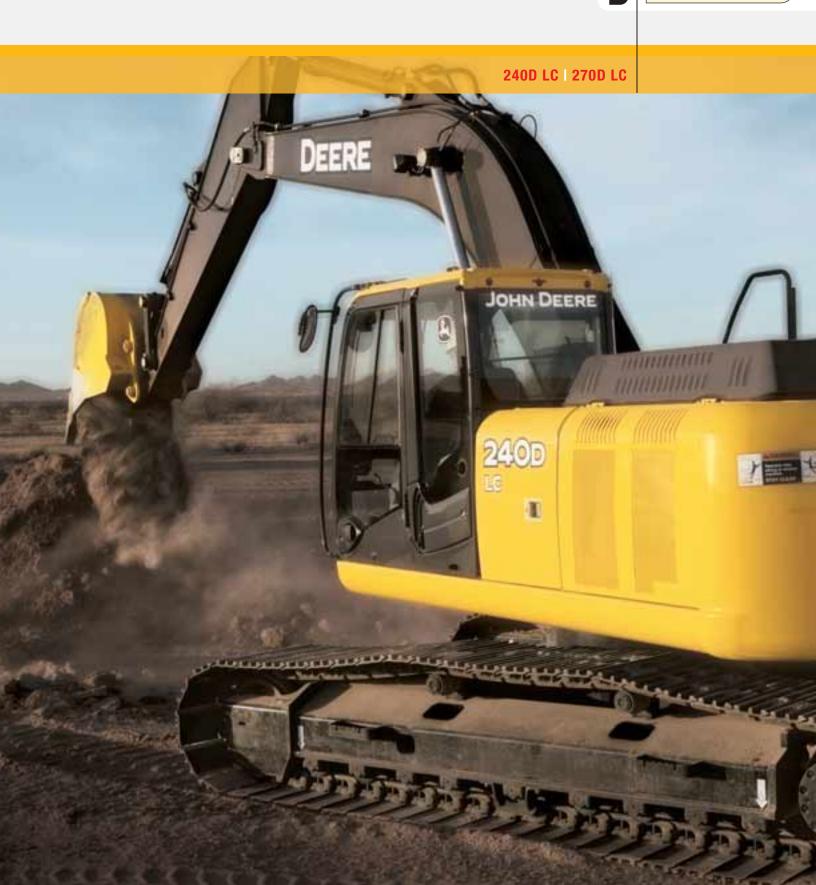




**EXCAVATORS** 





### Armed forces.

Bigger, stronger, faster, and quieter. The new 240D LC and 270D LC are armed and ready to take on your world. Both deliver the power, smoothness, ease of operation, and comfort you'd expect from John Deere excavators — and then some. Each features a rugged, fuel-efficient Tier 3

PowerTech Plus<sup>™</sup> engine; an enhanced cooling system; and extended service intervals for industry-leading uptime and serviceability. And with other refinements such as faster hydraulics, better visibility, and a roomier, more comfortable cab, Deere once again sets the standard.



Specifications	240D LC	270D LC
Net Horsepower	177 hp	188 hp
Operating Weight	54,624 lb.	63,425 lb.
Lift Capacity	16,877 lb.	19,727 lb.
Digging Depth	24 ft. 7 in.	25 ft. 11 in.
Arm Breakout Force	24,020 lb.	25,979 lb.

240D LC and 270D LC deliver more digging force, swing torque, and lift capability, with less emissions and noise.

Extended engine and hydraulic oil service intervals increase uptime and reduce daily operating costs.

Redesigned cab is more spacious and has 47-percent more glass for best-in-class comfort and visibility.

Powerwise™ III engine/hydraulic management system maximizes power output, saves fuel, and delivers smooth multifunction hydraulic operation.

Hydraulically driven, highly efficient fan runs only as needed, reducing noise, fuel consumption, and operating costs.

Tier 3 emission-certified PowerTech Plus diesels deliver power without compromise in all conditions.

Electronically controlled variable-geometry turbocharger (VGT) improves torque response, helping match engine speed to load requirements.

Noise levels — and operator fatigue — have been significantly reduced. Variable-speed fan, dual-pass muffler, pilot-injected PowerTech Plus engine, and isochronous high-idle speed help quiet things down.

Cooled exhaust gas recirculation (EGR), four-valveper-cylinder head, and high-pressure commonrail fuel system enable the 6.8-L diesels to meet Tier 3 emission standards without sacrificing power or fuel efficiency.

Additional hydraulic capability a necessity? Two factory-installed high-pressure, high-flow auxiliary hydraulic packages enable you to meet the need.

Choose from a variety of track widths, arm lengths, buckets, and other options.

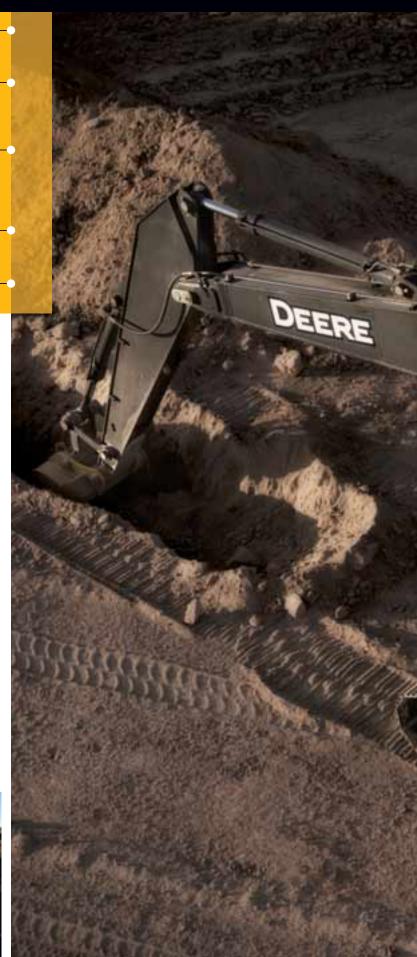


- Powerwise III perfectly balances engine performance and hydraulic flow for fast, smooth, and predictable operation. One work mode makes it easy to be productive in any application.
- Significant increases in horsepower, weight, dig force, and drawbar pull make the D-Series highly productive machines for a wide variety of work.
- 3. Increased flow, arm force, and swing torque help speed cycles, enabling you to load more trucks or open more trench.
- 4. For work that requires extra finesse, the D-Series' best-in-class metering and smooth multifunction operation give you the precise control you need.









