

Liftcrane Boom Capacities

Boom No. 74A
101,400 lb Crane Counterweight
0 lb Carbody Counterweight
360 Degree Rating

MLC165-1
SERIES 1



LIFTING CAPACITIES: Lifting capacities for various boom lengths and operating radii are for freely suspended loads and may be based on percent of static tipping or strength of structural components.

Boom Backward Stability: A minimum of 4 parts hoist line is required for capacities denoted by (b), (c), and (d) for boom lengths 49.2 ft thru 98.4 ft. Capacities indicated by (b) require 3,000 lb minimum weight, (c) requires 7,500 lb minimum weight, and (d) requires 15,000 lb minimum weight.

Caution: Do not operate in areas indicated by (b), (c), or (d) without required minimum weights. Boom will not boom down and boom hoist wire rope may go slack causing wire rope damage or failure.

Upper boom point capacity for liftcrane service with single part whip line is 27,558 lb or 55,116 lb with two part whip line. When boom butt mounted auxiliary drum is used, capacity with single part whip line is 20,000 lb or 40,000 lb with two part whip line. In all cases, upper boom point capacities cannot exceed those listed for main boom capacity.

206.7 ft thru 236.2 ft boom lengths require only the middle three sheaves in lower boom point. All other sheaves must be removed from lower boom point.

Weight of upper boom point, jib, all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom and jib point sheaves, is considered part of main boom load. Boom is not to be lowered beyond radii where combined weights are greater than rated capacity. Where no capacity is shown, operation is not intended or approved.

OPERATING CONDITIONS: Machine to operate in a level position on a firm uniformly supporting surface. Refer to Boom Rigging **No. 81023602**, Wire Rope Specification chart **No. 9408-A**, and Wind Conditions chart **No. 9407-A**. Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, wind conditions, as well as adverse operating conditions and physical machine depreciation. Refer to Operator's Manual for operating guidelines.

MACHINE TRAVEL: Machine to travel on a firm, level, and uniformly supporting surface. Boom must be within boom angle range shown in capacity chart. Refer to Maximum Allowable Travel Specification chart **No. 9404-A**.



OPERATING RADIUS: Operating radius is horizontal distance from axis of rotation to center of vertical hoist line or load block.



BOOM ANGLE: Boom angle in degrees (°) is angle between horizontal and centerline of boom butt and inserts, and is an indication of operating radius. In all cases, operating radius shall govern capacity.



BOOM POINT ELEVATION: Boom point elevation is vertical distance from ground level to centerline of boom point shaft.

MACHINE EQUIPMENT: Machine equipped with 26 ft 2 in. crawlers, 43 in. treads, 23 ft 7 in. live mast, 18 part boom hoist reeving, boom support straps, 101,400 lb crane counterweight, and 0 lb carbody counterweight.



101,400 lb Crane Counterweight
6 Side Boxes

WARNING: Free fall operation is limited to 13,000 lb per part of line when lowering load with free fall clutch/brake pedal. Hydraulic power must be used for full line pull.

Deduct From Capacities When Jib Is Attached	
Jib Length	Jib No. 134
30.0 ft	3,800 lb
40.0 ft	4,600 lb
50.0 ft	5,400 lb
60.0 ft	6,300 lb
70.0 ft	6,900 lb
80.0 ft	7,900 lb

Upper Boom Point Deduct

Deduct 1,300 lb from capacities when upper boom point, and adapter frame if equipped, is attached.

Lower Boom Point Sheave Deduct

Deduct 700 lb from capacities for boom lengths 147.6 ft thru 196.9 ft when lower boom point is equipped with outer sheave clusters.

Auxiliary Drum Deduct

Deduct 1,800 lb from capacities when boom butt is equipped with auxiliary drum, and 6.0 m (19.7 ft) insert is equipped with wire rope guide sheaves.

Third Line Deduct

Deduct 400 lb from capacities when boom is equipped for three line operation.

Refer to **Tables 1 and 2** for raising ability with the maximum weight of all load blocks, hooks, weight balls, slings, and hoist lines beneath lower and/or upper boom point and jib point sheaves. For block weights shown with #, a, or b, load blocks, hooks, weight balls, and slings must remain on ground until combined weights are within rated capacity of chart. For block weights shown with (a), auxiliary drum mounted in boom butt, wire rope guide sheaves in 6,0 m (19.7 ft) insert, and boom lights must be removed. For block weights shown with (b), upper boom point must be removed. Raising is not permitted in shaded areas of table.

