

160G LC/180G LC

16–18 metric ton



JOHN DEERE





Seeking big productivity in a mid-size package?

The enhanced 160G LC and all-new 180G LC will exceed your expectations. With impressive arm force, dig force, and lift capacity, they pack plenty of ability into easy-to-transport mid-size packages. Their more spacious and comfortable cabs come equipped with easy-to-navigate enhanced LCD monitors that let operators easily dial-in a wealth of machine info and functionality. Rugged EPA Interim Tier 4/EU Stage IIIB John Deere PowerTech™ diesels meet rigid emission regulations, enabling you to work, wherever there's work — even in nonattainment areas. And of course, you'll enjoy typical John Deere smoothness, control, and operating ease. Why settle for anything less?



A longtime favorite because of its “load-and-go” versatility, the G-Series version of our popular 160 is even more capable.

For those of you who said you’d like an even larger mid-size, there’s the all-new 180G LC. Weighing nearly 2100 kg (4,632 lb.) more than its smaller sibling, it also offers more reach, digging depth, lift capacity, and arm and bucket dig forces.

The EPA IT4/EU Stage IIIB technology in our excavators is simple, fuel efficient, fully integrated, and fully supported. It employs field-proven cooled exhaust gas recirculation (EGR) for reducing NO_x, and a diesel particulate filter (DPF) and diesel oxidation catalyst (DOC) to reduce particulate matter.

With John Deere WorkSight™, JDLink™ monitoring provides real-time machine utilization and health data, plus location information. Fleet Care proactively suggests maintenance to correct problems early before they turn into costly downtime. And Service ADVISOR™ Remote enables your dealer to read diagnostic codes, record performance data, and even update software without a trip to the jobsite. It’s the most comprehensive, easy-to-use suite of technology available for increasing uptime and productivity while lowering operating costs. And it’s only available from John Deere.

	160G LC	180G LC
Net rated hp	90 kW (121 hp)	90 kW (121 hp)
Operating weight	18 017 kg (39,685 lb.)	20 120 kg (44,317 lb.)
Lift capacity	4267 kg (9,408 lb.)	5302 kg (11,690 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.)

Mid-size, no compromise.

Whether you're stockpiling overburden, excavating basements, loading trucks, or placing pipe, the G-Series provide the muscle and finesse you need. Their no-compromise Powerwise™ III hydraulic management systems yield the pinpoint metering and smooth-as-silk low-effort control that have become trademarks of our excavators. Plus, they're highly maneuverable — easily transported to the site, and navigating easily through a project's worth of tasks. So you can get in, get done, and get on to the next job.

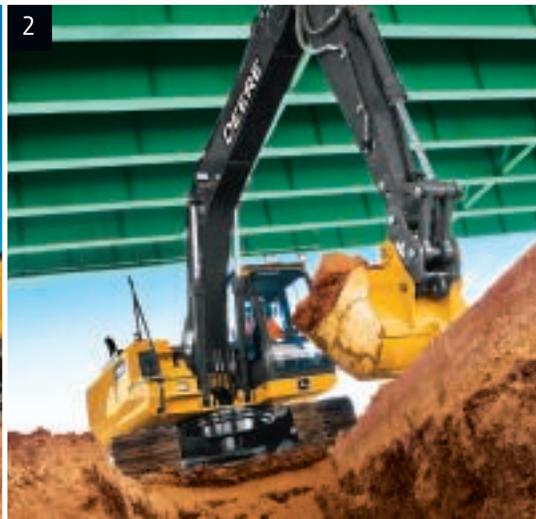
Powerwise III perfectly balances engine performance and hydraulic flow for predictable operation. Three productivity modes allow you to choose the digging style that fits the job. **High productivity** delivers more power and faster hydraulic response to move more material. **Power** delivers smooth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

