

160G LC/180G LC

17 945–20 507-kg (39,526–45,170 lb.) Operating Weight



JOHN DEERE



A large Deere excavator is shown in the foreground, its arm extended and bucket digging into a pile of dark brown soil. The excavator's body is black with yellow accents, and the word "DEERE" is prominently displayed in white on the side of the boom. In the background, a lush green field stretches out, with several houses and trees visible under a bright blue sky with scattered white clouds. The overall scene conveys a sense of productivity and versatility in a rural or construction setting.

Seeking big productivity in a midsize package?

With impressive arm forces, dig forces, and lift capacities, the 160G LC and 180G LC pack plenty of ability into easy-to-transport midsize packages. Rugged EPA Final Tier 4 (FT4)/EU Stage IV PowerTech™ diesel engines meet rigid emission regulations, enabling you to work, wherever there's work — without compromising power, reliability, or ease of operation.



	160G LC	180G LC
Net rated power	90 kW (122 hp)	95 kW (128 hp)
Operating weight	17 945 kg (39,526 lb.)	20 507 kg (45,170 lb.)
Maximum digging depth	6.49 m (21 ft. 4 in.)	7.07 m (23 ft. 2 in.)
Arm digging force	82 kN (18,508 lb.)	84 kN (18,825 lb.)
Bucket digging force	119 kN (26,665 lb.)	126 kN (28,244 lb.)

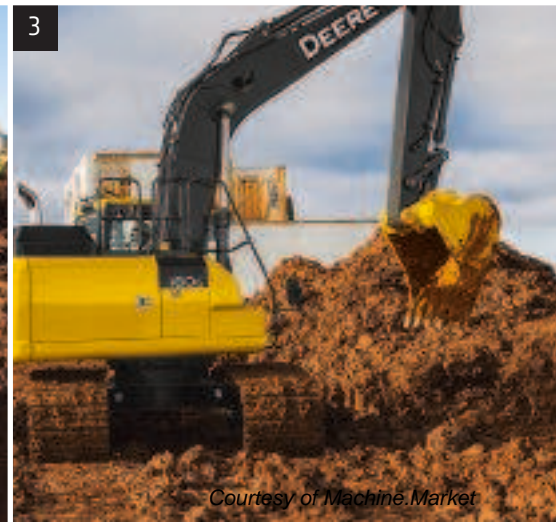



Midsize, no compromise.

Whether you're stockpiling overburden, excavating basements, loading trucks, or placing pipe, the G-Series provides the muscle and finesse you need.

Powerwise™ III hydraulic management system perfectly balances engine performance and hydraulic flow for predictable operation. Three productivity modes allow you to choose the digging style that fits the job. **High productivity** delivers more power and faster hydraulic response to move more material. **Power** delivers smooth and balanced metering for normal operation. **Economy** reduces top speed and helps save fuel.

1. Choose from a variety of track widths, arm lengths, buckets, high-flow auxiliary hydraulic packages, and other options.
2. When the digging gets tough, simply press the power-boost button on the right-hand control and muscle through.
3. For work that requires extra finesse, the G-Series' short-throw low-effort controls, unmatched metering, and smooth multifunction operation give the precision you need.



A detailed view of the operator's seat and controls inside a John Deere tractor cab. The seat is grey and upholstered. In front of the seat is a black gear shift lever with a red safety strap. To the left is a black hand throttle. The dashboard features a large, clear monitor with several warning labels, including 'DANGER' and 'WARNING'. The background shows the yellow exterior of the tractor and the large front window.

Operating ease takes a turn for the better.

Now it's easier than ever for your 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 quiet and spacious cab, virtually unobstructed all-around visibility, and numerous other amenities that provide everything your operators need to do their best work.



New hood design ensures optimal visibility to the sides and rear, even with the increased under-the-hood space requirements of EPA Final Tier 4 (FT4)/EU Stage IV engine components.

We've got your back with a sculpted mechanical-suspension high-back seat with 318 mm (12½ in.) of travel, sliding together or independent of the joystick console. So it won't cramp an operator's style. For even more support and comfort, opt for the air-suspension heated seat.

Ergonomically correct short-throw pilot levers provide smooth, predictable fingertip control with less movement or effort. Push buttons in the right lever allow fingertip control of auxiliary hydraulic flow for operating attachments. Optional sliding switch provides proportional speed control, giving you full command at your fingertips.

1. 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.
2. Standard boom/frame lights and cab/boom-mounted options provide illumination to extend your workday beyond daytime hours. Add optional cab lights, a right-hand boom light, or the underhood light package to further dispel the dark when needed.
3. Automatic, high-velocity bi-level climate-control system with automotive-style adjustable louvers helps keep the glass clear and the cab comfortable.



Nothing runs like a Deere, because nothing is built like one.

Unlike some excavators that scream for attention, our G-Series' hydraulically driven on-demand fans run only as fast or often as needed. For reduced noise and fuel consumption. Their highly efficient cooling systems keep things running cool, even in high-trash environments and high altitudes. When you know how they're built, you'll run a Deere.

1. With large idlers, rollers, and struted links, the sealed and lubricated undercarriage delivers long and reliable performance.



Courtesy of Machine.Market

To meet stringent EPA Final Tier 4 (FT4)/EU Stage IV standards, we built on our Interim Tier 4 (IT4)/Stage IIIB solution to deliver the best combination of performance, efficiency, and reliability without sacrificing power or torque. Our field-proven technology is simple, fluid efficient, fully integrated, and fully supported. It employs field-proven cooled exhaust gas recirculation (EGR), easy-to-maintain high-uptime exhaust filters, and selective catalytic reduction (SCR).

2. Highly efficient hydraulically driven fans run only as fast as needed, reducing noise, fuel consumption, and operating costs. Reversing option automatically back-blows cooler cores to keep them clean.

3. Thick-plate single-sheet mainframe, box-section track frames, and industry-exclusive double-seal swing bearing deliver rock-solid durability.

4. A John Deere exclusive, three welded bulkheads within the boom resist torsional stress for unsurpassed durability. Booms, arms, and mainframes are so tough, they're warranted for three years or 10,000 hours.



Uncover all the ways we keep costs down.

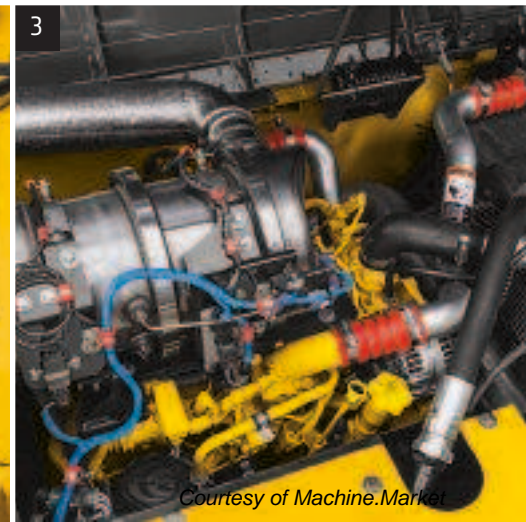
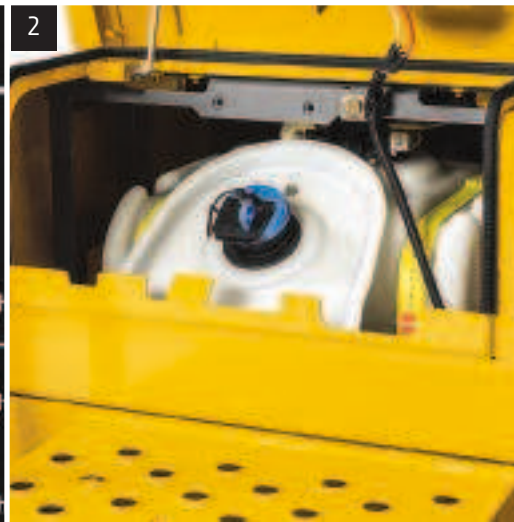
Like all John Deere machines, G-Series Excavators are loaded with features that make them hassle free to service and low cost to maintain.

