILITY
MEETS
SIMPLICITY





**OUTRUN THE
ORDINARY.**

Our L-II Series Skidders reflect three years of continual refinement based on invaluable input from loggers like you — the ones who live it every day. We took our most powerful, productive skidders ever, the L-Series, and incrementally enhanced performance and durability to push them to the next level. These upgrades resulted in over 1,600 component changes, including more robust electrical harnesses, fittings, hoses, cylinder guards, grapple-tong teeth, and more.

We made subtle changes under the hood — for example, improving component placement and dramatically reducing the complexity of the electrical and hydraulic systems. All with the goal of improving the overall customer experience. The result is a reengineered machine that is simpler, easier to maintain, and more reliable.

Built on over 180 years of groundbreaking innovation. Backed by a half-century of experience in the woods. And continually evolving to meet and exceed our customers' highest expectations. Our new L-II Series Skidders have what it takes to help you outrun the competition.

ALL DAY, EVERY DAY

Simply more reliable.

Incorporating a less complex, easier-to-maintain design, our L-II Series Skidders are well equipped to handle the toughest forest environments.

Redesigned electrical and hydraulic systems

Routing of the electrical and hydraulic systems has been simplified significantly to improve reliability and ease maintenance. Wiring and hoses are better protected against wear and bending. Durable forestry-proven electrical components help extend wear life.

Longer booms

Opt for longer booms on the 848L-II and 948L-II for more maneuverability when working on slopes.

Stronger winches

New two-speed 4000 Winch increases line pull and is faster than the single-speed winch on previous models, boosting productivity.

Softer steering

New steering sensors control articulation speed when nearing frame-to-frame contact, cushioning impact during full articulation and improving operator comfort.

Tougher tires

Higher-ply tire options from the factory increase tire strength for carrying heavier loads.

Bigger grapples

Larger grapples — including a huge 17.5-sq.-ft. model on the 648L-II — help you deliver more wood to the landing with fewer skids. More grapple-squeeze force provides a constant pressure, so operators are less likely to lose a log, even if a load gets jarred.



INCREASED
GRAPPLE-SQUEEZE
FORCE

BEST OF BOTH WORLDS

Continuously Variable Transmission (CVT).

Loggers often wonder if the easy-to-use CVT transmission is a direct-drive or hydrostatic transmission. The answer? Without being either, CVT combines the efficiency of a direct-drive transmission with the smoothness and operating ease of a hydrostatic drive.



NO MORE SHIFTING
WITH CVT

More power to the ground

CVT automatically senses the load, delivering more torque and tractive effort as needed to maintain the desired speed.

Durable and fluid efficient

Efficient CVT transmission keeps engine speed constant, reducing engine wear while providing excellent fluid economy. Proven components, simplified electronics, and internally routed hoses further bolster durability.

Easy to operate

No more shifting. Simply set the maximum speed and let the CVT do the rest. There's no need to hunt for the correct gear, shortening the learning curve for new operators, while helping experienced pros maximize productivity.



RELENTLESS

The real deal.

L-II Series Skidders combine a range of grapple choices with serious power and stability – for the versatility and performance you need to give it your all.



Superb power and stability

Combining impressive horsepower and power-to-weight ratio with a constant engine speed, L-II Series Skidders deliver superb responsiveness with maximum efficiency. Rock-solid stability provides excellent pulling power, especially when climbing hills, navigating adverse terrain, or hauling bigger payloads.

Independent axle-diff lock

Engage all four tires, or just the front two or rear two as needed, to maneuver over tough terrain.

More grapple capacity

Expanded grapple options – from the 17.5-sq.-ft. grapple on the 648L-II up to a massive 22.3-sq.-ft. capacity on the 948L-II – give you more flexibility to configure your skidder to best match the application.



A large yellow skidder is shown working in a dense forest. The machine's body is yellow with a black roll cage. A large black grapple arm is extended to the right, holding a log. The background shows tall evergreen trees. In the bottom left corner, a close-up of the skidder's tracks and a log being processed is visible. A white callout box with arrows points to the grapple arm and the text "MAXIMUM 17.5-SQ.-FT. GRAPPLE".

