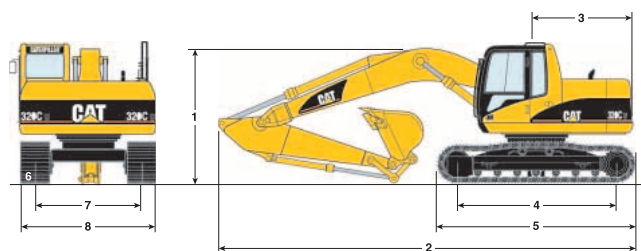


320C/320C L Utility Hydraulic Excavator

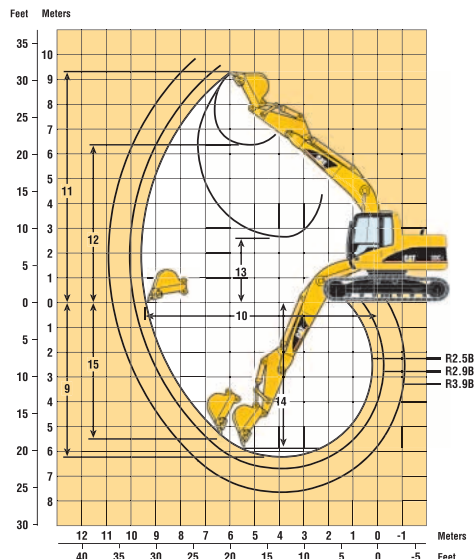
Dimensions

All dimensions are approximate.



Excavator Working Ranges

Reach (R) Boom configuration



Dimensions

Reach Boom 5.68 m (18'7")	R3.9B (12'8") Stick	R2.9B (9'7") Stick	R2.5B (8'2") Stick
1 Shipping height	3430 mm (11'3")	3010 mm (9'11")	3010 mm (9'11")
2 Shipping length: Standard	8710 mm (28'7")	8730 mm (28'8")	8750 mm (28'8")
Long	8900 mm (29'2")	8920 mm (29'3")	8940 mm (29'4")
3 Tail swing radius	2000 mm (6'7")	2000 mm (6'7")	2000 mm (6'7")
4 Length to center of rollers: Standard	3265 mm (10'9")	3265 mm (10'9")	3265 mm (10'9")
Long	3650 mm (12'0")	3650 mm (12'0")	3650 mm (12'0")
5 Track length: Standard	4075 mm (13'4")	4075 mm (13'4")	4075 mm (13'4")
Long	4455 mm (14'7")	4455 mm (14'7")	4455 mm (14'7")
6 Ground clearance	475 mm (1'7")	475 mm (1'7")	475 mm (1'7")
7 Track gauge: Standard	2200 mm (7'3")	2200 mm (7'3")	2200 mm (7'3")
Long	2380 mm (7'10")	2380 mm (7'10")	2380 mm (7'10")
8 Transport width	800 mm (32") shoes	700 mm (28") shoes	600 mm (24") shoes
Standard	3000 mm (9'10")	2900 mm (9'6")	2800 mm (9'2")
Long	3180 mm (10'5")	3080 mm (10'1")	2980 mm (9'9")

Working Ranges

Stick Length	R3.9B (12'8")	R2.9B (9'7")	R2.5B (8'2")
Bucket	1 m ³ (1.3 yd ³)	1 m ³ (1.3 yd ³)	1 m ³ (1.3 yd ³)
9 Maximum Digging Depth	7.66 m (25'1")	6.72 m (22'0")	6.33 m (20'9")
10 Maximum Reach at Ground Level	10.71 m (35'2")	9.86 m (32'4")	9.46 m (31'0")
11 Maximum Cutting Height	9.82 m (32'2")	9.49 m (31'1")	9.30 m (30'6")
12 Maximum Loading Height	6.85 m (22'5")	6.50 m (21'4")	6.30 m (20'8")
13 Minimum Loading Height	1.23 m (4'0")	2.17 m (7'11")	2.59 m (8'5")
14 Maximum Depth Cut for 2440 mm (8') Level Bottom	7.31 m (24'0")	6.37 m (20'10")	5.95 m (19'6")
15 Maximum Vertical Wall Digging Depth	6.86 m (22'6")	6.05 m (19'10")	5.65 m (18'6")