# Quietly go about your business of building your bottom line.

D-Series Excavators speak softly and carry a big stick. Combining strong digging forces with outstanding lift capacity and reach, the 240D LC and 270D LC are more than up to any task. Faster hydraulics boost productivity, while increased drawbar pull and arm force provide an additional lift to production.

The Powerwise III engine/hydraulic management system provides pinpoint metering and low-effort control, while numerous noise-reduction enhancements further reduce operator fatigue. Add any of the many available options, and put even more work within reach.







Deluxe-suspension multi-position seat has 101/2 inches of travel, sliding together or independently of the control console.

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

Pushbuttons in the right lever allow fingertip control of auxil-

Convenient 12-volt port powers cell phones and other

Redesigned cab isn't just roomier, it's also noticeably quieter and more comfortable. Silicone-filled mounts effectively isolate operators from noise and vibration.







Graphite-iron wet-sleeve cylinder liners, monosteel pistons, and large-diameter connecting rods ensure long-term engine durability.

Welded bulkheads within the boom resist torsional stress. Reinforced D-channel side frames provide maximum cab and component protection.

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

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

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

Booms, arms, and mainframes are so tough, they're warranted for three years or 10,000 hours.





- Hydraulically driven cool-on-demand fan runs only as needed, reducing fuel consumption and debris flow through the coolers. Highly efficient system keeps things cool, even in tough environments or high altitudes.
- Perforations in the hood and side shields serve as a "first filter," helping prevent trash entry. Anything that passes through will also clear the eight-fin-per-inch cooler cores.
- Reinforced resin thrust plates, grooved bushings, and thermal-coated bucket joints increase arm and boom lube intervals to 500 hours.
- You won't find a more durable swing bearing or mainframe on comparablesize excavators.







### Nothing runs like a Deere because nothing is built like one. DEERE From their durable sealed and lubricated tungsten-carbide thermal-coated arm surfaces, undercarriages to their heavy-duty fuel-sipping oil-impregnated bushings, welded-boom bulk-PowerTech Plus engines, the D-Series are built to heads, and extended engine and hydraulic oilthe hilt to deliver unsurpassed reliability. These change intervals help keep downtime down and plus numerous other traditional John Deere profits up. When you know how they're built, you'll run a Deere. features such as wet-sleeve engine liners,

Machine Information Center (MIC) captures and stores vital machine performance and utilization data to help improve uptime, productivity, and profit. Auto-idle automatically reduces engine speed when hydraulics aren't in use, helping make the most of every precious drop of fuel.

Large easy-to-open doors provide quick access to service items. Lube banks, filters, and checkpoints are grouped for added convenience. Large fuel tanks and 500- and 5,000-hour engine and hydraulic oil-service intervals increase uptime and help lower daily operating costs.

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

Nobody backs you better than the 500plus John Deere dealers throughout North America.



## Minimize maintenance, maximize results.

As with all John Deere machines, D-Series Excavators are loaded with features that make them hassle free to service and low cost to maintain. Large, easy-to-open service doors and easy-to-reach daily 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 periodic maintenance, too. Plus, the Machine Information Center (MIC) and remote fluid-sample ports help you make timely decisions about machine upkeep, further minimizing downtime and expense.

- Vertical spin-on engine oil and fuel/water filters are positioned in the right rear compartment for simplified servicing.
- **4.** Coolers' eight-fin-per-inch spacing lets trash easily pass to resist plugging. Hinged, swingout coolers provide added core access.
- Ground-level fresh-air cab filter is quickly serviced from outside the cab. Where it's more likely to get done.
- Remote diagnostic and fluid-sample ports help speed preventative maintenance and troubleshooting.
- 3. Centralized lube banks place difficult-to-lube zerks within easy reach. Help make greasing less messy and time consuming, too.
- **6.** Convenient door atop the hood speeds and simplifies daily engine oil and coolant checks.













# Specifications 2400 (2400)

Engine 240D LC

Cooling Fan . . . . . . . . . . . . suction-type, hydraulic-driven, remote-mounted drive

**Hydraulic System** 

Maximum Flow . . . . . . . . . . . . . . . . . 2 x 59.2 gpm (2 x 224 L/min.)

Pilot Pump..... one gear

 Maximum Flow
 8.9 gpm (34 L/min.)

 Pressure Setting
 580 psi (4000 kPa)

System Operating Pressure

 Implement Circuits
 4,980 psi (34 300 kPa)

 Travel Circuits
 4,980 psi (34 300 kPa)

 Swing Circuits
 4,700 psi (32 400 kPa)

 Power Boost
 5,260 psi (36 300 kPa)

Oil Filtration.....one 10-micron full-flow return filter with by-pass / one pilot oil filter

**Cylinders** 

	Bore	Rod Diameter	Stroke
Boom (2)	4.9 in. (125 mm)	3.5 in. (90 mm)	54.7 in. (1390 mm)
Arm (1)	5.5 in. (140 mm)	3.9 in. (100 mm)	63.4 in. (1610 mm)
Bucket (1)	5.1 in. (130 mm)	3.5 in. (90 mm)	42.3 in. (1075 mm)

Swing Mechanism

Undercarriage

 Carrier Rollers (per side)
 2

 Track Rollers (per side)
 9

 Shoes, Triple Semi-Grouser (per side)
 51

Track Guides ... front and center
Track Adjustment. hydraulic

Travel Speed

 Low.
 0-2.1 mph (0-3.4 km/h)

 High
 0-3.4 mph (0-5.5 km/h)

 Drawbar Pull
 49,920 lb. (22 650 kg)

### **Ground Pressure Data**

240D LC

Average Ground Pressure

28-in. (700 mm) Triple Semi-Grouser Shoes

(recommended for rocky terrain/stumps) . . . 6.02 psi (41.5 kPa)

