

Liftcrane Jib Capacities

Jib No. 148 on
 Boom No. B10:500
 with 309,100 lb Fixed Position Counterweight
 at 13.4 ft Position
 360 Degree Rating

MLC300 SERIES 1



LIFTING CAPACITIES: Chart supplements Boom Capacity chart **No. 9597-A**. Lifting capacities for various boom lengths, jib lengths, and jib operating radii are for freely suspended loads and may be based on percent of static tipping or strength of structural components. Capacities must be reduced by applicable deducts.

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom and jib point sheaves is considered part of load. Boom and jib are 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 on a firm, level, and uniformly supporting surface. Refer to Boom Rigging **No. 81023380**, Jib Rigging **No. 81023385**, Wire Rope Specifications chart **No. 9471-A**, Counterweight Arrangements **No. 9345-A**, and Wind Conditions chart **No. 9472-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 the Operator 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 Specifications chart **No. 9618-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.



JIB POINT ELEVATION: Jib point elevation is vertical distance from ground level to centerline of jib point shaft.

MACHINE EQUIPMENT: Machine equipped with 31 ft 10 in. crawlers, 48 in. or 60 in. treads, 30 ft live mast, 24 part boom hoist reeving, boom support straps, and 309,100 lb Fixed Position Counterweight.

Luffing Jib Backstay Deduct	
Boom Length (ft)	Deduct (lb)
98.4	2,900
118.1	3,500
137.8	4,100
157.5	4,600
177.2	5,200
196.9	5,800
216.5	6,400
Deduct the appropriate value from capacities when luffing jib backstays are stored on boom.	

Refer to Table 1 (with luffing jib backstays stored) and Table 2 (without luffing jib backstays stored) for raising ability with the maximum weight of all load blocks, hooks, weight ball, slings, and hoist lines beneath boom and jib point sheaves. For block weights shown with #, load blocks, hooks, weight ball, and slings must remain on ground until combined weights are within rated capacity of chart. Raising is not permitted in shaded areas of table.

Combined weight beneath boom and jib point sheaves must not exceed block weight shown. Total weight beneath jib point must not exceed 6,200 lb.

Table 1a: With Luffing Jib Backstays

Over End or Side of Crawlers						
Boom Length (ft)	Jib No. 148					
	39.4 ft	59.1 ft	78.7 ft	98.4 ft	118.1 ft	137.8 ft
	Block Weight (lb)					
98.4	22,900	22,900	22,900	22,900	22,900	22,900
118.1	22,900	22,900	22,900	22,900	22,900	15,800
137.8	22,900	22,900	15,800	15,800	8,300	8,300
157.5	8,300	8,300	8,300	#	#	#
177.2	#	#	#	#	Raising Not Permitted	
196.9						
216.5						

Table 1b: With Luffing Jib Backstays

Over End of Blocked Crawlers						
Boom Length (ft)	Jib No. 148					
	39.4 ft	59.1 ft	78.7 ft	98.4 ft	118.1 ft	137.8 ft
	Block Weight (lb)					
98.4	22,900	22,900	22,900	22,900	22,900	22,900
118.1	22,900	22,900	22,900	22,900	22,900	15,800
137.8	22,900	22,900	15,800	15,800	8,300	8,300
157.5	8,300	8,300	8,300	#	#	#
177.2	#	#	#	#	#	#
196.9	#	#	#	#	Raising Not Permitted	
216.5	#					
Warning: Crane must remain in-line with crawlers when raising over end of blocked crawlers until operating radius is within 360 degree chart. <i>Crane tipping or structural damage can occur.</i>						

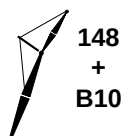
Table 2a: Without Luffing Jib Backstays

Over End or Side of Crawlers						
Boom Length (ft)	Jib No. 148					
	39.4 ft	59.1 ft	78.7 ft	98.4 ft	118.1 ft	137.8 ft
	Block Weight (lb)					
98.4	22,900	22,900	22,900	22,900	22,900	22,900
118.1	22,900	22,900	22,900	22,900	22,900	22,900
137.8	22,900	22,900	22,900	15,800	8,300	8,300
157.5	15,800	8,300	8,300	#	#	#
177.2	8,300	#	#	#	#	Raising Not Permitted
196.9	#	#				
216.5						

Table 2b: Without Luffing Jib Backstays

Over End of Blocked Crawlers						
Boom Length (ft)	Jib No. 148					
	39.4 ft	59.1 ft	78.7 ft	98.4 ft	118.1 ft	137.8 ft
	Block Weight (lb)					
98.4	22,900	22,900	22,900	22,900	22,900	22,900
118.1	22,900	22,900	22,900	22,900	22,900	22,900
137.8	22,900	22,900	22,900	15,800	8,300	8,300
157.5	15,800	8,300	8,300	#	#	#
177.2	8,300	#	#	#	#	#
196.9	#	#	#	#	#	Raising Not Permitted
216.5	#	#				
Warning: Crane must remain in-line with crawlers when raising over end of blocked crawlers until operating radius is within 360 degree chart. <i>Crane tipping or structural damage can occur.</i>						

Explanation of Symbols



Jib No. 148
+
Boom No. B10:500



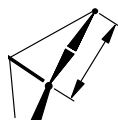
Fixed Position Counterweight



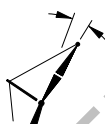
360 Degree Rating



Boom Length



Jib Length



Jib Offset Angle



Operating Radius
(see page 1)



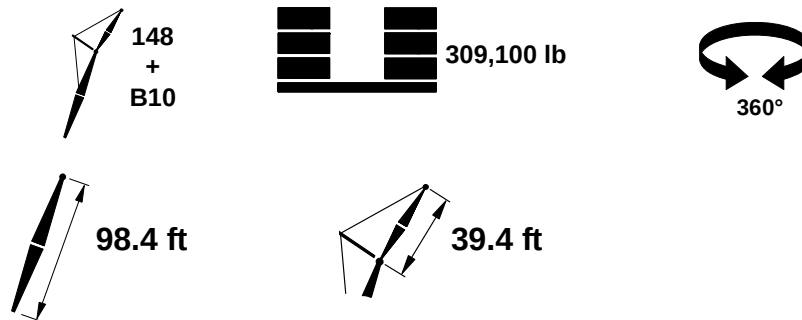
Boom Angle
(see page 1)



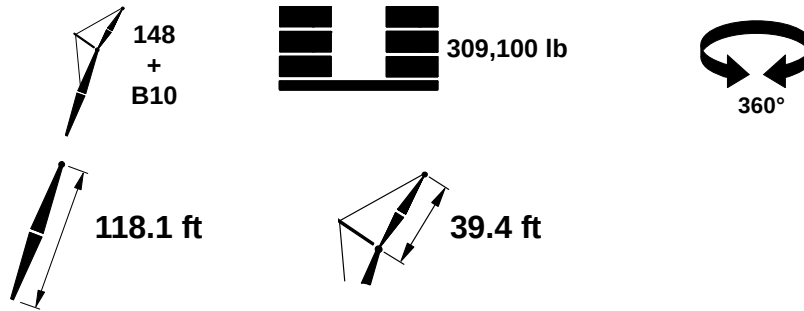
Jib Point Elevation
(see page 1)



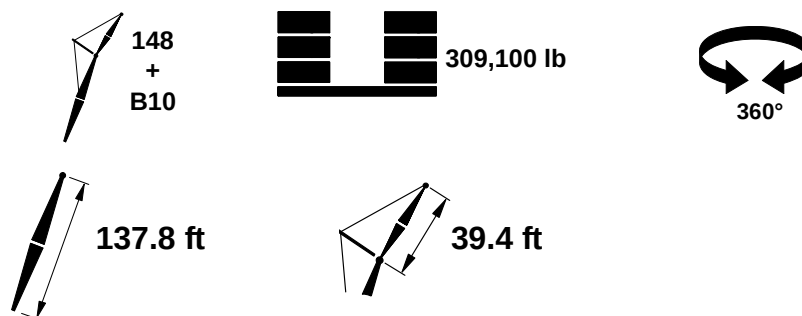
Lifting Capacities
(see page 1)



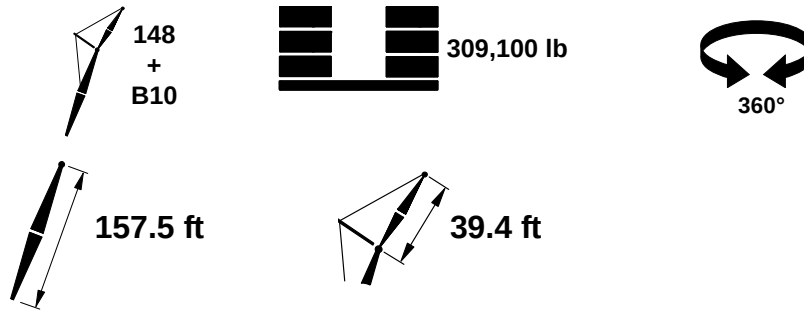
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
28	84.3	143.9	143,300				28
30	83.4	143.6	143,300				30
32	82.6	143.2	143,300				32
34	81.7	142.8	143,300	84.3	141.4	143,300	34
36	80.9	142.4	143,300	83.4	141.0	142,000	36
38	80.0	141.9	143,300	82.6	140.5	138,000	38
40	79.2	141.4	143,300	81.7	140.0	134,200	40
45	77.0	140.0	143,300	79.5	138.6	125,700	45
50	74.9	138.4	143,300	77.3	136.9	118,300	50
55	72.7	136.5	143,300	75.1	135.1	111,700	55
60	70.4	134.5	135,400	72.9	133.0	105,800	60
65	68.2	132.2	127,000	70.6	130.7	100,700	65
70	65.9	129.7	119,600	68.2	128.2	96,000	70
75	63.5	126.9	108,200	65.8	125.3	91,700	75
80	61.1	123.8	98,500	63.4	122.2	88,000	80
85	58.6	120.5	90,100	60.8	118.8	84,500	85
90	56.0	116.8	82,700	58.2	115.0	81,400	90
95	53.3	112.7	76,200	55.5	110.9	77,300	95
100	50.6	108.2	70,400	52.7	106.4	71,400	100
105	47.7	103.3	65,200	49.7	101.3	66,100	105
110	44.6	97.8	60,500	46.6	95.7	61,300	110
115	41.3	91.7	56,300	43.3	89.4	56,900	115
120	37.8	84.7	52,400	39.6	82.3	53,000	120
125	33.9	76.7	48,900	35.6	74.0	49,300	125
130	29.5	67.3	45,600	31.0	64.1	45,900	130
135	24.2	55.5	42,500				135
140	17.1	39.0	39,500				140



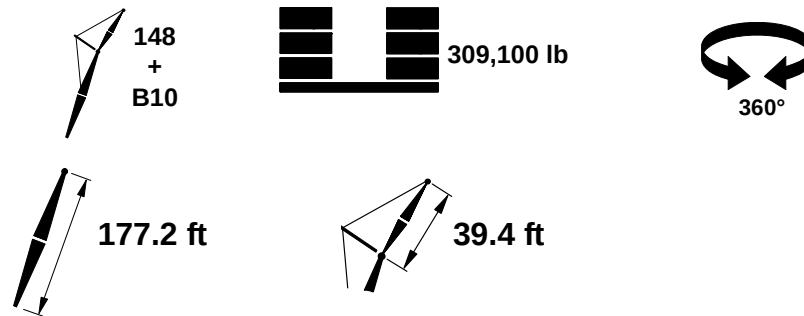
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
28	85.0	163.8	143,300				28
30	84.2	163.5	143,300				30
32	83.5	163.2	143,300				32
34	82.8	162.8	143,300	85.0	161.4	143,300	34
36	82.0	162.4	143,300	84.3	161.0	143,300	36
38	81.3	162.0	143,300	83.5	160.6	142,100	38
40	80.6	161.6	143,300	82.8	160.1	138,600	40
45	78.7	160.4	143,300	80.9	158.9	130,600	45
50	76.8	159.0	143,300	79.0	157.5	123,500	50
55	74.9	157.4	143,300	77.1	155.9	117,200	55
60	73.0	155.7	143,300	75.1	154.1	111,600	60
65	71.1	153.7	132,200	73.2	152.2	106,500	65
70	69.1	151.6	118,700	71.2	150.0	101,900	70
75	67.1	149.2	107,300	69.2	147.6	97,700	75
80	65.1	146.6	97,500	67.1	145.0	93,900	80
85	63.0	143.8	89,100	65.0	142.2	90,400	85
90	60.9	140.8	81,700	62.9	139.1	83,100	90
95	58.7	137.4	75,200	60.7	135.7	76,400	95
100	56.5	133.9	69,400	58.4	132.1	70,500	100
105	54.2	129.9	64,200	56.1	128.1	65,200	105
110	51.8	125.7	59,500	53.7	123.8	60,500	110
115	49.3	121.1	55,300	51.2	119.1	56,200	115
120	46.8	116.0	51,500	48.5	113.9	52,200	120
125	44.1	110.5	48,000	45.8	108.3	48,600	125
130	41.2	104.4	44,700	42.9	102.0	45,300	130
135	38.2	97.6	41,700	39.7	95.1	42,200	135
140	34.8	89.9	38,900	36.3	87.2	39,400	140
145	31.2	81.2	36,300	32.5	78.1	36,700	145
150	27.0	70.8	33,900	28.1	67.2	34,100	150
155	22.0	57.9	31,600				155



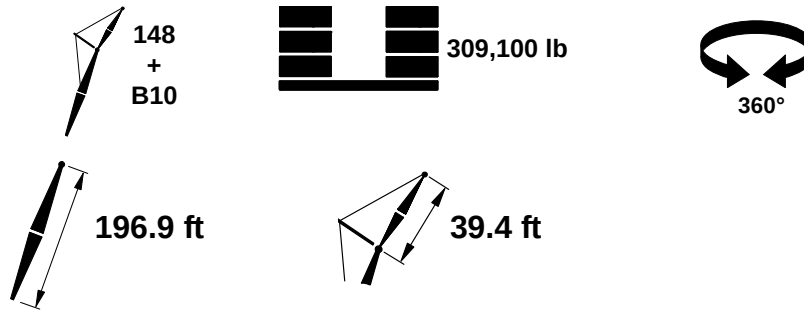
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
30	84.9	183.4	143,300				30
32	84.2	183.1	143,300				32
34	83.6	182.8	143,300				34
36	82.9	182.4	143,300	84.9	180.9	143,300	36
38	82.3	182.1	143,300	84.3	180.6	143,300	38
40	81.6	181.7	143,300	83.6	180.2	142,100	40
45	80.0	180.6	143,300	81.9	179.1	134,600	45
50	78.3	179.4	143,300	80.3	177.9	127,900	50
55	76.6	178.0	143,300	78.6	176.5	121,900	55
60	75.0	176.5	143,300	76.9	174.9	116,400	60
65	73.3	174.7	131,300	75.2	173.2	111,500	65
70	71.5	172.9	117,700	73.4	171.3	106,900	70
75	69.8	170.8	106,300	71.7	169.2	102,800	75
80	68.0	168.6	96,500	69.9	167.0	98,300	80
85	66.3	166.2	88,000	68.1	164.5	89,700	85
90	64.4	163.6	80,600	66.2	161.9	82,100	90
95	62.6	160.7	74,100	64.4	159.0	75,500	95
100	60.7	157.7	68,300	62.5	155.9	69,600	100
105	58.8	154.4	63,100	60.5	152.6	64,300	105
110	56.8	150.9	58,400	58.5	149.1	59,500	110
115	54.8	147.1	54,200	56.5	145.2	55,200	115
120	52.7	143.0	50,400	54.4	141.1	51,300	120
125	50.6	138.6	46,900	52.2	136.6	47,700	125
130	48.4	133.9	43,600	49.9	131.8	44,400	130
135	46.1	128.8	40,700	47.6	126.6	41,400	135
140	43.6	123.2	37,900	45.1	120.9	38,500	140
145	41.1	117.1	35,400	42.6	114.7	35,900	145
150	38.4	110.4	33,000	39.8	107.8	33,500	150
155	35.5	103.0	30,800	36.8	100.2	31,200	155
160	32.4	94.7	28,700	33.6	91.6	29,000	160
165	29.0	85.2	26,700	30.0	81.7	26,900	165
170	25.0	74.0	24,800				170
175	20.2	60.0	23,000				175



