

L-II SERIES

# WHEELED FELLER BUNCHERS



JOHN DEERE

643L-II / 843L-II




*EXCELLENCE*  
*EVOLVED*



***OUTRUN THE UNFO***



**ORESEEN.**



When we introduced our L-Series Wheeled Feller Bunchers, they redefined loggers' expectations of what a feller buncher can accomplish. Not content to stand pat, we've continued to refine these machines, enhancing their performance and durability so they meet or exceed customer expectations.

Our goal was to improve the overall user experience based on customer feedback. We made over 1,600 component changes, including more robust electrical harnesses, fittings, hoses, and cylinder guards. And we made subtle changes under the hood, such as improving component placement and dramatically reducing the complexity of the electrical and hydraulic systems.

The result is our L-II Series Wheeled Feller Bunchers — machines reengineered to be simpler to run, 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 based on invaluable customer input. ***Our L-II Series Wheeled Feller Bunchers once again outrun expectations.***

# THEY WORK AS LONG AND HARD AS YOU DO

## Simply dependable.

L-II Series Wheeled Feller Bunchers incorporate a simplified, easier-to-maintain design. So they're ready to go, no matter what the forest throws your way.

### **Simplified 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 electrical-harness components help extend wear life.

### **Durable axles**

Heavy-duty axles help deliver stability and hill-climbing power under the toughest forest conditions.

### **Tougher tires**

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



**& DANGER**  
Operation requires the operator to wear safety glasses, hard hat, and seat belt. Always use proper tie-off technique. Do not use the machine for any purpose other than that for which it was designed. See the operator's manual for more information.

FD 22B

FD 22B



**STEERING SENSORS**  
CONTROL ARTICULATION IMPACT



**SPACIOUS**  
104-CU.-FT. CAB

**WARNING**

**& WARNING**



## COMFORT ZONE

# Boost operating ease — and your bottom line.

Less fatigue means more output. Your operators will have what they need to be comfortable and productive in the cab of an L-II Series Wheeled Feller Buncher.

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### **Softer steering**

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

### **Power-management system**

Simply set the desired power to the felling head and drive motors, and the power-management system optimizes multifunction performance to suit the application and conditions.

### **Configurable EH controls**

Electrohydraulic (EH) controls can be configured to personal preferences. Optional joystick and foot controls deliver smooth, low-effort control, for less fatigue over long shifts.



**SERIOUSLY PRODUCTIVE**  
**Cut more wood.**

If your cutter just isn't cutting it, choose an L-II Series Wheeled Feller Buncher. Combining impressive horsepower with fast cycle times, they provide the muscle and finesse you need to get down to business.





# MUSCLE AND HUSTLE.

## **Extend your workday**

Six high-intensity halogen driving lights are standard, for when you need to work past (or before) daylight. For additional illumination, opt for a working-light or LED package.

## **Stable and able**

Optimal weight distribution and a long wheelbase enable excellent stability when climbing hills and controlling trees.

## **One-button Quick Dump**

Simply press a button to release trees in a single, smooth motion. Head-tilt and arm functions are combined to help minimize fatigue while improving productivity.

## **Plenty of power**

L-II Series machines boast impressive horsepower, for superb responsiveness.

## GET AHEAD WITH OUR FELLING HEADS

# Disk-saw felling heads for every need.

Choose from three different felling heads to match your application, tree size, and conditions. So you can improve productivity while extending machine life.

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### FD45

- Open area between post for good tree visibility
- High productivity in thinning applications
- Deepest accumulation pocket (largest of the three), to improve productivity for thinning small trees
- Ideal for use with a 643L-II in any terrain

### FD55

- Multipurpose for harvesting applications from thinning through clearcutting
- Large accumulation area; suited for handling a wide range of tree diameters
- Good visibility to the tree being cut
- Best paired with an 843L-II in hilly or muddy applications, and with a 643L-II in flat conditions

### FD22B

- Best option for large, mature trees
- Designed for centering large trees; also big enough to accumulate several mid-sized trees
- Improved cutting-zone visibility
- Best paired with an 843L-II in hilly or muddy applications, and with a 643L-II in flat conditions



CHOOSE TO DO **MORE.**





REMOTE  
DIAGNOSTICS

# *UNSTOPPABLE* *FORCE OF NATURE*

Uptime is everything in the forest. And your L-II Series Wheeled Feller Buncher has what it takes to pull through just about anything.