**MAXIMUM
17.5-SQ.-FT.
GRAPPLE**

ON THE 648L-II



SPACIOUS

104-CU.-FT. CAB

43-SQ.-FT.

TOTAL WINDOW AREA



**MORE COMFORT EQUALS
MORE PRODUCTIVITY**

Make a comfortable living.

Designed by loggers for loggers, the quiet, spacious cab helps keep your operators more comfortable and productive — so you can boost your bottom line.

Find your comfort zone

Fatigue-beating creature comforts include a highly efficient HVAC system, operator-configurable controls, and plenty of storage space.

Effortless operation

Armrest-mounted electrohydraulic controls provide easy, fingertip operation of all machine functions and turn with the optional rotating seat. Joystick steering provides smooth, intuitive control of steering, direction, and ground speed.

Reduce neck strain

Opt for a rotating high-back seat to improve rearward visibility to the grapple and minimize neck strain.

Configure controls to conditions

Operators can save their preferred control configurations, so they can spend less time setting up the machine and more time working productively.

Work before (or past) daylight

Six high-intensity halogen lights are standard, for when you need to start early or stay late. For additional illumination, opt for a work-light or LED package.

GOES TO EXTREMES

Tames the toughest woods.

In the forest, you need uptime above all else. L-II Series Skidders keep going, even when the going gets tough.



Our most rugged axles ever

Outboard-Extreme™ axles are designed with larger components to deliver maximum jobsite durability, along with a heavier weight to boost machine stability. They are standard on the 848L-II and 948L-II, optional on the 748L-II (not available on the 640L-II and 648L-II).

Long axle life

A pressurized continuous-lube system and independent axle filters help extend wear life up to 15,000 hours.* Axle oil-pressure monitoring alerts the operator if a leak occurs.

*Not applicable to dual-tire configurations.

Reliable drivetrain

A constant engine speed helps provide superb multifunction performance. The elimination of sudden surges and engine overspeed also reduces component wear and helps extend engine life. The 640L-II, 648L-II, and 748L-II feature high-performance 6.8L diesels, while the 848L-II and 948L-II run powerful 9.0L engines.



STRONG BOX-STYLE TONGS MAXIMIZE WEAR LIFE

Trouble-free bushings and pins

Straight bushings at all grapple, arch, boom, and blade joints deliver long, trouble-free life and can be quickly replaced. Grease-through pins are more resistant to dust, rust, and debris.

Durable frame and arch

The frame and arch have been redesigned and reinforced to maximize durability. Boom-arch hoses are routed inside the arch, for maximum protection and ready repair access.

Tough grapples

Grapples feature box-style tongs for maximum strength and harder wear surfaces for long life. Components are easy to access, simplifying service.

Minimize maintenance and expense

Unlatch the large panels for fast, wide-open access to filters and critical components. Grease points for boom and arch are easily reached from ground level, while extended service intervals help to further simplify maintenance and reduce expense.

Low total fluid consumption

John Deere EPA Final Tier 4 (FT4)/EU Stage V engines maintain engine performance while minimizing total fluid consumption — diesel fuel plus diesel exhaust fluid.

Fuel-efficient hydraulic reversing fan

Hydraulic-driven variable-speed fan runs only as needed, reducing fuel consumption and debris flow through the cooler cores. It's programmable to reverse at periodic intervals to clear core-clogging buildup. Or it can be actuated at the push of a button if demanded by conditions.

Extended filter-change interval

Hydraulic filter service interval is 4,000 hours. Most customers will be able to work a whole season without a change interrupting production.



PENNY-FAIR

Easy cooling-package access

Cooling fan and other system components swing out for quick, easy cleaning.

Keep fuel costs down

Auto-idle reduces engine speed after a period of inactivity, reducing fuel consumption and noise, while extending component life. Auto shutdown turns the engine off after a preset length of time, reducing engine wear and fuel costs.

Get valuable insight with

JOHN DEERE FORESTSIGHT™

With a JDLink™ subscription, alerts can be sent to your computer or mobile device — or your Deere dealer, if you choose — to inform you of immediate machine issues. If downtime does occur, exclusive remote diagnostics and programming enable your dealer to minimize the time and cost associated with sending a technician to the logging site for an initial diagnostic visit. You can also receive reminders of periodic scheduled maintenance on your computer or mobile device, or from your dealer.