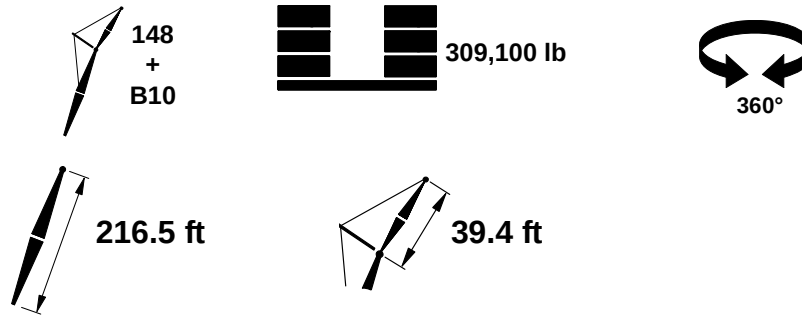
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
34	84.2	202.7	143,300				34
36	83.6	202.4	143,300				36
38	83.1	202.1	143,300				38
40	82.5	201.7	143,300	84.2	200.2	142,900	40
45	81.0	200.7	143,300	82.8	199.2	137,900	45
50	79.5	199.6	143,300	81.3	198.1	131,500	50
55	78.0	198.4	143,300	79.8	196.8	125,800	55
60	76.5	197.0	143,300	78.2	195.4	120,500	60
65	75.0	195.5	130,200	76.7	193.9	115,800	65
70	73.5	193.8	116,500	75.2	192.2	111,300	70
75	71.9	192.0	105,000	73.6	190.4	107,300	75
80	70.4	190.0	95,200	72.0	188.4	97,300	80
85	68.8	187.9	86,700	70.5	186.2	88,600	85
90	67.2	185.6	79,300	68.8	183.9	81,000	90
95	65.6	183.2	72,700	67.2	181.4	74,300	95
100	63.9	180.5	66,900	65.6	178.8	68,400	100
105	62.3	177.7	61,700	63.9	175.9	63,100	105
110	60.6	174.6	57,100	62.2	172.8	58,300	110
115	58.9	171.4	52,800	60.4	169.6	54,000	115
120	57.1	167.9	49,000	58.6	166.1	50,100	120
125	55.3	164.2	45,500	56.8	162.3	46,500	125
130	53.4	160.3	42,300	54.9	158.3	43,200	130
135	51.5	156.1	39,300	53.0	154.0	40,100	135
140	49.6	151.6	36,600	51.0	149.5	37,300	140
145	47.6	146.7	34,000	49.0	144.5	34,700	145
150	45.5	141.5	31,700	46.9	139.2	32,300	150
155	43.3	135.9	29,400	44.6	133.5	30,000	155
160	41.0	129.8	27,400	42.3	127.4	27,900	160
165	38.6	123.2	25,400	39.9	120.6	25,900	165
170	36.1	116.0	23,600	37.3	113.2	24,000	170
175	33.4	108.0	21,900	34.4	105.0	22,200	175
180	30.4	99.1	20,200	31.4	95.8	20,500	180
185	27.1	88.9	18,600	27.9	85.1	18,800	185
190	23.3	76.8	17,100				190
195	18.7	61.7	15,700				195



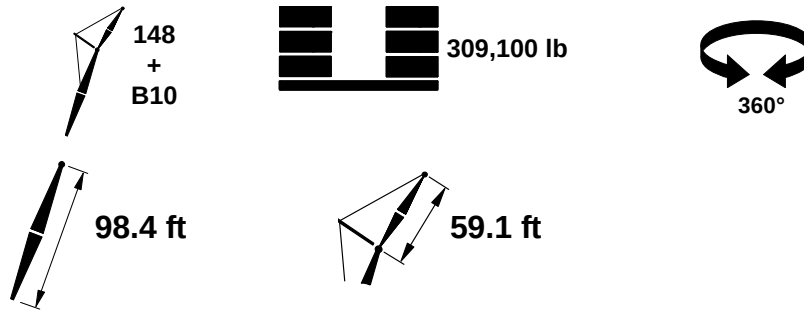
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
34	84.8	222.5	143,300				34
36	84.2	222.3	143,300				36
38	83.7	222.0	143,300				38
40	83.2	221.7	143,300	84.8	220.1	141,900	40
45	81.8	220.8	143,300	83.4	219.2	140,600	45
50	80.5	219.8	143,300	82.1	218.2	134,600	50
55	79.1	218.7	143,300	80.7	217.1	129,100	55
60	77.8	217.4	143,300	79.3	215.8	124,100	60
65	76.4	216.0	129,700	78.0	214.4	119,400	65
70	75.0	214.5	116,000	76.6	212.9	115,200	70
75	73.6	212.9	104,500	75.2	211.3	106,800	75
80	72.2	211.1	94,600	73.8	209.5	96,800	80
85	70.8	209.2	86,100	72.3	207.6	88,100	85
90	69.4	207.2	78,600	70.9	205.5	80,500	90
95	68.0	205.0	72,100	69.5	203.3	73,800	95
100	66.5	202.6	66,300	68.0	200.9	67,800	100
105	65.0	200.1	61,100	66.5	198.4	62,500	105
110	63.5	197.4	56,400	65.0	195.7	57,700	110
115	62.0	194.6	52,200	63.5	192.8	53,400	115
120	60.5	191.6	48,300	61.9	189.7	49,500	120
125	58.9	188.4	44,800	60.3	186.5	45,900	125
130	57.3	185.0	41,600	58.7	183.0	42,600	130
135	55.7	181.3	38,600	57.1	179.4	39,600	135
140	54.0	177.5	35,900	55.4	175.5	36,800	140
145	52.3	173.4	33,300	53.7	171.3	34,200	145
150	50.6	169.1	31,000	51.9	166.9	31,700	150
155	48.8	164.4	28,800	50.1	162.3	29,500	155
160	46.9	159.5	26,700	48.2	157.3	27,400	160
165	45.0	154.2	24,800	46.3	151.9	25,400	165
170	43.0	148.6	23,000	44.2	146.2	23,500	170
175	41.0	142.6	21,300	42.1	140.0	21,700	175
180	38.8	136.0	19,700	39.9	133.4	20,100	180
185	36.5	129.0	18,100	37.6	126.2	18,500	185
190	34.1	121.2	16,700	35.1	118.2	17,000	190
195	31.5	112.7	15,300	32.4	109.4	15,600	195
200	28.6	103.1	14,000	29.5	99.5	14,200	200
205	25.5	92.2	12,700				205
210	21.8	79.4	11,200				210
215	17.4	63.2	9,800				215



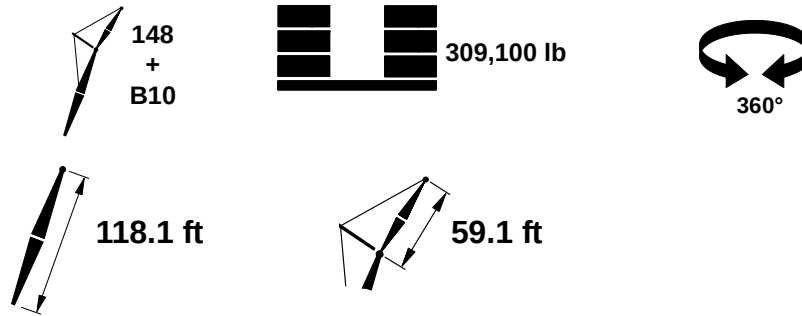
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
36	84.7	242.1	143,300				36
38	84.2	241.9	143,300				38
40	83.7	241.6	143,300				40
45	82.5	240.8	143,300	84.0	239.1	140,100	45
50	81.3	239.9	143,300	82.7	238.2	137,200	50
55	80.0	238.8	143,300	81.5	237.2	131,900	55
60	78.8	237.7	143,300	80.3	236.1	127,100	60
65	77.6	236.4	128,400	79.0	234.8	122,700	65
70	76.3	235.1	114,700	77.7	233.4	117,500	70
75	75.0	233.6	103,100	76.5	231.9	105,700	75
80	73.8	232.0	93,200	75.2	230.3	95,500	80
85	72.5	230.3	84,600	73.9	228.6	86,800	85
90	71.2	228.4	77,100	72.6	226.7	79,200	90
95	69.9	226.4	70,600	71.3	224.7	72,400	95
100	68.6	224.3	64,700	70.0	222.5	66,500	100
105	67.3	222.0	59,500	68.6	220.3	61,100	105
110	65.9	219.6	54,800	67.3	217.9	56,300	110
115	64.6	217.1	50,600	65.9	215.3	52,000	115
120	63.2	214.4	46,700	64.5	212.6	48,000	120
125	61.8	211.5	43,200	63.1	209.7	44,400	125
130	60.4	208.5	40,000	61.7	206.6	41,100	130
135	59.0	205.3	37,000	60.2	203.4	38,100	135
140	57.5	202.0	34,200	58.8	200.0	35,300	140
145	56.0	198.4	31,700	57.3	196.4	32,600	145
150	54.5	194.6	29,300	55.7	192.6	30,200	150
155	53.0	190.7	27,100	54.2	188.6	28,000	155
160	51.4	186.5	25,100	52.6	184.3	25,900	160
165	49.8	182.0	23,200	51.0	179.8	23,900	165
170	48.1	177.3	21,400	49.3	175.1	22,000	170
175	46.4	172.3	19,600	47.5	170.0	20,300	175
180	44.6	167.0	18,000	45.7	164.6	18,600	180
185	42.8	161.3	16,500	43.9	158.9	17,000	185
190	40.9	155.3	15,100	42.0	152.7	15,500	190
195	38.9	148.8	13,600	40.0	146.2	14,100	195
200	36.9	141.9	12,000	37.8	139.0	12,500	200
205	34.7	134.3	10,500	35.6	131.3	11,000	205
210	32.4	126.1	9,100	33.2	122.9	9,500	210
215	29.8	117.0	7,700	30.6	113.6	8,000	215
220				27.8	103.1	6,700	220



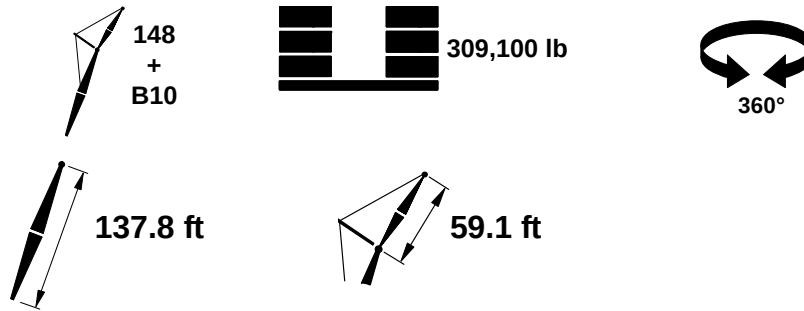
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
38	84.7	261.7	143,300				38
40	84.2	261.4	143,300				40
45	83.1	260.7	143,300	84.5	259.1	138,700	45
50	82.0	259.9	143,300	83.3	258.2	137,800	50
55	80.8	258.9	143,300	82.2	257.3	134,300	55
60	79.7	257.9	143,000	81.0	256.2	129,700	60
65	78.5	256.7	127,900	79.9	255.1	125,500	65
70	77.4	255.5	114,100	78.7	253.8	117,000	70
75	76.2	254.1	102,500	77.5	252.4	105,200	75
80	75.1	252.6	92,500	76.4	250.9	95,000	80
85	73.9	251.0	83,900	75.2	249.3	86,200	85
90	72.7	249.4	76,500	74.0	247.6	78,600	90
95	71.5	247.5	69,900	72.8	245.8	71,800	95
100	70.3	245.6	64,000	71.6	243.9	65,800	100
105	69.1	243.6	58,800	70.4	241.8	60,500	105
110	67.9	241.4	54,100	69.2	239.6	55,700	110
115	66.7	239.1	49,800	67.9	237.3	51,300	115
120	65.4	236.6	46,000	66.7	234.8	47,400	120
125	64.2	234.1	42,400	65.4	232.2	43,700	125
130	62.9	231.3	39,200	64.1	229.5	40,400	130
135	61.6	228.5	36,200	62.8	226.6	37,400	135
140	60.3	225.5	33,500	61.5	223.6	34,600	140
145	59.0	222.3	30,900	60.2	220.4	32,000	145
150	57.7	219.0	28,600	58.8	217.0	29,500	150
155	56.3	215.4	26,400	57.5	213.4	27,300	155
160	54.9	211.8	24,300	56.1	209.7	25,200	160
165	53.5	207.9	22,400	54.6	205.8	23,200	165
170	52.1	203.8	20,600	53.2	201.7	21,300	170
175	50.6	199.5	18,900	51.7	197.3	19,600	175
180	49.1	194.9	17,300	50.2	192.7	17,900	180
185	47.5	190.1	15,700	48.6	187.9	16,400	185
190	45.9	185.1	14,000	47.0	182.7	14,800	190
195	44.3	179.7	12,400	45.3	177.3	13,100	195
200	42.6	174.1	10,900	43.6	171.6	11,500	200
205	40.9	168.0	9,400	41.8	165.4	10,000	205
210	39.1	161.6	8,000	40.0	158.9	8,600	210
215	37.2	154.8	6,700	38.1	151.9	7,200	215



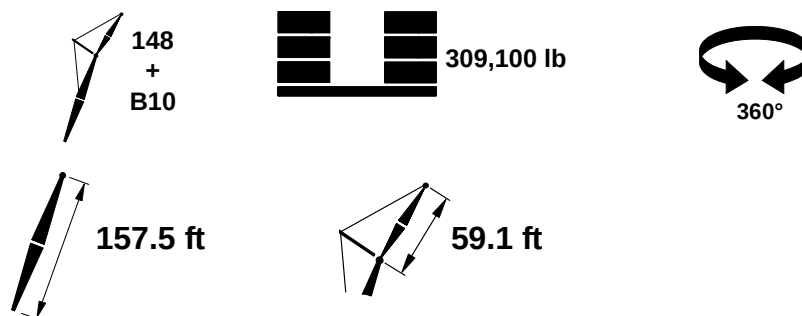
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
34	84.7	162.5	116,600				34
36	83.9	162.1	115,100				36
38	83.2	161.7	113,400				38
40	82.4	161.3	111,800				40
45	80.6	160.1	107,900				45
50	78.7	158.7	104,300	83.9	158.1	90,000	50
55	76.8	157.1	101,000	80.1	155.1	79,900	55
60	74.9	155.3	97,800	78.1	153.3	75,700	60
65	72.9	153.4	94,700	76.2	151.3	71,900	65
70	71.0	151.2	89,200	74.2	149.1	68,500	70
75	69.0	148.9	84,300	72.1	146.7	65,500	75
80	66.9	146.3	80,000	70.1	144.1	62,600	80
85	64.8	143.5	76,100	67.9	141.3	60,100	85
90	62.7	140.4	72,500	65.8	138.2	57,700	90
95	60.5	137.1	69,300	63.6	134.8	55,600	95
100	58.3	133.5	66,300	61.3	131.1	53,600	100
105	56.0	129.6	63,600	58.9	127.1	51,800	105
110	53.6	125.3	61,100	56.5	122.7	50,100	110
115	51.1	120.6	58,800	54.0	118.0	48,600	115
120	48.6	115.6	55,400	51.3	112.8	47,100	120
125	45.8	110.0	51,800	48.5	107.1	45,800	125
130	43.0	103.9	48,600	45.6	100.8	44,700	130
135	39.9	97.1	45,500	42.4	93.7	43,600	135
140	36.6	89.4	42,700	38.9	85.6	42,600	140
145	32.9	80.5	40,100	35.1	76.3	40,600	145
150	28.7	70.1	37,600	30.6	65.1	38,000	150
155	23.6	57.0	35,200				155



