

ENGINE	<b>450LC</b>
Type .....	John Deere 6101A with altitude-compensating turbocharger and aftercooler
Rated power .....	285 SAE net hp (213 kW) @ 2,000 rpm
Cylinders .....	6
Displacement .....	.619 cu. in. (10.14 L)
Maximum net torque .....	955 lb.-ft. (1295 Nm) @ 1,300 rpm
Fuel consumption, typical .....	.6 to 10 gal./hr. (23 to 38 L/h)
Cooling fan .....	suction-type
Electrical system .....	24 volt with 45-amp alternator
Batteries (two 12 volt) .....	reserve capacity: 180 min.
Off-level capacity .....	100% (45 deg.)

HYDRAULIC SYSTEM	
Main pumps .....	two variable-displacement axial-piston
Minimum flow .....	2 x 39 gpm (2 x 147 L/min.)
Maximum flow .....	2 x 95 gpm (2 x 360 L/min.)
Pilot pump .....	one gear
Maximum rated flow .....	9.3 gpm (35 L/min.)
Pressure setting .....	655 psi (4510 kPa)
System operating pressure	
Implement circuits .....	4,270 psi (29 440 kPa)
Travel circuits .....	5,050 psi (34 820 kPa)
Swing circuits .....	3,840 psi (26 480 kPa)
Power boost .....	4,480 psi (30 890 kPa)
Oil filtration .....	one 10-micron full-flow return filter with by-pass / one pilot oil filter / one suction filter

CYLINDERS	
Boom (2)	
Bore .....	6.69 in. (170 mm)
Rod diameter .....	4.53 in. (115 mm)
Stroke .....	62.6 in. (1590 mm)
Arm (1)	
Bore .....	7.48 in. (190 mm)
Rod diameter .....	5.12 in. (130 mm)
Stroke .....	76.4 in. (1940 mm)
Bucket (1)	
Bore .....	6.69 in. (170 mm)
Rod diameter .....	4.53 in. (115 mm)
Stroke .....	52.2 in. (1325 mm)

SWING MECHANISM	
Swing speed .....	0-9 rpm
Swing torque .....	107,004 lb.-ft. (145 189 Nm)

UNDERCARRIAGE	
Carrier rollers (per side) .....	3
Track rollers (per side) .....	9
Shoes (per side) .....	53
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 .....	79,590 lb. (36 100 kg)

GROUND PRESSURE DATA	
Average ground pressure	
30-in. (750 mm) triple semi-grouser shoes .....	8.69 psi (59.9 kPa); recommended for rocky terrain and stumps
36-in. (900 mm) triple semi-grouser shoes .....	7.26 psi (50.1 kPa); recommended for general/soft terrain

CAPACITIES	
Fuel tank .....	160 gal. (605 L)
Cooling system .....	40 qt. (38 L)
Engine lubrication, including filter .....	36 qt. (34 L)
Hydraulic system .....	137 gal. (520 L)
Propel gearbox (each) .....	9 qt. (8.5 L)
Swing drive .....	6 qt. (5.7 L)

OPERATING WEIGHTS	
With full fuel tank; 175-lb. (79 kg) operator; 2.45-cu. yd. (1.87 m <sup>3</sup> ), 54-in. (1370 mm), 3,578-lb. (1623 kg) bucket; 12 ft. 10 in. (3.9 m) arm; 18,100-lb. (8210 kg) counter-weight; 17 ft. 11 in. (5.47 m) undercarriage length with 9 ft. 6 in. (2.89 m) wide gauge	
30-in. (750 mm) triple semi-grouser shoes .....	97,680 lb. (44 307 kg)
36-in. (900 mm) triple semi-grouser shoes .....	97,900 lb. (44 407 kg)

**COMPONENT WEIGHTS**

**450LC**

Undercarriage

30-in. (750 mm) triple semi-grouser shoes .....39,242 lb. (17 800 kg)

36-in. (900 mm) triple semi-grouser shoes .....39,462 lb. (17 900 kg)

Upperstructure with full fuel tank (less front attachments and 18,100-lb. [8210 kg] counterweight) .....20,282 lb. (9200 kg)

One-piece boom (with arm cylinder) .....9,017 lb. (4090 kg)

Arm with bucket cylinder and linkage

9 ft. 6 in. (2.9 m) .....5,082 lb. (2305 kg)

11 ft. 2 in. (3.4 m) .....5,026 lb. (2280 kg)

12 ft. 10 in. (3.9 m) .....5,423 lb. (2460 kg)

16 ft. 1 in. (4.9 m) .....5,180 lb. (2350 kg)

Boom lift cylinders (2) total weight .....1,863 lb. (845 kg)

54-in. (1370 mm), 2.45-cu. yd. (1.87 m<sup>3</sup>) bucket .....3,578 lb. (1623 kg)

Counterweight .....18,100 lb. (8210 kg)

