

870G LC



Engine		870G LC	
Manufacturer and Model	Isuzu 6WG1-iT4		
Non-Road Emissions Standard	EPA Interim Tier 4/EU Stage IIIB		
Net Rated Power (ISO 9249)	397 kW (532 hp) at 1,800 rpm		
Cylinders	6		
Displacement	15.7 L (957 cu. in.)		
Off-Level Capacity	70% (35 deg.)		
Aspiration	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 Autoshift			
Maximum Travel Speed			
Low	3.2 km/h (2.0 mph)		
High	4.7 km/h (2.9 mph)		
Drawbar Pull	57 240 kg (126,193 lb.)		
Hydraulics			
Open center, load sensing			
Main Pumps		2 variable-displacement pumps	
Maximum Rated Flow	566 L/m (150 gpm) x 2		
Pilot Pump		One gear	
Maximum Rated Flow	30 L/m (7.9 gpm)		
Pressure Setting	3900 kPa (566 psi)		
System Operating Pressure			
Circuits			
Implement	31 900 kPa (4,627 psi)		
Travel	34 300 kPa (4,975 psi)		
Swing	29 400 kPa (4,264 psi)		
Power Boost	34 300 kPa (4,975 psi)		
Controls		Pilot levers, short stroke, low-effort hydraulic pilot controls with shutoff lever	
Cylinders			
Heat-treated, chrome-plated, polished cylinder rods; hardened steel (replaceable bushings) pivot pins			
	<i>Bore</i>	<i>Rod Diameter</i>	<i>Stroke</i>
Boom (2)	215 mm (8.5 in.)	150 mm (5.9 in.)	1835 mm (72.2 in.)
Arm (1)	225 mm (8.9 in.)	160 mm (6.3 in.)	2225 mm (87.6 in.)
Bucket (1)	200 mm (7.9 in.)	140 mm (5.5 in.)	1555 mm (61.2 in.)
Electrical			
Number of Batteries (12 volt)	2		
Battery Capacity	500 CCA		
Alternator Rating	50 amp		
Work Lights	5 halogen (one mounted on frame, 2 mounted on boom, and 2 mounted on top of cab)		
Undercarriage			
Rollers (each side)			
Carrier	3		
Track	9		
Shoes, Double-Bar Grousers (each side)	51		
Track			
Adjustment	Hydraulic		
Guides	Front and center		
Chain	Sealed and lubricated		
Ground Pressure			
Double-Bar Grouser Shoes			
650 mm (26 in.)	115.3 kPa (16.7 psi)		
750 mm (30 in.)	100.7 kPa (14.6 psi)		
900 mm (36 in.)	84.8 kPa (12.3 psi)		
1020 mm (40 in.)	77.2 kPa (11.2 psi)		



Swing Mechanism	870G LC
Speed	7.8 rpm
Torque	267 000 Nm (196,929 lb.-ft.)

Serviceability

Refill Capacities	
Fuel Tank	1110 L (293 gal.)
Cooling System	112 L (29.6 gal.)
Engine Oil with Filter	57 L (15.1 gal.)
Hydraulic Tank	500 L (132.1 gal.)
Hydraulic System	1042 L (275.3 gal.)
Gearbox	
Swing (each)	15 L (15.9 qt.)
Travel (each)	19 L (20.1 qt.)
Pump Drive	6.2 L (6.6 qt.)

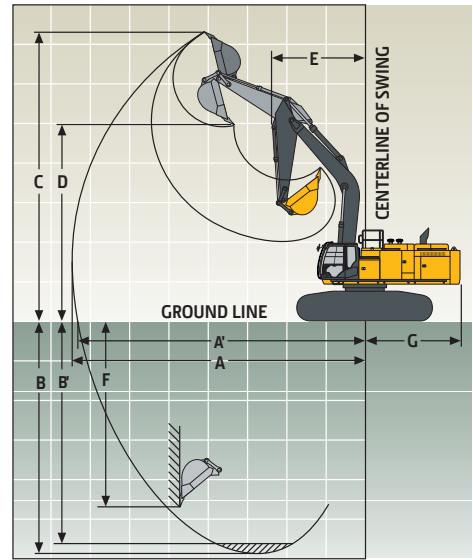
Operating Weights

With full fuel tank; 79-kg (175 lb.) operator; 3.49-m³ (4.57 cu. yd.), 1370-mm (54 in.), 3558-kg (7,844 lb.) bucket; 4.4-m (14 ft. 5 in.) arm; 13 300-kg (29,321 lb.) counterweight; and 900-mm (36 in.) double-bar grouser shoes

SAE Operating Weight	87 659 kg (193,255 lb.)
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Component Weights

Undercarriage with Double-Bar Grouser Shoes	
650 mm (26 in.)	32 350 kg (71,320 lb.)
750 mm (30 in.)	33 050 kg (72,863 lb.)
900 mm (36 in.)	33 990 kg (74,935 lb.)
1020 mm (40 in.)	34 420 kg (75,883 lb.)
One-Piece Boom (with arm cylinder)	
8.4 m (27 ft. 7 in.)	8200 kg (18,078 lb.)
7.1-m (23 ft. 4 in.) Mass Excavating	7670 kg (16,909 lb.)
10.0 m (32 ft. 10 in.)	9390 kg (20,701 lb.)
Arm with Bucket Cylinder and Linkage	
3.7 m (12 ft. 1 in.)	4330 kg (9,546 lb.)
4.4 m (14 ft. 5 in.)	4660 kg (10,274 lb.)
5.4 m (17 ft. 9 in.)	4950 kg (10,913 lb.)
2.95-m (9 ft. 8 in.) with 7.1-m (23 ft. 4 in.) Mass-Excavating Boom	4650 kg (10,251 lb.)
Boom-Lift Cylinders (2), Total Weight	
3.49-m ³ (4.57 cu. yd.), 1370-mm (54 in.)	3558 kg (7,844 lb.)
Heavy-Duty High-Capacity Bucket Counterweight, Standard	
	13 300 kg (29,321 lb.)

