Manitowoc Cranes, Inc. Manitowoc, Wisconsin 54220 U.S.A.

Maximum Allowable **Travel Specifications**



Boom No. 55 or No. 55A with 100 Ft. (30.5m) Mast No. 56 Fixed Jib No. 79A with 50 Ft. (15.2m) Strut

Jobsite Travel

18000 must be equipped with 528,000 Lb. (239 500 kg) crane counterweight and 320,000 Lb. (145 150 kg) carbody counterweight. Refer to operators manual for maximum wind speed for various boom and jib lengths. Refer to capacity charts for maximum boom and jib lengths lifted unassisted.

1. Machine Travel With Load

- A. Machine can swing and travel with 360 degree rating.
- B. Grade in any direction must not exceed 1 percent (0.5 degrees) for boom No. 55 or No. 55A.
- C. Grade in any direction must not exceed 1/2 in. in 10 Ft. (13 mm in 3m) for boom No. 55 or No. 55A with fixed jib 79A.
- D. 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 boom and fixed jib points or tied off to machine. Total combined suspended weight beneath boom and fixed jib points must not exceed 40,000 Lbs. (18 140 kg).
- B. 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. 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. Refer to tables 1 and 2 on page 2 for boom angle, boom length and direction for various grades. Adjust boom within boom angle range shown in tables 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. Refer to 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).
- E. Table 1 on page 2 does not include jib; Table 2 on page 2 includes all jib lengths and offset angles.
- F. Warning: Travel prohibited for boom angle range not shown in tables 1 and 2 on page 2. Crane could tip.

Percent Grade vs. Angle in Degrees				
Percent Grade	Angle			
1	0.5			
10	5.7			
20	11.3			
30	16.7			



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	MACHINE TRAVEL WITHOUT LOAD						
Boom Length (not including jib)		Boom Angle Range in Degrees					
			Percent Grade				
Feet	Meters	0 - 1%	2 - 10%	11 - 20%	21 - 30%		
BOOM FACING DOWNHILL OR UPHILL							
120	36.6	30 - 72	30 - 66	30 - 55	30 - 40		
140	42.7	30 - 72	30 - 66	30 - 60	30 - 45		
160	48.8	30 - 72	30 - 66	30 - 60	30 - 50		
180	54.9	30 - 72	30 - 66	30 - 60	40 - 55		
200	61.0	30 - 72	30 - 66	35 - 60	50 - 55		
220	67.1	30 - 72	35 - 66	50 - 60			
240	73.2	35 - 72	45 - 66	55 - 60	_		
260	79.2	45 - 72	55 - 66		_		
280	85.3	50 - 72	60 - 66				
300	91.4	55 - 72	65 - 66				
320	97.5	60 - 72	65 - 66	—	—		

Table 1: Boom No. 55 or No. 55A

MACHINE TRAVEL WITHOUT LOAD						
Boom Length (including all jib lengths and offset angles)		Boom Angle Range in Degrees				
		Percent Grade				
Feet	Meters	0 - 1%	2 - 10%			
BOOM FACING DOWNHILL OR UPHILL						
140	42.7	45 - 72	55 - 66			
160	48.8	55 - 72	60 - 66			
180	54.9	60 - 72	65 - 66			
200	61.0	60 - 72	65 - 66			
220	67.1	60 - 72	65 - 66			