


Liftcrane Boom Capacities

Boom No. B10:290
73,000 lb Crane Counterweight
23,100 lb Carbody Counterweight
Crawler Machine on a Barge
0 Degree thru 3 Degree Static Machine List
No Travel - 360 Degree Rating


MLC90A-1 SERIES 2


 **LIFTING CAPACITIES:** Lifting capacities are for a crawler machine when operating on a barge. Machine shall be positively secured to prevent shifting. Lifting capacities for various boom lengths and operating radii are for freely suspended loads and may be based on percent of static tipping or strength of structural components. Capacities must be reduced by applicable deducts.


Upper boom point capacity for liftcrane service with single part whip line from Drum 3 is 20,000 lb. When Drum 1 or Drum 2 is used, capacity with single part whip line is 27,600 lb. In all cases, upper boom point capacities cannot exceed those listed for main boom capacity.

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom point sheaves, is considered part of 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 on a firm and uniformly supporting surface with machine list not to exceed degrees noted. Refer to Boom Rigging **No. 80121887**, Wire Rope Specifications chart **No. 9751-A**, Counterweight Arrangements chart **No. 9745-A**, and Wind Conditions chart **No. 9750-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 the Operator Manual for operating guidelines.

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

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

 **BOOM POINT ELEVATION:** Boom point elevation is vertical distance from barge deck to centerline of boom point shaft.

MACHINE EQUIPMENT: Machine equipped with 21 ft 3 in. crawlers, 35 in. treads, 14 ft 5 in. gantry, 8 part boom hoist reeving, two 32 mm boom pendants, 73,000 lb crane counterweight, and 23,100 lb carbody counterweight.

Consult chart **No. 9762-A** when Jib No. 117 is attached.

Upper Boom Point Deduct
Deduct 600 lb from capacities when upper boom point is attached. Deduct does not apply to 62.3 ft boom length.

Third Line Deduct
Deduct 300 lb from capacities when boom top is equipped with optional 3rd sheave wire rope guide.

Deduct From Capacities When Jib No. 117 Is Attached	
Jib Length (ft)	Deduct (lb)
30.0	4,500
40.0	5,300
50.0	6,200
60.0	7,400
Weight of jib and 700 lb suspended beneath jib point have been included in determination of deduct.	

Refer to Table 1 for raising ability with the maximum weight of all load blocks, hooks, weight ball, slings, and hoist lines beneath boom point sheaves. For block weights shown with #, load blocks, hooks, weight ball, and slings must remain on barge deck until combined weights are within rated capacity of chart. Raising is not permitted in shaded areas of table.

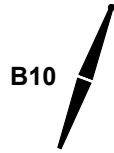
Combined weight beneath boom point sheaves must not exceed block weight shown.

Table 1

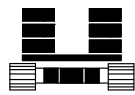
Boom Length (ft)	Over End or Side of Crawlers	
	Machine List	
	0°	1° - 3°
	Block Weight (lb)	
62.3 - 160.8	3,800	3,800
170.6	2,650	700
180.4 - 200.1	700	#

REFERENCE ONLY!

Explanation of Symbols



Boom No. B10:290



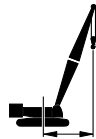
Crane Counterweight
+
Carbody Counterweight



360 Degree Rating



Boom Length



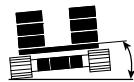
Operating Radius
(see page 1)



Boom Angle
(see page 1)



Boom Point Elevation
(see page 1)

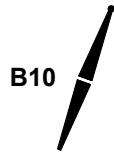


Machine List



Lifting Capacities
(see page 1)

