ENGINE

It's John Deere-engineered and manufactured. Replaceable wet-type cylinder liners are spun cast and machined for uniform wall thickness to assure even heat dissipation. Piston spray cooling contributes to long component life. A dynamically-balanced crankshaft assures smooth operation. Turbocharged for maximum performance.

Engine: John Deere 6076A – Turbocharged and Aftercooled
Rated power at 2,000 rpm ..... 220 SAE net hp (164 kW)
..... 232 SAE gross hp (173 kW)
Cylinders 6
Displacement ..... 466 cu. in. (7.638 L)
Maximum net torque at 1,400 rpm ..... 650 lb.-ft. (881 Nm)
Fuel consumption, typical ..... 4 to 9 gal./hr. (15 to 34 L/h)
Cooling fan ..... suction-type viscous drive
Electrical system ..... 24-volt w/45-amp alternator
Batteries (two 12 volt) ..... reserve capacity: 180 min.

HYDRAULIC SYSTEM

Sophisticated, yet simple; state-of-the-art, yet easy to operate. You get the best of both worlds with the 892E LC's hydraulic system. This closed center system uses two axial piston pumps. A microprocessor ties the system with the engine to allow the operator to tailor hydraulic performance to particular job situations. A soft touch keypad control to the operator's right allows the desired performance to be tuned in with the touch of a button or two. This load sensing, speed sensing, variable flow system delivers smooth response even when the operator uses more than one function at the same time. The operator is in complete control at all times and can override any of the preset hydraulic modes or engine settings with the simple touch of a button.

Main pumps ..... 2 variable-displacement axial pistons
Maximum rated flow ..... 2 x 72 gpm (2 x 273 L/min.)
Pilot pump ..... one gear
Maximum rated flow ..... 9.3 gpm (35 L/min.)
Pressure setting ..... 668 psi (4605 kPa)
System operating pressure
Implement circuits ..... 4,270 psi (29 440 kPa)
Travel circuits ..... 4,980 psi (34 340 kPa)
Swing circuits ..... 3,840 psi (26 480 kPa)
Oil filtration
One 10-micron full flow return filter with bypass
One pilot oil filter
One suction filter

Cylinders	Bore	Rod Diameter	Stroke
Boom (2)	5.7 in. (145 mm)	3.9 in. (100 mm)	60.2 in. (1530 mm)
Arm (1)	6.5 in. (165 mm)	4.3 in. (110 mm)	71.7 in. (1820 mm)
Bucket (1)	5.7 in. (145 mm)	3.7 in. (95 mm)	49.2 in. (1250 mm)

SWING MECHANISM

Multiple planetary gearing is driven by an axial-piston, high-torque hydraulic motor. Ring and pinion gears are induction hardened for long life. The multiple, wet-disk swing brake is spring applied, hydraulically released. The single 90-ball swing bearing is sealed top and bottom.

Swing speed ..... 0–12 rpm

UNDERCARRIAGE

Heavy-duty rollers and chain are designed to stand up to the side-to-side stress of excavator work. The strong box-section track frame comes with a track guide at the front idler location and center of the frame. The track frames are welded to the center section to eliminate any need for periodic tightening and are designed to resist the buildup of mud and debris.

Carrier rollers (per side) 2
Track rollers (per side) 9
Idlers (per side) 1
Shoes, triple semigrouser (per side) 50
Track guides ..... front and center
Track adjustment ..... hydraulic

Travel speed	Low	Medium	High
mph	0–1.6	0–2.4	0–3.4
km/h	(0–2.6)	(0–3.9)	(0–5.5)

Drawbar pull ..... 52,120 lb. (231 kN)
Tractive gradability ..... 123% (51 deg.)
Off-level operating limit for oil sump ..... 100% (45 deg.)

Ground Pressure Data

Shoe Width/ Grouser	Average Ground Pressure	Recommended Application
24 in./triple (600 mm)	6.81 psi (46.9 kPa)	Rocky terrain and stumps
32 in./triple (800 mm)	5.62 psi (38.7 kPa)	General/soft terrain

