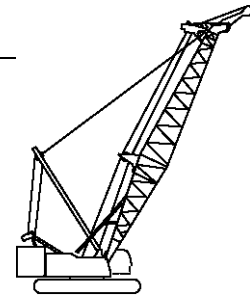




Liftcrane Boom Capacities

Boom No. 76
168,000 lb Crane Counterweight
53,000 lb Carbody Counterweight
Rating Over End of Blocked Crawlers
No Travel - Limited Swing



14000 SERIES 2



LIFTING CAPACITIES: Lifting capacities for various boom lengths and operating radii are for freely suspended loads and do not exceed 75% of a static tipping load over end of machine with crawlers blocked. Capacities based on structural competence are denoted by an asterisk (*). Capacities indicated by (b) require 10,000 lb minimum weight.

Upper boom point capacity for liftcrane service with single part whip line is 31,500 lb or 60,000 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.

233 ft thru 292 ft boom lengths require only the middle two 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 with gantry up. Drive and idler tumblers must be properly blocked so that centerline of tumblers becomes tipping fulcrum. Swing is limited to that sector shown on Operating Range Diagram **No. 8793-A**. Refer to boom rigging **No. A16106**, Wire Rope Specification chart **No. 8789-A**, and Wind Conditions chart **No. 8790-A**. Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, wind conditions, as well as adverse operating conditions and physical machine depreciation. Refer to Operator's Manual for operating guidelines.



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

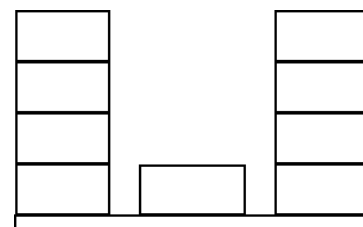


BOOM ANGLE: Boom angle in degrees ($^{\circ}$) is angle between horizontal and centerline of boom butt and inserts, and is an indication of operating radius. In all cases, operating radius shall govern capacity.



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

MACHINE EQUIPMENT: Machine equipped with 27 ft 2 in. crawlers, 48 in. treads, 10 ft 3 in. retractable gantry, 27 ft live mast, 20 part boom hoist reeving, boom support straps, 168,000 lb crane counterweight, and two 26,500 lb carbody counterweights.



168,000 lb Crane Counterweight
 8 Side Boxes - 1 Center Box

WITHOUT BOOM CATWALKS	
Maximum Boom and Jib Lengths Lifted Unassisted Over End of Blocked Crawlers	
Boom Length	Jib No. 134
(a) 292 ft	—
282 ft	—
272 ft	—
262 ft	40 ft
253 ft	70 ft
243 ft	80 ft
Load block, hook and weight ball on ground at start. (a) Upper boom point cannot be used on 292 ft boom.	

Consult jib chart for jib capacities.

Upper boom point cannot be used when jib is attached.

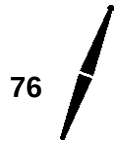
WITH BOOM CATWALKS	
Maximum Boom and Jib Lengths Lifted Unassisted Over End of Blocked Crawlers	
Boom Length	Jib No. 134
(a)(b) 292 ft	—
(b) 282 ft	—
272 ft	—
262 ft	40 ft
253 ft	(b) 70 ft
243 ft	80 ft
Load block, hook and weight ball on ground at start. (a) Upper boom point cannot be used on 292 ft boom. 292 ft boom <i>must</i> be rigged with one hoist lead line. (b) Requires lowerworks jacking cylinders.	

Deduct From Capacities When Jib Is Attached	
Jib Length	Jib No. 134
30 ft	3,900 lb
40 ft	4,700 lb
50 ft	5,600 lb
60 ft	6,600 lb
70 ft	7,600 lb
80 ft	8,700 lb

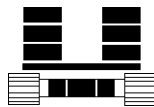
Upper Boom Point Deduct
Deduct 1,100 lb from capacities when upper boom point is attached.

Boom Catwalks Deduct
Deduct 600 lb from capacities when boom catwalks are attached.

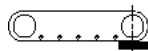
Explanation of Symbols



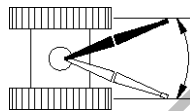
Boom No. 76



Crane Counterweight
+
Carbody Counterweight



Rating Over End of
Blocked Crawlers



Limited Swing Area



Operating Radius
(see page 1)



Boom Angle
(see page 1)



Boom Point Elevation
(see page 1)

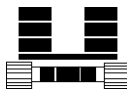


Lifting Capacities
(see page 1)

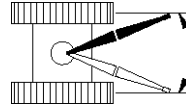
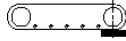


