



JOHN DEERE

FORESTRY EQUIPMENT

H

SKIDDERS

640H | 648H | 748H | 848H



A close-up photograph of a John Deere skidder's yellow grapple loading a large stack of logs. The skidder's black arm, featuring the John Deere logo, is positioned above the logs. The background shows a dense forest of evergreen trees.

Being the boss isn't always easy

But John Deere skidders inspire loggers each and every day. With industry-leading axles, bulletproof frames, and innovative options like dual-mode steering, the H-Series Skidders continue John Deere's unwavering dedication to being the leader in the woods.



Fuel-efficient Tier 3 PowerTech Plus™ engines deliver power without compromise in all conditions.

Increased option choices, including dual-mode steering.

Rely on our industry-leading axles in the toughest conditions.

The H-Series Skidders live up to the horsepower and powertrain performance standards you've come to expect from John Deere.

Whether you are skidding logs or moving your log loader, these machines are built to do what skidders do best: Get the job done.

640H/648 with Direct Drive

Engine	6.8L Tier 3 PowerTech Plus
Peak Gross Horsepower	184 hp (137 kW)
Tong Opening At Tips	115 in. (2921 mm) (648H only)
Grapple Area	10.4 sq. ft. (1 m ²) (648H only)
Wheelbase	135 in.

640H/648 with Torque Converter

Engine	6.8L Tier 3 PowerTech Plus
Peak Gross Horsepower	NA
Tong Opening At Tips	115 in. (2921 mm) (648H only)
Grapple Area	10.4 sq. ft. (1 m ²) (648H only)
Wheelbase	137 in.

748H with Direct Drive

Engine	6.8L Tier 3 PowerTech Plus
Peak Gross Horsepower	202 hp (151 kW)
Tong Opening At Tips	127 in. (3226 mm)
Grapple Area	14.9 sq. ft. (1.4 m ²)
Wheelbase	149 in.

848H with Lock-Up Torque Converter

Engine	6.8L Tier 3 PowerTech Plus
Peak Gross Horsepower	224 hp (167 kW)
Tong Opening At Tips	130 in. (3302 mm)
Grapple Area	16.0 sq. ft. (1.5 m ²)
Wheelbase	149 in.

One tight grab on productivity

Count on the H-Series Skidders for the fastest load gathering and the most secure hold on stems from stump to landing. From steep slopes to swamp conditions to flat land, our skidders take a load off your mind, carrying you both securely and powerfully. With a wide range of models and options, choose the size, power, and options that best suit your job needs.





- 1 Hydraulically driven fan runs only as needed for efficient cooling and reduced fuel consumption.
- 2 116-inch wide heavy-duty decking blade has a heavy cutting edge and improved grading capability and weight distribution. This blade is available as an option on the 748H and comes standard on the 848H.
- 3 6.8 L PowerTech Plus Tier 3 6068H engine delivers best-in-class fuel efficiency.
- 4 Achieve unmatched stability with a long wheelbase and wide stance. For better efficiency, the power-to-weight ratio has also been improved, up to 5.6 percent in the 848H.
- 5 Our industry-leading grapples offer a choice of four single-function or three dual-function models to suit your application. The 748H and 848H grapples have a huge 16-square-foot area and 130-inch-wide opening that can securely handle more wood than the larger competitive grapples.

Turn your operator loose

Productivity begins with a smartly designed cab so that your operators are secure and comfortable. With new features like dual-mode steering and electronic engine throttle at their fingertips, your operators and jobsite are going to see a lot more productivity.



Electronic engine throttle option (direct-drive transmissions only) with three preset speeds frees up your operator's throttle pedal foot.

Controls for heating, venting, air conditioning, and windshield wipers are at the operator's fingertips.

The cab is isolation-mounted for quiet operation, with tinted front windshield, sun visor, and heavy screens to secure the side door windows.