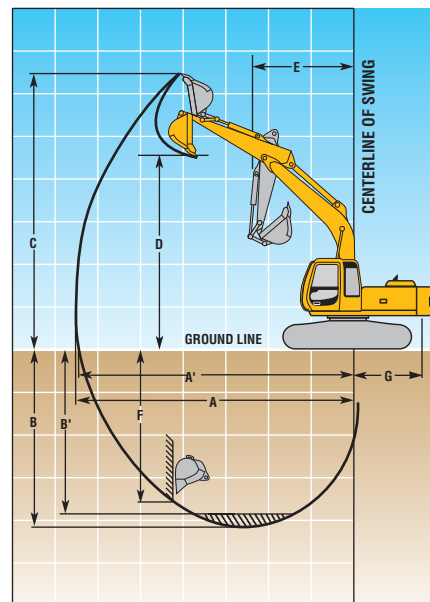
**SHIPPING WEIGHT**

Upperstructure with full fuel tank, boom with arm cylinder, boom cylinders (2), and undercarriage with 36-in. (900 mm) triple semi-grouser shoes (less 18,100-lb. [8210 kg] counterweight; 5,423-lb. [2460 kg], 12-ft. 10-in. [3.9 m] arm; 3,578-lb. [1623 kg], 54-in. [1370 mm], 2.45-cu. yd. [1.87 m<sup>3</sup>] bucket, and 175-lb. [79 kg] operator) .....70,624 lb. (32 035 kg)

**OPERATING INFORMATION**

	Arm Length 9 ft. 6 in. (2.9 m)	Arm Length 11 ft. 2 in. (3.4 m)	Arm Length 12 ft. 10 in. (3.9 m)	Arm Length 16 ft. 1 in. (4.9 m)
Arm force with 54-in. (1370 mm) heavy-duty bucket* .....50,460 lb. (224 kN)	42,990 lb. (191 kN)	52,980 lb. (236 kN)	52,980 lb. (236 kN)	33,700 lb. (150 kN)**
Bucket digging force with 54-in. (1370 mm) heavy-duty bucket* .....52,980 lb. (236 kN)	52,980 lb. (236 kN)	52,980 lb. (236 kN)	52,980 lb. (236 kN)	39,190 lb. (174 kN)**
Lifting capacity over front @ ground level 20-ft. (6.1 m) reach* .....35,050 lb. (15 899 kg)	35,130 lb. (15 935 kg)	34,378 lb. (15 594 kg)	33,771 lb. (15 319 kg)	
<b>A</b> Maximum reach .....37 ft. 6 in. (11.42 m)	39 ft. 6 in. (12.05 m)	40 ft. 11 in. (12.48 m)	43 ft. 11 in. (13.38 m)	
<b>A'</b> Maximum reach @ ground level .....36 ft. 9 in. (11.16 m)	38 ft. 9 in. (11.81 m)	40 ft. 3 in. (12.27 m)	43 ft. 3 in. (13.18 m)	
<b>B</b> Maximum digging depth .....23 ft. 11 in. (7.30 m)	25 ft. 6 in. (7.76 m)	27 ft. 1 in. (8.26 m)	29 ft. 11 in. (9.11 m)	
<b>B'</b> Maximum digging depth @ 8-ft. (2.44 m) flat bottom .....23 ft. 4 in. (7.10 m)	25 ft. 0 in. (7.62 m)	26 ft. 8 in. (8.13 m)	29 ft. 6 in. (9.00 m)	
<b>C</b> Maximum cutting height .....33 ft. 8 in. (10.27 m)	36 ft. 4 in. (11.08 m)	36 ft. 8 in. (11.18 m)	38 ft. 11 in. (11.85 m)	
<b>D</b> Maximum dumping height .....23 ft. 0 in. (7.00 m)	25 ft. 2 in. (7.66 m)	25 ft. 6 in. (7.78 m)	28 ft. 9 in. (8.77 m)	
<b>E</b> Minimum swing radius .....16 ft. 2 in. (4.92 m)	15 ft. 11 in. (4.84 m)	15 ft. 9 in. (4.81 m)	15 ft. 10 in. (4.82 m)	
<b>F</b> Maximum vertical wall .....15 ft. 8 in. (4.78 m)	21 ft. 10 in. (6.66 m)	23 ft. 1 in. (7.04 m)	27 ft. 9 in. (8.45 m)	
<b>G</b> Tail swing radius .....11 ft. 5 in. (3.47 m)	11 ft. 5 in. (3.47 m)	11 ft. 5 in. (3.47 m)	11 ft. 5 in. (3.47 m)	

\*Digging forces and lift capacities with power boost. / \*\*Equipped with 54-in. (1370 mm) general-purpose bucket.