Boom Length

76



168,000 lb
+
53,000 lb

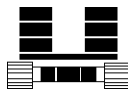


ft	o	ft	lb
 65.6 ft			
14	83.2	72.9	441,000 *b
15	82.3	72.7	409,500 *b
16	81.4	72.5	386,000 *b
17	80.5	72.3	364,900 *b
18	79.7	72.1	346,000 *b
19	78.8	71.9	328,900 *b
20	77.9	71.7	313,300 *b
22	76.1	71.1	286,100 *
24	74.2	70.5	263,100 *
26	72.4	69.8	243,400 *
28	70.5	69.1	226,300 *
30	68.6	68.3	211,300 *
32	66.7	67.4	198,000 *
34	64.8	66.4	186,400 *
36	62.8	65.3	176,000 *
38	60.8	64.2	166,500 *
40	58.7	62.9	158,000 *
42	56.6	61.5	150,200 *
44	54.4	60.0	143,100 *
46	52.2	58.5	136,600 *
48	49.9	56.7	130,600 *
50	47.5	54.8	125,100 *
55	41.0	49.3	113,000 *
60	33.4	42.3	100,000 *
65	23.7	32.3	85,200 *

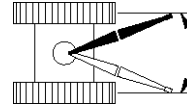
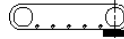
ft	o	ft	lb
 75.5 ft			
16	82.6	82.5	385,600 *b
17	81.8	82.3	364,600 *b
18	81.0	82.2	345,700 *b
19	80.2	82.0	328,500 *b
20	79.5	81.8	313,000 *b
22	77.9	81.3	285,800 *
24	76.3	80.8	262,800 *
26	74.8	80.2	243,100 *
28	73.2	79.6	226,000 *
30	71.6	78.9	211,100 *
32	69.9	78.1	197,900 *
34	68.3	77.3	186,200 *
36	66.6	76.4	175,700 *
38	64.9	75.4	166,300 *
40	63.2	74.3	157,800 *
42	61.5	73.2	150,000 *
44	59.7	72.0	142,900 *
46	57.9	70.7	136,400 *
48	56.1	69.3	130,500 *
50	54.2	67.8	125,000 *
55	49.2	63.6	112,800 *
60	43.8	58.6	100,300 *
65	37.8	52.5	89,600 *
70	30.8	44.6	80,700 *
75	21.6	33.6	73,100 *

ft	o	ft	lb
 85.3 ft			
17	82.7	92.3	356,600 *
18	82.1	92.2	345,300 *
19	81.4	92.0	328,100 *
20	80.7	91.8	312,600 *
22	79.3	91.4	285,400 *
24	78.0	90.9	262,400 *
26	76.6	90.4	242,700 *
28	75.2	89.9	225,600 *
30	73.8	89.3	210,700 *
32	72.4	88.6	197,500 *
34	70.9	87.9	185,800 *
36	69.5	87.1	175,400 *
38	68.0	86.2	166,000 *
40	66.6	85.3	157,400 *
42	65.1	84.4	149,700 *
44	63.6	83.4	142,600 *
46	62.0	82.3	136,100 *
48	60.5	81.1	130,200 *
50	58.9	79.8	124,700 *
55	54.8	76.4	112,600 *
60	50.5	72.4	100,400 *
65	45.9	67.7	89,700 *
70	40.8	62.1	80,800 *
75	35.2	55.3	73,300 *
80	28.6	46.8	66,900 *
85	19.8	34.8	61,300 *

76



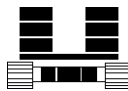
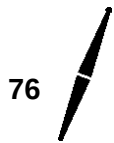
168,000 lb
+
53,000 lb



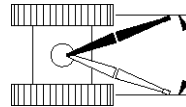
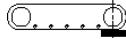
ft	o	ft	lb
18	82.9	102.1	343,500 *
19	82.3	102.0	328,000 *
20	81.7	101.8	312,400 *
22	80.5	101.4	285,200 *
24	79.2	101.0	262,200 *
26	78.0	100.6	242,500 *
28	76.7	100.1	225,500 *
30	75.5	99.5	210,600 *
32	74.2	98.9	197,400 *
34	73.0	98.3	185,700 *
36	71.7	97.6	175,200 *
38	70.4	96.9	165,800 *
40	69.1	96.1	157,300 *
42	67.8	95.2	149,600 *
44	66.5	94.3	142,500 *
46	65.2	93.4	136,000 *
48	63.8	92.4	130,100 *
50	62.5	91.3	124,600 *
55	59.0	88.3	112,500 *
60	55.3	84.9	100,500 *
65	51.5	81.0	89,800 *
70	47.4	76.6	81,000 *
75	43.1	71.4	73,500 *
80	38.4	65.3	67,100 *
85	33.0	58.0	61,600 *
90	26.7	48.7	56,700 *
95	18.4	35.8	52,400 *