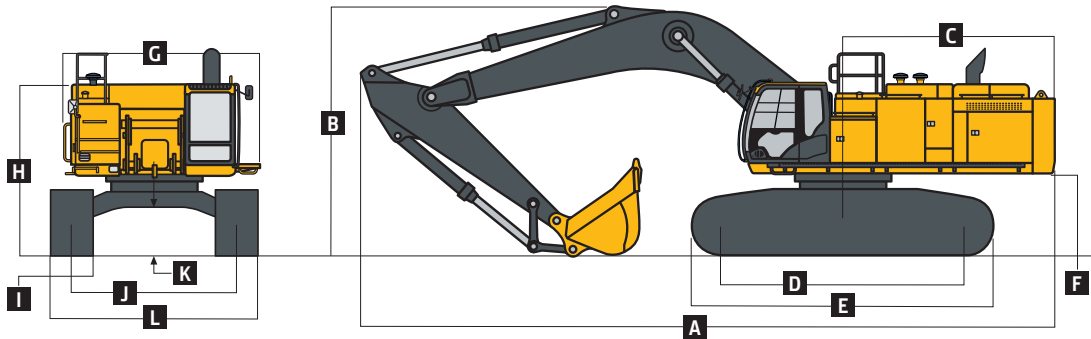


Operating Dimensions

Arm Length	3.7 m (12 ft. 2 in.) w/ 8.4-m (27 ft. 7 in.) Boom	4.4 m (14 ft. 5 in.) w/ 8.4-m (27 ft. 7 in.) Boom	5.4 m (17 ft. 9 in.) w/ 8.4-m (27 ft. 7 in.) Boom	2.95-m (9 ft. 8 in.) w/ 7.1-m (23 ft. 4 in.) Mass-Excavating Boom	4.4-m (14 ft. 5 in.) w/ 10.0-m (32 ft. 10 in.) Boom	5.4-m (17 ft. 9 in.) w/ 10.0-m (32 ft. 10 in.) Boom
Arm Digging Force						
SAE	315 kN (70,815 lb.)	273 kN (61,373 lb.)	237 kN (53,280 lb.)	378 kN (84,978 lb.)	273 kN (61,373 lb.)	237 kN (53,280 lb.)
ISO	323 kN (72,613 lb.)	280 kN (62,946 lb.)	243 kN (54,629 lb.)	394 kN (88,575 lb.)	280 kN (62,946 lb.)	243 kN (54,629 lb.)
Bucket Digging Force						
SAE	359 kN (80,706 lb.)	359 kN (80,706 lb.)	289 kN (64,970 lb.)	411 kN (92,396 lb.)	359 kN (80,706 lb.)	289 kN (64,970 lb.)
ISO	399 kN (89,699 lb.)	399 kN (89,699 lb.)	323 kN (72,613 lb.)	472 kN (106,110 lb.)	399 kN (89,699 lb.)	323 kN (72,613 lb.)
Lifting Capacity Over Front at Ground Level 9.0-m (30 ft.) Reach (with power boost)	20 579 kg (44,499 lb.)	20 260 kg (43,800 lb.)	19 466 kg (42,109 lb.)	20 609 kg (44,450 lb.)	18 919 kg (40,872 lb.)	18 341 kg (40,435 lb.)
A	Maximum Reach	14.10 m (46 ft. 3 in.)	14.91 m (48 ft. 11 in.)	15.91 m (52 ft. 2 in.)	12.34 m (40 ft. 6 in.)	16.55 m (54 ft. 4 in.)
A'	Maximum Reach at Ground Level	13.82 m (45 ft. 4 in.)	14.64 m (48 ft. 0 in.)	15.67 m (51 ft. 5 in.)	12.02 m (39 ft. 5 in.)	16.32 m (53 ft. 7 in.)
B	Maximum Digging Depth	8.87 m (29 ft. 1 in.)	9.57 m (31 ft. 5 in.)	10.57 m (34 ft. 8 in.)	7.14 m (23 ft. 5 in.)	11.16 m (36 ft. 7 in.)
B'	Maximum Digging Depth at 2.44-m (8 ft. 0 in.) Flat Bottom	8.74 m (28 ft. 8 in.)	9.46 m (31 ft. 0 in.)	10.46 m (34 ft. 4 in.)	7.00 m (23 ft. 0 in.)	11.04 m (36 ft. 3 in.)
C	Maximum Cutting Height	13.03 m (42 ft. 9 in.)	13.82 m (45 ft. 4 in.)	14.53 m (47 ft. 8 in.)	12.01 m (39 ft. 5 in.)	14.66 m (48 ft. 1 in.)
D	Maximum Dumping Height	9.08 m (29 ft. 9 in.)	9.73 m (31 ft. 11 in.)	10.41 m (34 ft. 2 in.)	8.13 m (26 ft. 8 in.)	10.81 m (35 ft. 6 in.)
E	Minimum Swing Radius	5.95 m (19 ft. 6 in.)	5.94 m (19 ft. 6 in.)	5.94 m (19 ft. 6 in.)	5.21 m (17 ft. 1 in.)	7.35 m (24 ft. 1 in.)
F	Maximum Vertical Wall	7.17 m (23 ft. 6 in.)	8.48 m (27 ft. 10 in.)	9.75 m (32 ft. 0 in.)	4.10 m (13 ft. 5 in.)	9.87 m (32 ft. 5 in.)
G	Tail-Swing Radius	4.60 m (15 ft. 1 in.)	4.60 m (15 ft. 1 in.)	4.60 m (15 ft. 1 in.)	4.60 m (15 ft. 1 in.)	4.60 m (15 ft. 1 in.)

