









# Get into the swing

Reduced-tail-swing configuration enhances machine flexibility, enabling the 85 P-Tier to maneuver nimbly and work efficiently on tight and congested jobsites. Plus this go-to taskmaster transports easily, making it ideal for "dig-and-go" projects.

# In control and comfortable

Ergonomically correct short-throw pilot joysticks enable smooth, precise fingertip control. Handy new swing-boom functionality in the joystick eliminates a hard-to-reach floor pedal and clears space to move your legs.

# At home in the cab

All-new operator station that's more spacious than previous models features a completely new adjustable and heated airsuspension seat with armrests, comfortable air-conditioning system, and ample entryway and legroom. Wide expanse of front and side glass, narrow front cab posts, large tinted overhead window, and numerous mirrors enable outstanding visibility. Isolated cab mounts help reduce noise and vibration.

# Stay connected

New 8-inch multi-language LCD monitor equipped with Bluetooth® connectivity to phone calls and music provides intuitive access to a wealth of information and functions. Just turn and tap the rotary dial to select work mode, access operating info, check service intervals, source diagnostic codes, adjust cab temperature, and tune the radio. Handy USB port and cellphone holder make it easy to stay in touch.

# Bring your work into focus

Standard LED lighting illuminates dusty and before-daylight or after-dark jobsites. Integrated into the all-new, high-resolution main monitor for optimal image quality, the standard right rear left camera system with additional LED surround lighting work together to supplement 270-degree visibility of the area around the machine, even in low-light conditions.

# Modes of operation

Engine performance and hydraulic flow are optimally balanced for predictable operation. Two productivity modes allow you to choose the digging style that fits the job: **Power** delivers a balance of speed and fuel economy for normal operation, while **Economy** reduces engine speed and helps save fuel.

## Bank on these blades

Standard blade is ideal for cleanup and backfilling. It provides extra lift capacity and stability when running hydraulic hammers and other heavy-duty attachments. Optional new angle blade with float redefines earthmoving and grading.

# Rugged resistance

Large idlers, rollers, and strutted links enable the undercarriage to withstand and command. Thick-plate single-sheet mainframe, box-section track frames, double-seal swing bearing, and new boom-cylinder guard deliver rock-solid durability. All structures and components are built to resist stress.

# It's all right here

Large hinged doors provide easy wide-open access to service items including cooler and condenser cleanout. Remote oil-filter and filter-bank access, remote swing-bearing grease bank, generous fuel tank, and 500- and 5,000-hour engine and hydraulic oil-service intervals minimize downtime for routine maintenance.

Where the rubber meets the road

Optional rubber track pads or heavy-duty rubber belts let the 85 P-Tier set up and work on paved surfaces and even cross curbs without doing damage.







# 85 P-TIER EXCAVATOR



# Work your way

DEERE

Undercarriage options include rubber tracks or sealed and lubricated chain with rubber pads or steel semi-grousers from 18- to 24-inches wide. Numerous bucket options let you spec the excavator for the way you work.

# **Connected machines**

The 85 P-Tier Excavator arrives JDLink™ ready and connectivity capable. Via a simple dealer-installed hardware kit, you can analyze critical machine data, track utilization, review diagnostic alerts, and more from **the John Deere Operations Center™**. The Operations Center also enables **John Deere Connected Support™**, which uses data from thousands of connected machines to proactively address issues before they arise. Once you opt in, your dealer can remotely monitor machine health, diagnose problems, and even update machine software without a trip to the jobsite.\*

\*Availability varies by region and product. Options not available in every country.



# **85 P-TIER EXCAVATOR SPECIFICATIONS**



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.