A quick glance at the diagnostic monitor gives you engine temperature, transmission oil temperature, and fuel-level readings. The select button calls up digital readouts for hour meter, gear selection, battery voltage, engine rpm, and hydraulic oil temperature with fault codes for the engine and transmission. The warning indicators include an audible alarm — critical for immediate shutdown, or cautionary during a less critical malfunction.



Lock-Up Torque Converter exclusive on the 848H stays engaged between gearshifts, offering a smooth, steady shift, improving fuel efficiency and driving your productivity.

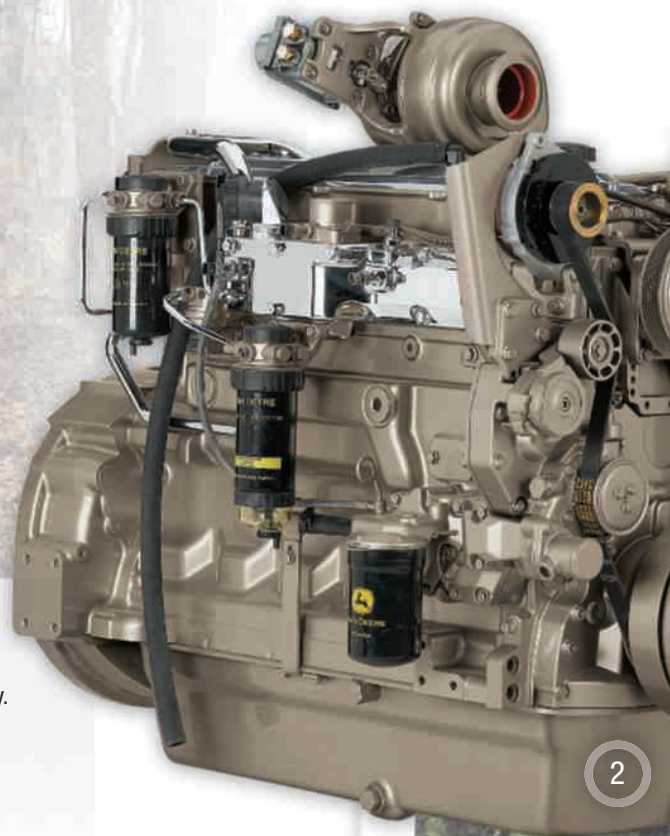


Dual-mode steering option allows you to alternate between standard steering and quick-steer mode with the flip of a switch.

Cooling System reversible fan automatically reverses every 20 minutes, ejecting debris from the radiator and coolers for more uptime and productivity. Or just hit a button to manually initiate the cleaning cycle.



The little things mean a lot — including a dome light, storage under the armrest with 12V power port, a beverage holder, door bins, and easy-to-read gauges, indicators, and switches. Optional AM/FM stereo in the contoured headliner has remote speakers and a CD or cassette option. The park-brake switch has been relocated to the right-hand console for convenient access or operation.



- 1 The 640H Cable Skidder Winch is easily operated with a single lever, and features sealed, wet-disc clutches and spring-applied, hydraulically activated brakes for extreme durability.
- 2 6.8L PowerTech Plus Tier 3 engine provides clean, efficient, and reliable performance.
- 3 New articulation joint seal extends life, keeping out abrasive debris.
- 4 Protect lights from jobsite hazards with new guarding features.
- 5 Axle-mounting joint has been improved with two additional bolts to each joint.

Larger-diameter arch pins and bushings and enhanced side mounts for improved durability.

Transmission choices: (1) Direct Drive comes standard on the 640H/648H/748H; (2) Torque Converter is an option on the 648H; (3) Lock-Up Torque Converter is optional on the 848H.

Choose optional large-diameter steering cylinders for even greater turning force with duals or floatation tire options. Bushings are 30 percent stronger than the previous models.

Hydraulic wet-disc brakes are completely sealed and immersed in a cooling oil bath. Self-adjusting to extend their service intervals.



