Maximum Allowable Travel Specifications

MLC100A-1

Jib No. 117 on
Boom No. B10:290

Jobsite Travel

MLC100A-1 SERIES 1 must be equipped with 20 610 kg (45,400 lb) crane counterweight and 0 kg (0 lb) carbody counterweight; MLC100A-1 SERIES 2 must be equipped with 33 120 kg (73,000 lb) crane counterweight and 10 500 kg (23,100 lb) carbody counterweight. Refer to Wind Conditions chart for maximum wind speed for various boom and jib lengths. Refer to capacity charts for maximum boom and jib lengths lifted unassisted. Travel slowly and smoothly to avoid shock loading boom, jib, and rigging. **Warning: Maintain adequate clearance between boom or jib and load blocks, hooks, or weight ball while traveling.** *The boom or jib can buckle and collapse if the load blocks, hooks or weight ball contact the boom or jib.*

1. Machine Travel With Load

A. Machine can swing and travel with 360 degree rating.

B. Grade in any direction must not exceed 1 percent (0.5 degrees).

C. Travel surface must be firm, level and uniformly supporting. Capacity charts are based on static conditions; therefore judgment must be used to allow for dynamic effects of traveling with load. Carry load as close to ground as possible. Stabilize load with taglines.

2. Machine Travel Without Load - <u>Without</u> Boom Angle Adjustment on Grade

A. Load blocks, hooks, weight ball, slings, hoist lines, etc., may be suspended beneath boom or jib point, or tied off to machine. Total combined suspended weight beneath boom point must not exceed 1 725 kg (3,800 lb). Total suspended weight beneath jib point must not exceed 325 kg (700 lb).

B. Machine to travel on a firm and uniformly supporting surface. Travel allowed with 360 degree swing up to 1 percent (0.5 degrees) grade; crane upperworks must be in-line with crawlers and grade when grade exceeds 1 percent. Side-to-side grade must not exceed 2 percent (1.1 degrees) measured at boom hinge pins.

C. Refer to Tables 2 and 3 for boom angle, boom length, and direction for various grades. **Adjust boom** within boom angle range shown in table with machine in a level position **before traveling** onto grade. **Do not adjust boom angle after crane has been traveled onto grade**. Boom angle is angle between horizontal and centerline of boom butt and inserts. Refer to Table 1 for grade vs. angle when traveling.

D. Do not exceed 2 percent (1.1 degrees) side-to-side grade at boom hinge pins when cutting (turning on grade).

E. Boom lengths shown in Tables 2 and 3 include all jib lengths and offset angles.

F. ***Warning:*** Travel prohibited for boom angle range not shown in Tables 2 and 3. *Crane could tip.*

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3. Machine Travel Without Load - <u>With</u> Boom Angle Adjustment on Grade

A. Load blocks, hooks, weight ball, slings, hoist lines, etc., may be suspended beneath boom or jib point, or tied off to machine. Total combined suspended weight beneath boom point must not exceed 1 725 kg (3,800 lb). Total suspended weight beneath jib point must not exceed 325 kg (700 lb).

B. Machine to travel on a firm and uniformly supporting surface. Travel allowed with 360 degree swing up to 1 percent (0.5 degrees) grade; crane upperworks must be in-line with crawlers and grade when grade exceeds 1 percent. Side-to-side grade must not exceed 2 percent (1.1 degrees) measured at boom hinge pins.

C. Refer to Tables 4 and 5 for boom angle, boom length, and direction for various grades. **Adjust boom** to remain within boom angle range shown in table **while traveling on grade**. Boom angle is angle between horizontal and centerline of boom butt and inserts. Refer to Table 1 for grade vs. angle when traveling.

D. Do not exceed 2 percent (1.1 degrees) side-to-side grade at boom hinge pins when cutting (turning on grade).

E. Boom lengths shown in Tables 4 and 5 include all jib lengths and offset angles.

F. ***Warning:*** Travel prohibited for boom angle range not shown in Tables 4 and 5. *Crane could tip.*

Table 1

Percent Grade Vs. Angle In Degrees	
Percent Grade	Angle
5	2.9
10	5.7
20	11.3
30	16.7

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Table 2a - Without Boom Angle Adjustment: SERIES 1

MACHINE TRAVEL WITHOUT LOAD					
Boom Length (including all jib lengths and offsets)		**Boom Angle Range in Degrees**			
		Maximum Percent Grade			
Meters	Feet	5%	10%	20%	30%
BOOM FACING DOWNHILL					
16,0	52.5	37 - 71	40 - 71	45 - 71	53 - 71
19,0	62.3	37 - 71	40 - 71	45 - 71	53 - 71
22,0	72.2	37 - 71	40 - 71	45 - 71	53 - 71
25,0	82.0	37 - 71	40 - 71	45 - 71	53 - 71
28,0	91.9	37 - 71	40 - 71	46 - 71	59 - 71
31,0	101.7	38 - 71	42 - 71	54 - 71	65 - 71
34,0	111.5	47 - 71	50 - 71	61 - 71	—
37,0	121.4	51 - 71	56 - 71	65 - 71	—
40,0	131.2	55 - 71	60 - 71	69 - 71	—
43,0	141.1	59 - 71	63 - 71	—	—
46,0	150.9	62 - 71	66 - 71	—	—
49,0	160.8	62 - 71	66 - 71	—	—

