### 75G/85G EXCAVATORS

8143-8729-kg (17,952-19,244 lb.) Operating Weight





# Fit in more productivity.

Neither too big nor too small, these right-size excavators are the perfect solution for a wide variety of tasks. Their reduced-tail-swing configurations provide extra flexibility, enabling them to maneuver nimbly and work efficiently in and around congested conditions. What's more, the 85G comes equipped with the extra advantage of an independent-swing boom that lets it work even closer to curbs, parallel to structures, or in the midst of traffic. Inside their spacious, comfortable cabs, easy-to-navigate enhanced LCD monitors let operators easily dial-in a wealth of machine info and functionality. Of course, these two meet EPA Final Tier 4 (FT4)/EU Stage IV regulations, so they're a perfect fit for your equipment fleet for years to come.

Key specifications	75G	85G
Net rated power	42.4 kW (56.9 hp)	42.4 kW (56.9 hp)
Operating weight	8143 kg (17,952 lb.)	8729 kg (19,244 lb.)
Maximum digging depth	4.61 m (15 ft. 1 in.)	4.51 m (14 ft. 10 in.)
Arm digging force	30.7 kN (6,902 lb.)	30.7 kN (6,902 lb.)
Bucket digging force	46.6 kN (10,476 lb.)	46.6 kN (10,476 lb.)



Want to add a hammer or other attachment? High-pressure, high-flow auxiliary hydraulic packages meet the need.

Choose from a variety of track widths, buckets, and other options to maximize your efforts.

Two-speed propel with AutoShift helps speed machine moves and maximize maneuverability.

Complete factory-installed standard auxiliary hydraulics with proportional control help improve productivity on the jobsite.

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These two transport easily between jobsites, making them perfect for "dig-and-go" jobs.

# Remove obstacles without moving them.

Empowered with the same no-compromise load-sensing open-center hydraulic system as our other excavators, the 75G and 85G's pinpoint metering delivers unsurpassed smooth-as-silk control. Together with their reduced-tail-swing configurations, they deliver the finesse and footwork to keep jobsite obstacles from becoming barriers. Two power modes, plus an available control-pattern selector, easily adapt to changing job demands and operator preferences. Plus, their highly fuel-efficient direct-injected diesels meet rigid FT4/Stage IV emission standards and are noticeably quiet, so you can put them to work almost anywhere, any time.





Put more productivity on speed dial.

Now it's easier than ever for operators to "dial things up." The G-Series' refined monitor employs a rotary control that makes it quick and easy to tap into an abundance of performance and convenience functions and features. Operators will also appreciate the comfortable fabric-covered adjustable suspension seat and ample legroom in the spacious, well-appointed cab. As always, unsurpassed all-round visibility, loweffort joysticks, a highly efficient HVAC system, and numerous other amenities provide everything your

operators need to do their best work. And keep them comfortably on-task and ahead of schedule.



- 1. Wide expanse of front and side glass, narrow front cab posts, large tinted overhead hatch, and numerous mirrors provide virtually unrestricted all-around visibility.
- **2.** Standard lockable control-pattern selector valve enables you to switch from backhoeto SAE-style controls with just a twist of your wrist.
- 3. Multi-language LCD monitor and rotary dial provide intuitive access to a wealth of information and functions. Just turn and tap to select work mode, access operating info, check maintenance intervals, source diagnostic codes, adjust cab temperature, and tune the radio. Plus much more.

With large self-cleaning steps and wide entryways, getting in and out of our excavators has never been easier.

Spacious cab is comfortable and noticeably quiet. Silicone-filled mounts effectively isolate noise and vibration.

We've got your back with sculpted mechanical-suspension multi-position mid- and high-back seats.

Automatic, high-velocity bi-level climatecontrol system with automotive-style adjustable louvers helps keep the glass clear and the cab comfortable.

Cab includes a cup holder and storage compartment with nearby power port for a cell phone. The 75G also has a cab-side storage box for a grease gun, tools, or other necessities.

Ergonomically correct short-throw joysticks provide smooth, predictable fingertip control with less movement or effort.

Standard boom/frame lights illuminate the way to extend your day beyond daylight hours.







## Nothing runs like this Deere.

Just like you, our 75G and 85G Excavators won't quit. These dependable workers deliver unsurpassed reliability, with jobproven digging structures and hydraulic, electrical, and undercarriage components. Their highly efficient cooling systems keep things running cool, even in high altitudes or tough environments. Other durability-enhancing "extras" include tungsten-carbidecoated wear surfaces and oil-impregnated bushings. When you know how they're built, you'll run a Deere.

A John Deere feature, three welded bulkheads within the boom resist torsional stress for unsurpassed durability.

Rigid, reinforced D-channel side frames resist impacts, providing maximum cab and component protection.

Oil-impregnated bushings enhance durability and extend grease intervals to 500 hours for the arm-and-boom joint and 100 hours for the bucket joint.

Durable shields deflect material and impacts, protecting the blade cylinder and propel motors.

Tungsten-carbide coating creates an extremely wear-resistant surface to protect the all-important bucket-to-arm joint.

