

Maximum Allowable Travel Specifications

Boom No. 180 With Open Throat Top
Jib No. 10 With 12 Ft. 6 in. (3 810 mm) Strut

Jobsite Travel

180 must be equipped with 28,500 Lb. (12 930 kg) or 53,300 Lb. (24 180 kg) crane counterweight and 7,000 Lb. (3 175 kg) crawler frame 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 3,000 Lbs. (1 360 kg) or 2,300 Lbs. (1 040 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. Machine must be equipped with 53,300 Lb. (24 180 kg) crane counterweight and 7,000 Lb. (3 175 kg) crawler frame counterweight when jib is attached.
- 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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Boom No. 180 With Open Throat Top

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
	28,500 Lb. (12 930 kg) Crane Counterweight		53,300 Lb. (24 180 kg) Crane Counterweight		
	7,000 Lb. (3 175 kg) Crawler Frame Cwt.				
	Feet	Meters	Feet	Meters	
30 - 72	40 - 90	12.2 - 27.4	40 - 120	12.2 - 36.6	30 - 72
40 - 72	100	30.5	130 - 140	39.6 - 42.7	40 - 72
50 - 72	110 - 120	33.5 - 36.6	150 - 160	45.7 - 48.8	50 - 72
60 - 72	130 - 190	39.6 - 57.9	170 - 200	51.8 - 61.0	60 - 72
2 - 10% Percent Grade					
30 - 72	40 - 80	12.2 - 24.4	40 - 110	12.2 - 33.5	30 - 72
40 - 72	90	27.4	120	36.6	40 - 72
50 - 72	100 - 110	30.5 - 33.5	130 - 140	39.6 - 42.7	50 - 72
60 - 72	120	36.6	150 - 160	45.7 - 48.8	60 - 72
65 - 72	130 - 140	39.6 - 42.7	170 - 180	51.8 - 54.9	65 - 72
11 - 20% Percent Grade					
30 - 72	40 - 70	12.2 - 21.3	40 - 100	12.2 - 30.5	30 - 72
40 - 72	80	24.4	110	33.5	40 - 72
50 - 72	90	27.4	120	36.6	50 - 72
60 - 72	100	30.5	130 - 140	39.6 - 42.7	60 - 72
65 - 72	110	33.5	150	45.7	65 - 72
21 - 30% Percent Grade					
30 - 72	40 - 60	12.2 - 18.3	40 - 90	12.2 - 27.4	30 - 72
40 - 72	70	21.3	100	30.5	40 - 72
50 - 72	80	24.4	110	33.5	50 - 72
60 - 72	90	27.4	120	36.6	60 - 72
65 - 72	100	30.5	130	39.6	65 - 72

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Boom No. 180 With Open Throat Top

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
	28,500 Lb. (12 930 kg) Crane Counterweight		53,300 Lb. (24 180 kg) Crane Counterweight 7,000 Lb. (3 175 kg) Crawler Frame Cwt.		
	Feet	Meters	Feet	Meters	
30 - 66	40 - 160	12.2 - 48.8	40 - 200	12.2 - 61.0	30 - 66
40 - 72	170	51.8	—	—	40 - 72
50 - 72	180 - 190	54.9 - 57.9	—	—	50 - 72
2 - 10% Percent Grade					
30 - 40	—	—	50 - 70	15.2 - 21.3	30 - 40
30 - 66	40 - 100	12.2 - 30.5	80 - 140	24.4 - 42.7	30 - 66
40 - 66	110	33.5	150	45.7	40 - 66
50 - 66	120 - 140	36.6 - 42.7	160 - 180	48.8 - 54.9	50 - 66
60 - 66	150 - 180	45.7 - 54.9	190 - 200	57.9 - 61.0	60 - 66
65 - 66	190	57.9	—	—	65 - 66
11 - 20% Percent Grade					
30 - 40	—	—	70 - 100	21.3 - 30.5	30 - 40
30 - 60	40 - 110	12.2 - 33.5	110 - 150	33.5 - 45.7	30 - 60
40 - 60	120 - 130	36.6 - 39.6	160 - 170	48.8 - 51.8	40 - 60
50 - 60	140 - 160	42.7 - 48.8	180 - 200	54.9 - 61.0	50 - 60
55 - 60	170 - 180	51.8 - 54.9	—	—	55 - 60
21 - 30% Percent Grade					
30 - 40	—	—	100 - 150	30.5 - 45.7	30 - 40
30 - 55	40 - 120	12.2 - 36.6	160	48.8	30 - 55
40 - 55	130 - 150	39.6 - 45.7	170 - 190	51.8 - 57.9	40 - 55
50 - 55	160 - 180	48.8 - 54.9	200	61.0	50 - 55

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Boom No. 180 With Open Throat Top
Jib No. 10 With 12 Ft. 6 in. (3 810 mm) Strut

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)	
	53,300 Lb. (24 180 kg) Crane Counterweight	
	7,000 Lb. (3 175 kg) Crawler Frame Cwt.	
	Feet	Meters
50 - 72	70 - 150	21.3 - 45.7
55 - 72	160	48.8
60 - 72	170 - 190	51.8 - 57.9
2 - 10% Percent Grade		
50 - 72	70 - 130	21.3 - 39.6
55 - 72	140	42.7
60 - 72	150	45.7
65 - 72	160 - 170	48.8 - 51.8
11 - 20% Percent Grade		
50 - 72	70 - 110	21.3 - 33.5
55 - 72	120	36.6
60 - 72	130	39.6
65 - 72	140	42.7
21 - 30% Percent Grade		
50 - 72	70 - 90	21.3 - 27.4
55 - 72	100	30.5
60 - 72	110	33.5
65 - 72	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)	
	53,300 Lb. (24 180 kg) Crane Counterweight	
	7,000 Lb. (3 175 kg) Crawler Frame Cwt.	
	Feet	Meters
50 - 72	70 - 150	21.3 - 45.7
55 - 72	160	48.8
60 - 72	170 - 190	51.8 - 57.9
2 - 10% Percent Grade		
50 - 66	70 - 160	21.3 - 48.8
60 - 66	170 - 190	51.8 - 57.9
11 - 20% Percent Grade		
Not Allowed		
21 - 30% Percent Grade		
Not Allowed		

Machine must be equipped with 53,300 Lb. (24 180 kg) crane counterweight and 7,000 Lb. (3 175 kg) crawler frame counterweight when jib is attached.