



WHEELED FELLER BUNCHERS

643H 843H

FULL TREE SYSTEM ▶

HARVESTING ▼

TRANSPORTING

LOADING





Head can be tilted back 17° to control heavy bunches and tall trees when felling and tilted 58° forward for dumping.

BUILT TO WORK FOR YOUR BOTTOM LINE.

The stronger, more dependable H-Series feller bunchers are loaded with features to make you more productive while costing you less to operate.

FULL TREE SYSTEM

HARVESTING

TRANSPORTING

LOADING



Full Tree System—No one offers the extensive product line, dealer network and tough, purpose-built machines like John Deere.



H-Series feller bunchers offer fast maneuverability with 90° articulation.

	643H	843H
John Deere Engine Power	6068T—170 gross hp 127 kW	6068H—200 gross hp 149 kW
Standard Operating Weight, Less Felling Head	25,975 lb. 11 782 kg	26,275 lb. 11 918 kg

The H-Series feller bunchers are built to be durable with a tapered-roller-bearing center joint and a streamlined hood constructed of dent-resistant steel. Heavy-gauge fuel and hydraulic tanks, as well as the wraparound rear bumper are forest-tough to stand up to the punishment of the woods. They're also built to be more productive with big pins and bushings in the boom and head-tilt linkage to maximize lift capacity.

The 643H is compact and versatile with a short wheelbase and tight turn radius to work in crowded conditions. The 843H features the extra size and power for bigger wood and heavier bunches. Whatever one best fits your needs, you'll get the high performance you demand to get the job done right.

FEATURE-RICH AND FOREST-TOUGH.

WHEELED FELLER BUNCHER

643H 843H

High-efficiency John Deere engines deliver full power on-demand at low rpms with economical fuel consumption.

Well-equipped operator's cabin with excellent all-direction sight lines, proven cab HVAC system and the choice of wheel or joystick steering all ensure full-shift productivity.

Smooth hydrostatic drive with two-speed, electric-over-hydraulic gearbox avoids transmission wear when shifting on-the-go.

Strong center hinge with large tapered roller bearings gives long-life reliability to this critical area.

Load-sensing hydraulics with a closed-center hydraulic valve lets you run different functions at the same time.





Powerful cylinders and large pins and bushings provide the strength for high lifting capacity.

Felling head tilts back for maximum control of tall, heavy trees when felling, especially in slope conditions.

OPERATOR COMFORT IS THE KEY TO PRODUCTIVITY.

The remarkably roomy cab is well appointed for the ultimate in operator comfort. Plus, powerful load-sensing hydraulics will get the most out of every bunch and every shift.



Choose between traditional wheel steering or lever steering.



Parallel geometry of the arms and linkages keep trees vertical when the boom is raised.



Streamlined engine cover, with no limb risers, greatly improves visibility to the rear.

Long shifts fly by when you are inside a climate-controlled, isolation-mounted cab. Well-placed, low-effort controls are well within reach, and your view is unobstructed in all directions including up to the treetops through the large skylight, all to make your operator as productive as possible.

But when it comes to straight-out productivity, the H-Series feller bunchers feature John Deere diesel engines with a steep torque rise in the work range for easier load starting, better low-speed driveability and superior lugging power. The load-sensing hydraulics utilize a closed-center control valve, allowing multiple hydraulic functions to be powered simultaneously.



Spacious operator station features high-efficiency air-conditioning with ducts positioned for air flow to the operator's feet and chest, CB radio and new AM/FM/cassette radio with remote speakers.

The tilt/telescopic steering wheel allows the operator to find the perfect position for shift-long comfort.

TAKES THE PUNISHMENT AND KEEPS COMING BACK FOR MORE.

The H-Series feller bunchers are designed to perform day after day with reliable components and quick access to service areas.



Heavy-gauge fuel and hydraulic tanks and wraparound bumper stand up to the woods for unsurpassed reliability.

The parking brake is fully enclosed and oil-immersed for increased dependability.

Both the 643H and 843H feller bunchers feature smooth hydrostatic drive, with two-speed, electric-over-hydraulic gear box to avoid transmission wear when shifting on the go. Quick shifts between forward and reverse and on-the-fly differential lock-ups front and rear provide fast, no hesitation response and extended component life cycle.