Weights

	320C U		320C LU	
Operating Weight	600 mm (24") Shoes		800 mm (32") Shoes	
Reach Boom	kg	lb	kg	lb
Stick Options: 3.9 m (12'8")	22 600	49,800	23 200	51,100
2.9 m (9'7")	22 300	49,200	23 000	50,700
2.5 m (8'2")	22 300	49,200	23 000	50,700

320C/320C L Utility Hydraulic Excavator

Bucket Specifications

320C Utility (Standard Undercarriage) and 320C L Utility (Long Undercarriage)

Contact your Caterpillar dealer for special bucket requirements.

B Buckets for Reach Linkage	Capacity*		Width		Tip Radius		Weight (without tips)		Teeth	320C – Reach Boom Stick			320C L – Reach Boom Stick		
	m³	yd³	mm	in	mm	in	kg	lb		R3.9B (12'8")	R2.9B (9'7")	R2.5B (8'2")	R3.9B (12'8")	R2.9B (9'7")	R2.5B (8'2")
General Purpose (GP)	0.70	0.88	775	30	1626	64.0	665	1463	4	●	●	●	●	●	●
	0.90	1.12	932	36	1626	64.0	741	1630	5	○	●	●	●	●	●
	1.10	1.50	1082	42	1626	64.0	777	1710	5	∴	○	◐	○	●	●
	1.30	1.75	1230	48	1626	64.0	907	1995	6	–	∴	○	∴	○	◐
Heavy Duty (HD)	0.45	0.62	625	24	1563	61.5	639	1405	3	●	●	●	●	●	●
	0.60	0.75	775	30	1563	61.5	691	1520	4	●	●	●	●	●	●
	0.80	1.00	932	36	1563	61.5	765	1683	5	◐	●	●	●	●	●
	1.00	1.25	1082	42	1563	61.5	814	1790	5	∴	◐	●	◐	●	●
	1.10	1.50	1230	48	1563	61.5	942	2072	6	–	○	○	∴	◐	●
	1.10	1.50	1230	48	1563	61.5	912	2007	6	–	○	○	∴	◐	●
	1.30	1.75	1377	54	1563	61.5	1003	2206	7	–	∴	∴	∴	○	◐
	1.30	1.75	1377	54	1563	61.5	968	2130	7	–	∴	○	∴	○	◐
	1.30	1.75	1377	54	1563	61.5	968	2130	7	–	∴	○	∴	○	◐
Power Bucket (PB)	0.83	1.09	932	36	1406	55.0	797	1757	5	○	●	●	◐	●	●
	1.00	1.31	1082	42	1406	55.0	863	1903	5	∴	◐	●	○	●	●
	1.17	1.53	1230	48	1406	55.0	936	2064	6	–	○	○	∴	◐	◐
Heavy Duty Rock (HDR)	0.45	0.62	625	24	1563	61.5	727	1600	3	●	●	●	●	●	●
	0.60	0.75	775	30	1563	61.5	845	1860	4	●	●	●	●	●	●
	0.80	1.00	932	36	1563	61.5	864	1900	5	○	●	●	●	●	●
	1.00	1.25	1082	42	1563	61.5	912	2006	5	∴	◐	●	◐	●	●
Ditch Cleaning (DC)	0.90	1.12	1422	56	1143	45.0	707	1555	0	◐	●	●	●	●	●
	1.10	1.50	1727	68	1143	45.0	786	1730	0	∴	○	◐	○	●	●

Assumptions for maximum material density rating:

1. Front linkage fully extended at ground line
2. Bucket curled
3. 100% bucket fill factor

* - Based on SAE J296, some calculations of capacity specs fall on borderlines. Rounding may allow two buckets to have the same English rating, but different metric ratings.

