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

Swing and Travel Specifications

Boom No. 49A-44 With Heavy Lift Top Jib No. 132 With 20 Ft. (6 096 mm) Strut 169,200 Lb. (76 750 kg) [2250] Crane Counterweight or 167,000 Lb. (75 750 kg) [M-250] Crane Counterweight 60,000 Lb. (27 220 kg) Carbody Counterweight 55,000 Lb. (24 950 kg) Thru 225,000 Lb. (102 060 kg) Wheeled Counterweight

A. Jobsite Travel

1. MACHINE SWING AND TRAVEL WITH LOAD

- a. Travel with crane upperworks in-line or at 90 degrees to 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.
- c. Refer to operators manual for maximum wind speed for various boom and jib lengths.
- d. Machine can swing and travel in normal manner when wheeled counterweight assembly is free of ground support.
- e. Counterweight wheels must be properly positioned before swinging or traveling machine when wheeled counterweight is contacting ground.

2. MACHINE SWING AND 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 11,000 Lbs. (4 990 kg). Total suspended weight beneath jib point must not exceed 5,500 Lbs. (2 490 kg).
- b. Travel with crane upperworks in-line or at 90 degrees to crawlers. Do not exceed side-to-side grade of 1 percent (0.5 degrees) at boom hinge pins when cutting (steering on grade).
- c. Machine to swing and travel without load on a firm and uniformly supporting surface. Travel may be limited depending upon ground conditions.
- d. For crane upperworks in-line to crawlers, grade in direction of travel must not exceed 5 percent (3 degrees). Side-to-side grade must not exceed 1 percent (0.5 degrees) measured at boom hinge pins. Adjust boom within boom angle range shown in table on page 2 with machine in a level position.
- e. For crane upperworks at 90 degrees to crawlers, grade in direction of travel must not exceed 1 percent (0.5 degrees) measured at boom hinge pins. Grade must not exceed 5 percent (3 degrees) measured parallel to boom centerline. Adjust boom within boom angle range shown in table on page 2 with machine in a level position.
- f. Rate of change in grade must not exceed 5 percent (3 degrees) in 50 Ft. (15.2m).
- g. Counterweight wheels must be properly positioned before swinging or traveling machine when wheeled counterweight is contacting ground.
- h. Refer to operators manual for maximum wind speed with various boom and jib lengths.
- i. Jib lengths shown in table on page 2 include all offset angles.
- j. Refer to Maximum Allowable Travel Specification chart No. 7710-A for travel without load with 0 Lb. (0 kg) wheeled counterweight.