Engine	85 P-TIER		
Manufacturer and Model	Yanmar 4TNV98CT-WHBW		
Non-Road Emission Standard	EPA Final Tier 4/EU Stage IV		
Net Power (ISO 9249)			
	50.4 kW (67.6 hp) at 2,000 rpm		
Cylinders	4 3.3 L (202 cu. in.)		
Displacement			
Aspiration	Turbocharger		
Off-Level Capacity	70% (35 deg.)		
Cooling			
Variable-speed fan; viscous clutch			
Powertrain			
2-speed propel with automatic shift			
Maximum Travel Speed			
Low	3.1 km/h (1.9 mph)		
High	5.0 km/h (3.1 mph)		
Drawbar Pull	6520 kgf (14,374 lb.)		
Hydraulics			
Open center, load sensing			
Main Pumps	3 variable-displacement axial-piston	pumps	
Maximum Pump Flow	2 x 72 + 56 L/m (2 x 19 + 15 gpm)		
Auxiliary			
Maximum Flow (1 pump)*	16.8 gpm (63.6 lpm)		
Maximum Pressure (1 pump)*	3,000 psi (207 bar / 20.7 MPa)		
Maximum Flow (2 pump) <sup>†</sup>	35.2 gpm (133.3 lpm)		
Maximum Pressure (2 pump) <sup>†</sup>	3,000 psi (207 bar / 20.7 MPa)		
Pilot Pump	l gear		
Maximum Rated Flow			
	20 L/m (5.3 gpm)		
System Relief Pressure	4300 kPa (624 psi)		
System Operating Pressure	20,000   D. // 0.57 - 1)		
Implement Circuits	28 000 kPa (4,061 psi)		
Travel Circuits	31 600 kPa (4,583 psi)		
Swing Circuits	26 100 kPa (3,785 psi)		
Controls	Pilot levers, short stroke, low effort;	hydraulic pilot controls with shutoff le	ver
*Flow and pressure at selector valve.			
†2-pump flow not available on machines equippe	d with angle-blade option.		
Cylinders			
Heat-treated, chrome-plated, polished cylinder i	ods; hardened steel (replaceable bushi	ngs) pivot pins	
	Bore	Rod Diameter	Stroke
Boom (1)	115 mm (4.5 in.)	70 mm (2.8 in.)	915 mm (36.0 in.)
Arm (1)	95 mm (3.7 in.)	60 mm (2.4 in.)	900 mm (35.4 in.)
Bucket (1)	85 mm (3.3 in.)	55 mm (2.2 in.)	730 mm (28.7 in.)
Electrical	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	
Batteries	2 x 12 volt		
Battery Capacity	2 x 450 CCA		
Alternator Rating	50 amp		
Work Lights	2 LED: 1 mounted on boom and 1 mou	inted on frame	
Undercarriage	Z LLD. I IIIOUIILEU OII DOOIII AIIU I IIIOU	anted on Italiie	
Rollers (each side)			
	1		
Carrier	1		
Track	5		
Shoes (each side)	40		
Track			
Adjustment	Hydraulic		
Chain	Sealed and lubricated		
Swing Mechanism			
Swing Speed	10.1 rpm		
Swing Torque	16 600 Nm (12,244 lbft.)		
Boom Swing			
Left	65 deg.		
Right	55 deg.		
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**85 P-TIER EXCAVATOR SPECIFICATIONS** 



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C

Maximum Digging Depth

Maximum Cutting Height

E Minimum Swing Radius F Tail-Swing Radius

Maximum Dumping Height

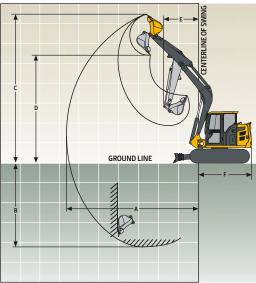
Ground Pressure	85 P-TIER
450-mm (18 in.) Rubber Crawler Pads	39 kPa (5.7 psi)
Triple Semi-Grouser Shoes	
450 mm (18 in.)	39 kPa (5.7 psi)
600 mm (24 in.)	30 kPa (4.4 psi)
Serviceability	
Refill Capacities	
Fuel Tank	125 L (33 gal.)
Cooling System	13.1 L (3.5 gal.)
Engine Oil With Filter	12.3 L (3.2 gal.)
Hydraulic Tank	52 L (14 gal.)
Hydraulic System	100 L (26 gal.)
Propel Gearbox (each)	1.2 L (1.3 qt.)
Operating Weights	
With 75-kg (165 lb.) Operator, Oil, Water, Full Fuel	Tank, 3.67-m (12 ft. 0 in.) Boom, and 2.12-m (6 ft. 11 in.) Arm
With 450-mm (18 in.) Track (steel track shoes	8820 kg (19,445 lb.)
with vulcanized rubber pads bonded to top	
of shoes)	
With Angle Blade	9168 kg (20,212 lb.)
With 600-mm (24 in.) Steel Track	8994 kg (19,828 lb.)
With 450-mm (18 in.) Rubber Crawler Pads	8858 kg (19,529 lb.)
With Angle Blade	9206 kg (20,296 lb.)
With 450-mm (18 in.) Continuous Rubber Belt	8726 kg (19,238 lb.)
Optional Components	
Undercarriage (with the following)	
450-mm (18 in.) Rubber Crawler Pads	2912 kg (6,420 lb.)
450-mm (18 in.) Continuous Rubber Belt	2884 kg (6,358 lb.)
Triple Semi-Grouser Shoes	
450 mm (18 in.)	2874 kg (6,336 lb.)
600 mm (24 in.)	3048 kg (6,720 lb.)
1-Piece Boom (with arm cylinder)	443 kg (977 lb.)
2.12-m (6 ft. 11 in.) Arm With Bucket Cylinder	282 kg (622 lb.)
and Linkage	
Boom Lift Cylinder	109 kg (196 lb.)
0.49-m³ (0.64 cu. yd.), 1219-mm (48 in.)	330 kg (728 lb.)
Ditching Bucket	
Counterweight, Standard	1408 kg (3,104 lb.)
Operating Dimensions	
Arm Length	2.12 m (6 ft. 11 in.)
Arm Digging Force (ISO)	35.3 kN (7,936 lb.) ↑
Bucket Digging Force (ISO)	
A Maximum Reach	7.56 m (24 ft. 10 in.)
B 14 1 B 1	

4.53 m (14 ft. 10 in.)