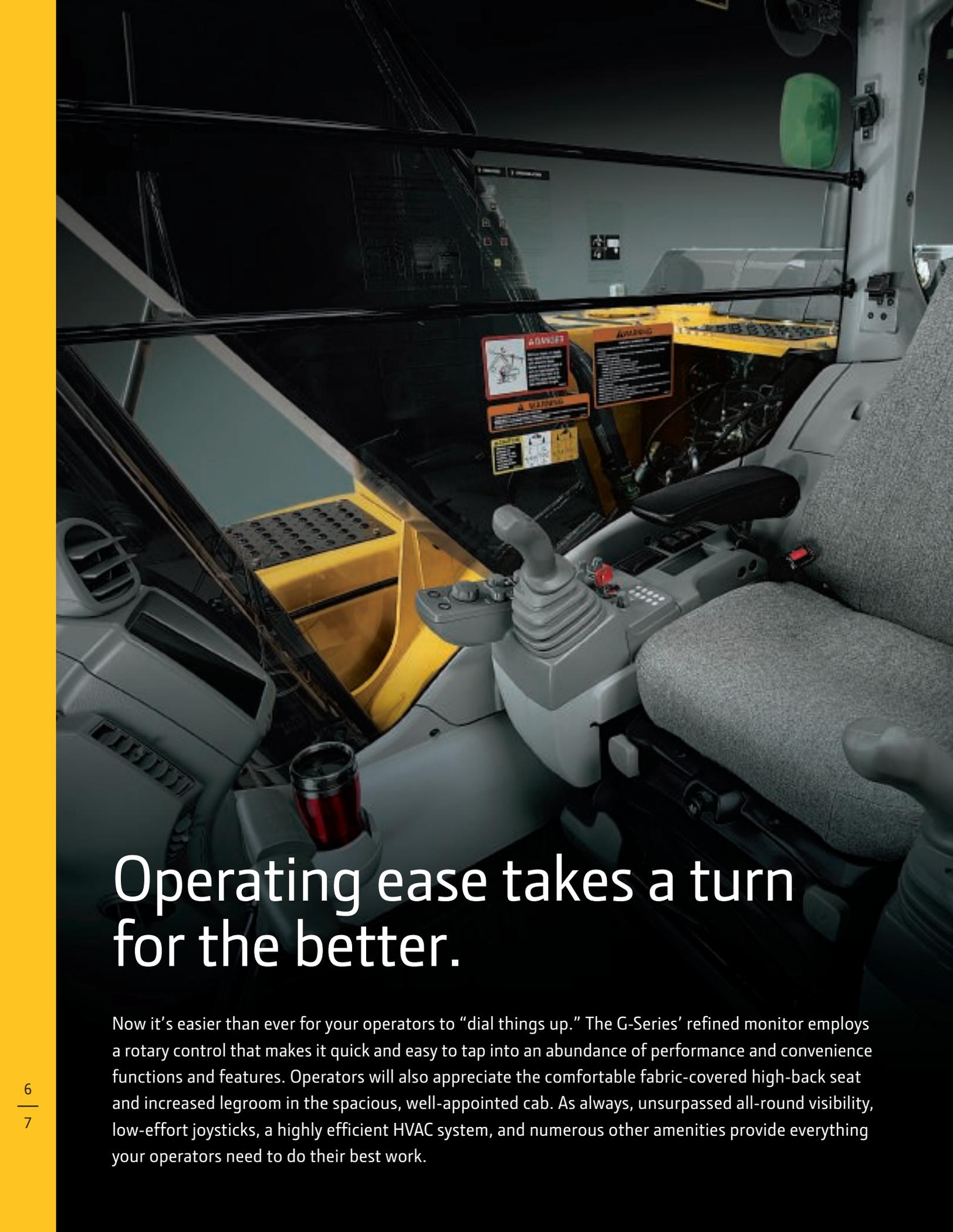
Choose from a variety of track widths, arm lengths, buckets, high-flow auxiliary hydraulic packages, and other options.

Machine Information Center (MIC) captures and stores vital machine performance and utilization data to help improve productivity, uptime, and profit.

1. For work that requires extra finesse, the G-Series' short-throw low-effort controls, unmatched metering, and smooth multi-function operation give the precision you need.
2. Generous flow, arm force, and swing torque help speed cycles. So you can do your best to stay on schedule or ahead of the weather.
3. When the digging gets tough, simply press the power-boost button on the right-hand control and muscle through.





The image shows the interior of a John Deere tractor cab. The view is from the driver's perspective, looking towards the front. The dashboard is illuminated with yellow light, and a large monitor is visible. The seat is upholstered in grey fabric. A red cup is in a holder on the left. The overall atmosphere is professional and functional.

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 comfortable fabric-covered high-back seat and increased legroom in the spacious, well-appointed cab. As always, unsurpassed all-round visibility, low-effort joysticks, a highly efficient HVAC system, and numerous other amenities provide everything your operators need to do their best work.



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 operators from noise and vibration.

We've got your back with a sculpted mechanical-suspension high-back seat. Seat has 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.

No shortage of storage in here. There's a place for a cooler, cup holders, and even a hot/cold box that keeps beverages at just the right temperature.

Standard boom/frame lights and cab/boom-mounted options provide illumination to extend your workday beyond normal daylight hours.

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. Wide expanse of front and side glass, narrow front cab posts, large overhead glass, and numerous mirrors provide virtually unobstructed all-around visibility. If you need to see more, choose the optional camera that displays the action behind on the monitor.
3. Automatic, high-velocity bi-level climate-control system with automotive-style adjustable louvers helps keep the glass clear and the cab comfortable.



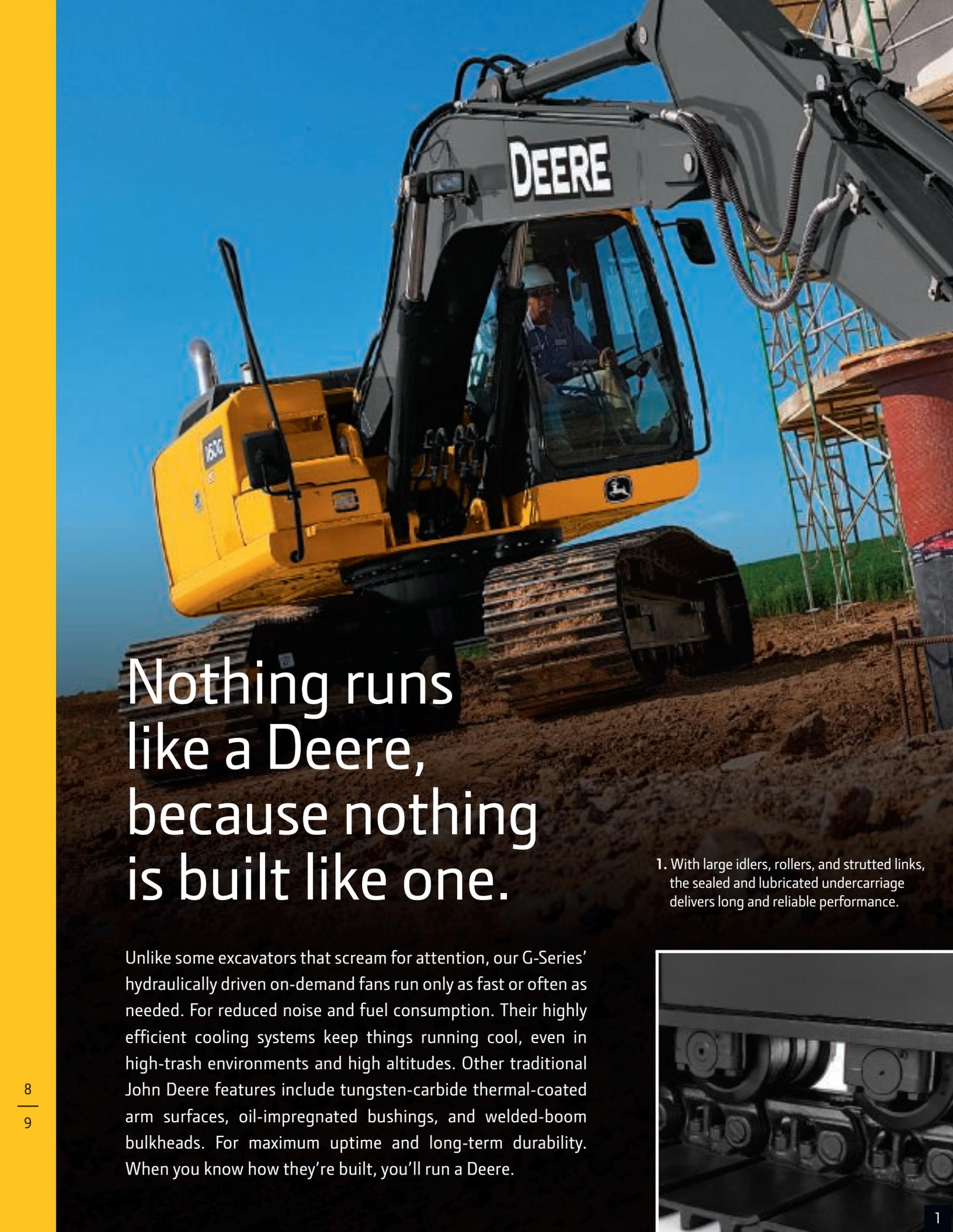
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2



