

# 853M TRACKED FELLER BUNCHER



JOHN DEERE







## 853M TRACKED FELLER BUNCHER

# BUILT FOR WORK IN THE REAL WORLD.

Keeping up in the woods and at the landing can be some of the hardest work you do. So when you asked for job-proven mid-size might to help get things done, we took it from there. The result is a tracked feller buncher equipped with standard Smooth Boom Control (SBC) for exceptional command. A long and wide undercarriage for sturdy stability. Dual-swing drive for powerful performance. Standard Rapid Cycle System (RCS) for optimized operation. Uncompromising cab comfort and visibility. Plus a range of available options to suit your application. It all adds up to a purpose-built machine designed to work for you.

### **Smooth operation**

Smooth Boom Control (SBC) allows machine movements to be controlled more effectively, delivering a smoother experience for the operator and less wear and tear on the machine over time.

### **Sure-footed stability**

Generous tractive effort enables reliable negotiation of difficult or steep terrain, deep snow, and swamps. Long and wide undercarriage maximizes stability in all terrain conditions.

### **Expansive visibility**

Floor-to-ceiling front window, large side windows, skylight, and optional floor window significantly expand the view of the harvesting area and the work at hand.

### **Comfortable control**

Ergonomically designed controls and seat with dual-density seat pan and contour plus updated armrest and suspension boost overall operator comfort. Options such as heated-ventilated seat (HVS) and updated premium Bluetooth® radio with XM Satellite Radio ready from the factory take comfort to the next level.





 **CUT TIME** |  **MAXIMIZE PRODUCTIVITY**  
WITH STANDARD RAPID CYCLE SYSTEM

#### **Rapid Cycle System (RCS)**

Standard RCS can be tailored to individual skill levels and specific harvesting conditions, from large single-tree harvesting to high-speed, multi-stem cutting. Multiple RCS settings can be saved according to individual operator preferences.

#### **Dedicated to your work**

When equipped with the Dedicated Travel System feature, a 246-kW (330 hp) engine option can be selected to further improve the performance and efficiency of the Travel System and all other machine functions.

#### **Get in the swing**

Dual-swing system increases power and performance in demanding felling or harvesting conditions, boosting overall productivity.

#### **Smart debris management**

Designed to keep your workspace free and clear, the productivity-boosting debris-management system is integrated into the hood and left-side guarding to prevent materials and debris from entering the cooling package. External screening, sealed cooler compartment, and standard variable-speed reversing fan provide protection as needed.



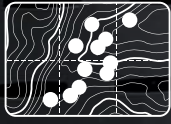
853M TRACKED FELLER BUNCHER

# PUT TECHNOLOGY TO WORK IN THE WOODS AND AT THE OFFICE.

Coordinate your operation and your team's productivity from wherever your work takes you with John Deere Precision Forestry and our core technology solutions.







## JOHN DEERE PRECISION FORESTRY

TOOLS ENABLE PRODUCTION  
PLANNING & TRACKING

## FEATURES

### Core intelligence

Your John Deere Forestry machine arrives from the factory equipped with a powerful set of technologies and capabilities already built in. Each plays an important role in managing the health and performance of your overall equipment fleet:

- **JDLink™** connectivity lets you track your equipment, see which machines are working, and know if they're being utilized properly and at maximum productivity and efficiency.
- Enabled through JDLink, **John Deere Connected Support™** leverages a suite of dealer and factory tools designed to deliver increased uptime and productivity, and lower daily operating costs.
- **Remote Diagnostics and Programming Capability** within John Deere Connected Support helps your dealer warn you of any issue with your machine — often before you know of the problem yourself — and initiate solutions without charging you for a technician's visit to your jobsite.
- Our advanced dual approach to **Machine Health** combines the expertise of the technology specialists at our dealerships with the data specialists at our central Machine Health Monitoring Center (MHMC). As part of John Deere Connected Support, information from thousands of connected machines flows through the MHMC, enabling our specialists to identify trends and develop new and improved preventative-maintenance and repair protocols.