Ultimate Uptime, featuring John Deere WorkSight™, is a customizable support solution available exclusively from your Deere dealer. This flexible offering maximizes equipment availability with standard John Deere WorkSight capabilities that can help prevent future downtime and speed repairs when needed. In addition to the base John Deere WorkSight features, our dealers work with you to build an uptime package that meets the specific needs of your machine, fleet, project, and business, including customized maintenance and repair agreements, onsite parts availability, extended warranties, fluid sampling, response-time guarantees, and more.

John Deere WorkSight is an exclusive suite of telematics solutions that increases uptime while lowering operating costs. At its heart, JDLink™ Ultimate machine monitoring provides real-time utilization data and alerts to help you maximize productivity and efficiency while minimizing downtime. Remote diagnostics enable your dealer to read codes, record performance data, and even update software without a trip to the jobsite.



1 Engine Oil Filter		
Previous Maintenance		
2015/04/07	0.0	
Remains	375.8	
Maintenance Interval	500.0	



Courtesy of Machine.Market

1. Easy-to-read LCD monitor tracks scheduled maintenance intervals and issues reminders. Should a problem arise, it provides diagnostic information to help decrease downtime.

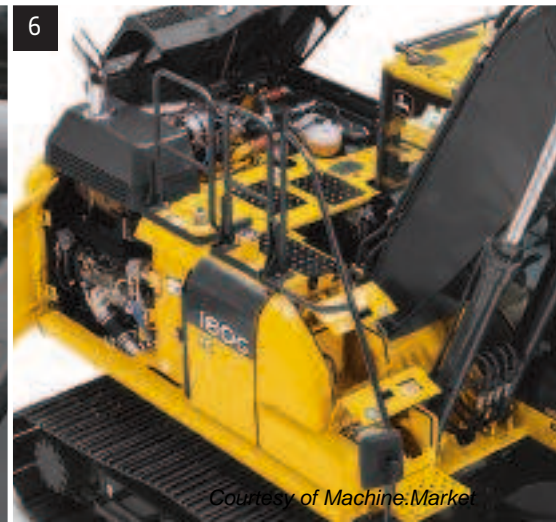
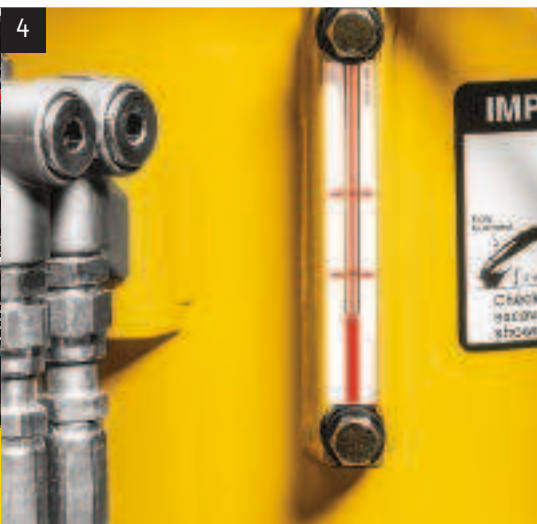
2. Diesel exhaust fluid (DEF) can be conveniently filled when refueling due to its large and accessible tank. DEF overflow routes excess outside the machine to avoid paint damage.

3. Ash-service intervals for the diesel particulate filter (DPF) are condition based, with the machine notifying the operator before service is required. Typically, ash service is not necessary until the first engine overhaul, depending on machine application and maintenance practices. FT4/Stage IV components are warranted for 10,000 hours.

4. Large fuel tanks and 500- and 5,000-hour engine and hydraulic oil-service intervals decrease downtime for routine maintenance. Fluid-sample and remote diagnostic ports help speed preventative maintenance and troubleshooting.

5. Auto-idle automatically reduces engine speed when hydraulics aren't in use. Auto shutdown further preserves precious fuel.

6. Upper-structure handrails provide three points of contact when accessing the engine compartment. Slip-resistant surfaces help improve stability.



160G LC

Engine		160G LC	
		<i>Base engine for use in the U.S., U.S. Territories, and Canada</i>	<i>Optional engine for use outside the U.S. and U.S. Territories</i>
Manufacturer and Model		John Deere PowerTech™ PWS 4.5 L	John Deere 4045H
Non-Road Emission Standard		EPA Final Tier 4/EU Stage IV	EPA Tier 3/EU Stage IIIA
Net Rated Power (ISO 9249)		90 kW (122 hp) at 2,200 rpm	90 kW (121 hp) at 1,900 rpm
Cylinders		4	4
Displacement		4.5 L (275 cu. in.)	4.5 L (275 cu. in.)
Off-Level Capacity		70% (35 deg.)	70% (35 deg.)
Aspiration		Series turbocharged, air-to-air charge-air cooler	Turbocharged, air-to-air charge-air cooler
Cooling			
Cool-on-demand hydraulic-driven, suction-type fan with remote-mounted drive			
Powertrain			
2-speed propel with automatic shift			
Maximum Travel Speed			
Low		3.4 km/h (2.1 mph)	
High		5.3 km/h (3.3 mph)	
Drawbar Pull		16 112 kg (35,521 lb.)	
Hydraulics			
Open center, load sensing			
Main Pumps			
Maximum Rated Flow		191 L/m (50.5 gpm) x 2	
Pilot Pump			
Maximum Rated Flow		33.6 L/m (8.9 gpm)	
Pressure Setting		3930 kPa (570 psi)	
System Operating Pressure			
Circuits			
Implement		34 336 kPa (4,980 psi)	
Travel		34 336 kPa (4,980 psi)	
Swing		34 336 kPa (4,980 psi)	
Power Boost		38 000 kPa (5,511 psi)	
Controls			
Pilot levers, short stroke, low-effort hydraulic pilot controls with shutoff lever			
Cylinders			
	<i>Bore</i>	<i>Rod Diameter</i>	<i>Stroke</i>
Boom (2)	110 mm (4.33 in.)	80 mm (3.15 in.)	1110 mm (43.70 in.)
Arm (1)	120 mm (4.72 in.)	90 mm (3.54 in.)	1365 mm (53.74 in.)
Bucket (1)	105 mm (4.13 in.)	75 mm (2.95 in.)	935 mm (36.81 in.)
Electrical			
Number of Batteries (12 volt)		2	
Battery Capacity		750 CCA	
Alternator Rating		100 amp	
Work Lights		2 halogen (1 mounted on boom, 1 on frame)	
Undercarriage			
Rollers (per side)			
Carrier		2	
Track		7	
Shoes (per side)		43	
Track			
Adjustment		Hydraulic	
Guides		Front and center	
Chain		Sealed and lubricated	
Ground Pressure			
Triple Semi-Grouser Shoes			
600 mm (24 in.)		41 kPa (5.95 psi)	
700 mm (28 in.)		35 kPa (5.08 psi)	



Swing Mechanism	160G LC
Speed	13.3 rpm
Torque	44 000 Nm (32,353 lb.-ft.)