Machine Dimensions 870G LC

A Overall Length with Arm	
3.7 m (12 ft. 2 in.)	14.88 m (48 ft. 10 in.)
4.4 m (14 ft. 5 in.)	14.80 m (48 ft. 7 in.)
5.4 m (17 ft. 9 in.)	14.65 m (48 ft. 1 in.)
2.95-m (9 ft. 8 in.) Mass Excavating with Mass-Excavating Boom	13.55 m (44 ft. 5 in.)
B Overall Height with Arm	
3.7 m (12 ft. 2 in.)	4.77 m (15 ft. 8 in.)
4.4 m (14 ft. 5 in.)	5.13 m (16 ft. 10 in.)
5.4 m (17 ft. 9 in.)	5.76 m (18 ft. 11 in.)
2.95-m (9 ft. 8 in.) Mass Excavating with Mass-Excavating Boom	5.20 m (17 ft. 1 in.)
C Rear-End Length/Swing Radius	4.54 m (14 ft. 11 in.)
D Distance Between Idler/Sprocket Centerline	5.11 m (16 ft. 9 in.)
E Undercarriage Length	6.36 m (20 ft. 10 in.)
F Counterweight Clearance	1.68 m (5 ft. 6 in.)
G Upperstructure Width	4.12 m (13 ft. 6 in.)
H Cab Height	3.69 m (12 ft. 1 in.)
I Track Width with Double-Bar Grouser Shoes	650 mm (26 in.) / 750 mm (30 in.) / 900 mm (36 in.) / 1020 mm (40 in.)
J Gauge Width	
Operating Position	3.45 m (11 ft. 4 in.)
Transport Position	2.83 m (9 ft. 3 in.)
K Ground Clearance	0.89 m (35 in.)
L Overall Width with 900-mm (36 in.) Double-Bar Grouser Shoes	
Operating Position	4.35 m (14 ft. 3 in.)
Transport Position	3.73 m (12 ft. 3 in.)

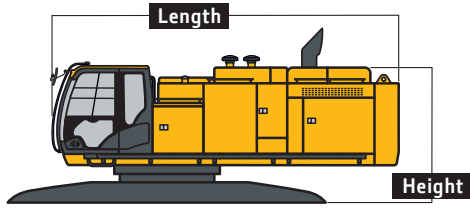


Packing Dimensions and Weights For Transportation

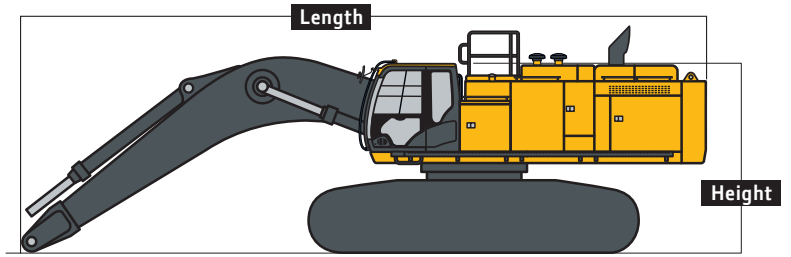
	Length	Height	Overall Width	Weight
Base Machine (without front attachment and side frame)*	6.04 m (19 ft. 10 in.)	3.49 m (11 ft. 5 in.)	3.39 m (11 ft. 1 in.)	27 400 kg (60,407 lb.)
Side Frame**				
650-mm (26 in.) Shoe Width	6.36 m (20 ft. 10 in.)	1.50 m (4 ft. 11 in.)	1.30 m (4 ft. 3 in.)	12 100 kg (26,676 lb.)
750-mm (30 in.) Shoe Width	6.36 m (20 ft. 10 in.)	1.50 m (4 ft. 11 in.)	1.33 m (4 ft. 4 in.)	12 500 kg (27,558 lb.)
900-mm (36 in.) Shoe Width	6.36 m (20 ft. 10 in.)	1.50 m (4 ft. 11 in.)	1.43 m (4 ft. 8 in.)	12 890 kg (28,418 lb.)
1020-mm (40 in.) Shoe Width	6.36 m (20 ft. 10 in.)	1.50 m (4 ft. 11 in.)	1.45 m (4 ft. 9 in.)	13 320 kg (29,366 lb.)
Counterweight, Standard	3.36 m (11 ft. 0 in.)	1.62 m (5 ft. 4 in.)	0.72 m (28 in.)	13 300 kg (29,321 lb.)
Boom				
7.1 m (23 ft. 4 in.)	7.49 m (24 ft. 7 in.)	2.70 m (8 ft. 10 in.)	1.45 m (4 ft. 9 in.)	7670 kg (16,909 lb.)
8.4 m (27 ft. 7 in.)	8.78 m (28 ft. 10 in.)	2.50 m (8 ft. 2 in.)	1.45 m (4 ft. 9 in.)	8200 kg (18,078 lb.)
10.0 m (32 ft. 10 in.)	10.37 m (34 ft. 0 in.)	2.70 m (8 ft. 10 in.)	1.45 m (4 ft. 9 in.)	9390 kg (20,701 lb.)
Arm				
2.95 m (9 ft. 8 in.)	4.46 m (14 ft. 8 in.)	1.66 m (5 ft. 5 in.)	0.85 m (33 in.)	4650 kg (10,251 lb.)
3.7 m (12 ft. 2 in.)	5.29 m (17 ft. 4 in.)	1.42 m (4 ft. 8 in.)	0.82 m (32 in.)	4330 kg (9,546 lb.)
4.4 m (14 ft. 5 in.)	5.88 m (19 ft. 3 in.)	1.42 m (4 ft. 8 in.)	0.82 m (32 in.)	4660 kg (10,274 lb.)
5.4 m (17 ft. 9 in.)	6.83 m (22 ft. 5 in.)	1.48 m (4 ft. 10 in.)	0.80 m (31 in.)	4950 kg (10,913 lb.)
Less Arm and Counterweight	7.08 m (23 ft. 3 in.)	4.41 m (14 ft. 6 in.) / 3.39 m (11 ft. 1 in.) without exhaust stack	3.60 m (11 ft. 10 in.)	51 800 kg (114,199 lb.) with 650-mm (26 in.) shoes / 52 500 kg (115,743 lb.) with 750-mm (30 in.) shoes

*Steps on the track frame and the side hydraulic oil tank, handrails on the upper battery box, upper fuel tank, and the side hydraulic oil tank must be removed to comply with the overall width dimensions above.