Table 2b - Without Boom Angle Adjustment: SERIES 1

MACHINE TRAVEL WITHOUT LOAD					
Boom Length (including all jib lengths and offsets)		**Boom Angle Range in Degrees**			
		Maximum Percent Grade			
Meters	Feet	5%	10%	20%	30%
BOOM FACING UPHILL					
16,0	52.5	33 - 68	33 - 65	33 - 59	33 - 49
19,0	62.3	34 - 68	34 - 65	34 - 59	34 - 54
22,0	72.2	34 - 68	34 - 65	34 - 59	34 - 54
25,0	82.0	34 - 68	34 - 65	34 - 59	34 - 54
28,0	91.9	34 - 68	34 - 65	34 - 59	34 - 54
31,0	101.7	34 - 68	34 - 65	34 - 59	34 - 54
34,0	111.5	34 - 68	34 - 65	34 - 59	34 - 54
37,0	121.4	41 - 68	41 - 65	41 - 59	41 - 54
40,0	131.2	47 - 68	47 - 65	47 - 59	47 - 54
43,0	141.1	51 - 68	51 - 65	51 - 59	51 - 54
46,0	150.9	54 - 68	54 - 65	54 - 59	—
49,0	160.8	54 - 68	54 - 65	54 - 59	—

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Jib No. 117 on
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Table 3a - Without Boom Angle Adjustment: SERIES 2

MACHINE TRAVEL WITHOUT LOAD					
Boom Length (including all jib lengths and offsets)		**Boom Angle Range in Degrees**			
		Maximum Percent Grade			
Meters	Feet	5%	10%	20%	30%
BOOM FACING DOWNHILL					
16,0	52.5	37 - 71	40 - 71	45 - 71	53 - 71
19,0	62.3	37 - 71	40 - 71	45 - 71	53 - 71
22,0	72.2	37 - 71	40 - 71	45 - 71	53 - 71
25,0	82.0	37 - 71	40 - 71	45 - 71	53 - 71
28,0	91.9	37 - 71	40 - 71	45 - 71	53 - 71
31,0	101.7	37 - 71	40 - 71	45 - 71	53 - 71
34,0	111.5	37 - 71	40 - 71	45 - 71	53 - 71
37,0	121.4	37 - 71	40 - 71	45 - 71	54 - 71
40,0	131.2	37 - 71	40 - 71	49 - 71	60 - 71
43,0	141.1	37 - 71	43 - 71	55 - 71	65 - 71
46,0	150.9	44 - 71	49 - 71	59 - 71	69 - 71
49,0	160.8	49 - 71	54 - 71	63 - 71	—
52,0	170.6	53 - 71	57 - 71	67 - 71	—
55,0	180.4	56 - 71	61 - 71	69 - 71	—
58,0	190.3	59 - 71	63 - 71	—	—

Table 3b - Without Boom Angle Adjustment: SERIES 2

MACHINE TRAVEL WITHOUT LOAD					
Boom Length (including all jib lengths and offsets)		**Boom Angle Range in Degrees**			
		Maximum Percent Grade			
Meters	Feet	5%	10%	20%	30%
BOOM FACING UPHILL					
16,0	52.5	33 - 68	33 - 64	33 - 42	—
19,0	62.3	34 - 68	34 - 65	34 - 42	—
22,0	72.2	34 - 68	34 - 65	34 - 49	34 - 37
25,0	82.0	34 - 68	34 - 65	34 - 54	34 - 42
28,0	91.9	34 - 68	34 - 65	34 - 57	34 - 47
31,0	101.7	34 - 68	34 - 65	34 - 59	34 - 51
34,0	111.5	34 - 68	34 - 65	34 - 59	34 - 53
37,0	121.4	34 - 68	34 - 65	34 - 59	34 - 54
40,0	131.2	34 - 68	34 - 65	34 - 59	34 - 54
43,0	141.1	34 - 68	34 - 65	34 - 59	34 - 54
46,0	150.9	34 - 68	34 - 65	34 - 59	34 - 54
49,0	160.8	39 - 68	39 - 65	39 - 59	39 - 54
52,0	170.6	44 - 68	44 - 65	44 - 59	44 - 54
55,0	180.4	47 - 68	47 - 65	47 - 59	47 - 54
58,0	190.3	51 - 68	51 - 65	51 - 59	51 - 54