**DIMENSIONS**

**A** With 9 ft. 6 in. (2.9 m) arm .....39 ft. 0 in. (11.88 m)

With 11 ft. 2 in. (3.4 m) arm .....38 ft. 8 in. (11.79 m)

With 12 ft. 10 in. (3.9 m) arm .....38 ft. 8 in. (11.79 m)

With 16 ft. 1 in. (4.9 m) arm .....38 ft. 5 in. (11.70 m)

**B** With 9 ft. 6 in. (2.9 m) arm .....11 ft. 10 in. (3.60 m)

With 11 ft. 2 in. (3.4 m) arm .....11 ft. 5 in. (3.48 m)

With 12 ft. 10 in. (3.2 m) arm .....11 ft. 5 in. (3.48 m)

With 16 ft. 1 in. (4.9 m) arm .....15 ft. 3 in. (4.66 m)

**C** Operating position .....9 ft. 6 in. (2.89 m)

Transport position .....7 ft. 10 in. (2.39 m)

**D** With 30-in. (750 mm) triple semi-grouser shoes:

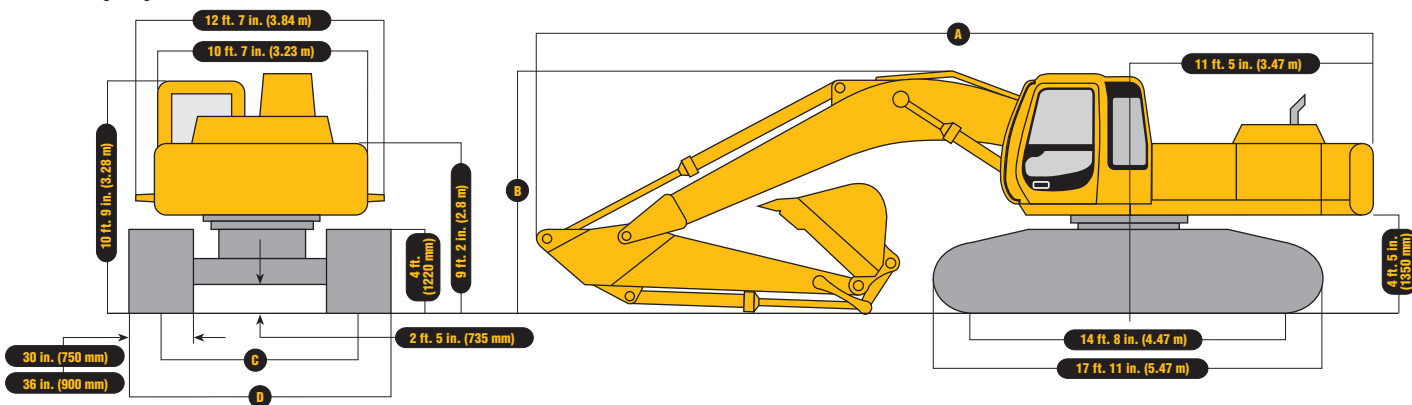
Operating position .....11 ft. 11 in. (3.64 m)

Transport position .....10 ft. 4 in. (3.14 m)

With 36-in. (900 mm) triple semi-grouser shoes:

Operating position .....12 ft. 5 in. (3.79 m)

Transport position .....10 ft. 10 in. (3.29 m)



## 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 30-in. (750 mm) or 36-in. (900 mm) shoes and standard counterweight, 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 with power boost or in precision mode.

Load Point Height	15 ft. (4.57 m)		20 ft. (6.10 m)		25 ft. (7.62 m)		30 ft. (9.15 m)		35 ft. (10.67 m)	
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 9-ft. 6-in. (2.9 m) arm and 3,578-lb. (1623 kg), 54-in. (1370 mm), 2.45-cu. yd. (1.87 m³) bucket</i>										
25 ft. (7.62 m)					<b>19,359 (8781)</b>	<b>19,359 (8781)</b>				
20 ft. (6.10 m)					<b>19,861 (9009)</b>	19,162 (8692)				
15 ft. (4.57 m)	<b>35,116 (15 929)</b>	<b>35,116 (15 928)</b>	<b>26,001 (11 794)</b>	<b>26,001 (11 794)</b>	<b>21,609 (9802)</b>	18,328 (8314)	<b>19,193 (8706)</b>	13,092 (5939)		
10 ft. (3.05 m)			<b>30,473 (13 823)</b>	24,661 (11 186)	<b>23,845 (10 816)</b>	17,296 (7845)	<b>20,193 (9160)</b>	12,590 (5710)		
5 ft. (1.52 m)			<b>33,877 (15 367)</b>	22,990 (10 428)	<b>25,818 (11 711)</b>	16,348 (7415)	21,083 (9563)	12,074 (5477)		
Ground Line			<b>35,050 (15 899)</b>	22,113 (10 030)	<b>26,880 (12 193)</b>	15,691 (7117)	20,655 (9369)	11,686 (5301)		
-5 ft. (-1.52 m)	<b>43,076 (19 539)</b>	35,345 (16 032)	<b>34,149 (15 490)</b>	21,855 (9913)	<b>26,628 (12 078)</b>	15,389 (6980)	20,476 (9288)	11,523 (5227)		
-10 ft. (-3.05 m)	<b>38,823 (17 610)</b>	35,770 (16 225)	<b>31,353 (14 222)</b>	22,018 (9987)	<b>24,650 (11 181)</b>	15,446 (7006)				
-15 ft. (-4.57 m)	<b>31,846 (14 445)</b>	<b>31,846 (14 445)</b>	<b>26,054 (11 818)</b>	22,589 (10 246)	<b>19,615 (8897)</b>	15,973 (7245)				