32-in. (800 mm) Triple Semi-Grouser Shoes

(recommended for general/soft terrain) . . . 5.34 psi (36.8 kPa)

### Capacities (U.S.)

Fuel Tank
Cooling System
Engine Lubrication, Including Filter 26 qt. (24.6 L)
Hydraulic Tank
Hydraulic System
Propel Gearbox (each) 6.5 qt. (6.2 L)
Swing Drive

### **SAE Operating Weights**

With Full Fuel Tank; 175-lb. (79 kg) Operator; 1.38-cu.-yd. (1.06 m<sup>3</sup>), 42-in. (1065 mm), 2,195-lb. (996 kg) Bucket; 11-ft. 10-in. (3.61 m) Arm; 11,904-lb. (5400 kg) Counterweight; and 32-in. (800 mm) Triple Semi-

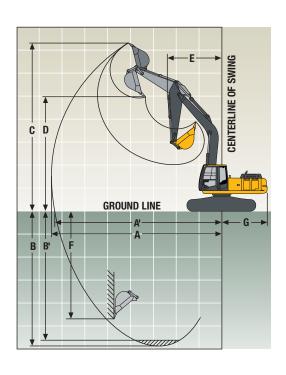
### **Component Weights**

Undercarriage

28-in. (700 mm) Triple Semi-Grouser Shoes . . . 18,650 lb. (8460 kg) 32-in. (800 mm) Triple Semi-Grouser Shoes . . . 19,277 lb. (8744 kg) One-Piece Boom (with arm cylinder) . . . . . . . . 4,868 lb. (2208 kg) Arm with Bucket Cylinder and Linkage Boom Lift Cylinders (2) Total Weight . . . . . . . . . . 957 lb. (434 kg) 1.38-cu.-yd. (1.06 m<sup>3</sup>), 42-in. (1065 mm) Heavy-Duty Plate-Lip Bucket. . . . . . . . . 2,195 lb. (996 kg) 

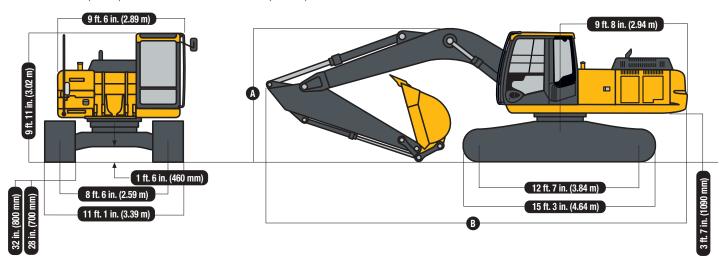
### **Operating Information**

pula	ung miormation		
	-	Arm Length	Arm Length
		9 ft. 9 in. (2.96 m)	11 ft. 10 in. (3.61 m)
Arm	Force with 32-in. (800 mm) Triple Semi-		
	Grouser Shoes*	. 27,640 lb. (122.9 kN)	24,020 lb. (106.8 kN)
Buc	ket Digging Force with 32-in. (800 mm)		
	Triple Semi-Grouser Shoes*	. 37,670 lb. (167 kN)	37,670 lb. (167 kN)
Lifti	ng Capacity Over Front @ Ground Level		
	20-ft. (6.1 m) Reach*	. 17,721 lb. (8038 kg)	16,877 lb. (7655 kg)
Α	Maximum Reach	. 33 ft. 5 in. (10.19 m)	35 ft. 6 in. (10.81 m)
A١	Maximum Reach @ Ground Level	. 32 ft. 9 in. (9.99 m)	34 ft. 11 in. (10.64 m)
В	Maximum Digging Depth	. 22 ft. 5 in. (6.84 m)	24 ft. 7 in. (7.49 m)
B'	Maximum Digging Depth @ 8-ft. (2.44 m)		
	Flat Bottom	. 21 ft. 9 in. (6.63 m)	24 ft. 1 in. (7.33 m)
C	Maximum Cutting Height	. 33 ft. 2 in. (10.12 m)	34 ft. 6 in. (10.52 m)
D	Maximum Dumping Height	. 23 ft. 6 in. (7.16 m)	24 ft. 9 in. (7.54 m)
Ε	Minimum Swing Radius	. 11 ft. 3 in. (3.44 m)	11 ft. 4 in. (3.46 m)
F	Maximum Vertical Wall	. 19 ft. 5 in. (5.91 m)	21 ft. 9 in. (6.63 m)
G	Tail Swing Radius	, ,	9 ft. 8 in. (2.94 m)



### Dimensions 240D LC

Α	9-ft. 9-in. (2.96 m) arm
	11-ft. 10-in. (3.61 m) arm 10 ft. 4 in. (3.14 m)
В	9-ft. 9-in. (2.96 m) arm
	11-ft. 10-in. (3.61 m) arm



### **Lift Capacities**

**Boldface italic** type indicates hydraulic-limited capacities; lightface type indicates stability-limited capacities, in lb. (kg). Ratings at bucket lift hook; machine equipped with 1.38-cu.-yd. (1.06 m³), 42-in. (1065 mm), 2,195-lb. (996 kg) bucket; 11,904-lb. (5400 kg) counterweight; standard gauge; and situated on firm, 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 SAE J1097.