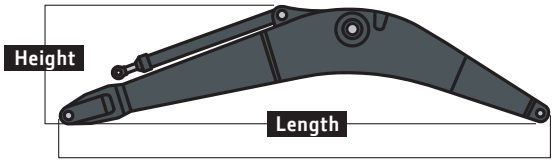
**The dimensions and the weights indicate those of one side frame.



Base Machine



Less Counterweight and Arm



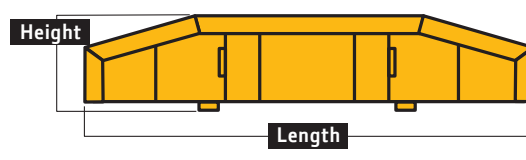
Boom



Arm



Side Frame



Counterweight

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 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 ISO 10567 (with power boost).

Load Point Height	3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)		9.0 m (30 ft.)		10.5 m (35 ft.)		12.0 m (40 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	Over Front	Over Side	Over Front	Over Side
<i>With 2.9-m³ (3.79 cu. yd.) bucket, 4.4-m (14 ft. 5 in.) arm, 8.4-m (27 ft. 7 in.) boom, and 650-mm (26 in.) double-bar grouser shoes</i>														
9.0 m (30 ft.)											10 017	10 017		
											(19,446)	(19,446)		
7.5 m (25 ft.)									13 533	13 533	12 668	12 546		
									(29,445)	(29,445)	(26,635)	(26,635)		
6.0 m (20 ft.)							16 971	16 971	14 840	14 840	13 489	12 255	9301	9288
							(36,623)	(36,623)	(32,179)	(32,179)	(29,365)	(26,246)	(16,454)	(16,454)
4.5 m (15 ft.)			25 251	25 251	19 607	19 607	16 415	15 519	14 422	11 822	11 997	9110		
			(54,124)	(54,124)	(42,254)	(42,254)	(35,518)	(33,378)	(31,321)	(25,362)	(23,411)	(19,434)		
3.0 m (10 ft.)			29 592	28 023	22 176	19 817	18 010	14 781	15 403	11 363	13 674	8875		
			(63,589)	(60,425)	(47,813)	(42,693)	(38,942)	(31,795)	(33,396)	(24,389)	(27,728)	(18,968)		
1.5 m (5 ft.)			28 893	26 575	24 195	18 846	19 362	14 143	16 260	10 951	13 846	8631		
			(69,872)	(57,214)	(52,236)	(40,574)	(41,869)	(30,416)	(35,217)	(23,508)	(29,651)	(18,483)		
Ground Line			28 793	25 831	25 383	18 201	20 259	13 672	16 821	10 634	13 656	8454		
			(68,029)	(55,531)	(54,873)	(39,155)	(43,815)	(29,394)	(36,393)	(22,832)	(26,766)	(18,128)		
-1.5 m (-5 ft.)			16 350	16 350	33 262	25,555	25 660	17 863	20 543	13 394	16 806	10 449		
			(37,551)	(37,551)	(72,025)	(54,895)	(55,505)	(38,407)	(44,412)	(28,791)	(36,123)	(22,446)		
-3.0 m (-10 ft.)	16 528	16 528	24 952	24 952	31 886	25 594	24 981	17 787	20 048	13 315	16 234	10 432		
	(37,406)	(37,406)	(57,056)	(57,056)	(69,029)	(54,968)	(53,997)	(38,243)	(43,253)	(28,633)	(34,820)	(22,447)		
-4.5 m (-15 ft.)	25 416	25 416	36 206	36 206	29 279	25 896	23 165	17 955	18 445	13 459				
	(57,577)	(57,577)	(81,680)	(81,680)	(63,219)	(55,642)	(49,890)	(38,630)	(39,501)	(28,987)				
-6.0 m (-20 ft.)			31 730	31 730	24 964	24 964	19 636	18 414						
			(68,104)	(68,104)	(53,446)	(53,446)	(41,734)	(39,695)						

Lift Capacities (continued) 870G LC

Boldface type indicates hydraulically limited capacity; **lightface type** indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 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 ISO 10567 (with power boost).