### Precision Forestry

Take the guesswork out of planning, implementing, and monitoring your logging operation. The tools of our production-planning and -tracking system expand on the core technology features that come standard in every John Deere Forestry machine to unleash a powerful new array of possibilities:

- **TimberMatic™ Maps** is an innovative onboard software solution that helps you reimagine your jobsites. Real-time production views, optimized routes, and shared wireless connections between machines make it easier than ever before to take your forestry operation to the next level.
- **TimberManager™** is a web-based solution for PCs, tablets, and mobile phones that allows you to follow jobsite progress. Combined with TimberMatic Maps, this software provides complete visibility of your operation — from land harvested to specific machines — so you can streamline communication, analyze tasks, and increase productivity:
  - **Remote Monitoring** keeps tabs on the health and performance of your fleet from wherever you are.
  - **Precise Progress Tracking** lets you set goals for your team to meet throughout the day.
  - **Live Production View** displays progress including tree count, area harvested, and estimated tonnage.
  - **Simplified Mapping** of machine data and GPS-based location tracking shows precise stem and log counts.
  - **Real-Time Updates** let you adjust course or eliminate tasks if needed to maintain steady workflow.
  - **Fleet Optimization** goes beyond machine management to help improve the efficiency of your business.



## Robust flexibility

Available in both limited and high rotation, the **FS22B** and **FR22B** are our most versatile felling heads. They're robust enough to handle larger, mature trees, with the tree-handling performance to also efficiently accumulate mid-sized timber. The 853M Tracked Feller Buncher is most typically equipped with the FR22B felling head.

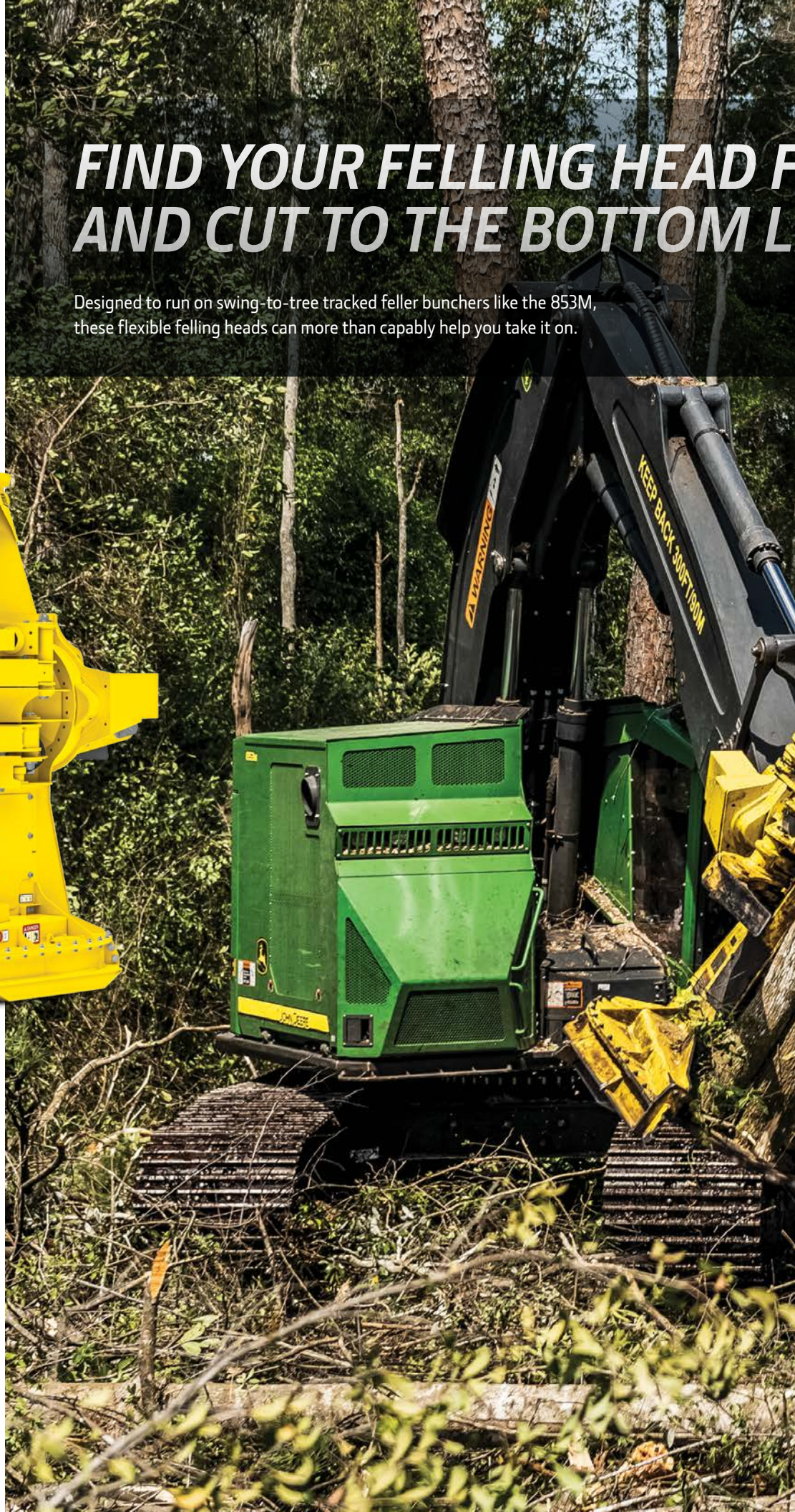
# FIND YOUR FELLING HEAD AND CUT TO THE BOTTOM LINE