Caution: Combined weight beneath lower and/or upper boom point and jib point sheaves must not exceed block weight shown. Total weight beneath jib point must not exceed 4,000 lb.

Table 1

Raising Ability Over End or Side of Crawlers							
Boom Length (ft)	Fixed Jib No. 134						
	—	30.0 ft	40.0 ft	50.0 ft	60.0 ft	70.0 ft	80.0 ft
	Block Weight (lb)						
49.2 - 78.7	7,700	—	—	—	—	—	—
88.6 - 108.3	7,700	7,700	7,700	7,700	7,700	7,700	7,700
118.1	7,700	7,700	7,700	7,700	7,700	5,800	5,800
128.0	7,700	7,700	7,700	5,800	5,800	1,600	1,600
137.8	7,700	5,800	5,800	1,600	1,600	1,600	1,600
147.6	7,700	5,800	1,600	1,600	1,600	1,600	1,600
157.5	7,700	1,600	1,600	1,600	1,600	1,600	#
167.3	5,800	1,600	1,600	1,600	#	#	#
177.2	1,600	1,600	#	#	a	a	
187.0	1,600	#	a	a			
196.9	#	RAISING NOT PERMITTED					
206.7	#						
216.5	a, b						
226.4 - 236.2							

Table 2

Raising Ability Over Front of Blocked Crawlers							
Boom Length (ft)	Fixed Jib No. 134						
	—	30.0 ft	40.0 ft	50.0 ft	60.0 ft	70.0 ft	80.0 ft
	Block Weight (lb)						
49.2 - 78.7	7,700	—	—	—	—	—	—
88.6 - 108.3	7,700	7,700	7,700	7,700	7,700	7,700	7,700
118.1	7,700	7,700	7,700	7,700	7,700	5,800	5,800
128.0	7,700	7,700	7,700	5,800	5,800	1,600	1,600
137.8	7,700	5,800	5,800	1,600	1,600	1,600	1,600
147.6	7,700	5,800	1,600	1,600	1,600	1,600	1,600
157.5	7,700	1,600	1,600	1,600	1,600	1,600	#
167.3	5,800	1,600	1,600	1,600	#	#	#
177.2	1,600	1,600	#	#	#	#	#
187.0	1,600	#	#	#	#	#	#
196.9	#	#	#	#	a	a	
206.7	#	#	a				
216.5	#	RAISING NOT PERMITTED					
226.4	#						
236.2	a, b						

Warning: Crane must remain in-line with crawlers when raising over end of blocked crawlers until operating radius and crane configuration is within 360 degree chart.

Explanation of Symbols



Boom No. 74A



Crane Counterweight
+
Carbody Counterweight



360 Degree Rating



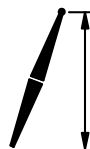
Boom Length



Operating Radius
(see page 1)



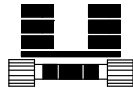
Boom Angle
(see page 1)



Boom Point Elevation
(see page 1)



Lifting Capacities
(see page 1)



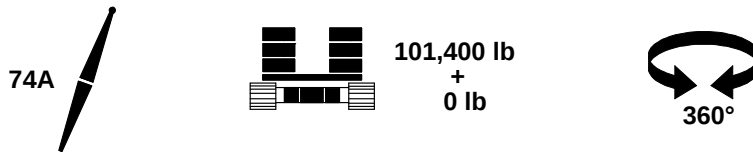
101,400 lb
+
0 lb



49.2 ft			
ft	°	ft	lb
14	81.7	55.1	363,800 d
15	80.5	54.9	344,000 d
16	79.3	54.6	324,000 d
17	78.1	54.4	306,100 d
18	76.9	54.1	290,000 d
19	75.7	53.8	275,500 c
20	74.5	53.5	262,400 c
22	72.0	52.8	224,700 c
24	69.5	52.0	193,100 b
26	66.9	51.1	169,000 b
28	64.3	50.1	150,000
30	61.7	48.9	134,700
32	58.9	47.7	122,100
34	56.1	46.3	111,500
36	53.1	44.7	102,400
38	50.0	43.0	94,600
40	46.8	41.0	87,900
42	43.3	38.8	81,900
44	39.6	36.4	76,600
46	35.6	33.5	71,800
48	31.0	30.1	67,600
50	25.6	26.0	63,700