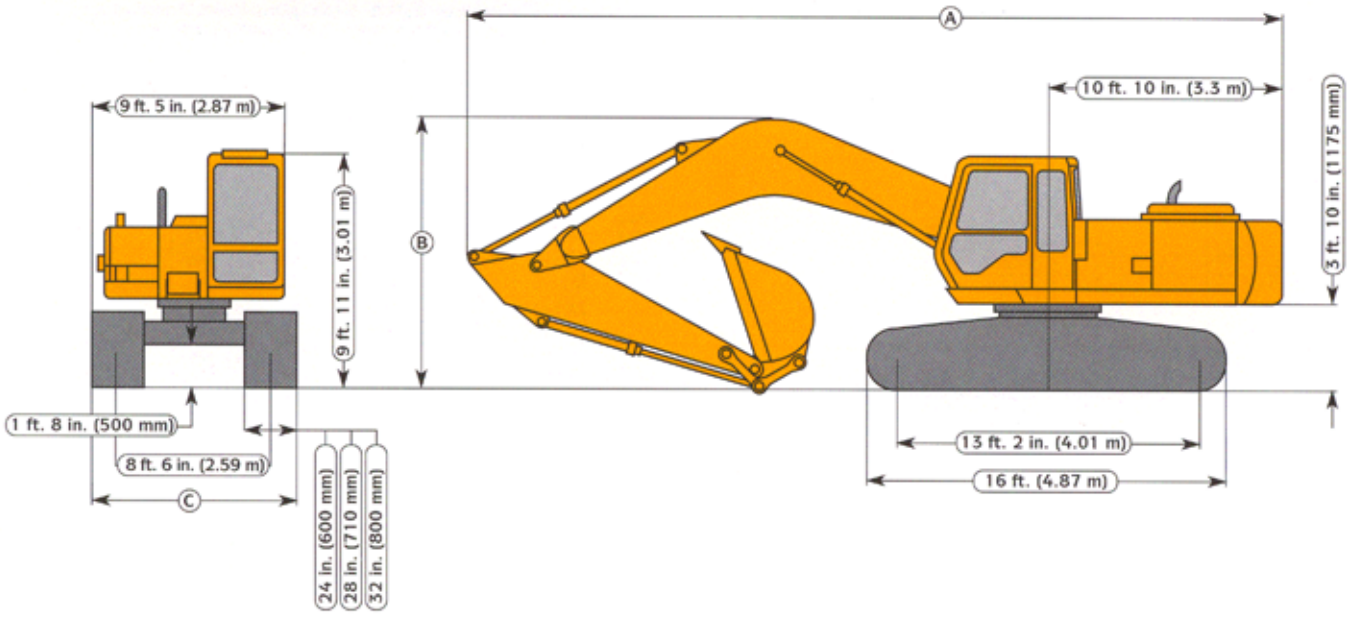
CAPACITIES

Fuel tank ..... 135 gal. (510 L)
Cooling system ..... 34 qt. (32 L)
Engine lubrication, including filter ..... 6.3 gal. (24 L)
Hydraulic system ..... 82 gal. (310 L)
Planetary propel drive (each) ..... 6.3 qt. (6 L)
Swing drive ..... 13.8 qt. (13 L)

OPERATING WEIGHTS

Weights	lb.	kg
Operating weight with full fuel tank, 175-lb. (79 kg) operator, 54-in. (1372 mm) bucket, 13 ft. 1 in. (4.0 m) arm, 14,770-lb. (6700 kg) counterweight and 32-in. (800 mm) triple grouser shoes	67,450	30 595
Undercarriage		
Shoe width:		
24-in. (600 mm) triple grouser shoes	22,465	10 190
32-in. (800 mm) triple grouser shoes	24,515	11 120
Component Weights:		
Upperstructure with full fuel tank (less front attachments and 14,770-lb. [6700 kg] counterweight)	14,380	6523
One-piece boom (with arm cylinder)	5,836	2647
Arm, 8 ft. 9 in. (2.7 m) with bucket cylinder and linkage	3,435	1558
Arm, 10 ft. 6 in. (3.2 m) with bucket cylinder and linkage	3,673	1666
Arm, 13 ft. 1 in. (4.0 m) with bucket cylinder and linkage	3,907	1772
Boom lift cylinders (2) total weight	1,318	598
Counterweight	14,770	6700
2.3 cu. yd. (1.76 m^3), 54 in. (1370 mm) bucket	2,557	1160

DIMENSIONS



A) With 8 ft. 9 in. (2.7 m) arm ..... 36 ft. 3 in. (11.06 m)
With 10 ft. 6 in. (3.2 m) arm ..... 35 ft. 11 in. (10.94 m)
With 13 ft. 1 in. (4.0 m) arm ..... 36 ft. 1 in. (11.01 m)