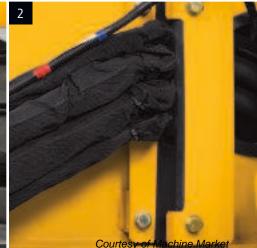
Viscous fan continuously adjusts speed as necessary for effective cooling. Helps reduce noise and fuel consumption, too.

To help prevent accidental machine movement, a spring-applied, hydraulically released park brake automatically engages when a control lever is released.

Wet-disc swing brake delivers longterm maintenance-free performance.







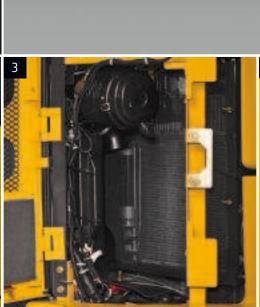


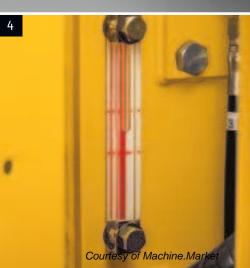
## Operating costs are reduced, too.

It's likely that it was the G-Series' compact stature that caught your eye. But it's their reduced daily operating costs that'll really turn your head. Daily and periodic maintenance are quick, easy, and convenient, with large, easy-open doors providing wide-open access to grouped service points. Extended hydraulic and engine oil-change intervals reduce downtime and expense. Plus the easy-to-read LCD monitor lets you track fluid-maintenance intervals to help manage uptime.

- LCD monitor tracks scheduled maintenance intervals and issues reminders. Should a problem arise, it provides diagnostic information to assist in troubleshooting and decrease downtime.
- Vertical spin-on fuel filter and water separator are conveniently located in the right rear compartment for quick and convenient ground-level service access.
- **3.** Left rear compartment houses the battery, engine air filter, fresh-air cab filter, and side-by-side coolers.
- **4.** Sight gauges and see-through reservoirs allow hydraulic, coolant, and window-washer fluid-level checks at a glance.

1	Engine Oil Filter	
	Previous Maintenance	
	2015/04/07	0.0 <sub>h</sub>
1	Remains	375.8 ь
ij	Maintenance Interval	500.0 h







Engine 75G
Manufacturer and Model Yanmar 4TNV98C

Non-Road Emission Standard EPA Final Tier 4/EU Stage IV
Net Power (ISO 9249) 42.4 kW (56.9 hp) at 2,000 rpm

Cylinders

Displacement 3.3 L (202 cu. in.)
Aspiration Natural
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
 6650 kgf (14,661 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)

Pilot Pump 1 gear

Maximum Rated Flow 20 L/m (5.3 gpm) System Relief Pressure 3900 kPa (566 psi)

**System Operating Pressure** 

 Implement Circuits
 26 000 kPa (3,771 psi)

 Travel Circuits
 31 400 kPa (4,554 psi)

 Swing Circuits
 25 200 kPa (3,655 psi)

**Controls** Pilot levers, short stroke, low effort; hydraulic pilot controls with shutoff lever

Cylinders

Heat-treated, chrome-plated, polished cylinder rods; hardened steel (replaceable bushings) pivot pins

 Boom (1)
 Bore
 Rod Diameter
 Stroke

 Boom (1)
 115 mm (4.5 in.)
 65 mm (2.6 in.)
 885 mm (34.8 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** 

Batteries2 x 12 voltBattery Capacity2 x 450 CCAAlternator Rating50 amp

Work Lights 2 halogen: 1 mounted on boom and 1 mounted on frame

Undercarriage

Rollers (each side)

Carrier 1
Track 5
Shoes (each side) 40

Track

Adjustment Hydraulic

Chain Sealed and lubricated

**Swing Mechanism** 

Swing Speed 10.5 rpm

Swing Torque 16 600 Nm (12,244 lb.-ft.)



Ground Pressure	75G
450-mm (18 in.) Rubber Crawler Pads	39 kPa (5.6 psi)
450-mm (18 in.) Continuous Rubber Belt	39 kPa (5.6 psi)
450-mm (18 in.) Triple Semi-Grouser Shoes	38 kPa (5.4 psi)
600-mm (24 in.) Triple Semi-Grouser Shoes	27 kPa (3.9 psi)
Serviceability	
Refill Capacities	
Fuel Tank	135 L (35.7 gal.)
Cooling System	9.7 L (2.6 gal.)
Engine Oil with Filter	12.3 L (3.2 gal.)
Hydraulic Tank	56 L (15 gal.)
Hydraulic System	103 L (27 gal.)
Propel Gearbox (each)	1.2 L (1.3 qt.)
Operating Weights	
With 0.31-m <sup>3</sup> (0.41 cu. yd. ), 762-mm (30 in.), 313-kg	
(691 lb.) Bucket; 2.12-m (6 ft. 11 in.) Arm; 1305-kg	
(2,877 lb.) Counterweight; 2470-mm (8 ft. 1 in.) Blade;	
Full Fuel Tank; and 75-kg (165 lb.) Operator	
450-mm (18 in.) Rubber Crawler Pads	8143 kg (17,952 lb.)
450-mm (18 in.) Triple Semi-Grouser Shoes	7882 kg (17,377 lb.)