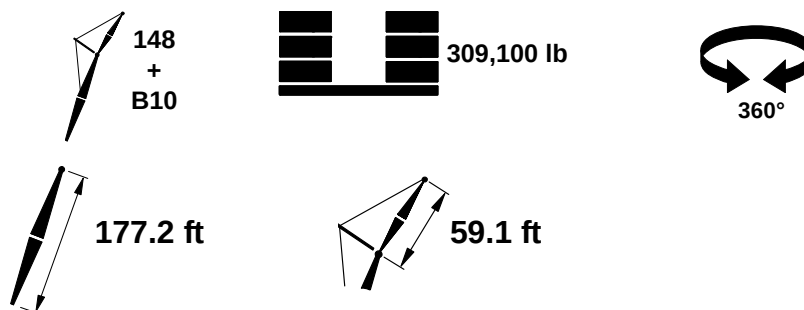
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
36	84.6	182.1	115,900				36
38	84.0	181.7	114,400				38
40	83.3	181.3	113,000				40
45	81.6	180.3	109,600	84.6	178.2	91,900	45
50	80.0	179.0	106,300	82.9	176.9	87,000	50
55	78.3	177.6	103,200	81.2	175.5	82,500	55
60	76.6	176.1	100,400	79.5	174.0	78,500	60
65	74.9	174.4	97,600	77.8	172.2	74,900	65
70	73.2	172.5	95,100	76.1	170.3	71,600	70
75	71.5	170.4	90,300	74.3	168.2	68,600	75
80	69.7	168.2	85,900	72.5	166.0	65,900	80
85	67.9	165.8	81,900	70.7	163.5	63,400	85
90	66.1	163.2	78,300	68.8	160.9	61,000	90
95	64.2	160.3	74,900	67.0	158.0	58,900	95
100	62.3	157.3	71,900	65.0	154.9	56,900	100
105	60.4	154.0	67,100	63.1	151.5	55,100	105
110	58.4	150.5	62,400	61.1	148.0	53,400	110
115	56.4	146.7	58,100	59.0	144.1	51,800	115
120	54.3	142.6	54,200	56.9	139.9	50,300	120
125	52.2	138.2	50,700	54.7	135.4	48,900	125
130	49.9	133.4	47,400	52.4	130.5	47,700	130
135	47.6	128.3	44,400	50.0	125.3	45,400	135
140	45.2	122.7	41,600	47.6	119.5	42,500	140
145	42.7	116.5	39,100	44.9	113.2	39,800	145
150	40.0	109.8	36,600	42.1	106.3	37,300	150
155	37.1	102.4	34,400	39.1	98.5	35,000	155
160	33.9	94.0	32,300	35.8	89.8	32,700	160
165	30.4	84.4	30,200	32.1	79.6	30,600	165
170	26.4	73.0	28,300				170
175	21.6	58.8	26,500				175



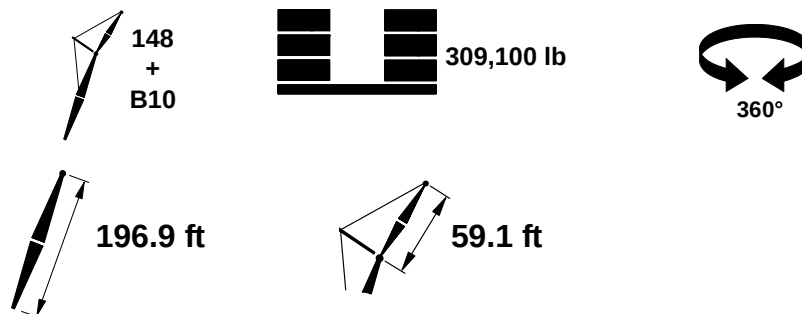
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
38	84.6	201.7	115,000				38
40	84.0	201.3	113,800				40
45	82.5	200.3	110,600				45
50	81.0	199.2	107,700	83.7	197.1	88,800	50
55	79.5	198.0	104,900	82.2	195.8	84,700	55
60	78.0	196.6	102,300	80.6	194.4	80,900	60
65	76.5	195.1	99,700	79.1	192.9	77,400	65
70	75.0	193.4	97,400	77.5	191.2	74,200	70
75	73.4	191.6	95,200	76.0	189.3	71,400	75
80	71.9	189.6	91,300	74.4	187.3	68,700	80
85	70.3	187.5	87,100	72.8	185.2	66,200	85
90	68.7	185.2	83,500	71.2	182.8	64,000	90
95	67.1	182.7	77,000	69.5	180.3	61,800	95
100	65.4	180.1	71,200	67.9	177.6	59,900	100
105	63.7	177.2	65,900	66.2	174.7	58,000	105
110	62.0	174.2	61,200	64.4	171.7	56,300	110
115	60.3	170.9	56,900	62.7	168.4	54,700	115
120	58.5	167.5	53,000	60.9	164.8	53,200	120
125	56.7	163.8	49,500	59.1	161.1	50,800	125
130	54.9	159.8	46,200	57.2	157.0	47,500	130
135	53.0	155.6	43,200	55.2	152.7	44,400	135
140	51.0	151.0	40,500	53.2	148.1	41,500	140
145	49.0	146.2	37,900	51.2	143.1	38,800	145
150	46.9	140.9	35,500	49.0	137.8	36,400	150
155	44.7	135.3	33,300	46.8	132.0	34,000	155
160	42.4	129.2	31,200	44.4	125.7	31,900	160
165	40.0	122.6	29,200	41.9	118.9	29,800	165
170	37.4	115.3	27,300	39.3	111.4	27,900	170
175	34.7	107.3	25,600	36.4	103.0	26,000	175
180	31.7	98.3	23,900	33.3	93.5	24,300	180
185	28.4	87.9	22,300	29.7	82.6	22,600	185
190	24.5	75.7	20,700				190
195	19.8	60.3	19,200				195



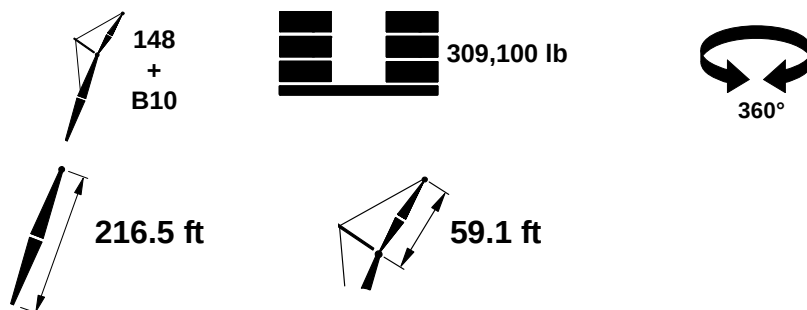
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
40	84.5	221.2	114,000				40
45	83.2	220.4	111,200				45
50	81.8	219.4	108,600	84.3	217.1	90,300	50
55	80.5	218.2	106,000	82.9	216.0	86,400	55
60	79.1	217.0	103,600	81.5	214.7	82,800	60
65	77.8	215.6	101,300	80.1	213.3	79,500	65
70	76.4	214.1	99,100	78.7	211.8	76,500	70
75	75.0	212.5	97,100	77.3	210.1	73,700	75
80	73.6	210.7	95,100	75.9	208.3	71,100	80
85	72.2	208.8	89,900	74.5	206.4	68,800	85
90	70.7	206.7	82,400	73.0	204.3	66,500	90
95	69.3	204.5	75,700	71.6	202.1	64,400	95
100	67.8	202.2	69,800	70.1	199.7	62,500	100
105	66.4	199.7	64,600	68.6	197.2	60,700	105
110	64.9	197.0	59,800	67.1	194.4	59,000	110
115	63.3	194.1	55,500	65.5	191.5	57,300	115
120	61.8	191.1	51,600	64.0	188.5	53,300	120
125	60.2	187.9	48,100	62.4	185.2	49,600	125
130	58.6	184.4	44,800	60.8	181.7	46,200	130
135	57.0	180.8	41,800	59.1	178.0	43,100	135
140	55.3	177.0	39,000	57.4	174.1	40,300	140
145	53.6	172.9	36,500	55.7	169.9	37,600	145
150	51.9	168.5	34,100	53.9	165.5	35,100	150
155	50.1	163.9	31,800	52.0	160.8	32,800	155
160	48.2	158.9	29,800	50.1	155.7	30,700	160
165	46.3	153.6	27,800	48.2	150.3	28,600	165
170	44.3	148.0	26,000	46.1	144.5	26,700	170
175	42.2	141.9	24,200	44.0	138.3	24,900	175
180	40.0	135.3	22,600	41.8	131.6	23,200	180
185	37.7	128.2	21,000	39.4	124.2	21,600	185
190	35.3	120.4	19,500	36.9	116.1	20,000	190
195	32.7	111.8	18,100	34.1	107.2	18,500	195
200	29.8	102.2	16,800	31.1	97.0	17,100	200
205	26.6	91.2	15,400				205
210	22.9	78.1	14,200				210



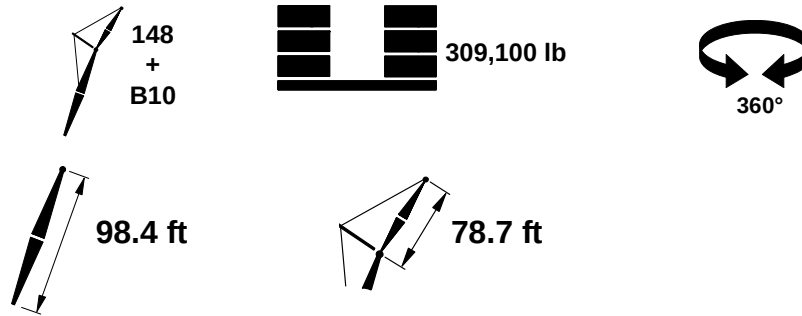
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
40	85.0	241.1	113,400				40
45	83.8	240.3	111,400				45
50	82.5	239.4	109,000	84.8	237.1	91,500	50
55	81.3	238.4	106,700	83.5	236.0	87,900	55
60	80.1	237.2	104,500	82.2	234.9	84,500	60
65	78.8	236.0	102,400	81.0	233.6	81,400	65
70	77.6	234.6	100,400	79.7	232.2	78,500	70
75	76.3	233.1	98,500	78.4	230.7	75,800	75
80	75.0	231.5	96,600	77.2	229.1	73,300	80
85	73.7	229.8	89,200	75.9	227.4	70,900	85
90	72.4	227.9	81,700	74.6	225.5	68,700	90
95	71.1	225.9	75,000	73.2	223.5	66,700	95
100	69.8	223.8	69,100	71.9	221.3	64,800	100
105	68.5	221.6	63,800	70.6	219.0	63,000	105
110	67.2	219.1	59,100	69.2	216.6	61,100	110
115	65.8	216.6	54,800	67.8	214.0	56,700	115
120	64.4	213.9	50,900	66.4	211.3	52,600	120
125	63.0	211.0	47,300	65.0	208.4	49,000	125
130	61.6	208.0	44,000	63.6	205.3	45,600	130
135	60.2	204.8	41,000	62.1	202.1	42,500	135
140	58.7	201.4	38,300	60.6	198.6	39,600	140
145	57.2	197.9	35,700	59.1	195.0	37,000	145
150	55.7	194.1	33,300	57.6	191.2	34,500	150
155	54.2	190.1	31,100	56.0	187.1	32,200	155
160	52.6	185.9	29,000	54.4	182.8	30,000	160
165	50.9	181.4	27,000	52.8	178.3	28,000	165
170	49.3	176.7	25,200	51.1	173.5	26,100	170
175	47.6	171.7	23,500	49.3	168.4	24,300	175
180	45.8	166.3	21,800	47.5	162.9	22,600	180
185	44.0	160.7	20,300	45.6	157.1	21,000	185
190	42.1	154.6	18,800	43.7	150.9	19,500	190
195	40.1	148.1	17,400	41.6	144.2	18,000	195
200	38.0	141.1	16,100	39.5	137.0	16,600	200
205	35.8	133.5	14,800	37.2	129.2	15,300	205
210	33.4	125.2	13,600	34.8	120.6	14,000	210
215	30.9	116.1	12,500	32.1	111.0	12,800	215
220	28.2	105.9	11,200	29.2	100.3	11,500	220
225	25.1	94.2	9,900				225
230	21.5	80.3	8,600				230



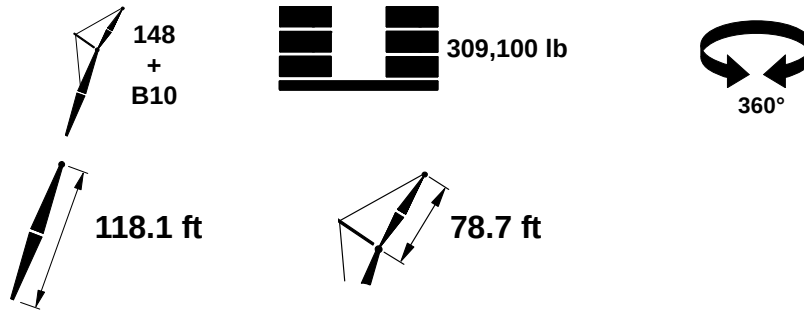
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
45	84.2	260.2	111,100				45
50	83.1	259.4	109,000				50
55	82.0	258.5	106,900	84.0	256.1	89,100	55
60	80.8	257.4	105,000	82.9	255.0	85,900	60
65	79.7	256.3	103,000	81.7	253.8	82,900	65
70	78.5	255.0	101,200	80.5	252.6	80,200	70
75	77.4	253.6	99,400	79.4	251.2	77,600	75
80	76.2	252.2	96,600	78.2	249.7	75,200	80
85	75.0	250.6	87,900	77.0	248.1	72,900	85
90	73.9	248.9	80,300	75.8	246.4	70,800	90
95	72.7	247.1	73,600	74.6	244.5	68,800	95
100	71.5	245.1	67,600	73.4	242.6	66,900	100
105	70.3	243.1	62,300	72.2	240.5	64,700	105
110	69.0	240.9	57,600	70.9	238.3	59,800	110
115	67.8	238.6	53,200	69.7	236.0	55,300	115
120	66.6	236.1	49,300	68.4	233.5	51,300	120
125	65.3	233.5	45,700	67.2	230.9	47,600	125
130	64.0	230.8	42,500	65.9	228.1	44,200	130
135	62.7	228.0	39,400	64.6	225.2	41,100	135
140	61.4	224.9	36,700	63.3	222.2	38,200	140
145	60.1	221.7	34,100	61.9	218.9	35,500	145
150	58.8	218.4	31,700	60.5	215.6	33,000	150
155	57.4	214.9	29,400	59.2	212.0	30,700	155
160	56.0	211.2	27,400	57.7	208.2	28,600	160
165	54.6	207.3	25,400	56.3	204.3	26,500	165
170	53.1	203.2	23,600	54.8	200.1	24,600	170
175	51.7	198.9	21,800	53.3	195.7	22,800	175
180	50.2	194.3	20,200	51.8	191.1	21,100	180
185	48.6	189.5	18,700	50.2	186.2	19,500	185
190	47.0	184.4	17,200	48.6	181.0	18,000	190
195	45.4	179.1	15,800	46.9	175.5	16,600	195
200	43.7	173.4	14,500	45.2	169.7	15,200	200
205	41.9	167.3	13,100	43.4	163.5	13,900	205
210	40.1	160.9	11,700	41.5	156.9	12,500	210
215	38.2	154.0	10,300	39.6	149.8	11,000	215
220	36.2	146.5	9,000	37.5	142.2	9,600	220
225	34.1	138.5	7,800	35.3	133.9	8,300	225
230	31.8	129.7	6,500	33.0	124.8	7,000	230