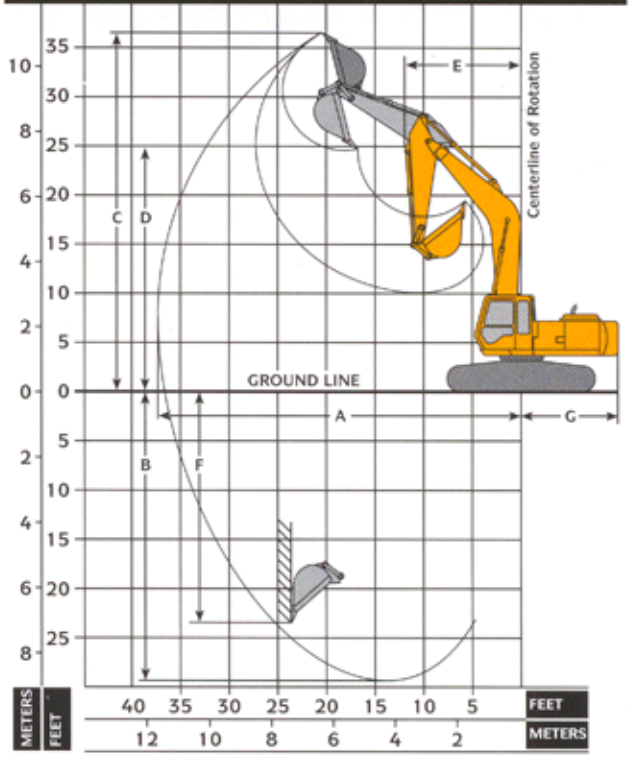
B) With 8 ft. 9 in. (2.7 m) arm ..... 11 ft. 2 in. (3.41 m)
With 10 ft. 6 in. (3.2 m) arm ..... 10 ft. 6 in. (3.20 m)
With 13 ft. 1 in. (4.0 m) arm ..... 11 ft. 5 in. (3.49 m)

C) With 8 ft. 6 in. (2.59 m) undercarriage and
24-in. (600 mm) shoes ..... 10 ft. 6 in. (3.19 m)
32-in. (800 mm) shoes ..... 11 ft. 1 in. (3.39 m)

OPERATING INFORMATION

	8 ft. 9 in. (2.7 m) Arm Length	10 ft. 6 in. (3.2 m) Arm Length	13 ft. 1 in. (4.0 m) Arm Length
Arm force with 54-in. (1370 mm) heavy-duty bucket	36,970 lb. (164.4 kN)	30,645 lb. (136.3 kN)	26,340 lb. (117.2 kN)
Bucket tangential force with 54-in. (1370 mm) heavy-duty bucket	41,620 lb. (185.1 kN)	41,620 lb. (185.1 kN)	41,620 lb. (185.1 kN)
Lifting capacity over front @ ground level 20-ft. (6.1 m) reach	23,401 lb. (10 615 kg)	22,977 lb. (10 422 kg)	22,147 lb. (10 046 kg)
A Max. reach	34 ft. 8 in. (10.57 m)	36 ft. 5 in. (11.10 m)	38 ft. 11 in. (11.86 m)
A' Max. reach @ ground level	34 ft. 0 in. (10.36 m)	35 ft. 9 in. (10.90 m)	38 ft. 4 in. (11.68 m)
B Max. digging depth	22 ft. 5 in. (6.84 m)	24 ft. 3 in. (7.38 m)	26 ft. 10 in. (8.18 m)
B' Max. digging depth @ 8 ft. (2.44 m) flat bottom	21 ft. 10 in. (6.65 m)	23 ft. 8 in. (7.21 m)	26 ft. 5 in. (8.05 m)
C Max. cutting height	32 ft. 4 in. (9.85 m)	33 ft. 6 in. (10.22 m)	34 ft. 9 in. (10.60 m)
D Max. dumping height	22 ft. 4 in. (6.81 m)	23 ft. 4 in. (7.12 m)	24 ft. 7 in. (7.49 m)
E Min. swing radius	14 ft. 11 in. (4.54 m)	14 ft. 7 in. (4.45 m)	14 ft. 4 in. (4.38 m)
F Max. vertical wall	18 ft. 5 in. (5.61 m)	21 ft. 3 in. (6.48 m)	24 ft. 2 in. (7.36 m)
G Tail swing radius	10 ft. 10 in. (3.30 m)	10 ft. 10 in. (3.30 m)	10 ft. 10 in. (3.30 m)

DIGGING DEPTH AND REACH



LIFT CAPACITIES

Ratings at bucket lift hook, machine equipped with 32-in. (800 mm) shoes, 2.3 cu. yd. (1.76 m^3) 54 in. (1370 mm) wide, 2557 lb. (1160 kg) bucket and situated on firm, uniform supporting surface. Total load includes weight of cables, hook, etc. **Boldface** type indicates hydraulic-limited capacities, lightface type indicates stability-limited capacities, in lb. (kg). Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine.