MLC90A-1 S-2



73,000 lb
 +
 23,100 lb



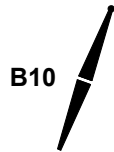
 62.3 ft							
ft	°	ft	0° lb	1° lb	2° lb	3° lb	ft
15	80.3	68.3	174,900				15
16	79.3	68.1	165,500	137,100			16
17	78.4	67.8	156,100	135,200	112,700		17
18	77.4	67.6	147,800	133,300	111,400	95,600	18
19	76.5	67.4	140,200	131,600	110,100	94,700	19
20	75.5	67.1	133,400	122,100	108,900	93,700	20
22	73.6	66.5	115,900	106,100	97,700	89,600	22
24	71.7	65.9	101,400	93,700	87,000	81,000	24
26	69.7	65.2	90,000	83,800	78,300	73,400	26
28	67.8	64.4	80,800	75,700	71,100	67,000	28
30	65.8	63.5	73,200	69,000	65,100	61,600	30
32	63.7	62.5	66,900	63,300	60,000	56,900	32
34	61.6	61.4	61,500	58,400	55,500	52,900	34
36	59.5	60.3	56,800	54,200	51,700	49,400	36
38	57.3	59.0	52,800	50,500	48,300	46,300	38
40	55.1	57.6	49,200	47,200	45,300	43,500	40
42	52.8	56.1	46,100	44,300	42,600	41,000	42
44	50.4	54.5	43,300	41,700	40,200	38,800	44
46	48.0	52.7	40,800	39,400	38,000	36,700	46
48	45.4	50.8	38,500	37,300	36,100	34,900	48
50	42.7	48.7	36,500	35,400	34,300	33,200	50
55	35.3	42.4	32,100	31,300	30,400	29,600	55
60	26.1	33.7	28,600	27,900	27,300	26,700	60

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72.2 ft								
ft	°	ft	0° lb	1° lb	2° lb	3° lb	ft	
16	80.8	78.1	159,100				16	
17	80.0	77.9	156,300	122,700			17	
18	79.2	77.7	147,900	121,100			18	
19	78.4	77.5	140,400	119,600	99,100		19	
20	77.6	77.3	133,600	118,200	98,100	83,900	20	
22	75.9	76.8	116,200	105,200	95,900	82,400	22	
24	74.3	76.2	101,700	93,100	85,600	79,100	24	
26	72.6	75.6	90,300	83,300	77,200	71,800	26	
28	70.9	74.9	81,100	75,400	70,300	65,700	28	
30	69.2	74.2	73,500	68,700	64,400	60,500	30	
32	67.5	73.3	67,200	63,100	59,400	56,000	32	
34	65.8	72.5	61,800	58,300	55,100	52,100	34	
36	64.0	71.5	57,100	54,100	51,300	48,700	36	
38	62.2	70.5	53,100	50,400	48,000	45,700	38	
40	60.4	69.3	49,600	47,200	45,000	43,000	40	
42	58.6	68.1	46,400	44,300	42,400	40,600	42	
44	56.7	66.8	43,600	41,800	40,000	38,400	44	
46	54.7	65.4	41,100	39,500	37,900	36,400	46	
48	52.7	63.9	38,900	37,400	35,900	34,600	48	
50	50.7	62.3	36,800	35,500	34,200	33,000	50	
55	45.3	57.7	32,400	31,400	30,400	29,400	55	
60	39.3	52.1	28,900	28,100	27,300	26,500	60	
65	32.5	45.0	26,000	25,300	24,700	24,100	65	
70	23.9	35.5	23,500	23,000	22,500	22,000	70	

MLC90A-1 S-2

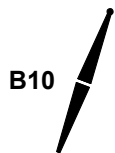



73,000 lb
 +
23,100 lb



 82.0 ft								
ft	°	ft	lb	lb	lb	lb	lb	ft
18	80.5	87.7	142,800					18
19	79.8	87.5	139,900	109,400				19
20	79.1	87.3	133,300	108,100				20
22	77.6	86.9	116,200	104,000	87,100	74,100		22
24	76.2	86.4	101,600	92,000	83,900	72,900		24
26	74.8	85.9	90,200	82,400	75,700	69,900		26
28	73.3	85.3	81,000	74,600	69,000	64,000		28
30	71.8	84.6	73,400	68,000	63,300	59,000		30
32	70.4	83.9	67,000	62,500	58,400	54,700		32
34	68.9	83.2	61,600	57,700	54,200	50,900		34
36	67.3	82.3	57,000	53,600	50,500	47,600		36
38	65.8	81.4	52,900	49,900	47,200	44,700		38
40	64.3	80.5	49,400	46,700	44,300	42,000		40
42	62.7	79.5	46,300	43,900	41,700	39,700		42
44	61.1	78.4	43,500	41,400	39,400	37,600		44
46	59.5	77.2	41,000	39,100	37,300	35,600		46
48	57.8	76.0	38,700	37,000	35,400	33,900		48
50	56.2	74.6	36,600	35,100	33,600	32,200		50
55	51.8	70.9	32,300	31,000	29,900	28,800		55
60	47.2	66.6	28,700	27,700	26,800	25,900		60
65	42.2	61.4	25,800	25,000	24,200	23,500		65
70	36.6	55.2	23,300	22,700	22,000	21,400		70
75	30.2	47.5	21,200	20,700	20,200	19,700		75
80	22.1	37.0	19,400	19,000	18,600	18,200		80