Dependable when your jobsite isn't

You can't count on the weather or the site you're working on, but you can count on the reliability of your John Deere skidder. No one feature makes our skidders reliable; it takes commitment and years of experience to build in quality. From its articulation joint strength to its transmission performance, your skidder is going to keep on going until you hear the dinner bell.



Even our service is turbocharged

Improved productivity and efficient service go hand in hand. By improving oil flow through our skidders, we've increased time between service intervals. And with increased hydraulic and fuel capacity, we've stretched your dollars — and service intervals — even further.





Oil sampling ensures cooling, engine, transmission, and hydraulics are working efficiently.

Remote-mounted engine, hydraulic, and transmission filters are positioned for easy access.

The cab can be hydraulically tilted to provide unrestricted access to all critical components.

500-hour engine oil change intervals.

Hydraulic oil cooler and A/C condenser swing out for easy cleaning.

Side-by-side cooling system design allows access to all coolers for cleaning.

Grapple Skidders 648H, 748H, 848H

	648H Grapple Direct Drive	648H Grapple Torque Converter	748H Grapple Direct Drive	848H Grapple Lockup Torque Converter
ENGINE	John Deere, PowerTech Plus™ 6068H, Tier 3		John Deere, PowerTech Plus™ 6068H, Tier 3	
Engine displacement	415 cu. in. <i>6.8 L</i>	415 cu. in. <i>6.8 L</i>	415 cu. in. <i>6.8 L</i>	415 cu. in. <i>6.8 L</i>
Gross horsepower @ rated speed	172 hp <i>128 kW</i>	185 hp <i>138 kW</i>	189 hp <i>141 kW</i>	200 hp <i>149 kW</i>
Gross horsepower — peak	184 hp <i>137 kW</i>	N/A	202 hp <i>151 kW</i>	224 hp <i>167 kW</i>
Additional features	Turbocharged, air-to-air intercooled Engine cold-start system: glow plug Slope operation, maximum angle: 45 deg.			
COOLING	Fan drive: variable-speed hydraulic with automatic reversing			
TRANSMISSION				
Number of gears:				
Forward	8	6	8	6
Reverse	7	3	7	3
Maximum travel speed with 30.5-32 tires @ 2,200 rpm:				
Forward travel speed	14.3 mph <i>23.0 km/h</i>	15.8 mph <i>25.4 km/h</i>	14.3 mph <i>23.0 km/h</i>	13.0 mph <i>20.9 km/h</i>
Reverse travel speed	10.8 mph <i>17.4 km/h</i>	11.5 mph <i>18.5 km/h</i>	10.8 mph <i>17.4 km/h</i>	9.5 mph <i>15.3 km/h</i>
AXLES	Front axle oscillation, stop to stop: 30 deg. Final drive: heavy-duty planetary, mounted inboard			
STEERING				
Standard features:	Power, fully hydraulic, Orbitrol™ valve Articulation angle: 45 deg. each direction			
Optional features:	Dual-mode Secondary			
BRAKES				
Standard features:	Inboard-mounted, wet disc, oil cooled, and self-adjusting front and rear axles Automatically spring-applied, hydraulically released, sealed and lubricated, wet multi-disc, integrally mounted in transmission			
HYDRAULICS				
Reservoir size	15 gal. <i>57 L</i>	15 gal. <i>57 L</i>	15 gal. <i>57 L</i>	15 gal. <i>57 L</i>
Main pump:				
Type	Variable-displacement axial piston		Variable-displacement axial piston	
Maximum rated flow	42 gpm <i>159 L/min.</i>	42 gpm <i>159 L/min.</i>	42 gpm <i>159 L/min.</i>	42 gpm <i>159 L/min.</i>
REFILL CAPACITIES				
Fuel tank size:				
Single function	72 gal. <i>273 L</i>	72 gal. <i>273 L</i>	N/A	N/A
Dual function	78 gal. <i>295 L</i>	78 gal. <i>295 L</i>	87 gal. <i>329 L</i>	87 gal. <i>329 L</i>
Optional without winch	N/A	N/A	111 gal. <i>420 L</i>	111 gal. <i>420 L</i>