Load Point Height	3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)		9.0 m (30 ft.)		10.5 m (35 ft.)		12.0 m (40 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	Over Front	Over Side	Over Front	Over Side
<i>With 4.5-m³ (5.89 cu. yd.) bucket, 2.95-m (9 ft. 8 in.) BE arm, 7.1-m (23 ft. 4 in.) BE boom, and 650-mm (26 in.) double-bar grouser shoes</i>														
7.5 m (25 ft.)							18 586	18 586						
							(40,535)	(40,535)						
6.0 m (20 ft.)					24 030	24 030	20 180	20 180	17 955	15 295				
					(51,762)	(51,762)	(43,741)	(43,741)	(39,197)	(32,640)				
4.5 m (15 ft.)					28 171	28 171	22 238	20 727	18 941	14 949				
					(60,565)	(60,565)	(48,083)	(44,569)	(41,121)	(32,000)				
3.0 m (10 ft.)					31 893	28 423	24 273	19 742	19 970	14 436				
					(68,676)	(61,194)	(52,446)	(42,457)	(43,285)	(30,974)				
1.5 m (5 ft.)					33 940	27 185	25 677	18 944	20 662	13 961				
					(73,303)	(58,454)	(55,503)	(40,722)	(44,705)	(29,963)				
Ground Line					34 060	26 550	26,028	18 430	20 609	13 643				
					(73,723)	(57,025)	(56,274)	(39,600)	(44,450)	(29,293)				
-1.5 m (-5 ft.)			37 404	37 404	32 417	26 358	24 990	18 223						
			(86,602)	(86,602)	(70,176)	(56,585)	(53,930)	(39,155)						
-3.0 m (-10 ft.)	37 120	37 120	37 087	37 087	28 747	26 539	21 817	18 368						
	(84,432)	(84,432)	(80,338)	(80,338)	(61,986)	(56,992)	(46,554)	(39,521)						
<i>With 2.9-m³ (3.79 cu. yd.) bucket, 4.4-m (14 ft. 5 in.) arm, 8.4-m (27 ft. 7 in.) boom, and 750-mm (30 in.) double-bar grouser shoes</i>														
9.0 m (30 ft.)											10 017	10 017		
											(19,446)	(19,446)		
7.5 m (25 ft.)									13 533	13 533	12 668	12 662		
									(29,445)	(29,445)	(26,635)	(26,635)		
6.0 m (20 ft.)							16 971	16 971	14 840	14 840	13 489	12 370	9301	9301
							(36,623)	(36,623)	(32,179)	(32,179)	(29,365)	(26,496)	(16,454)	(16,454)
4.5 m (15 ft.)					25 251	25 251	19 607	16 415	15 659	14 422	11 938	11 997	9209	9209
					(54,124)	(54,124)	(42,254)	(42,254)	(35,518)	(33,681)	(31,321)	(25,612)	(23,411)	(19,647)
3.0 m (10 ft.)					29 592	28 265	22 176	19 994	18 010	14 921	15 403	11 479	13 674	8974
					(63,589)	(60,945)	(47,813)	(43,076)	(38,942)	(32,097)	(33,396)	(24,639)	(27,728)	(19,181)
1.5 m (5 ft.)					28 893	26 816	24 195	19 023	19 362	14 283	16 260	11 066	13 991	8730
					(69,872)	(57,734)	(52,236)	(40,957)	(41,869)	(30,718)	(35,217)	(23,758)	(29,651)	(18,697)
Ground Line					28 793	26 072	25 383	18 378	20 259	13 812	16 821	10 750	13 801	8552
					(68,029)	(56,051)	(54,873)	(39,537)	(43,815)	(29,696)	(36,393)	(23,082)	(26,766)	(18,341)
-1.5 m (-5 ft.)			16 350	16 350	33 262	25 797	25 660	18 040	20 543	13 534	16 905	10 564		
			(37,551)	(37,551)	(72,025)	(55,415)	(55,505)	(38,790)	(44,412)	(29,094)	(36,496)	(22,696)		
-3.0 m (-10 ft.)	16 528	16 528	24 952	24 952	31 886	25 835	24 981	17 964	20 048	13 455	16 234	10 548		
	(37,406)	(37,406)	(57,056)	(57,056)	(69,029)	(55,489)	(53,997)	(38,625)	(43,253)	(28,936)	(34,820)	(22,697)		
-4.5 m (-15 ft.)	25 416	25 416	36 206	36 206	29 279	26 138	23 165	18 132	18 445	13 599				
	(57,577)	(57,577)	(81,680)	(81,680)	(63,219)	(56,162)	(49,890)	(39,012)	(39,501)	(29,289)				
-6.0 m (-20 ft.)			31 730	31 730	24 964	24 964	19 636	18 591						
			(68,104)	(68,104)	(53,446)	(53,446)	(41,734)	(40,078)						
<i>With 3.5-m³ (4.58 cu. yd.) bucket, 3.7-m (12 ft. 2 in.) arm, 8.4-m (27 ft. 7 in.) boom, and 900-mm (36 in.) double-bar grouser shoes</i>														
9.0 m (30 ft.)									13 883	13 883				
									(30,445)	(30,445)				
7.5 m (25 ft.)									14 650	14 650	13 097	12 403		
									(31,872)	(31,872)	(25,048)	(25,048)		
6.0 m (20 ft.)					22 867	22 867	18 428	18 428	15 885	15 885	14 331	12 206		
					(48,972)	(48,972)	(39,742)	(39,742)	(34,438)	(34,438)	(31,213)	(26,116)		
4.5 m (15 ft.)					27 613	27 613	20 981	20 942	17 362	15 521	15 159	11 849		
					(59,131)	(59,131)	(45,194)	(45,132)	(37,560)	(33,384)	(32,927)	(25,416)		
3.0 m (10 ft.)					31 519	27 885	23 337	19 847	18 811	14 858	16 005	11 450		
					(67,721)	(60,141)	(50,308)	(42,764)	(40,667)	(31,963)	(34,698)	(24,576)		
1.5 m (5 ft.)					25 408	25 408	25 009	19 031	19 954	14 310	16 691	11 103		
					(61,704)	(57,717)	(53,998)	(40,974)	(43,142)	(30,777)	(36,137)	(23,838)		
Ground Line					29 583	26 386	25 770	18 542	20 579	13 934	17 019	10 858		
					(69,892)	(56,704)	(55,722)	(39,887)	(44,499)	(29,959)	(36,789)	(23,320)		
-1.5 m (-5 ft.)			18 560	18 560	32 751	26 313	25 587	18 338	20 522	13 749	16 753	10 755		
			(42,711)	(42,711)	(70,992)	(56,510)	(55,356)	(39,429)	(44,342)	(29,561)	(36,067)	(23,121)		
-3.0 m (-10 ft.)	20 695	20 695	30 186	30 186	30 768	26 486	24 398	18 375	19 560	13 767				
	(46,802)	(46,802)	(69,025)	(69,025)	(66,644)	(56,882)	(52,716)	(39,513)	(42,114)	(29,620)				
-4.5 m (-15 ft.)			34 430	34 430	27 474	26 903	21 900	18 657	17 089	14 047				
			(74,510)	(74,510)	(59,278)	(57,812)	(47,044)	(40,158)	(36,205)	(30,306)				
-6.0 m (-20 ft.)			27 445	27 445	22 087	22 087	16 999	16 999						
			(58,692)	(58,692)	(46,986)	(46,986)	(35,451)	(35,451)						

Lift Capacities (continued) 870G LC

Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 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 ISO 10567 (with power boost).