ft	o	ft	lb
19	83.0	111.9	315,000 *
20	82.5	111.8	311,900 *
22	81.4	111.4	284,800 *
24	80.2	111.1	261,800 *
26	79.1	110.7	242,100 *
28	78.0	110.2	225,000 *
30	76.9	109.7	210,100 *
32	75.8	109.2	196,900 *
34	74.6	108.6	185,300 *
36	73.5	108.0	174,800 *
38	72.3	107.3	165,400 *
40	71.2	106.6	156,900 *
42	70.0	105.9	149,100 *
44	68.8	105.1	142,100 *
46	67.7	104.2	135,600 *
48	66.5	103.3	129,600 *
50	65.2	102.4	124,100 *
55	62.2	99.8	112,100 *
60	59.0	96.8	100,300 *
65	55.7	93.5	89,700 *
70	52.3	89.7	80,800 *
75	48.7	85.3	73,300 *
80	44.9	80.4	67,000 *
85	40.8	74.8	61,400 *
90	36.2	68.2	56,600 *
95	31.2	60.4	52,300 *
100	25.1	50.5	48,500 *
105	17.1	36.7	45,100 *

ft	o	ft	lb
22	82.1	121.4	284,500 *
24	81.1	121.1	261,500 *
26	80.1	120.7	241,800 *
28	79.1	120.3	224,800 *
30	78.0	119.8	209,900 *
32	77.0	119.4	196,700 *
34	76.0	118.8	185,000 *
36	74.9	118.3	174,500 *
38	73.9	117.7	165,100 *
40	72.9	117.1	156,600 *
42	71.8	116.4	148,900 *
44	70.7	115.6	141,800 *
46	69.7	114.9	135,400 *
48	68.6	114.1	129,400 *
50	67.5	113.2	123,900 *
55	64.8	110.9	111,800 *
60	61.9	108.3	100,300 *
65	59.0	105.3	89,600 *
70	56.0	102.0	80,800 *
75	52.9	98.3	73,300 *
80	49.7	94.1	66,900 *
85	46.3	89.4	61,400 *
90	42.6	84.1	56,600 *
95	38.7	78.1	52,300 *
100	34.4	71.0	48,500 *
105	29.6	62.7	45,100 *
110	23.8	52.2	42,100 *
115	16.0	37.5	39,200 *



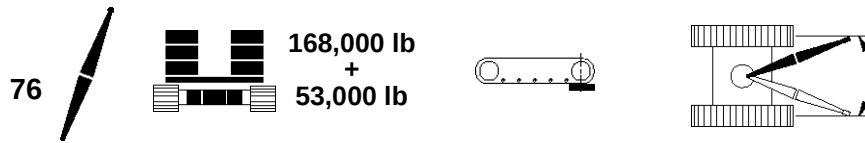
168,000 lb
+
53,000 lb



ft	o	ft	lb
124.7 ft			
22	82.7	131.4	281,600 *
24	81.8	131.1	261,300 *
26	80.9	130.7	241,600 *
28	79.9	130.3	224,500 *
30	79.0	129.9	209,600 *
32	78.1	129.5	196,500 *
34	77.1	129.0	184,800 *
36	76.2	128.5	174,300 *
38	75.2	127.9	164,900 *
40	74.3	127.4	156,400 *
42	73.3	126.7	148,700 *
44	72.3	126.1	141,600 *
46	71.4	125.4	135,100 *
48	70.4	124.7	129,200 *
50	69.4	123.9	123,700 *
55	66.9	121.8	111,600 *
60	64.3	119.4	100,300
65	61.7	116.7	89,600
70	59.1	113.8	80,700
75	56.3	110.5	73,300
80	53.5	106.8	66,900
85	50.5	102.8	61,400
90	47.4	98.3	56,500
95	44.2	93.2	52,300
100	40.7	87.6	48,500
105	36.9	81.1	45,200
110	32.8	73.7	42,100
115	28.1	64.8	39,300
120	22.6	53.7	36,800

ft	o	ft	lb
134.5 ft			
24	82.4	141.0	261,000 *
26	81.5	140.7	241,300 *
28	80.7	140.4	224,200 *
30	79.8	140.0	209,300 *
32	78.9	139.6	196,200 *
34	78.1	139.1	184,500 *
36	77.2	138.7	174,000 *
38	76.3	138.1	164,600 *
40	75.4	137.6	156,100 *
42	74.6	137.0	148,400 *
44	73.7	136.4	141,300 *
46	72.8	135.8	134,900 *
48	71.9	135.1	128,900 *
50	71.0	134.4	123,400 *
55	68.7	132.5	111,400 *
60	66.4	130.3	100,200
65	64.0	127.9	89,400
70	61.6	125.2	80,600
75	59.1	122.3	73,100
80	56.6	119.0	66,700
85	53.9	115.4	61,200
90	51.2	111.4	56,400
95	48.4	107.1	52,200
100	45.4	102.2	48,400
105	42.3	96.9	45,000
110	39.0	90.8	42,000
115	35.4	84.0	39,200
120	31.4	76.1	36,700
125	26.9	66.8	34,400
130	21.5	55.1	32,300