MLC90A-1 S-2



73,000 lb
 +
23,100 lb



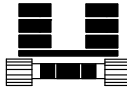
 91.9 ft							
ft	°	ft	0° lb	1° lb	2° lb	3° lb	ft
19	80.9	97.5	129,300				19
20	80.3	97.4	126,900				20
22	79.0	97.0	116,100	96,800	79,300		22
24	77.7	96.5	101,600	91,000	77,900	66,000	24
26	76.4	96.1	90,200	81,600	74,400	65,000	26
28	75.1	95.5	80,900	73,900	67,800	62,500	28
30	73.8	95.0	73,300	67,400	62,300	57,700	30
32	72.5	94.3	67,000	62,000	57,500	53,500	32
34	71.2	93.7	61,600	57,200	53,400	49,900	34
36	69.9	92.9	56,900	53,200	49,800	46,700	36
38	68.6	92.2	52,900	49,600	46,600	43,800	38
40	67.2	91.3	49,400	46,400	43,700	41,300	40
42	65.8	90.4	46,200	43,600	41,200	39,000	42
44	64.5	89.5	43,400	41,100	38,900	36,900	44
46	63.1	88.5	40,900	38,800	36,800	35,000	46
48	61.6	87.4	38,700	36,700	35,000	33,300	48
50	60.2	86.3	36,600	34,900	33,200	31,700	50
55	56.5	83.1	32,200	30,800	29,500	28,300	55
60	52.7	79.5	28,700	27,600	26,500	25,500	60
65	48.6	75.4	25,800	24,800	23,900	23,100	65
70	44.3	70.5	23,300	22,500	21,800	21,100	70
75	39.6	64.9	21,200	20,500	19,900	19,300	75
80	34.3	58.1	19,400	18,800	18,300	17,800	80
85	28.2	49.7	17,800	17,300	16,900	16,500	85
90	20.5	38.4	16,400	16,000	15,700	15,400	90

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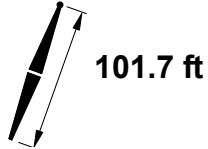
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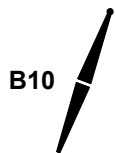

73,000 lb
 +

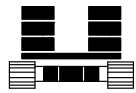
23,100 lb




 101.7 ft							
ft	°	ft	lb	lb	lb	lb	ft
22	80.1	107.0	114,500				22
24	78.9	106.6	101,500	87,600	71,300		24
26	77.8	106.2	90,000	80,700	70,100	59,200	26
28	76.6	105.7	80,800	73,100	66,600	58,400	28
30	75.4	105.2	73,200	66,800	61,200	56,400	30
32	74.3	104.6	66,800	61,300	56,500	52,300	32
34	73.1	104.0	61,400	56,700	52,500	48,800	34
36	71.9	103.4	56,800	52,600	49,000	45,700	36
38	70.7	102.7	52,700	49,100	45,800	42,900	38
40	69.5	102.0	49,200	46,000	43,100	40,400	40
42	68.3	101.2	46,000	43,200	40,600	38,200	42
44	67.1	100.3	43,200	40,700	38,300	36,100	44
46	65.9	99.4	40,700	38,400	36,300	34,300	46
48	64.6	98.5	38,500	36,400	34,400	32,600	48
50	63.4	97.5	36,400	34,500	32,700	31,100	50
55	60.1	94.8	32,000	30,500	29,100	27,700	55
60	56.8	91.6	28,500	27,200	26,000	24,900	60
65	53.4	88.1	25,500	24,500	23,500	22,600	65
70	49.8	84.1	23,100	22,200	21,400	20,600	70
75	45.9	79.5	21,000	20,200	19,500	18,900	75
80	41.8	74.2	19,200	18,500	17,900	17,400	80
85	37.4	68.0	17,600	17,000	16,500	16,000	85
90	32.4	60.8	16,200	15,700	15,300	14,900	90
95	26.6	51.7	14,900	14,600	14,200	13,800	95