Load Point	10 ft. (	3.05 m)	15 ft. (4	.57 m)	20 ft. (6.10 m)		25 ft. (7.62 m)		30 ft. (9.15 m)	
Height	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
With 11-ft. 10-i	in. (3.61 m) arm a	and 32-in. (800 n	nm) triple semi-gr	ouser shoes						
20 ft. (6.10 m)							7,549 (3424)	7,549 (3424)		
15 ft. (4.57 m)					8,518 (3864)	8,518 (3864)	8,607 (3904)	8,607 (3904)	6,261 (2840)	6,261 (2840)
10 ft. (3.05 m)			14,688 (6662)	14,688 (6662)	11,557 (5242)	11,557 (5242)	10,049 (4558)	8,879 (4027)	8,091 (3670)	6,289 (2853)
5 ft. (1.52 m)			20,756 (9415)	18,889 (8568)	14,486 (6571)	12,098 (5488)	11,624 (5273)	8,385 (3803)	9,678 (4390)	6,038 (2739)
Ground Line			24,563 (11 142)	17,619 (7992)	16,877 (7655)	11,347 (5147)	12,785 (5799)	7,956 (3609)	9,457 (4290)	5,809 (2635)
−5 ft. (−1.52 m)	13,061 (5924)	13,061 (5924)	25,705 (11 660)	17,163 (7785)	17,903 (8121)	10,923 (4955)	12,480 (5661)	7,678 (3483)	9,308 (4222)	5,670 (2572)
-10 ft. (-3.05 m)	22,506 (10 209)	22,506 (10 209)	25,004 (11 342)	17,154 (7781)	17,768 (8060)	10,804 (4901)	12,387 (5619)	7,593 (3444)		
–15 ft. (–4.57 m)	29,633 (13 441)	29,633 (13 441)	22,540 (10 224)	17,460 (7920)	16,709 (7579)	10,961 (4972)	12,307 (5582)	7,768 (3524)		
-20 ft. (-6.10 m)	)		17,275 (7836)	17,275 (7836)	12,097 (5487)	11,532 (5231)				
With 11-ft. 10-i	in. (3.61 m) arm a	and 28-in. (700 n	nm) triple semi-gr	ouser shoes						
20 ft. (6.10 m)							7,549 (3424)	7,549 (3424)		
15 ft. (4.57 m)					8,518 (3864)	8,518 (3864)	8,607 (3904)	8,607 (3904)	6,261 (2840)	6,261 (2840)
10 ft. (3.05 m)			14,688 (6662)	14,688 (6662)	11,557 (5242)	11,557 (5242)	10,049 (4558)	8,775 (3980)	8,091 (3670)	6,206 (2815)
5 ft. (1.52 m)			20,756 (9415)	18,696 (8480)	14,486 (6571)	11,961 (5425)	11,624 (5273)	8,282 (3757)	9,578 (4345)	5,955 (2701)
Ground Line			24,563 (11 142)	17,417 (7900)	16,877 (7655)	11,210 (5085)	12,627 (5728)	7,853 (3562)	9,332 (4233)	5,726 (2597)
−5 ft. (−1.52 m)	13,061 (5924)	13,061 (5924)	25,705 (11 660)	16,960 (7693)	17,687 (8023)	10,786 (4892)	12,322 (5589)	7,574 (3436)	9,183 (4165)	5,587 (2534)
-10 ft. (-3.05 m)	22,506 (10 209)	22,506 (10 209)	25,004 (11 342)	16,952 (7689)	17,551 (7961)	10,666 (4838)	12,229 (5547)	7,489 (3397)		
–15 ft. (–4.57 m)	29,633 (13 441)	29,633 (13 441)	22,540 (10 224)	17,257 (7828)	16,709 (7579)	10,824 (4910)	12,307 (5582)	7,664 (3476)		
-20 ft. (-6.10 m)	)		17,275 (7836)	17,275 (7836)	12,097 (5487)	11,395 (5169)				
With 9-ft. 9-in.	(2.96 m) arm and	d 32-in. (800 mm	) triple semi-grou	ser shoes						
20 ft. (6.10 m)							8,237 (3736)	8,237 (3736)		
15 ft. (4.57 m)					10,540 (4781)	10,540 (4781)	9,885 (4484)	9,122 (4138)		
10 ft. (3.05 m)			17,515 (7945)	17,515 (7945)	13,047 (5918)	12,726 (5772)	11,074 (5023)	8,728 (3959)	7,205 (3268)	6,196 (2810)
5 ft. (1.52 m)			23,155 (10 503)	18,262 (8284)	15,755 (7146)	11,858 (5379)	12,482 (5662)	8,288 (3759)	9,206 (4176)	6,004 (2723)
Ground Line			25,634 (11 628)	17,416 (7900)	17,721 (8038)	11,241 (5099)	12,744 (5781)	7,930 (3597)	9,235 (4189)	5,837 (2648)
−5 ft. (−1.52 m)	12,761 (5788)	12,761 (5788)	25,654 (11 637)	17,248 (7824)	17,922 (8129)	10,954 (4969)	12,530 (5684)	7,734 (3508)		
-10 ft. (-3.05 m)	19,352 (8778)	19,352 (8778)	24,124 (10 943)	17,398 (7892)	17,921 (8129)	10,953 (4968)	12,548 (5692)	7,750 (3515)		
–15 ft. (–4.57 m)	27,603 (12 521)	27,603 (12 521)	20,730 (9403)	17,836 (8090)	15,487 (7025)	11,247 (5102)				

**Boldface italic** type indicates hydraulic-limited capacities; lightface type indicates stability-limited capacities, in lb. (kg). Ratings at bucket lift hook; machine equipped with 1.38-cu.-yd. (1.06 m³), 42-in. (1065 mm), 2,195-lb. (996 kg) bucket; 11,904-lb. (5400 kg) counterweight; standard gauge; and situated on firm, 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 SAE J1097.

Load Point	Point 10 ft. (3.05 m)		10 ft. (3.05 m) 15 ft. (4.57 m)			6.10 m)	25 ft. (7	7.62 m)	30 ft. (9.15 m)	
Height	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
With 9-ft. 9-in. (2	2.96 m) arm and	1 28-in. (700 mm	) triple semi-grou	ser shoes						
20 ft. (6.10 m)							8,237 (3736)	8,237 (3736)		
15 ft. (4.57 m)					10,540 (4781)	10,540 (4781)	9,885 (4484)	9,018 (4091)		
10 ft. (3.05 m)			17,515 (7945)	17,515 (7945)	13,047 (5918)	12,589 (5710)	11,074 (5023)	8,625 (3912)	7,205 (3268)	6,113 (2773)
5 ft. (1.52 m)			23,155 (10 503)	18,059 (8192)	15,755 (7146)	11,721 (5317)	12,482 (5662)	8,184 (3712)	9,206 (4176)	5,921 (2686)
Ground Line			25,634 (11 628)	17,213 (7808)	17,721 (8038)	11,104 (5037)	12,586 (5709)	7,826 (3550)	9,235 (4189)	5,753 (2610)
-5 ft. (-1.52 m)	12,761 (5788)	12,761 (5788)	25,654 (11 637)	17,045 (7732)	17,706 (8031)	10,817 (4907)	12,372 (5612)	7,630 (3461)		
-10 ft. (-3.05 m)	19,352 (8778)	19,352 (8778)	24,124 (10 943)	17,196 (7800)	17,705 (8031)	10,816 (4906)	12,389 (5620)	7,646 (3468)		
-15 ft. (-4.57 m)	27,603 (12 521)	27,603 (12 521)	20,730 (9403)	17,634 (7999)	15,487 (7025)	11,110 (5039)				