*With 11-ft. 2-in. (3.4 m) arm and 3,578-lb. (1623 kg), 54-in. (1370 mm), 2.45-cu. yd. (1.87 m³) bucket*

20 ft. (6.10 m)					<b>18,785 (8453)</b>	<b>18,785 (8453)</b>	<b>17,749 (7987)</b>	13,894 (6252)		
15 ft. (4.57 m)			<b>24,511 (11 030)</b>	<b>24,511 (11 030)</b>	<b>20,694 (9312)</b>	18,881 (8496)	<b>18,482 (8317)</b>	13,528 (6088)		
10 ft. (3.05 m)			<b>29,201 (13 140)</b>	25,548 (11 497)	<b>23,128 (10 408)</b>	17,830 (8024)	<b>19,699 (8865)</b>	12,979 (5841)		
5 ft. (1.52 m)			<b>33,166 (14 925)</b>	23,746 (10 686)	<b>25,394 (11 427)</b>	16,825 (7571)	<b>20,914 (9411)</b>	12,414 (5586)		
Ground Line	<b>24,614 (11 076)</b>	<b>24,614 (11 076)</b>	<b>35,130 (15 809)</b>	22,648 (10 192)	<b>26,848 (12 082)</b>	16,075 (7234)	20,956 (9430)	11,960 (5382)		
-5 ft. (-1.52 m)	<b>41,796 (18 808)</b>	35,496 (15 973)	<b>34,972 (15 737)</b>	22,197 (9989)	<b>27,071 (12 182)</b>	15,664 (7049)	20,674 (9303)	11,704 (5267)		
-10 ft. (-3.05 m)	<b>42,070 (18 932)</b>	35,837 (16 127)	<b>32,869 (14 791)</b>	22,206 (9993)	<b>25,723 (11 575)</b>	15,596 (7018)	<b>19,952 (8978)</b>	11,728 (5278)		
-15 ft. (-4.57 m)	<b>35,705 (16 067)</b>	<b>35,705 (16 067)</b>	<b>28,480 (12 816)</b>	22,609 (10 174)	<b>22,016 (9907)</b>	15,910 (7160)				
-20 ft. (-6.10 m)	<b>25,460 (11 457)</b>	<b>25,460 (11 457)</b>	<b>20,113 (9051)</b>	<b>20,113 (9051)</b>						

*With 12-ft. 10-in. (3.9 m) arm and 3,578-lb. (1623 kg), 54-in. (1370 mm), 2.45-cu. yd. (1.87 m³) bucket*

25 ft. (7.62 m)							<b>10,811 (4904)</b>	<b>10,811 (4904)</b>		
20 ft. (6.10 m)							<b>16,440 (7457)</b>	14,016 (6358)		
15 ft. (4.57 m)						<b>19,328 (8767)</b>	19,045 (8639)	<b>17,375 (7881)</b>	13,579 (6159)	<b>9,694 (4397)</b> <b>9,694 (4397)</b>
10 ft. (3.05 m)	<b>38,671 (17 541)</b>	<b>38,671 (17 541)</b>	<b>27,343 (12 403)</b>	25,927 (11 760)	<b>21,897 (9932)</b>	17,938 (8137)	<b>18,748 (8504)</b>	12,974 (5885)	<b>14,770 (6700)</b>	9,545 (4330)
5 ft. (1.52 m)	<b>34,037 (15 439)</b>	<b>34,037 (15 439)</b>	<b>31,732 (14 394)</b>	23,946 (10 862)	<b>24,396 (11 066)</b>	16,843 (7640)	<b>20,150 (9140)</b>	12,345 (5600)	<b>16,374 (7427)</b>	9,223 (4184)
Ground Line	<b>31,484 (14 281)</b>	<b>31,484 (14 281)</b>	<b>34,378 (15 594)</b>	22,608 (10 255)	<b>26,192 (11 881)</b>	15,980 (7249)	20,807 (9438)	11,816 (5360)	16,074 (7291)	8,946 (4058)
-5 ft. (-1.52 m)	<b>42,548 (19 300)</b>	34,984 (15 869)	<b>34,936 (15 847)</b>	21,953 (9958)	<b>26,850 (12 179)</b>	15,452 (7009)	20,432 (9268)	11,475 (5205)		
-10 ft. (-3.05 m)	<b>44,069 (19 990)</b>	35,173 (15 954)	<b>33,534 (15 211)</b>	21,813 (9894)	<b>26,063 (11 822)</b>	15,272 (6927)	20,334 (9224)	11,386 (5165)		
-15 ft. (-4.57 m)	<b>38,473 (17 451)</b>	35,776 (16 228)	<b>29,992 (13 604)</b>	22,086 (10 018)	<b>23,296 (10 567)</b>	15,451 (7009)				
-20 ft. (-6.10 m)	<b>29,542 (13 400)</b>	<b>29,542 (13 400)</b>	<b>23,241 (10 542)</b>	22,829 (10 355)	<b>16,517 (7492)</b>	16,174 (7337)				