When service is necessary, all panels open quickly and easily, and the entire cab can be hydraulically tilted for efficient access to vital service areas and components. Pumps in the engine compartment are easy to get to, simplifying service and getting your John Deere H-Series Feller Buncher back to work quickly.



Strong center hinge with large tapered roller bearings give long-life reliability to this critical area.

The cab's roof is built to be dent-resistant with thicker front and rear windows for operator protection.

FELLING HEADS FACTORY MATCHED FOR YOUR EXACT NEEDS.

Industry-leading disk saw felling heads and a high-speed shear are available to fit your specific application.

Forest-tough heads are built for shift-after-shift reliability, with either single-post and center-pocket design for handling big stems, or twin-post and side-pocket design to accumulate smaller stems.

Saw speed recovers quickly for increased productivity as the machine moves forward to the next tree. A shear head is available on the 643H.

FELLING HEADS	FD22	FD45	FB20 SHEAR
Cutting Capacity	22-in 56 cm	20-in 51 cm	20-in 51cm
Style	Single post center pocket	Twin post side pocket	Twin post center pocket
Accumulating Capacity	4.1 sq-ft 0,38m ²	6.9 sq-ft 0,64 m ²	5.2 sq-ft 0,48 m ²
Weight	5,800 lb 2 631 kg	4,900 lb 2 227 kg	6,000 lb 2 728 kg



FD22 FELLING HEAD

FD22—BEST IN BIG WOOD

- The FD22 has two non-folding harvesting and two folding accumulating clamp arms with high center posts and horn to control tall trees.
- Single-post design, with center storage pocket, holds large trees better with a wider opening.
- Low velocity front discharge directs spray chips forward, away from the machine.

FB20—SHEAR HEAD

- The FB20 shear head features one fixed and one moveable shear blade. High accumulation capacity and strength for high productivity in heavy going.
- Twin post, center pocket for secure handling of thick stems.
- Cutting capacity of 20 in. (51 cm).

FD45—BEST IN CLASS

- The FD45 disc saw felling head has best-in-class size and productivity with 990-sq.-in. (638.7 m²) accumulation and an offset pocket for gathering multiple small stems.
- Single-side accumulating and gathering arms provide fast, reliable and repetitive gathering and moving cut stems to the pocket.
- All lubrication points are accessible from the side of the head for easy servicing and less downtime.
- Twin-post design provides maximum visibility to the cutting zone.
- Can cut and hold single stems up to 20-in. (51 cm) in diameter with better use of horsepower and faster saw recovery.

FD45 FELLING HEAD



MAKE THE MOST OF EVERY DAILY OPERATING DOLLAR.

These highly maneuverable feller bunchers will keep your operating costs in line with high-output engines and load-sensing hydraulics.



Rest assured that your purpose-built John Deere Forestry equipment is supported by the most extensive dealer network in the industry and unsurpassed parts availability. That's our promise.

John Deere engines are dependable with more net torque at lower rpms for instant power and economical fuel consumption. Load-sensing hydraulics run all functions at the same time, greatly improving fuel economy. When it comes time for daily maintenance chores, nearly

all routine servicing can be done from ground level. Removing the left rear side shield allows quick and easy access to all daily engine service points, as well as fluid levels and visual check points.

OPERATOR'S STATION

Air conditioner (R134A refrigerant)
 AM-FM stereo radio with two (2) remote-mounted speakers
 CB radio
 Cab tilt with onboard hydraulics
 Cab with integral forestry guarding, FOPS, OPS, and ROPS protective structure
 Coat hook
 Cup holder
 Defroster fan (right front of cab)
 Fire extinguishers, dry chemical and pressurized water
 Floor mat
 Full-function monitor instrumentation with audible warning for: Engine air intake temperature (843 only) / Engine coolant temperature / Engine oil pressure
 Monitor indicator lights for: Engine air filter restriction / Hydraulic filter restriction / Hydrostatic filter restriction / Low alternator voltage / Park brake
 Gauges, illuminated: Engine coolant temperature / Hydrostatic transmission oil temperature
 Hand throttle
 Headliner
 Heater, 40,000 Btu
 Horn
 Hourmeter, illuminated
 Interior light
 Lockable cab door (with start switch key)
 Lunch cooler storage area
 Pressurizer, dual-zone, three speed with fresh air inlet
 Rearview mirror, interior mounted
 Seat, fabric covered, adjustable suspension, knee action with: Height and weight adjustment / Seat armrest height adjustment / High back with headrest / Seat backrest angle adjustment
 Seat belt, 2-in 51 mm wide with retractor (conforms to SAE J386)
 Secondary exit (right side window)
 Large treetop window
 Sliding side windows (2)
 Tinted polycarbonate windows
 Storage in left-hand door
 Windshield wiper/washer

