



Swing and Travel Specifications

Boom No. 55 or No. 55A with 140 Ft. (42.7m) Mast No. 56
Fixed Jib No. 79A with 50 Ft. (15.2m) Strut
Wheeled Counterweight

18000 With 21000 MAX-ER

Jobsite Travel

18000 With 21000 MAX-ER must be equipped with 492,000 Lb. (223 170 kg) crane counterweight, 320,000 Lb. (145 150 kg) carbody counterweight and 0 Lb. (0 kg) thru 860,000 Lb. (390 090 kg) wheeled counterweight. Refer to capacity charts for maximum wind speed for various boom and jib lengths and for maximum boom and jib lengths lifted unassisted.

1. Machine Swing and Travel With Load and Wheeled Counterweight

- 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, or 1/2 in. in 10 Ft. (13 mm in 3m) for fixed jib No. 79A. *Travel with 100 percent of rated load prohibited.* Travel restricted to 90 percent of rated capacity with speed not to exceed 0.4 m/s.
- C. **Warning:** For travel with crane upperworks in-line to crawlers, swing brake and swing lock must be free (released).
For travel with crane upperworks 90 degrees to crawlers, wheeled counterweight **must be in the air**, free of ground support. Swing brake and swing lock must be free (released).
- 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.
- E. Machine can swing and travel in normal manner when wheeled counterweight assembly is free of ground support or removed.
- F. Counterweight wheels must be properly positioned before swinging or traveling machine when wheeled counterweight is contacting ground. Refer to Operator's Manual for instructions.

2. Machine Swing and Travel Without Load and With Wheeled Counterweight

- 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. **Travel with crane upperworks in-line to crawlers.** Do not exceed 1 percent (0.5 degrees) grade at boom hinge pins when cutting (turning on grade) or swinging.
- C. **Warning:** Swing brake and swing lock must be free (released).
- D. Machine to travel on a firm and uniformly supporting surface. Travel may be limited depending upon ground conditions.
- E. Refer to tables 1 thru 6 on pages 2 thru 6 for boom angle and boom length 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.
- F. **Warning:** Change in grade must not exceed 2 percent (1.1 degrees) in 59 Ft. (18m).
- G. Counterweight wheels must be properly positioned before swinging or traveling machine when wheeled counterweight is contacting ground. Refer to Operator's Manual for instructions.
- H. Tables 1 thru 3 on pages 2 thru 4 do not include jib; tables 4 thru 6 on pages 5 and 6 include all jib lengths and offset angles.
- I. **Warning:** Travel prohibited for boom angle range not shown in tables 1 thru 6 on pages 2 thru 6. *Crane could tip.*

Percent Grade vs. Angle in Degrees	
Percent Grade	Angle
1	0.5
5	3.0
10	5.7
20	11.3



Swing and Travel Specifications

Boom No. 55 or No. 55A with 140 Ft. (42.7m) Mast No. 56
 Wheeled Counterweight

**18000 With
 21000 MAX-ER**

Table 1: 0 Lb. (0 kg) Wheeled Counterweight

MACHINE TRAVEL WITHOUT LOAD				
Boom Length		Boom Angle Range in Degrees		
		Percent Grade		
Feet	Meters	0 - 1%	2 - 10%	11 - 20%
BOOM FACING DOWNHILL OR UPHILL				
140	42.7	30 - 72	30 - 66	30 - 60
160	48.8	30 - 72	30 - 66	30 - 60
180	54.9	30 - 72	30 - 66	30 - 60
200	61.0	30 - 72	30 - 66	40 - 60
220	67.1	30 - 72	40 - 66	50 - 60
240	73.2	35 - 72	45 - 66	—
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	—

REFERENCE ONLY!



