



Maximum Allowable Travel Specifications

111

111 SERIES B

Boom No. 111 With Open Throat Top
Jib No. 111 With 12 Ft. 0 in. (3 658 mm) Strut

Jobsite Travel

111 must be equipped with 44,000 Lb. (19 960 kg) counterweight and 111 SERIES B must be equipped with 49,700 Lb. (22 540 kg) crane counterweight and 8,000 Lb. (3 630 kg) carbody counterweight.

1. Machine Travel With Load

- A. Travel with crane upperworks in-line with crawlers. 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, jib and rigging.

2. Machine Travel Without Load

- A. Load blocks and/or hook and weight balls may be suspended beneath lower boom point, upper boom point and jib point. Total combined suspended weight beneath lower and upper boom points must not exceed 2,900 Lbs. (1 320 kg) or 2,200 Lbs. (1 000 kg) on lower point when jib is attached. Total suspended weight beneath jib point must not exceed 700 Lbs. (320 kg).
- B. Machine to travel on a firm and uniformly supporting surface with crane upperworks in-line with crawlers and travel drive to rear. 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 pages 2-4 for boom angle, boom length and direction for various grades. Adjust boom within boom angle range shown in tables on pages 2-4 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. Do not exceed 2 percent (1.1 degrees) side-to-side grade at boom hinge pins when cutting (turning on grade). Travel with crane upperworks in-line with grade at all times.
- E. Boom lengths shown in tables on page 2 and 3 do not include jib. Boom lengths shown in tables on page 4 include all jib lengths and offset angles.
- F. **Warning:** Travel prohibited for boom lengths not shown in tables on pages 2, 3 and 4. *Crane could tip.*

Refer to capacity charts for maximum boom and jib 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					
0 - 1% Percent Grade					
Boom Angle Range in Degrees	Boom Length (not including jib)				Boom Angle Range in Degrees
	44,000 Lb. (19 960 kg) Crane Counterweight		49,700 Lb. (22 540 kg) Crane Counterweight 8,000 Lb. (3 630 kg) Carbody Cwt.		
	Feet	Meters	Feet	Meters	
30 - 45	40 - 60	12.2 - 18.3	40 - 60	12.2 - 18.3	30 - 45
30 - 72	70 - 120	21.3 - 36.6	70 - 120	21.3 - 36.6	30 - 72
40 - 72	130	39.6	130 - 140	39.6 - 42.7	40 - 72
50 - 72	140 - 150	42.7 - 45.7	150 - 160	45.7 - 48.8	50 - 72
60 - 72	160 - 180	48.8 - 54.9	170 - 190	51.8 - 57.9	60 - 72
65 - 72	190	57.9	—	—	65 - 72
2 - 10% Percent Grade					
30 - 72	40 - 100	12.2 - 30.5	40 - 110	12.2 - 33.5	30 - 72
40 - 72	110	33.5	120	36.6	40 - 72
50 - 72	120 - 130	36.6 - 39.6	130 - 140	39.6 - 42.7	50 - 72
60 - 72	140 - 150	42.7 - 45.7	150 - 160	45.7 - 48.8	60 - 72
65 - 72	160	48.8	170 - 180	51.8 - 54.9	65 - 72
11 - 20% Percent Grade					
30 - 72	40 - 90	12.2 - 27.4	40 - 100	12.2 - 30.5	30 - 72
40 - 72	100	30.5	110	33.5	40 - 72
50 - 72	110	33.5	120	36.6	50 - 72
60 - 72	120 - 130	36.6 - 39.6	130 - 140	39.6 - 42.7	60 - 72
65 - 72	140	42.7	150	45.7	65 - 72
21 - 30% Percent Grade					
30 - 72	40 - 80	12.2 - 24.4	40 - 90	12.2 - 27.4	30 - 72
40 - 72	90	27.4	100	30.5	40 - 72
50 - 72	100	30.5	110	33.5	50 - 72
60 - 72	110	33.5	120	36.6	60 - 72
65 - 72	120	36.6	130	39.6	65 - 72