3



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. Other traditional John Deere features include tungsten-carbide thermal-coated arm surfaces, oil-impregnated bushings, and welded-boom bulkheads. For maximum uptime and long-term durability. When you know how they're built, you'll run a Deere.

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





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.

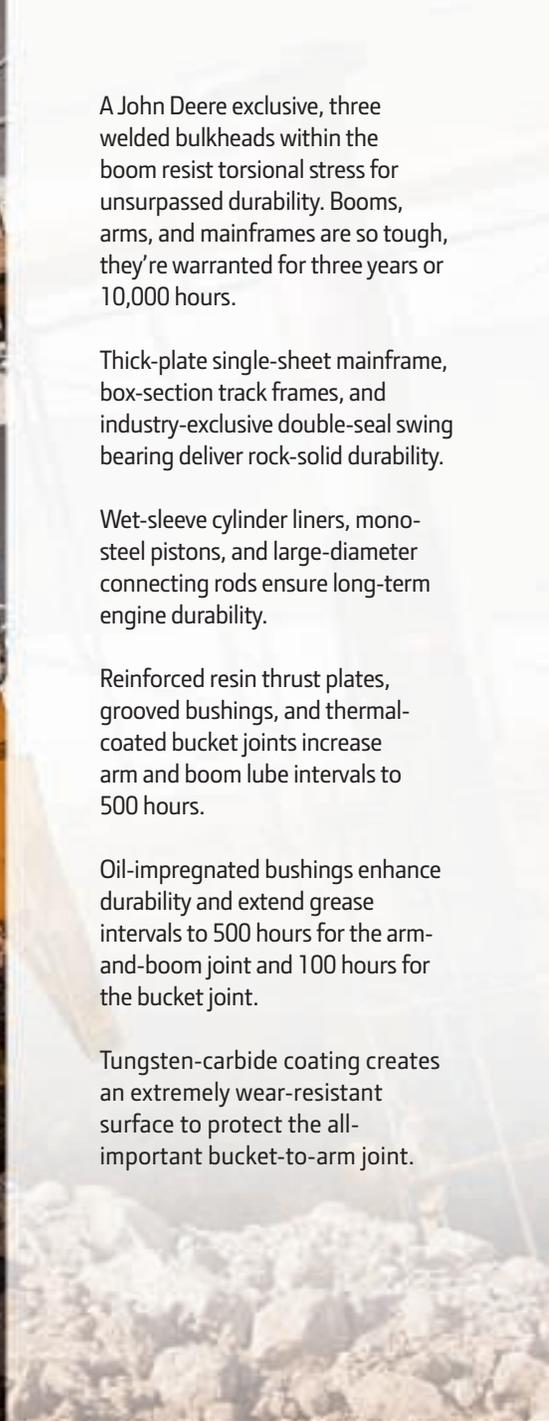
Thick-plate single-sheet mainframe, box-section track frames, and industry-exclusive double-seal swing bearing deliver rock-solid durability.

Wet-sleeve cylinder liners, mono-steel pistons, and large-diameter connecting rods ensure long-term engine durability.

Reinforced resin thrust plates, grooved bushings, and thermal-coated bucket joints increase arm and boom lube intervals to 500 hours.

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.

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



2. Highly efficient, heavy-duty cooling system keeps things cool, even in tough environments or high altitudes.

3. Reinforced D-channel side frames provide maximum cab and component protection.

4. Optional TK-Series bucket teeth are engineered for maximum strength and impact absorption. Hammer-free installation and removal simplifies changes, minimizes downtime.



Uncover all the ways we keep costs down.

Like all John Deere machines, the G-Series are loaded with features that make them hassle-free to service and low cost to maintain. Large, easy-to-open service doors and easy-access service points make quick work of the daily routine. Remote-mounted vertical oil and fuel filters and extended engine and hydraulic oil-change intervals minimize maintenance, too. Plus the Machine Information Center (MIC), state-of-the-art LCD color monitor, and fluid-sample ports help you make timely decisions about machine upkeep — and enable you to manage uptime and costs.