	648H Grapple Direct Drive	648H Grapple Torque Converter	748H Grapple Direct Drive	848H Grapple Lockup Torque Converter
WINCH (optional)				
Type	Sealed, wet multi-disc clutch and brake with pressurized lubrication single-lever control			
Cable capacity	4000 (8-in. drum)	4000 (10-in. drum)	4000 (8-in. drum)	4000 (8-in. drum)
0.75-in. 19.1 mm cable	179 ft. 54.6 m	141 ft. 43.0 m	179 ft. 54.6 m	179 ft. 54.6 m
Linepull bare drum				
0.625-in. 15.9 mm cable:				
High speed	37,296 lb. 166 kN	35,270 lb. 157 kN	50,548 lb. 225 kN	50,548 lb. 225 kN
Standard speed	43,449 lb. 193 kN	N/A	43,449 lb. 193 kN	43,449 lb. 193 kN
OPERATING WEIGHTS				
Standard equipment:				
Single function	30,925 lb. 14 040 kg	31,275 lb. 14 199 kg	N/A	N/A
Single-function long frame	31,405 lb. 14 258 kg	31,755 lb. 14 417 kg	N/A	N/A
Dual function	32,245 lb. 14 638 kg	32,595 lb. 14 798 kg	37,540 lb. 17 043 kg	39,300 lb. 17 842 kg

	648H Grapple Direct Drive	648H Grapple Torque Converter	748H Grapple Direct Drive	848H Grapple Lockup Torque Converter
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DIMENSIONS

Tire size	28L-26, 14 PR LS2	30.5-32, 16 PR LS2	30.5-32, 16 PR LS2	30.5-32, 16 PR LS2
A Overall height*	119 in. 3023 mm	123.1 in. 3127 mm	123.1 in. 3127 mm	123.1 in. 3127 mm
B Maximum blade lift above ground	51.5 in. 1308 mm	59 in. 1499 mm	59 in. 1499 mm	59 in. 1499 mm
C Maximum blade dig below ground	14.5 in. 367 mm	14.2 in. 360 mm	14.2 in. 360 mm	14.2 in. 360 mm
Dozer blade width	86 in. 2184 mm	116 in. 2946 mm	116 in. 2946 mm	116 in. 2946 mm
Optional	116 in. 2946 mm	116 in. 2946 mm		
D Front axle to front of machine	66.3 in. 1685 mm	70 in. 1778 mm	70 in. 1778 mm	70 in. 1778 mm
E Front axle to blade cutting edge arc	90.2 in. 2292 mm	100.7 in. 2558 mm	100.7 in. 2558 mm	100.7 in. 2558 mm
F Front axle to articulation joint	68 in. 1727 mm	70 in. 1778 mm	70 in. 1778 mm	70 in. 1778 mm
G Wheelbase	135 in.† 3430 mm	137 in.† 3481 mm	149 in. 3785 mm	149 in. 3785 mm

*Add 6.3 in. 160 mm when equipped with water tank.