Load Point Height	3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)		9.0 m (30 ft.)		10.5 m (35 ft.)		12.0 m (40 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	Over Front	Over Side	Over Front	Over Side	
<i>With 2.0-m³ (2.63 cu. yd.) bucket, 4.4-m (14 ft. 5 in.) arm, 10.0-m (32 ft. 10 in.) boom, and 900-mm (36 in.) double-bar grouser shoes</i>															
9.0 m (30 ft.)												10 151	10 151	9756	9756
												(22,132)	(22,132)	(21,446)	(21,283)
7.5 m (25 ft.)												10 899	10 899	10 132	9810
												(23,662)	(23,662)	(22,105)	(20,957)
6.0 m (20 ft.)							16 521	16 521	13 630	13 630		11 858	11 858	10 724	9483
							(35,416)	(35,416)	(29,377)	(29,377)		(25,670)	(25,670)	(23,319)	(20,312)
4.5 m (15 ft.)							19 241	19 241	15 295	14 885		12 932	11 545	11 408	9083
							(41,259)	(41,259)	(32,945)	(32,099)		(27,955)	(24,832)	(24,750)	(19,473)
3.0 m (10 ft.)							21 599	18 293	16 856	13 987		13 985	10 947	12 110	8686
							(46,412)	(39,516)	(36,327)	(30,155)		(30,219)	(23,547)	(26,236)	(18,631)
1.5 m (5 ft.)							23 185	17 376	18 103	13 284		14 889	10 443	12 734	8338
							(49,966)	(37,469)	(39,061)	(28,616)		(32,178)	(22,456)	(27,568)	(17,886)
Ground Line							23 959	16 880	18 919	12 809		15 545	10 069	13 194	8070
							(51,762)	(36,337)	(40,872)	(27,567)		(33,604)	(21,642)	(28,545)	(17,314)
-1.5 m (-5 ft.)					13 348	13 348	24 068	16 677	19 267	12 546		15 876	9839	13 200	7905
					(31,421)	(31,421)	(52,075)	(35,861)	(41,656)	(26,983)		(34,317)	(21,143)	(28,378)	(16,969)
-3.0 m (-10 ft.)			11 968	11 968	20 969	20 969	23 609	16 679	19 127	12 468		15 807	9756	13 157	7865
			(27,635)	(27,635)	(48,643)	(48,643)	(51,101)	(35,853)	(41,349)	(26,809)		(34,134)	(20,971)	(28,313)	(16,908)
-4.5 m (-15 ft.)	15 257	15 257	20 145	20 145	27 964	24 512	22 563	16 854	18 433	12 559		15 212	9830	12 437	7999
	(34,672)	(34,672)	(46,108)	(46,108)	(60,593)	(52,631)	(48,786)	(36,239)	(39,781)	(27,018)		(32,732)	(21,158)	(26,419)	(17,278)
-6.0 m (-20 ft.)	23 304	23 304	29 883	29 883	25 525	25 021	20 774	17 210	16 994	12 835		13 757	10 112		
	(52,949)	(52,949)	(68,530)	(68,530)	(55,119)	(53,772)	(44,755)	(37,042)	(36,475)	(27,657)		(29,212)	(21,846)		
-7.5 m (-25 ft.)			26 926	26 926	21 895	21 895	17 842	17 809	14 240	13 388					
			(57,739)	(57,739)	(46,867)	(46,867)	(38,010)	(38,010)	(29,895)	(28,975)					

With 1.9-m³ (2.48 cu. yd.) bucket, 5.4-m (17 ft. 9 in.) arm, 10.0-m (32 ft. 10 in.) boom, and 900-mm (36 in.) double-bar grouser shoes

9.0 m (30 ft.)															8717	8717
															(19,090)	(19,090)
7.5 m (25 ft.)												9858	9858	9221	9221	
												(21,398)	(21,398)	(20,090)	(20,090)	
6.0 m (20 ft.)										12 358	12 358	10 883	10 883	9892	9883	
										(26,649)	(26,649)	(23,559)	(23,559)	(21,494)	(21,173)	
4.5 m (15 ft.)							17 395	17 395	14 090	14 090	12 034	12 029	10 666	9437		
							(37,340)	(37,340)	(30,365)	(30,365)	(26,017)	(25,866)	(23,130)	(20,232)		
3.0 m (10 ft.)							19 975	19 183	15 787	14 568		13 193	11 355	11 466	8984	
							(42,948)	(41,424)	(34,036)	(31,400)		(28,512)	(24,419)	(24,838)	(19,267)	
1.5 m (5 ft.)							21 992	17 948	17 249	13 708		14 242	10 756	12 211	8568	
							(47,391)	(38,713)	(37,224)	(29,529)		(30,782)	(23,125)	(26,435)	(18,377)	
Ground Line							23 285	17 153	18 341	13 069		15 081	10 278	12 822	8225	
							(22,849)	(36,945)	(40,435)	(28,131)		(39,622)	(22,091)	(32,606)	(17,641)	
-1.5 m (-5 ft.)					13 383	13 383	23 894	16 721	19 000	12 658		15 636	9945	13 228	7979	
					(31,212)	(31,212)	(51,669)	(35,977)	(41,078)	(27,228)		(33,810)	(21,368)	(28,555)	(17,115)	
-3.0 m (-10 ft.)			10 774	10 774	18 566	18 566	23 900	16 561	19 202	12 453		15 846	9761	13 146	7846	
			(24,721)	(24,721)	(42,934)	(42,934)	(51,712)	(35,613)	(41,521)	(26,778)		(34,245)	(20,975)	(28,263)	(16,843)	
-4.5 m (-15 ft.)	12 312	12 312	16 579	16 579	25 346	23 979	23 325	16 614	18 907	12 431		15 628	9730	13 057	7847	
	(27,934)	(27,934)	(37,876)	(37,876)	(58,533)	(51,509)	(50,442)	(35,729)	(40,845)	(26,738)		(33,711)	(20,922)	(28,068)	(16,876)	
-6.0 m (-20 ft.)	18 197	18 197	23 583	23 583	27 626	24 408	22 096	16 860	18 010	12 589		14 823	9866	12 050	8033	
	(41,299)	(41,299)	(53,952)	(53,952)	(59,688)	(52,460)	(47,677)	(36,283)	(38,788)	(27,105)		(31,805)	(21,255)	(25,492)	(17,363)	
-7.5 m (-25 ft.)	25 375	25 375	31 576	31 576	24 810	24 810	19 994	17 319	16 247	12 957		13 000	10 237			
	(57,797)	(57,797)	(67,916)	(67,916)	(53,324)	(53,324)	(42,882)	(37,325)	(34,683)	(27,960)		(27,337)	(22,163)			
-9.0 m (-30 ft.)			25 770	25 770	20 524	20 524	16 466	16 466	12 798	12 798						
			(54,676)	(54,676)	(43,483)	(43,483)	(34,644)	(34,644)	(26,223)	(26,223)						