ft	o	ft	lb
144.4 ft			
24	82.9	151.0	238,600 *
26	82.1	150.7	231,900 *
28	81.3	150.4	223,700 *
30	80.5	150.0	208,800 *
32	79.7	149.6	195,700 *
34	78.9	149.2	184,000 *
36	78.1	148.8	173,500 *
38	77.3	148.3	164,100 *
40	76.5	147.8	155,600 *
42	75.6	147.3	147,900 *
44	74.8	146.7	140,800 *
46	74.0	146.1	134,300 *
48	73.1	145.5	128,400 *
50	72.3	144.8	122,900 *
55	70.2	143.1	110,900 *
60	68.1	141.1	99,900
65	65.9	138.8	89,200
70	63.7	136.4	80,300
75	61.4	133.7	72,800
80	59.1	130.7	66,400
85	56.8	127.5	60,900
90	54.3	123.9	56,100
95	51.8	120.1	51,800
100	49.2	115.8	48,000
105	46.5	111.2	44,700
110	43.7	106.0	41,600
115	40.6	100.3	38,900
120	37.4	93.9	36,400
125	34.0	86.7	34,100
130	30.1	78.5	32,000
135	25.7	68.7	30,100
140	20.5	56.4	28,300

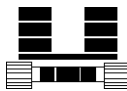


ft	o	ft	lb
154.2 ft			
26	82.6	160.6	225,200 *
28	81.9	160.3	218,900 *
30	81.1	160.0	208,500 *
32	80.4	159.6	195,300 *
34	79.6	159.2	183,600 *
36	78.9	158.8	173,200 *
38	78.1	158.4	163,800 *
40	77.3	157.9	155,300 *
42	76.6	157.4	147,500 *
44	75.8	156.9	140,500 *
46	75.0	156.4	134,000 *
48	74.3	155.8	128,100 *
50	73.5	155.2	122,600 *
55	71.5	153.5	110,500 *
60	69.5	151.7	99,700
65	67.5	149.6	88,900
70	65.5	147.4	80,100
75	63.4	144.9	72,600
80	61.3	142.2	66,200
85	59.2	139.2	60,600
90	56.9	136.0	55,800
95	54.7	132.5	51,600
100	52.3	128.7	47,800
105	49.9	124.5	44,400
110	47.4	120.0	41,400
115	44.8	115.0	38,700
120	42.1	109.6	36,200
125	39.2	103.6	33,900
130	36.0	96.9	31,800
135	32.7	89.4	29,900
140	29.0	80.7	28,100
145	24.7	70.4	26,500
150	19.6	57.7	24,900

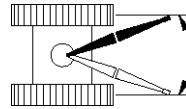
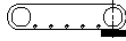
ft	o	ft	lb
164.0 ft			
28	82.4	170.3	206,800 *
30	81.7	170.0	201,800 *
32	81.0	169.6	195,000 *
34	80.2	169.3	183,400 *
36	79.5	168.9	172,900 *
38	78.8	168.5	163,500 *
40	78.1	168.0	155,000 *
42	77.4	167.6	147,300 *
44	76.7	167.1	140,200 *
46	76.0	166.6	133,700 *
48	75.2	166.0	127,800 *
50	74.5	165.5	122,300 *
55	72.7	163.9	110,300 *
60	70.8	162.2	99,600
65	69.0	160.3	88,800
70	67.1	158.2	79,900
75	65.1	155.9	72,400
80	63.2	153.4	66,000
85	61.2	150.6	60,500
90	59.2	147.7	55,700
95	57.1	144.5	51,400
100	55.0	141.0	47,700
105	52.8	137.3	44,300
110	50.5	133.2	41,300
115	48.2	128.8	38,500
120	45.8	124.0	36,000
125	43.3	118.8	33,800
130	40.6	113.1	31,700
135	37.8	106.7	29,800
140	34.8	99.7	28,000
145	31.5	91.8	26,300
150	27.9	82.8	24,800
155	23.8	72.1	23,400
160	18.8	58.8	22,000

ft	o	ft	lb
173.9 ft			
28	82.8	180.2	199,400 *
30	82.1	179.9	194,500 *
32	81.5	179.6	189,800 *
34	80.8	179.3	183,000 *
36	80.1	178.9	172,600 *
38	79.5	178.5	163,100 *
40	78.8	178.1	154,600 *
42	78.1	177.7	146,900 *
44	77.4	177.2	139,900 *
46	76.8	176.7	133,400 *
48	76.1	176.2	127,400 *
50	75.4	175.7	121,900 *
55	73.7	174.2	109,900 *
60	72.0	172.6	99,300
65	70.2	170.8	88,600
70	68.4	168.9	79,700
75	66.6	166.7	72,200
80	64.8	164.4	65,800
85	63.0	161.9	60,200
90	61.1	159.1	55,400
95	59.2	156.2	51,200
100	57.2	153.0	47,400
105	55.2	149.6	44,000
110	53.2	145.8	41,000
115	51.1	141.9	38,300
120	48.9	137.5	35,800
125	46.6	132.9	33,500
130	44.3	127.8	31,400
135	41.9	122.3	29,500
140	39.3	116.4	27,700
145	36.6	109.8	26,100
150	33.6	102.4	24,600
155	30.5	94.2	23,100
160	27.0	84.8	21,800
165	22.9	73.7	20,500
170	18.1	59.8	19,300