Engine Oil Filter

Previous Maintenance

2012/04/07 0.0 h

Remains 375.8 h



Seamless diesel particulate filter (DPF) cleaning happens automatically without impacting machine productivity. The DPF is easily removed through the top of the engine compartment. Minimum service interval is 4,500 hours and can be done by your John Deere dealer.

Fluid-level sight gauges are conveniently located and can be checked at a glance.

Large fuel tanks and 500- and 5,000-hour engine and hydraulic oil-service intervals decrease downtime for routine maintenance.

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

Optional reversing fan back-blows cooler cores to reduce debris buildup. It's a welcome addition that helps increase uptime.

Centralized lube banks place difficult-to-lube zerks within easy reach. They make greasing less messy and time consuming, too.

Convenient color-coded lubrication and maintenance chart helps ensure that nothing gets overlooked.



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. Fluid-sample and remote diagnostic ports help speed preventative maintenance and troubleshooting.
3. Vertical spin-on fuel and engine oil filters are conveniently located in the right rear compartment for simplified ground-level servicing.
4. Fresh-air cab filter is quickly serviced from outside the cab where it's more likely to get done.
5. Easy-to-reach dipstick and nearby coolant reservoir make daily checks and/or additions quick and easy.
6. Perforations in the side shields act as a "first filter." Anything that passes through will also clear the 10-fin-per-inch cooler cores.



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™ PVX	John Deere PowerTech™ 4045H
Non-Road Emissions Standard		EPA Interim Tier 4/EU Stage IIIB	EPA Tier 3/EU Stage IIIA
Net Rated Power (ISO 9249)		90 kW (121 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		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		17 250 kg (38,030 lb.)	
Hydraulics			
Open center, load sensing			
Main Pumps			
2 variable-displacement axial-piston pumps			
Maximum Rated Flow		191 L/m (50 gpm) x 2	
Pilot Pump			
One gear			
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		1,400 CCA	
Alternator Rating		100 amp	
Work Lights		2 halogen (one mounted on boom, one on frame)	
Undercarriage			
Rollers (each side)			
Carrier		2	
Track		7	
Shoes, Triple Semi-Grousers (each 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	320 L (84.5 gal.)
Cooling System	23.5 L (24.8 qt.)
Engine Oil with Filter	14.5 L (15 qt.)
Hydraulic Tank	125 L (33 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.)

Operating Weights

With full fuel tank; 79-kg (175 lb.) operator; 914-mm (36 in.), 0.62-m³ (0.81 cu. yd.), 623-kg (1,373 lb.) general-purpose bucket; 3.10-m (10 ft. 2 in.) arm; 3210-kg (7,077 lb.) counterweight; and 700-mm (28 in.) triple semi-grouser shoes

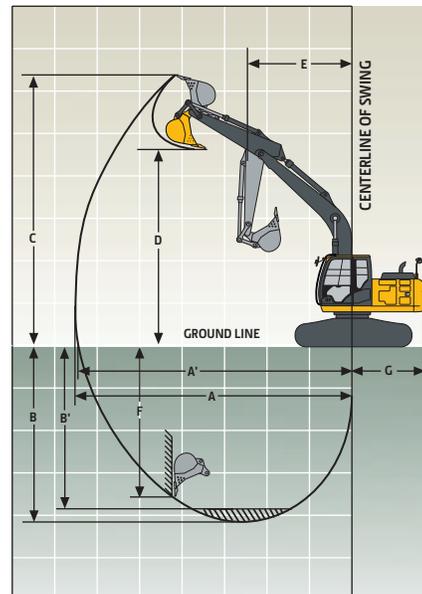
Operating Weight	18 017 kg (39,685 lb.)
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Component Weights

Undercarriage with Triple Semi-Grouser Shoes	
600 mm (24 in.)	6316 kg (13,912 lb.)
700 mm (28 in.)	6530 kg (14,383 lb.)
One-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.)
914-mm (36 in.), 0.62-m ³ (0.81 cu. yd.)	623 kg (1,372 lb.)
Bucket	
Counterweight, Standard	3210 kg (7,077 lb.)

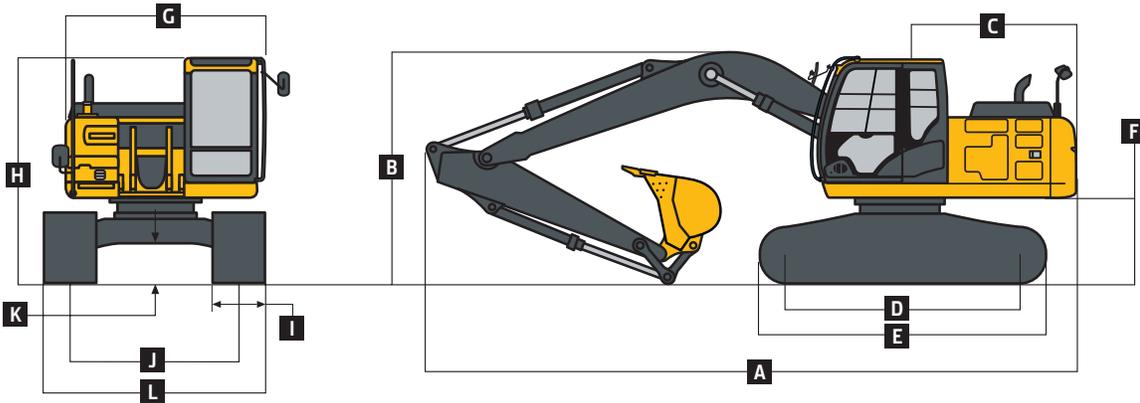
Operating Dimensions

Arm Length	<i>2.60 m (8 ft. 6 in.)</i>	<i>3.10 m (10 ft. 2 in.)</i>
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.)
Lifting Capacity Over Front at Ground Level 6.1-m (20 ft. 0 in.) Reach (with power boost)	4269 kg (9,411 lb.)	4267 kg (9,408 lb.)
A Maximum Reach	8.87 m (29 ft. 1 in.)	9.33 m (30 ft. 7 in.)
A¹ 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.)
B¹ 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