8265 kg (18,221 lb.)

7898 kg (17,412 lb.)

#### **Optional Components**

Undercarriage (with the following)

600-mm (24 in.) Triple Semi-Grouser Shoes

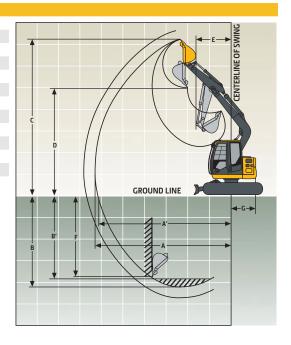
450-mm (18 in.) Continuous Rubber Belt

450-mm (18 in.) Rubber Crawler Pads 2903 kg (6,400 lb.) 450-mm (18 in.) Continuous Rubber Belt 2867 kg (6,321 lb.) 2851 kg (6,285 lb.) 450-mm (18 in.) Triple Semi-Grouser Shoes 600-mm (24 in.) Triple Semi-Grouser Shoes 3025 kg (6,669 lb.) 1-Piece Boom (with arm cylinder) 497 kg (1,096 lb.) 2.12-m (6 ft. 11 in.) Arm with Bucket Cylinder and 276 kg (608 lb.)

Boom Lift Cylinders (2), Total Weight 178 kg (392 lb.) Counterweight, Standard 1305 kg (2,877 lb.)

#### **Operating Dimensions**

Arm Length 2.12 m (6 ft. 11 in.) Arm Digging Force (ISO) 30.7 kN (6,902 lb.) Bucket Digging Force (ISO) 46.6 kN (10,476 lb.) A Maximum Reach 6.92 m (22 ft. 8 in.) AI Maximum Reach at Ground Level 6.76 m (22 ft. 2 in.) **B** Maximum Digging Depth 4.61 m (15 ft. 1 in.) **B**<sup>I</sup> Maximum Digging Depth at 2.44-m (8 ft.) Flat Bottom 4.32 m (14 ft. 2 in.) C Maximum Cutting Height 7.61 m (25 ft. 0 in.) D Maximum Dumping Height 5.51 m (18 ft. 1 in.) E Minimum Swing Radius 2.17 m (7 ft. 1 in.) Maximum Vertical Wall 4.22 m (13 ft. 10 in.) **G** Tail Swing Radius 1.29 m (4 ft. 3 in.)



Machine Dimensions	75G		
	Arm Length 2.12 m (6 ft.	11 in.)	
A Overall Length	6.37 m (20 ft. 11 in.)		
B Overall Height	2.69 m (8 ft. 10 in.)		
C Undercarriage Width		J	
With 450-mm (18 in.) Shoes	2.32 m (7 ft. 7 in.)		
With 600-mm (24 in.) Shoes	2.47 m (8 ft. 1 in.)		
D Rear-End Length/Swing Radius	1.29 m (4 ft. 3 in.)		
E Distance Between Idler/Sprocket Centerline	2.29 m (7 ft. 6 in.)		
F Undercarriage Length	2.92 m (9 ft. 7 in.)		
<b>G</b> Counterweight Clearance	0.73 m (29 in.)		
H Cab Height	2.69 m (8 ft. 10 in.)		
I Ground Clearance	360 mm (14 in.)	→ ←0	<u> </u>
J Upperstructure Width	2.32 m (7 ft. 7 in.)	K –	A
K Gauge Width	1.87 m (6 ft. 2 in.)	С	i A
L Blade Lift Height	360 mm (14 in.)		
Blade Height	480 mm (19 in.)		
Blade Width			
With 450-mm (18 in.) Shoes	2320 mm (7 ft. 7 in.)	r	
With 600-mm (24 in.) Shoes	2470 mm (8 ft. 1 in.)	<u> </u>	
M Blade Cut Below Grade	300 mm (12 in.)		
N Blade Lift Angle	27 deg.		VN D
O Track Width		1	
With 450-mm (18 in.) Shoes	0.45 m (18 in.)		М
With 600-mm (24 in.) Shoes	0.60 m (24 in.)		ш
Lift Canacities			

irt 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.