Serviceability

Refill Capacities

Fuel Tank	285 L (75.3 gal.)
Cooling System	23.5 L (24.8 qt.)
Engine Oil with Filter	17 L (18.0 qt.)
Hydraulic Tank	125 L (33.0 gal.)
Hydraulic System	210 L (55.5 gal.)
Gearbox	
Swing	6.2 L (6.6 qt.)
Propel (each)	6.8 L (7.2 qt.)
Pump Drive	0.9 L (1.0 qt.)
Diesel Exhaust Fluid (DEF) Tank	26.7 L (28.2 qt.)

Operating Weights

With full fuel tank, 79-kg (175 lb.) operator, and 914-mm (36 in.), 0.60-m³ (0.78 cu. yd.), 528-kg (1,164 lb.) general-purpose bucket; 3.10-m (10 ft. 2 in.) arm; 3200-kg (7,055 lb.) counterweight; and 700-mm (28 in.) triple semi-grouser shoes

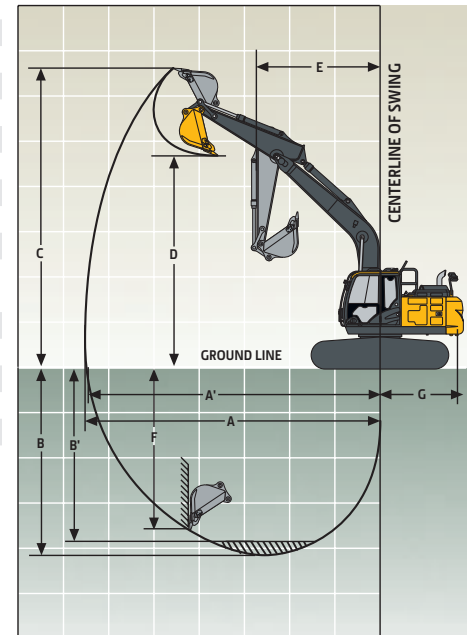
Operating Weight 17 945 kg (39,526 lb.)

Optional Components

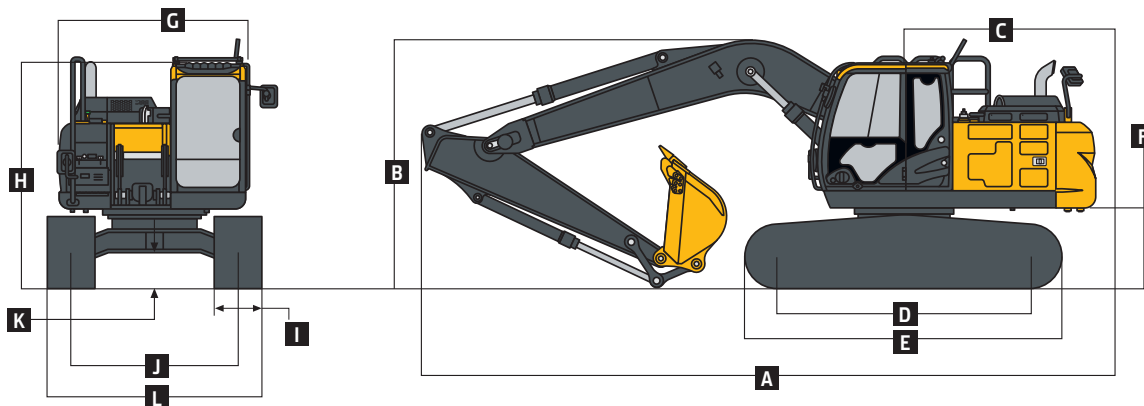
Undercarriage with Triple Semi-Grouser Shoes	
600 mm (24 in.)	6316 kg (13,912 lb.)
700 mm (28 in.)	6530 kg (14,383 lb.)
1-Piece Boom (with arm cylinder)	1300 kg (2,863 lb.)
Arm with Bucket Cylinder and Linkage	
2.60 m (8 ft. 6 in.)	788 kg (1,736 lb.)
3.10 m (10 ft. 2 in.)	874 kg (1,925 lb.)
Boom-Lift Cylinders (2), Total Weight	306 kg (674 lb.)

Operating Dimensions

Arm Length	2.60 m (8 ft. 6 in.)	3.10 m (10 ft. 2 in.)
Arm Digging Force		
SAE	90 kN (20,193 lb.)	79 kN (17,857 lb.)
ISO	93 kN (20,838 lb.)	82 kN (18,508 lb.)
Bucket Digging Force		
SAE	105 kN (23,598 lb.)	105 kN (23,598 lb.)
ISO	119 kN (26,665 lb.)	119 kN (26,665 lb.)
A Maximum Reach	8.87 m (29 ft. 1 in.)	9.33 m (30 ft. 7 in.)
A ¹ Maximum Reach at Ground Level	8.70 m (28 ft. 7 in.)	9.16 m (30 ft. 1 in.)
B Maximum Digging Depth	5.98 m (19 ft. 7 in.)	6.49 m (21 ft. 4 in.)
B ¹ Maximum Digging Depth at 2.44-m (8 ft. 0 in.) Flat Bottom	5.74 m (18 ft. 10 in.)	6.27 m (20 ft. 7 in.)
C Maximum Cutting Height	8.88 m (29 ft. 2 in.)	9.13 m (29 ft. 11 in.)
D Maximum Dumping Height	6.17 m (20 ft. 3 in.)	6.40 m (21 ft. 0 in.)
E Minimum Swing Radius	2.91 m (9 ft. 7 in.)	2.92 m (9 ft. 7 in.)
F Maximum Vertical Wall	5.16 m (16 ft. 11 in.)	5.69 m (18 ft. 8 in.)
G Tail-Swing Radius	2.55 m (8 ft. 4 in.)	2.55 m (8 ft. 4 in.)



Machine Dimensions		160G LC	
Arm Length		2.60 m (8 ft. 6 in.)	3.10 m (10 ft. 2 in.)
A Overall Length		8.62 m (28 ft. 3 in.)	8.65 m (28 ft. 5 in.)
B Overall Height		2.87 m (9 ft. 5 in.)	3.11 m (10 ft. 2 in.)
C Rear-End Length/Swing Radius		2.55 m (8 ft. 4 in.)	
D Distance Between Idler/Sprocket Centerline		3.10 m (10 ft. 2 in.)	
E Undercarriage Length		3.92 m (12 ft. 10 in.)	
F Counterweight Clearance		1030 mm (3 ft. 5 in.)	
G Upperstructure Width		2.50 m (8 ft. 2 in.)	
H Cab Height		2.95 m (9 ft. 8 in.)	
I Track Width with Triple Semi-Grouser Shoes		600 mm (24 in.) / 700 mm (28 in.)	
J Gauge Width		1.99 m (6 ft. 6 in.)	
K Ground Clearance		470 mm (18.5 in.)	
L Overall Width with Triple Semi-Grouser Shoes	600 mm (24 in.)	2.59 m (8 ft. 6 in.)	
	700 mm (28 in.)	2.69 m (8 ft. 10 in.)	



