Maximum Allowable Travel Specifications

MLC650 VPC-MAX

Luffing Jib No. LJ10:681-682 on
Boom No. B60:680
with Mast No. M10:684 or Mast No. M11:684
VPC-MAX at 18,3 m (60.0 ft) Position

Jobsite Travel

MLC650 VPC-MAX SERIES 1 must be equipped with 200 000 kg (440,900 lb) VPC (Variable Position Counterweight); MLC650 VPC-MAX SERIES 2 must be equipped with 300 000 kg (661,300 lb) VPC; MLC650 VPC-MAX SERIES 3 must be equipped with 400 000 kg (881,800 lb) VPC. Refer to Wind Conditions chart for maximum wind speed for various boom and luffing jib lengths. Refer to luffing jib raising procedure for maximum boom and luffing jib lengths lifted unassisted. Travel slowly and smoothly to avoid shock loading boom, luffing jib and rigging.

1. Machine Travel With Load

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

B. Grade in any direction must not exceed 13 mm in 3 m (1/2 in. in 10 ft).

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 and/or hook and weight balls may be suspended beneath boom or luffing jib points, or tied off to machine. Total combined suspended weight beneath boom and luffing jib points must not exceed 18 100 kg (40,000 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 1 percent (0.5 degrees) measured at boom hinge pins.

C. Do not change boom or luffing jib angle after crane has traveled onto grade. Boom angle is angle between horizontal and centerline of boom butt and inserts. Refer to table below for grade vs. angle when traveling. Refer to Tables 1 and 2 for direction and maximum luffing jib length for various grades.

a. **Boom Facing Uphill:** With machine on level ground, adjust boom angle to **75 degrees** (plus or minus 1 degree) above horizontal and position luffing jib between **55 - 60 degrees** above horizontal.

b. **Boom Facing Downhill:** With machine on level ground, adjust boom angle to **85 degrees** (plus or minus 1 degree) above horizontal and position luffing jib between **65 - 70 degrees** above horizontal.

D. Do not exceed 1 percent (0.5 degrees) side-to-side grade at boom hinge pins when cutting (turning on grade).

E. ***Caution:*** Change in grade must not exceed 3.0 percent (1.7 degrees) in 10,7 m (35 ft). *Damage could occur.*

F. ***Warning:*** Travel prohibited when boom and luffing jib angles are outside range specified in Tables 1 and 2. *Crane could tip.*

G. ***Warning:*** 18,3 m (60 ft) counterweight position must be selected before traveling on grade greater than 1 percent (0.5 degrees). *Crane could tip.*

Percent Grade Vs. Angle In Degrees	
Percent Grade	Angle
3	1.7
7	4.0
10	5.7
15	8.5

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Table 1

MACHINE TRAVEL WITHOUT LOAD - BOOM FACING UPHILL (BOOM AT 75°, JIB AT 55-60°)				
Series	**Maximum Percent Grade**			
	7%		10%	
	Maximum Luffing Jib Length (includes all boom lengths)			
	Meters	Feet	Meters	Feet
Series 1	101,0	331.4	101,0	331.4
Series 2	101,0	331.4	101,0	331.4
Series 3	101,0	331.4	—	—

Table 2

MACHINE TRAVEL WITHOUT LOAD - BOOM FACING DOWNHILL (BOOM AT 85°, JIB AT 65-70°)								
Series	**Maximum Percent Grade**							
	3%		7%		10%		15%	
	Maximum Luffing Jib Length (includes all boom lengths)							
	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet
Series 1	101,0	331.4	83,0	272.3	65,0	213.3	50,0	164.0
Series 2	101,0	331.4	95,0	311.7	77,0	252.6	—	—
Series 3	101,0	331.4	101,0	331.4	—	—	—	—

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