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73,000 lb
 +
23,100 lb



 111.5 ft							
ft	°	ft	0° lb	1° lb	2° lb	3° lb	ft
22	81.0	117.0	105,900				22
24	79.9	116.6	101,400	80,600			24
26	78.9	116.2	89,900	79,100	64,200		26
28	77.8	115.8	80,700	72,400	63,200	53,300	28
30	76.8	115.3	73,100	66,100	60,200	52,600	30
32	75.7	114.8	66,700	60,700	55,600	51,200	32
34	74.6	114.3	61,300	56,100	51,700	47,700	34
36	73.6	113.7	56,600	52,100	48,200	44,700	36
38	72.5	113.1	52,600	48,600	45,100	42,000	38
40	71.4	112.4	49,000	45,500	42,400	39,600	40
42	70.3	111.7	45,900	42,800	40,000	37,400	42
44	69.2	111.0	43,100	40,300	37,700	35,400	44
46	68.1	110.2	40,600	38,000	35,700	33,600	46
48	67.0	109.3	38,300	36,000	33,900	32,000	48
50	65.9	108.4	36,200	34,200	32,200	30,500	50
55	63.0	106.0	31,900	30,200	28,600	27,200	55
60	60.1	103.2	28,300	26,900	25,700	24,400	60
65	57.1	100.1	25,400	24,200	23,200	22,100	65
70	53.9	96.6	22,900	21,900	21,000	20,200	70
75	50.7	92.7	20,800	20,000	19,200	18,500	75
80	47.2	88.3	19,000	18,300	17,600	17,000	80
85	43.6	83.3	17,400	16,800	16,200	15,700	85
90	39.7	77.6	16,000	15,500	15,000	14,500	90
95	35.5	71.0	14,800	14,300	13,900	13,500	95
100	30.7	63.2	13,700	13,300	12,900	12,600	100
105	25.1	53.6	12,700	12,300	12,000	11,700	105

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B10



73,000 lb

+

23,100 lb



 121.4 ft							
ft	°	ft	lb	lb	lb	lb	ft
24	80.7	126.6	96,100				24
26	79.8	126.3	89,800	73,400			26
28	78.8	125.9	80,500	71,600			28
30	77.9	125.5	72,900	65,400			30
32	76.9	125.0	66,500	60,100	58,400	48,300	32
34	75.9	124.5	61,100	55,600	50,800	46,700	34
36	74.9	124.0	56,400	51,600	47,400	43,700	36
38	74.0	123.4	52,400	48,100	44,400	41,100	38
40	73.0	122.8	48,800	45,100	41,700	38,800	40
42	72.0	122.1	45,700	42,300	39,300	36,600	42
44	71.0	121.5	42,900	39,900	37,100	34,700	44
46	70.0	120.7	40,400	37,600	35,200	32,900	46
48	69.0	120.0	38,100	35,600	33,400	31,300	48
50	67.9	119.2	36,000	33,800	31,700	29,800	50
55	65.4	117.0	31,700	29,800	28,200	26,600	55
60	62.7	114.5	28,100	26,600	25,200	23,900	60
65	60.0	111.7	25,200	23,900	22,700	21,600	65
70	57.3	108.6	22,700	21,600	20,600	19,700	70
75	54.4	105.2	20,600	19,700	18,800	18,000	75
80	51.4	101.4	18,800	18,000	17,200	16,500	80
85	48.3	97.1	17,200	16,500	15,900	15,200	85
90	45.1	92.3	15,800	15,200	14,600	14,100	90
95	41.6	86.9	14,500	14,000	13,500	13,100	95
100	37.9	80.8	13,400	13,000	12,600	12,200	100
105	33.8	73.8	12,400	12,100	11,700	11,300	105
110	29.2	65.6	11,500	11,200	10,900	10,600	110
115	23.9	55.4	10,700	10,400	10,200	9,900	115