7.19 m (23 ft. 7 in.)

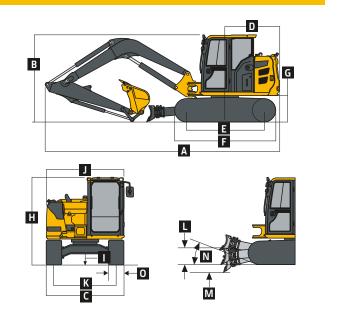
5.12 m (16 ft. 10 in.) 2.68 m (8 ft. 10 in.)

1.59 m (5 ft. 3 in.)



# 85 P-TIER

I.	lachine Dimensions	85 P-TIER					
		2.12 m (6 ft. 11 in.)					
	rm Length						
Α	Overall Length	6.79 m (22 ft. 3 in.)					
В	Overall Height in Transport Position	2.52 m (8 ft. 3 in.)					
C	Undercarriage Width						
	With 450-mm (18 in.) Track	2.20 m (7 ft. 3 in.)					
	With 600-mm (24 in.) Steel Track	2.47 m (8 ft. 1 in.)					
D	Rear-End Length/Swing Radius	1.59 m (5 ft. 3 in.)					
Ε	Distance Between Idler/Sprocket Centerline	2.30 m (7 ft. 6 in.)					
F	Undercarriage Length	2.90 m (9 ft. 6 in.)					
G	Counterweight Clearance	0.72 m (28 in.)					
Н	Cab Height	2.52 m (8 ft. 3 in.)					
1	Ground Clearance	360 mm (14 in.)					
J	Upperstructure Width	2.26 m (7 ft. 5 in.)					
K	Gauge Width	1.75 m (5 ft. 9 in.)					
L	Blade Lift Height	450 mm (18 in.)					
В	lade Height	472 mm (19 in.)					
В	lade Width						
	With 450-mm (18 in.) Track	2200 mm (7 ft. 3 in.)					
	With 600-mm (24 in.) Steel Track	2470 mm (8 ft. 1 in.)					
M	Blade Cut Below Grade	410 mm (16 in.)					
Ν	Blade Lift Angle	26 deg.					
0	Track Width						
	With 450-mm (18 in.) Track 0.45 m (18 in.)						
	With 600-mm (24 in.) Steel Track	0.60 m (24 in.)					



Lift Capacities

**Boldface type** indicates hydraulically limited capacities; lightface type indicates stability-limited capacities, in kg (lb.). Ratings are at bucket lift hook, using standard counterweight, situated on firm, level, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87% of hydraulic capacity or 75% of weight needed to tip machine. All lift capacities are based on ISO 10567.