Designed to run on swing-to-tree tracked feller bunchers like the 853M, these flexible felling heads can more than capably help you take it on.

FR22B



FS22B





**TIT  
LINE.**

## FELLING HEADS

### Well within your reach

From small stems to big timber, softwood to hardwood, level or sloped ground, John Deere has a disk saw felling head that's designed for your job.

### Cut and accumulate

The **FR21B\*** is a lighter-weight, high-rotation felling head designed for both select- and final-harvest applications. With excellent cut and accumulation capacity, this felling head has been optimized for small to mid-sized timber.

### Powerful productivity

Its 686-millimeter (27 inch) single-cut capacity makes the **FR27†** our largest-cut-capacity felling head. Over 16-percent bigger than the FR24B, a massive 0.70-square-meter (7.5 square foot) accumulation area efficiently handles a single large tree or multiple smaller stems. With long harvesting arms, hardened-steel saw housing, and large side-chip exhaust chute, the FR27 is productive, durable, and maintenance friendly.

### Proven reliability

Delivering efficient, multi-stem high-accumulation performance with huge pockets and tall horns, and available in both limited and high-rotation wrist, **FS50 and FR50** felling heads are best suited for first and second thinnings as well as high-production plantation harvests.

\*With 6.71-meter (22 foot) boom only. / †With 6.10-meter (20 foot) boom only.

### Choose the correct felling head for your 853M Tracked Feller Buncher.



6–14"

Plantation  
Thinning  
Select Cut  
High  
Accumulation  
Short–Mid-  
Height Timber

**FS50 / FR50**



10–18"

Select Cut  
Final Felling  
Mid–High  
Accumulation  
Mid-Height  
Timber

**FR21B**



14–22"

Select Cut  
Final Felling  
Mid Accumulation  
Mid-Height–  
Tall Timber

**FS22B / FR22B**



18–27"