•		HORIZ	ONTAL DISTANCE FROM CENTERLINE OF ROTATION					
	1.5 m	(5 ft.)	3.0 m (	10 ft.)	4.5 m (15 ft.)			
LOAD POINT HEIGHT	Over Front	Over Side	de Over Front Over Side		Over Front	Over Side		
With 3.72-m (12 ft. 8 in.) bo	oom, 2.12-m (6 ft. 11 i	n.) arm, 0.28-m³ (0.37	cu. yd.) bucket, 450-mm	ı (18 in.) rubber pads,	and 2320-mm (7 ft. 9 ir	n.) blade		
4.5 m (15 ft.)					1475	1475		
					(3,252)	(3,252)		
3.0 m (10 ft.)			1834	1834	1613	1613		
			(4,043)	(4,043)	(3,557)	(3,557)		
1.5 m (5 ft.)			2864	2797	1958	1541		
			(6,313)	(6,167)	(4,317)	(3,397)		
Ground Line			3508	2629	2248	1472		
			(7,734)	(5,797)	(4,956)	(3,246)		
–1.5 m (–5 ft.)	3544	3544	3514	2594	2252	1451		
	(7,813)	(7,813)	(7,746)	(5,718)	(4,964)	(3,199)		
–3.0 m (–10 ft.)	5020	5020	2742	2663				
	(11,068)	(11,068)	(6,044)	(5,870)				

#### Lift Capacities (continued)

75G

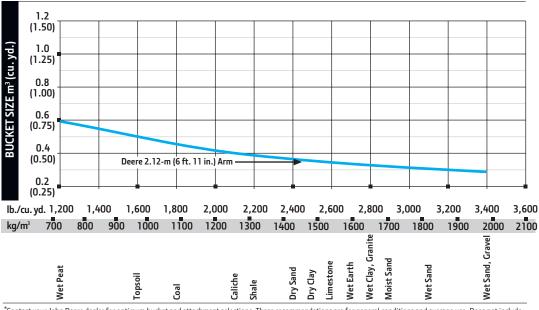
**Boldface type** indicates hydraulically limited capacities; lightface type indicates stability-limited capacities, in kg (lb.). Ratings are at bucket lift hook, using standard counterweight, situated on firm, level, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures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

		HORI	ZONTAL DISTANCE FROM	A CENTERLINE OF ROTA	ATION	
	1.5 m	(5 ft.)	3.0 m (	4.5 m (	15 ft.)	
LOAD POINT HEIGHT	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
With 3.72-m (12 ft. 8 in.) bo	om, 2.12-m (6 ft. 11 in.)	arm, 0.28-m³ (0.37 cu.	yd.) bucket, 600-mm (24	4 in.) shoes, and 2470-i	mm (8 ft. 1 in.) blade	
4.5 m (15 ft.)					1475	1475
					(3,252)	(3,252)
3.0 m (10 ft.)			1834	1834	1613	1613
			(4,043)	(4,043)	(3,557)	(3,557)
1.5 m (5 ft.)			2864	2841	1958	1566
			(6,313)	(6,263)	(4,317)	(3,452)
Ground Line			3508	2673	2248	1497
			(7,734)	(5,893)	(4,956)	(3,301)
–1.5 m (–5 ft.)	3544	3544	3514	2637	2252	1476
	(7,813)	(7,813)	(7,746)	(5,814)	(4,964)	(3,254)
-3.0 m (-10 ft.)	5020	5020	2742	2707		
	(11,068)	(11,068)	(6,044)	(5,967)		

#### **Buckets**

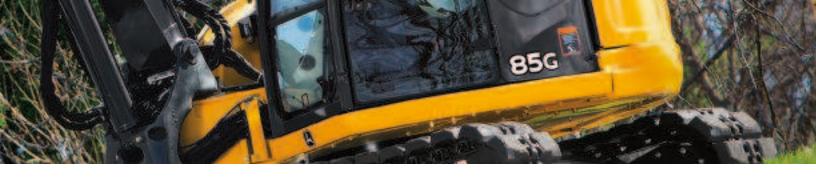
A full line of buckets is offered to meet a wide variety of applications. Replaceable cutting edges are available through John Deere Parts. Optional side cutters add 150 mm (6 in.) to bucket widths.

Type Bucket	ucket Bucket Width Bucket Capacity Bucket Weight						cet Dig e (ISO)	Arm Dig Force (ISO) 2.12 m (6 ft. 11 in.) Bucket Tip Radius			ip Radius	Number of Teeth	
	mm	in.	$m^3$	cu. yd.	kg	lb.	kN	lb.	kN	lb.	mm	in.	
Heavy Duty	610	24	0.24	0.31	268	591	44	9,892	29	6,524	883	34.76	5
	762	30	0.31	0.41	313	691	44	9,892	29	6,524	883	34.76	6
	914	36	0.39	0.51	358	790	44	9,892	29	6,524	883	34.76	7
Ditching	1219	48	0.49	0.64	330	727	64	14,344	33	7,473	907	35.69	0
Bucket Selection	on Guide*												1



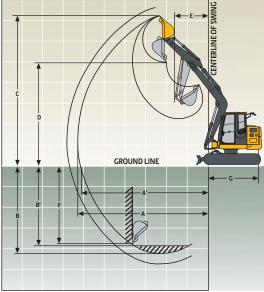
\*Contact your John Deere dealer for optimum bucket and attachment selections. These recommendations are for general conditions and average use. Does not include optional equipment such as thumbs or couplers. Larger buckets may be possible when using light materials, for flat and level operations, less 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.