A Overall Length with Arm	2.60 m (8 ft. 6 in.)	8.62 m (28 ft. 3 in.)
	3.10 m (10 ft. 2 in.)	8.65 m (28 ft. 5 in.)
B Overall Height with Arm	2.60 m (8 ft. 6 in.)	2.87 m (9 ft. 5 in.)
	3.10 m (10 ft. 2 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 (19 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, 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).

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.)	
Horizontal Distance from Centerline of Rotation	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	4100	3850	2900		
3.0 m (10 ft.)			8400	8400	5400	4450	4400	2750		
1.5 m (5 ft.)					6800	4100	4300	2650		
Ground Line			5800	5800	6600	3900	4150	2500		
-1.5 m (-5 ft.)	5300	5300	9950	7450	6550	3850	4100	2500		
-3.0 m (-10 ft.)	9850	9850	10 550	7600	6600	3900				
<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	4100	3850	3000		
3.0 m (10 ft.)			8400	8400	5400	4550	4400	2850		
1.5 m (5 ft.)					6800	4200	4400	2700		
Ground Line			5800	5800	6800	4050	4300	2600		
-1.5 m (-5 ft.)	5300	5300	9950	7650	6700	3950	4250	2550		
-3.0 m (-10 ft.)	9850	9850	10 550	7800	6800	4050				

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, 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).

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.)

Horizontal Distance from Centerline of Rotation

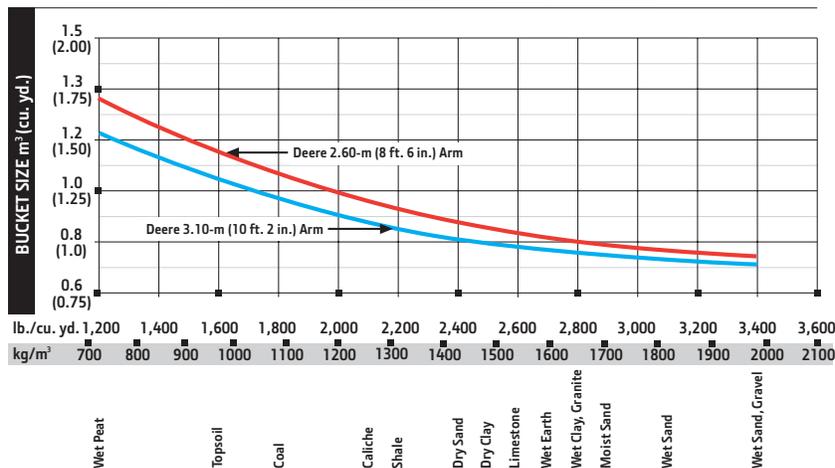
	Over Front		Over Side		Over Front		Over Side		Over Front		Over Side	
<i>With 3.10-m (10 ft. 2 in.) arm and 600-mm (24 in.) triple semi-grouser shoes</i>												
6.0 m (20 ft.)									2950	2950		
4.5 m (15 ft.)									(6,150)	(6,150)		
3.0 m (10 ft.)			6950	6950	4800	4500	4000	2800	2900	2900	1850	
1.5 m (5 ft.)			(14,800)	(14,800)	(10,400)	(9,750)	(8,700)	(6,000)	(5,750)	(5,750)	(4,000)	
Ground Line			7100	7100	6300	4150	4300	2650	2950	2950	1800	
			(17,200)	(16,750)	(13,600)	(8,950)	(9,250)	(5,650)	(6,350)	(6,350)	(3,850)	
-1.5 m (-5 ft.)	4700	4700	9200	7350	6500	3800	4100	2450				
	(10,550)	(10,550)	(21,000)	(15,750)	(13,950)	(8,200)	(8,750)	(5,250)				
-3.0 m (-10 ft.)	8250	8250	11 200	7450	6500	3850	4100	2450				
	(18,600)	(18,600)	(24,200)	(15,950)	(14,000)	(8,250)	(8,850)	(5,300)				
-4.5 m (-15 ft.)			8900	7700	5850	4000						
			(19,050)	(16,600)	(12,300)	(8,650)						
<i>With 3.10-m (10 ft. 2 in.) arm and 700-mm (28 in.) triple semi-grouser shoes</i>												
6.0 m (20 ft.)									2950	2950		
4.5 m (15 ft.)									(6,150)	(6,150)		
3.0 m (10 ft.)			6950	6950	4800	4650	4000	2900	2900	2900	1900	
1.5 m (5 ft.)			(14,800)	(14,800)	(10,400)	(10,000)	(8,700)	(6,200)	(5,750)	(5,750)	(4,100)	
Ground Line			7100	7100	6300	4250	4400	2700	3050	3050	1850	
			(17,200)	(17,200)	(13,600)	(9,200)	(9,500)	(5,850)	(6,550)	(6,550)	(3,950)	
-1.5 m (-5 ft.)	4700	4700	9200	7550	6650	3900	4200	2500				
	(10,550)	(10,550)	(21,000)	(16,150)	(14,350)	(8,450)	(9,000)	(5,400)				
-3.0 m (-10 ft.)	8250	8250	11 200	7650	6700	3950	4200	2550				
	(18,600)	(18,600)	(24,200)	(16,400)	(14,400)	(8,500)	(9,100)	(5,500)				
-4.5 m (-15 ft.)			8900	7900	5850	4100						
			(19,050)	(17,000)	(12,300)	(8,900)						