Keep downtime down with

JOHN DEERE ULTIMATE UPTIME

In addition to the base John Deere ForestSight features, our dealers work with you to build an uptime package that meets your specific needs, including customized maintenance and repair agreements, onsite parts availability, extended warranties, fluid sampling, response-time guarantees, and more.



PINCHER

640L-II / 648L-II / 748L-II

JOHN DEERE

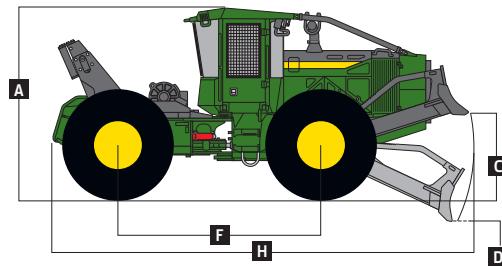
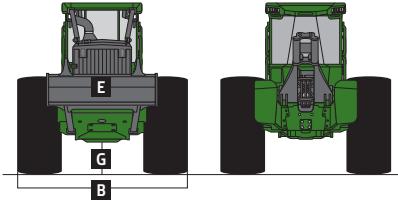
Engine	640L-II / 648L-II		748L-II
Manufacturer / Model	John Deere PowerTech™ PSS 6.8L	John Deere PowerTech™ Plus 6.8L	John Deere PowerTech™ 6.8L
Off-Road Emission Standards	EPA Final Tier 4/ EU Stage V	EPA Tier 3/EU Stage IIIA	EPA Tier 2/EU Stage II
Gross Power	177 kW (237 hp) at 1,800 rpm	163 kW (218 hp) at 1,800 rpm	157 kW (210 hp) at 1,800 rpm
Gross Torque	1025 Nm (756 ft.-lb.) at 1,600 rpm	979 Nm (722 ft.-lb.) at 1,400 rpm	943 Nm (695 ft.-lb.) at 1,400 rpm
Number of Cylinders	6	6	6
Valves per Cylinder	4	4	4
Engine Displacement	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		
Engine Cold-Start System	Glow plugs		
Cooling	640L-II / 648L-II / 748L-II		
Cooling System	Heavy-duty radiator with continuous deaeration tank and recovery reservoir		
Fan Drive	Hydraulic, variable speed, reversing		
Powertrain	640L-II / 648L-II		748L-II
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 1400 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		
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	640L-II / 648L-II / 748L-II		
Main Pump	Open circuit, axial piston, variable displacement		
Maximum Displacement	85 cc/rev (5.19 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-II	648L-II	748L-II
Dual Function			
Standard			
Opening	N/A	3226 mm (127 in.)	3251 mm (128 in.)
Area	N/A	1.24 m ² (13.3 sq. ft.)	1.48 m ² (15.9 sq. ft.)
Optional			
Opening	N/A	3251 mm (128 in.)	3886 mm (153 in.)
Area	N/A	1.48 m ² (15.9 sq. ft.)	1.63 m ² (17.5 sq. ft.)
Optional			
Opening	N/A	3886 mm (153 in.)	3785 mm (149 in.)
Area	N/A	1.63 m ² (17.5 sq. ft.)	1.77 m ² (19.1 sq. ft.)
Grapple Control	N/A	Joystick	Joystick
Refill Capacities			
Fuel Tank			
Standard	342.2 L (90.4 gal.)	391.8 L (103.5 gal.)	391.8 L (103.5 gal.)
Optional	N/A	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.)
Diesel Exhaust Fluid (DEF) Tank	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.)	19 054 kg (42,159 lb.)	19 713 kg (43,610 lb.)
Dozer Blade			
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.)	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.)
Blade Control	Joystick	Joystick	Joystick