MLC90A-1 S-2



73,000 lb
+
23,100 lb



ft	°	ft	0° lb	1° lb	2° lb	3° lb	ft	
26	80.6	136.3	87,400					26
28	79.7	135.9	80,400	67,100				28
30	78.8	135.5	72,800	64,800	53,500			30
32	77.9	135.1	66,400	59,500	52,700	44,200		32
34	77.0	134.6	61,000	55,100	50,000	43,700		34
36	76.1	134.1	56,300	51,100	46,700	42,900		36
38	75.2	133.6	52,200	47,700	43,800	40,300		38
40	74.3	133.1	48,700	44,700	41,100	38,000		40
42	73.4	132.5	45,500	41,900	38,800	35,900		42
44	72.5	131.8	42,700	39,500	36,600	34,000		44
46	71.5	131.2	40,200	37,300	34,700	32,300		46
48	70.6	130.5	37,900	35,300	32,900	30,700		48
50	69.7	129.7	35,900	33,500	31,300	29,300		50
55	67.3	127.7	31,500	29,600	27,800	26,100		55
60	64.9	125.5	28,000	26,300	24,900	23,500		60
65	62.5	123.0	25,000	23,700	22,400	21,200		65
70	60.0	120.2	22,500	21,400	20,300	19,300		70
75	57.4	117.1	20,400	19,500	18,500	17,700		75
80	54.8	113.7	18,600	17,800	17,000	16,200		80
85	52.1	110.0	17,000	16,300	15,600	14,900		85
90	49.2	105.8	15,600	15,000	14,400	13,800		90
95	46.3	101.2	14,400	13,900	13,300	12,800		95
100	43.1	96.1	13,300	12,800	12,300	11,900		100
105	39.8	90.4	12,300	11,900	11,500	11,100		105
110	36.2	83.9	11,400	11,000	10,700	10,300		110
115	32.3	76.5	10,600	10,300	9,900	9,600		115
120	27.9	67.7	9,900	9,600	9,300	9,000		120
125	22.8	57.0	9,200	8,900	8,700	8,400		125

MLC90A-1 S-2




B10



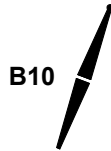


 73,000 lb
 +
 23,100 lb



 141.1 ft							
ft	°	ft	0° lb	1° lb	2° lb	3° lb	ft
28	80.4	145.9	77,800				28
30	79.6	145.5	72,600	60,700			30
32	78.7	145.2	66,200	59,000	48,400		32
34	77.9	144.7	60,800	54,500	47,800	40,000	34
36	77.1	144.3	56,100	50,600	46,000	39,600	36
38	76.2	143.8	52,100	47,200	43,100	39,100	38
40	75.4	143.3	48,500	44,200	40,500	37,200	40
42	74.6	142.7	45,300	41,500	38,100	35,200	42
44	73.7	142.1	42,500	39,100	36,000	33,300	44
46	72.9	141.5	40,000	36,900	34,100	31,700	46
48	72.0	140.9	37,700	34,900	32,400	30,100	48
50	71.2	140.2	35,700	33,100	30,800	28,700	50
55	69.0	138.4	31,300	29,200	27,300	25,600	55
60	66.8	136.3	27,700	26,000	24,400	23,000	60
65	64.6	134.0	24,800	23,400	22,000	20,800	65
70	62.3	131.5	22,300	21,100	20,000	18,900	70
75	60.0	128.7	20,200	19,200	18,200	17,200	75
80	57.6	125.6	18,400	17,500	16,600	15,800	80
85	55.1	122.2	16,800	16,000	15,300	14,500	85
90	52.6	118.5	15,400	14,700	14,100	13,400	90
95	50.0	114.5	14,200	13,600	13,000	12,400	95
100	47.3	110.0	13,100	12,500	12,000	11,500	100
105	44.4	105.1	12,100	11,600	11,100	10,700	105
110	41.4	99.7	11,200	10,800	10,300	9,900	110
115	38.2	93.6	10,400	10,000	9,600	9,300	115
120	34.8	86.8	9,600	9,300	9,000	8,600	120
125	31.0	79.0	8,900	8,600	8,400	8,100	125
130	26.8	69.8	8,300	8,100	7,800	7,500	130
135	21.8	58.5	7,700	7,500	7,300	7,100	135

MLC90A-1 S-2



73,000 lb
+
23,100 lb




150.9 ft								
ft	°	ft	0° lb	1° lb	2° lb	3° lb	ft	
30	80.3	155.6	70,700				30	
32	79.5	155.2	66,000	55,700			32	
34	78.7	154.8	60,600	54,000	44,100		34	
36	77.9	154.4	55,900	50,100	43,800	35,000	36	
38	77.2	153.9	51,900	46,700	42,400	34,900	38	
40	76.4	153.4	48,300	43,800	39,800	34,800	40	
42	75.6	152.9	45,100	41,100	37,600	34,500	42	
44	74.8	152.4	42,300	38,700	35,500	32,700	44	
46	74.0	151.8	39,800	36,500	33,600	31,000	46	
48	73.2	151.2	37,500	34,500	31,900	29,500	48	
50	72.4	150.6	35,500	32,700	30,300	28,100	50	
55	70.4	148.9	31,100	28,900	26,900	25,000	55	
60	68.4	147.0	27,500	25,700	24,000	22,500	60	
65	66.3	144.9	24,600	23,100	21,600	20,300	65	
70	64.2	142.5	22,100	20,800	19,600	18,500	70	
75	62.1	140.0	20,000	18,900	17,800	16,900	75	
80	59.9	137.2	18,200	17,200	16,300	15,400	80	
85	57.7	134.1	16,600	15,800	14,900	14,200	85	
90	55.4	130.8	15,200	14,500	13,700	13,100	90	
95	53.1	127.1	14,000	13,300	12,700	12,100	95	
100	50.6	123.1	12,900	12,300	11,700	11,200	100	
105	48.1	118.8	11,900	11,400	10,800	10,400	105	
110	45.5	114.1	11,000	10,500	10,100	9,600	110	
115	42.8	108.9	10,200	9,700	9,300	8,900	115	
120	39.9	103.1	9,400	9,000	8,700	8,300	120	
125	36.8	96.7	8,700	8,400	8,100	7,800	125	
130	33.5	89.5	8,100	7,800	7,500	7,200	130	
135	29.8	81.3	7,500	7,300	7,000	6,800	135	
140	25.7	71.7	7,000	6,800	6,500	6,300	140	
145	20.9	59.9	6,500	6,300	6,100	5,900	145	