59.1 ft			
ft	°	ft	lb
16	81.1	64.7	323,700 d
17	80.1	64.5	305,800 d
18	79.1	64.3	289,800 d
19	78.1	64.0	275,300 c
20	77.1	63.8	262,100 c
22	75.1	63.2	225,200 c
24	73.1	62.5	193,500 b
26	71.0	61.8	169,400 b
28	68.9	61.0	150,400
30	66.8	60.1	135,000
32	64.6	59.1	122,400
34	62.4	58.0	111,800
36	60.2	56.8	102,800
38	57.8	55.5	95,000
40	55.5	54.1	88,200
42	53.0	52.5	82,200
44	50.4	50.8	77,000
46	47.8	48.9	72,200
48	45.0	46.9	68,000
50	42.1	44.6	64,200
55	33.8	37.7	56,000
60	22.7	27.4	49,400

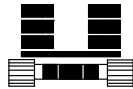
68.9 ft			
ft	°	ft	lb
17	81.6	74.5	305,200 d
18	80.7	74.3	289,100 c
19	79.9	74.1	274,600 c
20	79.0	73.9	261,500 c
22	77.3	73.4	225,000 c
24	75.6	72.9	193,200 b
26	73.8	72.3	169,100 b
28	72.1	71.6	150,100
30	70.3	70.8	134,700
32	68.5	70.0	122,100
34	66.7	69.1	111,400
36	64.8	68.1	102,400
38	62.9	67.0	94,600
40	61.0	65.9	87,800
42	59.1	64.6	81,900
44	57.1	63.3	76,600
46	55.0	61.9	71,900
48	52.9	60.3	67,700
50	50.7	58.6	63,900
55	45.0	53.8	55,800
60	38.5	47.8	49,200
65	30.8	40.0	43,800
70	20.5	28.7	39,200



78.7 ft			
ft	°	ft	lb
19	81.2	84.2	274,300 c
20	80.4	84.0	261,100 c
22	78.9	83.5	225,200 b
24	77.4	83.1	193,500 b
26	75.9	82.5	169,300 b
28	74.4	81.9	150,200
30	72.9	81.3	134,800
32	71.3	80.6	122,100
34	69.8	79.8	111,500
36	68.2	79.0	102,500
38	66.6	78.1	94,700
40	65.0	77.1	87,900
42	63.3	76.1	81,900
44	61.7	74.9	76,700
46	60.0	73.8	71,900
48	58.3	72.5	67,700
50	56.5	71.1	63,900
55	51.9	67.3	55,800
60	47.0	62.8	49,300
65	41.6	57.3	43,900
70	35.6	50.7	39,400
75	28.4	42.2	35,600
80	18.6	29.7	32,200

88.6 ft			
ft	°	ft	lb
20	81.5	94.0	260,900 c
22	80.2	93.6	225,500 b
24	78.9	93.2	193,600 b
26	77.5	92.7	169,400 b
28	76.2	92.2	150,300
30	74.8	91.6	134,900
32	73.5	91.0	122,300
34	72.1	90.3	111,600
36	70.7	89.6	102,600
38	69.4	88.8	94,800
40	68.0	88.0	88,000
42	66.5	87.1	82,000
44	65.1	86.1	76,700
46	63.6	85.1	72,000
48	62.2	84.0	67,800
50	60.7	82.8	64,000
55	56.8	79.6	55,900
60	52.8	75.9	49,400
65	48.5	71.6	44,100
70	43.9	66.6	39,600
75	38.9	60.6	35,800
80	33.2	53.3	32,500
85	26.4	44.1	29,600
90	17.1	30.6	27,000

98.4 ft			
ft	°	ft	lb
22	81.2	103.6	225,600 b
24	80.0	103.2	193,700 b
26	78.8	102.8	169,400
28	77.6	102.3	150,300
30	76.4	101.8	134,900
32	75.2	101.3	122,200
34	74.0	100.7	111,500
36	72.8	100.0	102,500
38	71.5	99.3	94,700
40	70.3	98.6	87,900
42	69.0	97.8	81,900
44	67.8	97.0	76,600
46	66.5	96.1	71,900
48	65.2	95.1	67,700
50	63.9	94.1	63,800
55	60.6	91.3	55,800
60	57.1	88.1	49,300
65	53.5	84.5	43,900
70	49.7	80.3	39,400
75	45.7	75.6	35,600
80	41.4	70.1	32,400
85	36.6	63.6	29,500
90	31.2	55.8	27,000
95	24.7	45.8	24,700
100	15.8	31.3	22,600