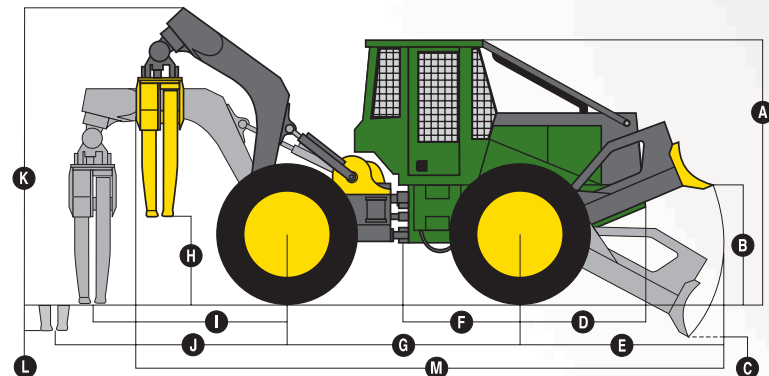
GRAPPLE

Tire size	28L	30.5	30.5	30.5
H Height of grapple from ground level	31.3 in. 794 mm	62 in. 1575 mm	61.3 in. 1556 mm	58.7 in. 1490 mm
I Reach of grapple at ground level	84.7 in. 2152 mm	116.6 in. 2961 mm	122.6 in. 3113 mm	122.5 in. 3111 mm
J Reach of grapple at full reach**	93.3 in. 2369 mm	101.6 in. 2580 mm	106.3 in. 2699 mm	106.3 in. 2699 mm
K Maximum height of boom	133.7 in. 3395 mm	164.9 in. 4188 mm	168.9 in. 4289 mm	168.9 in. 4289 mm
L Below ground reach of grapple at full reach**	41.5 in. 1054 mm	35.7 in. 907 mm	43.9 in. 1114 mm	46.5 in. 1180 mm
M Overall length with grapple	23 ft. 8.6 in.† 7230 mm	25 ft. 7.6 in. 7814 mm	26 ft. 5.8 in. 8072 mm	26 ft. 5.8 in. 8072 mm

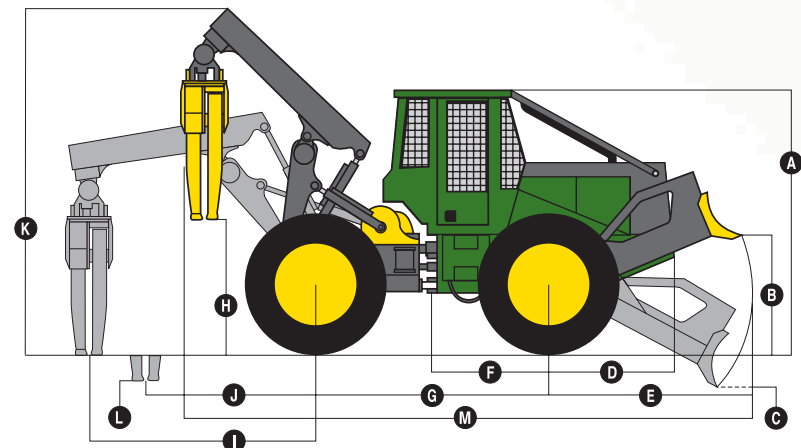
**Arch and boom cylinders fully extended.

†For long-frame single-arch and for dual-function machines, add 10 in. 254 mm.