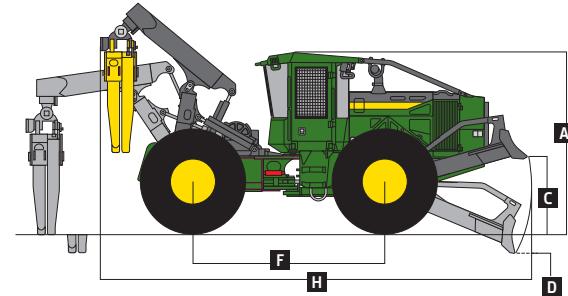
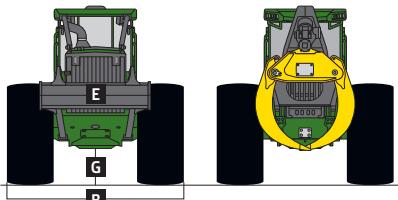
Boom Options	640L-II	648L-II	748L-II
Size	N/A	2.6 m	2.6-m standard / 3.0-m optional
Winch	640L-II / 648L-II / 748L-II		
Winch Control	Joystick control, hydraulically driven		
Cable Capacity	2-Speed 6000 Winch with 279.5-mm (11 in.) Drum	2-Speed 4000 Winch with 204-mm (8 in.) Drum	
15.8 mm (5/8 in.)	119.0 m (390 ft.)	77.4 m (252 ft.)	
19.1 mm (3/4 in.)	81.4 m (267 ft.)	54.6 m (177 ft.)	
22.2 mm (7/8 in.)	60.3 m (197 ft.)	39.3 m (128 ft.)	
25.4 mm (1 in.)	46.0 m (150 ft.)	30.7 m (100 ft.)	
Line Pull – 15.8-mm (5/8 in.) Cable	Bare Drum at Stall with 2-Speed 6000 Winch	Bare Drum at Stall with 2-Speed 4000 Winch	
Low Speed	221.0 kN (49,696 lb.)	213.5 kN (47,997 lb.)	
High Speed	147.3 kN (33,311 lb.)	142.3 kN (31,990 lb.)	
Winch	640L-II	648L-II / 748L-II	
Line Speed – 15.8-mm (5/8 in.) Cable	Bare Drum at 1,800 rpm with 2-Speed 6000 or 4000 Winch	Bare Drum at 1,800 rpm with 2-Speed 6000 or 4000 Winch	
Low Speed	18.2 m/min (60 fpm)	13.4 m/min. (44 fpm)	
High Speed	27.4 m/min (90 fpm)	20.1 m/min. (66 fpm)	
Machine Dimensions	640L-II	648L-II	748L-II
Tire Size	Cable Skidder	Dual Function	Dual Function
A Overall Height	30.5-32	30.5-32	30.5-32
B Overall Width	3365 mm (132.5 in.)	3365 mm (132.5 in.)	3365 mm (132.5 in.)
C Maximum Blade Lift Above Ground	3233 mm (127.3 in.)	3233 mm (127.3 in.)	3239 mm (127.5 in.)
D Maximum Blade Dig Below Ground	1517 mm (59.7 in.)	1517 mm (59.7 in.)	1517 mm (59.7 in.)
E Dozer Blade Width	359 mm (14.1 in.)	359 mm (14.1 in.)	359 mm (14.1 in.)
Optional Dozer Blade Width	2192 mm (86.3 in.)	2192 mm (86.3 in.)	2962.4 mm (116.6 in.)
F Wheelbase	2962.4 mm (116.6 in.)	2962.4 mm (116.6 in.)	N/A
G Ground Clearance	3680 mm (144.8 in.)	3680 mm (144.8 in.)	3925 mm (154.5 in.)
H Overall Length	555 mm (21.8 in.)	557 mm (21.9 in.)	557 mm (21.9 in.)
	7591 mm (298.9 in.)	8129 mm (320.0 in.)*	8384 mm (330.0 in.)*

*Length based on 2.6-m boom.