Equipped with 8 ft. 9 in. (2.7 m) arm

OVER SIDE OVER FRONT

Load Point Height	5 ft. (1.52 m)		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)		35 ft. (10.67 m)	
20 ft. (6.10 m)									12,222 (5543)	**12,669 (5747)**				
15 ft. (4.57 m)							**15,863 (7195)**	**15,863 (7195)**	11,788 (5347)	**13,716 (6222)**	8365 (3794)	**12,758 (5787)**		
10 ft. (3.05 m)							15,908 (7216)	**19,237 (8726)**	11,170 (5067)	**15,337 (6957)**	8114 (3681)	**13,343 (6052)**		
5 ft. (1.52 m)							14,810 (6718)	**22,112 (10 030)**	10,575 (4797)	**16,912 (7671)**	7817 (3546)	13,044 (5917)		
Ground Line							14,227 (6453)	**23,401 (10 615)**	10,161 (4609)	17,063 (7740)	7596 (3446)	12,804 (5808)		
– 5 ft. (– 1.52 m)					**22,107 (10 028)**	**22,107 (10 028)**	14,069 (6382)	**23,081 (10 470)**	9988 (4531)	16,871 (7653)	7547 (3423)	12,751 (5784)		
– 10 ft. (– 3.05 m)			**32,205 (14 608)**	**32,205 (14 608)**	**20,093 (9114)**	**20,093 (9114)**	14,214 (6447)	**21,209 (9620)**	10,082 (4573)	**16,437 (7456)**				
– 15 ft. (– 4.57 m)					**21,263 (9645)**	**21,263 (9645)**	14,690 (6663)	**17,021 (7721)**						

Equipped with 10 ft. 6 in. (3.2 m) arm

Load Point Height	5 ft. (1.52 m)		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)		35 ft. (10.67 m)	
20 ft. (6.10 m)									**11,457 (5197)**	**11,457 (5197)**	**7481 (3393)**	**7481 (3393)**		
15 ft. (4.57 m)									11,924 (5409)	**12,655 (5740)**	8445 (3831)	**11,771 (5339)**		
10 ft. (3.05 m)					25,175 (11,419)	**25,708 (11 661)**	16,241 (7367)	**17,842 (8093)**	11,279 (5116)	**14,416 (6539)**	8135 (3690)	**12,584 (5708)**		
5 ft. (1.52 m)							15,038 (6821)	**21,092 (9567)**	10,633 (4823)	**16,201 (7349)**	7791 (3534)	13,029 (5910)		
Ground Line					**20,003 (9073)**	**20,003 (9073)**	14,288 (6481)	**22,977 (10 422)**	10,144 (4601)	17,061 (7739)	7512 (3407)	12,726 (5772)		
– 5 ft. (– 1.52 m)			**13,847 (6281)**	**13,847 (6281)**	**19,294 (8752)**	**19,294 (8752)**	13,989 (6345)	**23,254 (10 548)**	9886 (4484)	16,775 (7609)	7374 (3345)	12,577 (5705)		
– 10 ft. (– 3.05 m)			**25,768 (11 688)**	**25,768 (11 688)**	22,393 (10 157)	**24,656 (11 184)**	14,022 (6360)	**21,990 (9975)**	9877 (4480)	16,765 (7604)				
– 15 ft. (– 4.57 m)			**18,717 (8490)**	**18,717 (8490)**	22,939 (10 405)	**23,934 (10 856)**	14,358 (6513)	**18,764 (8511)**	10,193 (4624)	**13,908 (6309)**				