### **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.

### **Grease-thru pins**

Grease-thru pins eliminate hunting around for zerks, allowing easier access for quick servicing. Plus they're more resistant to dust, rust, and debris.



## GET VALUABLE INSIGHT WITH ***Precision Forestry***

### **JDLink™**

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.

### **TimberMatic™ Maps and TimberManager™**

TimberMatic Maps and TimberManager are proven jobsite-mapping tools designed for full-tree logging operations. TimberMatic Maps enables enhanced visibility, allowing operators to review production values as well as see and create points of interest that can be shared in real time with other onsite team members. Staff not on the jobsite can also access any of this data through TimberManager, to optimize tasks and increase efficiency.

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*PINCH PENNIES WHILE  
**STACKING UP  
THE PROFITS.***



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### **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 conditions demand.

### **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.

### **Quick, cooling-package access**

Cooling fan and other system components swing out for fast 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.

### **Within easy reach**

Simply unlatch the large panels for fast, wide-open access to filters and critical components.



# 643L-II / 843L-II

Engine	643L-II	843L-II
Manufacturer and Model	John Deere PowerTech™ PSS 6.8L	John Deere PowerTech™ PSS 6.8L
Off-Road Emission Standards	EPA Final Tier 4/EU Stage V	EPA Final Tier 4/EU Stage V
Gross Power	163 kW (219 hp) at 1,900 rpm	201 kW (270 hp) at 1,900 rpm
Gross Torque	923 Nm (680 ft.-lb.) at 1,600 rpm	1141 Nm (841 ft.-lb.) at 1,600 rpm
Number of Cylinders	6	6
Valves per Cylinder	4	4
Engine Displacement	6.8L (415 cu. in.)	6.8L (415 cu. in.)
Engine Bore and Stroke	106 x 127 mm (4.17 x 5.00 in.)	106 x 127 mm (4.17 x 5.00 in.)
Fuel System	High-pressure common rail	High-pressure common rail
Aspiration	Turbocharged and charge-air cooled	Turbocharged and charge-air cooled
Air Cleaner	Dual stage with safety element and dust-unloader valve	Dual stage with safety element and dust-unloader valve
Engine Cold-Start System	Glow plugs	Glow plugs
<b>Cooling</b>	<b>643L-II / 843L-II</b>	
Cooling System	Heavy-duty radiator with continuous deaeration tank and recovery reservoir	
Fan Drive	Hydraulic, variable speed, reversing	
<b>Powertrain</b>		
Transmission	Infinitely variable hydrostatic with 2-speed gearbox	
Speed Ranges, 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)	
Front Axle Oscillation, Stop to Stop	30 deg.	
<b>Axles</b>		
Options	1400 Extreme Duty and 1400 Super Wide Extreme Duty (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	
<b>Hydraulics</b>		
Main Pump	Open circuit, axial piston, variable displacement	
Maximum Displacement	90 cc/rev (5.49 ci/rev)	
<b>Electrical System</b>		
Voltage	24 volt	
Number of Batteries (12 volt)	2	
Battery Capacity (each)	950 CCA	
Alternator Rating	150 amp	
Lights (optional)	10	
<b>Refill Capacities</b>		
Fuel Tank	396 L (104.6 gal.)	
Hydraulic Reservoir	169.1 L (44.7 gal.)	
Diesel Exhaust Fluid (DEF) Tank	19.9 L (5.2 gal.)	
<b>Operating Weights</b>		
Machine Weight (less felling head)	13 910 kg (30,704 lb.)	
<b>With Saw</b>		
FD45	16 383 kg (36,120 lb.)	
FD22B	17 081 kg (37,659 lb.)	
FD55	17 000 kg (37,480 lb.)	

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.

