

# Luffing Jib Raising Procedure

Luffing Jib No. 79A on Boom No. 55 or No. 55A  
with 140 Ft. (42.7m) Mast No. 56  
Wheeled Counterweight

**18000 With  
21000 MAX-ER**

## Recommended boom and luffing jib raising and lowering procedure.

Machine 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), 464,000 Lb. (210 470 kg) or 860,000 Lb. (390 090 kg) wheeled counterweight. Refer to luffing jib rigging assembly **No. A08238** for boom and luffing jib make-up of inserts, straps, struts, strut raising procedure, jib stop positioner setup and operation, jib stop raising and lowering procedure and miscellaneous parts, etc.

Boom and luffing jib combinations must be raised and lowered using jack-knife method.

Release swing brake (disengage swing lock) and slowly raise boom while jib point dolly is allowed to roll on ground. Tension should be applied to luffing jib hoist to keep jib strut off luffing jib during boom raising. Boom up until boom to luffing jib angle reaches 140 degrees. Extend jib stop positioner cylinders (see procedure). Continue to boom up until boom to luffing jib reaches value specified in table. Tighten luffing jib suspension with luffing jib hoist. Boom and luffing jib are then raised together using boom hoist until boom reaches desired boom operating angle. Luffing jib radius must be within capacity chart before swinging over side of machine when raising over end of blocked crawlers.

Position boom at 85 degrees prior to lowering luffing jib. Lower luffing jib until boom to luffing jib angle reaches value specified in table. Lower boom until luffing jib point is just above ground. Position dolly under upper jib point, then lower upper jib point onto dolly. Release swing brake (disengage swing lock) and continue to lower boom while luffing jib rolls along ground until boom to luffing jib angle reaches 140 degrees. Keep enough tension on luffing jib hoist to keep jib strut off luffing jib. Retract jib stop positioner cylinders (see procedure). Continue to lower boom while luffing jib rolls along ground.

**CAUTION:** Do not under any condition allow boom to luffing jib angle to become less than 70 degrees.

WITH OR WITHOUT BOOM AND/OR JIB CATWALKS							
Maximum Boom and Luffing Jib Lengths Lifted Unassisted Using Jack-Knife Method							
Boom Length		Over End of Blocked Crawlers			Over Side of Crawlers		
		0 Lb. (0 kg) Wheeled Counterweight					
		Luffing Jib No. 79A		Boom to Luffing Jib Angle	Luffing Jib No. 79A		Boom to Luffing Jib Angle
Feet	Meters	Feet	Meters	Degrees	Feet	Meters	Degrees
160	48.8	90 - 130	27.4 - 39.6	140	90	27.4	140
		150 - 270	45.7 - 82.3	90	110 - 210	33.5 - 64.0	90
		290 - 310	88.4 - 94.5	70	230 - 310	70.1 - 94.5	70
180	54.9	90 - 210	27.4 - 64.0	90	90 - 110	27.4 - 33.5	90
		230 - 310	70.1 - 94.5	70	130 - 270	39.6 - 82.3	70
200	61.0	90 - 190	27.4 - 57.9	70	—	—	—
Load blocks, hook and weight ball on ground until boom and luffing jib are erected.							



# Luffing Jib Raising Procedure

Luffing Jib No. 79A on Boom No. 55 or No. 55A  
with 140 Ft. (42.7m) Mast No. 56  
Wheeled Counterweight