*With 16-ft. 1-in. (4.9 m) arm and 2,215-lb. (1005 kg), 54-in. (1370 mm), 2.30-cu. yd. (1.76 m³) bucket*

20 ft. (6.10 m)							<b>15,386 (6979)</b>	<b>15,386 (6979)</b>	<b>13,213 (5993)</b>	11,473 (5204)
15 ft. (4.57 m)							<b>16,604 (7532)</b>	15,066 (6834)	<b>15,731 (7136)</b>	11,231 (5094)
10 ft. (3.05 m)						<b>20,744 (9409)</b>	19,605 (8893)	<b>18,241 (8274)</b>	14,386 (6525)	<b>16,602 (7531)</b> 10,850 (4922)
5 ft. (1.52 m)	<b>42,410 (19 237)</b>	40,281 (18 271)	<b>29,927 (13 575)</b>	25,971 (11 780)	<b>23,664 (10 734)</b>	18,384 (8339)	<b>19,976 (9061)</b>	13,661 (6197)	<b>17,568 (7969)</b>	10,424 (4728)
Ground Line	<b>40,970 (18 584)</b>	37,329 (16 932)	<b>33,771 (15 319)</b>	24,228 (10 990)	<b>26,085 (11 832)</b>	17,328 (7860)	<b>21,458 (9733)</b>	13,007 (5900)	17,171 (7789)	10,032 (4551)
-5 ft. (-1.52 m)	<b>41,898 (19 005)</b>	36,040 (16 348)	<b>35,716 (16 201)</b>	23,155 (10 503)	<b>27,544 (12 494)</b>	16,580 (7521)	21,482 (9744)	12,517 (5678)	16,860 (7648)	9,745 (4420)
-10 ft. (-3.05 m)	<b>48,326 (21 921)</b>	35,696 (16 192)	<b>35,714 (16 200)</b>	22,669 (10 283)	<b>27,745 (12 585)</b>	16,176 (7338)	21,185 (9610)	12,247 (5555)	16,741 (7594)	9,635 (4370)
-15 ft. (-4.57 m)	<b>44,537 (20 202)</b>	35,935 (16 300)	<b>33,722 (15 296)</b>	22,648 (10 273)	<b>26,366 (11 960)</b>	16,112 (7308)	<b>20,830 (9448)</b>	12,248 (5556)		
-20 ft. (-6.10 m)	<b>37,911 (17 196)</b>	<b>36,678 (16 637)</b>	<b>29,254 (13 270)</b>	23,055 (10 458)	<b>22,636 (10 268)</b>	16,427 (7451)				
-25 ft. (-7.62 m)	<b>26,897 (12 200)</b>	<b>26,897 (12 200)</b>	<b>20,578 (9334)</b>	<b>20,578 (9334)</b>						

## BUCKETS

A full line of buckets is offered to meet a wide variety of applications. Digging forces are with power boost. The buckets have an adjustable bushing for side clearance, with the exception of the ditching bucket. Tooth selection includes either the John Deere Fangg<sup>®</sup>, 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	Bucket Width		Bucket Capacity*		Weight		Bucket Dig Force		Arm Dig Force 9 ft.		Arm Dig Force 11 ft.		Arm Dig Force 12 ft.		Arm Dig Force 16 ft.		Bucket Tip Radius		No. Teeth
	in.	mm	cu. yd.	m³	lb.	kg	lb.	kN	6 in. (2.9 m)	2 in. (3.4 m)	10 in. (3.9 m)	1 in. (4.9 m)	lb.	kN	in.	mm			
General-Purpose	54	1370	2.30	1.76	2,215	1005	39,190	174.3							33,700	149.9	69.5	1765	7
Plate Lip	84	2135	5.00	3.82	4,905	2224	51,190	227.7	49,790	221.5							74.0	1880	7
Heavy-Duty	36	915	1.56	1.19	2,888	1310	52,980	235.7	50,460	224.4	42,990	191	40,910	182.0			71.5	1816	4
Plate Lip	42	1065	1.85	1.41	3,124	1417	52,980	235.7	50,460	224.4	42,990	191	40,910	182.0			71.5	1816	5
	48	1220	2.15	1.64	3,320	1505	52,980	235.7	50,460	224.4	42,990	191	40,910	182.0			71.5	1816	6
	54	1370	2.45	1.87	3,578	1623	52,980	235.7	50,460	224.4	42,990	191	40,910	182.0			71.5	1816	6
	60	1525	2.74	2.10	3,771	1710	52,980	235.7	50,460	224.4	42,990	191	40,910	182.0			71.5	1816	7
	66	1675	3.01	2.30	3,825	1735	52,980	235.7	50,460	224.4	42,990	191	40,910	182.0			71.5	1816	7
	72	1830	3.29	2.52	4,061	1842	52,980	235.7	50,460	224.4	42,990	191	40,910	182.0			71.5	1816	8