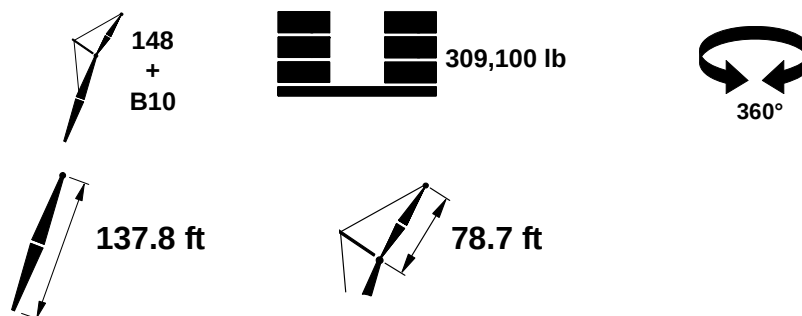
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
45	84.7	280.1	110,600				45
50	83.6	279.3	108,700				50
55	82.6	278.5	106,800	84.5	276.0	90,200	55
60	81.5	277.5	105,000	83.4	275.0	87,100	60
65	80.4	276.4	103,200	82.3	274.0	84,200	65
70	79.4	275.3	101,600	81.2	272.8	81,600	70
75	78.3	274.0	100,000	80.2	271.5	79,200	75
80	77.2	272.6	95,900	79.1	270.2	76,800	80
85	76.1	271.2	87,200	78.0	268.7	74,700	85
90	75.1	269.6	79,600	76.9	267.1	72,600	90
95	74.0	267.9	72,900	75.8	265.4	70,700	95
100	72.9	266.2	66,900	74.7	263.6	68,800	100
105	71.7	264.3	61,600	73.5	261.7	64,100	105
110	70.6	262.3	56,800	72.4	259.7	59,100	110
115	69.5	260.2	52,500	71.3	257.5	54,700	115
120	68.4	257.9	48,500	70.1	255.3	50,600	120
125	67.2	255.6	44,900	69.0	252.9	46,900	125
130	66.1	253.1	41,600	67.8	250.4	43,500	130
135	64.9	250.5	38,600	66.6	247.8	40,400	135
140	63.7	247.7	35,800	65.4	245.0	37,500	140
145	62.5	244.9	33,200	64.2	242.1	34,800	145
150	61.3	241.9	30,800	63.0	239.0	32,300	150
155	60.1	238.7	28,600	61.7	235.8	30,000	155
160	58.8	235.4	26,500	60.5	232.5	27,800	160
165	57.6	231.9	24,600	59.2	228.9	25,800	165
170	56.3	228.3	22,700	57.9	225.3	23,900	170
175	55.0	224.4	21,000	56.6	221.4	22,100	175
180	53.6	220.4	19,400	55.2	217.3	20,400	180
185	52.3	216.2	17,800	53.8	213.1	18,800	185
190	50.9	211.8	16,400	52.4	208.6	17,300	190
195	49.5	207.2	14,900	51.0	203.9	15,900	195
200	48.0	202.3	13,400	49.5	198.9	14,400	200
205	46.5	197.2	11,900	48.0	193.7	12,900	205
210	45.0	191.8	10,500	46.4	188.2	11,400	210
215	43.4	186.1	9,100	44.8	182.4	10,000	215
220	41.8	180.0	7,800	43.2	176.2	8,600	220
225	40.1	173.6	6,600	41.4	169.6	7,300	225



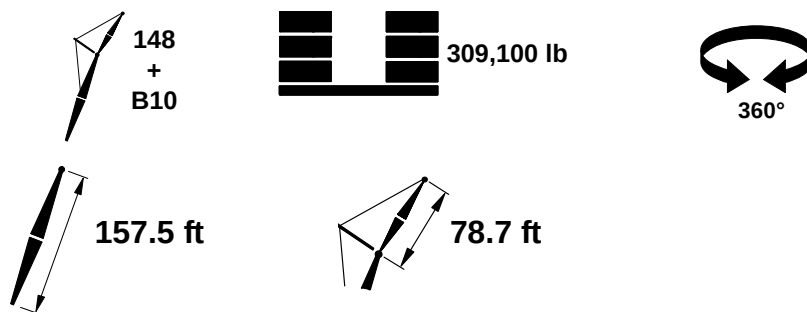
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
40	84.4	181.4	85,600				40
45	82.7	180.3	82,900				45
50	81.1	179.1	80,300				50
55	79.4	177.7	77,900	83.4	175.4	66,600	55
60	77.7	176.1	75,500	81.7	173.9	62,900	60
65	76.0	174.4	73,300	80.0	172.1	59,600	65
70	74.3	172.5	71,300	78.2	170.2	56,600	70
75	72.6	170.5	69,300	76.4	168.2	53,900	75
80	70.8	168.3	66,600	74.7	165.9	51,500	80
85	69.0	165.8	63,200	72.8	163.4	49,200	85
90	67.2	163.2	60,100	71.0	160.8	47,100	90
95	65.3	160.4	57,200	69.1	157.9	45,300	95
100	63.4	157.3	54,700	67.2	154.8	43,500	100
105	61.5	154.1	52,300	65.2	151.5	41,900	105
110	59.5	150.5	50,100	63.2	147.9	40,400	110
115	57.5	146.7	48,100	61.2	144.0	39,000	115
120	55.4	142.6	46,300	59.0	139.8	37,700	120
125	53.3	138.2	44,500	56.8	135.3	36,500	125
130	51.1	133.5	43,000	54.5	130.4	35,400	130
135	48.7	128.3	41,400	52.2	125.2	34,400	135
140	46.3	122.7	40,100	49.7	119.4	33,400	140
145	43.8	116.6	38,800	47.1	113.1	32,500	145
150	41.1	109.9	37,600	44.3	106.1	31,700	150
155	38.2	102.4	36,500	41.3	98.4	30,900	155
160	35.0	94.1	35,400	38.0	89.6	30,300	160
165	31.5	84.5	33,400	34.3	79.4	29,600	165
170	27.6	73.1	31,500	29.9	67.1	29,100	170
175	22.7	58.9	29,600				175



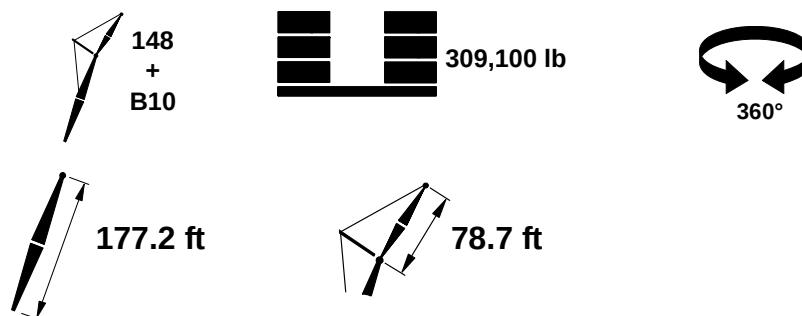
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
40	85.0	201.3	86,000				40
45	83.5	200.4	83,600				45
50	82.0	199.3	81,300				50
55	80.5	198.0	79,100	84.1	195.6	68,100	55
60	79.0	196.6	76,900	82.6	194.2	64,600	60
65	77.5	195.1	74,900	81.0	192.7	61,500	65
70	75.9	193.4	73,000	79.5	191.0	58,600	70
75	74.4	191.6	71,100	77.9	189.1	56,000	75
80	72.8	189.6	69,400	76.3	187.1	53,600	80
85	71.3	187.5	67,400	74.7	185.0	51,400	85
90	69.7	185.2	64,300	73.1	182.6	49,400	90
95	68.0	182.7	61,400	71.5	180.1	47,600	95
100	66.4	180.1	58,700	69.8	177.4	45,900	100
105	64.7	177.2	56,300	68.1	174.5	44,300	105
110	63.0	174.2	54,100	66.4	171.5	42,800	110
115	61.3	170.9	52,000	64.6	168.1	41,300	115
120	59.5	167.5	50,100	62.8	164.6	40,100	120
125	57.7	163.8	48,300	61.0	160.8	38,800	125
130	55.9	159.8	46,600	59.1	156.8	37,700	130
135	54.0	155.6	45,100	57.1	152.5	36,700	135
140	52.0	151.0	43,500	55.1	147.8	35,700	140
145	50.0	146.2	41,000	53.1	142.9	34,700	145
150	47.9	141.0	38,600	50.9	137.5	33,800	150
155	45.7	135.3	36,300	48.7	131.7	33,000	155
160	43.4	129.2	34,200	46.3	125.5	32,300	160
165	41.0	122.6	32,300	43.8	118.6	31,600	165
170	38.4	115.3	30,400	41.1	111.1	30,900	170
175	35.7	107.3	28,600	38.3	102.7	29,300	175
180	32.7	98.3	27,000	35.1	93.1	27,500	180
185	29.4	88.0	25,400	31.6	82.1	25,800	185
190	25.5	75.7	23,800				190
195	20.8	60.3	22,300				195



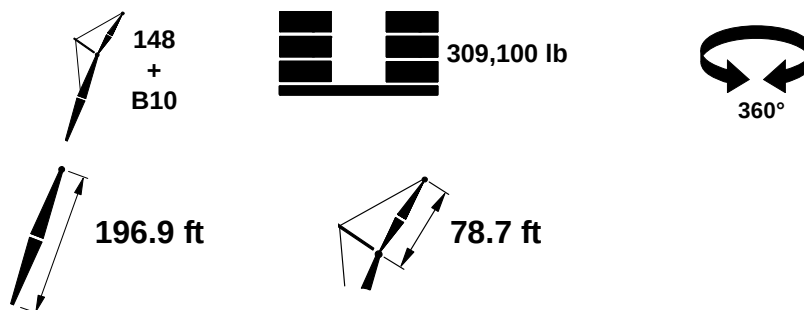
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
45	84.1	220.3	84,000				45
50	82.7	219.3	81,900				50
55	81.4	218.2	79,900	84.6	215.7	69,300	55
60	80.0	217.0	77,900	83.3	214.4	66,000	60
65	78.7	215.6	76,100	81.9	213.0	63,100	65
70	77.3	214.1	74,400	80.5	211.5	60,400	70
75	75.9	212.5	72,700	79.1	209.9	57,800	75
80	74.5	210.7	71,000	77.7	208.1	55,500	80
85	73.1	208.8	69,500	76.2	206.1	53,400	85
90	71.6	206.7	68,000	74.8	204.0	51,400	90
95	70.2	204.5	65,100	73.3	201.8	49,600	95
100	68.7	202.2	62,500	71.8	199.4	48,000	100
105	67.3	199.6	60,000	70.3	196.9	46,400	105
110	65.8	197.0	57,700	68.8	194.1	44,900	110
115	64.2	194.1	55,600	67.3	191.2	43,500	115
120	62.7	191.1	53,600	65.7	188.2	42,200	120
125	61.1	187.9	51,300	64.1	184.9	41,000	125
130	59.5	184.4	48,100	62.5	181.4	39,800	130
135	57.9	180.8	45,100	60.8	177.7	38,700	135
140	56.2	176.9	42,300	59.1	173.8	37,700	140
145	54.5	172.8	39,700	57.4	169.6	36,800	145
150	52.8	168.5	37,300	55.6	165.2	35,800	150
155	51.0	163.8	35,100	53.7	160.4	35,000	155
160	49.1	158.9	33,000	51.8	155.4	34,100	160
165	47.2	153.6	31,000	49.9	149.9	32,100	165
170	45.2	148.0	29,200	47.8	144.1	30,100	170
175	43.1	141.9	27,400	45.7	137.9	28,300	175
180	40.9	135.3	25,800	43.4	131.1	26,600	180
185	38.6	128.2	24,200	41.1	123.7	24,900	185
190	36.2	120.4	22,700	38.5	115.6	23,400	190
195	33.6	111.8	21,300	35.8	106.6	21,900	195
200	30.7	102.2	20,000	32.7	96.4	20,400	200
205	27.5	91.1	18,600	29.3	84.6	19,000	205
210	23.8	78.1	17,400				210
215	19.2	61.5	16,100				215



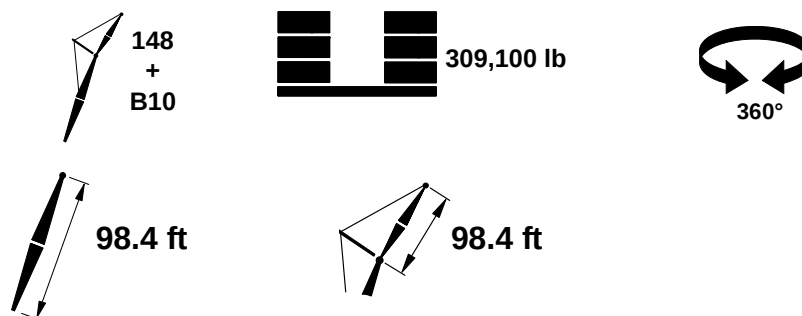
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
45	84.6	240.3	84,100				45
50	83.4	239.4	82,200				50
55	82.1	238.3	80,400				55
60	80.9	237.2	78,600	83.9	234.6	67,200	60
65	79.6	236.0	77,000	82.6	233.3	64,400	65
70	78.4	234.6	75,300	81.3	231.9	61,800	70
75	77.1	233.1	73,800	80.0	230.4	59,400	75
80	75.8	231.5	72,200	78.8	228.8	57,200	80
85	74.6	229.8	70,800	77.5	227.0	55,100	85
90	73.3	227.9	69,400	76.1	225.1	53,200	90
95	72.0	225.9	68,100	74.8	223.1	51,500	95
100	70.6	223.8	65,900	73.5	221.0	49,800	100
105	69.3	221.5	63,400	72.1	218.7	48,200	105
110	68.0	219.1	61,100	70.8	216.2	46,700	110
115	66.6	216.6	57,400	69.4	213.6	45,400	115
120	65.2	213.9	53,500	68.0	210.9	44,100	120
125	63.8	211.0	49,900	66.6	208.0	42,800	125
130	62.4	208.0	46,700	65.2	204.9	41,800	130
135	61.0	204.8	43,600	63.7	201.7	40,600	135
140	59.5	201.4	40,800	62.2	198.2	39,600	140
145	58.0	197.8	38,300	60.7	194.6	38,700	145
150	56.5	194.0	35,900	59.1	190.8	37,400	150
155	55.0	190.0	33,600	57.6	186.7	35,000	155
160	53.4	185.8	31,500	56.0	182.4	32,900	160
165	51.8	181.4	29,600	54.3	177.8	30,800	165
170	50.1	176.6	27,700	52.6	173.0	28,900	170
175	48.4	171.6	26,000	50.8	167.9	27,100	175
180	46.6	166.3	24,300	49.0	162.4	25,300	180
185	44.8	160.6	22,800	47.2	156.6	23,700	185
190	42.9	154.5	21,300	45.2	150.4	22,200	190
195	40.9	148.0	19,900	43.1	143.7	20,700	195
200	38.8	141.0	18,600	41.0	136.4	19,300	200
205	36.6	133.5	17,300	38.7	128.5	17,900	205
210	34.2	125.2	16,100	36.3	119.9	16,700	210
215	31.7	116.0	14,900	33.6	110.3	15,400	215
220	29.0	105.8	13,800	30.7	99.4	14,200	220
225	25.9	94.1	12,700				225
230	22.3	80.1	11,600				230



