

# Luffing Jib Raising Procedure

Luffing Jib No. 49A-44 On Boom No. 67B

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

Machine must be equipped with 1,395,100 Lb. (632 810 kg) or 867,100 Lb. (393 310 kg) auxiliary counterweight for raising and lowering various boom and luffing jib combinations. Refer to luffing jib rigging assembly **No. 178033** for boom and luffing jib make-up of inserts, straps, and miscellaneous parts, etc.

Two methods may be used to raise and lower boom and luffing jib combinations, depending on length.

## A. Standard (In-Line) Method

Boom and luffing jib are assembled in layout position. Slowly raise boom until jib stop strut is just clear of ground. Unpin jib stop inner strut from retracted position and attach jib stop pendants. Slowly raise boom until jib stop strut is fully extended and pins engaged (approximately 170 degree boom to luffing jib angle). Tighten luffing jib suspension with luffing jib hoist. Boom and luffing jib can then be raised simultaneously using only the boom hoist. Reverse this procedure when lowering boom and luffing jib.

The following combinations may be raised and lowered using this method.

Maximum Boom And Luffing Jib Lengths Lifted Unassisted Using Standard (In-Line) Method									
	om ngth	(632 8	00 Lb. 10 kg) ounterweight	867,100 Lb. (393 310 kg) Auxiliary Counterweight					
		Luffing Jib	No. 49A-44	Luffing Jib No. 49A-44					
Feet	Meters	Feet	Meters	Feet	Meters				
125	38.1	100 - 300	30.5 - 91.4	100 - 300	30.5 - 91.4				
150	45.7	100 - 280	30.5 - 85.3	100 - 280	30.5 - 85.3				
175	53.3	100 - 280	30.5 - 85.3	100 - 240	30.5 - 73.2				
200	61.0	100 - 240	30.5 - 73.2	100 - 200	30.5 - 61.0				
225	68.6	100 - 220	30.5 - 67.1	100 - 160	30.5 - 48.8				
250	76.2	100 - 200	30.5 - 61.0	100 - 120	30.5 - 36.6				
275	83.8	100 - 160	30.5 - 48.8						
300	91.4	100 - 140	30.5 - 42.7						
325	99.1	100	30.5						
Load ble are erec		c and weight b	all on ground	until boom an	d luffing jib				

# Luffing Jib Raising Procedure Luffing Jib No. 49A-44 On Boom No. 67B



#### **B. Jack-Knife Method**

Longer boom and luffing jib combinations must be raised and lowered using this method.

Boom and luffing jib are assembled in layout position. Slowly raise boom until jib stop strut is just clear of ground. Unpin jib stop inner strut from retracted position and attach jib stop pendants. Slowly raise boom until jib stop strut is fully extended and pins engaged (approximately 170 degree boom to luffing jib angle). Boom is then raised while jib point wheels are 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 value specified in table or jib is vertical, whichever occurs first. 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.

Position boom at 75 degrees. Lower luffing jib until boom to luffing jib angle reaches value specified in table. Lower boom until luffing jib point rollers contact ground. If luffing jib is hanging vertical, raise luffing jib a few degrees forward of vertical. Continue to lower boom while luffing jib rolls along ground. Keep enough tension on luffing jib hoist to keep jib strut off luffing jib. Stop lowering boom when jib stop pendants start to go into tension (approximately 170 degree boom to luffing jib angle). Disengage jib stop strut pins and lower boom to retract jib stop inner strut. Pin strut in retracted position and unpin jib stop pendants. Rotate jib stop struts forward and lower boom and luffing jib to ground.

The following boom and luffing jib combinations require jack-knifing to a specified boom to luffing jib angle for raising and lowering.

Maximum Boom And Luffing Jib Lengths Lifted Unassisted Using Jack-Knife Method												
Boom Length			100 Lb. (632 8 iary Counterv	<u> </u>	867,100 Lb. (393 310 kg) Auxiliary Counterweight							
		Luffing Jib	No. 49A-44	Boom to Luffing Jib Angle	Luffing Jib No. 49A-44 Luff		Boom to Luffing Jib Angle					
Feet	Meters	Feet	Meters	Degrees	Feet	Meters	Degrees					
125	38.1	320	97.5	90	320	97.5	90					
150	45.7	300 - 320	91.4 - 97.5	90	300 - 320	91.4 - 97.5	90					
175	53.3	300 - 320	91.4 - 97.5	90	260 - 320	79.2 - 97.5	90					
200	61.0	260 - 320	79.2 - 97.5	90	220 - 320	67.1 - 97.5	90					
225	68.6	240 - 320	73.2 - 97.5	90	180 - 300	54.9 - 91.4	90					
250	76.2	220 - 320	67.1 - 97.5	90	140 - 220	42.7 - 67.1	90					
275	83.8	180 - 320	54.9 - 97.5	90	100 - 120	30.5 - 36.6	90					
300	91.4	160 - 320	48.8 - 97.5	90								
325	99.1	120 - 240	36.6 - 97.5	90								
Load blocks, hook and weight ball on ground until boom and luffing jib are erected.												