101,400 lb
+
0 lb

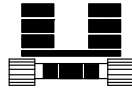


108.3 ft			
ft	°	ft	lb
24	80.9	113.3	193,800 b
26	79.8	112.9	169,500
28	78.7	112.4	150,400
30	77.7	112.0	135,000
32	76.6	111.5	122,300
34	75.5	110.9	111,600
36	74.4	110.4	102,500
38	73.3	109.7	94,700
40	72.1	109.1	87,900
42	71.0	108.4	81,900
44	69.9	107.6	76,600
46	68.8	106.8	71,900
48	67.6	105.9	67,700
50	66.4	105.0	63,900
55	63.5	102.6	55,800
60	60.5	99.8	49,300
65	57.3	96.6	44,000
70	54.1	93.1	39,500
75	50.7	89.0	35,700
80	47.1	84.5	32,400
85	43.3	79.3	29,600
90	39.2	73.4	27,100
95	34.7	66.4	24,900
100	29.5	58.1	22,900
105	23.3	47.4	21,000

118.1 ft			
ft	°	ft	lb
24	81.7	123.2	193,800 b
26	80.7	122.9	169,500
28	79.7	122.5	150,400
30	78.7	122.1	134,900
32	77.7	121.6	122,100
34	76.7	121.1	111,500
36	75.7	120.6	102,400
38	74.7	120.0	94,500
40	73.7	119.4	87,700
42	72.7	118.8	81,700
44	71.6	118.1	76,400
46	70.6	117.4	71,700
48	69.6	116.6	67,500
50	68.5	115.8	63,700
55	65.9	113.6	55,600
60	63.2	111.1	49,100
65	60.4	108.3	43,700
70	57.5	105.1	39,300
75	54.6	101.6	35,500
80	51.5	97.7	32,200
85	48.2	93.3	29,400
90	44.8	88.4	26,900
95	41.2	82.8	24,600
100	37.3	76.5	22,700
105	32.9	69.0	20,900
110	28.0	60.2	19,300
115	22.0	48.9	17,800

128.0 ft			
ft	°	ft	lb
26	81.4	132.9	169,500
28	80.5	132.5	150,300
30	79.6	132.1	134,800
32	78.7	131.7	122,000
34	77.8	131.3	111,300
36	76.8	130.8	102,200
38	75.9	130.3	94,400
40	75.0	129.7	87,600
42	74.0	129.1	81,600
44	73.1	128.5	76,300
46	72.2	127.8	71,600
48	71.2	127.1	67,300
50	70.3	126.4	63,500
55	67.8	124.4	55,400
60	65.4	122.1	48,900
65	62.9	119.6	43,600
70	60.3	116.7	39,100
75	57.7	113.6	35,300
80	54.9	110.1	32,000
85	52.1	106.3	29,200
90	49.2	102.1	26,700
95	46.1	97.3	24,500
100	42.9	92.1	22,500
105	39.4	86.1	20,800
110	35.6	79.4	19,200
115	31.4	71.5	17,700
120	26.7	62.1	16,400
125	20.9	50.2	15,100

74A



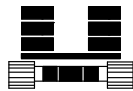
101,400 lb
+
0 lb



137.8 ft			
ft	°	ft	lb
28	81.2	142.5	150,200
30	80.3	142.2	134,700
32	79.5	141.8	121,900
34	78.6	141.4	111,200
36	77.8	140.9	102,100
38	76.9	140.4	94,200
40	76.1	139.9	87,400
42	75.2	139.4	81,400
44	74.4	138.8	76,100
46	73.5	138.2	71,300
48	72.6	137.5	67,100
50	71.7	136.8	63,300
55	69.5	135.0	55,200
60	67.3	132.9	48,700
65	65.0	130.6	43,300
70	62.6	128.0	38,800
75	60.2	125.2	35,000
80	57.8	122.1	31,800
85	55.3	118.7	28,900
90	52.7	114.9	26,400
95	50.0	110.8	24,200
100	47.2	106.2	22,300
105	44.2	101.2	20,500
110	41.1	95.6	18,900
115	37.7	89.3	17,500
120	34.1	82.1	16,100
125	30.1	73.9	14,900
130	25.5	64.0	13,800
135	19.9	51.5	12,700