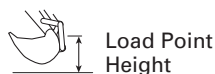
- 2100 kg/m³ (3,500 lbs/yd³) max material density
- ◐ 1800 kg/m³ (3,000 lbs/yd³) max material density
- 1500 kg/m³ (2,500 lbs/yd³) max material density
- ∴ 1200 kg/m³ (2,000 lbs/yd³) max material density

320C L Utility Bucket and Stick Forces

Power Buckets						
Stick	R3.9B (12'8")		R2.9B (9'7")		R2.5B (8'2")	
Bucket Digging Force (ISO)	159 kN	35,800 lb	159 kN	35,800 lb	159 kN	35,800 lb
Stick Digging Force (ISO)	86 kN	19,300 lb	103 kN	23,100 lb	117 kN	26,300 lb
Bucket Digging Force (SAE)	142 kN	31,800 lb	142 kN	31,800 lb	142 kN	31,800 lb
Stick Digging Force (SAE)	84 kN	18,900 lb	100 kN	22,400 lb	113 kN	25,400 lb
HD and HDR Buckets						
Stick	R3.9B (12'8")		R2.9B (9'7")		R2.5B (8'2")	
Bucket Digging Force (ISO)	145 kN	32,500 lb	145 kN	32,500 lb	145 kN	32,500 lb
Stick Digging Force (ISO)	84 kN	18,900 lb	100 kN	22,500 lb	113 kN	25,500 lb
Bucket Digging Force (SAE)	128 kN	28,900 lb	128 kN	28,900 lb	128 kN	28,900 lb
Stick Digging Force (SAE)	82 kN	18,500 lb	97 kN	21,800 lb	110 kN	24,600 lb

320C/320C L Utility Hydraulic Excavator

Reach Boom Lift Capacities



Load Point
Height



Load at
Maximum Reach



Load Radius
Over Front



Load Radius
Over Side

R2.9B STICK – 2900 mm (9'7")

BUCKET – 1.0 m³ (1.3 yd³)

UNDERCARRIAGE – Long

SHOES – 800 mm (32") triple grouser

BOOM – 5680 mm (18'7")

		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)				m ft
														
7.5 m 25.0 ft	kg lb											*1800 *3950	*1800 *3950	7.76 25.11
6.0 m 20.0 ft	kg lb									*3300 *7300	*3300 *7300	*1700 *3700	*1700 *3700	8.77 28.62
4.5 m 15.0 ft	kg lb							*4550 *9800	*4550 *9800	*4200 *9100	3250 6950	*1700 *3700	*1700 *3700	9.37 30.66
3.0 m 10.0 ft	kg lb			*11 250 *23,850	*11 250 *23,850	*6950 *14,900	*6950 *14,900	*5350 *11,550	4650 10,000	*4550 *9950	3150 6750	*1750 *3800	*1750 *3800	9.64 31.60
1.5 m 5.0 ft	kg lb					*8600 *18,550	6850 14,750	*6200 *13,400	4400 9450	*5000 *10,850	3050 6500	*1900 *4150	*1900 *4150	9.61 31.54
Ground Line	kg lb			*5200 *12,000	*5200 *12,000	*9600 *20,750	6500 13,950	*6850 *14,800	4200 9000	5100 10,900	2950 6300	*2150 *4700	2050 4450	9.30 30.50
-1.5 m -5.0 ft	kg lb	*5200 *11,600	*5200 *11,600	*8800 *20,050	*8800 *20,050	*9800 *21,200	6400 13,700	*7050 *15,250	4100 8800	5050 10,800	2900 6200	*2550 *5600	2300 5050	8.66 28.36
-3.0 m -10.0 ft	kg lb	*9150 *20,500	*9150 *20,500	*13 550 *29,250	12 800 27,350	*9250 *20,000	6400 13,750	*6750 *14,450	4100 8800			*3300 *7300	2900 6450	7.60 24.79
-4.5 m -15.0 ft	kg lb			*11 000 *23,550	*11 000 *23,550	*7700 *16,350	6600 14,200					*3900 *8650	*3900 *8650	5.97 19.59

* Limited by hydraulic capacity rather than tipping load. The above loads are in compliance with SAE hydraulic excavator lift capacity rating standard J1097. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. Weight of all lifting accessories must be deducted from the above lifting capacities.