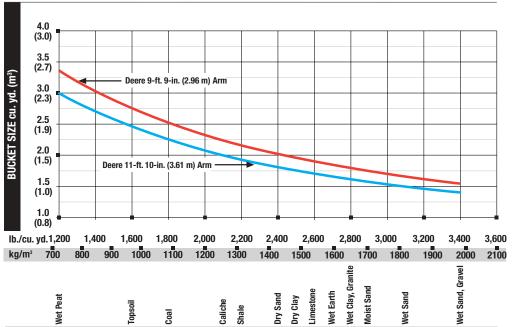
### **Buckets**

A full line of buckets is offered to meet a wide variety of applications. Digging forces are with power boost. Tooth selection includes either the John Deere Fanggs®, Standard, Tiger, Twin Tiger, Abrasion panel, or Flare tooth, or the ESCO (Vertalok) Standard, Tiger, Twin Tiger, or Flare tooth. Replaceable cutting edges are available through John Deere parts. Optional side cutters add 6 inches (150 mm) to bucket widths.

Type Bucket		cket idth	Buc Capa		Wei	ight		ket orce	Arm Dig 9 ft. 9 in.	g Force (2.96 m)	Arm Dig 11 ft. 10 ir	•		cket adius	No. Teeth
	in.	mm	cu. yd.	m³	lb.	kg	lb.	kN	lb.	kN	lb.	kN	in.	mm	
Heavy-Duty	42	1065	1.38	1.06	2,195	996	37,676	167.0	27,640	122.9	24,020	106.8	56.5	1435	5
Plate Lip	48	1220	1.60	1.22	2,359	1070	37,676	167.0	27,640	122.9	24,020	106.8	56.5	1435	6
	54	1370	1.82	1.39	2,507	1137	37,676	167.0	27,640	122.9	24,020	106.8	56.5	1435	6
Heavy-Duty	24	610	0.92	0.70	1,765	801	35,846	159.4	26,710	118.8	23,313	103.7	62.5	1588	3
High Capacity	30	760	1.20	0.92	2,010	912	35,846	159.4	26,710	118.8	23,313	103.7	62.5	1588	4
	36	915	1.48	1.13	2,133	968	35,846	159.4	26,710	118.8	23,313	103.7	62.5	1588	4
	42	1065	1.75	1.34	2,279	1034	35,846	159.4	26,710	118.8	23,313	103.7	62.5	1588	5
	48	1200	2.03	1.55	2,505	1136	35,846	159.4	26,710	118.8	23,313	103.7	62.5	1588	6
Severe-Duty	30	760	0.95	0.73	2,080	943	37,676	167.0	27,640	122.9	24,020	106.8	56.5	1435	4
Plate Lip	36	915	1.16	0.89	2,179	988	37,676	167.0	27,640	122.9	24,020	106.8	56.5	1435	4
	42	1065	1.38	1.06	2,345	1064	37,676	167.0	27,640	122.9	24,020	106.8	56.5	1435	5
Ditching	60	1525	1.34	1.02	1,562	709	45,273	201.4	29,244	130.1	25,225	112.2	47.0	1194	0

<sup>\*</sup>All capacities are SAE heaped ratings and with side cutters.

### **Bucket Selection Guide\***



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

Engine 270D LC

Cooling Fan . . . . . . . . . . . . . . . . suction-type, hydraulic-driven, remote-mounted drive

**Hydraulic System** 

Maximum Flow . . . . . . . . . . . . . . . . . . 2 x 62.3 gpm (2 x 236 L/min.)

Pilot Pump. . . . . . one gear

 Maximum Flow
 8.9 gpm (34 L/min.)

 Pressure Setting
 580 psi (4000 kPa)

System Operating Pressure

 Implement Circuits
 4,980 psi (34 300 kPa)

 Travel Circuits
 4,980 psi (34 300 kPa)

 Swing Circuits
 4,700 psi (32 400 kPa)

 Power Boost
 5,260 psi (36 300 kPa)

Oil Filtration......one 10-micron full-flow return filter with by-pass / one pilot oil filter

**Cylinders** 

	Bore	Rod Diameter	Stroke
Boom (2)	5.3 in. (135 mm)	3.7 in. (95 mm)	53.5 in. (1360 mm)
Arm (1)	5.9 in. (150 mm)	4.1 in. (105 mm)	65.3 in. (1659 mm)
Bucket (1)	5.3 in. (135 mm)	3.5 in. (90 mm)	42.1 in. (1070 mm)

Swing Mechanism

Undercarriage

 Carrier Rollers (per side)
 2

 Track Rollers (per side)
 8

 Shoes, Triple Semi-Grouser (per side)
 48

Track Guides . . . . front and center Track Adjustment. . . . . hydraulic

Travel Speed

 Low.
 0-2.1 mph (0-3.3 km/h)

 High
 0-3.4 mph (0-5.5 km/h)

 Drawbar Pull
 56,074 lb. (25 435 kg)

### **Ground Pressure Data**

270D LC

Average Ground Pressure

32-in. (800 mm) Triple Semi-Grouser Shoes

(recommended for general/soft terrain) . . . 5.84 psi (40.3 kPa)

### Capacities (U.S.)

Fuel Tank	. 132 gal. (500 L)
Cooling System	• ( ,
Engine Lubrication, Including Filter	
Hydraulic Tank	
Hydraulic System	. 63.4 gal. (240 L)
Propel Gearbox (each)	. 9 qt. (8.5 L)
Swing Drive	. 8 gt. (7.6 L)