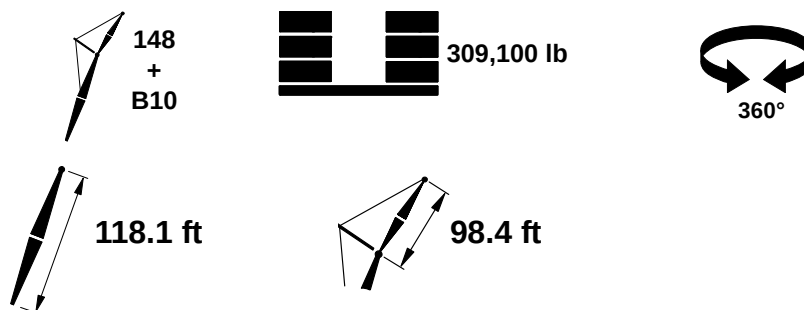
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
45	85.0	260.2	84,000				45
50	83.9	259.3	82,300				50
55	82.7	258.4	80,700				55
60	81.6	257.3	79,100	84.3	254.6	68,200	60
65	80.4	256.2	77,500	83.2	253.4	65,500	65
70	79.3	254.9	76,000	82.0	252.2	63,000	70
75	78.1	253.6	74,600	80.8	250.8	60,800	75
80	77.0	252.1	73,200	79.7	249.3	58,600	80
85	75.8	250.5	71,800	78.5	247.7	56,600	85
90	74.6	248.8	70,600	77.3	246.0	54,800	90
95	73.4	247.0	69,300	76.1	244.1	53,000	95
100	72.2	245.1	68,100	74.9	242.2	51,400	100
105	71.0	243.0	66,700	73.6	240.1	49,900	105
110	69.8	240.8	60,900	72.4	237.9	48,400	110
115	68.6	238.5	56,600	71.2	235.5	47,100	115
120	67.3	236.1	52,700	69.9	233.1	45,800	120
125	66.1	233.5	49,100	68.6	230.4	44,600	125
130	64.8	230.8	45,800	67.3	227.7	43,400	130
135	63.5	227.9	42,800	66.0	224.8	42,400	135
140	62.2	224.9	40,000	64.7	221.7	41,300	140
145	60.9	221.7	37,400	63.3	218.5	39,100	145
150	59.5	218.3	35,000	62.0	215.1	36,600	150
155	58.1	214.8	32,700	60.6	211.5	34,300	155
160	56.8	211.1	30,600	59.2	207.7	32,100	160
165	55.3	207.2	28,700	57.7	203.8	30,100	165
170	53.9	203.1	26,800	56.3	199.6	28,200	170
175	52.4	198.8	25,100	54.8	195.2	26,300	175
180	50.9	194.2	23,500	53.2	190.5	24,600	180
185	49.3	189.4	21,900	51.6	185.6	23,000	185
190	47.8	184.4	20,500	50.0	180.4	21,500	190
195	46.1	179.0	19,100	48.3	175.0	20,000	195
200	44.4	173.3	17,800	46.6	169.1	18,600	200
205	42.7	167.2	16,500	44.8	162.9	17,300	205
210	40.8	160.8	15,300	42.9	156.3	16,100	210
215	38.9	153.9	14,200	40.9	149.1	14,800	215
220	36.9	146.4	13,100	38.9	141.4	13,700	220
225	34.8	138.4	12,000	36.7	133.1	12,500	225
230	32.5	129.6	10,800	34.3	123.9	11,500	230
235	30.1	120.0	9,700	31.7	113.7	10,200	235
240	27.4	109.1	8,500	28.9	102.2	8,900	240
245	24.5	96.7	7,400				245



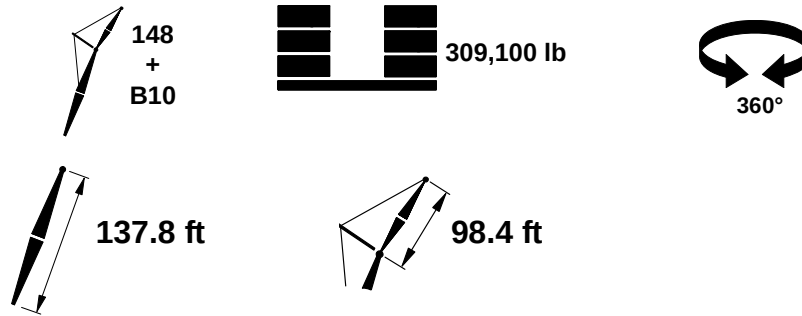
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
50	84.3	279.3	82,100				50
55	83.3	278.4	80,600				55
60	82.2	277.4	79,200	84.8	274.6	69,000	60
65	81.1	276.4	77,700	83.7	273.5	66,400	65
70	80.1	275.2	76,400	82.6	272.3	64,100	70
75	79.0	273.9	75,100	81.5	271.1	61,900	75
80	77.9	272.6	73,800	80.4	269.7	59,900	80
85	76.8	271.1	72,500	79.3	268.2	58,000	85
90	75.8	269.5	71,300	78.2	266.6	56,200	90
95	74.7	267.9	70,200	77.1	264.9	54,500	95
100	73.6	266.1	69,000	76.0	263.1	52,900	100
105	72.4	264.2	64,300	74.9	261.2	51,400	105
110	71.3	262.2	59,500	73.8	259.2	49,900	110
115	70.2	260.1	55,100	72.6	257.1	48,700	115
120	69.1	257.8	51,200	71.5	254.8	47,400	120
125	67.9	255.5	47,600	70.3	252.4	46,200	125
130	66.8	253.0	44,300	69.1	249.9	45,000	130
135	65.6	250.4	41,200	67.9	247.3	43,400	135
140	64.4	247.7	38,400	66.7	244.5	40,500	140
145	63.2	244.8	35,800	65.5	241.6	37,800	145
150	62.0	241.8	33,400	64.3	238.5	35,200	150
155	60.8	238.6	31,100	63.1	235.3	32,900	155
160	59.5	235.3	29,000	61.8	231.9	30,700	160
165	58.2	231.8	27,100	60.5	228.4	28,600	165
170	57.0	228.2	25,200	59.2	224.7	26,700	170
175	55.7	224.3	23,500	57.9	220.8	24,900	175
180	54.3	220.3	21,800	56.5	216.7	23,200	180
185	53.0	216.1	20,300	55.1	212.5	21,600	185
190	51.6	211.7	18,800	53.7	208.0	20,000	190
195	50.2	207.1	17,400	52.3	203.2	18,600	195
200	48.7	202.2	16,100	50.8	198.3	17,200	200
205	47.2	197.1	14,900	49.3	193.0	15,900	205
210	45.7	191.7	13,700	47.7	187.5	14,600	210
215	44.1	186.0	12,300	46.1	181.7	13,400	215
220	42.5	179.9	11,000	44.4	175.5	12,100	220
225	40.8	173.5	9,800	42.7	168.9	10,800	225
230	39.0	166.7	8,600	40.9	161.8	9,500	230
235	37.2	159.4	7,400	39.0	154.3	8,200	235
240				37.0	146.2	7,000	240



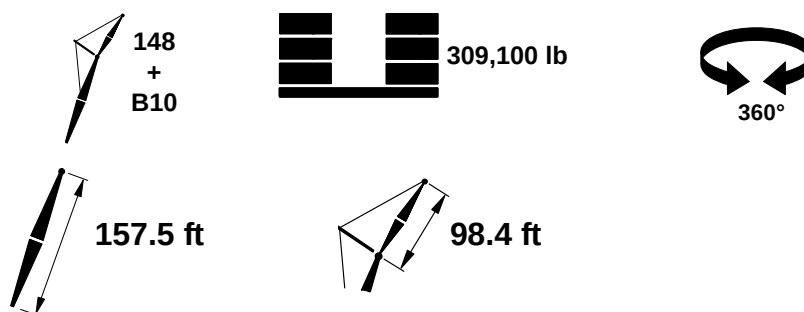
	10°			20°			
 ft	 o	 ft	 lb	 o	 ft	 lb	 ft
45	83.9	200.6	66,500				45
50	82.4	199.5	64,600				50
55	80.9	198.3	62,600				55
60	79.4	196.9	60,800	84.0	194.6	54,400	60
65	77.9	195.4	59,000	82.4	193.1	52,700	65
70	76.4	193.7	57,000	80.9	191.4	50,400	70
75	74.8	191.9	55,100	79.3	189.6	47,800	75
80	73.3	189.9	53,300	77.8	187.6	45,400	80
85	71.7	187.8	51,600	76.2	185.4	43,300	85
90	70.1	185.5	49,900	74.5	183.1	41,400	90
95	68.5	183.0	48,400	72.9	180.6	39,500	95
100	66.8	180.4	46,900	71.2	177.9	37,900	100
105	65.2	177.5	45,600	69.5	175.0	36,300	105
110	63.5	174.5	44,100	67.8	171.9	34,900	110
115	61.8	171.2	42,200	66.1	168.6	33,600	115
120	60.0	167.8	40,400	64.3	165.1	32,400	120
125	58.2	164.1	38,800	62.4	161.3	31,200	125
130	56.3	160.1	37,300	60.5	157.3	30,100	130
135	54.4	155.9	35,900	58.6	153.0	29,200	135
140	52.5	151.4	34,600	56.6	148.4	28,200	140
145	50.5	146.5	33,400	54.6	143.4	27,400	145
150	48.4	141.3	32,200	52.4	138.1	26,500	150
155	46.2	135.7	31,200	50.2	132.3	25,800	155
160	43.9	129.6	30,100	47.8	126.1	25,100	160
165	41.5	123.0	29,200	45.3	119.3	24,400	165
170	39.0	115.8	28,300	42.7	111.8	23,800	170
175	36.2	107.8	27,500	39.9	103.5	23,100	175
180	33.2	98.8	26,700	36.7	94.0	22,600	180
185	29.9	88.6	25,900	33.2	83.1	22,200	185
190	26.1	76.4	25,300	29.1	70.0	21,700	190
195	21.5	61.3	24,700				195



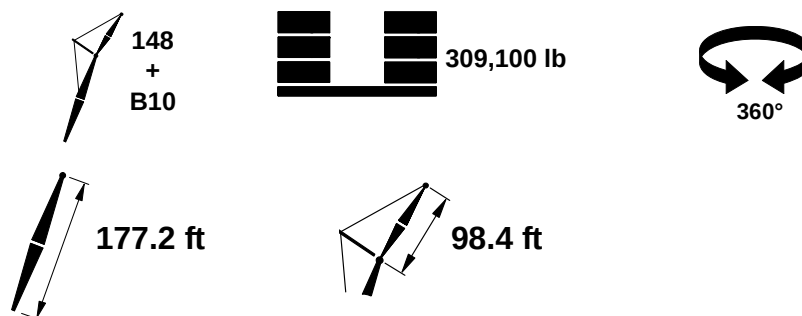
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
45	84.5	220.6	66,900				45
50	83.1	219.6	65,100				50
55	81.8	218.5	63,400				55
60	80.4	217.2	61,700	84.5	214.8	54,800	60
65	79.0	215.8	60,100	83.2	213.4	53,300	65
70	77.7	214.3	58,500	81.8	211.9	51,900	70
75	76.3	212.7	56,600	80.4	210.2	49,300	75
80	74.9	210.9	54,900	78.9	208.4	47,100	80
85	73.5	209.0	53,300	77.5	206.5	45,100	85
90	72.0	207.0	51,800	76.1	204.4	43,100	90
95	70.6	204.8	50,300	74.6	202.2	41,400	95
100	69.1	202.4	48,900	73.1	199.8	39,700	100
105	67.7	199.9	47,500	71.6	197.2	38,200	105
110	66.2	197.2	46,300	70.1	194.5	36,800	110
115	64.6	194.4	45,000	68.6	191.6	35,500	115
120	63.1	191.4	43,600	67.0	188.5	34,300	120
125	61.5	188.1	41,900	65.4	185.3	33,100	125
130	59.9	184.7	40,300	63.8	181.8	32,100	130
135	58.3	181.1	38,900	62.1	178.1	31,000	135
140	56.6	177.2	37,500	60.4	174.2	30,100	140
145	54.9	173.1	36,300	58.7	170.0	29,200	145
150	53.2	168.8	35,000	56.9	165.6	28,400	150
155	51.4	164.2	33,900	55.1	160.9	27,500	155
160	49.5	159.2	32,800	53.2	155.8	26,800	160
165	47.6	154.0	31,900	51.2	150.4	26,100	165
170	45.6	148.3	30,900	49.2	144.6	25,400	170
175	43.6	142.3	30,000	47.1	138.4	24,800	175
180	41.4	135.7	28,400	44.8	131.7	24,200	180
185	39.1	128.6	26,900	42.4	124.3	23,700	185
190	36.7	120.9	25,400	39.9	116.3	23,200	190
195	34.0	112.3	24,000	37.2	107.3	22,700	195
200	31.2	102.7	22,600	34.2	97.2	22,300	200
205	28.0	91.7	21,300	30.8	85.4	21,800	205
210	24.3	78.8	20,100	26.7	71.2	20,400	210
215	19.8	62.4	18,800				215



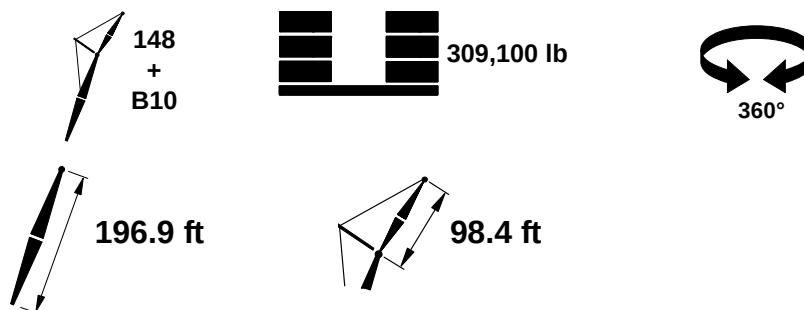
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
45	84.9	240.5	67,000				45
50	83.7	239.6	65,400				50
55	82.5	238.6	63,800				55
60	81.2	237.4	62,300				60
65	80.0	236.2	60,800				65
70	78.7	234.8	59,400	83.8	233.6	53,800	70
75	77.5	233.3	58,000	82.5	232.2	52,500	75
80	76.2	231.7	56,300	81.2	230.7	50,700	80
85	74.9	230.0	54,800	79.9	229.0	48,500	85
90	73.6	228.1	53,300	78.6	227.3	46,500	90
				77.3	225.4	44,700	
95	72.3	226.1	51,900	76.0	223.4	43,000	95
100	71.0	224.0	50,600	74.7	221.2	41,400	100
105	69.7	221.8	49,300	73.3	218.9	39,900	105
110	68.3	219.4	48,000	72.0	216.5	38,500	110
115	67.0	216.8	46,900	70.6	213.9	37,200	115
120	65.6	214.1	45,700	69.2	211.2	36,000	120
125	64.2	211.3	44,600	67.8	208.3	34,800	125
130	62.8	208.2	43,200	66.3	205.2	33,800	130
135	61.4	205.0	41,700	64.9	202.0	32,700	135
140	59.9	201.7	40,200	63.4	198.6	31,800	140
145	58.4	198.1	38,900	61.9	194.9	30,900	145
150	56.9	194.3	37,700	60.4	191.1	30,000	150
155	55.4	190.3	36,300	58.8	187.0	29,200	155
160	53.8	186.1	34,200	57.2	182.7	28,500	160
165	52.1	181.7	32,300	55.5	178.2	27,700	165
170	50.5	177.0	30,400	53.8	173.4	27,000	170
175	48.8	171.9	28,700	52.1	168.3	26,400	175
180	47.0	166.6	27,100	50.3	162.8	25,800	180
185	45.2	161.0	25,500	48.4	157.0	25,200	185
190	43.3	154.9	24,100	46.4	150.8	24,600	190
195	41.3	148.4	22,700	44.4	144.1	23,600	195
200	39.2	141.4	21,400	42.2	136.9	22,200	200
205	37.0	133.9	20,100	40.0	129.0	20,900	205
210	34.7	125.6	18,900	37.5	120.4	19,600	210
215	32.2	116.5	17,700	34.9	110.9	18,300	215
220	29.4	106.3	16,600	32.0	100.1	17,100	220
225	26.4	94.7	15,500	28.7	87.5	15,900	225
230	22.8	80.9	14,500				230
235	18.4	63.4	13,400				235