MLC90A-1 S-2




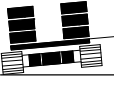
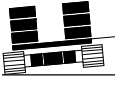
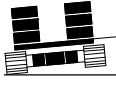

B10



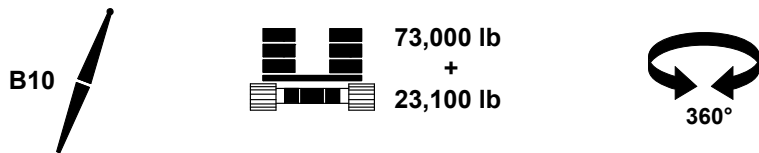

73,000 lb
 +

23,100 lb



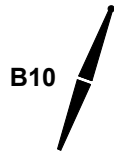
 160.8 ft								
ft	°	ft	 0° lb	 1° lb	 2° lb	 3° lb	ft	
30	80.9	165.5	62,900				30	
32	80.1	165.2	61,900				32	
34	79.4	164.8	60,400	50,800			34	
36	78.7	164.4	55,800	49,600	38,200		36	
38	78.0	164.0	51,700	46,300	38,000	30,100	38	
40	77.2	163.6	48,100	43,300	37,900	30,000	40	
42	76.5	163.1	44,900	40,600	37,000	29,900	42	
44	75.8	162.6	42,100	38,300	34,900	29,800	44	
46	75.0	162.0	39,600	36,100	33,100	29,700	46	
48	74.3	161.5	37,300	34,200	31,400	28,900	48	
50	73.5	160.9	35,300	32,400	29,800	27,500	50	
55	71.7	159.3	30,900	28,500	26,400	24,500	55	
60	69.8	157.5	27,300	25,400	23,600	22,000	60	
65	67.9	155.6	24,400	22,700	21,200	19,900	65	
70	65.9	153.4	21,900	20,500	19,200	18,000	70	
75	63.9	151.0	19,800	18,600	17,500	16,400	75	
80	61.9	148.4	17,900	16,900	15,900	15,000	80	
85	59.9	145.6	16,400	15,500	14,600	13,800	85	
90	57.8	142.6	15,000	14,200	13,400	12,700	90	
95	55.7	139.3	13,700	13,000	12,300	11,700	95	
100	53.5	135.7	12,600	12,000	11,400	10,800	100	
105	51.2	131.8	11,600	11,100	10,500	10,000	105	
110	48.9	127.5	10,700	10,200	9,700	9,300	110	
115	46.5	122.9	9,900	9,500	9,000	8,600	115	
120	43.9	117.9	9,200	8,800	8,400	8,000	120	
125	41.3	112.4	8,500	8,100	7,800	7,400	125	
130	38.5	106.4	7,900	7,500	7,200	6,900	130	
135	35.5	99.7	7,300	7,000	6,700	6,400	135	
140	32.3	92.2	6,800	6,500	6,200	6,000	140	
145	28.8	83.6	6,300	6,000	5,800	5,500	145	
150	24.8	73.6	5,800	5,600	5,400	5,200	150	
155	20.0	61.3	5,100	5,000	4,900	4,800	155	