Final Felling  
Swamp Logging  
(Swell)  
Mid–Low  
Accumulation  
Tall Timber

**FR27**



FS50



FR50



FR21B



FR27

# 853M TRACKED FELLER BUNCHER SPECIFICATIONS

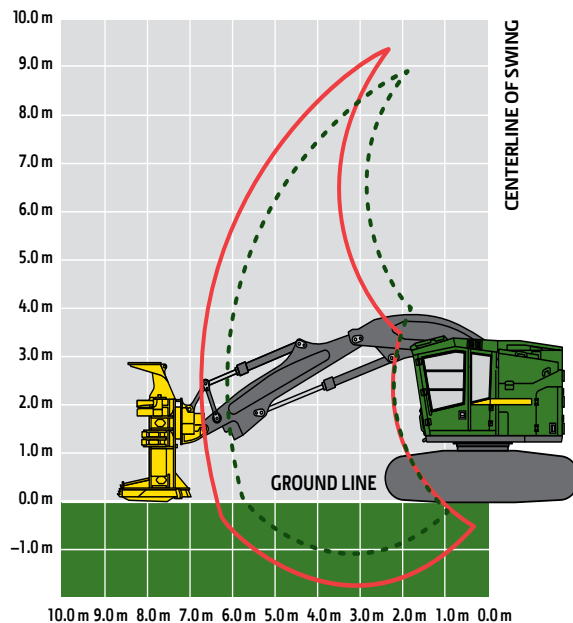
Engine		853M	
Manufacturer and Model	John Deere PowerTech™ PSS 9.0L	John Deere PowerTech™ Plus 6090H	
Non-Road Emission Standard	EPA Final Tier 4/EU Stage V	EPA Tier 3/EU Stage IIIA / EPA Tier 2/EU Stage II	
Cylinders	6	6	
Displacement	9.0 L (549 cu. in.)	9.0 L (549 cu. in.)	
	<i>Standard Travel</i>	<i>Dedicated Travel</i>	<i>Dedicated Travel</i>
Peak Power at 1,900 rpm	224 kW (300 hp)	246 kW (330 hp)	224 kW (300 hp)
Net Peak Torque at 1,500 rpm	1270 Nm (937 lb.-ft.)	1392 Nm (1,027 lb.-ft.)	1270 Nm (937 lb.-ft.)
Cooling			
Fan Type	Suction type, hydraulically driven, variable speed, reversing		
Hydraulics			
Closed center, load sense, pressure compensated			
Standard Travel System			
<b>Main Pump</b>	Variable-displacement axial piston		
Maximum Rated Flow	532 L/min. (131 gpm)		
<b>Continuous Saw Pump</b>	Dedicated variable-displacement axial piston		
Maximum Rated Flow	135 L/min. (36 gpm)		
<b>Attachment Pump</b>	Dedicated variable-displacement axial piston		
Maximum Rated Flow	135 L/min. (36 gpm)		
Dedicated Travel System			
<b>Main Pump</b>	Variable-displacement axial piston		
Maximum Rated Flow	494 L/min. (131 gpm)		
<b>Travel Pump</b>	Dedicated variable-displacement axial piston		
Maximum Rated Flow (x2)	190 L/min. (50 gpm)		
<b>Continuous Saw Pump</b>	Dedicated variable-displacement axial piston		
Maximum Rated Flow	135 L/min. (36 gpm)		
<b>Attachment Pump</b>	Dedicated variable-displacement axial piston		
Maximum Rated Flow	135 L/min. (36 gpm)		
Oil Filtration	2 main return filters, 10-micron return with bypass, 1 case-drain strainer, 25 micron		
Electrical			
	<i>EPA Final Tier 4/EU Stage V</i>	<i>EPA Tier 3/EU Stage IIIA / EPA Tier 2/EU Stage II</i>	
Voltage	24 volt	24 volt	
Number of Batteries	2 x 12 volt	2 x 12 volt	
Alternator Rating	200-amp standard	100-amp standard, 130-amp optional	
Work Lights	LED (12)	LED (12)	
Service Lights	LED (2)	LED (2)	
Undercarriage			
Integral track guides, thick high-abrasion-resistant material, ramp angles, hydraulic track adjustment			
Size	U7 Extreme Duty (EXD)		
Track Chain	215.9 mm (8.5 in.)		
Number of Track Links (per side)	47		
Lower Rollers (per side)	9		
Carrier Slides/Rollers (per side)	2		
Travel Performance	<i>Standard Travel</i>	<i>Dedicated Travel</i>	
Travel Speed, Forward and Reverse			
High	4.2 km/h (2.6 mph)	4.2 km/h (2.6 mph)	
Low	2.0 km/h (1.2 mph)	2.0 km/h (1.2 mph)	
Tractive Effort	322 kN (72,299 lbf)	308 kN (69,196 lbf)	
Rotating Upper			
Swing System			
Swing Speed (maximum)	6.8 rpm		
Swing Torque	94 740 Nm (69,880 lb.-ft.)		
Swing Brake	Sealed wet multi-disc, manually applied/released		
Serviceability			
<b>Refill Capacities</b>	<i>EPA Final Tier 4/EU Stage V</i>	<i>EPA Tier 3/EU Stage IIIA / EPA Tier 2/EU Stage II</i>	
Fuel Tank	870 L (228.9 gal.)	870 L (228.9 gal.)	
Diesel Exhaust Fluid (DEF)	34 L (8.9 gal.)	N/A	