147.6 ft			
ft	°	ft	lb
30	81.0	152.2	135,100
32	80.2	151.8	122,300
34	79.4	151.4	111,600
36	78.6	151.0	102,500
38	77.8	150.5	94,600
40	77.0	150.1	87,800
42	76.2	149.6	81,800
44	75.4	149.0	76,500
46	74.6	148.5	71,700
48	73.8	147.9	67,500
50	73.0	147.2	63,700
55	70.9	145.5	55,600
60	68.9	143.6	49,000
65	66.8	141.5	43,700
70	64.6	139.1	39,200
75	62.4	136.5	35,400
80	60.2	133.7	32,200
85	57.9	130.6	29,300
90	55.6	127.2	26,800
95	53.2	123.5	24,600
100	50.7	119.5	22,700
105	48.1	115.0	20,900
110	45.4	110.2	19,300
115	42.5	104.8	17,900
120	39.5	98.9	16,600
125	36.3	92.3	15,400
130	32.8	84.8	14,200
135	28.9	76.1	13,200
140	24.4	65.7	12,200
145	19.0	52.6	11,300

157.5 ft			
ft	°	ft	lb
30	81.6	162.1	134,900
32	80.8	161.8	122,100
34	80.1	161.4	111,400
36	79.3	161.0	102,300
38	78.6	160.6	94,400
40	77.9	160.2	87,600
42	77.1	159.7	81,500
44	76.4	159.2	76,200
46	75.6	158.7	71,500
48	74.8	158.1	67,200
50	74.1	157.5	63,400
55	72.2	155.9	55,300
60	70.3	154.2	48,800
65	68.3	152.2	43,400
70	66.3	150.0	38,900
75	64.3	147.6	35,100
80	62.2	145.0	31,900
85	60.2	142.2	29,000
90	58.0	139.1	26,500
95	55.8	135.7	24,300
100	53.6	132.1	22,400
105	51.2	128.1	20,600
110	48.8	123.8	19,000
115	46.3	119.1	17,600
120	43.7	113.9	16,300
125	41.0	108.3	15,100
130	38.1	102.1	14,000
135	35.0	95.1	12,900
140	31.6	87.2	12,000
145	27.8	78.2	11,100
150	23.5	67.4	10,300
155	18.2	53.6	9,500



101,400 lb
+
0 lb



167.3 ft			
ft	°	ft	lb
32	81.4	171.8	122,000
34	80.7	171.4	111,200
36	80.0	171.1	102,100
38	79.3	170.7	94,200
40	78.6	170.3	87,400
42	77.9	169.8	81,300
44	77.2	169.4	76,000
46	76.5	168.9	71,300
48	75.8	168.3	67,000
50	75.1	167.8	63,200
55	73.3	166.3	55,100
60	71.5	164.6	48,500
65	69.6	162.8	43,200
70	67.8	160.8	38,700
75	65.9	158.5	34,900
80	64.0	156.1	31,600
85	62.1	153.5	28,800
90	60.1	150.6	26,300
95	58.1	147.6	24,100
100	56.0	144.2	22,100
105	53.9	140.6	20,400
110	51.8	136.7	18,800
115	49.5	132.5	17,300
120	47.2	127.9	16,000
125	44.8	123.0	14,800
130	42.3	117.6	13,700
135	39.6	111.6	12,700
140	36.8	105.1	11,800
145	33.8	97.8	10,900
150	30.5	89.6	10,100
155	26.8	80.2	9,300
160	22.6	68.9	8,600
165	17.4	54.6	7,900

