

Maximum Allowable Travel Specifications

MLC650 VPC-MAX

Jib No. FJ10:687 on
Boom No. B90:686-685-680-681-682
with Mast No. M11:684
VPC-MAX at 18,3 m (60.0 ft) Position

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 load blocks, hooks, or weight ball contact the boom or jib. Refer to Wind Conditions chart No. A045-A for maximum wind speed while traveling.

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

- A. Load blocks, hooks, weight ball, slings, hoist lines, etc., may be suspended beneath jib point or tied off to machine. Total suspended weight beneath jib point must not exceed 13 605 kg (30,000 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 (0.5 degrees). Side-to-side grade must not exceed 2 percent (1.1 degrees) measured at boom hinge pins.
- C. Refer to Tables 2 thru 4 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 thru 4 include all jib lengths and offset angles.
- F. **Caution:** Change in grade must not exceed 3 percent (1.7 degrees) in 10,7 m (35 ft). *Damage could occur.*
- G. **Warning:** Travel prohibited for boom angle range not shown in Tables 2 thru 4. *Crane could tip.*
- H. **Warning:** 18,3 m (60.0 ft) counterweight position must be selected before traveling on grade greater than 1 percent (0.5 degrees). *Crane could tip.*

Table 1

Percent Grade Vs. Angle In Degrees	
Percent Grade	Angle
5	2.9
7	4.0
10	5.7
15	8.5

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Table 2a: Boom B90:686-685-680-681-682 with FJ10:687, SERIES 1

MACHINE TRAVEL WITHOUT LOAD				
Boom Length (including all jib lengths and offsets)		Boom Angle Range in Degrees		
		Maximum Percent Grade		
		5%	10%	15%
Meters	Feet	BOOM FACING DOWNHILL		
78,0	255.9	39 - 75	41 - 75	44 - 75
90,0	295.3	51 - 75	51 - 75	55 - 75
102,0	334.6	56 - 75	56 - 75	61 - 75

Table 2b: Boom B90:686-685-680-681-682 with FJ10:687, SERIES 1

MACHINE TRAVEL WITHOUT LOAD		
Boom Length (including all jib lengths and offsets)		Boom Angle Range in Degrees
		Maximum Percent Grade
		10%
Meters	Feet	BOOM FACING UPHILL
78,0	255.9	37 - 69
90,0	295.3	37 - 69
102,0	334.6	43 - 69

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Table 3a: Boom B90:686-685-680-681-682 with FJ10:687, SERIES 2

MACHINE TRAVEL WITHOUT LOAD			
Boom Length (including all jib lengths and offsets)		Boom Angle Range in Degrees	
		Maximum Percent Grade	
		5%	10%
Meters	Feet	BOOM FACING DOWNHILL	
78,0	255.9	38 - 75	41 - 75
90,0	295.3	38 - 75	41 - 75
102,0	334.6	39 - 75	42 - 75
114,0	374.0	45 - 75	49 - 75
117,0	383.9	47 - 75	51 - 75
120,0	393.7	49 - 75	53 - 75
123,0	403.5	50 - 75	54 - 75

Table 3b: Boom B90:686-685-680-681-682 with FJ10:687, SERIES 2

MACHINE TRAVEL WITHOUT LOAD		
Boom Length (including all jib lengths and offsets)		Boom Angle Range in Degrees
		Maximum Percent Grade
		10%
Meters	Feet	BOOM FACING UPHILL
78,0	255.9	37 - 69
90,0	295.3	37 - 69
102,0	334.6	37 - 69
114,0	374.0	37 - 69
117,0	383.9	38 - 69
120,0	393.7	40 - 69
123,0	403.5	41 - 69

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Table 4a: Boom B90:686-685-680-681-682 with FJ10:687, SERIES 3

MACHINE TRAVEL WITHOUT LOAD			
Boom Length (including all jib lengths and offsets)		Boom Angle Range in Degrees	
		Maximum Percent Grade	
		5%	7%
Meters	Feet	BOOM FACING DOWNHILL	
78,0	255.9	38 - 75	39 - 75
90,0	295.3	38 - 75	39 - 75
102,0	334.6	39 - 75	40 - 75
114,0	374.0	40 - 75	41 - 75
117,0	383.9	40 - 75	41 - 75
120,0	393.7	40 - 75	41 - 75
123,0	403.5	40 - 75	41 - 75

Table 4b: Boom B90:686-685-680-681-682 with FJ10:687, SERIES 3

MACHINE TRAVEL WITHOUT LOAD		
Boom Length (including all jib lengths and offsets)		Boom Angle Range in Degrees
		Maximum Percent Grade
		7%
Meters	Feet	BOOM FACING UPHILL
78,0	255.9	37 - 69
90,0	295.3	37 - 69
102,0	334.6	37 - 69
114,0	374.0	37 - 69
117,0	383.9	37 - 69
120,0	393.7	37 - 69
123,0	403.5	37 - 69