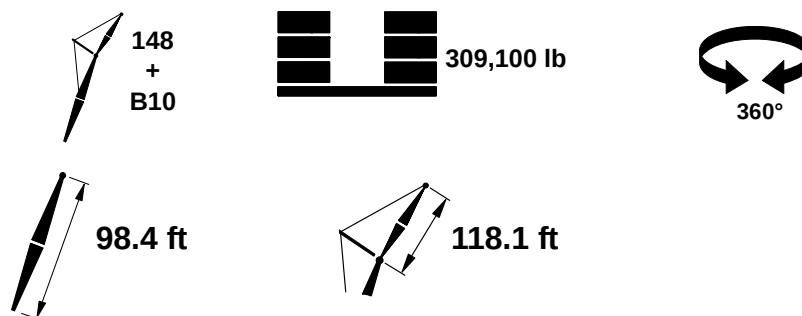
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
50	84.2	259.6	65,500				50
55	83.1	258.6	64,100				55
60	81.9	257.6	62,700				60
65	80.8	256.4	61,400	84.3	253.7	54,100	65
70	79.6	255.2	60,100	83.1	252.4	52,900	70
75	78.5	253.8	58,800	81.9	251.0	51,600	75
80	77.3	252.3	57,400	80.7	249.5	49,700	80
85	76.1	250.7	56,000	79.6	247.9	47,800	85
90	74.9	249.0	54,600	78.4	246.2	46,000	90
95	73.8	247.2	53,200	77.2	244.4	44,400	95
100	72.6	245.3	52,000	75.9	242.4	42,800	100
105	71.3	243.2	50,800	74.7	240.3	41,400	105
110	70.1	241.1	49,600	73.5	238.1	40,000	110
115	68.9	238.7	48,400	72.2	235.8	38,700	115
120	67.7	236.3	47,300	71.0	233.3	37,500	120
125	66.4	233.7	46,300	69.7	230.7	36,400	125
130	65.1	231.0	45,300	68.4	227.9	35,300	130
135	63.8	228.1	44,200	67.1	225.0	34,300	135
140	62.5	225.1	42,000	65.8	222.0	33,300	140
145	61.2	221.9	39,500	64.4	218.7	32,400	145
150	59.9	218.6	37,100	63.1	215.3	31,600	150
155	58.5	215.1	34,800	61.7	211.8	30,700	155
160	57.1	211.4	32,700	60.3	208.0	30,000	160
165	55.7	207.5	30,800	58.8	204.0	29,200	165
170	54.2	203.4	28,900	57.4	199.9	28,500	170
175	52.8	199.1	27,200	55.9	195.5	27,900	175
180	51.3	194.5	25,600	54.3	190.8	27,000	180
185	49.7	189.7	24,000	52.7	185.9	25,300	185
190	48.1	184.7	22,600	51.1	180.8	23,800	190
195	46.5	179.3	21,200	49.4	175.3	22,400	195
200	44.8	173.6	19,900	47.7	169.4	21,000	200
205	43.0	167.6	18,600	45.9	163.2	19,600	205
210	41.2	161.1	17,400	44.0	156.6	18,400	210
215	39.3	154.2	16,300	42.1	149.5	17,200	215
220	37.3	146.8	15,200	40.0	141.8	16,000	220
225	35.2	138.8	14,200	37.8	133.5	14,900	225
230	33.0	130.1	13,100	35.5	124.4	13,800	230
235	30.5	120.5	12,200	32.9	114.2	12,700	235
240	27.9	109.7	11,200	30.1	102.8	11,700	240
245	24.9	97.4	10,300	26.9	89.4	10,600	245
250	21.5	82.7	9,200				250
255	17.1	64.1	8,100				255



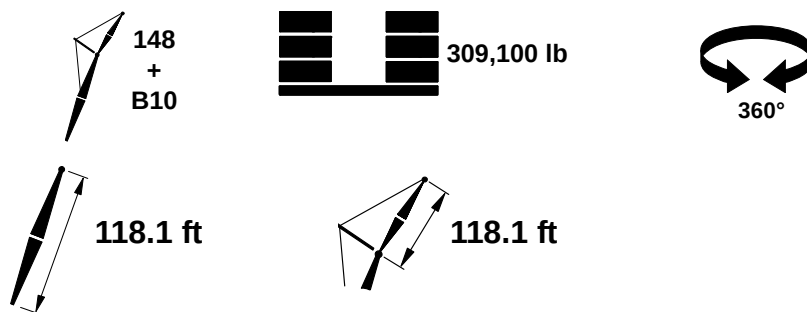
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
50	84.6	279.5	65,500				50
55	83.6	278.6	64,200				55
60	82.5	277.6	62,900				60
65	81.4	276.6	61,700	84.7	273.7	54,300	65
70	80.4	275.4	60,500	83.6	272.5	53,200	70
75	79.3	274.2	59,300	82.5	271.2	52,100	75
80	78.2	272.8	58,100	81.4	269.9	50,800	80
85	77.2	271.3	56,900	80.3	268.4	49,000	85
90	76.1	269.8	55,700	79.2	266.8	47,300	90
95	75.0	268.1	54,400	78.1	265.1	45,600	95
100	73.9	266.3	53,200	77.0	263.3	44,100	100
105	72.8	264.4	52,000	75.9	261.4	42,700	105
110	71.6	262.4	50,800	74.8	259.4	41,400	110
115	70.5	260.3	49,800	73.6	257.2	40,100	115
120	69.4	258.1	48,700	72.5	255.0	38,900	120
125	68.2	255.7	47,700	71.3	252.6	37,800	125
130	67.1	253.2	46,700	70.1	250.1	36,700	130
135	65.9	250.6	43,900	69.0	247.5	35,700	135
140	64.7	247.9	41,100	67.8	244.7	34,800	140
145	63.5	245.0	38,500	66.5	241.8	33,900	145
150	62.3	242.0	36,100	65.3	238.7	33,000	150
155	61.1	238.9	33,900	64.1	235.5	32,200	155
160	59.8	235.5	31,800	62.8	232.1	31,400	160
165	58.6	232.1	29,800	61.5	228.6	30,600	165
170	57.3	228.4	28,000	60.2	224.9	29,700	170
175	56.0	224.6	26,300	58.9	221.0	27,900	175
180	54.7	220.6	24,600	57.5	217.0	26,200	180
185	53.3	216.4	23,100	56.2	212.7	24,600	185
190	51.9	212.0	21,600	54.7	208.2	23,000	190
195	50.5	207.4	20,300	53.3	203.5	21,600	195
200	49.1	202.5	18,900	51.8	198.5	20,200	200
205	47.6	197.4	17,700	50.3	193.3	18,900	205
210	46.0	192.0	16,500	48.7	187.8	17,600	210
215	44.5	186.3	15,400	47.1	181.9	16,400	215
220	42.8	180.3	14,300	45.5	175.7	15,300	220
225	41.2	173.9	13,300	43.7	169.2	14,200	225
230	39.4	167.0	12,300	41.9	162.1	13,100	230
235	37.6	159.8	11,300	40.0	154.6	12,100	235
240	35.6	151.9	10,100	38.0	146.5	11,100	240
245	33.6	143.5	9,100	35.9	137.7	9,900	245
250	31.4	134.3	8,000	33.6	128.1	8,800	250
255	29.1	124.2	7,000	31.2	117.4	7,700	255
260				28.4	105.2	6,600	260



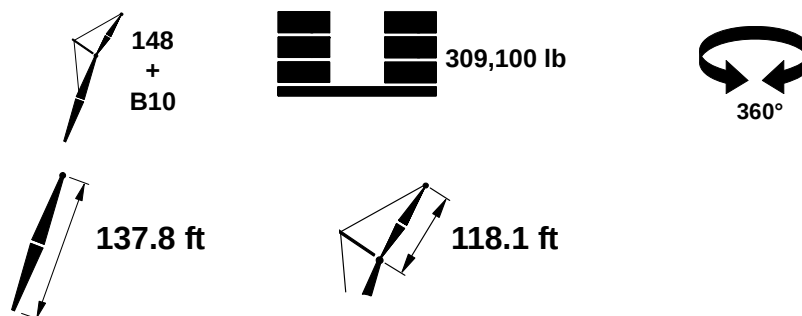
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
50	85.0	299.4	65,200				50
55	84.0	298.6	64,000				55
60	83.0	297.7	62,900				60
65	82.0	296.7	61,800				65
70	81.0	295.6	60,700				70
75	80.0	294.4	59,700	84.0	292.6	53,300	75
80	79.0	293.1	58,600	82.0	290.1	51,300	80
85	78.0	291.8	57,500	81.0	288.8	50,000	85
90	77.0	290.3	56,400	80.0	287.3	48,300	90
95	76.0	288.8	55,300	79.0	285.7	46,700	95
100	75.0	287.1	54,100	77.9	284.1	45,300	100
105	74.0	285.4	53,000	76.9	282.3	43,900	105
110	72.9	283.5	51,900	75.9	280.4	42,500	110
115	71.9	281.6	50,900	74.8	278.4	41,300	115
120	70.8	279.5	49,900	73.7	276.4	40,200	120
125	69.8	277.4	48,700	72.7	274.2	39,100	125
130	68.7	275.1	45,400	71.6	271.9	38,000	130
135	67.6	272.7	42,400	70.5	269.4	37,000	135
140	66.6	270.2	39,600	69.4	266.9	36,000	140
145	65.5	267.6	37,000	68.3	264.2	35,200	145
150	64.4	264.8	34,500	67.2	261.5	34,300	150
155	63.2	261.9	32,300	66.0	258.5	33,500	155
160	62.1	258.9	30,200	64.9	255.5	32,300	160
165	61.0	255.8	28,200	63.7	252.3	30,200	165
170	59.8	252.5	26,400	62.6	249.0	28,300	170
175	58.6	249.1	24,600	61.4	245.5	26,500	175
180	57.4	245.5	23,000	60.2	241.8	24,800	180
185	56.2	241.7	21,500	58.9	238.0	23,100	185
190	55.0	237.8	20,000	57.7	234.0	21,600	190
195	53.7	233.7	18,600	56.4	229.9	20,100	195
200	52.5	229.4	17,300	55.1	225.5	18,700	200
205	51.2	224.9	16,000	53.8	220.9	17,400	205
210	49.8	220.2	14,900	52.4	216.1	16,200	210
215	48.5	215.3	13,700	51.0	211.1	14,900	215
220	47.1	210.1	12,500	49.6	205.8	13,800	220
225	45.7	204.7	11,300	48.2	200.3	12,700	225
230	44.2	199.0	10,100	46.6	194.4	11,400	230
235	42.7	192.9	8,900	45.1	188.3	10,200	235
240	41.1	186.6	7,800	43.5	181.7	9,000	240
245	39.5	179.8	6,800	41.8	174.8	7,900	245
250				40.1	167.4	6,800	250



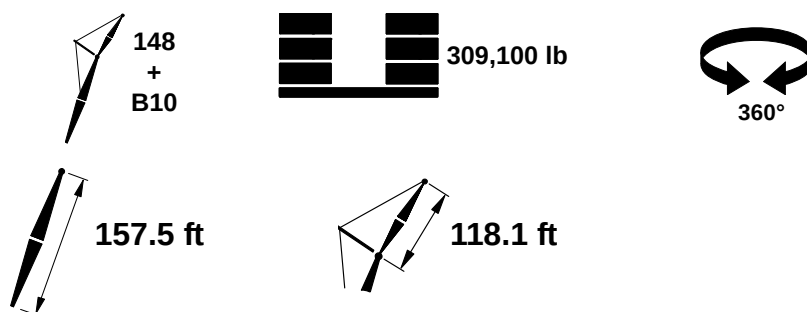
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
50	84.5	219.5	52,000				50
55	83.2	218.3	50,300				55
60	81.8	217.1	48,600				60
65	80.4	215.7	47,000				65
70	79.1	214.2	45,400				70
75	77.7	212.6	43,900	84.0	211.6	40,400	75
80	76.3	210.8	42,300	82.6	209.9	39,100	80
85	74.8	208.9	40,900	81.2	208.1	37,800	85
90	73.4	206.8	39,500	79.8	206.2	36,600	90
95	72.0	204.6	38,200	78.3	204.1	35,400	95
100	70.5	202.3	36,900	76.9	201.9	34,200	100
105	69.0	199.8	35,700	75.4	199.5	32,700	105
110	67.5	197.1	34,600	73.9	197.0	31,300	110
115	66.0	194.2	33,400	72.4	194.2	30,100	115
120	64.5	191.2	32,300	70.8	191.3	29,000	120
125	62.9	188.0	31,300	69.2	188.3	27,800	125
130	61.3	184.6	30,300	67.6	185.0	26,800	130
135	59.7	180.9	29,300	66.0	181.5	25,900	135
140	58.0	177.1	28,500	64.4	177.8	24,900	140
145	56.3	173.0	27,600	62.7	173.9	24,100	145
150	54.6	168.6	26,800	60.9	169.7	23,300	150
155	52.8	164.0	26,000	59.1	165.3	22,600	155
160	50.9	159.1	25,300	57.3	160.5	21,900	160
165	49.0	153.8	24,600	55.4	155.5	21,200	165
170	47.0	148.1	24,000	53.4	150.1	20,500	170
175	44.9	142.1	23,300	51.4	144.3	20,000	175
180	42.7	135.5	22,700	49.2	138.0	19,400	180
185	40.4	128.4	22,100	47.0	131.2	18,900	185
190	38.0	120.6	21,500	44.6	123.9	18,400	190
195	35.4	112.0	20,900	42.1	115.8	17,900	195
200	32.5	102.4	20,300	39.3	106.8	17,500	200
205	29.3	91.4	19,800	36.3	96.6	17,100	205
210	25.6	78.4	19,300	32.9	84.8	16,800	210
215	21.1	61.9	18,900	28.8	70.4	16,400	215



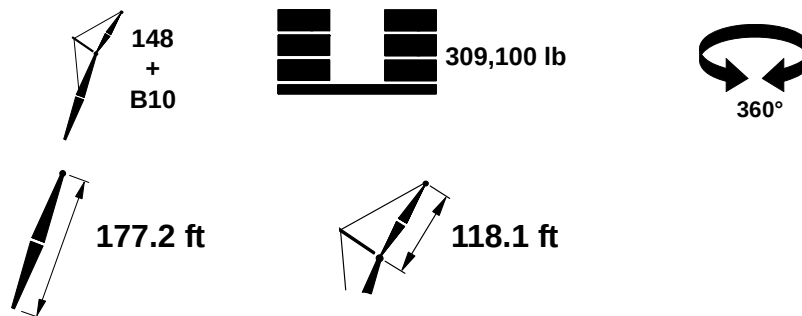
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
50	85.0	239.4	52,300				50
55	83.7	238.4	50,700				55
60	82.5	237.3	49,200				60
65	81.3	236.0	47,800				65
70	80.0	234.6	46,300	84.5	231.8	40,800	70
75	78.7	233.2	44,900	83.3	230.3	39,600	75
80	77.5	231.5	43,500	82.0	228.6	38,400	80
85	76.2	229.8	42,200	80.7	226.9	37,300	85
90	74.9	227.9	40,800	79.4	225.0	36,200	90
95	73.6	226.0	39,500	78.0	223.0	35,200	95
100	72.3	223.8	38,400	76.7	220.8	34,000	100
105	70.9	221.6	37,200	75.4	218.5	32,700	105
110	69.6	219.2	36,100	74.0	216.1	31,400	110
115	68.2	216.6	34,900	72.6	213.5	30,300	115
120	66.9	213.9	34,000	71.2	210.8	29,200	120
125	65.5	211.1	32,900	69.8	207.9	28,200	125
130	64.1	208.0	32,000	68.4	204.8	27,200	130
135	62.6	204.8	31,000	66.9	201.5	26,400	135
140	61.2	201.4	30,200	65.4	198.1	25,500	140
145	59.7	197.9	29,300	63.9	194.5	24,700	145
150	58.1	194.1	28,500	62.4	190.6	23,900	150
155	56.6	190.1	27,700	60.8	186.6	23,300	155
160	55.0	185.9	27,000	59.2	182.2	22,600	160
165	53.4	181.4	26,300	57.5	177.7	21,900	165
170	51.7	176.7	25,600	55.8	172.9	21,400	170
175	50.0	171.7	24,900	54.1	167.7	20,700	175
180	48.2	166.4	24,400	52.2	162.3	20,200	180
185	46.4	160.7	23,700	50.4	156.4	19,700	185
190	44.5	154.6	23,100	48.4	150.2	19,200	190
195	42.5	148.1	22,700	46.3	143.5	18,700	195
200	40.4	141.1	22,100	44.2	136.2	18,300	200
205	38.2	133.6	21,600	41.9	128.3	17,900	205
210	35.9	125.3	21,000	39.4	119.7	17,500	210
215	33.4	116.1	20,500	36.8	110.0	17,200	215
220	30.6	105.9	19,400	33.8	99.1	16,800	220
225	27.5	94.2	18,300	30.5	86.4	16,600	225
230	24.0	80.3	17,200				230
235	19.5	62.6	16,200				235