Buckets

A full line of buckets is offered to meet a wide variety of applications. Digging forces are with power boost. Tooth selection includes the John Deere Fanggs™ Standard, Tiger, Twin Tiger, Abrasion panel, or Flare tooth. Replaceable cutting edges and a variety of teeth are available through John Deere Parts. Optional side cutters add 150 mm (6 in.) to bucket widths. Capacities are SAE heaped ratings.

Type Bucket	Bucket Width		Bucket Capacity		Bucket Weight		Bucket Dig Force (SAE)		Bucket Dig Force (ISO)		Arm Dig Force 4.4 m (14 ft. 5 in.) (SAE)		Arm Dig Force 4.4 m (14 ft. 5 in.) (ISO)		Arm Dig Force 5.4 m (17 ft. 9 in.) (SAE)		Arm Dig Force 5.4 m (17 ft. 9 in.) (ISO)		ME Arm Dig Force 2.95 m (9 ft. 8 in.) (SAE)	
	mm	in.	m³	cu. yd.	kg	lb.	kN	lb.	kN	lb.	kN	lb.	kN	lb.	kN	lb.	kN	lb.	kN	lb.
Heavy Duty High Capacity	914	36	2.09	2.7	2767	6,100	360	80,973	369	82,855	264	59,251	270	60,770	230	51,673	236	52,981	361	81,247
	1067	42	2.55	3.3	2972	6,552	360	80,973	369	82,855	264	59,251	270	60,770	230	51,673	236	52,981	361	81,247
	1219	48	3.02	3.9	3177	7,004	360	80,973	369	82,855	264	59,251	270	60,770	230	51,673	236	52,981	361	81,247
	1370	54	3.49	4.6	3558	7,844	360	80,973	369	82,855	264	59,251	270	60,770	230	51,673	236	52,981	361	81,247
	1524	60	3.98	5.2	3572	7,875	360	80,973	369	82,855	264	59,251	270	60,770	230	51,673	236	52,981	361	81,247
Heavy Capacity Dirt	1829	72	4.96	6.5	3786	8,346	360	80,973	369	82,855	264	59,251	270	60,770	230	51,673	236	52,981	361	81,247
	2032	80	5.63	7.4	4519	9,963	360	80,973	369	82,855	264	59,251	270	60,770	230	51,673	236	52,981	361	81,247
	2286	90	5.81	7.6	4296	9,471	341	76,746	379	85,298	268	60,338	275	61,885	275	61,782	307	69,050	370	83,150
	914	36	1.51	2.0	2510	5,534	372	83,647	414	92,967	276	62,098	283	63,691	300	67,336	335	75,259	384	86,270
	1067	42	1.86	2.4	2761	6,087	372	83,647	414	92,967	276	62,098	283	63,691	300	67,336	335	75,259	384	86,270
Truck Loading	1219	48	2.22	2.9	2935	6,471	372	83,647	414	92,967	276	62,098	283	63,691	300	67,336	335	75,259	384	86,270
	1370	54	2.58	3.4	3091	6,814	372	83,647	414	92,967	276	62,098	283	63,691	300	67,336	335	75,259	384	86,270
	1524	60	2.95	3.9	3232	7,125	372	83,647	414	92,967	276	62,098	283	63,691	300	67,336	335	75,259	384	86,270
	2134	84	4.21	5.5	3285	7,242	363	81,638	404	90,735	274	61,607	281	63,186	238	53,456	244	54,809	380	85,393
	2337	92	4.63	6.0	3598	7,932	363	81,638	404	90,735	274	61,607	281	63,186	238	53,456	244	54,809	380	85,393