Swing and Travel Specifications

Boom No. 55 or No. 55A with 140 Ft. (42.7m) Mast No. 56
Wheeled Counterweight

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Table 2: Boom No. 55 or 55A, Wheeled Counterweight at 59 Ft. (18m) Position

MACHINE TRAVEL WITHOUT LOAD						
Boom Length (not including jib)		Boom Angle Range in Degrees				
		244,000 Lb. (110 680 kg) Counterweight	464,000 Lb. (210 470 kg) Counterweight	596,000 Lb. (270 340 kg) Counterweight	772,000 Lb. (350 170 kg) Counterweight	860,000 Lb. (390 090 kg) Counterweight
Feet	Meters					
BOOM FACING DOWNHILL or UPHILL — 0 - 5% Grade						
140	42.7	30 - 69	30 - 69	30 - 69	30 - 69	30 - 69
160	48.8	30 - 69	30 - 69	30 - 69	30 - 69	30 - 69
180	54.9	30 - 69	30 - 69	30 - 69	30 - 69	30 - 69
200	61.0	30 - 69	30 - 69	30 - 69	30 - 69	30 - 69
220	67.1	30 - 69	30 - 69	30 - 69	30 - 69	30 - 69
240	73.2	30 - 69	30 - 69	30 - 69	30 - 69	30 - 69
260	79.2	30 - 69	30 - 69	30 - 69	30 - 69	30 - 69
280	85.3	30 - 69	30 - 69	30 - 69	30 - 69	30 - 69
300	91.4	45 - 69	30 - 69	30 - 69	30 - 69	30 - 69
320	97.5	45 - 69	30 - 69	30 - 69	30 - 69	30 - 69
340	103.6	45 - 69	30 - 69	30 - 69	30 - 69	30 - 69
360	109.7	45 - 69	30 - 69	30 - 69	30 - 69	30 - 69
380	115.8	55 - 69	35 - 69	30 - 69	30 - 69	30 - 69
400	121.9	55 - 69	35 - 69	30 - 69	30 - 69	30 - 69
420	128.0	—	40 - 69	30 - 69	30 - 69	30 - 69
440	134.1	—	45 - 69	35 - 69	30 - 69	30 - 69
BOOM FACING DOWNHILL OR UPHILL — 6 - 10% Grade						
140	42.7	30 - 66	30 - 66	30 - 66	30 - 57	30 - 52
160	48.8	30 - 66	30 - 66	30 - 65	30 - 57	30 - 52
180	54.9	30 - 66	30 - 66	30 - 63	30 - 57	30 - 52
200	61.0	30 - 66	30 - 66	30 - 61	30 - 56	30 - 52
220	67.1	30 - 66	30 - 64	30 - 61	30 - 56	30 - 52
240	73.2	30 - 66	30 - 63	30 - 59	30 - 55	30 - 52
260	79.2	30 - 66	30 - 62	30 - 58	30 - 54	30 - 52
280	85.3	30 - 66	30 - 61	30 - 58	30 - 54	30 - 52
300	91.4	50 - 66	30 - 59	30 - 57	30 - 54	30 - 52
320	97.5	50 - 66	30 - 58	30 - 56	30 - 54	30 - 52
340	103.6	50 - 66	30 - 58	30 - 56	30 - 53	30 - 52
360	109.7	50 - 66	30 - 58	30 - 56	30 - 53	30 - 52
380	115.8	60 - 66	40 - 58	30 - 56	30 - 53	30 - 52
400	121.9	60 - 66	40 - 58	30 - 56	30 - 52	30 - 52
420	128.0	—	45 - 58	30 - 56	30 - 52	30 - 52
440	134.1	—	50 - 58	40 - 56	30 - 52	30 - 52