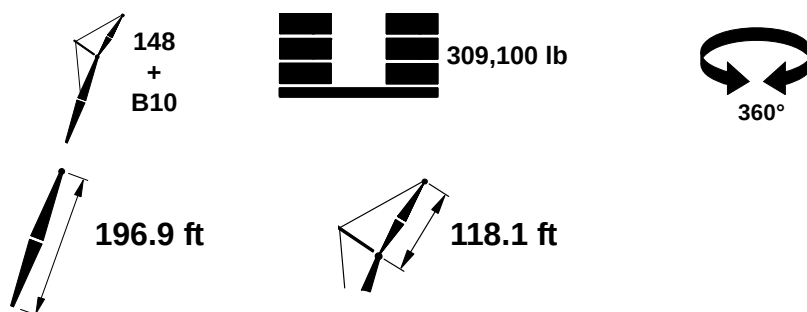
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
55	84.2	258.4	51,000				55
60	83.1	257.4	49,700				60
65	81.9	256.2	48,300				65
70	80.8	254.9	47,000	85.0	251.9	41,000	70
75	79.6	253.6	45,700	83.8	250.5	40,000	75
80	78.5	252.1	44,400	82.6	249.0	38,900	80
85	77.3	250.5	43,100	81.4	247.4	37,900	85
90	76.1	248.8	41,900	80.2	245.7	36,800	90
95	74.9	247.0	40,700	79.0	243.8	35,900	95
100	73.7	245.1	39,600	77.8	241.9	35,000	100
105	72.5	243.0	38,400	76.6	239.8	33,800	105
110	71.3	240.8	37,400	75.4	237.6	32,600	110
115	70.1	238.5	36,400	74.1	235.2	31,500	115
120	68.8	236.1	35,400	72.8	232.7	30,400	120
125	67.6	233.5	34,400	71.6	230.1	29,400	125
130	66.3	230.8	33,500	70.3	227.4	28,500	130
135	65.0	227.9	32,600	69.0	224.4	27,600	135
140	63.7	224.9	31,700	67.6	221.4	26,800	140
145	62.4	221.7	30,800	66.3	218.1	25,900	145
150	61.0	218.3	30,100	64.9	214.7	25,200	150
155	59.6	214.8	29,300	63.5	211.2	24,500	155
160	58.3	211.1	28,500	62.1	207.4	23,800	160
165	56.8	207.2	27,800	60.7	203.4	23,200	165
170	55.4	203.1	27,100	59.2	199.2	22,600	170
175	53.9	198.8	26,500	57.7	194.8	22,000	175
180	52.4	194.2	25,900	56.1	190.2	21,500	180
185	50.8	189.4	25,300	54.6	185.2	20,900	185
190	49.3	184.4	24,600	52.9	180.0	20,400	190
195	47.6	179.0	24,100	51.2	174.5	19,900	195
200	45.9	173.3	22,900	49.5	168.7	19,500	200
205	44.2	167.2	21,600	47.7	162.5	19,100	205
210	42.3	160.8	20,400	45.8	155.8	18,600	210
215	40.4	153.9	19,200	43.8	148.6	18,300	215
220	38.4	146.5	18,100	41.7	140.9	17,900	220
225	36.3	138.4	17,100	39.5	132.5	17,500	225
230	34.1	129.6	16,100	37.2	123.3	16,800	230
235	31.6	120.0	15,100	34.6	113.1	15,700	235
240	29.0	109.2	14,100	31.7	101.5	14,600	240
245	26.0	96.8	13,200	28.5	87.9	13,600	245
250	22.5	82.0	12,300				250
255	18.1	63.1	11,400				255



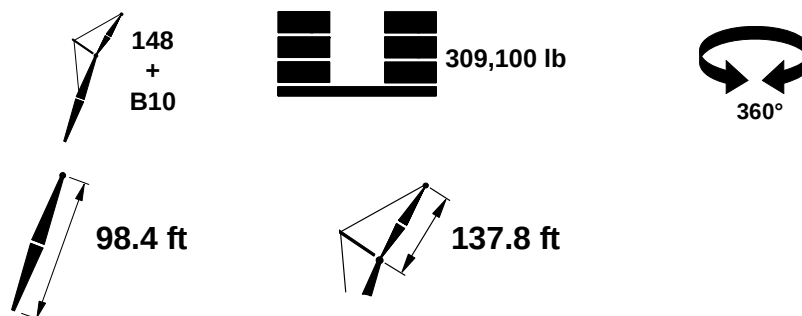
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
55	84.7	278.4	51,200				55
60	83.6	277.4	50,000				60
65	82.5	276.3	48,700				65
70	81.5	275.2	47,500				70
75	80.4	273.9	46,300	84.3	270.6	40,200	75
80	79.3	272.5	45,100	83.2	269.3	39,300	80
85	78.2	271.1	43,900	82.1	267.8	38,300	85
90	77.1	269.5	42,800	81.0	266.2	37,400	90
95	76.0	267.8	41,700	79.9	264.5	36,500	95
100	74.9	266.1	40,600	78.8	262.7	35,600	100
105	73.8	264.2	39,600	77.6	260.8	34,700	105
110	72.7	262.2	38,500	76.5	258.8	33,700	110
115	71.6	260.0	37,500	75.4	256.6	32,600	115
120	70.5	257.8	36,600	74.2	254.3	31,600	120
125	69.3	255.5	35,600	73.0	252.0	30,500	125
130	68.1	253.0	34,800	71.9	249.4	29,600	130
135	67.0	250.4	33,900	70.7	246.8	28,700	135
140	65.8	247.6	33,000	69.5	244.0	27,900	140
145	64.6	244.8	32,200	68.3	241.1	27,100	145
150	63.4	241.7	31,500	67.0	238.0	26,300	150
155	62.1	238.6	30,700	65.8	234.8	25,600	155
160	60.9	235.3	30,000	64.5	231.4	25,000	160
165	59.6	231.8	29,200	63.2	227.9	24,300	165
170	58.3	228.1	28,500	61.9	224.2	23,700	170
175	57.0	224.3	27,900	60.6	220.3	23,100	175
180	55.7	220.3	27,100	59.2	216.2	22,600	180
185	54.4	216.1	25,600	57.8	211.9	22,000	185
190	53.0	211.7	24,100	56.4	207.4	21,500	190
195	51.6	207.0	22,700	55.0	202.7	21,000	195
200	50.1	202.2	21,400	53.5	197.7	20,500	200
205	48.6	197.0	20,100	52.0	192.4	20,100	205
210	47.1	191.6	18,900	50.4	186.9	19,700	210
215	45.5	185.9	17,800	48.8	181.0	18,900	215
220	43.9	179.9	16,700	47.1	174.8	17,800	220
225	42.2	173.5	15,600	45.4	168.2	16,700	225
230	40.4	166.6	14,600	43.5	161.1	15,600	230
235	38.6	159.3	13,700	41.6	153.5	14,500	235
240	36.7	151.5	12,700	39.6	145.4	13,500	240
245	34.6	143.0	11,800	37.5	136.5	12,600	245
250	32.4	133.8	11,000	35.2	126.8	11,600	250
255	30.1	123.6	10,100	32.7	115.9	10,700	255
260	27.5	112.2	9,200	29.9	103.6	9,800	260
265	24.6	99.1	8,200				265
270	21.2	83.5	7,200				270



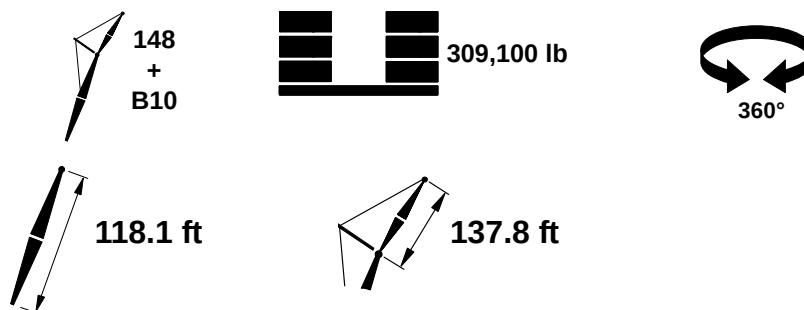
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
60	84.0	297.4	50,100				60
65	83.0	296.4	49,000				65
70	82.0	295.3	47,900				70
75	81.0	294.1	46,800	84.7	290.7	40,400	75
80	80.0	292.9	45,700	83.7	289.4	39,500	80
85	79.0	291.5	44,600	82.6	288.1	38,700	85
90	78.0	290.1	43,500	81.6	286.6	37,800	90
95	77.0	288.5	42,400	80.6	285.0	36,900	95
100	76.0	286.9	41,400	79.6	283.4	36,100	100
105	75.0	285.1	40,500	78.5	281.6	35,300	105
110	73.9	283.3	39,500	77.5	279.7	34,500	110
115	72.9	281.3	38,500	76.4	277.7	33,600	115
120	71.8	279.2	37,600	75.4	275.6	32,500	120
125	70.8	277.1	36,800	74.3	273.4	31,500	125
130	69.7	274.8	35,900	73.2	271.1	30,600	130
135	68.6	272.4	35,100	72.1	268.7	29,800	135
140	67.6	269.9	34,200	71.0	266.2	28,900	140
145	66.5	267.3	33,500	69.9	263.5	28,200	145
150	65.4	264.5	32,700	68.8	260.7	27,400	150
155	64.2	261.6	31,900	67.6	257.8	26,700	155
160	63.1	258.6	31,200	66.5	254.7	26,000	160
165	62.0	255.5	30,500	65.3	251.5	25,300	165
170	60.8	252.2	29,500	64.1	248.2	24,800	170
175	59.6	248.7	27,800	62.9	244.7	24,200	175
180	58.4	245.1	26,100	61.7	241.0	23,600	180
185	57.2	241.4	24,600	60.5	237.2	23,100	185
190	56.0	237.4	23,100	59.2	233.2	22,500	190
195	54.7	233.3	21,700	58.0	229.0	22,100	195
200	53.4	229.0	20,400	56.7	224.6	21,600	200
205	52.1	224.5	19,200	55.3	220.0	20,600	205
210	50.8	219.8	18,000	54.0	215.2	19,400	210
215	49.4	214.9	16,800	52.6	210.2	18,100	215
220	48.1	209.7	15,700	51.1	204.9	17,000	220
225	46.6	204.3	14,700	49.7	199.3	15,900	225
230	45.1	198.6	13,700	48.2	193.4	14,800	230
235	43.6	192.5	12,700	46.6	187.2	13,800	235
240	42.1	186.1	11,800	45.0	180.6	12,800	240
245	40.4	179.4	10,900	43.3	173.6	11,800	245
250	38.7	172.2	9,800	41.5	166.2	10,900	250
255	36.9	164.5	8,900	39.7	158.2	9,900	255
260	35.1	156.3	7,900	37.7	149.6	8,800	260
265	33.1	147.4	7,000	35.6	140.2	7,800	265
270				33.4	130.0	6,800	270



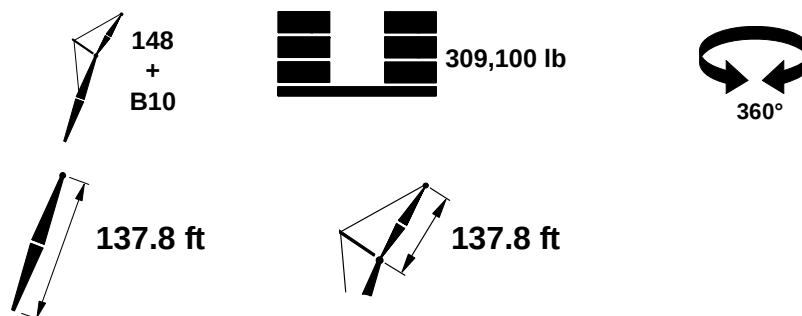
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
60	84.4	317.3	50,100				60
65	83.5	316.4	49,000				65
70	82.6	315.4	48,100				70
75	81.6	314.3	47,000				75
80	80.7	313.1	46,000	84.1	309.6	39,700	80
85	79.7	311.8	45,100	83.1	308.3	38,900	85
90	78.8	310.5	44,100	82.2	306.9	38,100	90
95	77.9	309.0	43,100	81.2	305.4	37,300	95
100	76.9	307.5	42,100	80.2	303.9	36,500	100
105	76.0	305.9	41,200	79.3	302.2	35,800	105
110	75.0	304.2	40,300	78.3	300.5	35,000	110
115	74.0	302.3	39,400	77.3	298.7	34,300	115
120	73.0	300.4	38,600	76.3	296.7	33,400	120
125	72.1	298.4	37,700	75.3	294.7	32,500	125
130	71.1	296.3	36,900	74.3	292.5	31,500	130
135	70.1	294.1	36,100	73.3	290.3	30,700	135
140	69.1	291.8	35,300	72.3	287.9	29,900	140
145	68.1	289.3	34,500	71.3	285.5	29,100	145
150	67.1	286.8	33,800	70.3	282.9	28,400	150
155	66.0	284.2	33,100	69.2	280.2	27,700	155
160	65.0	281.4	31,900	68.2	277.4	27,000	160
165	63.9	278.5	29,900	67.1	274.5	26,300	165
170	62.9	275.5	28,000	66.0	271.4	25,800	170
175	61.8	272.4	26,200	64.9	268.2	25,200	175
180	60.7	269.1	24,600	63.8	264.9	24,600	180
185	59.6	265.7	23,000	62.7	261.5	24,000	185
190	58.5	262.1	21,500	61.6	257.8	23,500	190
195	57.4	258.4	20,100	60.4	254.1	22,000	195
200	56.2	254.6	18,800	59.3	250.1	20,600	200
205	55.0	250.5	17,600	58.1	246.0	19,200	205
210	53.9	246.3	16,400	56.9	241.8	18,000	210
215	52.7	242.0	15,200	55.6	237.3	16,700	215
220	51.4	237.4	14,100	54.4	232.6	15,600	220
225	50.2	232.6	13,100	53.1	227.8	14,500	225
230	48.9	227.6	11,900	51.8	222.7	13,400	230
235	47.6	222.4	10,700	50.4	217.3	12,400	235
240	46.2	216.9	9,700	49.0	211.7	11,200	240
245	44.8	211.2	8,600	47.6	205.8	10,100	245
250	43.4	205.2	7,600	46.2	199.6	9,000	250
255	41.9	198.8	6,600	44.6	193.1	7,900	255
260				43.1	186.2	6,900	260