STANDARD EQUIPMENT

Engine
 John Deere 6068T, 414 cu-in 6,8 L
 170 gross hp 127 kW (643 only)
 John Deere 6068H, 414 cu-in 6,8 L
 200 gross hp 149 kW (843 only)
 Antifreeze to -34°F -37°C
 Blower-type cooling fan, enclosed with guard
 Coolant recovery tank
 Electric fuel shutoff with start switch key
 Fuel filters, dual stage, quick release
 Fuel water separator
 In-line injection pump
 Isolation-mounted engine
 Oil drain shutoff for spill-free oil changes
 Oil-to-water engine oil cooler
Electrical
 Battery disconnect in operator's station
 Dual, heavy-duty, low-maintenance batteries
Transmission
 Infinitely variable hydrostatic transmission
 Oil cooler, oil to air, heavy-duty in-line core, side-by-side with radiator
 Oil filter, 10-micron spin-on type
 Quick disconnect diagnostic ports
 Protected electric/hydraulic range shift of two-speed gearbox
Axles
 Front and rear axle differential lock, hydraulically operated, on-the-go
 Standard-duty front axle, John Deere 1200 Series
 Rear axle, John Deere 1200 Series
Brakes
 Service: Disc type, mounted inboard of axle final drives, front axle / Sealed and lubricated / Self adjusting and self equalizing
 Park: Spring-applied, hydraulically released, driveline mounted, completely enclosed in oil
Steering
 Frame articulation, with 90 degrees total articulation, rubber frame stops
 Wheel steering, telescopic and tilt column, steering wheel spinner knob
Hydraulic System
 Low-effort pilot controls
 Oil filter, return, 10 micron with bypass
 Oil cooler, heavy-duty in-line core, side-by-side with radiator
 Open-center hydraulics for shear machine (643 only)
 Pressure-compensating load-sense hydraulics for saw machine (843 only)
 Quick disconnect diagnostic ports
 Continuous disc saws with axial piston pump (843 only)

Felling Head

None
Overall Vehicle
 Articulation transport lock pin
 Cable-type cab guards
 Hand grips
 Hose shields on lift and tilt cylinders
 Lift arm lock
 Lockable heavy-duty engine side shields
 Lockable hinged access doors over fuel and hydraulic fill caps
 Pressurized water reservoir with pressure gauge, hose, and spray nozzle
 Tow hook

OPTIONAL EQUIPMENT

Transmission
 Ground speed limiter control
Axles
 Heavy-duty front axle, John Deere 1400 Series
 Lever steering, left-hand armrest-mounted control
Hydraulic System
 Pressure-compensating load-sense hydraulics for saw machine (643 only)
 Shear (643 only)
Felling Head
 Continuous disc saw
 Shear (643 only)

Net engine power is with standard equipment including air cleaner, alternator, and cooling fan, at standard conditions per SAE J1349 and DIN 70 020, using No 2-D fuel at 35 API gravity. No derating is required up to 10,000 ft (3050 m) altitude. Gross power is without cooling fan. 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 units with full fuel tank, 175-lb (79 kg) operators, and standard equipment.