Engine85 GManufacturer and ModelYanmar 4TNV98C-WHBWNon-Road Emission StandardEPA Final Tier 4/EU Stage IVNet Power (ISO 9249)42.4 kW (56.9 hp) at 2,000 rpmCylinders4Displacement3.3 L (202 cu. in.)AspirationNaturalOff-Level Capacity70% (35 deg.)CoolingVariable-speed fan; viscous clutchPowertrain2-speed propel with automatic shiftMaximum Travel Speed3.1 km/h (1.9 mph)Low3.1 km/h (3.1 mph)Drawbar Pull6650 kgf (14,661 lb.)Hydraulics4650 kgf (14,661 lb.)Open center, load sensing3 variable-displacement axial-piston pumpsMaximum Pump Flow2 x 72 + 56 L/m (2 x 19 + 15 gpm)Pilot Pump1 gearMaximum Rated Flow20 L/m (5.3 gpm)	
Non-Road Emission Standard EPA Final Tier 4/EU Stage IV  Net Power (ISO 9249) 42.4 kW (56.9 hp) at 2,000 rpm  Cylinders 4  Displacement 3.3 L (202 cu. in.)  Aspiration Natural  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 6650 kgf (14,661 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)  Pilot Pump	
Net Power (ISO 9249)       42.4 kW (56.9 hp) at 2,000 rpm         Cylinders       4         Displacement       3.3 L (202 cu. in.)         Aspiration       Natural         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       6650 kgf (14,661 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)         Pilot Pump       1 gear	
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Maximum Travel Speed           Low         3.1 km/h (1.9 mph)           High         5.0 km/h (3.1 mph)           Drawbar Pull         6650 kgf (14,661 lb.)           Hydraulics           Open center, load sensing         3 variable-displacement axial-piston pumps           Maximum Pump Flow         2 x 72 + 56 L/m (2 x 19 + 15 gpm)           Pilot Pump         1 gear	
Low       3.1 km/h (1.9 mph)         High       5.0 km/h (3.1 mph)         Drawbar Pull       6650 kgf (14,661 lb.)         Hydraulics         Open center, load sensing       3 variable-displacement axial-piston pumps         Maximum Pump Flow       2 x 72 + 56 L/m (2 x 19 + 15 gpm)         Pilot Pump       1 gear	
High       5.0 km/h (3.1 mph)         Drawbar Pull       6650 kgf (14,661 lb.)         Hydraulics         Open center, load sensing       3 variable-displacement axial-piston pumps         Maximum Pump Flow       2 x 72 + 56 L/m (2 x 19 + 15 gpm)         Pilot Pump       1 gear	
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Maximum Pump Flow         2 x 72 + 56 L/m (2 x 19 + 15 gpm)           Pilot Pump         1 gear	
Pilot Pump 1 gear	
Maximum Rateu Flow 20 L/III (3.3 ypin)	
System Relief Pressure 3900 kPa (566 psi)	
System Operating Pressure	
Implement Circuits         26 000 kPa (3,771 psi)           Travel Circuits         31 400 kPa (4,554 psi)	
Swing Circuits 25 000 kPa (3,626 psi)	
Controls Pilot levers, short stroke, low effort; hydraulic pilot controls with shutoff lever  Cylinders	
Heat-treated, chrome-plated, polished cylinder rods; hardened steel (replaceable bushings) pivot pins	
Bore Rod Diameter Stroke	
<b>Boom (1)</b> 115 mm (4.5 in.) 65 mm (2.6 in.) 885 mm (34.8 in.)	
Arm (1) 95 mm (3.7 in.) 60 mm (2.4 in.) 900 mm (35.4 in.)	
<b>Bucket (1)</b> 85 mm (3.3 in.) 55 mm (2.2 in.) 730 mm (28.7 in.)	
Electrical 65 mini (5.5 mi.) 55 mini (2.2 mi.) 730 mini (28.7 mi.)	
Batteries 2 x 12 volt	
Battery Capacity 2 x 450 CCA Alternator Rating 50 amp	
Work Lights 2 halogen: 1 mounted on boom and 1 mounted on frame Undercarriage	
Rollers (each side)	
Carrier 1	
Track 5	
Shoes (each side) 40	
Track	
Adjustment Hydraulic	
Chain Sealed and lubricated	
Swing Mechanism 10.5 and 10.5	
Swing Speed 10.5 rpm	
Swing Torque 16 600 Nm (12,244 lbft.)	
Boom Swing	
Left 60 deg.	
Right 60 deg.	