R2.9B STICK – 2900 mm (9'7")

BUCKET – 1.0 m³ (1.3 yd³)

UNDERCARRIAGE – Standard

SHOES – 600 mm (24") triple grouser

BOOM – 5680 mm (18'7")

		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)				m ft
														
7.5 m 25.0 ft	kg lb											*1800 *3950	*1800 *3950	7.76 25.11
6.0 m 20.0 ft	kg lb									*3300 *7300	2900 6400	*1700 *3700	*1700 *3700	8.77 28.62
4.5 m 15.0 ft	kg lb							*4550 *9800	4250 9100	*4200 *9100	2800 5950	*1700 *3700	*1700 *3700	9.37 30.66
3.0 m 10.0 ft	kg lb			*11 250 *23,850	*11 250 *23,850	*6950 *14,900	6450 13,850	*5350 *11,550	4000 8600	4300 9250	2700 5750	*1750 *3800	1650 3650	9.64 31.60
1.5 m 5.0 ft	kg lb					*8600 *18,550	5850 12,650	6050 13,000	3750 8100	4200 9000	2600 5500	*1900 *4150	1600 3550	9.61 31.54
Ground Line	kg lb			*5200 *12,000	*5200 *12,000	9300 19,950	5550 11,850	5850 12,550	3600 7650	4100 8750	2500 5300	*2150 *4700	1700 3700	9.30 30.50
-1.5 m -5.0 ft	kg lb	*5200 *11,600	*5200 *11,600	*8800 *20,050	*8800 *20,050	9150 19,600	5400 11,600	5750 12,300	3500 7450	4050 8650	2450 5200	*2550 *5600	1900 4200	8.66 28.36
-3.0 m -10.0 ft	kg lb	*9150 *20,500	*9150 *20,500	*13 550 *29,250	10 700 22,900	9200 19,700	5450 11,650	5750 12,350	3500 7450			*3300 *7300	2450 5450	7.60 24.79
-4.5 m -15.0 ft	kg lb			*11 000 *23,550	*11 000 *23,550	*7700 *16,350	5600 12,100					*3900 *8650	3800 8300	5.97 19.59

* Limited by hydraulic capacity rather than tipping load. The above loads are in compliance with SAE hydraulic excavator lift capacity rating standard J1097. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. Weight of all lifting accessories must be deducted from the above lifting capacities.

320C/320C L Utility Hydraulic Excavator

Reach Boom Lift Capacities



Load Point
Height



Load at
Maximum Reach



Load Radius
Over Front



Load Radius
Over Side

R3.9B STICK – 3900 mm (12'8")
BUCKET – 1.0 m³ (1.3 yd³)

UNDERCARRIAGE – Long
SHOES – 800 mm (32") triple grouser

BOOM – 5680 mm (18'7")

		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)				m ft
7.5 m 25.0 ft	kg lb									*2550 *5550	*2550 *5550			*1400 *3050	*1400 *3050	8.83 28.69
6.0 m 20.0 ft	kg lb									*3100 *6800	*3100 *6800			*1300 *2850	*1300 *2850	9.71 31.72
4.5 m 15.0 ft	kg lb									*3450 *7500	3300 7000	*2400 *5300	2250 4950	*1300 *2850	*1300 *2850	10.24 33.54
3.0 m 10.0 ft	kg lb							*4450 *9650	*4450 *9650	*3900 *8500	3150 6750	*3100 *6050	2200 4600	*1350 *2950	*1350 *2950	10.48 34.38
1.5 m 5.0 ft	kg lb			*9200 *22,250	*9200 *22,250	*7400 *15,900	7000 15,050	*5450 *11,700	4400 9450	*4450 *9600	3000 6400	*3700 *7200	2100 4450	*1500 *3250	*1500 *3250	10.46 34.33
Ground Line	kg lb			*6500 *14,850	*6500 *14,850	*8800 *19,000	6500 13,900	*6250 *13,500	4150 8850	*4900 *10,650	2850 6100	3700 *6950	2050 4300	*1650 *3650	1600 3550	10.18 33.40
-1.5 m -5.0 ft	kg lb	*4400 *9800	*4400 *9800	*8200 *18,650	*8200 *18,650	*9500 *20,550	6200 13,300	*6750 *14,600	3950 8500	4900 10,500	2750 5900			*2000 *4350	1800 3950	9.61 31.50
-3.0 m -10.0 ft	kg lb	*7200 *16,100	*7200 *16,100	*11 450 *26,100	*11 450 *26,100	*9450 *20,450	6150 13,150	*6800 *14,650	3900 8350	4900 10,450	2750 5850			*2550 *5600	2150 4800	8.69 28.40
-4.5 m -15.0 ft	kg lb	*10 700 *24,100	*10 700 *24,100	*12 800 *27,500	12 550 26,900	*8600 *18,500	6250 13,400	*6150 *13,100	3950 8500					*3650 *8250	3000 6800	7.27 23.56
-6.0 m -20.0 ft	kg lb			*9400 *19,800	*9400 *19,800	*6350 *13,100	*6350 *13,100							*4800 *10,550	*4800 *10,550	5.37 17.15