**BUCKETS (continued)**

A full line of buckets is offered to meet a wide variety of applications. Digging forces are with power boost. The buckets have an adjustable bushing for side clearance, with the exception of the ditching bucket. 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	Bucket Width		Bucket Capacity*		Weight		Bucket Dig Force		Arm Dig Force 9 ft.		Arm Dig Force 11 ft.		Arm Dig Force 12 ft.		Arm Dig Force 16 ft.		Bucket Tip Radius		No. Teeth
	in.	mm	cu. yd.	m <sup>3</sup>	lb.	kg	lb.	kN	lb.	kN	lb.	kN	lb.	kN	lb.	kN	in.	mm	
Truck Loading	72	1830	4.18	3.20	4,340	2041	51,190	227.7	49,790	221.5	42,472	189	40,460	180.0			74.0	1880	6
Heavy-Duty	36	915	1.96	1.50	3,375	1530	51,190	227.7	49,790	221.5	42,472	189	40,460	180.0			74.0	1880	4
High Capacity	42	1065	2.32	1.77	3,812	1729	51,190	227.7	49,790	221.5	42,472	189	40,460	180.0			74.0	1880	4
	48	1220	2.69	2.06	3,969	1800	51,190	227.7	49,790	221.5	42,472	189	40,460	180.0			74.0	1880	5
	54	1370	3.06	2.34	4,478	2031	51,190	227.7	49,790	221.5	42,472	189	40,460	180.0			74.0	1880	5
	60	1525	3.43	2.62	5,131	2327	51,190	227.7	49,790	221.5	42,472	189	40,460	180.0			74.0	1880	6
	66	1675	3.80	2.91	5,003	2269	51,190	227.7	49,790	221.5	42,472	189	40,460	180.0			74.0	1880	6
	72	1830	4.18	3.20	5,865	2660	51,190	227.7	49,790	221.5	42,472	189	40,460	180.0			74.0	1880	7
Severe-Duty	42	1065	1.80	1.38	3,189	1446	52,610	234.0	50,325	223.8	42,885	191	40,820	181.6			72.0	1829	5
Cast Lip	48	1220	2.15	1.64	3,510	1592	52,610	234.0	50,325	223.8	42,885	191	40,820	181.6			72.0	1829	5
Severe-Duty	36	915	1.56	1.19	3,024	1372	52,610	234.0	50,325	223.8	42,885	191	40,820	181.6			72.0	1829	3
Plate Lip	42	1065	1.85	1.41	3,470	1574	52,610	234.0	50,325	223.8	42,885	191	40,820	181.6			72.0	1829	4
	48	1220	2.15	1.64	3,522	1597	52,610	234.0	50,325	223.8	42,885	191	40,820	181.6			72.0	1829	5
	54	1370	2.45	1.87	3,719	1686	52,610	234.0	50,325	223.8	42,885	191	40,820	181.6			72.0	1829	5
Ditching	84	2135	2.40	1.84	2,730	1238	71,475	317.9	56,050	249.3	47,241	210	44,565	198.2			53.0	1346	0

\*All capacities are SAE heaped ratings.