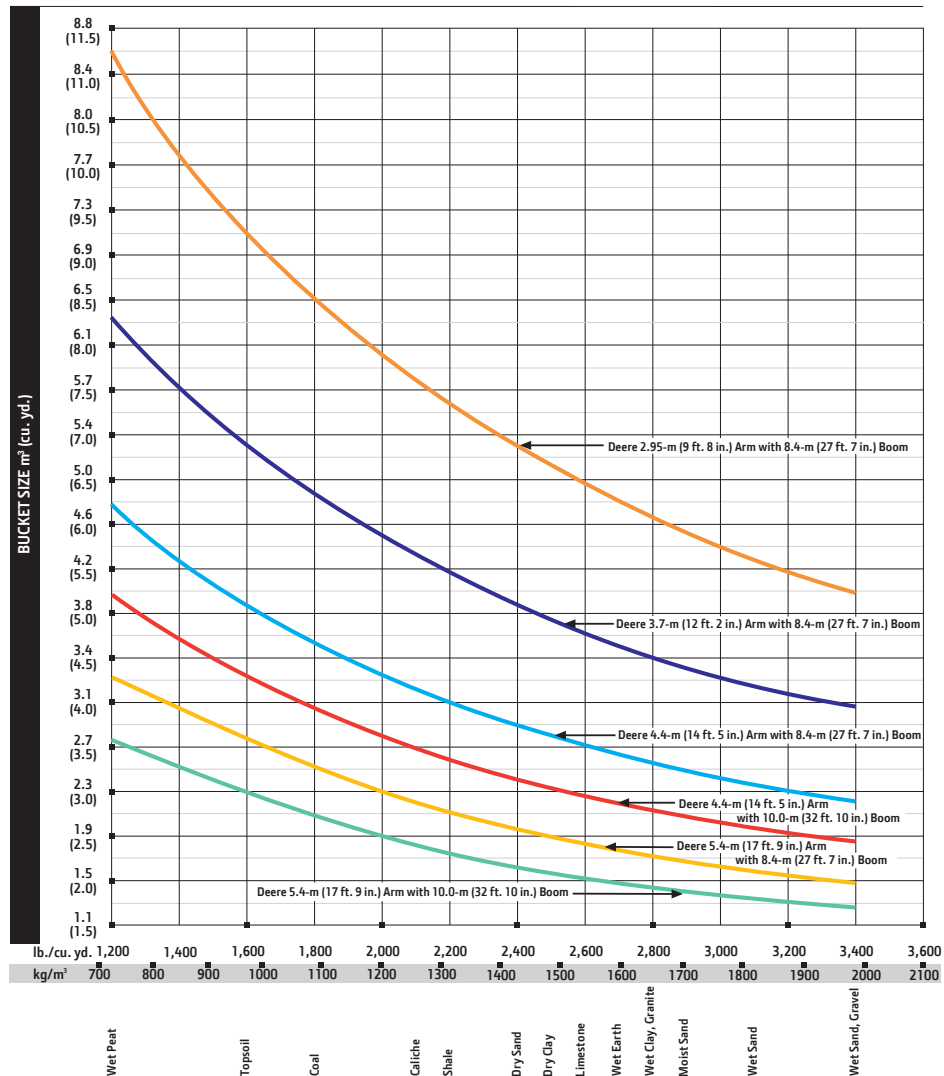
Lift Capacities (continued) 870G LC

Boldface type indicates hydraulically limited capacity; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 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 ISO 10567 (with power boost).

Load Point Height	3.0 m (10 ft.)		4.5 m (15 ft.)		6.0 m (20 ft.)		7.5 m (25 ft.)		9.0 m (30 ft.)		10.5 m (35 ft.)		12.0 m (40 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	Over Front	Over Side	Over Front	Over Side
With 2.0-m ³ (2.63 cu. yd.) bucket, 4-4-m (14 ft. 5 in.) arm, 10.0-m (32 ft. 10 in.) boom, and 1020-mm (40 in.) double-bar grouser shoes														
9.0 m (30 ft.)											10 151 (22,131)	10 151 (22,131)	9756 (21,445)	9756 (21,445)
7.5 m (25 ft.)											10 899 (23,662)	10 899 (23,662)	10 132 (22,105)	9922 (21,199)
6.0 m (20 ft.)							16 521 (35,416)	16 521 (35,416)	13 630 (29,377)	13 630 (29,377)	11 858 (25,670)	11 858 (25,670)	10 724 (23,319)	9595 (20,555)
4.5 m (15 ft.)							19 241 (41,259)	19 241 (41,259)	15 295 (32,945)	15 044 (32,443)	12 932 (27,955)	11 676 (25,116)	11 408 (24,750)	9195 (19,715)
3.0 m (10 ft.)							21 599 (46,412)	18 494 (39,951)	16 856 (36,327)	14 146 (30,499)	13 985 (30,219)	11 079 (23,832)	12 110 (26,236)	8798 (18,873)
1.5 m (5 ft.)							23 185 (49,966)	17 577 (37,903)	18 103 (39,061)	13 443 (28,959)	14 889 (32,178)	10 574 (22,740)	12 734 (27,568)	8450 (18,129)
Ground Line							23 959 (51,762)	17 081 (36,772)	18 919 (40,872)	12 968 (27,910)	15 545 (33,604)	10 200 (21,927)	13 194 (28,545)	8182 (17,556)
-1.5 m (-5 ft.)					13 350 (31,425)	13 350 (31,425)	24 068 (52,075)	16 878 (36,296)	19 267 (41,656)	12 705 (27,326)	15 876 (34,317)	9970 (21,427)	13 361 (28,727)	8017 (17,211)
-3.0 m (-10 ft.)			11 969 (27,636)	11 969 (27,636)	20 973 (48,661)	20 973 (48,661)	23 609 (51,101)	16 880 (36,288)	19 127 (41,349)	12 626 (27,152)	15 807 (34,134)	9887 (21,255)	13 242 (28,514)	7977 (17,151)
-4.5 m (-15 ft.)	15 257 (34,673)	15 257 (34,673)	20 145 (46,118)	20 145 (46,118)	27 964 (60,593)	24 787 (53,222)	22 563 (48,786)	17 055 (36,674)	18 433 (39,781)	12 717 (27,362)	15 212 (32,732)	9961 (21,442)	12 437 (26,419)	8111 (17,521)
-6.0 m (-20 ft.)	23 308 (52,949)	23 308 (52,949)	29 885 (68,516)	29 885 (68,516)	25 525 (55,119)	25 296 (54,363)	20 774 (44,755)	17 411 (37,477)	16 994 (36,475)	12 994 (28,000)	13 757 (29,212)	10 243 (22,130)		
-7.5 m (-25 ft.)			26 926 (57,739)	26 926 (57,739)	21 895 (46,867)	21 895 (46,867)	17 842 (38,010)	17 842 (38,010)	14 240 (29,895)	13 547 (29,319)				

Bucket Selection Guide*

	ME Arm Dig Force 2.95 m (9 ft. 8 in.) (ISO)		Bucket Tip Radius		Number of Teeth
	kN	lb.	mm	in.	
	377	84,686	2426	95.53	3
	377	84,686	2426	95.53	4
	377	84,686	2426	95.53	4
	377	84,686	2426	95.53	5
	377	84,686	2426	95.53	5
	377	84,686	2426	95.53	6
	377	84,686	2426	95.53	6
	386	86,669	2303	90.66	7
	400	89,922	2113	83.19	3
	400	89,922	2113	83.19	4
	400	89,922	2113	83.19	4
	400	89,922	2113	83.19	5
	400	89,922	2113	83.19	5
	396	89,008	2165	85.22	6
	396	89,008	2165	85.22	8



* 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.