* Limited by hydraulic capacity rather than tipping load. The above loads are in compliance with SAE hydraulic excavator lift capacity rating standard J1097. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. Weight of all lifting accessories must be deducted from the above lifting capacities.

R3.9B STICK – 3900 mm (12'8")
BUCKET – 1.0 m³ (1.3 yd³)

UNDERCARRIAGE – Standard
SHOES – 600 mm (24") triple grouser

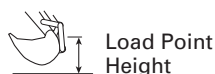
BOOM – 5680 mm (18'7")

		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)				m ft
7.5 m 25.0 ft	kg lb									*2550 *5550	*2550 *5550			*1400 *3050	*1400 *3050	8.83 28.69
6.0 m 20.0 ft	kg lb									*3100 *6800	*2950 6250			*1300 *2850	*1300 *2850	9.71 31.72
4.5 m 15.0 ft	kg lb									*3450 *7500	2800 6000	*2400 *5300	1900 4150	*1300 *2850	*1300 *2850	10.24 33.54
3.0 m 10.0 ft	kg lb							*4450 *9650	4100 8750	*3900 *8500	2700 5750	3050 *6050	1800 3800	*1350 *2950	1300 2850	10.48 34.38
1.5 m 5.0 ft	kg lb			*9200 *22,250	*9200 *22,250	*7400 *15,900	6000 12,900	*5450 *11,700	3750 8050	4150 8900	2550 5400	3000 6350	1750 3650	*1500 *3250	1250 2750	10.46 34.33
Ground Line	kg lb			*6500 *14,850	*6500 *14,850	*8800 *19,000	5500 11,800	5800 12,400	3500 7500	4000 8550	2400 5100	2900 6200	1650 3550	*1650 *3650	1300 2850	10.18 33.40
-1.5 m -5.0 ft	kg lb	*4400 *9800	*4400 *9800	*8200 *18,650	*8200 *18,650	9000 19,250	5250 11,200	5600 12,000	3350 7100	3900 8350	2300 4900			*2000 *4350	1450 3200	9.61 31.50
-3.0 m -10.0 ft	kg lb	*7200 *16,100	*7200 *16,100	*11 450 *26,100	10 200 21,850	8900 19,100	5150 11,050	5550 11,850	3250 7000	3850 8300	2250 4850			*2550 *5600	1800 3950	8.69 28.40
-4.5 m -15.0 ft	kg lb	*10 700 *24,100	*10 700 *24,100	*12 800 *27,500	10 450 22,450	*8600 *18,500	5250 11,300	5600 12,000	3350 7150					*3650 *8250	2550 5700	7.27 23.56
-6.0 m -20.0 ft	kg lb			*9400 *19,800	*9400 *19,800	*6350 *13,100	5550 11,950							*4800 *10,550	4250 9750	5.37 17.15

* Limited by hydraulic capacity rather than tipping load. The above loads are in compliance with SAE hydraulic excavator lift capacity rating standard J1097. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. Weight of all lifting accessories must be deducted from the above lifting capacities.