177.2 ft			
ft	°	ft	lb
34	81.2	181.4	111,000
36	80.5	181.1	101,900
38	79.9	180.7	94,000
40	79.2	180.3	87,100
42	78.6	179.9	81,100
44	77.9	179.5	75,800
46	77.2	179.0	71,000
48	76.6	178.5	66,800
50	75.9	178.0	62,900
55	74.2	176.6	54,800
60	72.5	175.0	48,200
65	70.8	173.3	42,900
70	69.1	171.4	38,400
75	67.3	169.3	34,600
80	65.6	167.1	31,300
85	63.8	164.6	28,500
90	61.9	162.0	26,000
95	60.1	159.1	23,800
100	58.2	156.0	21,800
105	56.2	152.7	20,000
110	54.3	149.2	18,400
115	52.2	145.3	17,000
120	50.1	141.2	15,700
125	48.0	136.7	14,500
130	45.7	131.9	13,400
135	43.4	126.7	12,400
140	40.9	121.1	11,400
145	38.4	114.9	10,600
150	35.6	108.0	9,700
155	32.7	100.5	9,000
160	29.5	91.9	8,300
165	25.9	82.1	7,600
170	21.8	70.4	6,900
175	16.7	55.5	6,300

187.0 ft			
ft	°	ft	lb
34	81.7	191.4	110,900
36	81.0	191.1	101,700
38	80.4	190.7	93,800
40	79.8	190.4	87,000
42	79.2	190.0	80,900
44	78.6	189.5	75,600
46	77.9	189.1	70,800
48	77.3	188.6	66,600
50	76.7	188.1	62,700
55	75.1	186.8	54,600
60	73.5	185.3	48,000
65	71.9	183.7	42,700
70	70.2	181.9	38,200
75	68.6	180.0	34,400
80	66.9	177.9	31,100
85	65.3	175.6	28,300
90	63.5	173.1	25,800
95	61.8	170.5	23,600
100	60.0	167.6	21,600
105	58.2	164.5	19,800
110	56.4	161.2	18,300
115	54.5	157.7	16,800
120	52.6	153.9	15,500
125	50.6	149.9	14,300
130	48.6	145.5	13,200
135	46.5	140.8	12,200
140	44.3	135.8	11,300
145	42.1	130.3	10,400
150	39.7	124.4	9,600
155	37.2	117.9	8,800
160	34.5	110.8	8,100
165	31.7	103.0	7,400
170	28.6	94.1	6,800
175	25.1	83.9	6,200
180	21.1	71.8	5,600
185	16.1	56.2	5,100

74A



101,400 lb
+
0 lb

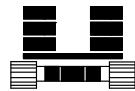


360°

196.9 ft			
ft	°	ft	lb
36	81.5	201.1	101,500
38	80.9	200.7	93,600
40	80.3	200.4	86,700
42	79.7	200.0	80,700
44	79.1	199.6	75,300
46	78.5	199.2	70,600
48	77.9	198.7	66,300
50	77.3	198.3	62,500
55	75.8	197.0	54,300
60	74.3	195.6	47,700
65	72.8	194.1	42,400
70	71.3	192.4	37,900
75	69.7	190.6	34,100
80	68.2	188.6	30,800
85	66.6	186.4	27,900
90	65.0	184.1	25,400
95	63.3	181.6	23,200
100	61.7	178.9	21,300
105	60.0	176.1	19,500
110	58.3	173.0	17,900
115	56.6	169.7	16,500
120	54.8	166.2	15,200
125	53.0	162.5	14,000
130	51.1	158.5	12,900
135	49.2	154.2	11,900
140	47.2	149.7	10,900
145	45.2	144.8	10,000
150	43.1	139.5	9,200
155	40.9	133.8	8,500
160	38.6	127.6	7,800
165	36.1	120.9	7,100
170	33.5	113.6	6,500
175	30.7	105.4	5,900
180	27.7	96.2	5,300
185	24.3	85.6	4,800
190	20.4	73.1	4,200
195	15.4	57.0	3,600

206.7 ft			
ft	°	ft	lb
38	81.3	210.7	93,400
40	80.8	210.4	86,500
42	80.2	210.0	80,500
44	79.7	209.6	75,100
46	79.1	209.2	70,300
48	78.5	208.8	66,100
50	78.0	208.4	62,200
55	76.5	207.2	54,000
60	75.1	205.9	47,500
65	73.7	204.4	42,100
70	72.2	202.8	37,600
75	70.7	201.1	33,800
80	69.3	199.2	30,500
85	67.8	197.2	27,600
90	66.2	195.0	25,200
95	64.7	192.6	22,900
100	63.2	190.1	21,000
105	61.6	187.4	19,200
110	60.0	184.6	17,600
115	58.4	181.5	16,200
120	56.7	178.2	14,900
125	55.0	174.8	13,700
130	53.3	171.1	12,600
135	51.5	167.1	11,600
140	49.7	162.9	10,600
145	47.9	158.5	9,800
150	45.9	153.7	8,900
155	44.0	148.6	8,200
160	41.9	143.1	7,500
165	39.8	137.2	6,800
170	37.5	130.8	6,200
175	35.1	123.8	5,600
180	32.6	116.2	5,000
185	29.9	107.7	4,400
190	26.9	98.2	3,800
195	23.6	87.3	3,200