76



168,000 lb
+
53,000 lb

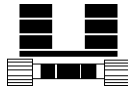


ft	o	ft	lb
183.7 ft			
30	82.6	189.9	177,400 *
32	81.9	189.6	173,400 *
34	81.3	189.3	169,600 *
36	80.7	188.9	166,000 *
38	80.0	188.6	162,300 *
40	79.4	188.2	154,100 *
42	78.8	187.7	146,400 *
44	78.1	187.3	139,300 *
46	77.5	186.9	132,900 *
48	76.8	186.4	126,900 *
50	76.2	185.9	121,400 *
55	74.6	184.5	109,400 *
60	73.0	183.0	99,000
65	71.3	181.3	88,300
70	69.7	179.5	79,300
75	68.0	177.4	71,800
80	66.3	175.3	65,400
85	64.5	172.9	59,900
90	62.8	170.4	55,000
95	61.0	167.6	50,800
100	59.2	164.6	47,000
105	57.4	161.5	43,600
110	55.5	158.1	40,600
115	53.5	154.4	37,900
120	51.6	150.5	35,400
125	49.5	146.3	33,100
130	47.4	141.7	31,000
135	45.2	136.8	29,100
140	43.0	131.5	27,300
145	40.6	125.8	25,700
150	38.1	119.5	24,200
155	35.4	112.7	22,700
160	32.6	105.1	21,400
165	29.5	96.5	20,200
170	26.1	86.7	19,000
175	22.2	75.2	17,900
180	17.4	60.7	16,800

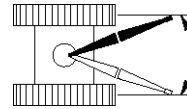
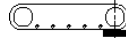
ft	o	ft	lb
193.6 ft			
30	82.9	199.8	170,200 *
32	82.3	199.5	166,400 *
34	81.8	199.2	162,800 *
36	81.2	198.9	159,200 *
38	80.6	198.6	155,700 *
40	79.9	198.2	152,300 *
42	79.3	197.8	146,000 *
44	78.7	197.4	138,900 *
46	78.1	196.9	132,500 *
48	77.5	196.5	126,500 *
50	76.9	196.0	121,000 *
55	75.4	194.7	109,000 *
60	73.9	193.3	98,800
65	72.3	191.7	88,000
70	70.7	190.0	79,100
75	69.1	188.1	71,500
80	67.5	186.0	65,100
85	65.9	183.8	59,600
90	64.3	181.4	54,700
95	62.6	178.8	50,500
100	60.9	176.1	46,700
105	59.2	173.1	43,300
110	57.5	170.0	40,300
115	55.7	166.6	37,500
120	53.9	163.0	35,100
125	52.0	159.1	32,800
130	50.1	154.9	30,700
135	48.1	150.5	28,800
140	46.0	145.7	27,000
145	43.9	140.6	25,400
150	41.7	135.1	23,900
155	39.4	129.1	22,400
160	37.0	122.6	21,100
165	34.4	115.5	19,900
170	31.6	107.6	18,700
175	28.6	98.7	17,600
180	25.3	88.6	16,600
185	21.4	76.6	15,600
190	16.8	61.6	14,600

ft	o	ft	lb
203.4 ft			
32	82.7	209.5	150,400 *
34	82.2	209.2	149,000 *
36	81.6	208.9	147,600 *
38	81.0	208.6	146,100 *
40	80.4	208.2	144,100 *
42	79.9	207.8	141,000 *
44	79.3	207.4	137,900 *
46	78.7	207.0	132,200 *
48	78.1	206.6	126,200 *
50	77.6	206.1	120,700 *
55	76.1	204.9	108,700 *
60	74.7	203.6	98,600
65	73.2	202.1	87,800
70	71.7	200.4	78,800
75	70.2	198.6	71,300
80	68.7	196.7	64,900
85	67.2	194.6	59,300
90	65.6	192.3	54,500
95	64.1	189.9	50,200
100	62.5	187.3	46,500
105	60.9	184.6	43,100
110	59.2	181.6	40,000
115	57.6	178.4	37,300
120	55.9	175.1	34,800
125	54.1	171.5	32,500
130	52.4	167.7	30,500
135	50.5	163.6	28,500
140	48.7	159.3	26,800
145	46.8	154.6	25,100
150	44.8	149.6	23,600
155	42.7	144.3	22,200
160	40.6	138.5	20,900
165	38.3	132.3	19,600
170	35.9	125.6	18,500
175	33.4	118.2	17,400
180	30.7	110.0	16,300
185	27.8	100.8	15,400
190	24.5	90.4	14,400
195	20.8	78.0	13,500
200	16.2	62.4	12,700

