

# Maximum Allowable Travel Specifications

Luffing Jib No. LJ10:681-682 on  
Boom No. B10:680

## Jobsite Travel

MLC650 SERIES 2 must be equipped with 300 000 kg (661,300 lb) VPC (Variable Position Counterweight); MLC650 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 point, luffing jib point, upper luffing jib point, or tied off to machine. Total combined suspended weight beneath boom and luffing jib points must not exceed 15 800 kg (35,000 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. Grade in direction of travel must not exceed values specified in Tables 2 and 3.

Before traveling onto grade:

- Position machine on a level surface with grade in any direction not to exceed 1 percent (0.5 degrees).
- Unlock the VPC
  - a. **Boom Facing Uphill:** 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:** Adjust boom angle to **85 degrees** (plus or minus 1 degree) above horizontal and position luffing jib between **65 - 70 degrees** above horizontal.
- Lock the VPC

VPC must be locked before traveling onto grade. 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 1 for grade vs. angle when traveling.

- D. Do not exceed 1 percent (0.5 degrees) side-to-side grade at boom hinge pins when cutting (turning on grade).
- E. **Warning:** Refer to Section 3 of the Operator Manual for setting of VPC Lockout Key Switch prior to traveling onto grade.
- F. **Warning:** Travel prohibited when boom and luffing jib angles are outside range specified in Tables 2 and 3. *Crane could tip.*

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Table 1

| Percent Grade Vs. Angle In Degrees |       |
|------------------------------------|-------|
| Percent Grade                      | Angle |
| 8                                  | 4.6   |
| 10                                 | 5.7   |
| 12                                 | 6.8   |
| 15                                 | 8.5   |
| 20                                 | 11.3  |
| 22                                 | 12.4  |

Table 2

| MACHINE TRAVEL WITHOUT LOAD - BOOM FACING UPHILL<br>(BOOM AT 75°, JIB AT 55 - 60°) |   |       |
|--|---|-------|
| Series   | Maximum Percent Grade                                     |       |
|  | 8%  |       |
|  | Maximum Luffing Jib Length<br>(includes all boom lengths) |       |
|  | Meters  | Feet  |
| Series 2   | 101,0   | 331.4 |
| Series 3   | 101,0   | 331.4 |

Table 3

| MACHINE TRAVEL WITHOUT LOAD - BOOM FACING DOWNHILL (BOOM AT 85°, JIB AT 65 - 70°) |   |       |        |       |        |       |        |       |        |       |        |      |
|---|---|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|------|
| Series  | Maximum Percent Grade                                     |       |        |       |        |       |        |       |        |       |        |      |
|   | 8%  |       | 10%    |       | 12%    |       | 15%    |       | 20%    |       | 22%    |      |
|   | Maximum Luffing Jib Length<br>(includes all boom lengths) |       |        |       |        |       |        |       |        |       |        |      |
|   | Meters  | Feet  | Meters | Feet  | Meters | Feet  | Meters | Feet  | Meters | Feet  | Meters | Feet |
| Series 2  | 101,0   | 331.4 | 95,0   | 311.7 | 95,0   | 311.7 | 50,0   | 164.0 | 35,0   | 114.8 | 26,0   | 85.3 |
| Series 3  | 101,0   | 331.4 | 101,0  | 331.4 | —      | —     | —      | —     | —      | —     | —      | —    |