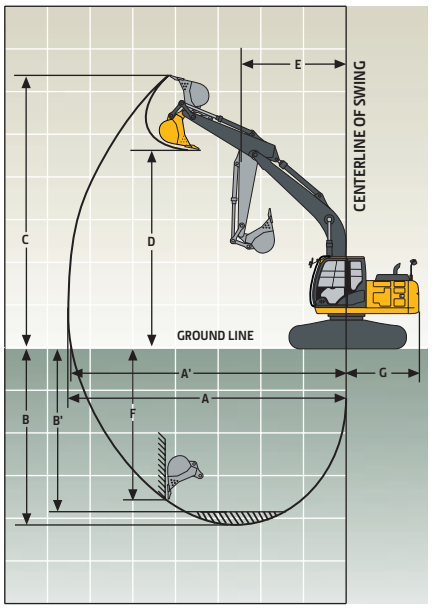
160G LC

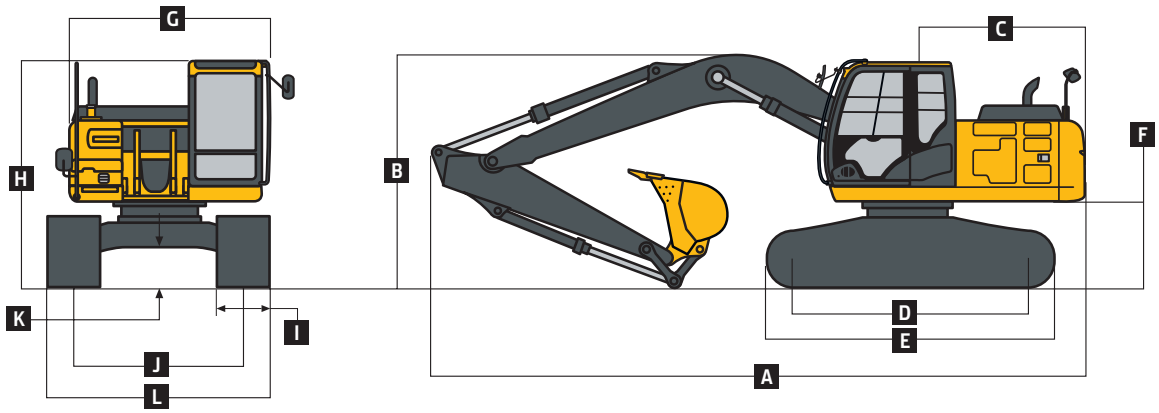
Engine	**160G LC**		
	Base engine for use in the U.S., U.S. Territories, and Canada		*Optional engine for use outside the U.S. and U.S. Territories*
Manufacturer and Model	John Deere PowerTech™ PVX		John Deere PowerTech™ 4045H
Non-Road Emissions Standard	EPA Interim Tier 4/EU Stage IIIB		EPA Tier 3/EU 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			
	Bore	*Rod Diameter*	*Stroke*
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-m^3 (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.)
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.) Bucket	623 kg (1,372 lb.)
Counterweight, Standard	3210 kg (7,077 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.)
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.)
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
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
With 2.60-m (8 ft. 6 in.) arm and 600-mm (24 in.) triple semi-grouser shoes										
6.0 m (20 ft.)							**2850**	**2850**		
4.5 m (15 ft.)					**4100 (8,900)**	**4100 (8,900)**	**3850 (8,400)**	2900 (6,250)		
3.0 m (10 ft.)			**8400 (17,850)**	**8400 (17,850)**	**5400 (11,700)**	4450 (9,550)	**4400 (9,550)**	2750 (5,950)		
1.5 m (5 ft.)					**6800 (14,650)**	4100 (8,850)	4300 (9,200)	2650 (5,650)		
Ground Line			**5800 (13,450)**	**5800 (13,450)**	6600 (14,200)	3900 (8,450)	4150 (8,950)	2500 (5,400)		
–1.5 m (–5 ft.)	**5300 (11,850)**	**5300 (11,850)**	**9950 (22,800)**	7450 (15,950)	6550 (14,050)	3850 (8,300)	4100 (8,850)	2500 (5,350)		
–3.0 m (–10 ft.)	**9850 (22,250)**	**9850 (22,250)**	**10 550 (22,850)**	7600 (16,300)	6600 (14,200)	3900 (8,450)				
With 2.60-m (8 ft. 6 in.) arm and 700-mm (28 in.) triple semi-grouser shoes										
6.0 m (20 ft.)							**2850**	**2850**		
4.5 m (15 ft.)					**4100 (8,900)**	**4100 (8,900)**	**3850 (8,400)**	3000 (6,400)		
3.0 m (10 ft.)			**8400 (17,850)**	**8400 (17,850)**	**5400 (11,700)**	4550 (9,800)	**4400 (9,550)**	2850 (6,150)		
1.5 m (5 ft.)					**6800 (14,650)**	4200 (9,100)	4400 (9,450)	2700 (5,800)		
Ground Line			**5800 (13,450)**	**5800 (13,450)**	6800 (14,600)	4050 (8,650)	4300 (9,200)	2600 (5,600)		
–1.5 m (–5 ft.)	**5300 (11,850)**	**5300 (11,850)**	**9950 (22,800)**	7650 (16,400)	6700 (14,450)	3950 (8,550)	4250 (9,150)	2550 (5,500)		
–3.0 m (–10 ft.)	**9850 (22,250)**	**9850 (22,250)**	**10 550 (22,850)**	7800 (16,700)	6800 (14,600)	4050 (8,700)				

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).