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<b>Ground Pressure (SAE J1309)</b>		<b>853M</b>	
Includes standard equipment, 6.71-m (22 ft.) power boom with Rapid Cycle System (RCS), medium extended counterweight, half-full fuel tank, and all fluids, less attachment			
Undercarriage	EPA Final Tier 4/EU Stage V U7 EXD	EPA Tier 3/EU Stage IIIA / EPA Tier 2/EU Stage II U7 EXD	
Double Grouser			
610 mm (24 in.)	62.4 kPa (9.1 psi)	61.7 kPa (9.0 psi)	
762 mm (30 in.)	50.9 kPa (7.4 psi)	50.3 kPa (7.3 psi)	
Single Grouser			
610 mm (24 in.)	62.0 kPa (9.0 psi)	61.3 kPa (8.9 psi)	
711 mm (28 in.)	53.9 kPa (7.8 psi)	53.3 kPa (7.7 psi)	
Triple Grouser (soft terrain only)			
914 mm (36 in.)	43.1 kPa (6.3 psi)	42.6 kPa (6.2 psi)	
<b>Operating Weight</b>			
Includes standard equipment, 6.71-m (22 ft.) power boom with RCS, medium extended counterweight, 610-mm (24 in.) single-grouser tracks, half-full fuel tank, and all fluids, less attachment			
Undercarriage	EPA Final Tier 4/EU Stage V U7 EXD	EPA Tier 3/EU Stage IIIA / EPA Tier 2/EU Stage II U7 EXD	
Approximate Weight — Base Machine	32 430 kg (71,510 lb.)	32 070 kg (70,710 lb.)	
<b>Boom Performance</b>			
<b>6.71-m (22 ft.) Boom</b>			
Maximum Reach (to tip of saw blade)	8.49 m (27 ft. 10 in.)		
Minimum Reach (to tip of saw blade)	3.83 m (12 ft. 7 in.)		
Cutting Swath	4.66 m (15 ft. 3 in.)		
<b>Power Lift Option With Rapid Cycle System (RCS)</b>			
Lift Capacity, Bare Pin at Full Reach	5540 kg (12,220 lb.)		
Lift Capacity, Bare Pin at 6.10 m (20 ft.)	6860 kg (15,130 lb.)		
<b>6.10-m (20 ft.) Boom</b>			
Maximum Reach (to tip of saw blade)	7.88 m (25 ft. 10 in.)		
Minimum Reach (to tip of saw blade)	3.92 m (12 ft. 10 in.)		
Cutting Swath	3.96 m (13 ft. 0 in.)		
<b>Power Lift Option With RCS</b>			
Lift Capacity, Bare Pin at 6.10 m (20 ft.) at Full Reach	6670 kg (14,710 lb.)		

### 853M Tracked Feller Buncher



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# 853M *TRACKED FELLER BUNCHER SPECIFICATIONS (continued)*