**18000 With  
21000 MAX-ER**

WITH OR WITHOUT BOOM AND/OR JIB CATWALKS							
Maximum Boom and Luffing Jib Lengths Lifted Unassisted Using Jack-Knife Method Over End or Side of Unblocked Crawlers							
Boom Length		464,000 Lb. (210 470 kg) Wheeled Counterweight at 40 Ft. (12m) Position			860,000 Lb. (390 090 kg) Wheeled Counterweight at 40 Ft. (12m) Position		
		Luffing Jib No. 79A		Boom to Luffing Jib Angle	Luffing Jib No. 79A		Boom to Luffing Jib Angle
Feet	Meters	Feet	Meters	Degrees	Feet	Meters	Degrees
160	48.8	90 - 250 270 - 310	27.4 - 76.2 82.3 - 94.5	140 90	90 - 270 290 - 310	27.4 - 82.3 88.4 - 94.5	140 90
180	54.9	90 - 210 230 - 310	27.4 - 64.0 70.1 - 94.5	140 90	90 - 230 250 - 310	27.4 - 70.1 76.2 - 94.5	140 90
200	61.0	90 - 190 210 - 310	27.4 - 57.9 64.0 - 94.5	140 90	90 - 210 230 - 310	27.4 - 64.0 70.1 - 94.5	140 90
220	67.1	90 - 150 170 - 310	27.4 - 45.7 51.8 - 94.5	140 90	90 - 170 190 - 310	27.4 - 51.8 57.9 - 94.5	140 90
240	73.2	90 - 110 130 - 270 290 - 310	27.4 - 33.5 39.6 - 82.3 88.4 - 94.5	140 90 70	90 - 150 170 - 310	27.4 - 45.7 51.8 - 94.5	140 90
260	79.2	90 - 170 190 - 270	27.4 - 51.8 57.9 - 82.3	90 70	90 - 110 130 - 310	27.4 - 33.5 39.6 - 94.5	140 90
280	85.3	—	—	—	90 - 270	27.4 - 82.3	90
300	91.4	—	—	—	90 - 170	27.4 - 51.8	90
Load blocks, hook and weight ball on ground until boom and luffing jib are erected.							

# Luffing Jib Raising Procedure

Luffing Jib No. 79A on Boom No. 55 or No. 55A  
with 140 Ft. (42.7m) Mast No. 56  
Wheeled Counterweight

**18000 With  
21000 MAX-ER**

WITH OR WITHOUT BOOM AND/OR JIB CATWALKS							
Maximum Boom and Luffing Jib Lengths Lifted Unassisted Using Jack-Knife Method Over End or Side of Unblocked Crawlers							
Boom Length		464,000 Lb. (210 470 kg) Wheeled Counterweight at 59 Ft. (18m) Position			860,000 Lb. (390 090 kg) Wheeled Counterweight at 59 Ft. (18m) Position		
		Luffing Jib No. 79A		Boom to Luffing Jib Angle	Luffing Jib No. 79A		Boom to Luffing Jib Angle
Feet	Meters	Feet	Meters	Degrees	Feet	Meters	Degrees
160	48.8	90 - 290 310	27.4 - 88.4 94.5	140 90	90 - 310	27.4 - 94.5	140
180	54.9	90 - 270 290 - 310	27.4 - 82.3 88.4 - 94.5	140 90	90 - 310	27.4 - 94.5	140
200	61.0	90 - 230 250 - 310	27.4 - 70.1 76.2 - 94.5	140 90	90 - 290 310	27.4 - 88.4 94.5	140 90
220	67.1	90 - 210 230 - 310	27.4 - 64.0 70.1 - 94.5	140 90	90 - 270 290 - 310	27.4 - 82.3 88.4 - 94.5	140 90
240	73.2	90 - 170 190 - 310	27.4 - 51.8 57.9 - 94.5	140 90	90 - 230 250 - 310	27.4 - 70.1 76.2 - 94.5	140 90
260	79.2	90 - 130 150 - 310	27.4 - 39.6 45.7 - 94.5	140 90	90 - 190 210 - 310	27.4 - 57.9 64.0 - 94.5	140 90
280	85.3	90 - 110 110 - 230 250 - 310	27.4 - 33.5 33.5 - 70.1 76.2 - 94.5	140 90 70	90 - 170 190 - 310	27.4 - 51.8 57.9 - 94.5	140 90
300	91.4	90 - 110 110 - 230	27.4 - 33.5 33.5 - 70.1	90 70	90 - 130 150 - 310	27.4 - 39.6 45.7 - 94.5	140 90
320	97.5	—	—	—	90 - 110 130 - 270	27.4 - 33.5 39.6 - 82.3	140 90
340	103.6	—	—	—	90 - 250	27.4 - 76.2	90
Load blocks, hook and weight ball on ground until boom and luffing jib are erected.							