TECHNICAL DATA 643H 843H WHEELED FELLER BUNCHER

ENGINE

643H

843H

Type	John Deere 6068T with altitude-compensating turbocharger	John Deere 6068H with altitude-compensating turbocharger
Gross Power @ 2,000 rpm	170 gross hp 127 kW.....	200 gross hp 149 kW
Cylinders.....	6	6
Displacement.....	414 cu-in 6,8 L	414 cu-in 6,8 L
Maximum Net Torque @ 1,400 rpm.....	494 lbf 670 Nm.....	575 lbf 780 Nm
Fuel Consumption, Typical	5.1–6.5 gal/hr 19,3–24,6 L/hr.....	6.5–7.5 gal/hr 19,3–28,4 L/hr
Fuel Filters.....	Two, with water separation	Two, with water separation
Air Cleaner	Dual stage with safety element and dust unloader valve	Dual stage with safety element and dust unloader valve
Cooling System.....	Heavy-duty radiator with coolant recovery reservoir	Heavy-duty radiator with coolant recovery reservoir, and side-by-side charged air cooler
Cooling Fan.....	Blower	Blower
Lubrication.....	Pressure system with oil cooler (oil to water).....	Pressure system with oil cooler (oil to water)
Oil Filter	Vertically mounted spin-on oil	Vertically mounted spin-on oil

ELECTRICAL

Alternator, 12 Volts.....	95 amps
Batteries (2), 12 Volt	
Reserve Minutes	180 minutes each
Cold Cranking Capacity.....	925 cold cranking amps each

TRANSMISSION

Type	Infinitely variable hydrostatic with two-speed gearbox
Travel Speeds, With 28L-26 Tires	Forward and Reverse
Gear 1	0–5 mph 0–8 kph
Gear 2	0–12.5 mph 0–20 kph
Filter	10-micron, spin-on type, filters all oil to rotating groups

AXLES

Final Drives.....	Heavy-duty planetary, mounted inboard
Differentials	Hydraulic lock, operated on-the-go front and rear – standard

BRAKES

Service Brakes	Inboard-mounted hydraulic wet-disc, bathed in cooling oil, long life, self adjusting, self equalizing, front axle
Parking Brake	Automatically spring applied, hydraulically released, driveline mounted, completely enclosed in oil

STEERING

Frame Articulation	90 degrees total articulation, stop-to-stop
Steering Wheel	Standard
Lever Steering Option	For minimum-control motion

HYDRAULIC SYSTEM

643H

843H

Main Pumps		
Saw Machine	One variable-displacement axial piston main pump, closed-center with priority for steering; one variable-displacement axial piston pump for continuous saw	One variable-displacement axial piston main pump, closed-center with priority for steering; one variable-displacement axial piston pump for continuous saw
Shear Machine.....	Two fixed-displacement gear pumps for shear; open-center system; axial piston pilot/brake pump	
Ground Drive.....	Variable displacement axial piston pump and motor	Variable displacement axial piston pump and motor
Shear Close Flow @ 2,200 rpm	88 gpm 333 L/min	
Shear Open Flow @ 2,200 rpm	44 gpm 166 L/min	
Shear Pressure (Close).....	3,500 psi 24 131 kPa	
Lift and Tilt Flow @ 2,200 rpm	44 gpm 166 L/min (shear).....	43 gpm 163 L/min (saw)
Pressure.....	3,100 psi 21 374 kPa.....	3,100 psi 21 374 kPa
Continuous Disc Saw Flow @ 2,200 rpm		
(Optional)	30 gpm 113 L/min	41 gpm 155 L/min
Pressure.....	3,750 psi 25 856 kPa.....	3,750 psi 25 856 kPa
Filter	Vertically mounted 10-micron spin-on return oil with bypass	Vertically mounted 10-micron spin-on return oil with bypass

CYLINDERS

	Bore	Rod Diameter
Lift Arm (2)	3.92-in 100 mm	2.24-in 56 mm
Head Tilt (2)	3.92-in 100 mm	2.24-in 56 mm

FELLING HEAD INFORMATION

	643H	843H
Shear	FB20	
Continuous-Type Disc Saw	FD22 - Single post	FD22 - Single post
	FD45 - Twin post	

TIRES

Size Offered	28L-26 LS2 12 Ply / 28L-26 LS2 14 Ply	28L-26 LS2 12 Ply / 28L-26 LS2 14 Ply
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GROUND PRESSURE DATA

	643H	843H
Ground Pressure*	28L-26 LS2 12 Ply	28L-26 LS2 12 Ply
	8.6 psi 59 kPa	8.7 psi 60 kPa

*Data is for shear- or saw-equipped unit, tires inflated to recommended pressures, and 3-in 76 mm ground penetration.