76



168,000 lb
+
53,000 lb

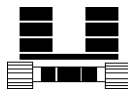


ft	o	ft	lb
213.2 ft			
34	82.5	219.1	136,500 *
36	82.0	218.8	132,700 *
38	81.4	218.5	131,400 *
40	80.9	218.2	130,100 *
42	80.3	217.8	128,800 *
44	79.8	217.5	128,100 *
46	79.2	217.1	126,400 *
48	78.7	216.7	125,200 *
50	78.1	216.2	120,300 *
55	76.8	215.1	108,300 *
60	75.4	213.8	98,200 *
65	74.0	212.3	87,500
70	72.6	210.8	78,600
75	71.2	209.1	71,000
80	69.7	207.2	64,600
85	68.3	205.3	59,000
90	66.8	203.1	54,200
95	65.3	200.9	49,900
100	63.9	198.4	46,100
105	62.3	195.8	42,800
110	60.8	193.0	39,700
115	59.2	190.1	37,000
120	57.7	186.9	34,500
125	56.0	183.6	32,200
130	54.4	180.1	30,100
135	52.7	176.3	28,200
140	51.0	172.3	26,500
145	49.2	168.0	24,800
150	47.4	163.4	23,300
155	45.5	158.6	21,900
160	43.6	153.4	20,600
165	41.6	147.9	19,300
170	39.5	141.9	18,200
175	37.3	135.4	17,100
180	35.0	128.4	16,000
185	32.5	120.8	15,100
190	29.9	112.3	14,100
195	27.0	102.9	13,300
200	23.8	92.1	12,400
205	20.1	79.3	11,600
210	15.6	63.2	10,900

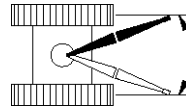
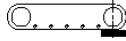
ft	o	ft	lb
223.1 ft			
34	82.9	229.1	135,800 *
36	82.3	228.8	132,000 *
38	81.8	228.5	130,700 *
40	81.3	228.2	129,400 *
42	80.8	227.8	128,100 *
44	80.2	227.5	127,400 *
46	79.7	227.1	125,700 *
48	79.2	226.7	124,500 *
50	78.7	226.3	119,700 *
55	77.4	225.2	107,600 *
60	76.0	223.9	97,500 *
65	74.7	222.6	87,100
70	73.4	221.1	78,100
75	72.0	219.5	70,500
80	70.7	217.7	64,100
85	69.3	215.9	58,500
90	67.9	213.9	53,700
95	66.5	211.7	49,400
100	65.1	209.4	45,600
105	63.7	206.9	42,200
110	62.2	204.3	39,200
115	60.7	201.5	36,400
120	59.3	198.6	33,900
125	57.7	195.4	31,700
130	56.2	192.1	29,600
135	54.6	188.6	27,700
140	53.0	184.9	25,900
145	51.4	180.9	24,300
150	49.7	176.7	22,700
155	48.0	172.2	21,300
160	46.2	167.5	20,000
165	44.4	162.4	18,800
170	42.5	157.1	17,600
175	40.5	151.3	16,500
180	38.5	145.1	15,500
185	36.4	138.4	14,500
190	34.1	131.2	13,600
195	31.7	123.3	12,700
200	29.1	114.6	11,900
205	26.3	104.8	11,100
210	23.2	93.7	10,300
215	19.5	80.5	9,600
220	15.1	63.8	8,900

ft	o	ft	lb
232.9 ft			
36	82.7	238.7	122,600 *
38	82.2	238.4	122,100 *
40	81.7	238.1	121,600 *
42	81.2	237.8	121,000 *
44	80.7	237.5	120,500 *
46	80.2	237.1	119,900 *
48	79.7	236.7	119,400 *
50	79.2	236.4	118,900 *
55	77.9	235.3	107,800 *
60	76.6	234.1	97,700 *
65	75.4	232.8	87,400
70	74.1	231.4	78,400
75	72.8	229.9	70,800
80	71.5	228.2	64,400
85	70.2	226.4	58,800
90	68.9	224.5	54,000
95	67.6	222.4	49,700
100	66.2	220.2	45,900
105	64.9	217.9	42,500
110	63.5	215.4	39,500
115	62.1	212.8	36,700
120	60.7	210.0	34,200
125	59.3	207.0	31,900
130	57.8	203.9	29,900
135	56.3	200.6	27,900
140	54.8	197.1	26,200
145	53.3	193.4	24,500
150	51.7	189.5	23,000
155	50.1	185.4	21,600
160	48.5	181.0	20,300
165	46.8	176.3	19,000
170	45.1	171.4	17,900
175	43.3	166.2	16,800
180	41.5	160.6	15,800
185	39.6	154.6	14,800
190	37.6	148.2	13,900
195	35.5	141.3	13,000
200	33.3	133.9	12,200
205	30.9	125.7	11,400
210	28.4	116.7	10,600
215	25.6	106.7	9,900
220	22.5	95.2	9,200
225	19.0	81.6	8,600