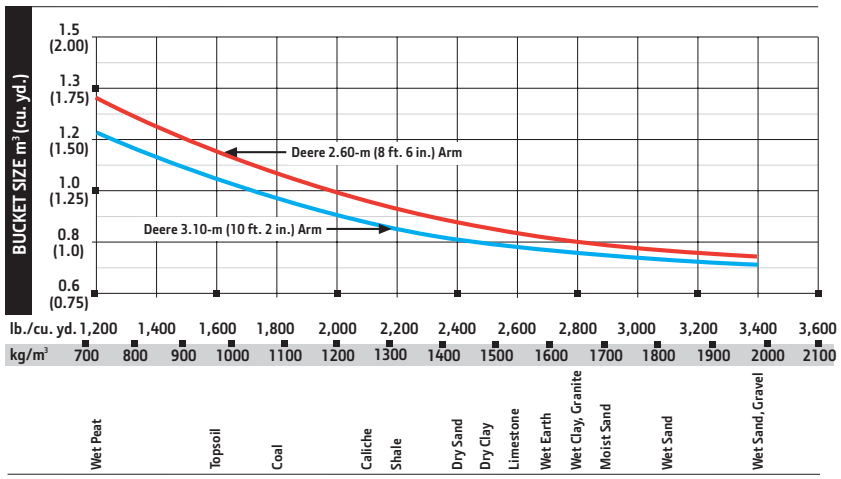
Load Point Height	1.5 m (5 ft.)		3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)	
Horizontal Distance from Centerline of Rotation	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
With 3.10-m (10 ft. 2 in.) arm and 600-mm (24 in.) triple semi-grouser shoes										
6.0 m (20 ft.)							**2950 (6,150)**	**2950 (6,150)**		
4.5 m (15 ft.)							**3400 (7,450)**	2950 (6,300)		
3.0 m (10 ft.)			**6950 (14,800)**	**6950 (14,800)**	**4800 (10,400)**	4500 (9,750)	**4000 (8,700)**	2800 (6,000)	**2900 (5,750)**	1850 (4,000)
1.5 m (5 ft.)			**7100 (17,200)**	**7100** (16,750)	**6300 (13,600)**	4150 (8,950)	4300 (9,250)	2650 (5,650)	2950 (6,350)	1800 (3,850)
Ground Line			**6400 (14,750)**	**6400 (14,750)**	6600 (14,200)	3900 (8,400)	4150 (8,900)	2500 (5,400)	2900 (6,200)	1750 (3,700)
–1.5 m (–5 ft.)	**4700 (10,550)**	**4700 (10,550)**	**9200 (21,000)**	7350 (15,750)	6500 (13,950)	3800 (8,200)	4100 (8,750)	2450 (5,250)		
–3.0 m (–10 ft.)	**8250 (18,600)**	**8250 (18,600)**	**11 200 (24,200)**	7450 (15,950)	6500 (14,000)	3850 (8,250)	4100 (8,850)	2450 (5,300)		
–4.5 m (–15 ft.)			**8900 (19,050)**	7700 (16,600)	**5850 (12,300)**	4000 (8,650)				
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 (7,450)**	3000 (6,500)		
3.0 m (10 ft.)			**6950 (14,800)**	**6950 (14,800)**	**4800 (10,400)**	4650 (10,000)	**4000 (8,700)**	2900 (6,200)	**2900 (5,750)**	1900 (4,100)
1.5 m (5 ft.)			**7100 (17,200)**	**7100** (17,200)	**6300 (13,600)**	4250 (9,200)	4400 (9,500)	2700 (5,850)	3050 (6,550)	1850 (3,950)
Ground Line			**6400 (14,750)**	**6400 (14,750)**	6800 (14,600)	4000 (8,650)	4250 (9,150)	2600 (5,550)	3000 (6,400)	1800 (3,850)
–1.5 m (–5 ft.)	**4700 (10,550)**	**4700 (10,550)**	**9200 (21,000)**	7550 (16,150)	6650 (14,350)	3900 (8,450)	4200 (9,000)	2500 (5,400)		
–3.0 m (–10 ft.)	**8250 (18,600)**	**8250 (18,600)**	**11 200 (24,200)**	7650 (16,400)	6700 (14,400)	3950 (8,500)	4200 (9,100)	2550 (5,500)		
–4.5 m (–15 ft.)			**8900 (19,050)**	7900 (17,000)	**5850 (12,300)**	4100 (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.