



Swing and Travel Specifications

Boom No. 55 or No. 55A with 140 Ft. (42,7m) Mast No. 56
Luffing Jib No. 79A
Hanging Counterweight

**18000 With
21000 MAX-ER**

Jobsite Travel

18000 With 21000 MAX-ER must be equipped with 492,000 Lb. (223 170 kg) crane counterweight, 320,000 Lb. (145 150 kg) carbody counterweight and 0 Lb. (0 kg), 247,800 Lb. (112 400 kg), 467,800 Lb. (212 190 kg), or 599,800 Lb. (272 060 kg) hanging counterweight. Refer to capacity 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.

1. Machine Swing and Travel With Load and With Hanging Counterweight

- a. Machine can swing and travel with 360 degree rating.
- b. Grade in any direction must not exceed 1/2 in. in 10 Ft. (13 mm in 3m). *Travel with 100 percent of rated load prohibited.* Travel restricted to 90 percent of rated capacity with speed not to exceed 0.4 m/s.
- 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. Travel slowly and smoothly to avoid shock loading boom, luffing jib, and rigging.
- d. Minimum capacity to raise hanging counterweight free of ground support is required for swing and travel. Machine can swing and travel in normal manner with load between minimum and rated capacity.
- e. Do not allow hanging counterweight to contact ground while swinging and traveling.

2. Machine Swing and Travel Without Load and With 0 Lb. (0 kg) Hanging Counterweight

- a. Position **boom to 83 degree boom angle** (plus or minus 1 degree) and position **luffing jib at 50 to 60 degrees** above horizontal. **Grade in direction of travel must not exceed 3 percent** (1.7 degrees).
- b. Load blocks and/or hook and weight balls may be suspended beneath boom and luffing jib points or tied off to machine. Total combined suspended weight beneath boom and luffing jib points must not exceed 27,000 Lb. (12 250 kg).
- c. 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 1 percent (0.5 degrees) measured at boom hinge pins.
- d. Refer to table on page 2 for grade vs. angle when traveling. When traveling on **uphill grade, lower boom** the corresponding degrees for grade to be traveled. When traveling on **downhill grade, raise boom** the corresponding degrees for grade to be traveled.
- e. Do not exceed 1 percent (0.5 degrees) side-to-side grade at boom hinge pins when cutting (turning on grade).



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3. Machine Swing and Travel Without Load (when minimum capacities to swing and travel are not required) and With Hanging Counterweight

- a. Position **boom to 75 degree boom angle** (plus or minus 1 degree) and position **luffing jib at 40 to 50 degrees** above horizontal. **Grade in direction of travel must not exceed 5 percent** (3.0 degrees).
- b. Load blocks and/or hook and weight balls may be suspended beneath boom and luffing jib points or tied off to machine. Total combined suspended weight beneath boom and luffing jib points must not exceed 27,000 Lb. (12 250 kg).
- c. **Travel with crane upperworks in-line to crawlers.** Do not exceed 1 percent (0.5 degrees) side-to-side grade measured at boom hinge pins when cutting (turning on grade) or swinging.
- d. Machine to travel on a firm and uniformly supporting surface. Travel may be limited depending upon ground conditions. Do not allow hanging counterweight to contact ground while swinging or traveling.
- e. Refer to table below for grade vs. angle when traveling. When traveling on **uphill grade, lower boom** the corresponding degrees for grade to be traveled. When traveling on **downhill grade, raise boom** the corresponding degrees for grade to be traveled. Side-to-side grade must not exceed 1 percent (0.5 degrees) measured at boom hinge pins.
- f. **Warning:** Change in grade must not exceed 2 percent (1.1 degrees) in 59 Ft. (18m).

Percent Grade vs. Angle In Degrees	
Percent Grade	Angle
1	0.5
3	1.7
5	3.0