Lift Capacities

Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 528-kg (1,164 lb.) bucket, 3200-kg (7,055 lb.) standard counterweight, and standard gauge; and situated on firm, level, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine. All lift capacities are based on ISO 10567 (with power boost).

HORIZONTAL DISTANCE FROM CENTERLINE OF ROTATION										
LOAD POINT HEIGHT	1.5 m (5 ft.)		3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)	
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 2.60-m (8 ft. 6 in.) arm and 600-mm (24 in.) triple semi-grouser shoes</i>										
6.0 m (20 ft.)							2850	2850		
4.5 m (15 ft.)					4100 (8,900)	4100 (8,900)	3850 (8,450)	3100 (6,650)		
3.0 m (10 ft.)			8400 (17,900)	8400 (17,900)	5450 (11,700)	4700 (10,150)	4400 (9,550)	2950 (6,350)		
1.5 m (5 ft.)					6800 (14,700)	4400 (9,450)	4550 (9,800)	2800 (6,050)		
Ground Line			5800 (13,450)	5800 (13,450)	7050 (15,100)	4200 (9,000)	4450 (9,550)	2700 (5,850)		
-1.5 m (-5 ft.)	5300 (11,850)	5300 (11,850)	9950 (22,800)	7900 (17,000)	6950 (14,950)	4150 (8,900)	4400 (9,450)	2650 (5,750)		
-3.0 m (-10 ft.)	9850 (22,250)	9850 (22,250)	10 600 (22,900)	8050 (17,350)	7050 (15,100)	4200 (9,050)				
<i>With 2.60-m (8 ft. 6 in.) arm and 700-mm (28 in.) triple semi-grouser shoes</i>										
6.0 m (20 ft.)							2850	2850		
4.5 m (15 ft.)					4100 (8,900)	4100 (8,900)	3850 (8,450)	3150 (6,750)		
3.0 m (10 ft.)			8400 (17,900)	8400 (17,900)	5450 (11,700)	4750 (10,250)	4400 (9,550)	3000 (6,450)		
1.5 m (5 ft.)					6800 (14,700)	4450 (9,550)	4600 (9,900)	2850 (6,150)		
Ground Line			5800 (13,450)	5800 (13,450)	7100 (15,250)	4250 (9,150)	4500 (9,650)	2750 (5,900)		
-1.5 m (-5 ft.)	5300 (11,850)	5300 (11,850)	9950 (22,800)	8000 (17,200)	7050 (15,100)	4200 (9,000)	4450 (9,550)	2700 (5,850)		
-3.0 m (-10 ft.)	9850 (22,250)	9850 (22,250)	10 600 (22,900)	8150 (17,550)	7100 (15,250)	4250 (9,150)				

Lift Capacities (continued)
160G LC

Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 528-kg (1,164 lb.) bucket, 3200-kg (7,055 lb.) standard counterweight, and standard gauge; and situated on firm, level, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine. All lift capacities are based on ISO 10567 (with power boost).

HORIZONTAL DISTANCE FROM CENTERLINE OF ROTATION

LOAD POINT HEIGHT	1.5 m (5 ft.)		3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)	
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 3.10-m (10 ft. 2 in.) arm and 600-mm (24 in.) triple semi-grouser shoes</i>										
6.0 m (20 ft.)							2950 (6,150)	2950 (6,150)		
4.5 m (15 ft.)							3400 (7,500)	3150 (6,750)		
3.0 m (10 ft.)			6950 (14,800)	6950 (14,800)	4850 (10,400)	4800 (10,350)	4000 (8,750)	3000 (6,450)	2900 (5,750)	2000 (4,300)
1.5 m (5 ft.)			7100 (17,200)	7100 (17,200)	6300 (13,650)	4450 (9,550)	4550 (9,850)	2850 (6,100)	3150 (6,800)	1950 (4,150)
Ground Line			6400 (14,750)	6400 (14,750)	7050 (15,100)	4200 (9,000)	4450 (9,500)	2700 (5,800)	3100 (6,700)	1850 (4,000)
-1.5 m (-5 ft.)	4700 (10,550)	4700 (10,550)	9200 (21,000)	7800 (16,800)	6900 (14,850)	4100 (8,800)	4350 (9,350)	2650 (5,650)		
-3.0 m (-10 ft.)	8250 (18,600)	8250 (18,600)	11 200 (24,250)	7900 (17,000)	6950 (14,900)	4100 (8,850)	4400 (9,450)	2650 (5,700)		
-4.5 m (-15 ft.)			8950 (19,100)	8200 (17,600)	5850 (12,350)	4250 (9,250)				

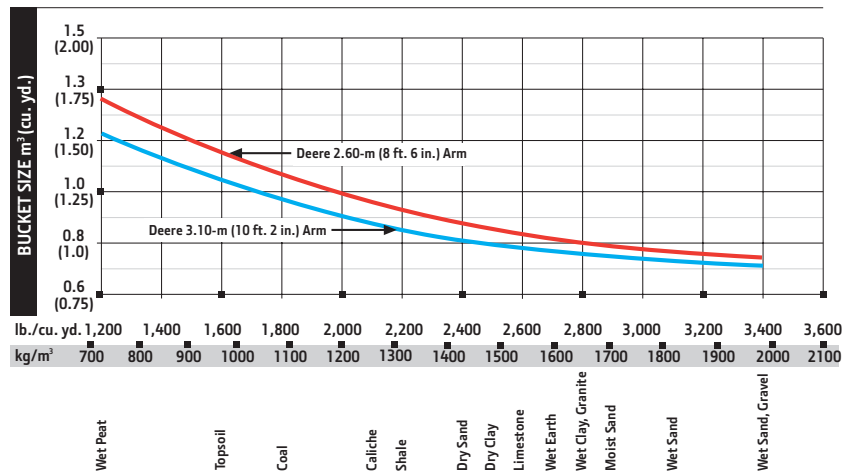
With 3.10-m (10 ft. 2 in.) arm and 700-mm (28 in.) triple semi-grouser shoes

6.0 m (20 ft.)							2950 (6,150)	2950 (6,150)		
4.5 m (15 ft.)							3400 (7,500)	3150 (6,800)		
3.0 m (10 ft.)			6950 (14,800)	6950 (14,800)	4850 (10,400)	4850 (10,400)	4000 (8,750)	3050 (6,500)	2900 (5,750)	2050 (4,350)
1.5 m (5 ft.)			7100 (17,200)	7100 (17,200)	6300 (13,650)	4500 (9,650)	4600 (9,900)	2850 (6,150)	3200 (6,900)	1950 (4,200)
Ground Line			6400 (14,750)	6400 (14,750)	7100 (15,250)	4250 (9,100)	4450 (9,600)	2750 (5,850)	3150 (6,750)	1900 (4,100)
-1.5 m (-5 ft.)	4700 (10,550)	4700 (10,550)	9200 (21,000)	7900 (17,000)	7000 (15,000)	4150 (8,900)	4400 (9,450)	2650 (5,750)		
-3.0 m (-10 ft.)	8250 (18,600)	8250 (18,600)	11 200 (24,250)	8000 (17,200)	7000 (15,050)	4150 (8,950)	4450 (9,550)	2700 (5,800)		
-4.5 m (-15 ft.)			8950 (19,100)	8300 (17,850)	5850 (12,350)	4300 (9,350)				

Buckets

A full line of buckets is offered to meet a wide variety of applications. Digging forces are with power boost. Buckets are equipped with John Deere Fanggs™ or ESCO teeth standard. Replaceable cutting edges and a variety of teeth are available through John Deere Parts. Optional side cutters add 150 mm (6 in.) to bucket widths. Capacities are SAE heaped ratings.