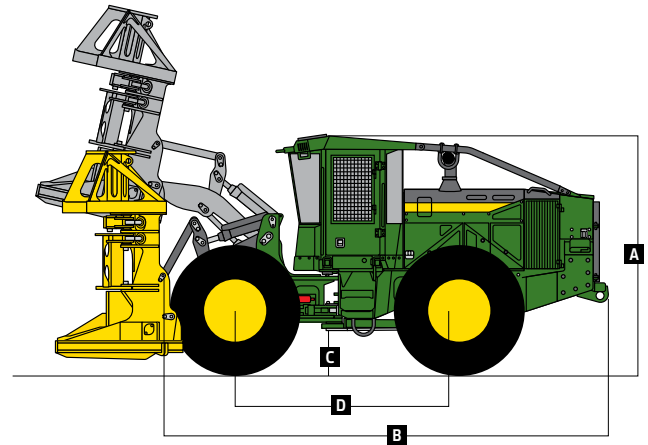
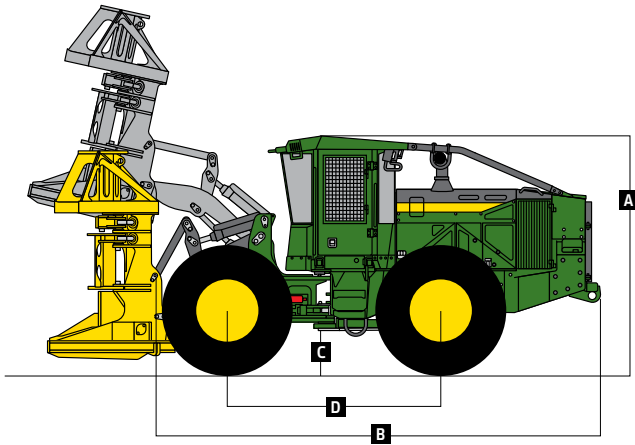




Machine Dimensions		643L-II	843L-II
<b>Tire Size</b>		<b>28L-26</b>	<b>28L-26</b>
<b>A</b>	Overall Height	3216 mm (126.6 in.)	3216 mm (126.6 in.)
	Overall Width (with 711-mm [28 in.] tires [1400 axles])	2913 mm (114.7 in.)	2913 mm (114.7 in.)
<b>B</b>	Overall Length (less felling head)	6293 mm (247.7 in.)	6293 mm (247.7 in.)
<b>C</b>	Ground Clearance	484 mm (19 in.)	484 mm (19 in.)
<b>D</b>	Wheelbase	3023 mm (119 in.)	3175 mm (125 in.)

### 643L-II Wheeled Feller Buncher

### 843L-II Wheeled Feller Buncher



Shipping Dimensions		28L-26	28L-26
<b>Tire Size</b>		<b>28L-26</b>	<b>28L-26</b>
Felling Head		FD45	FD22B
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.)
Overall Length (with felling head)		7340 mm (289.0 in.)	7416 mm (292.0 in.)
Felling Head Information		643L-II / 843L-II	
Head	<i>FD45 DSFH – Twin Post</i>	<i>FD22B DSFH – Single Post</i>	<i>FD55 DSFH – Twin Post</i>
Maximum Cutting Capacity	508.0 mm (20.0 in.)	559.0 mm (22.0 in.)	584.2 mm (23.0 in.)
Maximum Accumulation Capacity	0.65 m <sup>2</sup> (7.0 sq. ft.)	0.48 m <sup>2</sup> (5.2 sq. ft.)	0.63 m <sup>2</sup> (6.8 sq. ft.)
Opening at Front of Housing	863.60 mm (34.0 in.)	1290.32 mm (50.8 in.)	1033.02 mm (40.7 in.)
Blade Diameter	1346.20 mm (53.0 in.)	1422.40 mm (56.0 in.)	1473.20 mm (58.0 in.)
Number of Teeth	18	18	18
Width at Saw Housing	1582.42 mm (62.3 in.)	1617.98 mm (63.7 in.)	1651.00 mm (65.0 in.)
Height	2514.60 mm (99.0 in.)	3068.32 mm (120.8 in.)	2954.02 mm (116.3 in.)
Weight (no blade cover or tilt links)	2424.48 kg (5,345 lb.)	3070.85 kg (6,770 lb.)	2971.06 kg (6,550 lb.)

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**JOHN DEERE**

[JohnDeere.com/forestry](http://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.



DKDLWFB L (21-02)