MLC90A-1 S-2



 170.6 ft							
ft	°	ft	0° lb	1° lb	2° lb	3° lb	ft
32	80.7	175.2	53,200				32
34	80.0	174.8	52,400				34
36	79.3	174.5	51,700	44,200			36
38	78.7	174.1	51,000	43,900	33,100		38
40	78.0	173.6	47,900	42,900	32,900	25,900	40
42	77.3	173.2	44,800	40,200	32,800	25,800	42
44	76.6	172.7	41,900	37,900	32,700	25,800	44
46	75.9	172.2	39,400	35,700	32,500	25,700	46
48	75.2	171.7	37,100	33,800	30,900	25,600	48
50	74.5	171.1	35,100	32,000	29,300	25,600	50
55	72.8	169.7	30,700	28,200	26,000	24,000	55
60	71.0	168.0	27,100	25,100	23,200	21,600	60
65	69.2	166.2	24,200	22,500	20,900	19,500	65
70	67.4	164.1	21,700	20,200	18,900	17,600	70
75	65.6	161.9	19,600	18,300	17,200	16,100	75
80	63.7	159.5	17,800	16,700	15,600	14,700	80
85	61.8	156.9	16,200	15,200	14,300	13,500	85
90	59.9	154.1	14,800	13,900	13,100	12,400	90
95	57.9	151.1	13,500	12,800	12,100	11,400	95
100	55.9	147.8	12,400	11,800	11,100	10,500	100
105	53.8	144.2	11,500	10,800	10,300	9,700	105
110	51.7	140.4	10,600	10,000	9,500	9,000	110
115	49.5	136.2	9,700	9,300	8,800	8,300	115
120	47.3	131.8	9,000	8,600	8,100	7,700	120
125	44.9	126.9	8,300	7,900	7,500	7,200	125
130	42.5	121.6	7,700	7,300	7,000	6,600	130
135	39.9	115.9	7,100	6,800	6,500	6,200	135
140	37.2	109.5	6,600	6,300	6,000	5,700	140
145	34.3	102.5	6,100	5,800	5,600	5,300	145
150	31.2	94.7	5,600	5,400	5,100	4,900	150
155	27.8	85.8	5,200	5,000	4,800	4,600	155
160	23.9	75.3	4,800	4,600	4,400	4,200	160

MLC90A-1 S-2



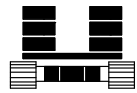

73,000 lb
 +
23,100 lb



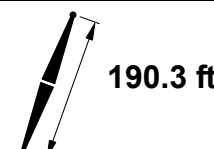
 180.4 ft								
ft	°	ft	lb	lb	lb	lb	lb	ft
34	80.6	184.8	46,000					34
36	79.9	184.5	45,400	38,700				36
38	79.3	184.1	44,700	38,500				38
40	78.6	183.7	44,100	38,400				40
42	78.0	183.3	43,200	38,200	28,700	22,400		42
44	77.3	182.8	41,700	37,500	28,600	22,300		44
46	76.7	182.4	39,200	35,300	28,500	22,300		46
48	76.0	181.9	36,900	33,400	28,300	22,200		48
50	75.4	181.3	34,900	31,700	28,300	22,100		50
55	73.7	179.9	30,500	27,900	25,600	21,900		55
60	72.1	178.4	26,900	24,700	22,800	21,100		60
65	70.4	176.7	23,900	22,100	20,500	19,000		65
70	68.7	174.8	21,500	19,900	18,500	17,200		70
75	67.0	172.7	19,400	18,000	16,800	15,700		75
80	65.2	170.5	17,500	16,400	15,300	14,300		80
85	63.5	168.0	15,900	14,900	14,000	13,100		85
90	61.7	165.4	14,500	13,600	12,800	12,000		90
95	59.9	162.6	13,300	12,500	11,800	11,000		95
100	58.0	159.5	12,200	11,500	10,800	10,200		100
105	56.1	156.3	11,200	10,600	10,000	9,400		105
110	54.2	152.8	10,300	9,700	9,200	8,700		110
115	52.2	149.0	9,500	9,000	8,500	8,000		115
120	50.1	144.9	8,800	8,300	7,800	7,400		120
125	48.0	140.5	8,100	7,600	7,200	6,800		125
130	45.8	135.8	7,400	7,100	6,700	6,300		130
135	43.6	130.7	6,900	6,500	6,200	5,800		135
140	41.2	125.2	6,300	6,000	5,700	5,400		140
145	38.7	119.2	5,800	5,500	5,300	5,000		145
150	36.1	112.6	5,400	5,100	4,800	4,600		150
155	33.3	105.3	4,900	4,700	4,500	4,200		155
160	30.2	97.1	4,500	4,300	4,100	3,900		160
165	26.9	87.8	4,100	4,000	3,800			165