Bucket Type	Bucket Width		Bucket Capacity		Bucket Weight		Bucket Dig Force		Arm Dig Force 2.60 m (8 ft. 6 in.)		Arm Dig Force 3.10 m (10 ft. 2 in.)		Bucket Tip Radius		Number of Teeth
	mm	in.	m³	cu. yd.	kg	lb.	kN	lb.	kN	lb.	kN	lb.	mm	in.	
General Purpose High Capacity	610	24	0.41	0.54	491	1,081	97.4	21,885	87.0	19,556	77.8	17,497	1463	57.61	4
	760	30	0.55	0.72	569	1,253	97.4	21,885	87.0	19,556	77.8	17,497	1463	57.61	4
	915	36	0.70	0.91	655	1,443	97.4	21,885	87.0	19,556	77.8	17,497	1463	57.61	5
	1065	42	0.85	1.11	733	1,615	97.4	21,885	87.0	19,556	77.8	17,497	1463	57.61	5
Heavy Duty	610	24	0.37	0.48	493	1,086	105.6	23,735	89.5	20,125	79.8	17,947	1349	53.10	4
	760	30	0.50	0.65	554	1,221	105.6	23,735	89.5	20,125	79.8	17,947	1349	53.10	4
	915	36	0.62	0.81	623	1,373	105.6	23,735	89.5	20,125	79.8	17,947	1349	53.10	5
	1065	42	0.76	0.99	685	1,508	105.6	23,735	89.5	20,125	79.8	17,947	1349	53.10	5
Ditching	1525	60	0.63	0.83	484	1,066	152.3	34,245	100.1	22,494	88.1	19,797	935	36.81	0

Bucket Selection Guide*


*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.

180G LC

Engine		180G LC	
		<i>Base engine for use in the U.S., U.S. Territories, and Canada</i>	<i>Optional engine for use outside the U.S. and U.S. Territories</i>
Manufacturer and Model		John Deere PowerTech™ PWS 4.5 L	John Deere 4045H
Non-Road Emission Standard		EPA Final Tier 4/EU Stage IV	EPA Tier 3/EU Stage IIIA
Net Rated Power (ISO 9249)		95 kW (128 hp) at 2,200 rpm	90 kW (121 hp) at 1,900 rpm
Cylinders		4	4
Displacement		4.5 L (275 cu. in.)	4.5 L (275 cu. in.)
Off-Level Capacity		70% (35 deg.)	70% (35 deg.)
Aspiration		Series turbocharged, air-to-air charge-air cooler	Turbocharged, air-to-air charge-air cooler
Cooling			
Cool-on-demand hydraulic-driven, suction-type fan with remote-mounted drive			
Powertrain			
2-speed propel with automatic shift			
Maximum Travel Speed			
Low		3.4 km/h (2.1 mph)	
High		5.3 km/h (3.3 mph)	
Drawbar Pull		20 700 kg (45,636 lb.)	
Hydraulics			
Open center, load sensing			
Main Pumps			
Maximum Rated Flow		191 L/m (50.5 gpm) x 2	
Pilot Pump			
Maximum Rated Flow		33.6 L/m (8.9 gpm)	
Pressure Setting		3930 kPa (570 psi)	
System Operating Pressure			
Circuits			
Implement		34 336 kPa (4,980 psi)	
Travel		34 336 kPa (4,980 psi)	
Swing		34 336 kPa (4,980 psi)	
Power Boost		38 000 kPa (5,511 psi)	
Controls			
Pilot levers, short stroke, low-effort hydraulic pilot controls with shutoff lever			
Cylinders			
	<i>Bore</i>	<i>Rod Diameter</i>	<i>Stroke</i>
Boom (2)	120 mm (4.72 in.)	85 mm (3.35 in.)	1123 mm (44.21 in.)
Arm (1)	125 mm (4.92 in.)	90 mm (3.54 in.)	1371 mm (53.98 in.)
Bucket (1)	105 mm (4.13 in.)	75 mm (2.95 in.)	1060 mm (41.73 in.)
Electrical			
Number of Batteries (12 volt)		2	
Battery Capacity		750 CCA	
Alternator Rating		100 amp	
Work Lights		2 halogen (1 mounted on boom, 1 on frame)	
Undercarriage			
Rollers (per side)			
Carrier		2	
Track		7	
Shoes (per side)		46	
Track			
Adjustment		Hydraulic	
Guides		Center	
Chain		Sealed and lubricated	
Ground Pressure			
Triple Semi-Grouser Shoes			
600 mm (24 in.)		41 kPa (5.95 psi)	
700 mm (28 in.)		36 kPa (5.22 psi)	
800 mm (32 in.)		32 kPa (4.64 psi)	



Swing Mechanism	180G LC
Speed	12.8 rpm
Torque	49 000 Nm (36,029 lb.-ft.)

Serviceability

Refill Capacities

Fuel Tank	285 L (75.3 gal.)
Cooling System	23.5 L (24.8 qt.)
Engine Oil with Filter	17.0 L (18.0 qt.)
Hydraulic Tank	125 L (33.0 gal.)
Hydraulic System	220 L (58.1 gal.)
Gearbox	
Swing	6.9 L (7.3 qt.)
Propel (each)	6.8 L (7.2 qt.)
Pump Drive	0.9 L (1.0 qt.)
Diesel Exhaust Fluid (DEF) Tank	26.7 L (28.2 qt.)