### **SAE Operating Weights**

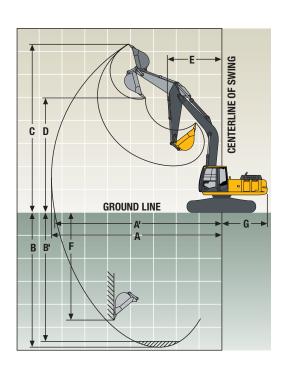
With Full Fuel Tank; 175-lb. (79 kg) Operator; 1.75-cu.-yd. (1.34 m³), 42-in. (1065 mm), 2,279-lb. (1034 kg) Bucket; 12-ft. 4-in. (3.75 m) Arm; 13,447-lb. (6100 kg) Counterweight; and 32-in. (800 mm) Triple Semi-

### **Component Weights**

Undercarriage

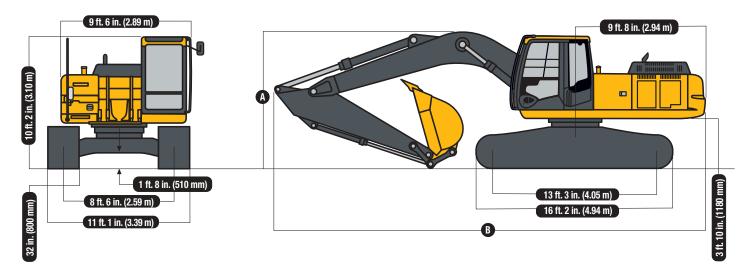
**Operating Information** 

Arm Length	Arm Length
10 ft. 2 in. (3.11 m)	12 ft. 4 in. (3.75 m)
Arm Force with 32-in. (800 mm) Triple Semi-	
Grouser Shoes*	l) 25,979 lb. (115.55 kN)
Bucket Digging Force with 32-in. (800 mm)	
Triple Semi-Grouser Shoes*	I) 37,480 lb. (166.7 kN)
Lifting Capacity Over Front @ Ground Level	, , , ,
20-ft. (6.1 m) Reach* 20,773 lb. (9423 kg)	19,727 lb. (8948 kg)
<b>A</b> Maximum Reach	) 37 ft. 1 in. (11.30 m)
A' Maximum Reach @ Ground Level 34 ft.7 in. (10.55 m)	36 ft. 6 in. (11.12 m)
<b>B</b> Maximum Digging Depth 23 ft. 10 in. (7.26 m	) 25 ft. 11 in. (7.91 m)
<b>B'</b> Maximum Digging Depth @ 8-ft. (2.44 m)	
Flat Bottom	25 ft. 8 in. (7.72 m)
<b>C</b> Maximum Cutting Height	m) 34 ft. 4 in. (10.46 m)
<b>D</b> Maximum Dumping Height 23 ft. 2 in. (7.07 m)	24 ft. 7 in. (7.49 m)
<b>E</b> Minimum Swing Radius	12 ft. 9 in. (3.89 m)
<b>F</b> Maximum Vertical Wall 20 ft. 1 in. (6.11 m)	23 ft. 1 in. (7.03 m)
<b>G</b> Tail Swing Radius	9 ft. 8 in. (2.94 m)



### Dimensions 270D LC

Α	10-ft. 2-in. (3.11 m) arm
	12-ft. 4-in. (3.75 m) arm
В	10-ft. 2-in. (3.11 m) arm
	12-ft. 4-in. (3.75 m) arm



### **Lift Capacities**

**Boldface italic** type indicates hydraulic-limited capacities; lightface type indicates stability-limited capacities, in lb. (kg). Ratings at bucket lift hook; machine equipped with 1.75-cu.-yd. (1.34 m³), 42-in. (1065 mm), 2,279-lb. (1034 kg) bucket; 13,447-lb. (6100 kg) counterweight; standard gauge; and situated on firm, 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 SAE J1097.

Load Point	Load Point 10 ft. (3.05 m)			15 ft. (4.57 m)		6.10 m)	25 ft. (7	7.62 m)	30 ft. (9.15 m)		
Height	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	
With 12-ft. 4-in	(3.75 m) arm aı	nd 32-in. (800 mi	m) triple semi-gro	ouser shoes							
25 ft. (7.62 m)							8,490 (3851)	8,490 (3851)			
20 ft. (6.10 m)							8,629 (3914)	8,629 (3914)	5,984 (2714)	5,984 (2714)	
15 ft. (4.57 m)							9,676 (4389)	9,676 (4389)	9,609 (4359)	7,937 (3600)	
10 ft. (3.05 m)			17,039 (7729)	17,039 (7729)	13,189 (5982)	13,189 (5982)	11,405 (5173)	10,668 (4839)	10,524 (4774)	7,680 (3484)	
5 ft. (1.52 m)			24,377 (11 057)	22,290 (10 111)	16,795 (7618)	14,398 (6531)	13,401 (6079)	10,091 (4577)	11,626 (5274)	7,371 (3343)	
Ground Line			28,866 (13 094)	20,936 (9497)	19,727 (8948)	13,562 (6152)	15,195 (6892)	9,601 (4355)	12,245 (5554)	7,096 (3219)	
-5 ft. (-1.52 m)	15,885 (7205)	15,885 (7205)	30,355 (13 769)	20,481 (9290)	21,412 (9712)	13,102 (5943)	16,083 (7295)	9,284 (4211)	12,055 (5468)	6,922 (3140)	
-10 ft. (-3.05 m)	22,504 (10 208)	22,504 (10 208)	29,877 (13 552)	20,489 (9294)	21,738 (9860)	12,972 (5884)	15,965 (7242)	9,178 (4163)	10,392 (4714)	6,920 (3139)	
-15 ft. (-4.57 m)	30,876 (14 005)	30,876 (14 005)	27,577 (12 509)	20,821 (9444)	20,489 (9294)	13,131 (5956)	15,518 (7039)	9,328 (4231)			
–20 ft. (–6.10 m)	30,941 (14 035)	30,941 (14 035)	22,517 (10 214)	21,537 (9769)	16,452 (7463)	13,673 (6202)					
With 10-ft. 2-in. (3.11 m) arm and 32-in. (800 mm) triple semi-grouser shoes											
20 ft. (6.10 m)							10,107 (4585)	10,107 (4585)			
15 ft. (4.57 m)					11,760 (5334)	11,760 (5334)	10,993 (4986)	10,981 (4981)	8,349 (3787)	7,778 (3528)	
10 ft. (3.05 m)			20,484 (9291)	20,484 (9291)	14,959 (6785)	14,959 (6785)	12,603 (5717)	10,494 (4760)	11,531 (5230)	7,587 (3441)	
5 ft. (1.52 m)			27,306 (12 386)	21,575 (9786)	18,319 (8309)	14,121 (6405)	14,426 (6544)	9,976 (4525)	12,445 (5645)	7,332 (3326)	
Ground Line			28,596 (12 971)	20,733 (9404)	20,773 (9423)	13,441 (6097)	15,959 (7239)	9,564 (4338)	12,256 (5559)	7,117 (3228)	
-5 ft. (-1.52 m)	14,458 (6558)	14,458 (6558)	30,272 (13 731)	20,588 (9339)	21,875 (9922)	13,133 (5957)	16,127 (7315)	9,337 (4235)	12,156 (5514)	7,026 (3187)	
-10 ft. (-3.05 m)	23,292 (10 565)	23,292 (10 565)	29,066 (13 184)	20,762 (9418)	21,566 (9782)	13,130 (5956)	16,121 (7312)	9,332 (4233)			
–15 ft. (–4.57 m)	29,503 (13 382)	29,503 (13 382)	25,803 (11 704)	21,225 (9628)	19,419 (8808)	13,422 (6088)					

