

Maximum Allowable Travel Specifications

21000

Boom No. 80-81 with 100 Ft. (30.5m) Mast No. 81

Jobsite Travel

Machine must be equipped with 530,700 Lb. (240 720 kg) crane counterweight and 200,000 Lb. (90 720 kg) carbody counterweight.

1. Machine Travel With Load

- A. Narrow crawler arrangement (30 Ft. 0 in. [9.1m]) 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. [14.5m]) travel allowed with 360 degree rating. Grade in any direction must not exceed 1 percent (0.5 degrees).
- 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 and rigging.

2. Machine Travel Without Load

- A. Load blocks and/or hook and weight balls may be suspended beneath lower and upper boom point. Total combined suspended weight beneath lower and upper boom points must not exceed 50,000 Lbs. (22 680 kg).
- B. Machine to travel on a firm and uniformly supporting surface with crane upperworks centered over front or rear of lowerworks (no swing) with outrigger jacks retracted or outriggers removed. Wide crawler arrangement (47 Ft. 6 in. [14.5m]) travel allowed with 360 degree swing up to 1 percent (0.5 degrees) grade. Grade in direction of travel should not exceed 30 percent (16.7 degrees); side-to-side grade must not exceed 2 percent (1.1 degrees) measured at boom hinge pins.
- C. See tables on page 2 for boom angle, boom length and direction for various grades. Adjust boom within boom angle range shown in tables on page 2 with machine in a level position before traveling onto grade. Do not change boom angle after crane has been traveled onto grade. Boom angle is angle between horizontal and centerline of boom butt and inserts. See table below for grade vs. angle when traveling.
- D. Travel with crane upperworks in-line with grade at all times. Do not exceed 2 percent (1.1 degrees) side-to-side grade at boom hinge pins with wide crawler arrangement when cutting (turning on grade). Cutting on grade not allowed with narrow crawler arrangement. Adjust boom angle within angle range shown in tables to shift machine center of gravity to allow cutting on level travel surface with narrow crawler arrangement.
- E. **Warning:** Travel prohibited for boom lengths not shown in tables on page 2. *Crane could tip.*

Refer to capacity chart for maximum boom length raising.

Percent Grade Vs. Angle In Degrees	
Percent Grade	Angle
10	5.7
20	11.3
30	16.7

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Machine Travel Without Load Boom Facing Downhill		
Boom Angle Range in Degrees	Boom Length	
	Feet	Meters
0 - 1% Percent Grade		
30 - 72	180 - 280	54.9 - 85.3
40 - 72	300	91.4
50 - 72	320 - 360	97.5 - 109.7
55 - 72	380 - 400	115.8 - 121.9
2 - 10% Percent Grade		
30 - 72	180 - 260	54.9 - 79.2
40 - 72	280	85.3
50 - 72	300	91.4
60 - 72	320 - 360	97.5 - 109.7
65 - 72	380 - 400	115.8 - 121.9
11 - 20% Percent Grade		
30 - 72	180 - 220	54.9 - 67.1
40 - 72	240	73.2
50 - 72	260	79.2
60 - 72	280 - 300	85.3 - 91.4
65 - 72	320 - 340	97.5 - 103.6
21 - 30% Percent Grade		
30 - 72	180 - 200	54.9 - 61.0
40 - 72	220	67.1
50 - 72	240	73.2
60 - 72	260	79.2
65 - 72	280	85.3

Machine Travel Without Load Boom Facing Uphill		
Boom Angle Range in Degrees	Boom Length	
	Feet	Meters
0 - 1% Percent Grade		
30 - 72	180 - 280	54.9 - 85.3
40 - 72	300	91.4
50 - 72	320 - 360	97.5 - 109.7
55 - 72	380 - 400	115.8 - 121.9
2 - 10% Percent Grade		
30 - 66	180 - 300	54.9 - 91.4
40 - 66	320 - 340	97.5 - 103.6
45 - 66	360 - 380	109.7 - 115.8
50 - 66	400	121.9
11 - 20% Percent Grade		
30 - 60	180 - 340	54.9 - 103.6
40 - 60	360 - 400	109.7 - 121.9
21 - 30% Percent Grade		
30 - 40	180	54.9
30 - 50	200	61.0
30 - 55	220 - 360	67.1 - 109.7
40 - 55	380 - 400	115.8 - 121.9