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111 SERIES B

Machine Travel Without Load - Boom Facing Uphill					
0 - 1% Percent Grade					
Boom Angle Range in Degrees	Boom Length (not including jib)				Boom Angle Range in Degrees
	44,000 Lb. (19 960 kg) Crane Counterweight		49,700 Lb. (22 540 kg) Crane Counterweight 8,000 Lb. (3 630 kg) Carbody Cwt.		
	Feet	Meters	Feet	Meters	
30 - 45	40 - 50	12.2 - 15.2	40 - 50	12.2 - 15.2	30 - 45
30 - 66	60 - 120	18.3 - 36.6	60 - 120	18.3 - 36.6	30 - 66
40 - 72	130	39.6	130 - 140	39.6 - 42.7	40 - 72
50 - 72	140 - 150	42.7 - 45.7	150 - 160	45.7 - 48.8	50 - 72
60 - 72	160 - 180	48.8 - 54.9	170 - 190	51.8 - 57.9	60 - 72
65 - 72	190	57.9	—	—	65 - 72
2 - 10% Percent Grade					
30 - 40	60 - 80	18.3 - 24.4	70 - 100	21.3 - 30.5	30 - 40
30 - 66	90 - 130	27.4 - 39.6	110 - 140	33.5 - 42.7	30 - 66
40 - 66	140	42.7	150	45.7	40 - 66
50 - 66	150 - 170	45.7 - 51.8	160 - 180	48.8 - 54.9	50 - 66
60 - 66	180 - 190	54.9 - 57.9	190	57.9	60 - 66
11 - 20% Percent Grade					
30 - 40	80 - 130	24.4 - 39.6	90 - 120	27.4 - 36.6	30 - 40
30 - 60	140	42.7	130 - 150	39.6 - 45.7	30 - 60
40 - 60	150 - 160	45.7 - 48.8	160 - 170	48.8 - 51.8	40 - 60
50 - 60	170 - 180	51.8 - 54.9	180 - 190	54.9 - 57.9	50 - 60
21 - 30% Percent Grade					
30 - 40	100 - 130	30.5 - 39.6	110 - 140	33.5 - 42.7	30 - 40
30 - 55	140 - 150	42.7 - 45.7	150 - 160	45.7 - 48.8	30 - 55



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Machine Travel Without Load - Boom Facing Downhill				
0 - 1% Percent Grade				
Boom Angle Range in Degrees	Boom Length (including all jib lengths and offset angles)			
	44,000 Lb. (19 960 kg) Crane Counterweight		49,700 Lb. (22 540 kg) Crane Counterweight 8,000 Lb. (3 630 kg) Carbody Cwt.	
	Feet	Meters	Feet	Meters
50 - 72	70 - 130	21.3 - 39.6	70 - 150	21.3 - 45.7
55 - 72	140 - 150	42.7 - 45.7	160	48.8
60 - 72	160	48.8	170 - 180	51.8 - 54.9
65 - 72	170 - 180	51.8 - 54.9	—	—
2 - 10% Percent Grade				
50 - 72	70 - 120	21.3 - 36.6	70 - 130	21.3 - 39.6
55 - 72	130	39.6	140	42.7
60 - 72	140	42.7	150	45.7
65 - 72	150	45.7	160	48.8
11 - 20% Percent Grade				
50 - 72	70 - 100	21.3 - 30.5	70 - 110	21.3 - 33.5
55 - 72	110	33.5	120	36.6
60 - 72	120	36.6	130	39.6
65 - 72	130	39.6	140	42.7
21 - 30% Percent Grade				
50 - 72	70 - 80	21.3 - 24.4	70 - 90	21.3 - 27.4
55 - 72	90	27.4	100	30.5
60 - 72	100	30.5	110	33.5
65 - 72	110	33.5	120	36.6

Machine Travel Without Load - Boom Facing Uphill				
0 - 1% Percent Grade				
Boom Angle Range in Degrees	Boom Length (including all jib lengths and offset angles)			
	44,000 Lb. (19 960 kg) Crane Counterweight		49,700 Lb. (22 540 kg) Crane Counterweight 8,000 Lb. (3 630 kg) Carbody Cwt.	
	Feet	Meters	Feet	Meters
50 - 72	70 - 130	21.3 - 39.6	70 - 150	21.3 - 45.7
55 - 72	140 - 150	42.7 - 45.7	160	48.8
60 - 72	160	48.8	170 - 180	51.8 - 54.9
65 - 72	170 - 180	51.8 - 54.9	—	—
2 - 10% Percent Grade				
50 - 64	70 - 160	21.3 - 48.8	70 - 170	21.3 - 51.8
60 - 66	170 - 180	51.8 - 54.9	180	54.9
11 - 20% Percent Grade				
<i>Not Allowed</i>				
21 - 30% Percent Grade				
<i>Not Allowed</i>				