**BUCKET SELECTION GUIDE**

Material (loose weight)	Recommended Bucket Size*	
	General-Purpose Bucket	Heavy-Duty Bucket
Wood chips – 700 lb./cu. yd. (420 kg/m <sup>3</sup> )	11.00 cu. yd. (8.4 m <sup>3</sup> )	—
Peat, dry – 750 lb./cu. yd. (440 kg/m <sup>3</sup> )	10.00 cu. yd. (7.6 m <sup>3</sup> )	—
Cinders – 950 lb./cu. yd. (560 kg/m <sup>3</sup> )	8.00 cu. yd. (6.1 m <sup>3</sup> )	—
Peat, wet – 1,170 lb./cu. yd. (690 kg/m <sup>3</sup> )	7.00 cu. yd. (5.4 m <sup>3</sup> )	—
Topsoil – 1,600 lb./cu. yd. (950 kg/m <sup>3</sup> )	6.00 cu. yd. (4.6 m <sup>3</sup> )	—
Coal – 1,780 lb./cu. yd. (1050 kg/m <sup>3</sup> )	5.00 cu. yd. (3.8 m <sup>3</sup> )	—
Caliche – 2,100 lb./cu. yd. (1250 kg/m <sup>3</sup> )	2.75–4.00 cu. yd. (2.1–3.1 m <sup>3</sup> )	2.50–3.75 cu. yd. (1.9–2.9 m <sup>3</sup> )
Earth, loam – 2,100 lb./cu. yd. (1250 kg/m <sup>3</sup> )	4.00 cu. yd. (3.1 m <sup>3</sup> )	3.75 cu. yd. (2.9 m <sup>3</sup> )
Shale – 2,250 lb./cu. yd. (1330 kg/m <sup>3</sup> )	4.00 cu. yd. (3.1 m <sup>3</sup> )	3.75 cu. yd. (2.9 m <sup>3</sup> )
Sand, dry – 2,400 lb./cu. yd. (1420 kg/m <sup>3</sup> )	4.00 cu. yd. (3.1 m <sup>3</sup> )	3.75 cu. yd. (2.9 m <sup>3</sup> )
Clay, dry – 2,500 lb./cu. yd. (1480 kg/m <sup>3</sup> )	3.00–3.75 cu. yd. (2.3–2.9 m <sup>3</sup> )	3.25 cu. yd. (2.5 m <sup>3</sup> )
Earth, dry – 2,550 lb./cu. yd. (1510 kg/m <sup>3</sup> )	3.00–3.50 cu. yd. (2.3–2.7 m <sup>3</sup> )	3.25 cu. yd. (2.5 m <sup>3</sup> )
Limestone, broken or crushed – 2,600 lb./cu. yd. (1540 kg/m <sup>3</sup> )	2.50–3.50 cu. yd. (1.9–2.7 m <sup>3</sup> )	2.25–3.25 cu. yd. (1.7–2.5 m <sup>3</sup> )
Earth, wet – 2,700 lb./cu. yd. (1600 kg/m <sup>3</sup> )	3.50 cu. yd. (2.7 m <sup>3</sup> )	3.25 cu. yd. (2.5 m <sup>3</sup> )
Clay, wet – 2,800 lb./cu. yd. (1660 kg/m <sup>3</sup> )	3.50 cu. yd. (2.7 m <sup>3</sup> )	3.25 cu. yd. (2.5 m <sup>3</sup> )
Rock, granite, blasted and broken – 2,800 lb./cu. yd. (1660 kg/m <sup>3</sup> )	2.75–4.00 cu. yd. (2.1–3.1 m <sup>3</sup> )	2.50–3.75 cu. yd. (1.9–2.9 m <sup>3</sup> )
Sand, moist – 2,850 lb./cu. yd. (1690 kg/m <sup>3</sup> )	3.50 cu. yd. (2.7 m <sup>3</sup> )	3.25 cu. yd. (2.5 m <sup>3</sup> )
Sand and gravel, dry – 2,900 lb./cu. yd. (1720 kg/m <sup>3</sup> )	3.50 cu. yd. (2.7 m <sup>3</sup> )	3.25 cu. yd. (2.5 m <sup>3</sup> )
Sand, wet – 3,100 lb./cu. yd. (1840 kg/m <sup>3</sup> )	3.00 cu. yd. (2.3 m <sup>3</sup> )	2.75 cu. yd. (2.1 m <sup>3</sup> )
Sand and gravel, wet – 3,400 lb./cu. yd. (2020 kg/m <sup>3</sup> )	3.00 cu. yd. (2.3 m <sup>3</sup> )	2.75 cu. yd. (2.1 m <sup>3</sup> )

\*Contact your John Deere dealer for optimum bucket and attachment selections. These recommendations are for general conditions and average use. Larger buckets may be possible 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 and uneven surfaces. Bucket capacity indicated is SAE heaped.