To   To   To   To   To   To   To   To	J	HORIZONTAL DISTANCE FROM CENTERLINE OF ROTATION									
With 3.67-m   [2 ft. 0 in.) boom, 2.12-m   6 ft. 1  in.) arm, and 450-mm   (18 in.) steel track, with blade on ground, without bucket   4.5 m   15 ft.    1900   1703									6.0 m (20 ft.)		
1.5 m (15 ft.)		Over Front						Over Front	Over Side		
3.0 m (10 ft.)	4.5 m (15 ft.)										
1.5 m   5 ft.    4493   2687   2806   1525   2125   1000											
15 m (5 ft.)	3.0 m (10 ft.)										
Ground Line   19906  (5,924)   16,187  (3,362)   14,504   2,205  (7,071)   1,3152   1,430   2,210   96,4   1,5552   1,7071   1,3152   1,430   2,210   96,4   1,5552   1,5552   1,7071   1,3152   1,430   2,215   1,5552   1,5552   1,7071   1,3152   1,457   1,5552   1	7.5 (5.5)				2607						
Ground Line	1.5 m (5 ft.)										
-1.5 m (-5 ft.) 3119 319 5111 2505 3047 1402 -1.5 m (-5 ft.) 3119 1319 5111 2505 3047 1402 -1.5 m (-10 ft.) (6,875) (11,267) (5,515) (6,717) (3,090) -3.0 m (-10 ft.) 3253 253 2587	C										
-1.5 m (-5 ft.) 3119 (6,875) (10,267) (11,267) (5,515) (6,717) (3,090)  -3.0 m (-10 ft.) 3253 (2587 (7,1711) (5,704)  With 3.67-m (12 ft. 0 in.) boom, 2.12-m (6 ft. 11 in.) arm, and 450-mm (18 in.) track-with rubber crawler pad (steel track shoes with vulcanized rubber pads bonded to top of shoes), with blade on ground, without bucket  4.5 m (15 ft.) 170 (4,190) (3,769)  3.0 m (10 ft.) 200 (4,190) (3,769)  1.5 m (5 ft.) 200 (4,990) (4,868) (3,630) (4,358) (2,297)  1.5 m (5 ft.) 4224 (2688 2825 1528 2130) (1004)  6.	Ground Line										
-3.0 m (-10 ft.)	1 F / F f+ \	2110	2110					(4,872)	(2,125)		
-3.0 m (-10 ft.)	-1.5 111 (-5 1 t.)										
	_3 0 m (_10 f+ )	(0,075)	(0,073)			(0,717)	(5,090)				
With 3.67-m (12 ft. 0 in.) boom, 2.12-m (6 ft. 11 in.) arm, and 450-mm (18 in.) track with rubber crawler pad (steel track shoes with vulcanized rubber pads bonded to top of shoes), with blade on ground, without bucket         1901   1710   171	-3.0 III (-10 I t.)										
top of shoes), with blade on ground, without bucket   4.5 m (15 ft.)	With 3.67-m (12 ft. 0 in.) I	oom. 2.12-m (6 ft	. 11 in.) arm. and 45	50-mm (18 in.) tra	nck with rubber cra	wler pad (steel tr	ack shoes with vu	lcanized rubber na	ds bonded to		
4.5 m (15 ft.)  3.0 m (10 ft.)  1901 (4,190) (3,769) 3.0 m (10 ft.)  1.5 m (5 ft.)  4224 2688 2825 1528 2130 1004 (4,868) (3,630) (4,358) (2,297) 1.5 m (5 ft.)  4224 2688 2825 1528 2130 1004 (4,868) (3,630) (4,696) (2,213)  Ground Line  3359 2515 3212 1435 2208 968 (7,405) (5,545) (7,081) (3,164) (4,868) (2,134)  -1.5 m (-5 ft.) 3187 3187 5074 2515 3030 1409 (7,027) (7,027) (11,186) (5,545) (6,680) (3,107)  -3.0 m (-10 ft.) 3159 2605 (6,965) (5,742)  With 3.67-m (12 ft. 0 in.) boom, 2.12-m (6 ft. 11 in.) arm, and 600-mm (24 in.) steel track, with blade on ground, without bucket 4.5 m (15 ft.)  3.0 m (10 ft.)  3.0 m (10 ft.)  4.5 m (5 ft.)  4.9 (4,849) (3,694) (4,352) (2,339) 1.5 m (5 ft.)  4.9 (9,906) (6,049) (6,187) (3,435) (4,684) (2,257)  Ground Line  3309 2561 3207 1463 2210 987  Ground Line  3309 2561 3207 1463 2210 987  Ground Line  3309 2561 3207 1463 2210 987  Ground Line 3309 2561 3207 1463 2210 987  -1.5 m (-5 ft.) 3119 3119 5111 2559 3047 1435 (6,875) (6,875) (6,875) (11,267) (5,641) (6,717) (3,225) (4,872) (2,176)				,,		F (					