Ground Pressure	85G
450-mm (18 in.) Rubber Crawler Pads	41.5 kPa (6.0 psi)
450-mm (18 in.) Continuous Rubber Belt	41.4 kPa (6.0 psi)
450-mm (18 in.) Triple Semi-Grouser Shoes	41.3 kPa (6.0 psi)
600-mm (24 in.) Triple Semi-Grouser Shoes	31.7 kPa (4.6 psi)
Serviceability	
Refill Capacities	
Fuel Tank	120 L (31.7 gal.)
Cooling System	9.7 L (2.6 gal.)
Engine Oil with Filter	12.3 L (3.2 gal.)
Hydraulic Tank	56 L (15 gal.)
Hydraulic System	103 L (27 gal.)
Propel Gearbox (each)	1.2 L (1.3 qt.)
Operating Weights	
With 0.31-m <sup>3</sup> (0.41 cu. yd. ), 762-mm (30 in.), 313-kg	
(691 lb.) Bucket; 2.12-m (6 ft. 11 in.) Arm; 1408-kg	
(3,104 lb.) Counterweight; Full Fuel Tank; and 75-kg	
(165 lb.) Operator	
2220-mm (7 ft. 3 in.) Blade and 450-mm (18 in.)	8729 kg (19,244 lb.)
Rubber Crawler Pads	
2220-mm (7 ft. 3 in.) Blade and 450-mm (18 in.)	8677 kg (19,130 lb.)
Triple Semi-Grouser Shoes	
2470-mm (8 ft. 1 in.) blade and 600-mm (24 in.)	8874 kg (19,564 lb.)
Triple Semi-Grouser Shoes	
2220-mm (7 ft. 3 in.) Blade and 450-mm (18 in.)	8701 kg (19,182 lb.)
Continuous Rubber Belt	
Optional Components	
Undercarriage (with the following)	
450-mm (18 in.) Rubber Crawler Pads	2871 kg (6,329 lb.)
450-mm (18 in.) Continuous Rubber Belt	2843 kg (6,268 lb.)
450-mm (18 in.) Triple Semi-Grouser Shoes	2819 kg (6,215 lb.)
600-mm (24 in.) Triple Semi-Grouser Shoes	2970 kg (6,548 lb.)
1-Piece Boom (with arm cylinder)	491 kg (1,082 lb.)
2.12-m (6 ft. 11 in.) Arm with Bucket Cylinder and	275 kg (606 lb.)
Linkage	
Boom Lift Cylinder	89 kg (196 lb.)
0.49-m³ (0.64 cu. yd.), 1219-mm (48 in.) Ditching Bucket	330 kg (728 lb.)
Counterweight (standard)	1408 kg (3,104 lb.)
Operating Dimensions	
	Arm Length 2.12 m (6 ft. 11 in.)
A D:: F (IEO)	20.71 N (6.002 II )

		Arm Length 2.12 m (6 ft. 11
L	Arm Digging Force (ISO)	30.7 kN (6,902 lb.)
Е	Bucket Digging Force (ISO)	46.6 kN (10,476 lb.)
ŀ	Maximum Reach	7.70 m (25 ft. 3 in.)
I	Naximum Reach at Ground Level	7.55 m (24 ft. 9 in.)
E	3 Maximum Digging Depth	4.51 m (14 ft. 10 in.)
E	Maximum Digging Depth at 2.44-m (8 ft.) Flat Bottom	4.20 m (13 ft. 9 in.)
(	Maximum Cutting Height	7.14 m (23 ft. 5 in.)
	Maximum Dumping Height	5.08 m (16 ft. 8 in.)
E	Minimum Swing Radius	2.89 m (9 ft. 6 in.)
F	Maximum Vertical Wall	4.05 m (13 ft. 3 in.)
(	Tail Swing Radius	1.49 m (4 ft. 11 in.)



Machine Dimensions	85G
	Arm Length 2.12 m (6 ft. 11 in.)
A Overall Length	6.82 m (22 ft. 5 in.)
<b>B</b> Overall Height with 450-mm (18 in.) Rubber Crawler Pads	2.61 m (8 ft. 7 in.)
C Undercarriage Width	
With 450-mm (18 in.) Shoes	2.20 m (7 ft. 3 in.)
With 600-mm (24 in.) Shoes	2.35 m (7 ft. 9 in.)
D Rear-End Length/Swing Radius	1.49 m (4 ft. 11 in.)
E Distance Between Idler/Sprocket Centerline	2.29 m (7 ft. 6 in.)
F Undercarriage Length	2.92 m (9 ft. 7 in.)
<b>G</b> Counterweight Clearance	0.72 m (28 in.)
H Cab Height	2.53 m (8 ft. 4 in.)
I Ground Clearance	360 mm (14 in.)
J Upperstructure Width	2.32 m (7 ft. 7 in.)
K Gauge Width	1.75 m (5 ft. 9 in.)
L Blade Lift Height	340 mm (13 in.)
Blade Height	460 mm (18 in.)
Blade Width	
With 450-mm (18 in.) Shoes	2200 mm (7 ft. 3 in.)
With 600-mm (24 in.) Shoes	2350 mm (7 ft. 9 in.)
M Blade Cut Below Grade	320 mm (13 in.)
N Blade Lift Angle	26 deg.
O Track Width	↑ <u> </u>
With 450-mm (18 in.) Shoes	0.45 m (18 in.)
With 600-mm (24 in.) Shoes	0.60 m (24 in.)
116.6	

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.