76



168,000 lb
+
53,000 lb

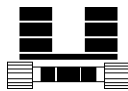


ft	o	ft	lb
242.8 ft			
36	83.0	248.7	111,600 *
38	82.5	248.4	111,100 *
40	82.0	248.1	110,600 *
42	81.5	247.8	110,000 *
44	81.0	247.5	109,500 *
46	80.6	247.1	109,000 *
48	80.1	246.8	108,500 *
50	79.6	246.4	108,000 *
55	78.4	245.4	106,700 *
60	77.2	244.2	97,400 *
65	76.0	243.0	87,100
70	74.8	241.6	78,200
75	73.5	240.2	70,600
80	72.3	238.6	64,100
85	71.0	236.9	58,600
90	69.8	235.0	53,700
95	68.5	233.1	49,400
100	67.2	231.0	45,600
105	65.9	228.8	42,200
110	64.6	226.4	39,200
115	63.3	223.9	36,400
120	62.0	221.3	33,900
125	60.6	218.5	31,600
130	59.3	215.5	29,600
135	57.9	212.4	27,600
140	56.5	209.1	25,900
145	55.0	205.6	24,200
150	53.6	202.0	22,700
155	52.1	198.1	21,300
160	50.6	194.0	20,000
165	49.0	189.7	18,700
170	47.4	185.2	17,600
175	45.8	180.3	16,500
180	44.1	175.2	15,500
185	42.3	169.8	14,500
190	40.5	164.0	13,600
195	38.7	157.9	12,700
200	36.7	151.3	11,900
205	34.7	144.2	11,100
210	32.5	136.5	10,400
215	30.2	128.1	9,600
220	27.7	118.8	9,000
225	25.0	108.5	8,300
230	22.0	96.7	7,700
235	18.5	82.7	7,100

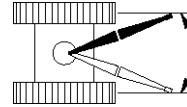
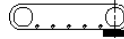
ft	o	ft	lb
252.6 ft			
38	82.8	258.3	101,300 *
40	82.3	258.0	100,700 *
42	81.9	257.7	100,200 *
44	81.4	257.4	99,700 *
46	80.9	257.1	99,200 *
48	80.5	256.8	98,700 *
50	80.0	256.4	98,200 *
55	78.9	255.4	97,000 *
60	77.7	254.3	95,800 *
65	76.5	253.1	86,900
70	75.4	251.8	77,900
75	74.2	250.4	70,300
80	73.0	248.9	63,800
85	71.8	247.3	58,200
90	70.6	245.5	53,400
95	69.4	243.7	49,100
100	68.2	241.7	45,300
105	66.9	239.6	41,900
110	65.7	237.3	38,800
115	64.4	234.9	36,100
120	63.2	232.4	33,600
125	61.9	229.8	31,300
130	60.6	226.9	29,200
135	59.3	224.0	27,300
140	57.9	220.9	25,500
145	56.6	217.6	23,900
150	55.2	214.2	22,400
155	53.8	210.5	20,900
160	52.4	206.7	19,600
165	50.9	202.7	18,400
170	49.4	198.4	17,200
175	47.9	193.9	16,100
180	46.4	189.2	15,100
185	44.7	184.2	14,100
190	43.1	178.9	13,200
195	41.4	173.3	12,300
200	39.6	167.4	11,500
205	37.8	161.0	10,700
210	35.9	154.2	10,000
215	33.9	146.9	9,300
220	31.8	139.0	8,600
225	29.5	130.4	8,000
230	27.1	120.9	7,300
235	24.4	110.3	6,700
240	21.4	98.1	6,200
245	18.0	83.8	5,600

ft	o	ft	lb
262.5 ft			
40	82.6	268.0	91,000 *
42	82.2	267.7	90,500 *
44	81.7	267.4	90,000 *
46	81.3	267.1	89,500 *
48	80.8	266.7	89,100 *
50	80.4	266.4	88,600 *
55	79.3	265.5	87,500 *
60	78.2	264.4	86,300 *
65	77.1	263.3	85,300 *
70	75.9	262.0	77,500
75	74.8	260.7	69,900
80	73.7	259.2	63,500
85	72.5	257.6	57,900
90	71.4	256.0	53,000
95	70.2	254.2	48,700
100	69.0	252.3	44,900
105	67.9	250.2	41,500
110	66.7	248.1	38,400
115	65.5	245.8	35,700
120	64.3	243.4	33,200
125	63.0	240.9	30,900
130	61.8	238.2	28,800
135	60.6	235.4	26,900
140	59.3	232.5	25,100
145	58.0	229.4	23,400
150	56.7	226.1	21,900
155	55.4	222.7	20,500
160	54.0	219.1	19,200
165	52.7	215.3	17,900
170	51.3	211.3	16,800
175	49.8	207.1	15,700
180	48.4	202.7	14,700
185	46.9	198.1	13,700
190	45.4	193.2	12,800
195	43.8	188.0	11,900
200	42.2	182.6	11,100
205	40.5	176.8	10,300
210	38.8	170.6	9,600
215	37.0	164.1	8,800
220	35.1	157.1	8,200
225	33.1	149.6	7,500
230	31.1	141.5	6,900
235	28.8	132.6	6,300
240	26.4	122.9	5,700
245	23.8	112.0	5,200
250	20.9	99.5	4,700
255	17.5	84.7	4,100 *