Swing and Travel Specifications

Boom No. 55 or No. 55A with 140 Ft. (42.7m) Mast No. 56
Wheeled Counterweight

**18000 With
21000 MAX-ER**

Table 3: Boom No. 55 or No. 55A, Wheeled Counterweight at 40 Ft. (12m) Position

MACHINE TRAVEL WITHOUT LOAD						
Boom Length (not including jib)		Boom Angle Range in Degrees				
		244,000 Lb. (110 680 kg) Counterweight	464,000 Lb. (210 470 kg) Counterweight	596,000 Lb. (270 340 kg) Counterweight	772,000 Lb. (350 170 kg) Counterweight	860,000 Lb. (390 090 kg) Counterweight
Feet	Meters					
BOOM FACING DOWNHILL or UPHILL — 0 - 5% Grade						
140	42.7	30 - 69	30 - 69	30 - 69	30 - 69	30 - 69
160	48.8	30 - 69	30 - 69	30 - 69	30 - 69	30 - 69
180	54.9	30 - 69	30 - 69	30 - 69	30 - 69	30 - 69
200	61.0	30 - 69	30 - 69	30 - 69	30 - 69	30 - 69
220	67.1	30 - 69	30 - 69	30 - 69	30 - 69	30 - 69
240	73.2	30 - 69	30 - 69	30 - 69	30 - 69	30 - 69
260	79.2	30 - 69	30 - 69	30 - 69	30 - 69	30 - 69
280	85.3	30 - 69	30 - 69	30 - 69	30 - 69	30 - 69
300	91.4	55 - 69	35 - 69	30 - 69	30 - 69	30 - 69
320	97.5	55 - 69	35 - 69	30 - 69	30 - 69	30 - 69
340	103.6	55 - 69	35 - 69	30 - 69	30 - 69	30 - 69
360	109.7	55 - 69	35 - 69	30 - 69	30 - 69	30 - 69
380	115.8	—	50 - 69	40 - 69	30 - 69	30 - 69
400	121.9	—	50 - 69	40 - 69	30 - 69	30 - 69
420	128.0	—	50 - 69	45 - 69	30 - 69	30 - 69
440	134.1	—	—	50 - 69	40 - 69	35 - 69
BOOM FACING DOWNHILL or UPHILL — 6 - 10% Grade						
140	42.7	30 - 66	30 - 66	30 - 66	30 - 66	30 - 62
160	48.8	30 - 66	30 - 66	30 - 66	30 - 66	30 - 62
180	54.9	30 - 66	30 - 66	30 - 66	30 - 66	30 - 62
200	61.0	30 - 66	30 - 66	30 - 66	30 - 66	30 - 62
220	67.1	30 - 66	30 - 66	30 - 66	30 - 65	30 - 62
240	73.2	30 - 66	30 - 66	30 - 66	30 - 65	30 - 62
260	79.2	30 - 66	30 - 66	30 - 66	30 - 64	30 - 62
280	85.3	30 - 66	30 - 66	30 - 66	30 - 64	30 - 62
300	91.4	60 - 66	40 - 66	30 - 66	30 - 64	30 - 62
320	97.5	60 - 66	40 - 66	30 - 66	30 - 64	30 - 62
340	103.6	60 - 66	40 - 66	30 - 66	30 - 64	30 - 62
360	109.7	60 - 66	40 - 66	30 - 66	30 - 64	30 - 62
380	115.8	—	55 - 66	45 - 66	30 - 64	30 - 62
400	121.9	—	55 - 66	45 - 66	30 - 64	30 - 62
420	128.0	—	55 - 66	50 - 66	40 - 64	30 - 62
440	134.1	—	—	55 - 66	45 - 64	40 - 62



Swing and Travel Specifications

Boom No. 55 or No. 55A with 140 Ft. (42.7m) Mast No. 56
Fixed Jib No. 79A with 50 Ft. (15.2m) Strut
Wheeled Counterweight

18000 With 21000 MAX-ER

**Table 4: Boom No. 55 or No. 55A, Fixed Jib No. 79A,
0 Lb. (0 kg) Wheeled Counterweight**

MACHINE TRAVEL WITHOUT LOAD			
Boom Length (including all jib lengths and jib offsets)		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	65 - 72	65 - 66

Table 5: Boom No. 55 or No. 55A, Fixed Jib No. 79A, Wheeled Counterweight at 59 Ft. (18m) Position

