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 - 130 150 - 270 290 - 310	27.4 - 39.6 45.7 - 82.3 88.4 - 94.5	140 90 70	90 110 - 210 230 - 310	27.4 33.5 - 64.0 70.1 - 94.5	140 90 70
180	54.9	90 - 210 230 - 310	27.4 - 64.0 70.1 - 94.5	90 70	90 - 110 130 - 210 (a)	27.4 - 33.5 39.6 - 64.0 (a)	90 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.
(a) Machine must be equipped with optional upperworks jacking cylinders.

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

European Standards

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 - 230 250 - 310	27.4 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 - 230	27.4 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.							