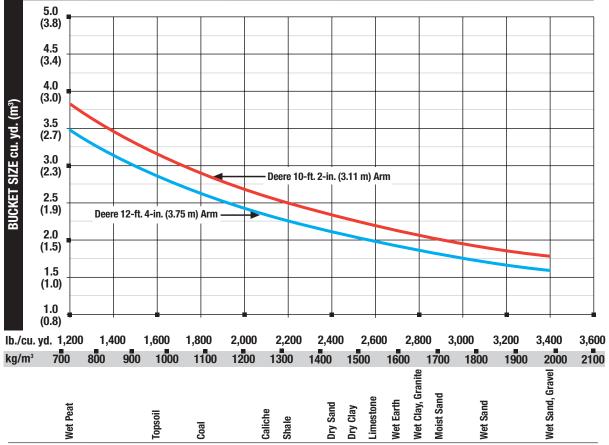
Buckets 270D LC

A full line of buckets is offered to meet a wide variety of applications. Digging forces are with power boost. Tooth selection includes either the John Deere Fanggs®, Standard, Tiger, Twin Tiger, Abrasion panel, or Flare tooth, or the ESCO (Vertalok) Standard, Tiger, Twin Tiger, or Flare tooth. Replaceable cutting edges are available through John Deere parts. Optional side cutters add 6 inches (150 mm) to bucket widths.

	Bucket Width		Bucket Capacity*				Bucket		Arm Dig Force		Arm Dig Force		Bucket		
Type Bucket					Weight		Dig Force		10 ft. 2 in. (3.11 m)		12 ft. 4 in. (3.75 m)		Tip Radius		No. Teeth
	in.	mm	cu. yd.	m³	lb.	kg	lb.	kN	lb.	kN	lb.	kN	in.	mm	
Heavy-Duty	42	1065	1.38	1.06	2,195	996	41,476	184.5	30,510	135.7	26,741	118.9	56.5	1435	5
Plate Lip	48	1220	1.60	1.22	2,359	1070	41,476	184.5	30,510	135.7	26,741	118.9	56.5	1435	6
	54	1370	1.82	1.39	2,507	1137	41,476	184.5	30,510	135.7	26,741	118.9	56.5	1435	6
Heavy-Duty	24	610	0.92	0.70	1,765	801	37,480	166.7	29,518	131.3	25,979	115.6	62.5	1588	3
High Capacity	30	760	1.20	0.92	2,010	912	37,480	166.7	29,518	131.3	25,979	115.6	62.5	1588	4
	36	915	1.48	1.13	2,133	968	37,480	166.7	29,518	131.3	25,979	115.6	62.5	1588	4
	42	1065	1.75	1.34	2,279	1034	37,480	166.7	29,518	131.3	25,979	115.6	62.5	1588	5
	48	1200	2.03	1.55	2,505	1136	37,480	166.7	29,518	131.3	25,979	115.6	62.5	1588	6
Severe-Duty	30	760	0.95	0.73	2,080	943	41,476	184.5	30,510	135.7	26,741	118.9	56.5	1435	4
Plate Lip	36	915	1.16	0.89	2,179	988	41,476	184.5	30,510	135.7	26,741	118.9	56.5	1435	4
	42	1065	1.38	1.06	2,345	1064	41,476	184.5	30,510	135.7	26,741	118.9	56.5	1435	5
Ditching	60	1525	1.34	1.02	1,562	709	49,848	221.7	32,225	143.3	28,044	124.7	47.0	1194	0

<sup>\*</sup>All capacities are SAE heaped ratings and with side cutters.