MACHINE TRAVEL WITHOUT LOAD						
Boom Length (including all jib lengths and jib offsets)		Boom Angle Range in Degrees				
		244,000 Lb. (110 680 kg) Counterweight	464,000 Lb. (210 470 kg) Counterweight	596,000 Lb. (270 340 kg) Counterweight	772,000 Lb. (350 170 kg) Counterweight	860,000 Lb. (390 090 kg) Counterweight
Feet	Meters	BOOM FACING DOWNHILL or UPHILL — 0 - 5% Grade				
140	42.7	40 - 69	40 - 69	40 - 69	40 - 69	40 - 69
160	48.8	40 - 69	40 - 69	40 - 69	40 - 69	40 - 69
180	54.9	40 - 69	40 - 69	40 - 69	40 - 69	40 - 69
200	61.0	40 - 69	40 - 69	40 - 69	40 - 69	40 - 69
220	67.1	45 - 69	40 - 69	40 - 69	40 - 69	40 - 69
240	73.2	50 - 69	40 - 69	40 - 69	40 - 69	40 - 69
260	79.2	55 - 69	40 - 69	40 - 69	40 - 69	40 - 69
280	85.3	55 - 69	45 - 69	40 - 69	40 - 69	40 - 69
300	91.4	—	50 - 69	40 - 69	40 - 69	40 - 69
320	97.5	—	50 - 69	45 - 69	40 - 69	40 - 69
340	103.6	—	50 - 69	45 - 69	40 - 69	40 - 69
BOOM FACING DOWNHILL OR UPHILL — 6 - 10% Grade						
140	42.7	40 - 66	40 - 66	40 - 66	40 - 66	40 - 66
160	48.8	40 - 66	40 - 66	40 - 66	40 - 66	40 - 66
180	54.9	40 - 66	40 - 66	40 - 66	40 - 66	40 - 66
200	61.0	45 - 66	40 - 66	40 - 66	40 - 66	40 - 66
220	67.1	50 - 66	40 - 66	40 - 66	40 - 66	40 - 66
240	73.2	55 - 66	40 - 66	40 - 66	40 - 66	40 - 66
260	79.2	60 - 66	45 - 66	40 - 66	40 - 66	40 - 66
280	85.3	60 - 66	50 - 66	40 - 66	40 - 66	40 - 66
300	91.4	—	55 - 66	45 - 66	40 - 66	40 - 66
320	97.5	—	55 - 66	50 - 66	40 - 66	40 - 66
340	103.6	—	55 - 66	50 - 66	45 - 66	40 - 66



Swing and Travel Specifications

Boom No. 55 or No. 55A with 140 Ft. (42.7m) Mast No. 56
Fixed Jib No. 79A with 50 Ft. (15.2m) Strut
Wheeled Counterweight

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Table 6: Boom No. 55 or No. 55A, Fixed Jib No. 79A, Wheeled Counterweight at 40 Ft. (12m) Position

MACHINE TRAVEL WITHOUT LOAD						
Boom Length (including all jib lengths and jib offsets)		Boom Angle Range in Degrees				
		244,000 Lb. (110 680 kg) Counterweight	464,000 Lb. (210 470 kg) Counterweight	596,000 Lb. (270 340 kg) Counterweight	772,000 Lb. (350 170 kg) Counterweight	860,000 Lb. (390 090 kg) Counterweight
Feet	Meters					
BOOM FACING DOWNHILL or UPHILL — 0 - 5% Grade						
140	42.7	40 - 69	40 - 69	40 - 69	40 - 69	40 - 69
160	48.8	40 - 69	40 - 69	40 - 69	40 - 69	40 - 69
180	54.9	40 - 69	40 - 69	40 - 69	40 - 69	40 - 69
200	61.0	50 - 69	40 - 69	40 - 69	40 - 69	40 - 69
220	67.1	55 - 69	40 - 69	40 - 69	40 - 69	40 - 69
240	73.2	55 - 69	45 - 69	40 - 69	40 - 69	40 - 69
260	79.2	55 - 69	50 - 69	45 - 69	40 - 69	40 - 69
280	85.3	—	50 - 69	50 - 69	40 - 69	40 - 69
300	91.4	—	50 - 69	50 - 69	40 - 69	40 - 69
320	97.5	—	—	50 - 69	40 - 69	40 - 69
BOOM FACING DOWNHILL OR UPHILL — 6 - 10% Grade						
140	42.7	40 - 66	40 - 66	40 - 66	40 - 66	40 - 66
160	48.8	40 - 66	40 - 66	40 - 66	40 - 66	40 - 66
180	54.9	45 - 66	40 - 66	40 - 66	40 - 66	40 - 66
200	61.0	55 - 66	40 - 66	40 - 66	40 - 66	40 - 66
220	67.1	60 - 66	45 - 66	40 - 66	40 - 66	40 - 66
240	73.2	60 - 66	50 - 66	40 - 66	40 - 66	40 - 66
260	79.2	60 - 66	55 - 66	50 - 66	40 - 66	40 - 66
280	85.3	—	55 - 66	50 - 66	45 - 66	40 - 66
300	91.4	—	55 - 66	50 - 66	45 - 66	40 - 66
320	97.5	—	—	50 - 66	45 - 66	40 - 66