Equipped with 13 ft. 1 in. (4.0 m) arm

Load Point Height	5 ft. (1.52 m)		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)		35 ft. (10.67 m)	
20 ft. (6.10 m)											9049 (4105)	**10,089 (4576)**		
15 ft. (4.57 m)											8814 (3998)	**10,664 (4837)**		
10 ft. (3.05 m)					**21,403 (9708)**	**21,403 (9708)**	**15,806 (7170)**	**15,806 (7170)**	11,712 (5313)	**13,172 (5975)**	8440 (3828)	**11,680 (5298)**	6176 (2801)	8614 (3907)
5 ft. (1.52 m)					23,971 (10 873)	**28,671 (13 005)**	15,616 (7083)	**19,495 (8843)**	10,979 (4980)	**15,216 (6902)**	8028 (3642)	**12,826 (5818)**	5974 (2710)	10,114 (4588)
Ground Line					22,503 (10 207)	**27,538 (12 491)**	14,620 (6632)	**22,147 (10 046)**	10,371 (4704)	**16,802 (7621)**	7667 (3478)	12,894 (5849)	5794 (2628)	9810 (4450)
– 5 ft. (– 1.52 m)			**15,219 (6903)**	**15,219 (6903)**	22,074 (10 013)	**26,124 (11 850)**	14,097 (6394)	**23,277 (10 558)**	9985 (4529)	16,884 (7658)	7429 (3370)	12,635 (5731)		
– 10 ft. (– 3.05 m)	**18,303 (8302)**	**18,303 (8302)**	**20,837 (9452)**	**20,837 (9452)**	22,125 (10 036)	**28,584 (12 966)**	13,955 (6330)	**22,886 (10 381)**	9843 (4465)	16,726 (7587)	7368 (3342)	12,569 (5701)		
– 15 ft. (– 4.57 m)			**21,592 (9794)**	**21,592 (9794)**	22,506 (10 208)	**27,282 (12 375)**	14,122 (6406)	**20,809 (9439)**	9964 (4520)	**15,973 (7245)**				
– 20 ft. (– 6.10 m)			**26,611 (12 071)**	**26,611 (12 071)**	**20,975 (9514)**	**20,975 (9514)**	14,652 (6646)	**16,063 (7286)**						

BUCKETS

A full line of buckets is offered to meet a wide variety of applications. All capacities are SAE heaped* ratings. The buckets have an adjustable bushing feature 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, 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 8 ft. 9 in. (2.7 m)		Arm Dig Force 10 ft. 6 in. (3.2 m)		Arm Dig Force 13 ft. 1 in. (4.0 m)		Bucket Tip Radius		No. Teeth
	in.	mm	yd³	m³	lb.	kg	lb.	kN	lb.	kN	lb.	kN	lb.	kN	in.	mm	
General Purpose Plate Lip	30	760	1.20	0.92	1770	803	41,620	185.1	36,970	164.4	30,645	136.3	26,340	117.2	62.5	1588	4
	36	915	1.48	1.13	1872	849	41,620	185.1	36,970	164.4	30,645	136.3	26,340	117.2	62.5	1588	4
	42	1065	1.75	1.34	1998	906	41,620	185.1	36,970	164.4	30,645	136.3	26,340	117.2	62.5	1588	5
	48	1220	2.03	1.55	2115	959	41,620	185.1	36,970	164.4	30,645	136.3	26,340	117.2	62.5	1588	6
	54	1370	2.30	1.76	2215	1005	41,620	185.1	36,970	164.4	30,645	136.3	26,340	117.2	62.5	1588	7
	60	1525	2.59	1.98	2338	1060	41,620	185.1	36,970	164.4	30,645	136.3	26,340	117.2	62.5	1588	7
General Purpose High Capacity	30	760	1.26	0.96	2420	1097	37,430	166.5	35,490	157.9	29,550	131.4	25,525	113.5	69.5	1765	4
	36	915	1.56	1.19	2550	1156	37,430	166.5	35,490	157.9	29,550	131.4	25,525	113.5	69.5	1765	4
	42	1065	1.85	1.41	2710	1229	37,430	166.5	35,490	157.9	29,550	131.4	25,525	113.5	69.5	1765	5
	48	1220	2.15	1.64	2815	1277	37,430	166.5	35,490	157.9	29,550	131.4	25,525	113.5	69.5	1765	6
	54	1370	2.45	1.87	2982	1352	37,430	166.5	35,490	157.9	29,550	131.4	25,525	113.5	69.5	1765	7
	60	1525	2.74	2.10	3089	1401	37,430	166.5	35,490	157.9	29,550	131.4	25,525	113.5	69.5	1765	7
Heavy-Duty Plate Lip	36	915	1.48	1.13	2138	970	41,620	185.1	36,970	164.4	30,645	136.3	26,340	117.2	62.5	1588	4
	42	1065	1.75	1.34	2210	1002	41,620	185.1	36,970	164.4	30,645	136.3	26,340	117.2	62.5	1588	5
	48	1220	2.03	1.55	2324	1054	41,620	185.1	36,970	164.4	30,645	136.3	26,340	117.2	62.5	1588	6
	54	1370	2.30	1.76	2557	1160	41,620	185.1	36,970	164.4	30,645	136.3	26,340	117.2	62.5	1588	6
Heavy-Duty High Capacity	30	760	1.26	0.96	2516	1141	37,430	166.5	35,490	157.9	29,550	131.4	25,525	113.5	69.5	1765	4
	36	915	1.56	1.19	2781	1261	37,430	166.5	35,490	157.9	29,550	131.4	25,525	113.5	69.5	1765	4
	42	1065	1.85	1.41	3120	1415	37,430	166.5	35,490	157.9	29,550	131.4	25,525	113.5	69.5	1765	5
	48	1220	2.15	1.64	3318	1505	37,430	166.5	35,490	157.9	29,550	131.4	25,525	113.5	69.5	1765	6
	54	1370	2.45	1.87	3562	1615	37,430	166.5	35,490	157.9	29,550	131.4	25,525	113.5	69.5	1765	6
Severe-Duty Cast Lip	42	1065	1.75	1.34	2774	1258	40,020	178.0	36,425	162.0	30,245	134.5	26,045	115.8	65.0	1651	5
	48	1220	2.03	1.55	2815	1277	40,020	178.0	36,425	162.0	30,245	134.5	26,045	115.8	65.0	1651	5
Severe-Duty Plate Lip	30	760	1.26	0.96	2850	1292	35,150	156.3	34,595	153.9	28,885	128.5	25,030	111.3	74.0	1880	3
	36	915	1.56	1.19	3024	1371	35,150	156.3	34,595	153.9	28,885	128.5	25,030	111.3	74.0	1880	4
	42	1065	1.85	1.41	3343	1516	35,150	156.3	34,595	153.9	28,885	128.5	25,030	111.3	74.0	1880	4
	48	1220	2.15	1.64	3522	1597	35,150	156.3	34,595	153.9	28,885	128.5	25,030	111.3	74.0	1880	5
Ditching	72	1830	1.66	1.27	2531	1148	51,005	226.9	39,695	176.6	32,635	145.2	27,795	123.6	51.0	1295	0