3.0 m (10 ft.)  1.5 m (5 ft.)  4224 2688 2825 1528 2130 1004 (4,868) (3,630) (4,358) (2,297)  1.5 m (5 ft.)  4224 2688 2825 1528 2130 1004 (4,968) (3,369) (4,696) (2,213)  Ground Line  3359 2515 3212 1435 2208 968  -1.5 m (-5 ft.) 3187 3187 5074 2515 3030 1409  -1.5 m (-10 ft.) (7,027) (7,027) (11,186) (5,545) (6,680) (3,107)  -3.0 m (-10 ft.) 3159 2605 (6,965) (5,742)  With 3.67-m (12 ft. 0 in.) boom, 2.12-m (6 ft. 11 in.) arm, and 600-mm (24 in.) steel track, with blade on ground, without bucket  4.5 m (15 ft.) 1900 1736 (4,188) (3,827)  3.0 m (10 ft.) 1900 1676 1974 1061 (4,889) (3,694) (4,352) (2,339)  1.5 m (5 ft.) 4493 2744 2806 1558 2125 1024 (5,9906) (6,049) (6,187) (3,435) (4,684) (2,257)  Ground Line 3309 2561 3207 1463 2210 987  Ground Line 3309 2561 3207 1463 2210 987  Ground Line 3309 2561 3207 1463 2210 987  -1.5 m (-5 ft.) 3119 3119 5111 2559 3047 1435 (6,875) (6,875) (11,267) (5,641) (6,717) (3,165)		g,				1901	1710				
1.5 m (5 ft.)						(4,190)	(3,769)				
1.5 m (5 ft.)	3.0 m (10 ft.)					2208	1647	1977	1042		
Ground Line 3359 2515 3212 1435 2208 968 -1.5 m (-5 ft.) 3187 3187 5074 2515 3030 1409 -3.0 m (-10 ft.) 5 (5,042) 5 (5,042) 5 (6,680) 5 (7,042) 5 (6,680) 5 (7,042) 5 (6,680) 5 (7,042) 5 (6,680) 5 (7,042) 5 (6,680) 5 (7,042) 5 (6,680) 5 (7,042) 5 (6,680) 5 (7,042) 5 (6,680) 5 (7,042) 5 (6,680) 5 (7,042) 5 (6,680) 5 (7,042) 5 (6,680) 5 (7,042) 5 (6,680) 5 (7,042) 5 (6,680) 5 (7,042) 5 (6,680) 5 (7,042) 5 (6,680) 5 (7,042) 5						(4,868)	(3,630)	(4,358)	(2,297)		
Ground Line         3359         2515         3212         1435         2208         968           -1.5 m (-5 ft.)         3187         3187         5074         2515         3030         1409           -3.0 m (-10 ft.)         (7,027)         (11,186)         (5,545)         (6,680)         (3,107)           -3.0 m (-10 ft.)         3159         2605         (5,742)         (5,945)         (6,965)         (5,742)           With 3.67-m (12 ft. 0 in.) boom, 2.12-m (6 ft. 11 in.) arm, and 600-mm (24 in.) steel track, with blade on ground, without bucket         4.5 m (15 ft.)         1900         1736           4.5 m (15 ft.)         1900         1736         1974         1061           4.5 m (15 ft.)         4.9 m (24 in.) steel track, with blade on ground, without bucket         4.5 m (15 ft.)         1900         1736           3.0 m (10 ft.)         4.5 m (25 in.)         4.9 m (24 in.) steel track, with blade on ground, without bucket         4.5 m (25 in.)         4.9 m (25 in.)         1.0 m (24 in.) steel track, with blade on ground, without bucket         4.5 m (25 in.)         4.5 m (25 in.)         4.9 m	1.5 m (5 ft.)			4224	2688		1528	2130	1004		
1.5 m (-5 ft.)   3187   3187   5074   2515   3030   1409   7,027   7,027   11,186   5,545   6,680   3,107   7,027   7,027   11,186   5,545   6,680   3,107   7,027											
-1.5 m (-5 ft.)  3187 (7,027) (7,027) (11,186) (5,545) (6,680) (3,107)  -3.0 m (-10 ft.)  With 3.67-m (12 ft. 0 in.) boom, 2.12-m (6 ft. 11 in.) arm, and 600-mm (24 in.) steel track, with blade on ground, without bucket  4.5 m (15 ft.)  3.0 m (10 ft.)  3.0 m (10 ft.)  15 m (5 ft.)  4493 2744 2806 1558 2125 1024 (9,906) (6,049) (6,187) 3307 1463 2210 987 Ground Line (6,875) (6,875) (11,267) (5,641) (5,641) (6,717) (3,163)  -3.0 m (-10 ft.)  3187 3187 3187 5074 2515 3030 1409 (6,680) (3,107) 1736 (6,680) (3,107) 1736 (4,188) (3,827) 1736 (4,849) (3,694) (4,352) (2,339) (4,352) (2,339) (4,684) (2,257) (5,647) (7,071) (3,225) (4,872) (2,176) (-1.5 m (-5 ft.) 3119 3119 3119 5111 2559 3047 1435 (6,875) (6,875) (11,267) (5,641) (6,717) (3,163)	Ground Line										
11,86   (5,545)   (6,680)   (3,107)   (11,186)   (5,545)   (6,680)   (3,107)   (3,107)   (3,107)   (4,849)   (4,84								(4,868)	(2,134)		