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		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.	m ³	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	97.7	21,966	87.8	19,744	78.5	17,648	1463	57.61	4
	760	30	0.55	0.72	569	1,253	97.7	21,966	87.8	19,744	78.5	17,648	1463	57.61	4
	915	36	0.70	0.91	655	1,443	97.7	21,966	87.8	19,744	78.5	17,648	1463	57.61	5
	1065	42	0.85	1.11	733	1,615	97.7	21,966	87.8	19,744	78.5	17,648	1463	57.61	5
Heavy Duty	610	24	0.37	0.48	493	1,086	106.0	23,832	90.4	20,320	80.5	18,105	1349	53.10	4
	760	30	0.50	0.65	554	1,221	106.0	23,832	90.4	20,320	80.5	18,105	1349	53.10	4
	915	36	0.62	0.81	623	1,373	106.0	23,832	90.4	20,320	80.5	18,105	1349	53.10	5
	1065	42	0.76	0.99	685	1,508	106.0	23,832	90.4	20,320	80.5	18,105	1349	53.10	5
Ditching	1525	60	0.63	0.83	484	1,066	152.9	34,378	101.0	22,712	88.8	19,971	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™ PVX	John Deere PowerTech™ 4045H
Non-Road Emissions Standard		EPA Interim Tier 4/EU Stage IIIB	EPA Tier 3/EU Stage IIIA
Net Rated Power (ISO 9249)		90 kW (121 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		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		17 250 kg (38,030 lb.)	
Hydraulics			
Open center, load sensing			
Main Pumps		2 variable-displacement axial-piston pumps	
Maximum Rated Flow		191 L/m (50 gpm) x 2	
Pilot Pump		One gear	
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>
Boom (2)		120 mm (4.72 in.)	85 mm (3.35 in.)
Arm (1)		125 mm (4.92 in.)	90 mm (3.54 in.)
Bucket (1)		105 mm (4.13 in.)	75 mm (2.95 in.)
		<i>Stroke</i>	
Electrical			
Number of Batteries (12 volt)		2	
Battery Capacity		1,400 CCA	
Alternator Rating		100 amp	
Work Lights		2 halogen (one mounted on boom, one on frame)	
Undercarriage			
Rollers (each side)			
Carrier		2	
Track		7	
Shoes, Triple Semi-Grousers (each 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	50 000 Nm (36,765 lb.-ft.)

Serviceability

Refill Capacities	
Fuel Tank	320 L (84.5 gal.)
Cooling System	23.5 L (24.8 qt.)
Engine Oil with Filter	14.5 L (15 qt.)
Hydraulic Tank	125 L (33 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.)

Operating Weights

With full fuel tank; 79-kg (175 lb.) operator; 1067-mm (42 in.), 0.83-m³ (1.09 cu. yd.), 785-kg (1,731 lb.) general-purpose bucket; 3.21-m (10 ft. 6 in.) arm; 3910-kg (8,620 lb.) counterweight; and 700-mm (28 in.) triple semi-grouser shoes

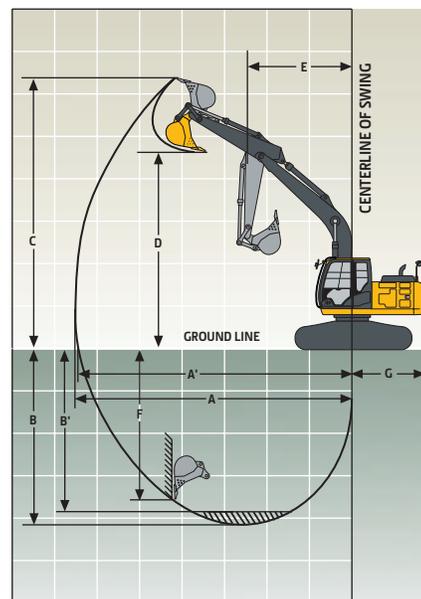
Operating Weight 20 120 kg (44,317 lb.)

Component Weights

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.)
One-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.)
1067-mm (42 in.), 0.83-m ³ (1.09 cu. yd.)	785 kg (1,731 lb.)
Bucket	
Counterweight, Standard	3910 kg (8,620 lb.)

