



21000
MAX-ER

Swing and Travel Specifications

Luffing Jib No. 81 On Boom No. 80
with 140 ft (42,7 m) Mast No. 81
458,700 Lb. (208 060 kg) Crane Counterweight
200,000 Lb. (90 720 kg) Carbody Counterweight
Hanging Counterweight

Jobsite Travel

21000 MAX-ER must be equipped with 458,700 lb (208 060 kg) crane counterweight and 200,000 lb (90 720 kg) carbody counterweight; and 0 lb (0 kg), 247,300 lb (112 170 kg), 423,300 lb (192 010 kg) or 599,300 lb (271 840 kg) hanging counterweight.

1. MACHINE SWING AND TRAVEL WITH LOAD AND HANGING COUNTERWEIGHT

- A. **Narrow crawler arrangement** (30 ft 0 in. [9,1 m]) **travel allowed only with upperworks centered over front or rear of lowerworks** (no swing) **with outrigger jacks retracted or outriggers removed**. Wide crawler arrangement (47 ft 6 in. [14,5 m]) travel allowed with 360 degree rating. Grade in any direction must not exceed 1/2 in. in 10 ft (13 mm in 3 m).
- B. 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.
- C. 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.
- D. Do not allow hanging counterweight to contact ground while swinging and traveling.
Travel with crane upperworks 90 degrees to crawlers is allowed only with wide crawler arrangement. When hanging counterweight is attached, it must be in the air, free of ground support. Swing brake and swing lock must be set.
- E. Refer to Operator's Manual for maximum wind speed for various boom and luffing jib lengths.
- F. Machine can swing and travel in normal manner when hanging counterweight assembly is attached and is free of ground support.

2. MACHINE SWING AND TRAVEL WITHOUT LOAD AND WITH 0 lb (0 kg) HANGING COUNTERWEIGHT

- A. Position **boom to 82 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 3 percent** (1.7 degrees).
- B. Load blocks may be suspended below boom and luffing jib point or tied off to machine rotating bed. Total combined suspended weight beneath lower boom point and luffing jib point must not exceed 37,000 lb (16 800 kg).
- C. Travel with crane upperworks in-line to crawlers. Do not exceed 1 percent (0.5 degrees) grade at boom hinge pins when cutting (steering on grade) or swinging.
- D. Machine to travel on a firm and uniformly supporting surface. Travel may be limited depending upon ground conditions.
- E. 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. See table on page 2 for grade vs. angle. Side-to-side grade must not exceed 1 percent (0.5 degrees) measured at boom hinge pins.
- F. Refer to operators manual for maximum wind speed with various boom and luffing jib lengths.



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Hanging Counterweight

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3. MACHINE SWING AND TRAVEL WITHOUT LOAD (when minimum capacities to swing and travel are not required) AND WITH 247,300 lb (112 170 kg), 423,300 lb (192 010 kg) or 599,300 lb (271 840 kg) 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 luffing jib points or tied off to machine. Total combined suspended weight beneath luffing jib points must not exceed 37,000 lb (16 800 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. Return to in-line position for continuation of travel.
 - d. Machine to travel on a firm and uniformly supporting surface. Travel may be limited depending upon ground conditions. Hanging counterweight must be clear of ground before swinging or traveling machine. 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 72 ft (22 m).

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