	HORIZONTAL DISTANCE FROM CENTERLINE OF ROTATION							
	1.5 m (5 ft.)		3.0 m (	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. 2 in.)	boom, 2.12-m (6	ft. 11 in.) arm, 0	28-m³ (0.37 cu. yd	l.) bucket, 450-m	m (18 in.) rubber <sub>l</sub>	pads, and 2200-r	nm (7 ft. 3 in.) bla	de
4.5 m (15 ft.)					1735	1656		
					(3,825)	(3,651)		
3.0 m (10 ft.)					2044	1597	1809	1022
					(4,506)	(3,521)	(3,988)	(2,253)
1.5 m (5 ft.)					2619	1488	1968	986
					(5,773)	(3,280)	(4,339)	(2,174)
Ground Line			2577	2445	2992	1403	2069	952
			(5,682)	(5,391)	(6,597)	(3,092)	(4,561)	(2,098)
–1.5 m (–5 ft.)	2683	2683	4770	2448	2868	1377		
	(5,914)	(5,914)	(10,516)	(5,397)	(6,322)	(3,036)		
–3.0 m (–10 ft.)			3130	3130				
			(7,012)	(5,560)				
With 3.67-m (12 ft. 2 in.)	boom, 2.12-m (6	ft. 11 in.) arm, 0	28-m³ (0.37 cu. yd	l.) bucket, 600-m	m (24 in.) shoes, o	and 2470-mm (8	ft. 1 in.) blade	
4.5 m (15 ft.)					1735	1679		
					(3,825)	(3,702)		
3.0 m (10 ft.)					2044	1620	1809	1038
					(4,506)	(3,572)	(3,988)	(2,289)
1.5 m (5 ft.)					2619	1511	1968	1002
					(5,773)	(3,332)	(4,339)	(2,210)
Ground Line			2577	2485	2992	1426	2069	968
			(5,682)	(5,479)	(6,597)	(3,143)	(4,561)	(2,134)
–1.5 m (–5 ft.)	2683	2683	4770	2488	2868	1400		
	(5,914)	(5,914)	(10,516)	(5,485)	(6,322)	(3,087)		
–3.0 m (–10 ft.)			3130	3130				
			(7,012)	(5,647)				

#### Lift Capacities (continued)

85G

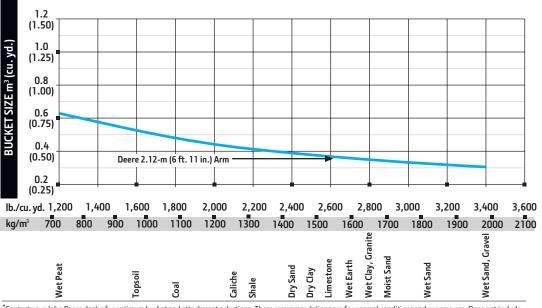
**Boldface type** indicates hydraulically limited capacities; lightface type indicates stability-limited capacities, in kg (lb.). Ratings are at bucket lift hook, using standard counterweight, situated on firm, level, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures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

,	HORIZONTAL DISTANCE FROM CENTERLINE OF ROTATION							
	1.5 m	(5 ft.)	3.0 m (	10 ft.)	4.5 m (	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. 2 in.) b	oom, 2.12-m (6 ft.	11 in.) arm, less b	oucket, 450-mm (1	8 in.) continuous	rubber belt, and 2.	200-mm (7 ft. 3 ii	n.) blade	
4.5 m (15 ft.)					1728	1579		
					(3,810)	(3,480)		
3.0 m (10 ft.)					2050	1520	1805	971
					(4,520)	(3,350)	(3,980)	(2,140)
1.5 m (5 ft.)					2626	1411	1969	934
					(5,790)	(3,110)	(4,340)	(2,060)
Ground Line			2595	2309	2994	1329	2068	903
			(5,720)	(5,090)	(6,600)	(2,930)	(4,560)	(1,990)
–1.5 m (–5 ft.)	2708	2708	4758	2309	2862	1306		
	(5,970)	(5,970)	(10,490)	(5,090)	(6,310)	(2,880)		
-3.0 m (-10 ft.)			3139	2386				
			(6,920)	(5,260)				

#### **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		Bucket Dig Force (ISO)		Arm Dig Force (ISO) 2.12 m (6 ft. 11 in.)		Bucket Tip 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	54	12,061	32	7,162	1087	42.80	5
	762	30	0.41	0.53	333	735	54	12,061	32	7,162	1087	42.80	6
	914	36	0.50	0.66	380	837	54	12,061	32	7,162	1087	42.80	7
Ditching	1219	48	0.49	0.64	330	727	64	14,344	33	7,473	907	35.69	0
Bucket Selection Guide*													



<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.