CAPACITIES

Fuel Tank	75 gal 284 L	75 gal 284 L
Cooling System	26 qt 24,6 L	32.5 qt 30,7 L
Engine Lubrication, Including Filter	20 qt 19 L	20 qt 19 L
Hydraulic Reservoir	67 gal 254 L	67 gal 254 L
Two-Speed Gearbox	5.2 qt 4,9 L	5.2 qt 4,9 L
Pump Drive Gearbox	5 qt 4,7 L	5 qt 4,7 L
Axles (Front and Rear), Each (1200 Series)	20 qt 19 L	20 qt 19 L
Axle (Front – 1400 Series)	30 qt 23,4 L	30 qt 23,4 L

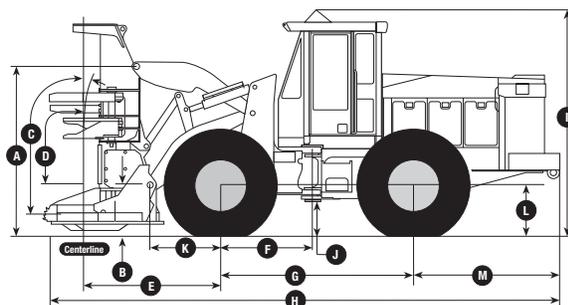
OPERATING WEIGHTS

Standard Equipment, Less Felling Head	25,975 lb 11 782 kg	26,275 lb 11 918 kg
With Shear (FB20)	31,975 lb 14 504 kg	
With Saw, Continuous (FD22)	31,860 lb 14 482 kg	32,390 lb 14 689 kg

DIMENSIONS

	643H	843H
A Maximum Height at Saw Head Attaching Pin	8-ft 0.3-in 2 446 mm	8-ft 0.3-in 2 446 mm
B Ground to Saw Head Attaching Pin	27.3-in 694 mm	27.3-in 694 mm
C Saw Head Tilt Back at Ground Level	17 degrees	17 degrees
D Saw Head Tilt Forward at Ground Level	58 degrees	58 degrees
E Front Axle to 20-in Tree Centerline	7-ft 3-in 2 141 mm	6-ft 3-in 1 988 mm
F Machine Articulation to Front Axle	3-ft 11-in 1 194 mm	4-ft 5-in 1 346 mm
G Wheelbase	8-ft 8-in 2 642 mm	9-ft 2-in 2 794 mm
Overall Width (With 28-in Wide Tires)	9-ft 6-in 2 900 mm	9-ft 10.2-in 3 002 mm
H Overall Length	24-ft 2-in 7 367 mm	24-ft 2-in 7 367 mm
I Overall Height	10-ft 8-in 3 251 mm	10-ft 8-in 3 251 mm
J Ground Clearance	20-in 508 mm	20-in 508 mm
K Saw Head Attaching Pin to Axle	3-ft 7.8-in 1 111 mm	3-ft 7.8-in 1 111 mm
L Ground to Axle	29.2-in 741,7 mm	29.2-in 741,7 mm
M Rear Axle to Rear of Unit	6-ft 9.8-in 2 078 mm	6-ft 9.8-in 2 078 mm

With FD22 Continuous Saw and 28L-26 LS2 Tires



W H E E L E D F E L L E R B U N C H E R

643H 843H



NOTHING RUNS LIKE A DEERE.™

Maybe those words are the reason why almost every other professional logger is a John Deere customer.

They're just five simple words. Yet they have profound impact on your company. Because at their heart they mean equipment that is built forest tough, with greater productivity, more uptime and lower daily operating costs. They mean a dealer network over 380 locations strong, with immediate access to parts and experts that understand your industry. They mean a dedicated lender

in John Deere Credit, committed to helping loggers succeed with competitive financing to enhance cash flow. And they mean a global forestry equipment leader that invests more in R & D than any other manufacturer.

But most of all, these words represent the confidence that comes with over 168 years of heavy equipment experience.

Your world is logging. So is ours. John Deere Forestry. Leading the way, worldwide.

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ADVANCED HARVESTING SYSTEM

PRODUCTIVITY | UPTIME | LOW DAILY OPERATING COSTS

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