MLC90A-1 S-2




73,000 lb
 +

23,100 lb



								
ft	°	ft	0° lb	1° lb	2° lb	3° lb	ft	
36	80.5	194.5	43,500				36	
38	79.8	194.1	43,000	33,900			38	
40	79.2	193.7	42,500	33,800			40	
42	78.6	193.3	42,000	33,700	25,300		42	
44	78.0	192.9	41,500	33,600	25,200		44	
46	77.4	192.5	39,000	33,600	25,200	19,500	46	
48	76.8	192.0	36,700	33,000	25,200	19,400	48	
50	76.2	191.5	34,600	31,300	25,100	19,400	50	
55	74.6	190.2	30,200	27,500	25,000	19,300	55	
60	73.0	188.7	26,600	24,400	22,400	19,200	60	
65	71.4	187.1	23,700	21,800	20,100	18,500	65	
70	69.8	185.3	21,200	19,600	18,100	16,800	70	
75	68.2	183.4	19,100	17,700	16,400	15,200	75	
80	66.6	181.3	17,300	16,000	14,900	13,900	80	
85	64.9	179.0	15,700	14,600	13,600	12,700	85	
90	63.3	176.5	14,300	13,300	12,400	11,600	90	
95	61.6	173.9	13,000	12,200	11,400	10,700	95	
100	59.8	171.1	11,900	11,200	10,500	9,800	100	
105	58.1	168.0	10,900	10,300	9,600	9,000	105	
110	56.3	164.8	10,000	9,400	8,800	8,300	110	
115	54.4	161.3	9,200	8,700	8,100	7,600	115	
120	52.6	157.6	8,500	8,000	7,500	7,000	120	
125	50.6	153.6	7,800	7,300	6,900	6,500	125	
130	48.6	149.3	7,200	6,700	6,300	6,000	130	
135	46.6	144.7	6,600	6,200	5,800	5,500	135	
140	44.5	139.7	6,100	5,700	5,400	5,000	140	
145	42.3	134.4	5,600	5,200	4,900	4,600	145	
150	40.0	128.6	5,100	4,800	4,500	4,200	150	
155	37.6	122.3	4,700	4,400	4,100	3,900	155	
160	35.0	115.5	4,300	4,000	3,800		160	
165	32.3	107.9	3,900				165	

MLC90A-1 S-2



B10



73,000 lb

+

23,100 lb



 200.1 ft								
ft	°	ft	lb	lb	lb	lb	lb	ft
36	80.9	204.5	38,800					36
38	80.4	204.1	38,300					38
40	79.8	203.8	37,800	29,800				40
42	79.2	203.4	37,400	29,700				42
44	78.6	203.0	36,900	29,600	22,200			44
46	78.0	202.6	36,400	29,600	22,200			46
48	77.4	202.1	36,000	29,500	22,100	16,900		48
50	76.8	201.6	34,400	29,400	22,000	16,800		50
55	75.4	200.4	29,900	27,100	21,900	16,800		55
60	73.9	199.0	26,400	24,000	21,800	16,700		60
65	72.4	197.5	23,400	21,400	19,600	16,600		65
70	70.9	195.8	20,900	19,200	17,700	16,300		70
75	69.4	193.9	18,800	17,300	16,000	14,800		75
80	67.8	192.0	17,000	15,700	14,500	13,400		80
85	66.3	189.8	15,400	14,300	13,200	12,300		85
90	64.7	187.5	14,000	13,000	12,100	11,200		90
95	63.1	185.0	12,700	11,800	11,000	10,200		95
100	61.5	182.4	11,600	10,800	10,100	9,400		100
105	59.8	179.5	10,600	9,900	9,200	8,600		105
110	58.1	176.5	9,700	9,100	8,500	7,900		110
115	56.4	173.3	8,900	8,300	7,800	7,200		115
120	54.7	169.8	8,200	7,600	7,100	6,600		120
125	52.9	166.1	7,500	7,000	6,500	6,100		125
130	51.1	162.2	6,900	6,400	6,000	5,600		130
135	49.2	158.0	6,300	5,900	5,500	5,100		135
140	47.3	153.5	5,800	5,400	5,000	4,700		140
145	45.3	148.7	5,300	4,900	4,600	4,300		145
150	43.3	143.5	4,800	4,500	4,200	3,900		150
155	41.1	137.9	4,400	4,100	3,800			155
160	38.9	131.9	4,000					160