-3.0 m (-10 ft.)  **Mith 3.67-m** (12 ft. 0 in.) boom, 2.12-m** (6 ft. 11 in.) arm, and 600-mm** (24 in.) steel track, with blade on ground, without bucket**  4.5 m (15 ft.)  3.0 m (10 ft.)  1900 1736  (4,188) (3,827)  3.0 m (10 ft.)  2200 1676 1974 1061  (4,849) (3,694) (4,352) (2,339)  1.5 m (5 ft.)  4493 2744 2806 1558 2125 1024  (9,906) (6,049) (6,187) (3,435) (4,684) (2,257)  Ground Line  (9,906) (6,049) (6,187) (3,435) (4,684) (2,257)  Ground Line  (7,296) (5,647) (7,071) (3,225) (4,872) (2,176)  -1.5 m (-5 ft.)  3119 3119 5111 2559 3047 1435  (6,875) (6,875) (11,267) (5,641) (6,717) (3,163)  -3.0 m (-10 ft.)  3253 2644	–1.5 m (–5 ft.)										
Mith 3.67-m (12 ft. 0 in.) boom, 2.12-m (6 ft. 11 in.) arm, and 600-mm (24 in.) steel track, with blade on ground, without bucket   4.5 m (15 ft.)	/ /	(7,027)	(7,027)			(6,680)	(3,107)				
With 3.67-m (12 ft. 0 in.) boom, 2.12-m (6 ft. 11 in.) arm, and 600-mm (24 in.) steel track, with blade on ground, without bucket         4.5 m (15 ft.)       1900 (4,188)       1736 (4,188)       13,827)         3.0 m (10 ft.)       2200 1676 1974 1061 (4,849)       1061 (4,849)       13,694)       (4,352) (2,339)         1.5 m (5 ft.)       4493 2744 2806 1558 2125 1024 (9,906) (6,049) (6,187) (3,435) (4,684) (2,257)       1024 (9,906) (6,049) (6,187) (3,435) (4,684) (2,257)       1024 (4,864) (2,257)         Ground Line       7,296) (5,647) (7,071) (3,225) (4,872) (2,176)       1,5 m (-5 ft.) 3119 3119 5111 2559 3047 1435 (6,875) (11,267) (5,641) (6,717) (3,163)       1,435 (6,875) (11,267) (5,641) (6,717) (3,163)         -3.0 m (-10 ft.)       3253 2644       2644	−3.0 m (−10 ft.)										
4.5 m (15 ft.)  3.0 m (10 ft.)  1.5 m (5 ft.)  4493  2744  2806  1558  2125  1024  (9,906)  (6,049)  (6,187)  (3,435)  (4,684)  (2,257)  Ground Line  (7,296)  (7,296)  (5,647)  (7,071)  (3,225)  (4,872)  (4,872)  (2,176)  -1.5 m (-5 ft.)  3119  3119  3119  3119  5111  2559  3047  1435  (6,875)  (6,875)  (11,267)  (5,641)  (6,717)  (3,163)	W: 1. 2 C7 /12 fr 0: 11	212 /6 6	77: 1 16				ha thalat				
3.0 m (10 ft.)  1.5 m (5 ft.)  4493  670 m (10 ft.)  1.5 m (5 ft.)  1.5 m (6,875)  1.5 m (6,049)  1.5 m (6,049)  1.5 m (6,875)  1.5 m (6,049)  1.5 m (6,049)  1.5 m (6,049)  1.5 m (6,875)  1.5 m (6,049)  1.5 m (6,049)  1.5 m (6,049)  1.5 m (6,875)  1.5 m (6,049)  1.5 m (6,049)  1.5 m (6,049)  1.5 m (6,875)  1.5 m (6,049)  1.5 m (6,049)		000M, 2.12-M (6 ft	. 11 in.) arm, and 60	JU-MM (24 IN.) Ste	eei track, with blad						
3.0 m (10 ft.)  1.5 m (5 ft.)  4493 2744 2806 1558 2125 1024 (9,906) (6,049) (6,187) (3,435) (4,684) (2,257)  Ground Line 3309 2561 3207 1463 2210 987 (7,296) (5,647) (7,071) (3,225) (4,872) (2,176)  -1.5 m (-5 ft.) 3119 3119 3119 5111 2559 3047 1435 (6,875) (6,875) (11,267) (5,641) (6,717) (3,163)	4.5 M (15 Tt.)										
1.5 m (5 ft.)	3.0 m (10 f+ )							197/	1061		
1.5 m (5 ft.)	ט.ט ווו (וט דנ.)										
Commond Line   Comm	15 m (5 ft )			4493	2744						
Ground Line 3309 2561 3207 1463 2210 987 (7,296) (5,647) (7,071) (3,225) (4,872) (2,176) -1.5 m (-5 ft.) 3119 3119 5111 2559 3047 1435 (6,875) (6,875) (11,267) (5,641) (6,717) (3,163) -3.0 m (-10 ft.) 3253 2644	1.5 111 (5 1 (.)										
(7,296) (5,647) (7,071) (3,225) (4,872) (2,176)  -1.5 m (-5 ft.) 3119 3119 5111 2559 3047 1435  (6,875) (6,875) (11,267) (5,641) (6,717) (3,163)  -3.0 m (-10 ft.) 3253 2644	Ground Line										
-1.5 m (-5 ft.) 3119 3119 5111 2559 3047 1435 (6,875) (11,267) (5,641) (6,717) (3,163) -3.0 m (-10 ft.) 3253 2644											
(6,875) (6,875) (11,267) (5,641) (6,717) (3,163) -3.0 m (-10 ft.) 3253 2644	–1.5 m (–5 ft.)	3119	3119					, -,,	(=,·· -,		
–3.0 m (–10 ft.) 3253 2644			(6,875)								
<b>(7171)</b> (5.830)	-3.0 m (-10 ft.)	•	•	3253		•					
(1)(1)				(7,171)	(5,830)						