### **Bucket Selection Guide\***



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

240D LC / 270D LC EXCAVATORS Key: ● Standard equipment ▲ Optional or special equipment \*See your John Deere dealer for further information. 240D 270D Engine 240D 270D Undercarriage (continued) 240D 270D Operator's Station (continued) Certified to EPA Tier 3 emissions Triple semi-grouser shoes, 28 in. (700 mm) Hydraulic shutoff lever, all controls Triple semi-grouser shoes, 32 in. (800 mm) Auto-idle system Hydraulic warm-up control Automatic belt tension device Upperstructure Interior light Large cup holder Batteries (two 12 volt), 180-min. reserve capacity Right- and left-hand mirrors Coolant recovery tank Machine Information Center (MIC) Vandal locks with ignition key: Cab door / Fuel • Dual-element dry-type air filter Mode selectors (illuminated): Power modes cap / Service doors / Toolbox Electronic engine control Debris-screening side panel Enclosed fan guard (conforms to SAE J1308) Work mode - one Remote-mounted engine oil and fuel filters Ó Engine coolant to -34°F (-37°C) **Front Attachments** Fuel filter with water separator capability / Multiple-language capabilities / Centralized lubrication system Full-flow oil filter Dirt seals on all bucket pins Turbocharger with charge air cooler Less boom and arm Muffler, under hood, with vertical curved end Oil-impregnated bushings indicator light, engine check, engine coolant exhaust stack Reinforced resin thrust plates Cool-on-demand hydraulic-driven fan Tungsten carbide thermal coating on arm-to-Glow-plug start aid bucket joint 500-hour engine-oil-change interval Arm, 9 ft. 9 in. (2.96 m) 100% (45 deg.) off-level capability Arm, 10 ft. 2 in. (3.11 m) • Engine-oil-sampling valve Arm, 11 ft. 10 in. (3.61 m) Hydraulic fan reverser indicator, and work-mode indicator Arm, 12 ft. 4 in. (3.75 m) Engine coolant heater Monitor system with alarm features: Hydraulic Attachment quick-couplers oil filter restriction indicator light **Hydraulic System** Boom cylinder with plumbing to mainframe for Motion alarm with cancel switch (conforms to Reduced-drift valve for boom down, arm in less boom and arm Auxiliary hydraulic valve section Bucket-to-arm clearance adjustable bushing Power-boost switch on right console lever Spring-applied, hydraulically released automatic (except ditching buckets) Auxiliary hydraulic control switches in right swing brake Buckets: Ditching / Heavy duty / Heavy-duty console lever Auxiliary hydraulic-flow adjustments through high capacity / Severe-duty plate lip / Side Propel pedals and levers monitor cutters and teeth SAE two-lever control pattern Auto power lift Material clamps Seat belt, 2 in. (51 mm), retractable 5,000-hour hydraulic-oil-change interval Super-long fronts Seat belt, 3 in. (76 mm), non-retractable Hydraulic-oil-sampling valve Operator's Station Tinted glass Auxiliary hydraulic lines Adjustable independent control positions (levers-Transparent tinted overhead hatch **A** Auxiliary pilot and electric controls to-seat, seat-to-pedals) Hot/cold beverage compartment Hydraulic filter restriction indicator kit Air-suspension heated seat AM/FM radio Load-lowering control device Auto climate control/air conditioner, 20,000 Btu/hr. 24- to 12-volt D.C. radio convertors, 10 amp Single-pedal propel control (5.9 kW) with heater and pressurizer Circulation fan Control pattern change valve **A** Built-in Operator's Manual storage compartment Protection screens for cab front, rear, and side Undercarriage and manual Window vandal protection covers Planetary drive with axial piston motors

- Propel motor shields
- Spring-applied, hydraulically released automatic propel brake
- Track guides, front idler and center
- Two-speed propel with automatic shift
- Upper carrier rollers (2)
- Sealed and lubricated track chain
- Cell-phone power outlet, 12 volt, 60 watt, 5 amp
- Coat hook
- Deluxe suspension cloth seat with 4-in. (100 mm) adjustable armrests
- Floor mat
- Front windshield wiper with intermittent speeds
- Gauges (illuminated): Engine coolant / Fuel
- Horn, electric
- Hourmeter, electric

- three / Travel modes two with automatic shift /
  - Multifunction, color LCD monitor with: Diagnostic Maintenance tracking / Clock / Theft-deterrent system / System monitoring with alarm features: Auto-idle indicator, engine air cleaner restriction temperature indicator light with audible alarm, engine oil pressure indicator light with audible alarm, low-alternator-charge indicator light, lowfuel indicator light, fault code alert indicator, fuelrate display, wiper-mode indicator, work-lights-on

### **Electrical**

- 80-amp alternator
  - Blade-type multi-fused circuits
- Positive terminal battery covers
- Cab extension wiring harness
- JDLink™ Ultimate wireless communication system with 3 years of service

### Lights

Work lights: Halogen / One mounted on boom / One mounted on frame

### **CONTROL OWNING AND OPERATING COSTS**

Customer Personal Service (CPS) is part of John Deere's proactive, fix-before-fail strategy on machine maintenance that will help control costs, increase profits, and reduce stress. Included in this comprehensive lineup of ongoing programs and services are:

Fluid analysis program - tells you what's going on inside all of your machine's major components so you'll know if there's a problem before you see a decline in performance. Fluid analysis is included in most extended coverage and preventive-maintenance agreements.

Component life-cycle data - gives you vital information on the projected life span of components and lets you make informed decisions on machine maintenance by telling you approximately how many hours of use you can expect from an engine, transmission, or hydraulic pump. This information can be used to preempt catastrophic downtime by servicing major components at about 80 percent of their life cycle.

Preventive Maintenance (PM) agreements - give you a fixed cost for maintaining a machine for a given period of time. They also help you avoid downtime by ensuring that critical maintenance work gets done right and on schedule. On-site preventive maintenance service performed where and when you need it helps protect you from the expense of catastrophic failures and lets you avoid waste-disposal hassles.

**Extended coverage** – gives you a fixed cost for machine repairs for a given period of time so you can effectively manage costs. Whether you work in a severe-service setting or just want to spread the risk of doing business, this is a great way to custom-fit coverage for your operation. And an extended coverage contract also travels well because it's backed by John Deere and is honored by all Deere construction dealers.

Customer Support Advisors (CSAs) - Deere believes the CSA program lends a personal quality to Customer Personal Service (CPS). Certified CSAs have the knowledge and skills for helping make important decisions on machine maintenance and repair. Their mission is to help you implement a plan that's right for your business and take the burden of machine maintenance off your shoulders.



Net engine power is with standard equipment including air cleaner, Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with SAE standards. exhaust system, alternator, and cooling fan at test conditions Except where otherwise noted, these specifications are based on a unit with 42-in, (1065 mm) bucket, 32-in, (800 mm) triple semispecified per ISO9249. No derating is required up to 10,000-ft. grouser shoes, full fuel tank, and 175-lb. (79 kg) operator; a 240D LC unit with 11,904-lb. (5400 kg) counterweight; and a 270D LC unit with 13,447-lb. (6100 kg) counterweight. (3050 m) altitude.