BUCKET SELECTION CHART

RECOMMENDED BUCKET SIZE*

lb/yd³	kg/m³	MATERIAL (loose weight)	General-Purpose		Heavy-Duty	
			cu. yd.	m³	cu. yd.	m³
700	420	Wood chips	9.0	6.9	—	—
750	440	Peat, dry	8.0	6.1	—	—
950	560	Cinders	5.5	4.2	—	—
1170	690	Peat, wet	5.0	3.8	—	—
1600	950	Topsoil	4.0	3.0	—	—
1780	1050	Coal	3.5	2.7	3.25	2.5
2100	1250	Caliche	1.75 to 2.50	1.3 to 1.9	1.50 to 2.50	1.1 to 1.9
2100	1250	Earth, loam	2.75	2.1	2.50	1.9
2250	1330	Shale	2.75	2.1	2.50	1.9
2400	1420	Sand, dry	2.75	2.1	2.50	1.9
2500	1480	Clay, dry	2.00 to 2.50	1.5 to 1.9	1.75 to 2.25	1.3 to 1.7
2550	1510	Earth, dry	2.00 to 2.50	1.5 to 1.9	1.75 to 2.25	1.3 to 1.7
2600	1540	Limestone, broken or crushed	1.63 to 2.25	1.2 to 1.7	1.50 to 2.00	1.1 to 1.5
2700	1600	Earth, wet	2.00 to 2.50	1.5 to 1.9	1.75 to 2.25	1.3 to 1.7
2800	1660	Clay, wet	2.00 to 2.50	1.5 to 1.9	1.75 to 2.25	1.3 to 1.7
2800	1660	Rock, granite, blasted and broken	1.63 to 2.75	1.2 to 2.1	1.50 to 2.50	1.1 to 1.9
2850	1690	Sand, moist	2.25	1.7	2.10	1.6
2900	1720	Sand and gravel, dry	2.25	1.7	2.15	1.6
3100	1840	Sand, wet	2.15	1.6	2.00	1.5
3400	2020	Sand and gravel, wet	2.00	1.5	1.85	1.4

*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 when using light buckets, 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.