	450LC		450LC		450LC
<b>ENGINE</b>					
Auto-idle system	●	Fuel cap	●	Hydraulic shutoff lever, all controls	●
Automatic belt tension device	●	Service doors	●	Interior light	●
Batteries (two 12 volt), 180-min. (1,250 CCA) reserve capacity	●	Toolbox	●	Mode selectors (illuminated)	●
Dual element dry-type air filter	●	<b>FRONT ATTACHMENTS</b>		Power modes – four	●
Electric fuel shutoff	●	Bucket-to-arm clearance adjustable bushing (except ditching buckets)	●	Travel modes – two	●
Enclosed fan guard	●	Centralized lubrication system	●	Work modes – four	●
Conforms to SAE J1308	●	Dirt seals on all bucket pins	●	Monitor system with alarm features	●
Engine coolant to -34°F (-37°C)	●	No-boom-arm	●	Auto-idle indicator light	●
Fuel filter with water separator	●	Arm, 9 ft. 6 in. (2.9 m)	■	Engine air cleaner restriction indicator light	●
Full-flow oil filter	●	Arm, 11 ft. 2 in. (3.4 m)	■	Engine coolant temperature indicator light with audible alarm	●
Radiator trash screen	●	Arm, 12 ft. 10 in. (3.9 m)	■	Engine oil pressure indicator light with audible alarm	●
Underhood muffler with vertical curved end exhaust stack	●	Arm, 16 ft. 1 in. (4.9 m)	■	Fluid level	●
Electric ether starting aid	■	Attachment quick couplers	■	Engine coolant level indicator light	●
Engine coolant heater	■	Boom cylinder with plumbing to mainframe	■	Engine oil level indicator light	●
<b>HYDRAULIC SYSTEM</b>		Buckets	■	Hydraulic oil level indicator light	●
Anti-drift valve for boom down, arm in	●	Ditching	■	Low alternator charge indicator light	●
Spring-applied, hydraulically released automatic swing brake	●	General purpose	■	Low fuel indicator light	●
Auxiliary hydraulic and electric pilot controls	■	General-purpose high capacity	■	Motion alarm with cancel switch	●
Auxiliary hydraulic lines	■	Heavy duty	■	Conforms to SAE J994	■
Hydraulic filter restriction indicator kit	■	Heavy-duty high capacity	■	Power boost switch on right control lever	●
Load-lowering control device	■	Severe-duty cast lip	■	Propel pedals and levers	●
Single pedal propel control	■	Severe-duty plate lip	■	Seat belt, 2 in. (51 mm), retractable	●
<b>UNDERCARRIAGE</b>		Side cutters and teeth	■	Seat belt, 3 in. (76 mm), retractable	■
Planetary drive	●	Heavy-duty grapple	■	Tinted glass	●
Propel motor shields	●	Hydraulic bucket material clamps	■	Air conditioning	■
Track guides, front idler and center	●	Slide-Loc hydraulic coupler	■	Alternate pilot control pattern	■
Triple semi-grouser shoes, 30 in. (750 mm)	●	Super-long front	■	Circulation fan	■
Triple semi-grouser shoes, 36 in. (900 mm)	●	<b>OPERATOR'S STATION</b>		Protection screens for cab front, rear, and side	■
Two-speed propel	●	Adjustable seat with independent control positions (levers-to-seat, seat-to-pedals)	●	Window vandal protection covers	■
Upper carrier rollers (3)	●	AM/FM stereo	●	24- to 12-volt D.C. radio converters	■
<b>UPPERSTRUCTURE</b>		Deluxe suspension cloth seat with adjustable armrests	●	<b>ELECTRICAL</b>	
Counterweight, 18,100 lb. (8210 kg)	●	Front windshield wiper with intermittent speed	●	Blade-type multi-fused circuits	●
Right- and left-hand mirrors	●	Gauges (illuminated)	●	By-pass start safety cover on starter	●
Toolbox	●	Engine coolant	●	Positive terminal battery covers	●
Vandal locks with ignition key	●	Fuel	●	Cab extension wiring harness	■
Cab door	●	Heater, 20,000 Btu/hr. (5.9 kW) with blower fan	●	<b>LIGHTS</b>	
Engine hood	●	Horn, electric on left control lever	●	Halogen work lights	
		Hourmeter, electric	●	One mounted on boom	●
				One mounted on frame	●

**KEY:** ● Standard equipment ■ Optional or special equipment

## THE JDAdvantEDGE

JDAdvantEdge is a wealth of support programs, parts systems, and dealer resources, all designed to give you the edge. This package of special benefits is a major reason why John Deere offers the "best value" for your equipment dollar.

**Best parts support** – Twelve regional parts depots in North America and others around the world put parts support near your job no matter where in the world it is.

A computerized FLASH™ parts locating system linking these depots to dealerships can find out-of-stock parts in a hurry and get them into your hands fast ... within 24 hours, across North America.

**Best service backup** – Dealer service technicians are regularly schooled, at our modern facility in Davenport, Iowa, or by professionals in the field, to diagnose quickly and repair efficiently.

If they're stumped, a phone call to DTAC (Dealer Technical Assistance Center) puts them in touch with a staff of pros at the factory who help them find a solution quickly.

**Best dealers** – Your John Deere dealer is an important contributor to the JDAdvantEdge. He or she is committed to being the best equipment supplier you can work with.

This is a dollars-and-cents commitment in parts inventory, in service facilities, in field-service trucks. It's a sweat-and-blood commitment in dedicated, skilled, and highly trained and motivated personnel in each and every department at the dealership.

But what sets John Deere dealers apart from all the rest is something more, a factor somewhat difficult to measure ... a caring attitude, and a sincere desire to be the best at meeting the needs of each individual customer.

**John Deere Finance Plans** – Whether you rent, lease, or buy John Deere equipment, your dealer can explain the John Deere options available. One-stop options that let you free up operating capital, keep other lines of credit open. More solid benefits of the JDAdvantEdge.

**Best protection** – In addition to the new equipment warranty that meets or exceeds the competition, SECURE® extended coverage, an optional service product for John Deere equipment, is available for repair coverage after the warranty concludes. Full machine or power train coverage is available for a variety of time periods to meet your needs. Consult your dealer for availability and details.



Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan, at standard conditions per SAE J1349 and DIN 6270B, using No. 2-D fuel at 35 API gravity. No derating is required up to 10,000 ft. (3050 m) altitude. Gross power is without cooling fan.

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 a unit with 54-in. (1370 mm) bucket, 36-in. (900 mm) track shoes, 18,100-lb. (8210 kg) counterweight, full fuel tank, and 175-lb. (79 kg) operator.