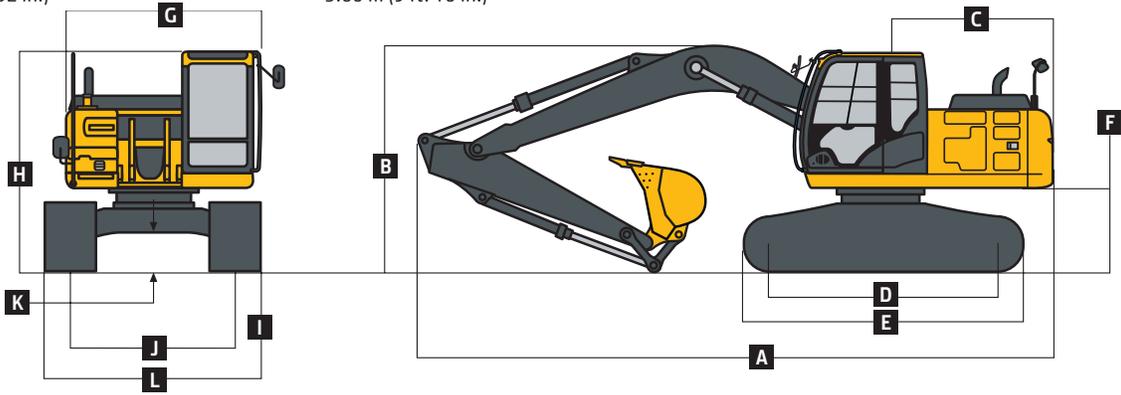
Operating Dimensions

Arm Length	<i>2.71 m (8 ft. 10 in.)</i>	<i>3.21 m (10 ft. 6 in.)</i>
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.)
Lifting Capacity Over Front at Ground Level 6.1-m (20 ft. 0 in.) Reach (with power boost)	5287 kg (11,656 lb.)	5302 kg (11,690 lb.)
A	Maximum Reach	9.43 m (30 ft. 11 in.)
A'	Maximum Reach at Ground Level	9.27 m (30 ft. 5 in.)
B	Maximum Digging Depth	6.57 m (21 ft. 7 in.)
B'	Maximum Digging Depth at 2.44-m (8 ft. 0 in.) Flat Bottom	6.32 m (20 ft. 9 in.)
C	Maximum Cutting Height	9.40 m (30 ft. 10 in.)
D	Maximum Dumping Height	6.57 m (21 ft. 7 in.)
E	Minimum Swing Radius	3.13 m (10 ft. 3 in.)
F	Maximum Vertical Wall	5.55 m (18 ft. 3 in.)
G	Tail-Swing Radius	2.55 m (8 ft. 4 in.)



Machine Dimensions 180G LC

A Overall Length with Arm	2.71 m (8 ft. 10 in.)	9.04 m (29 ft. 8 in.)
	3.21 m (10 ft. 6 in.)	9.04 m (29 ft. 8 in.)
B Overall Height with Arm	2.71 m (8 ft. 10 in.)	3.08 m (10 ft. 1 in.)
	3.21 m (10 ft. 6 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 (18 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 600-kg (1,323 lb.) bucket, 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).

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.)							4000 (8,850)	3800 (8,150)		
4.5 m (15 ft.)					4850 (10,450)	4850 (10,450)	4400 (9,550)	3700 (7,950)		
3.0 m (10 ft.)					6550 (14,050)	5600 (12,050)	5150 (11,150)	3550 (7,600)	3900 (8,350)	2400 (5,150)
1.5 m (5 ft.)					8200 (17,700)	5200 (11,200)	5450 (11,700)	3350 (7,200)	3800 (8,150)	2300 (4,950)
Ground Line			4350 (10,150)	4350 (10,150)	8500 (18,200)	4950 (10,650)	5300 (11,400)	3200 (6,900)	3700 (8,000)	2250 (4,850)
-1.5 m (-5 ft.)	4700 (10,500)	4700 (10,500)	8300 (18,950)	8300 (18,950)	8400 (18,000)	4900 (10,500)	5250 (11,250)	3150 (6,750)		
-3.0 m (-10 ft.)	8800 (19,850)	8800 (19,850)	12 750 (27,650)	9750 (20,950)	8450 (18,150)	4950 (10,650)	5250 (11,350)	3200 (6,850)		
-4.5 m (-15 ft.)			10 150 (21,700)	10 100 (21,700)	6900 (14,600)	5150 (11,100)				
<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.)							3450 (7,650)	3450 (7,650)		
4.5 m (15 ft.)							3900 (8,550)	3700 (7,950)	3350 (6,850)	2450 (5,200)
3.0 m (10 ft.)			8950 (19,000)	8950 (19,000)	5850 (12,600)	5600 (12,100)	4700 (10,250)	3500 (7,550)	3800 (8,200)	2350 (5,050)
1.5 m (5 ft.)					7650 (16,500)	5150 (11,150)	5350 (11,550)	3300 (7,100)	3700 (7,950)	2250 (4,850)
Ground Line			4700 (10,900)	4700 (10,900)	8350 (17,900)	4850 (10,500)	5200 (11,150)	3150 (6,750)	3600 (7,800)	2150 (4,650)
-1.5 m (-5 ft.)	4000 (8,950)	4000 (8,950)	7450 (17,000)	7450 (17,000)	8200 (17,600)	4750 (10,200)	5100 (10,950)	3050 (6,550)	3600 (7,700)	2150 (4,600)
-3.0 m (-10 ft.)	7250 (16,350)	7250 (16,350)	11 750 (26,900)	9450 (20,200)	8200 (17,600)	4750 (10,250)	5100 (10,950)	3050 (6,550)		
-4.5 m (-15 ft.)	11 700 (26,500)	11 700 (26,500)	11 300 (24,300)	9700 (20,850)	7700 (16,500)	4900 (10,600)				

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 600-kg (1,323 lb.) bucket, 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).

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.)