648H with Single-Function Grapple



648H / 748H / 848H with Dual-Function Grapple

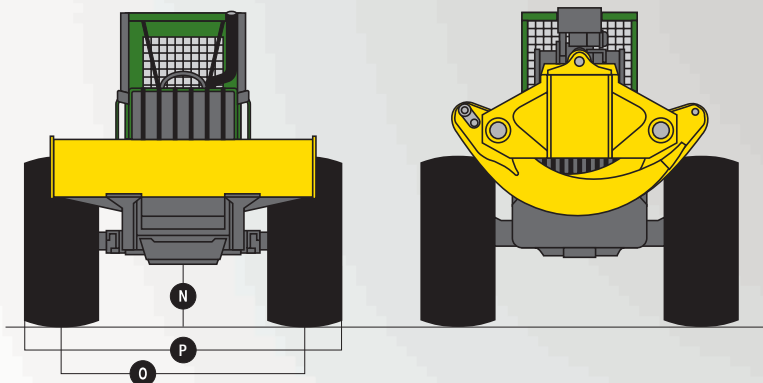


648H DIMENSIONS WITH TIRES

Tire size	28L-26	24.5-32	30.5-32	35.5-32	73/44-32
N Ground clearance	20.2 in. 514 mm	23.5 in. 598 mm	24.2 in. 615 mm	26.7 in. 677 mm	23.8 in. 605 mm
O Wheel tread	8 ft. 10 in. 2.69 m	8 ft. 2 in. 2.49 m	8 ft. 1 in. 2.46 m	8 ft. 6 in. 2.59 m	9 ft. 2 in. 2.79 m
P Overall width	10 ft. 2 in. 3.10 m	10 ft. 2 in. 3.10 m	11 ft. 7 in. 3.53 m	11 ft. 5 in. 3.48 m	13 ft. 8 in. 4.17 m
Turning radius over tires	Direct drive: 18 ft 9 in. 5.7 m / Torque converter: 19 ft. 0 in. 5.8 m				

748H / 848H DIMENSIONS WITH TIRES

Tire size	24.5-32	30.5-32	35.5-32	73/44-32
N Ground clearance	23.5 in. 598 mm	24.2 in. 615 mm	26.7 in. 677 mm	23.8 in. 605 mm
O Wheel tread	8 ft. 7 in. 2.62 m	8 ft. 1 in. 2.46 m	8 ft. 5 in. 2.57 m	9 ft. 2 in. 2.79 m
P Overall width	10 ft. 7 in. 3.53 m	11 ft. 8 in. 3.56 m	11 ft. 5 in. 3.48 m	13 ft. 8 in. 4.17 m
Turning radius over tires	19 ft. 10 in. 6.04 m			



648H

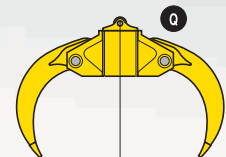
748H

848H

DIMENSIONS WITH GRAPPLE

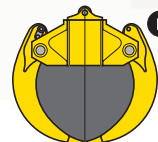
Standard grapple head:

Q Tong opening at tips	115 in. 2921 mm	127 in. 3226 mm	130 in. 3302 mm
R Enclosure area, tongs tip to tip	10.4 sq. ft. 0.97 m ²	14.9 sq. ft. 1.38 m ²	16.1 sq. ft. 1.50 m ²
S Minimum diameter of stem	5.5 in. 140 mm	6.0 in. 152 mm	7.5 in. 191 mm



High-capacity grapple head:

Q Tong opening at tips	125 in. 3175 mm	130 in. 3302 mm	134 in. 3404 mm
R Enclosure area, tongs tip to tip	12.5 sq. ft. 1.16 m ²	16.1 sq. ft. 1.50 m ²	17.9 sq. ft. 1.66 m ²
S Minimum diameter of stem	5.2 in. 132 mm	7.5 in. 191 mm	8.25 in. 210 mm



Cable Skidders 640H

640H Cable Direct Drive

640H Cable Torque Converter

ENGINE

Engine displacement
Gross horsepower @ rated speed
Gross horsepower — peak
Additional features

John Deere, PowerTech Plus™ 6068H, Tier 3
415 cu. in. *6.8 L* 415 cu. in. *6.8 L*
172 hp *128 kW* 185 hp *138 kW*
184 hp *137 kW* N/A
Turbocharged, air-to-air intercooled
Engine cold-start system: glow plug
Slope operation, maximum angle: 45 deg.

COOLING

Fan drive: variable-speed hydraulic with automatic reversing

TRANSMISSION

Number of gears:
Forward
Reverse
Maximum travel speed with
30.5-32 tires @ 2,200 rpm:
Forward travel speed
Reverse travel speed
Optional features

8 6
7 3
14.3 mph *23.0 km/h* 15.8 mph *25.4 km/h*
10.8 mph *17.4 km/h* 11.5 mph *18.5 km/h*
Transmission disconnect, for cold-weather starting (direct-drive only)

AXLES

Front axle oscillation, stop to stop: 30 deg.
Final drive: heavy-duty planetary, mounted inboard

STEERING

Standard features:
Optional features:

Orbitrol™ valve
Articulation angle: 45 deg. each direction
Dual-mode
Secondary

BRAKES

Standard features:
Service brakes
Parking brake

Inboard-mounted, wet disc, oil cooled, and self-adjusting front and rear axles
Automatically spring-applied, hydraulically released, sealed and lubricated, wet multi-disc,
integrally mounted in transmission

HYDRAULICS

Reservoir size
Main pump:
Type
Maximum rated flow

15 gal. *57 L* 15 gal. *57 L*
Variable-displacement axial piston
29 gpm *110 L/min.* 29 gpm *110 L/min.*

REFILL CAPACITIES

Fuel tank size

41 gal. *155 L* 41 gal. *155 L*

640H Cable Direct Drive / Torque Converter

WINCH

Type

Sealed, wet multi-disc clutch and brake with pressurized lubrication single-lever control

Cable capacity

4000 (8-in. drum)	4000 (10-in. drum)	6000 (11-in. drum)
179 ft. <i>54.6 m</i>	141 ft. <i>43.0 m</i>	263 ft. <i>80.2 m</i>
100 ft. <i>30.5 m</i>	78 ft. <i>23.8 m</i>	147 ft. <i>45.0 m</i>

Linepull @ peak engine,

0.625-in. *15.8 mm* cable

Bare drum	Full drum
37,296 lb. <i>166 kN</i>	22,377 lb. <i>100 kN</i>
43,449 lb. <i>193 kN</i>	26,069 lb. <i>116 kN</i>
35,270 lb. <i>157 kN</i>	26,069 lb. <i>116 kN</i>
37,839 lb. <i>168 kN</i>	23,615 lb. <i>105 kN</i>

4000 (8-in. drum high speed)

4000 (8-in. drum standard speed)

4000 (10-in. drum high speed)

6000 (11-in. drum high speed)

Line speed @ 2,200 rpm,

0.625-in. *15.8 mm* cable

Bare drum	Full drum
142 fpm <i>43.2 m/min</i>	236 fpm <i>72.0 m/min</i>
122 fpm <i>37.1 m/min</i>	203 fpm <i>61.8 m/min</i>
150 fpm <i>45.7 m/min</i>	203 fpm <i>61.8 m/min</i>
128 fpm <i>39.0 m/min</i>	205 fpm <i>62.5 m/min</i>

4000 (8-in. drum high speed)

4000 (8-in. drum standard speed)

4000 (10-in. drum high speed)

6000 (11-in. drum high speed)

640H Cable Direct Drive

640H Cable Torque Converter

OPERATING WEIGHTS

Standard equipment:

Cable

30,275 lb. <i>13 745 kg</i>	30,625 lb. <i>13 904 kg</i>
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640H Cable Direct Drive