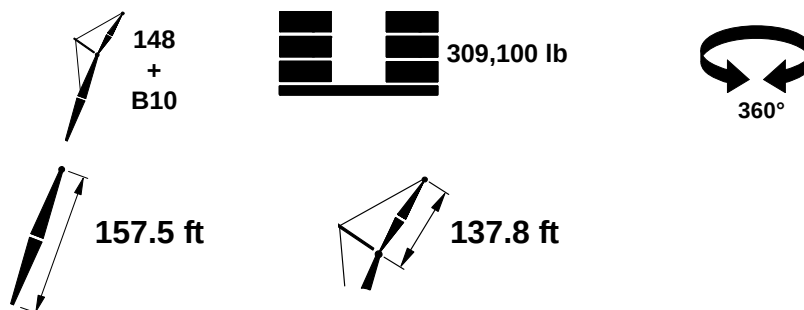
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
50	84.6	239.9	43,800				50
55	83.4	238.9	42,200				55
60	82.1	237.7	40,700				60
65	80.9	236.5	39,200				65
70	79.6	235.1	37,700				70
75	78.4	233.6	36,400	83.8	231.2	32,000	75
80	77.1	232.0	35,000	82.5	229.6	30,900	80
85	75.8	230.3	33,600	81.2	227.9	29,700	85
90	74.5	228.4	32,300	79.9	226.0	28,700	90
95	73.2	226.4	31,100	78.6	224.0	27,600	95
100	71.9	224.3	29,900	77.2	221.8	26,600	100
105	70.6	222.1	28,800	75.9	219.6	25,600	105
110	69.3	219.7	27,700	74.5	217.1	24,700	110
115	67.9	217.1	26,700	73.2	214.5	23,800	115
120	66.5	214.4	25,600	71.8	211.8	23,000	120
125	65.1	211.6	24,700	70.4	208.9	22,200	125
130	63.7	208.6	23,800	68.9	205.9	21,500	130
135	62.3	205.4	22,900	67.5	202.6	20,700	135
140	60.8	202.0	22,100	66.0	199.2	20,000	140
145	59.4	198.4	21,300	64.5	195.6	19,400	145
150	57.8	194.7	20,600	63.0	191.8	18,800	150
155	56.3	190.7	19,900	61.4	187.7	18,200	155
160	54.7	186.5	19,200	59.8	183.5	17,500	160
165	53.1	182.0	18,600	58.1	178.9	17,000	165
170	51.4	177.3	17,900	56.4	174.2	16,500	170
175	49.7	172.3	17,300	54.7	169.1	16,000	175
180	48.0	167.0	16,800	52.9	163.6	15,500	180
185	46.2	161.4	16,200	51.0	157.9	15,000	185
190	44.3	155.4	15,700	49.1	151.7	14,600	190
195	42.3	148.9	15,100	47.1	145.0	14,200	195
200	40.2	141.9	14,700	44.9	137.9	13,800	200
205	38.0	134.4	14,300	42.7	130.1	13,500	205
210	35.7	126.2	13,800	40.3	121.6	13,100	210
215	33.2	117.1	13,300	37.7	112.1	12,800	215
220	30.5	107.0	13,000	34.8	101.4	12,500	220
225	27.4	95.4	12,700	31.5	89.1	12,300	225
230	23.9	81.8	12,300	27.7	74.2	12,100	230
235	19.6	64.5	12,100				235



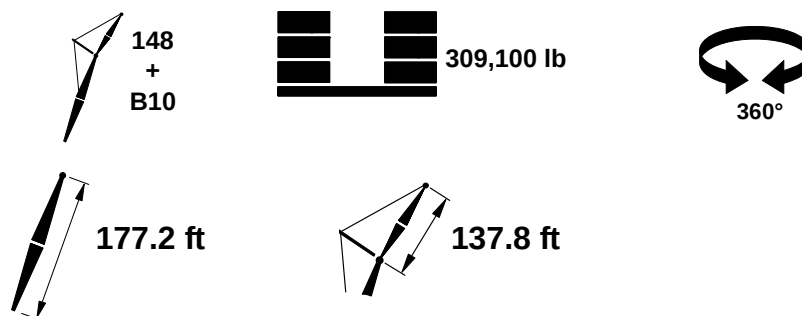
	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
55	83.9	258.9	42,700				55
60	82.8	257.8	41,300				60
65	81.6	256.7	39,900				65
70	80.5	255.4	38,500				70
75	79.3	254.1	37,200	84.3	251.4	32,400	75
80	78.1	252.6	36,000	83.1	249.9	31,300	80
85	77.0	251.0	34,700	81.9	248.3	30,300	85
90	75.8	249.3	33,500	80.7	246.6	29,200	90
95	74.6	247.5	32,300	79.5	244.8	28,300	95
100	73.4	245.6	31,200	78.3	242.8	27,400	100
105	72.2	243.5	30,100	77.1	240.8	26,400	105
110	71.0	241.3	29,000	75.8	238.6	25,600	110
115	69.8	239.0	28,000	74.6	236.2	24,700	115
120	68.5	236.6	27,100	73.3	233.7	23,900	120
125	67.3	234.0	26,100	72.1	231.1	23,200	125
130	66.0	231.3	25,200	70.8	228.4	22,500	130
135	64.7	228.4	24,400	69.5	225.5	21,700	135
140	63.4	225.4	23,600	68.2	222.4	21,100	140
145	62.1	222.2	22,800	66.8	219.2	20,400	145
150	60.7	218.9	22,100	65.5	215.8	19,800	150
155	59.4	215.4	21,300	64.1	212.3	19,200	155
160	58.0	211.7	20,600	62.7	208.5	18,600	160
165	56.6	207.8	20,000	61.2	204.6	18,000	165
170	55.1	203.7	19,400	59.8	200.4	17,500	170
175	53.7	199.4	18,800	58.3	196.0	17,100	175
180	52.1	194.9	18,200	56.7	191.4	16,600	180
185	50.6	190.1	17,600	55.1	186.5	16,100	185
190	49.0	185.0	17,100	53.5	181.4	15,700	190
195	47.4	179.7	16,500	51.9	175.9	15,300	195
200	45.7	174.0	16,000	50.1	170.1	14,800	200
205	43.9	168.0	15,500	48.3	163.9	14,500	205
210	42.1	161.6	15,100	46.5	157.3	14,100	210
215	40.2	154.7	14,700	44.5	150.2	13,700	215
220	38.2	147.3	14,300	42.5	142.6	13,400	220
225	36.1	139.3	13,900	40.3	134.3	13,200	225
230	33.9	130.6	13,500	37.9	125.3	12,900	230
235	31.5	121.0	13,100	35.4	115.2	12,600	235
240	28.8	110.3	12,800	32.6	103.8	12,400	240
245	25.9	98.1	12,500	29.4	90.7	12,200	245
250	22.5	83.6	12,300	25.6	74.6	12,100	250
255	18.2	65.2	12,100				255



	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
55	84.3	278.8	42,900				55
60	83.3	277.9	41,700				60
65	82.2	276.8	40,500				65
70	81.2	275.6	39,200				70
75	80.1	274.4	38,000				75
80	79.0	273.0	36,700	84.7	271.5	32,800	80
85	77.9	271.6	35,600	83.6	270.2	31,700	85
90	76.8	270.0	34,400	82.5	268.7	30,700	90
95	75.8	268.3	33,300	81.4	267.1	29,800	95
100	74.7	266.6	32,300	80.3	265.4	28,900	100
				79.2	263.6	28,000	
105	73.5	264.7	31,200	78.1	261.7	27,100	105
110	72.4	262.7	30,200	76.9	259.7	26,300	110
115	71.3	260.6	29,200	75.8	257.6	25,500	115
120	70.2	258.3	28,300	74.7	255.3	24,700	120
125	69.0	256.0	27,400	73.5	252.9	24,000	125
130	67.9	253.5	26,500	72.3	250.4	23,300	130
135	66.7	250.9	25,700	71.1	247.8	22,600	135
140	65.5	248.2	24,900	69.9	245.0	22,000	140
145	64.3	245.3	24,100	68.7	242.1	21,300	145
150	63.1	242.3	23,400	67.5	239.1	20,700	150
155	61.9	239.1	22,600	66.3	235.9	20,200	155
160	60.6	235.8	21,900	65.0	232.5	19,600	160
165	59.4	232.4	21,300	63.7	229.0	19,000	165
170	58.1	228.7	20,700	62.4	225.3	18,500	170
175	56.8	224.9	20,000	61.1	221.4	18,000	175
180	55.5	220.9	19,400	59.7	217.3	17,600	180
185	54.1	216.7	18,900	58.4	213.1	17,100	185
190	52.7	212.3	18,400	57.0	208.6	16,600	190
195	51.3	207.7	17,800	55.5	203.9	16,300	195
200	49.9	202.8	17,300	54.0	198.9	15,800	200
205	48.4	197.7	16,800	52.5	193.7	15,400	205
210	46.9	192.3	16,300	51.0	188.2	15,100	210
215	45.3	186.6	15,900	49.4	182.4	14,700	215
220	43.7	180.6	15,500	47.7	176.2	14,300	220
225	42.0	174.2	15,100	46.0	169.6	14,100	225
230	40.2	167.4	14,700	44.2	162.7	13,700	230
235	38.4	160.2	14,300	42.3	155.2	13,400	235
240	36.5	152.4	13,900	40.3	147.1	13,200	240
245	34.5	144.0	13,600	38.2	138.3	12,900	245
250	32.3	134.8	13,200	35.9	128.7	12,600	250
255	30.0	124.7	12,400	33.4	118.1	12,500	255
260	27.4	113.4	11,600	30.7	106.0	12,200	260
265	24.5	100.5	10,800	27.6	92.0	11,300	265
270	21.2	85.2	10,000				270
275	17.0	65.6	9,300				275



	10°			20°			
ft	o	ft	lb	o	ft	lb	ft
55	84.7	298.8	43,100				55
60	83.7	297.9	41,900				60
65	82.8	296.9	40,800				65
70	81.8	295.8	39,600				70
75	80.8	294.6	38,500				75
80	79.8	293.4	37,400	84.0	290.3	32,000	80
85	78.8	292.0	36,300	83.0	289.0	31,100	85
90	77.8	290.6	35,200	82.0	287.5	30,200	90
95	76.7	289.0	34,200	81.0	285.9	29,300	95
100	75.7	287.4	33,100	80.0	284.3	28,500	100
105	74.7	285.6	32,100	78.9	282.5	27,700	105
110	73.7	283.8	31,200	77.9	280.6	26,900	110
115	72.6	281.8	30,200	76.8	278.6	26,200	115
120	71.6	279.8	29,300	75.8	276.6	25,400	120
125	70.5	277.6	28,500	74.7	274.4	24,700	125
130	69.5	275.3	27,600	73.6	272.1	24,100	130
135	68.4	272.9	26,800	72.5	269.7	23,400	135
140	67.3	270.4	26,000	71.4	267.1	22,800	140
145	66.2	267.8	25,300	70.3	264.5	22,100	145
150	65.1	265.1	24,500	69.2	261.7	21,600	150
155	64.0	262.2	23,800	68.1	258.8	21,000	155
160	62.9	259.2	23,100	66.9	255.7	20,400	160
165	61.7	256.0	22,500	65.8	252.5	19,900	165
170	60.6	252.7	21,900	64.6	249.2	19,400	170
175	59.4	249.3	21,200	63.4	245.7	18,900	175
180	58.2	245.7	20,700	62.2	242.1	18,500	180
185	57.0	242.0	20,200	61.0	238.3	18,000	185
190	55.8	238.1	19,600	59.7	234.3	17,600	190
195	54.5	234.0	19,000	58.4	230.1	17,100	195
200	53.2	229.7	18,500	57.1	225.8	16,700	200
205	51.9	225.2	18,000	55.8	221.2	16,300	205
210	50.6	220.5	17,600	54.5	216.4	15,900	210
215	49.2	215.6	17,100	53.1	211.4	15,500	215
220	47.8	210.4	16,600	51.7	206.1	15,200	220
225	46.4	205.0	16,300	50.2	200.6	14,800	225
230	44.9	199.3	15,300	48.7	194.7	14,600	230
235	43.4	193.3	14,400	47.1	188.6	14,300	235
240	41.9	186.9	13,500	45.5	182.0	14,000	240
245	40.2	180.2	12,600	43.9	175.1	13,600	245
250	38.6	173.0	11,800	42.1	167.7	12,700	250
255	36.8	165.4	11,000	40.3	159.8	11,900	255
260	34.9	157.2	10,200	38.4	151.3	11,000	260
265	33.0	148.4	9,300	36.3	142.1	10,200	265
270	30.9	138.8	8,400	34.1	132.0	9,300	270
275	28.6	128.2	7,500	31.7	120.8	8,300	275
280	26.1	116.3	6,700	29.0	108.1	7,300	280



	10°			20°			
 ft	 o	 ft	 lb	 o	 ft	 lb	 ft
60	84.1	317.8	42,100				60
65	83.2	316.9	41,000				65
70	82.3	315.9	40,000				70
75	81.4	314.8	38,900				75
80	80.4	313.6	37,900				80
85	79.5	312.3	36,900	84.4	310.4	32,300	85
90	78.5	311.0	35,900	83.5	309.1	31,400	90
95	77.6	309.5	34,900	82.5	307.8	30,500	95
100	76.7	308.0	33,900	81.6	306.3	29,800	100
105	75.7	306.4	33,000	80.6	304.8	28,900	105
110	74.7	304.7	32,100	79.7	303.1	28,200	110
115	73.8	302.9	31,100	78.7	301.4	27,500	115
120	72.8	301.0	30,300	77.7	299.5	26,700	120
125	71.8	298.9	29,500	76.7	297.6	26,000	125
130	70.8	296.8	28,700	75.7	295.6	25,400	130
135	69.8	294.6	27,800	74.7	293.5	24,700	135
140	68.8	292.3	27,100	73.7	291.2	24,100	140
145	67.8	289.9	26,300	72.7	288.9	23,500	145
150	66.8	287.4	25,600	71.7	286.4	22,900	150
155	65.8	284.7	24,900	70.7	283.9	22,300	155
160	64.8	282.0	24,300	69.6	281.2	21,800	160
165	63.7	279.1	23,600	68.6	278.4	21,200	165
170	62.6	276.1	23,000	67.5	275.5	20,700	170
175	61.6	272.9	22,400	66.4	272.4	20,300	175
180	60.5	269.7	21,800	65.4	269.2	19,700	180
185	59.4	266.3	21,300	64.3	265.9	19,300	185
190	58.3	262.7	20,700	63.1	262.5	18,800	190
195	57.1	259.0	20,200	62.0	258.9	18,400	195
200	56.0	255.2	19,700	60.9	255.1	17,900	200
205	54.8	251.2	19,100	59.7	251.2	17,600	205
210	53.7	247.0	18,500	58.5	247.1	17,200	210
215	52.4	242.6	17,400	57.3	242.9	16,700	215
220	51.2	238.1	16,300	56.1	238.4	16,400	220
225	50.0	233.3	15,300	54.8	233.8	16,100	225
230	48.7	228.3	14,300	53.6	228.9	15,700	230
235	47.4	223.1	13,300	52.2	223.9	15,400	235
240	46.0	217.7	12,400	50.9	218.6	14,700	240
245	44.7	212.0	11,600	49.5	213.0	13,700	245
250	43.2	205.9	10,600	48.1	207.1	12,800	250
255	41.8	199.6	9,700	46.7	201.0	11,900	255
260	40.3	192.9	8,700	45.2	194.5	11,000	260
265	38.7	185.9	7,800	43.6	187.6	10,100	265
270	37.0	178.4	7,000	42.0	180.3	9,100	270
275				40.3	172.6	8,200	275
				38.5	164.3	7,200	