76



168,000 lb
+
53,000 lb



ft	o	ft	lb
272.3 ft			
40	82.9	277.9	85,500 *
42	82.5	277.6	85,100 *
44	82.0	277.4	84,700 *
46	81.6	277.0	84,300 *
48	81.2	276.7	83,900 *
50	80.7	276.4	83,500 *
55	79.7	275.5	82,500 *
60	78.6	274.5	81,500 *
65	77.5	273.4	80,500 *
70	76.4	272.2	77,200
75	75.4	270.9	69,600
80	74.3	269.5	63,100
85	73.2	268.0	57,500
90	72.1	266.4	52,600
95	71.0	264.6	48,300
100	69.8	262.8	44,500
105	68.7	260.9	41,100
110	67.6	258.8	38,100
115	66.4	256.6	35,300
120	65.3	254.4	32,800
125	64.1	251.9	30,500
130	62.9	249.4	28,400
135	61.7	246.7	26,500
140	60.5	243.9	24,700
145	59.3	241.0	23,100
150	58.1	237.9	21,600
155	56.8	234.6	20,100
160	55.5	231.2	18,800
165	54.2	227.6	17,600
170	52.9	223.9	16,400
175	51.6	219.9	15,300
180	50.2	215.8	14,300
185	48.8	211.4	13,300
190	47.4	206.9	12,400
195	45.9	202.1	11,500
200	44.4	197.0	10,700
205	42.9	191.7	9,900
210	41.3	186.1	9,200
215	39.7	180.1	8,500
220	38.0	173.8	7,800
225	36.2	167.1	7,200
230	34.4	159.9	6,600
235	32.4	152.2	6,000
240	30.4	143.9	5,400
245	28.2	134.8	4,900
250	25.9	124.8	4,300 *

ft	o	ft	lb
282.1 ft			
42	82.7	287.6	78,400 *
44	82.3	287.3	78,000 *
46	81.9	287.0	77,600 *
48	81.5	286.7	77,300 *
50	81.1	286.4	76,900 *
55	80.0	285.5	76,000 *
60	79.0	284.5	75,000 *
65	78.0	283.5	74,200 *
70	76.9	282.3	73,200 *
75	75.9	281.1	69,300
80	74.8	279.7	62,800
85	73.8	278.3	57,200
90	72.7	276.7	52,300
95	71.6	275.1	48,000
100	70.6	273.3	44,200
105	69.5	271.5	40,800
110	68.4	269.5	37,800
115	67.3	267.4	35,000
120	66.2	265.2	32,500
125	65.1	262.9	30,200
130	63.9	260.5	28,100
135	62.8	257.9	26,200
140	61.6	255.2	24,400
145	60.5	252.4	22,800
150	59.3	249.4	21,200
155	58.1	246.3	19,800
160	56.9	243.1	18,500
165	55.7	239.7	17,200
170	54.4	236.1	16,100
175	53.2	232.4	15,000
180	51.9	228.5	14,000
185	50.6	224.4	13,000
190	49.2	220.2	12,100
195	47.9	215.7	11,200
200	46.5	211.0	10,400
205	45.0	206.0	9,600
210	43.6	200.8	8,900
215	42.1	195.3	8,200
220	40.5	189.5	7,500
225	38.9	183.4	6,900
230	37.2	176.9	6,200
235	35.5	170.0	5,700
240	33.7	162.6	5,100
245	31.8	154.7	4,500 *

ft	o	ft	lb
292.0 ft			
42	83.0	297.5	72,300 *
44	82.6	297.2	71,900 *
46	82.2	297.0	71,500 *
48	81.8	296.6	71,200 *
50	81.4	296.3	70,800 *
55	80.4	295.5	70,000 *
60	79.4	294.6	69,000 *
65	78.4	293.5	68,200 *
70	77.4	292.4	67,300 *
75	76.4	291.2	66,500 *
80	75.4	289.9	62,500
85	74.3	288.5	56,900
90	73.3	287.0	52,000
95	72.3	285.4	47,700
100	71.2	283.7	43,900
105	70.2	282.0	40,500
110	69.2	280.1	37,400
115	68.1	278.1	34,600
120	67.0	276.0	32,100
125	66.0	273.7	29,800
130	64.9	271.4	27,700
135	63.8	269.0	25,800
140	62.7	266.4	24,000
145	61.6	263.7	22,400
150	60.4	260.9	20,900
155	59.3	257.9	19,400
160	58.1	254.8	18,100
165	57.0	251.6	16,900
170	55.8	248.2	15,700
175	54.6	244.7	14,600
180	53.4	241.0	13,600
185	52.1	237.1	12,600
190	50.9	233.1	11,700
195	49.6	228.9	10,800
200	48.3	224.4	10,000
205	46.9	219.8	9,200
210	45.6	214.9	8,500
215	44.2	209.8	7,800
220	42.7	204.5	7,100
225	41.3	198.8	6,500
230	39.7	192.9	5,900
235	38.2	186.6	5,300 *
240	36.5	179.9	4,600 *