Operating Weights

With full fuel tank; 79-kg (175 lb.) operator; 1067-mm (42 in.), 0.93-m³ (1.31 cu. yd.), 666-kg (1,468 lb.) general-purpose bucket; 3.21-m (10 ft. 6 in.) arm; 3900-kg (8,598 lb.) counterweight; and 800-mm (32 in.) triple semi-grouser shoes

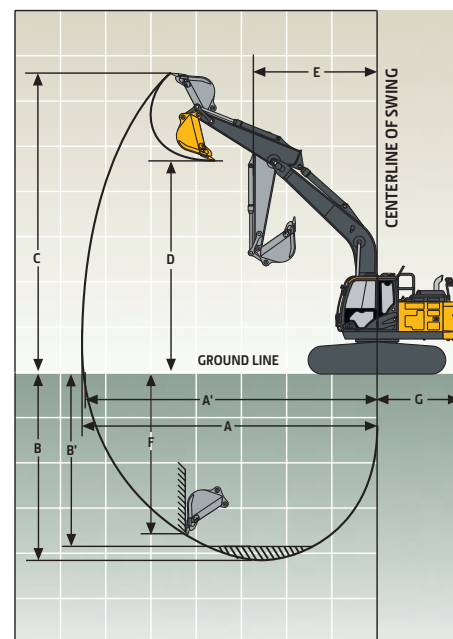
Operating Weight	20 507 kg (45,170 lb.)
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Optional Components

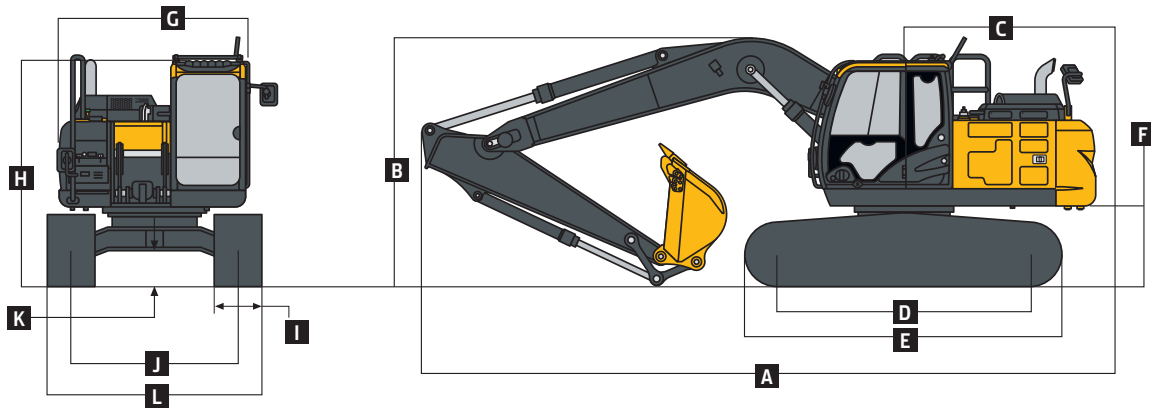
Undercarriage with Triple Semi-Grouser Shoes	
600 mm (24 in.)	6752 kg (14,873 lb.)
700 mm (28 in.)	7143 kg (15,733 lb.)
800 mm (32 in.)	7437 kg (16,381 lb.)
1-Piece Boom (with arm cylinder)	1566 kg (3,449 lb.)
Arm with Bucket Cylinder and Linkage	
2.71 m (8 ft. 10 in.)	881 kg (1,941 lb.)
3.21 m (10 ft. 6 in.)	946 kg (2,084 lb.)
Boom-Lift Cylinders (2), Total Weight	326 kg (718 lb.)

Operating Dimensions

Arm Length	2.71 m (8 ft. 10 in.)	3.21 m (10 ft. 6 in.)
Arm Digging Force		
SAE	91 kN (20,496 lb.)	81 kN (18,240 lb.)
ISO	95 kN (21,282 lb.)	84 kN (18,825 lb.)
Bucket Digging Force		
SAE	113 kN (25,311 lb.)	113 kN (25,311 lb.)
ISO	126 kN (28,244 lb.)	126 kN (28,244 lb.)
A Maximum Reach	9.43 m (30 ft. 11 in.)	9.94 m (32 ft. 7 in.)
A ¹ Maximum Reach at Ground Level	9.27 m (30 ft. 5 in.)	9.79 m (32 ft. 1 in.)
B Maximum Digging Depth	6.57 m (21 ft. 7 in.)	7.07 m (23 ft. 2 in.)
B ¹ Maximum Digging Depth at 2.44-m (8 ft. 0 in.) Flat Bottom	6.32 m (20 ft. 9 in.)	6.87 m (22 ft. 6 in.)
C Maximum Cutting Height	9.40 m (30 ft. 10 in.)	9.79 m (32 ft. 1 in.)
D Maximum Dumping Height	6.57 m (21 ft. 7 in.)	6.93 m (22 ft. 9 in.)
E Minimum Swing Radius	3.13 m (10 ft. 3 in.)	3.13 m (10 ft. 3 in.)
F Maximum Vertical Wall	5.55 m (18 ft. 3 in.)	6.28 m (20 ft. 7 in.)
G Tail-Swing Radius	2.55 m (8 ft. 4 in.)	2.55 m (8 ft. 4 in.)



Machine Dimensions		180G LC	
Arm Length		2.71 m (8 ft. 10 in.)	3.21 m (10 ft. 6 in.)
A	Overall Length with Arm	9.04 m (29 ft. 8 in.)	9.04 m (29 ft. 8 in.)
B	Overall Height with Arm	3.08 m (10 ft. 1 in.)	3.39 m (11 ft. 1 in.)
C	Rear-End Length/Swing Radius	2.55 m (8 ft. 4 in.)	
D	Distance Between Idler/Sprocket Centerline	3.37 m (11 ft. 1 in.)	
E	Undercarriage Length	4.17 m (13 ft. 8 in.)	
F	Counterweight Clearance	1030 mm (3 ft. 5 in.)	
G	Upperstructure Width	2.50 m (8 ft. 2 in.)	
H	Cab Height	2.95 m (9 ft. 8 in.)	
I	Track Width with Triple Semi-Grouser Shoes	600 mm (24 in.) / 700 mm (28 in.) / 800 mm (32 in.)	
J	Gauge Width	2.20 m (7 ft. 3 in.)	
K	Ground Clearance	450 mm (17.7 in.)	
L	Overall Width with Triple Semi-Grouser Shoes		
	600 mm (24 in.)	2.80 m (9 ft. 2 in.)	
	700 mm (28 in.)	2.90 m (9 ft. 6 in.)	
	800 mm (32 in.)	3.00 m (9 ft. 10 in.)	



Lift Capacities

Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 666-kg (1,468 lb.) bucket, 3900-kg (5,598 lb.) standard counterweight, and standard gauge; and situated on firm, level, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine. All lift capacities are based on ISO 10567 (with power boost).