MAX-ER 225

On 2250 or

M-250

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Machine Swing and Travel Without Load				
Boom Length		Boom Angle Range In Degrees		
Feet	Meters	55,000 Lb. (24 950 kg) Wheeled Counterweight	135,000 Lb. (61 230 kg) Wheeled Counterweight	225,000 Lb. (102 060 kg) Wheeled Counterweight
140 160 180 200	42.7 48.8 54.9 61.0	25 - 69 25 - 69 25 - 69 25 - 69 25 - 69	25 - 69 25 - 69 25 - 69 25 - 69 25 - 69	25 - 69 25 - 69 25 - 69 25 - 69 25 - 69
220 240 260 280 300	67.1 73.2 79.2 85.3 91.4	$ \begin{array}{r} 25 - 69 \\ 25 - 69 \\ 35 - 69 \\ 40 - 69 \\ \hline 45 - 69 \\ \hline 60 $	25 - 69 25 - 69 25 - 69 25 - 69 25 - 69 30 - 69	25 - 69 25 - 69 25 - 69 25 - 69 25 - 69 25 - 69 20 - 69
320 340	97.5 103.6	50 - 69 55 - 69	40 - 69 45 - 69	30 - 69 40 - 69
Boom + Jib Length		Boom Angle Range In Degrees		
Feet	Meters	55,000 Lb. (24 950 kg) Wheeled Counterweight	135,000 Lb. (61 230 kg) Wheeled Counterweight	225,000 Lb. (102 060 kg) Wheeled Counterweight
$\begin{array}{c} 220 + 40\\ 220 + 60\\ 220 + 80\\ 220 + 100\\ 220 + 120\\ 240 + 40\\ 240 + 60\\ 240 + 80\\ 240 + 100\\ 240 + 120\\ 260 + 40\\ 260 + 80\\ 260 + 120\\ 260 + 120\\ 280 + 40\\ 280 + 60\\ 280 + 80\\ 280 + 100\\ 280 + 120\\ 300 + 40\\ 300 + 60\\ 300 + 80\\ 300 + 100\\ 300 + 120\\ 300 + 120\\ 300 + 120\\ 300 + 120\\ 300 + 120\\ 300 + 120\\ 300 + 120\\ 300 + 120\\ 300 + 120\\ 300 + 120\\ 300 + 120\\ 300 + 120\\ 300 + 120\\ 300 + 120\\ 300 + 120\\ 300 + 120\\ 300 + 100\\ 300 + 120\\ 300 + 40\\ 300 + 120\\ 300 + 40\\ 300 + 120\\ 300 + 40\\ 300 + 120\\ 300 + 40\\ 300 + 100\\ $	$\begin{array}{c} 67.1 + 12.2\\ 67.1 + 18.3\\ 67.1 + 24.4\\ 67.1 + 30.5\\ 67.1 + 36.6\\ 73.2 + 12.2\\ 73.2 + 18.3\\ 73.2 + 24.4\\ 73.2 + 30.5\\ 73.2 + 36.6\\ 79.2 + 12.2\\ 79.2 + 18.3\\ 79.2 + 24.4\\ 79.2 + 30.5\\ 79.2 + 36.6\\ 85.3 + 12.2\\ 85.3 + 18.3\\ 85.3 + 24.4\\ 85.3 + 30.5\\ 85.3 + 36.6\\ 91.4 + 12.2\\ 91.4 + 18.3\\ 91.4 + 24.4\\ 91.4 + 30.5\\ 91.4 + 36.6\\ 97.5 + 12.2\\ \end{array}$	$\begin{array}{c} 45 - 69 \\ 50 - 69 \\ 50 - 69 \\ 50 - 69 \\ 50 - 69 \\ 50 - 69 \\ 50 - 69 \\ 50 - 69 \\ 50 - 69 \\ 50 - 69 \\ 50 - 69 \\ 50 - 69 \\ 50 - 69 \\ 50 - 69 \\ 50 - 69 \\ 50 - 69 \\ 55 - 69 \\ 55 - 69 \\ 55 - 69 \\ 55 - 69 \\ 55 - 69 \\ 55 - 69 \\ 60 - 69 \\ 60 - 69 \\ 60 - 69 \\ 60 - 69 \\ 60 - 69 \\ 60 - 69 \\ \\ 60 - 69 \end{array}$	$\begin{array}{c} 45 - 69 \\ 50 - 69 \\$	$\begin{array}{c} 45 - 69 \\ 50 - 69 \\$
$\begin{array}{r} 320 + 40 \\ 320 + 60 \\ 320 + 80 \\ 320 + 100 \\ 320 + 120 \\ 340 + 40 \\ 340 + 60 \\ 340 + 80 \\ 340 + 100 \\ 340 + 120 \\ \end{array}$	$\begin{array}{r} 97.5+12.2\\ 97.5+18.3\\ 97.5+24.4\\ 97.5+30.5\\ 97.5+36.6\\ 103.6+12.2\\ 103.6+18.3\\ 103.6+24.4\\ 103.6+30.5\\ 103.6+36.6\end{array}$	60 - 69 	50 - 69 50 - 69 50 - 69 55 - 69 55 - 69 55 - 69 55 - 69 	45 - 69 50 - 69 50 - 69 50 - 69 50 - 69 45 - 69 50 -

MAX-ER 225

On 2250 or

M-250