640H Cable Torque Converter

DIMENSIONS

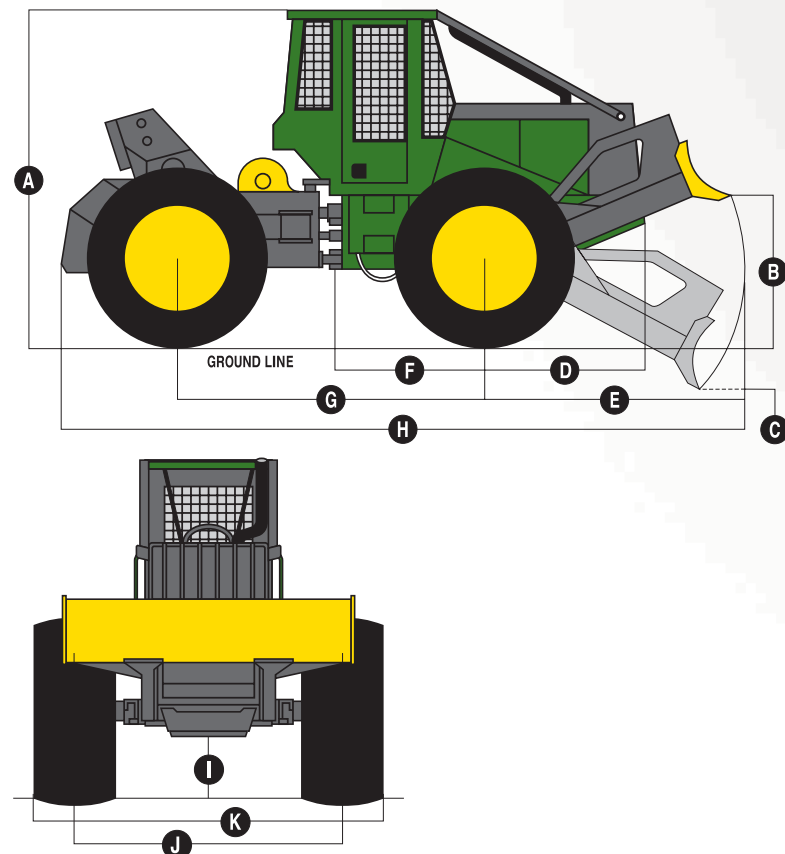
Tire size	28L-26, 14 PR LS2	30.5-32, 16 PR LS2
A Overall height*	119 in. 3023 mm	123.1 in. 3127 mm
B Maximum blade lift above ground	51.5 in. 1308 mm	59 in. 1499 mm
C Maximum blade dig below ground	14.5 in. 367 mm	14.2 in. 360 mm
Dozer blade width	86 in. 2184 mm	86 in. 2184 mm
Optional	116 in. 2946 mm	116 in. 2946 mm
D Front axle to front of machine	66.3 in. 1685 mm	70 in. 1778 mm
E Front axle to blade cutting Edge arc	90.2 in. 2292 mm	100.7 in. 2558 mm
F Front axle to articulation joint	68 in. 1727 mm	70 in. 1778 mm
G Wheelbase	11 ft. 3 in. 3430 mm	11 ft. 5 in. 3480 mm
H Overall length	23 ft. 8.6 in. 7230 mm	24 ft. 7 in. 7493 mm

*Add 6.3 in. 160 mm when equipped with water tank.

640H DIMENSIONS WITH TIRES

Tire size	23.1-26 (narrow gauge)	28L-26 (narrow gauge)	24.5-26 (narrow gauge)	23.1-26	28L-26	24.5-32	30.5-32	35.5-32	73/44-32
I Ground clearance	19.6 in. 498 mm	20.2 in. 514 mm	23.5 in. 598 mm	19.6 in. 498 mm	20.2 in. 514 mm	23.5 in. 598 mm	24.2 in. 615 mm	26.7 in. 677 mm	23.8 in. 605 mm
J Wheel tread	7 ft. 3 in. 2.21 m	8 ft. 6 in. 2.59 m	8 ft. 6 in. 2.59 m	7 ft. 3 in. 2.21 m	8 ft. 6 in. 2.59 m	8 ft. 6 in. 2.59 m	8 ft. 1 in. 2.46 m	8 ft. 6 in. 2.59 m	9 ft. 2 in. 2.79 m
K Overall width	9 ft. 2 in. 2.79 m	10 ft. 10 in. 2.90 m	10 ft. 10 in. 2.77 m	9 ft. 2 in. 2.79 m	10 ft. 10 in. 3.00 m	10 ft. 10 in. 3.00 m	11 ft. 7 in. 3.12 m	11 ft. 5 in. 3.48 m	13 ft. 8 in. 3.86 m

640H Cable







JOHN DEERE
Nothing Runs Like A Deere™

John Deere is the world's leading designer,
manufacturer, and distributor of forest machines.
Our range of purpose-built forestry equipment
is without equal in the industry.

From thinning to regeneration harvesting,
for both cut-to-length and full-tree applications,
John Deere builds woods-tough equipment
with the logger in mind.