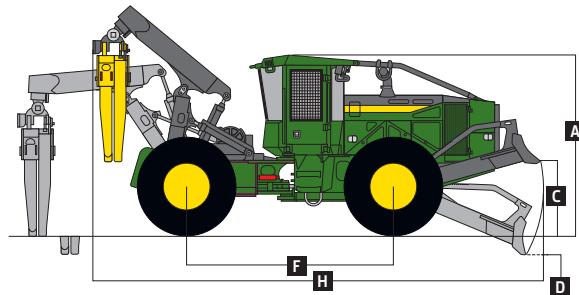
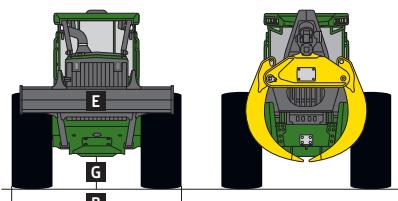
640L-II Skidder



648L-II with Dual-Function Grapple



748L-II with Dual-Function Grapple



848L-II / 948L-II

Engine	848L-II	948L-II
Manufacturer / Model	John Deere PowerTech™ PSS 9.0L	John Deere PowerTech™ Plus 9.0L
Off-Road Emission Standards	EPA Final Tier 4/ EU Stage V	EPA Tier 3/ EU Stage IIIA
Gross Power at 1,800 rpm	210 kW (281 hp)	210 kW (281 hp)
Gross Torque at 1,400 rpm	1276 Nm (941 ft.-lb.)	1276 Nm (941 ft.-lb.)
Number of Cylinders	6	6
Valves per Cylinder	4	4
Engine Displacement	9.0 L (549 cu. in.)	9.0 L (549 cu. in.)
Engine Bore and Stroke	118.4 x 136 mm (4.66 X 5.35 in.)	
Fuel System	High-pressure common rail	
Aspiration	Turbocharged and charge-air cooled	
Air Cleaner	Dual stage with safety element	
Engine Cold-Start System	Auto ether	
Cooling	848L-II / 948L-II	
Cooling System	Heavy-duty radiator with continuous deaeration tank and recovery reservoir	
Fan Drive	Hydraulic, variable speed, reversing	
Powertrain		
Transmission	Continuously Variable Transmission (CVT)	
Speed Ranges, Forward and Reverse	6	
Maximum Travel Speed with 35.5-32 Tires	0–25.0 km/h (0–15.53 mph) — 6 speed-range configurations available	
Axles	1700 Outboard-Extreme™	
Front Axle Oscillation, Stop to Stop	30 deg.	
Differential (front and rear)	Hydraulic-locking, operated-on-the-go, closed-center differential lock	
Steering	Fully hydraulic, joystick or wheel	
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	85 cc/rev (5.19 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	848L-II	948L-II
Dual Function Standard		
Opening Area	3785 mm (149 in.) 1.77 m ² (19.1 sq. ft.)	3886 mm (153 in.) 2.07 m ² (22.3 sq. ft.)
Optional		
Opening Area	3886 mm (153 in.) 1.63 m ² (17.5 sq. ft.)	3785 mm (149 in.) 1.77 m ² (19.1 sq. ft.)
Optional		
Opening Area	N/A	3886 mm (153 in.) 1.63 m ² (17.5 sq. ft.)
Control	Joystick	Joystick
Refill Capacities	848L-II / 948L-II	
Fuel Tank		
Standard	391.8 L (103.5 gal.)	
Optional	457.7 L (120.9 gal.)	
Hydraulic Reservoir	123.6 L (32.6 gal.)	
Diesel Exhaust Fluid (DEF) Tank	19.9 L (5.2 gal.)	

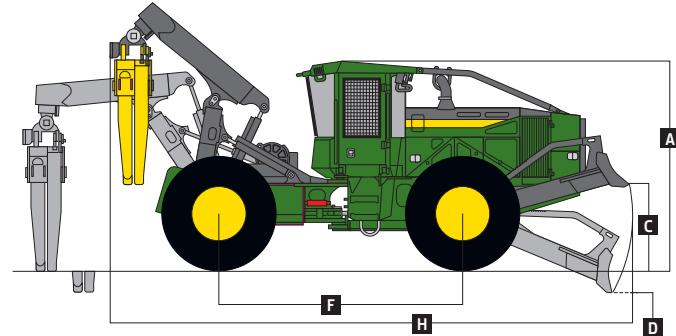
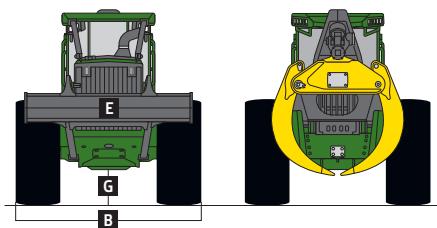
Specifications are subject to change without notice.