# Lift Capacities (continued) 85 P-TIER

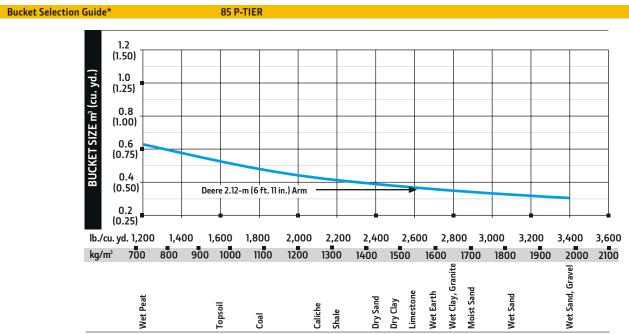
**Boldface type** indicates hydraulically limited capacities; lightface type indicates stability-limited capacities, in kg (lb.). Ratings are at bucket lift hook, using standard counterweight, situated on firm, level, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87% of hydraulic capacity or 75% of weight needed to tip machine. All lift capacities are based on ISO 10567.

75% of weight needed to	tip machine. All lif	t capacities are b			M CENTERLINE (	OF ROTATION						
	1.5 m	(5 ft.)	3.0 m (10 ft.)			(15 ft.)	6.0 m (20 ft.)					
LOAD POINT HEIGHT	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side				
With 3.67-m (12 ft. 0 in.) boom, 2.12-m (6 ft. 11 in.) arm, and 450-mm (18 in.) steel track, with blade on ground and additional counterweight, without bucket												
4.5 m (15 ft.)					1900	1900						
					(4,188)	(4,188)						
3.0 m (10 ft.)					2200	1863	1974	1193				
					(4,849)	(4,108)	(4,352)	(2,631)				
1.5 m (5 ft.)			4493	3067	2806	1746	2125	1156				
			(9,906)	(6,761)	(6,187)	(3,849)	(4,684)	(2,549)				
Ground Line			3309	2884	3207	1651	2210	1119				
			(7,296)	(6,359)	(7,071)	(3,639)	(4,872)	(2,468)				
–1.5 m (–5 ft.)	3119	3119	5111	2882	3047	1623						
	(6,875)	(6,875)	(11,267)	(6,353)	(6,717)	(3,578)						
–3.0 m (–10 ft.)			3253	2967								
With 3.67-m (12 ft. 0 in.)			(7,171)	(6,542)								
top of shoes), with blade	on ground and add	ditional counterw	eight, without bu	cket	1001	1001						
4.5 m (15 ft.)	3		<b>3</b>		1901	1901						
					(4,190)	(4,190)						
3.0 m (10 ft.)					2216	1867	1977	1198				
					(4,886)	(4,117)	(4,358)	(2,640)				
1.5 m (5 ft.)			4224	3068	2825	1749	2130	1160				
			(9,313)	(6,763)	(6,228)	(3,856)	(4,696)	(2,557)				
Ground Line			3359	2895	3212	1656	2208	1124				
			(7,405)	(6,382)	(7,081)	(3,651)	(4,868)	(2,478)				
–1.5 m (–5 ft.)	3187	3187	5074	2895	3030	1630						
	(7,027)	(7,027)	(11,186)	(6,382)	(6,680)	(3,594)						
-3.0 m (-10 ft.)	·		3159	2984	·							
			(6,965)	(6,579)								
Vith 3.67-m (12 ft. 0 in.) i	boom, 2.12-m (6 ft.	11 in.) arm, and 60	10-mm (24 in.) stee	l track, with blade	on ground and ad	ditional counterwe	eight, without buci	ket				
4.5 m (15 ft.)					1900	1900						
					(4,188)	(4,188)						
3.0 m (10 ft.)					2200	1897	1974	1217				
					(4,849)	(4,181)	(4,352)	(2,682)				
1.5 m (5 ft.)			4493	3123	2806	1779	2125	1179				
			(9,906)	(6,886)	(6,187)	(3,922)	(4,684)	(2,600)				
Ground Line			3309	2941	3207	1684	2210	1143				
			(7,296)	(6,484)	(7,071)	(3,712)	(4,872)	(2,520)				
–1.5 m (–5 ft.)	3119	3119	5111	2938	3047	1656						
	(6,875)	(6,875)	(11,267)	(6,478)	(6,717)	(3,650)						
-3.0 m (-10 ft.)	,	, ,	3253	3024	. , ,	,-,,						
• • • •			(7,171)	(6,667)								

#### Buckets

A full line of buckets is offered to meet a wide variety of applications. Replaceable cutting edges are available through John Deere Parts. Optional side cutters add 150 mm (6 in.) to bucket widths.

Type Bucket	Bucket	Width	Bucket	Capacity	Bucket	Weight		cet Dig e (ISO)		Force (ISO) 5 ft. 11 in.)	Bucket T	ip Radius	Number of Teeth
	mm	in.	$m^3$	cu. yd.	kg	lb.	kN	lb.	kN	lb.	mm	in.	
Heavy Duty	610	24	0.31	0.40	287	633	58	13,039	35	7,868	1087	42.80	5
	762	30	0.41	0.53	333	735	58	13,039	35	7,868	1087	42.80	6
	914	36	0.50	0.66	380	837	58	13,039	35	7,868	1087	42.80	7
Ditching	1219	48	0.49	0.64	330	727	69	15,512	37	8,318	907	35.69	0



<sup>\*</sup>Contact your John Deere dealer for optimum bucket and attachment selections. These recommendations are for general conditions and average use. Does not include optional equipment such as thumbs or couplers. Larger buckets may be possible when using light materials, for flat and level operations, less compacted materials, and volume loading applications such as mass-excavation applications in ideal conditions. Smaller buckets are recommended for adverse conditions such as off-level applications, rocks, and uneven surfaces. Bucket capacity indicated is SAE heaped.