75G	85G	Engine	75G	85G	Upperstructure
)	•	Auto-idle system	•		Counterweight, 1
		Batteries (2 – 12 volt)			Counterweight, 1
	•	Coolant recovery tank	•	•	Right- and left-ha
	•	Single-element air filter			Vandal locks with
	•	Electronic engine control			Engine hood / Fue
		Enclosed fan guard (conforms to SAE	•		Remote-mounted
		J1308)			Front Attachmen
		Engine coolant to -37 deg. C (-34 deg. F)			Centralized lubrication
	•	Fuel filter with water separator			Dirt seals on all bu
	•	Full-flow oil filter			Oil-impregnated b
		Radiator and oil cooler with dust-protec-			Reinforced resin t
		tive net	•	•	Tungsten carbide
		Glow-plug start aid			arm-to-bucket joi
		500-hour engine oil-change interval	•		Arm, 2.12 m (6 ft.
	•	70% (35 deg.) off-level capacity	<b>A</b>		Attachment quick
		Isolation mounted			Buckets: Ditching
		Hydraulic System			duty high capacity
	•	Reduced-drift valve for boom down, arm in			Operator's Statio
	•	Auxiliary hydraulic valve section			Meets ISO 12117-
	•	Spring-applied, hydraulically released			Adjustable indepe
		automatic swing brake			(seat-to-pedals)
	•	Auxiliary hydraulic-flow adjustments	•	•	AM/FM radio
		through monitor	•		Auto climate cont
		5,000-hour hydraulic oil-change interval			heater and pressu
	•	Auxiliary hydraulics	•		Built-in operator's
		Control pattern-change valve			partment and mai
		Hydraulic filter restriction indicator kit	•	•	Cell-phone power
		Load-lowering control device			5 amp
		Single-pedal propel control		•	Coat hook
		Undercarriage	•	•	Deluxe cloth suspo
		Planetary drive with axial piston motors			Floor mat
		Propel motor shields			Front windshield
	•	Spring-applied, hydraulically released		•	speeds
		automatic propel brake		•	Gauges (illuminate
		2-speed propel with automatic shift			Horn, electric
		Upper carrier roller (1)			Hour meter, elect
		Sealed and lubricated track chain		_	
	•	Undercarriage with blade		•	Hydraulic shutoff
		Triple semi-grouser shoes, 450 mm (18 in.)		•	Hydraulic warm-u
	<b>A</b>	Triple semi-grouser shoes, 600 mm (24 in.)	•		Interior light
	<b>A</b>	Rubber crawler pads, 450 mm (18 in.)			Large cup holder
	_	Rubber belt, continuous, 450 mm (18 in.)			

75G	85G	Upperstructure	75G	85G	Operator's Station (continued)
		Counterweight, 1305 kg (2,877 lb.)			Machine Information Center (MIC)
		Counterweight, 1408 kg (3,104 lb.)			Mode selectors (illuminated): Power
		Right- and left-hand mirrors			modes (2) / Travel modes (2 with auto-
•		Vandal locks with ignition key: Cab door /			matic shift) / Work mode (1)
		Engine hood / Fuel cap / Service doors			Multifunction, color LCD monitor with:
		Remote-mounted fuel filters			Diagnostic capability / Multiple-language
		Front Attachments			capabilities / Maintenance tracking /
•	•	Centralized lubrication system			Clock / System monitoring with alarm
•		Dirt seals on all bucket pins			features: Auto-idle indicator, engine air
•		Oil-impregnated bushings			cleaner restriction indicator light, engine
		Reinforced resin thrust plates			check, engine coolant temperature indi-
		Tungsten carbide thermal coating on			cator light with audible alarm, engine oil pressure indicator light with audible alarm,
		arm-to-bucket joint			low-alternator-charge indicator light,
		Arm, 2.12 m (6 ft. 11 in.)			low-fuel indicator light, fault-code alert
<b>A</b>	<b>A</b>	Attachment quick-couplers			indicator, fuel-rate display, wiper-mode
		Buckets: Ditching / Heavy duty / Heavy-			indicator, work-lights-on indicator, and
		duty high capacity / Side cutters and teeth			work-mode indicator
		Operator's Station			Motion alarm with cancel switch (con-
•	•	Meets ISO 12117-2 for ROPS			forms to SAE J994)
•	•	Adjustable independent control positions	•	•	Auxiliary hydraulic control switches in
		(seat-to-pedals) AM/FM radio			right console lever
•		Auto climate control/air conditioner with			SAE 2-lever control pattern
		heater and pressurizer			Seat belt, 51 mm (2 in.), retractable
		Built-in operator's manual storage com-			Tinted glass
		partment and manual			Transparent tinted overhead hatch
		Cell-phone power outlet, 12 volt, 60 watt,			Transparent tinted overhead window
		5 amp			Hot/cold beverage compartment
•	•	Coat hook			Seat belt, 76 mm (3 in.), non-retractable
•	•	Deluxe cloth suspension seat with adjust-			Protection screens for cab front, rear,
		able armrests			and side
•	•	Floor mat			Window vandal-protection covers
•		Front windshield wiper with intermittent			Electrical
		speeds	•	•	50-amp alternator
		Gauges (illuminated): Engine coolant / Fuel			Blade-type multi-fused circuits
•		Horn, electric	•	•	Positive-terminal battery covers
		Hour meter, electric			JDLink™ wireless communication system
		Hydraulic shutoff lever, all controls			(available in specific countries; see your
		Hydraulic warm-up control			dealer for details)
•		Interior light			Lights



Work lights: Halogen / 1 mounted on

boom / 1 mounted on frame