320C/320C L Utility Hydraulic Excavator

Reach Boom Lift Capacities



Load at
Maximum Reach



Load Radius
Over Front



Load Radius
Over Side

R2.5B STICK – 2500 mm (8'2")
BUCKET – 1.0 m³ (1.3 yd³)

UNDERCARRIAGE – Long
SHOES – 800 mm (32") triple grouser

BOOM – 5680 mm (18'7")

		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)				m ft
												
7.5 m 25.0 ft	kg lb									*2450 *5400	*2450 *5400	7.24 23.39
6.0 m 20.0 ft	kg lb					*4350 *9450	*4350 *9450			*2300 *5050	*2300 *5050	8.34 27.17
4.5 m 15.0 ft	kg lb					*4900 *10,600	*4850 10,350	*4450 *9700	3250 6900	*2300 *5000	*2300 *5000	8.97 29.34
3.0 m 10.0 ft	kg lb			*7500 *16,050	7300 15,700	*5650 *12,250	4600 10,350	*4800 *10,450	3150 6700	*2350 *5200	2150 4750	9.25 30.32
1.5 m 5.0 ft	kg lb			*9000 *19,400	6750 14,500	*6450 *13,950	4350 9350	*5200 11,100	3050 6450	*2550 *5600	2100 4600	9.22 30.27
Ground Line	kg lb			*9750 *21,100	6450 13,850	*7000 *15,100	4200 9000	5100 10,900	2950 6300	*2850 *6300	2200 4850	8.89 29.17
-1.5 m -5.0 ft	kg lb	*9150 *20,900	*9150 *20,900	*9750 *21,050	6400 13,700	*7050 *15,250	4100 8850	5050 11,150	2900 6400	*3400 *7500	2550 5600	8.21 26.90
-3.0 m -10.0 ft	kg lb	*12 700 *27,550	*12 700 *27,550	*8950 *19,350	6450 13,900	*6500 *13,900	4150 8950			*4350 *9450	3300 7350	7.07 23.04
-4.5 m -15.0 ft	kg lb	*9800 *20,850	*9800 *20,850	*6900 *14,550	6700 14,450					*5400 *11,800	5250 *11,800	5.32 17.16

* Limited by hydraulic capacity rather than tipping load. The above loads are in compliance with SAE hydraulic excavator lift capacity rating standard J1097. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. Weight of all lifting accessories must be deducted from the above lifting capacities.

R2.5B STICK – 2500 mm (8'2")
BUCKET – 1.0 m³ (1.3 yd³)

UNDERCARRIAGE – Standard
SHOES – 600 mm (24") triple grouser

BOOM – 5680 mm (18'7")

		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)				m ft
												
7.5 m 25.0 ft	kg lb									*2450 *5400	*2450 *5400	7.24 23.39
6.0 m 20.0 ft	kg lb					*4350 *9450	*4350 9300			*2300 *5050	*2300 *5050	8.34 27.17
4.5 m 15.0 ft	kg lb					*4900 *10,600	4200 8950	4400 9400	2750 5900	*2300 *5000	2000 4400	8.97 29.34
3.0 m 10.0 ft	kg lb			*7500 *16,050	6300 13,550	*5650 *12,250	3950 8500	4300 9150	2650 5700	*2350 *5200	1800 3950	9.25 30.32
1.5 m 5.0 ft	kg lb			*9000 *19,400	5750 12,400	6000 12,900	3750 8000	4200 8950	2550 5450	*2550 *5600	1750 3850	9.22 30.27
Ground Line	kg lb			9250 19,800	5450 11,750	5850 12,500	3550 7650	4100 8750	2500 5300	*2850 *6300	1850 4050	8.89 29.17
-1.5 m -5.0 ft	kg lb	*9150 *20,900	*9150 *20,900	9150 19,600	5400 11,600	5750 12,350	3500 7500	4050 8950	2450 5400	*3400 *7500	2150 4700	8.21 26.90
-3.0 m -10.0 ft	kg lb	*12 700 *27,550	10 800 23,100	*8950 *19,350	5500 11,800	5800 12,450	3550 7600			*4350 *9450	2800 6200	7.07 23.04
-4.5 m -15.0 ft	kg lb	*9800 *20,850	*9800 *20,850	*6900 *14,550	5750 12,350					*5400 *11,800	4450 10,150	5.32 17.16

* Limited by hydraulic capacity rather than tipping load. The above loads are in compliance with SAE hydraulic excavator lift capacity rating standard J1097. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. Weight of all lifting accessories must be deducted from the above lifting capacities.