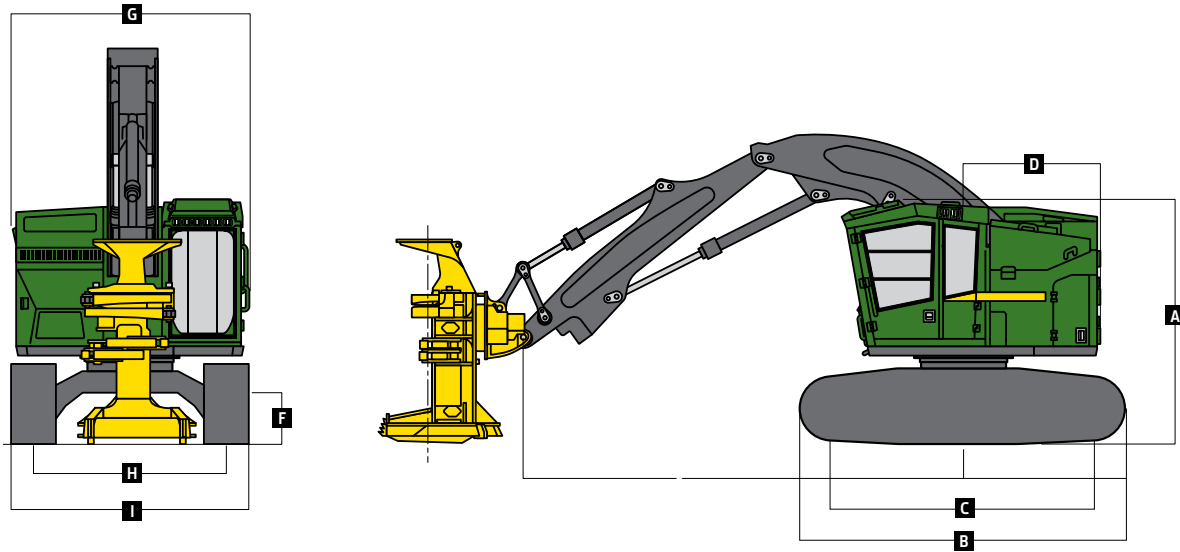
Attachment Information		853M				
Attachment	FR21B*	FS22B	FR22B	FR27 <sup>†</sup>	FS50	FR50
Maximum Cutting Capacity	545 mm (21.5 in.)	559 mm (22.0 in.)	559 mm (22.0 in.)	686 mm (27.0 in.)	508 mm (20.0 in.)	508 mm (20.0 in.)
Maximum Accumulation Capacity	0.46 m <sup>2</sup> (5.0 sq. ft.)	0.48 m <sup>2</sup> (5.2 sq. ft.)	0.48 m <sup>2</sup> (5.2 sq. ft.)	0.70 m <sup>2</sup> (7.5 sq. ft.)	0.64 m <sup>2</sup> (6.9 sq. ft.)	0.64 m <sup>2</sup> (6.9 sq. ft.)
Opening at Front of Housing	1180 mm (46.5 in.)	1280 mm (50.4 in.)	1280 mm (50.4 in.)	1382 mm (54.4 in.)	870 mm (34.3 in.)	870 mm (34.3 in.)
Blade Diameter	1372 mm (54.0 in.)	1422 mm (56.0 in.)	1422 mm (56.0 in.)	1676 mm (66.0 in.)	1346 mm (53.0 in.)	1346 mm (53.0 in.)
Number of Teeth	18	18	18	18	18	18
Saw rpm	1,150 rpm	1,150 rpm	1,150 rpm	1,000 rpm	1,250 rpm	1,225 rpm
Wrist Rotation	302 deg.	30 deg.	312 deg.	300 deg.	30 deg.	312 deg.
Width at Saw Housing	1550 mm (61.0 in.)	1620 mm (63.8 in.)	1620 mm (63.8 in.)	1908 mm (75.1 in.)	1660 mm (65.0 in.)	1510 mm (59.4 in.)
Height	2820 mm (111.0 in.)	3068 mm (120.8 in.)	3068 mm (120.8 in.)	3094 mm (121.8 in.)	2850 mm (112.0 in.)	2846 mm (112.0 in.)
Weight (including adapter and wrist)	3140 kg (6,920 lb.)	3550 kg (7,830 lb.)	3840 kg (8,470 lb.)	4220 kg (9,310 lb.)	3370 kg (7,430 lb.)	3666 kg (8,082 lb.)
*With 6.71-m (22 ft.) boom only. / <sup>†</sup> With 6.10-m (20 ft.) boom only.						
Machine Dimensions		U7 EXD				
Standard Undercarriage		U7 EXD				
<b>A</b>	Overall Height With Standard 6.71-m (22 ft.) Boom					
	Top of Cab With Flat Skylight	3.46 m (11 ft. 4 in.)				
	Top of Cab With Peaked Skylight	3.68 m (12 ft. 1 in.)				
	Top of Boom, Extended, Attachment Vertical	3.93 m (12 ft. 11 in.)				
<b>B</b>	Overall Track Length	4.90 m (16 ft. 1 in.)				
<b>C</b>	Track Length (idler to sprocket center)	3.83 m (12 ft. 7 in.)				
<b>D</b>	Tail Swing (from swing center)					
	Small Counterweight	1.94 m (6 ft. 4 in.)				
	Medium Counterweight	1.94 m (6 ft. 4 in.)				
	Medium Extended Counterweight	2.25 m (7 ft. 4 in.)				
	Large Extended Counterweight	2.25 m (7 ft. 4 in.)				
<b>E</b>	Boom Reach (to attachment pin)					
	Standard 6.71-m (22 ft.) Boom					
	Maximum	6.71 m (22 ft. 0 in.)				
	Minimum	2.05 m (6 ft. 9 in.)				
	Cutting Swath	4.66 m (15 ft. 3 in.)				
	Optional 6.10-m (20 ft.) Boom					
	Maximum	6.10 m (20 ft. 0 in.)				
	Minimum	2.14 m (7 ft. 0 in.)				
	Cutting Swath	3.96 m (13 ft. 0 in.)				

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Machine Dimensions <i>(continued)</i>		853M
Standard Undercarriage <i>(continued)</i>		U7 EXD
<b>F</b>	Ground Clearance	
	Single Grouser	779 mm (31 in.)
	Double Grouser	756 mm (30 in.)
	Triple Grouser	738 mm (29 in.)
<b>G</b>	Upperstructure Width	
	Standard	3.15 m (10 ft. 4 in.)
	With Optional Walkway	3.36 m (11 ft. 0 in.)
<b>H</b>	Track Gauge	2.69 m (8 ft. 10 in.)
<b>I</b>	Width Over Tracks	
	610-mm (24 in.) Track Shoes	3.30 m (10 ft. 10 in.)
	711-mm (28 in.) Track Shoes	3.40 m (11 ft. 2 in.)
	760-mm (30 in.) Track Shoes	3.45 m (11 ft. 4 in.)
	914-mm (36 in.) Track Shoes	3.61 m (11 ft. 10 in.)

### 853M Tracked Feller Buncher



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MTFB853U (22-05)

Contact us to learn more.

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