HORIZONTAL DISTANCE FROM CENTERLINE OF ROTATION										
LOAD POINT HEIGHT	1.5 m (5 ft.)		3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)	
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 2.71-m (8 ft. 10 in.) arm and 700-mm (28 in.) triple semi-grouser shoes</i>										
6.0 m (20 ft.)							3950 (8,700)	3900 (8,400)		
4.5 m (15 ft.)					4800 (10,400)	4800 (10,400)	4350 (9,450)	3800 (8,200)		
3.0 m (10 ft.)					6500 (14,000)	5750 (12,450)	5100 (11,050)	3650 (7,800)	4000 (8,550)	2450 (5,300)
1.5 m (5 ft.)					8150 (17,600)	5350 (11,550)	5600 (12,050)	3450 (7,400)	3900 (8,400)	2400 (5,100)
Ground Line			4300 (10,050)	4300 (10,050)	8750 (18,800)	5150 (11,050)	5450 (11,750)	3300 (7,100)	3850 (8,250)	2300 (5,000)
-1.5 m (-5 ft.)	4600 (10,400)	4600 (10,400)	8250 (18,880)	8250 (18,880)	8700 (18,650)	5050 (10,900)	5400 (11,600)	3250 (7,000)		
-3.0 m (-10 ft.)	8750 (19,750)	8750 (19,750)	12 750 (27,600)	10 150 (21,750)	8700 (18,750)	5100 (11,000)	5450 (11,700)	3300 (7,100)		
-4.5 m (-15 ft.)			10 100 (21,650)	10 100 (21,650)	6900 (14,500)	5300 (11,500)				
<i>With 3.21-m (10 ft. 6 in.) arm and 600-mm (24 in.) triple semi-grouser shoes</i>										
6.0 m (20 ft.)							3420 (7,550)	3420 (7,550)		
4.5 m (15 ft.)							3870 (8,450)	3800 (8,160)	3290 (6,700)	2510 (5,370)
3.0 m (10 ft.)			8920 (18,930)	8920 (18,930)	5810 (12,500)	5790 (12,480)	4680 (10,150)	3610 (7,760)	3930 (8,440)	2430 (5,200)
1.5 m (5 ft.)					7610 (16,410)	5340 (11,510)	5540 (11,900)	3400 (7,310)	3820 (8,210)	2330 (4,990)
Ground Line			4650 (10,760)	4650 (10,760)	8620 (18,500)	5050 (10,870)	5350 (11,510)	3230 (6,960)	3730 (8,020)	2240 (4,820)
-1.5 m (-5 ft.)	3930 (8,830)	3930 (8,830)	7390 (16,860)	7390 (16,860)	8480 (18,190)	4930 (10,600)	5260 (11,300)	3150 (6,770)	3690 (7,940)	2210 (4,740)
-3.0 m (-10 ft.)	7200 (16,210)	7200 (16,210)	11 700 (26,760)	9800 (21,010)	8500 (18,230)	4940 (10,640)	5260 (11,320)	3150 (6,790)		
-4.5 m (-15 ft.)	11 630 (26,400)	11 630 (26,400)	11 300 (24,250)	10 080 (21,630)	7670 (16,400)	5090 (10,970)				

Lift Capacities (continued)
180G LC

Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 666-kg (1,468 lb.) bucket, 3900-kg (5,598 lb.) standard counterweight, and standard gauge; and situated on firm, level, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine. All lift capacities are based on ISO 10567 (with power boost).

HORIZONTAL DISTANCE FROM CENTERLINE OF ROTATION

LOAD POINT HEIGHT	1.5 m (5 ft.)		3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)	
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 3.21-m (10 ft. 6 in.) arm and 700-mm (28 in.) triple semi-grouser shoes</i>										
6.0 m (20 ft.)							3420 (7,550)	3420 (7,550)		
4.5 m (15 ft.)							3870 (8,450)	3870 (8,310)	3290 (6,700)	2560 (5,480)
3.0 m (10 ft.)			8920 (18,930)	8920 (18,930)	5810 (12,500)	5810 (12,500)	4680 (10,150)	3680 (7,910)	4010 (8,610)	2480 (5,320)
1.5 m (5 ft.)					7610 (16,410)	5440 (11,730)	5580 (12,080)	3470 (7,460)	3900 (8,380)	2380 (5,100)
Ground Line			4650 (10,760)	4650 (10,760)	8790 (18,850)	5150 (11,080)	5460 (11,740)	3300 (7,100)	3810 (8,190)	2300 (4,930)
-1.5 m (-5 ft.)	3930 (8,830)	3930 (8,830)	7390 (16,860)	7390 (16,860)	8650 (18,550)	5030 (10,820)	5370 (11,530)	3220 (6,920)	3770 (8,110)	2260 (4,850)
-3.0 m (-10 ft.)	7200 (16,210)	7200 (16,210)	11 700 (26,760)	9980 (21,400)	8660 (18,580)	5040 (10,850)	5370 (11,550)	3220 (6,930)		
-4.5 m (-15 ft.)	11 630 (26,400)	11 630 (26,400)	11 300 (24,250)	10 260 (22,020)	7670 (16,400)	5190 (11,180)				

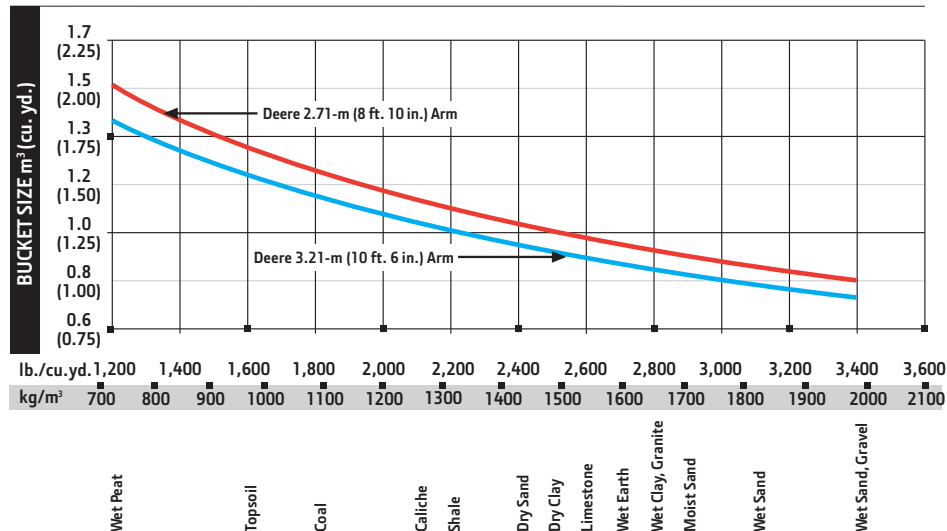
With 3.21-m (10 ft. 6 in.) arm and 800-mm (32 in.) triple semi-grouser shoes

6.0 m (20 ft.)							3420 (7,550)	3420 (7,550)		
4.5 m (15 ft.)							3870 (8,450)	3870 (8,420)	3290 (6,700)	2600 (5,570)
3.0 m (10 ft.)			8920 (18,930)	8920 (18,930)	5810 (12,500)	5810 (12,500)	4680 (10,150)	3730 (8,020)	4070 (8,740)	2520 (5,400)
1.5 m (5 ft.)					7610 (16,410)	5520 (11,890)	5580 (12,080)	3520 (7,570)	3960 (8,510)	2420 (5,190)
Ground Line			4650 (10,760)	4650 (10,760)	8830 (19,090)	5220 (11,240)	5540 (11,910)	3350 (7,210)	3870 (8,320)	2340 (5,010)
-1.5 m (-5 ft.)	3930 (8,830)	3930 (8,830)	7390 (16,860)	7390 (16,860)	8770 (18,810)	5100 (10,980)	5450 (11,710)	3270 (7,030)	3830 (8,240)	2300 (4,940)
-3.0 m (-10 ft.)	7200 (16,210)	7200 (16,210)	11 700 (26,760)	10 120 (21,690)	8790 (18,850)	5120 (11,010)	5450 (11,730)	3270 (7,040)		
-4.5 m (-15 ft.)	11 630 (26,400)	11 630 (26,400)	11 300 (24,250)	10 390 (22,310)	7670 (16,400)	5260 (11,340)				

Buckets

A full line of buckets is offered to meet a wide variety of applications. Digging forces are with power boost. Buckets are equipped with John Deere Fanggs™ or ESCO teeth standard. Replaceable cutting edges and a variety of teeth are available through John Deere Parts. Optional side cutters add 150 mm (6 in.) to bucket widths. Capacities are SAE heaped ratings.