Horizontal Distance from Centerline

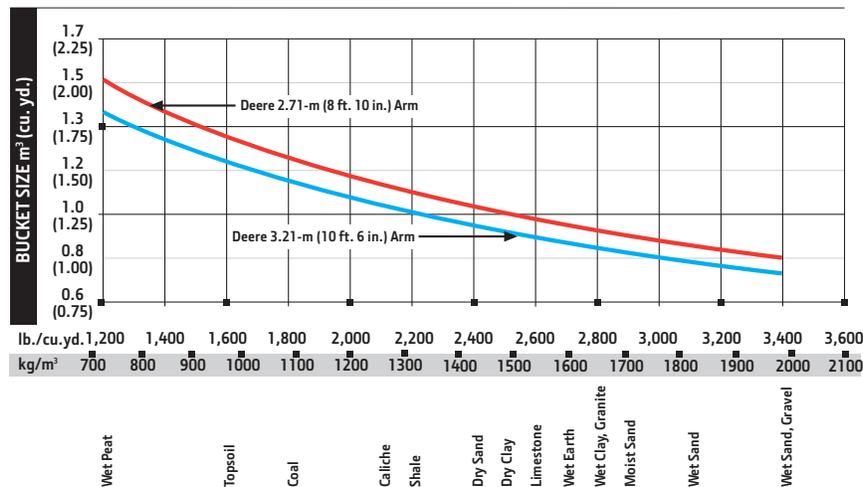
of Rotation	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 3.21-m (10 ft. 6 in.) arm and 700-mm (28 in.) triple semi-grouser shoes</i>										
6.0 m (20 ft.)							3450	3450		
							(7,650)	(7,650)		
4.5 m (15 ft.)							3900	3750	3350	2500
							(8,550)	(8,100)	(6,850)	(5,350)
3.0 m (10 ft.)			8950	8950	5850	5700	4700	3550	3900	2400
			(19,000)	(19,000)	(12,600)	(12,300)	(10,250)	(7,700)	(8,350)	(5,150)
1.5 m (5 ft.)					7650	5250	5500	3350	3800	2300
					(16,500)	(11,350)	(11,800)	(7,250)	(8,150)	(4,950)
Ground Line			4700	4700	8500	4950	5300	3200	3700	2250
			(10,900)	(10,900)	(18,250)	(10,700)	(11,400)	(6,850)	(7,950)	(4,800)
-1.5 m (-5 ft.)	4000	4000	7450	7450	8350	4850	5200	3100	3650	2200
	(8,950)	(8,950)	(17,000)	(17,000)	(17,950)	(10,450)	(11,150)	(6,700)	(7,850)	(4,700)
-3.0 m (-10 ft.)	7250	7250	11 750	9600	8400	4850	5200	3100		
	(16,350)	(16,350)	(26,900)	(20,600)	(18,000)	(10,450)	(11,200)	(6,700)		
-4.5 m (-15 ft.)	11 700	11 700	11 300	9900	7700	5000				
	(26,500)	(26,500)	(24,300)	(21,250)	(16,500)	(10,800)				
<i>With 3.21-m (10 ft. 6 in.) arm and 800-mm (32 in.) triple semi-grouser shoes</i>										
6.0 m (20 ft.)							3450	3450		
							(7,650)	(7,650)		
4.5 m (15 ft.)							3900	3800	3350	2550
							(8,550)	(8,200)	(6,850)	(5,400)
3.0 m (10 ft.)			8950	8950	5850	5800	4700	3600	3950	2450
			(19,000)	(19,000)	(12,600)	(12,500)	(10,250)	(7,800)	(8,500)	(5,250)
1.5 m (5 ft.)					7650	5350	5550	3400	3850	2350
					(16,500)	(11,500)	(11,950)	(7,350)	(8,250)	(5,050)
Ground Line			4700	4700	8650	5050	5400	3250	3750	2250
			(10,900)	(10,900)	(18,500)	(10,850)	(11,550)	(7,000)	(8,100)	(4,850)
-1.5 m (-5 ft.)	4000	4000	7450	7450	8500	4950	5300	3150	3700	2250
	(8,950)	(8,950)	(17,000)	(17,000)	(18,200)	(10,600)	(11,350)	(6,800)	(8,000)	(4,800)
-3.0 m (-10 ft.)	7250	7250	11 750	9750	8500	4950	5300	3150		
	(16,350)	(16,350)	(26,900)	(20,900)	(18,250)	(10,650)	(11,350)	(6,800)		
-4.5 m (-15 ft.)	11 700	11 700	11 300	10 050	7700	5100				
	(26,500)	(26,500)	(24,300)	(21,500)	(16,500)	(10,950)				

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	135.9	30,554	130.2	29,271	107.1	24,071	1463	57.61	4
	915	36	0.69	0.90	708	1,559	135.9	30,554	130.2	29,271	107.1	24,071	1463	57.61	5
	1065	42	0.83	1.09	786	1,731	135.9	30,554	130.2	29,271	107.1	24,071	1463	57.61	5
	1220	48	0.99	1.29	872	1,921	135.9	30,554	130.2	29,271	107.1	24,071	1463	57.61	6
Heavy Duty High Capacity	915	36	0.74	0.97	809	1,782	135.0	30,349	129.9	29,197	106.8	24,016	1473	58.0	5
	1065	42	0.91	1.19	886	1,951	135.0	30,349	129.9	29,197	106.8	24,016	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, left-hand, and counter-weight 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): Engine coolant / Fuel
●	●	Horn, electric
●	●	Hour meter, electric
●	●	Hydraulic shutdown lever, all controls
●	●	Hydraulic warm-up control
●	●	Interior light
●	●	Large cup holder

160G LC	180G LC	Operator's Station (continued)
●	●	Machine Information Center (MIC)
●	●	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, 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 / One mounted on boom / One mounted on frame
▲	▲	2 lights mounted on cab / One 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 700-mm (28 in.) triple semi-grouser shoes, full fuel tanks, and 79-kg (175 lb.) operators; a 160G LC unit with 914-mm (36 in.), 0.62-m³ (0.81 cu. yd.), 623-kg (1,373 lb.) general-purpose bucket; 3.10-m (10 ft. 2 in.) arm; 3210-kg (7,077 lb.) counterweight; and a 180G LC unit with 1067-mm (42 in.), 0.83-m³ (1.09 cu. yd.), 785-kg (1,731 lb.) general-purpose bucket; 3.21-m (10 ft. 6 in.) arm; and 3910-kg (8,620 lb.) counterweight.