# Additional equipment

**Key:** ● Standard ▲ Optional or special See your John Deere dealer for further information.

#### 85 P Engine

- Auto-idle system
- Batteries (2 12 volt)
- Coolant recovery tank
- Single-element air filter
- Electronic engine control
- Enclosed fan guard (conforms to SAE J1308)
- Engine coolant to –37 deg. C
   (–34 deg. F)
- Fuel filter with water separator
- Full-flow oil filter
- Radiator and oil cooler with dustprotective net
- Glow-plug start aid
- 500-hour engine oil-change interval
- 70% (35 deg.) off-level capacity
- Isolation mounted

# Hydraulic System

- Reduced-drift valve for boom down, arm in
- Auxiliary hydraulic valve section
- Spring-applied, hydraulically released automatic swing brake
- 5,000-hour hydraulic oil-change interval
- Auxiliary hydraulics with selector valve
- Control pattern-change valve
- ▲ Hydraulic filter restriction indicator kit

#### Undercarriage

- Planetary drive with axial piston motors
- Propel motor shields
- Spring-applied, hydraulically released automatic propel brake
- 2-speed propel with automatic shift
- Upper carrier roller (1)
- Sealed and lubricated track chain
- Undercarriage with blade
- ▲ Triple semi-grouser shoes, 600 mm (24 in.)
- ▲ Rubber crawler pads, 450 mm (18 in.)
- Rubber belt, continuous, 450 mm (18 in.)
- 2-way backfill blade
- ▲ 4-way angle blade with float

#### 85 P Upperstructure

- Counterweight, 1408 kg (3,104 lb.)
- Right- and left-hand mirrors
- Vandal locks with ignition key: Cab door / Engine hood / Fuel cap / Service doors
- Remote-mounted fuel filters

#### Front Attachments

- Centralized lubrication system
- Dirt seals on all bucket pins
- Oil-impregnated bushings
- Reinforced resin thrust plates
- Tungsten carbide thermal coating on arm-to-bucket joint
- Arm, 2.12 m (6 ft. 11 in.)
- ▲ Attachment quick-couplers
- Buckets: Ditching / Heavy duty / Heavy-duty high capacity / Side cutters and teeth
- Thumb bracket
- Attachment modes and adjustment in main monitor

#### Operator's Station

- Meets ISO 12117-2 for ROPS
- Adjustable independent control positions (seat-to-pedals)
- AM/FM radio
- Auto climate control/air conditioner with heater and pressurizer
- Built-in operator's manual storage compartment and manual
- Cell-phone power outlet, 12 volt,60 watt, 5 amp
- Coat hook
- Deluxe cloth, heated, air-suspension seat with adjustable armrests
- Floor mat
- Front windshield wiper with intermittent speeds
- Gauges (illuminated): Engine coolant / Fuel
- Horn, electric
- Hour meter, electric
- Cell-phone holder, USB port, and Bluetooth® calling and audio
- Hydraulic shutoff lever, all controls

#### B5 P Operator's Station (continued)

- Hydraulic warm-up control
- Interior light
- Large cup holder
- Machine Information Center (MIC)
- Mode selectors (illuminated): Power modes (2) / Travel modes (2 with automatic shift) / Work mode (1)
- Multifunction, color LCD monitor with: Diagnostic capability / Multiple-language capabilities / Maintenance tracking / Clock / System monitoring with alarm features: Auto-idle indicator, engine air cleaner restriction indicator light, engine check, engine coolant temperature indicator light with audible alarm, engine oil pressure indicator light with audible alarm, low-alternator-charge indicator light, low-fuel indicator light, fault-code alert indicator, fuel-rate display, wiper-mode indicator, work-lights-on indicator, and work-mode indicator
- Motion alarm with cancel switch (conforms to SAE J994)
- Auxiliary hydraulic control switches in right console lever
- SAE 2-lever control pattern
- Seat belt, 51 mm (2 in.), retractable
- Tinted glass
- Transparent tinted overhead window
- Hot/cold beverage compartment
- ▲ Seat belt, 76 mm (3 in.), non-retractable
- Protection screens for cab front, rear, and side

## Electrical

- 50-amp alternator
- Blade-type multi-fused circuits
- Positive-terminal battery covers
- Right rear left 270-deg. camera system with LED surround lighting

#### Lights

 Work lights: LED / 1 mounted on boom / 1 mounted on frame