216.5 ft			
ft	°	ft	lb
40	81.2	220.3	86,300
42	80.7	220.0	80,200
44	80.1	219.6	74,800
46	79.6	219.3	70,100
48	79.1	218.9	65,800
50	78.5	218.4	61,900
55	77.2	217.3	53,700
60	75.8	216.1	47,200
65	74.4	214.7	41,800
70	73.0	213.2	37,300
75	71.6	211.5	33,400
80	70.2	209.7	30,200
85	68.8	207.8	27,300
90	67.4	205.7	24,800
95	65.9	203.5	22,600
100	64.5	201.1	20,600
105	63.0	198.6	18,900
110	61.5	195.9	17,300
115	60.0	193.0	15,800
120	58.4	190.0	14,500
125	56.8	186.7	13,300
130	55.2	183.3	12,200
135	53.6	179.6	11,200
140	51.9	175.7	10,300
145	50.2	171.6	9,400
150	48.4	167.2	8,600
155	46.6	162.6	7,800
160	44.8	157.6	7,100
165	42.8	152.2	6,500
170	40.8	146.5	5,800
175	38.7	140.4	5,200
180	36.5	133.8	4,500
185	34.2	126.6	3,900
190	31.7	118.7	3,300



101,400 lb
+
0 lb



226.4 ft			
ft	°	ft	lb
40	81.6	230.3	81,000
42	81.1	230.0	80,000
44	80.6	229.6	74,600
46	80.1	229.3	69,900
48	79.5	228.9	65,600
50	79.0	228.5	61,700
55	77.7	227.4	53,500
60	76.4	226.2	46,900
65	75.1	224.9	41,500
70	73.8	223.5	37,000
75	72.5	221.9	33,200
80	71.1	220.2	29,900
85	69.8	218.4	27,100
90	68.4	216.4	24,600
95	67.1	214.3	22,400
100	65.7	212.0	20,400
105	64.3	209.6	18,600
110	62.8	207.1	17,000
115	61.4	204.4	15,600
120	59.9	201.5	14,300
125	58.5	198.5	13,100
130	57.0	195.2	12,000
135	55.4	191.8	11,000
140	53.9	188.2	10,000
145	52.3	184.3	9,200
150	50.6	180.3	8,400
155	49.0	176.0	7,600
160	47.2	171.4	6,900
165	45.5	166.5	6,200
170	43.7	161.3	5,500
175	41.8	155.8	4,800
180	39.8	149.9	4,200
185	37.8	143.6	3,600
190	35.6	136.7	3,000

236.2 ft			
ft	°	ft	lb
42	81.5	240.0	79,200
44	81.0	239.6	74,000
46	80.5	239.3	69,200
48	80.0	238.9	64,900
50	79.5	238.5	61,000
55	78.2	237.5	52,800
60	77.0	236.4	46,200
65	75.8	235.1	40,800
70	74.5	233.7	36,300
75	73.2	232.2	32,500
80	72.0	230.6	29,200
85	70.7	228.9	26,300
90	69.4	227.0	23,800
95	68.1	225.0	21,600
100	66.7	222.8	19,600
105	65.4	220.6	17,900
110	64.1	218.1	16,300
115	62.7	215.6	14,800
120	61.3	212.9	13,500
125	59.9	210.0	12,300
130	58.5	206.9	11,200
135	57.1	203.7	10,200
140	55.6	200.3	9,200
145	54.1	196.7	8,400
150	52.6	192.9	7,600
155	51.0	188.9	6,700
160	49.4	184.7	5,900
165	47.8	180.2	5,100
170	46.1	175.4	4,400
175	44.4	170.4	3,700
180	42.6	165.0	3,100