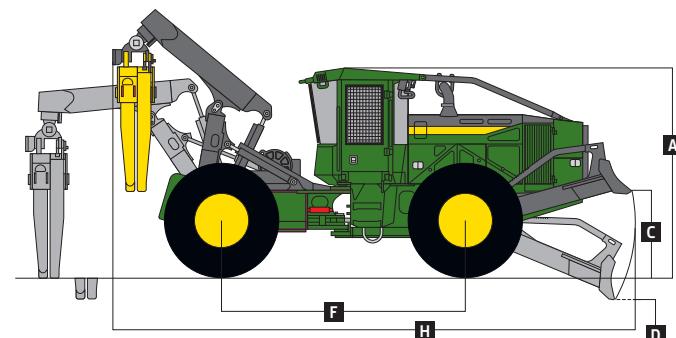
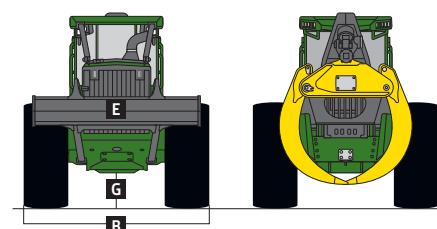
Operating Weights	848L-II	948L-II
Machine Weight	22 384 kg (49,499 lb.)	22 484 kg (49,570 lb.)
Dozer Blade	848L-II / 948L-II	
Width	2962.4 mm (116.6 in.)	
Height	691.0 mm (27.2 in.)	
Blade Control	Joystick	
Boom Options		
Size	2.6 m standard / 3.0 m optional	
Winch		
Winch Control	Joystick control, hydraulically driven	
Cable Capacity	2-Speed 6000 Winch with 279.5-mm (11 in.) Drum	2-Speed 4000 Winch with 204-mm (8.03 in.) Drum
15.8 mm (5/8 in.)	119.0 m (390 ft.)	77.4 m (252 ft.)
19.1 mm (3/4 in.)	81.4 m (267 ft.)	54.6 m (177 ft.)
22.2 mm (7/8 in.)	60.3 m (197 ft.)	39.3 m (128 ft.)
25.4 mm (1 in.)	46.0 m (150 ft.)	30.7 m (100 ft.)
Line Pull – 15.8-mm (5/8 in.) Cable	Bare Drum at Stall with 2-Speed 6000 Winch	Bare Drum at Stall with 2-Speed 4000 Winch
Low Speed	221.0 kN (49,696 lb.)	213.5 kN (47,997 lb.)
High Speed	147.3 kN (33,311 lb.)	142.3 kN (31,990 lb.)
Line Speed – 15.8-mm (5/8 in.) Cable	Bare Drum at 1,800 rpm with 2-Speed 6000 Winch	Bare Drum at 1,800 rpm with 2-Speed 4000 Winch
Low Speed	13.4 m/min (44 fpm)	13.4 m/min (44 fpm)
High Speed	20.1 m/min (66 fpm)	20.1 m/min (66 fpm)
Machine Dimensions	<i>Dual Function</i>	
Tire Size	35.5-32	
A Overall Height*	3454 mm (136.0 in.)	
B Overall Width	3575 mm (140.7 in.)	
C Maximum Blade Lift Above Ground	1578 mm (62.1 in.)	
D Maximum Blade Dig Below Ground	298 mm (11.7 in.)	
E Dozer Blade Width	2962.4 mm (116.6 in.)	
F Wheelbase	3975 mm (156.5 in.)	
G Ground Clearance	604 mm (23.7 in.)	
H Overall Length*	8469 mm (333.4 in.)	

*Based on 2.6-m boom.

848L-II with Dual-Function Grapple



948L-II with Dual-Function Grapple





JOHN DEERE

JohnDeere.com/forestry

TO FIND SUCCESS IN THE FOREST,
YOU CAN WAIT FOR THE PERFECT SET OF CONDITIONS.
Or give yourself every advantage to create your own.
Productive machines. Innovative technology. Useful insights.
Dependable support.

The obstacles to success are many. John Deere helps you
OUTRUN™ THEM ALL.