Type Bucket	Bucket Width		Bucket Capacity		Bucket Weight		Bucket Dig Force (SAE)		Arm Dig Force 2.71 m (8 ft. 10 in.)		Arm Dig Force 3.21 m (10 ft. 6 in.)		Bucket Tip Radius		Number of Teeth
	mm	in.	m ³	cu. yd.	kg	lb.	kN	lb.	kN	lb.	kN	lb.	mm	in.	
Heavy Duty	760	30	0.54	0.71	622	1,369	112.7	25,329	91.1	20,489	81.4	18,293	1463	57.61	4
	915	36	0.69	0.90	708	1,559	112.7	25,329	91.1	20,489	81.4	18,293	1463	57.61	5
	1065	42	0.83	1.09	786	1,731	112.7	25,329	91.1	20,489	81.4	18,293	1463	57.61	5
	1220	48	0.99	1.29	872	1,921	112.7	25,329	91.1	20,489	81.4	18,293	1463	57.61	6
Heavy Duty High Capacity	915	36	0.74	0.97	809	1,782	111.9	25,156	90.9	20,440	81.2	18,252	1473	58.0	5
	1065	42	0.91	1.19	886	1,951	111.9	25,156	90.9	20,440	81.2	18,252	1473	58.0	5

Bucket Selection Guide*


*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.

160G LC	180G LC	Engine
●	●	Auto-idle system
●	●	Automatic belt-tension device
●	●	Batteries (2 – 12 volt)
●	●	Coolant recovery tank
●	●	Dual-element dry-type 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
●	●	Turbocharger with charge air cooler
●	●	Cool-on-demand hydraulic-driven fan
●	●	500-hour engine-oil-change interval
●	●	70% (35 deg.) off-level capability
●	●	Engine-oil-sampling valve
●	●	Programmable auto shutdown
▲	▲	Chrome exhaust stack
▲	▲	Severe-duty fuel filter
▲	▲	Hydraulic fan reverser
▲	▲	Engine coolant heater
Hydraulic System		
●	●	Reduced-drift valve for boom down, arm in
●	●	Auxiliary hydraulic valve section
●	●	Spring-applied, hydraulically released automatic swing brake
●	●	Auxiliary hydraulic-flow adjustments through monitor
●	●	Auto power lift
●	●	5,000-hour hydraulic-oil-change interval
●	●	Hydraulic-oil-sampling valve
▲	▲	Auxiliary hydraulic lines
▲	▲	Auxiliary pilot and electric controls
▲	▲	Hydraulic filter restriction indicator kit
▲	▲	Load-lowering control device
▲	▲	Single-pedal propel control
▲	▲	Control pattern-change valve
Undercarriage		
●	●	Planetary drive with axial piston motors
●	●	Propel motor shields
●	●	Spring-applied, hydraulically released automatic propel brake
●	●	Track guides, front idler and center
●	●	2-speed propel with automatic shift
●	●	Upper carrier rollers (2)
●	●	Sealed and lubricated track chain
▲	▲	Triple semi-grouser shoes, 600 mm (24 in.)
▲	▲	Triple semi-grouser shoes, 700 mm (28 in.)
▲	▲	Triple semi-grouser shoes, 800 mm (32 in.)

160G LC	180G LC	Upperstructure
●	●	Right-hand and left-hand mirrors
●	●	Vandal locks with ignition key: Cab door / Service doors / Toolbox
●	●	Debris-screening side panel
●	●	Remote-mounted engine oil and fuel filters
Front Attachments		
●	●	Centralized lubrication system
●	●	Dirt seals on all bucket pins
●	●	Less boom and arm
●	●	Oil-impregnated bushings
●	●	Reinforced resin thrust plates
●	●	Tungsten carbide thermal coating on arm-to-bucket joint
▲		Arm, 2.60 m (8 ft. 6 in.)
	▲	Arm, 2.71 m (8 ft. 10 in.)
▲		Arm, 3.10 m (10 ft. 2 in.)
	▲	Arm, 3.21 m (10 ft. 6 in.)
▲	▲	Attachment quick-couplers
▲	▲	Boom cylinder with plumbing to main-frame less boom and arm
▲	▲	Buckets: Ditching / Heavy duty / Heavy-duty high capacity / Side cutters and teeth
▲	▲	Material clamps
Operator's Station		
●	●	Meets ISO 12117-2 for ROPS
●	●	Adjustable independent-control positions (levers-to-seat, seat-to-pedals)
●	●	AM/FM radio
●	●	Auto climate control/air conditioner/heater/pressurizer
●	●	Built-in Operator's Manual storage compartment and manual
●	●	Cell-phone power outlet, 12 volt, 60 watt, 5 amp
●	●	Coat hook
●	●	Deluxe suspension cloth seat with 100-mm (4 in.) adjustable armrests
●	●	Floor mat
●	●	Front windshield wiper with intermittent speeds
●	●	Gauges (illuminated): Diesel Exhaust Fluid (DEF) / Engine coolant / Fuel
●	●	Horn, electric
●	●	Hour meter, electric
●	●	Hydraulic shutoff lever, all controls
●	●	Hydraulic warm-up control
●	●	Interior light
●	●	Large cup holder
●	●	Machine Information Center (MIC)

160G LC	180G LC	Operator's Station (continued)
●	●	Mode selectors (illuminated): Power modes (3) / 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, low DEF indication with audible alarm, 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)
●	●	Power-boost switch on right console lever
●	●	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 hatch
●	●	Hot/cold beverage compartment
▲	▲	Air-suspension heated seat
▲	▲	24- to 12-volt D.C. radio converters, 10 amp
▲	▲	Hydraulic oil filter restriction indicator light
▲	▲	Protection screens for cab front, rear, and side
▲	▲	Seat belt, 76 mm (3 in.), non-retractable
▲	▲	Window vandal-protection covers
Electrical		
●	●	100-amp alternator
●	●	Blade-type multi-fused circuits
●	●	Positive-terminal battery covers
●	●	JDLINK™ wireless communication system (available in specific countries; see your dealer for details)
●	●	Rearview camera
▲	▲	Cab extension wiring harness
Lights		
●	●	Work lights: Halogen / 1 mounted on boom / 1 mounted on frame
▲	▲	2 lights mounted on cab / 1 mounted on right side of boom

Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan, at test conditions specified per ISO 9249. No derating is required up to 3050-m (10,000 ft.) altitude. 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 tanks and 79-kg (175 lb.) operators; a 160G LC unit with 914-mm (36 in.), 0.60-m³ (0.78 cu. yd.), 528-kg (1,164 lb.) general-purpose bucket; 3.10-m (10 ft. 2 in.) arm; 3200-kg (7,055 lb.) counterweight; and 700-mm (28 in.) triple semi-grouser shoes; and a 180G LC unit with 1067-mm (42 in.), 0.93-m³ (1.31 cu. yd.), 666-kg (1,468 lb.) general-purpose bucket; 3.21-m (10 ft. 6 in.) arm; 3900-kg (8,598 lb.) counterweight; and 800-mm (32 in.) triple semi-grouser shoes.