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Table 4a - With Boom Angle Adjustment: SERIES 1

MACHINE TRAVEL WITHOUT LOAD				
Boom Length (including all jib lengths and offsets)		**Boom Angle Range in Degrees**		
		Maximum Percent Grade		
Meters	Feet	5%	10%	20%
BOOM FACING DOWNHILL				
16,0	52.5	33 - 75	33 - 72	33 - 67
19,0	62.3	37 - 76	37 - 74	37 - 68
22,0	72.2	35 - 77	35 - 74	35 - 69
25,0	82.0	32 - 77	32 - 74	32 - 69
28,0	91.9	36 - 76	36 - 74	38 - 68
31,0	101.7	38 - 77	40 - 74	46 - 69
34,0	111.5	45 - 77	46 - 75	51 - 69
37,0	121.4	50 - 77	52 - 74	55 - 68
40,0	131.2	54 - 77	55 - 74	58 - 68
43,0	141.1	58 - 77	58 - 75	62 - 69
46,0	150.9	60 - 77	61 - 74	64 - 68
49,0	160.8	60 - 78	61 - 75	64 - 69

Table 4b - With Boom Angle Adjustment: SERIES 1

MACHINE TRAVEL WITHOUT LOAD				
Boom Length (including all jib lengths and offsets)		**Boom Angle Range in Degrees**		
		Maximum Percent Grade		
Meters	Feet	5%	10%	20%
BOOM FACING UPHILL				
16,0	52.5	35 - 78	38 - 78	44 - 78
19,0	62.3	40 - 79	43 - 79	49 - 79
22,0	72.2	38 - 80	40 - 80	46 - 80
25,0	82.0	35 - 80	38 - 80	44 - 80
28,0	91.9	39 - 79	42 - 79	47- 79
31,0	101.7	37 - 80	40 - 80	45 - 80
34,0	111.5	43 - 80	43 - 80	44 - 80
37,0	121.4	48 - 79	48 - 79	48 - 79
40,0	131.2	53 - 80	53 - 80	53 - 80
43,0	141.1	56 - 80	56 - 80	56 - 80
46,0	150.9	59 - 80	59 - 80	59 - 80
49,0	160.8	59 - 81	59 - 81	59 - 81

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Table 5a - With Boom Angle Adjustment: SERIES 2

MACHINE TRAVEL WITHOUT LOAD				
Boom Length (including all jib lengths and offsets)		**Boom Angle Range in Degrees**		
		Maximum Percent Grade		
Meters	Feet	5%	10%	20%
BOOM FACING DOWNHILL				
16,0	52.5	33 - 75	33 - 72	33 - 67
19,0	62.3	37 - 76	37 - 74	37 - 68
22,0	72.2	35 - 77	35 - 74	35 - 69
25,0	82.0	32 - 77	32 - 74	32 - 69
28,0	91.9	36 - 76	36 - 74	36 - 68
31,0	101.7	34 - 77	34 - 74	34 - 69
34,0	111.5	32 - 77	32 - 75	32 - 69
37,0	121.4	35 - 77	35 - 74	35 - 68
40,0	131.2	34 - 77	34 - 74	40 - 68
43,0	141.1	38 - 77	40 - 75	45 - 69
46,0	150.9	43 - 77	45 - 74	50 - 68
49,0	160.8	48 - 77	50 - 74	54 - 68
52,0	170.6	51 - 77	53 - 74	57 - 68
55,0	180.4	54 - 77	56 - 74	59 - 68
58,0	190.3	58 - 77	59 - 74	62 - 69

Table 5b - With Boom Angle Adjustment: SERIES 2

MACHINE TRAVEL WITHOUT LOAD				
Boom Length (including all jib lengths and offsets)		**Boom Angle Range in Degrees**		
		Maximum Percent Grade		
Meters	Feet	5%	10%	20%
BOOM FACING UPHILL				
16,0	52.5	35 - 78	38 - 70	44 - 54
19,0	62.3	40 - 79	43 - 73	49 - 61
22,0	72.2	38 - 80	40 - 77	46 - 66
25,0	82.0	35 - 80	38 - 79	44 - 69
28,0	91.9	39 - 79	42 - 79	47 - 72
31,0	101.7	37 - 80	40 - 80	45 - 75
34,0	111.5	35 - 80	38 - 80	44 - 77
37,0	121.4	38 - 79	41 - 79	46 - 78
40,0	131.2	37 - 80	39 - 80	45 - 80
43,0	141.1	36 - 80	38 - 80	44 - 80
46,0	150.9	41 - 80	41 - 80	42 - 80
49,0	160.8	46 - 80	46 - 80	46 - 80
52,0	170.6	50 - 80	50 - 80	50 - 80
55,0	180.4	53 - 80	53 - 80	53 - 80
58,0	190.3	56 - 80	56 - 80	56 - 80

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