

Luffing Jib Raising Procedure

Luffing Jib No. 79A on Boom No. 55 or No. 55A
with 140 Ft. (42.7m) Mast No. 56
Hanging 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), 247,800 Lb. (112 400 kg), 467,800 Lb. (212 190 kg), or 599,800 Lb. (272 060 kg) hanging 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) Hanging 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 - 110 | 27,4 - 33,5 | 140 |
| | | 150 - 270 | 45,7 - 82,3 | 90 | 130 - 210 | 39,6 - 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. | | | | | | | |



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with 140 Ft. (42.7m) Mast No. 56
Hanging 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 Side or End of Unblocked Crawlers

| Boom Length | | 247,800 Lb. (112 400 kg) Hanging Counterweight at 59 Ft. (18m) Position | | | 467,800 Lb. (212 190 kg) Hanging Counterweight at 59 Ft. (18m) Position | | | 599,800 Lb. (272 060 kg) Hanging Counterweight at 59 Ft. (18m) Position | | |
|-------------|------|---|---|---------------------------------|---|---|---------------------------------|---|---|---------------------------------|
| | | Luffing Jib No. 79A | | Boom to Luffing Jib Angle | Luffing Jib No. 79A | | Boom to Luffing Jib Angle | Luffing Jib No. 79A | | Boom to Luffing Jib Angle |
| | | Feet | Meters | Degrees | Feet | Meters | Degrees | Feet | Meters | Degrees |
| 160 | 48,8 | 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 | 90 - 310 — | 27,4 - 94,5 — | 140 — |
| 180 | 54,9 | 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 | 90 - 310 — | 27,4 - 94,5 — | 140 — |
| 200 | 61,0 | 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 | 90 - 290 310 | 27,4 - 88,4 94,5 | 140 90 |
| 220 | 67,1 | 90 - 130 150 - 270 290 - 310 | 27,4 - 39,6 45,7 - 82,3 88,4 - 94,5 | 140 90 70 | 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 - 210 230 - 310 | 27,4 - 64,0 70,1 - 94,5 | 90 70 | 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 - 250* — | 27,4 - 76,2 — | 70 — | 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 - 110 130 - 250 270 - 310 | 27,4 - 33,5 39,6 - 76,2 82,3 - 94,5 | 140 90 70 | 90 - 170 190 - 310 — | 27,4 - 51,8 57,9 - 94,5 — | 140 90 — |
| 300 | 91,4 | — — — | — — — | — — — | 90 - 110 130 - 230 — | 27,4 - 33,5 39,6 - 70,1 — | 90 70 — | 90 - 130 150 - 270 290 - 310 | 27,4 - 39,6 45,7 - 82,3 88,4 - 94,5 | 140 90 70 |
| 320 | 97,5 | — — — | — — — | — — — | — — — | — — — | — — — | 90 110 - 170 190 - 270 | 27,4 33,5 - 51,8 57,9 - 82,3 | 140 90 70 |

Load blocks, hook and weight ball on ground until boom and luffing jib are erected.

* When equipped with boom and/or jib catwalks, 250 Ft. luffing jib on 260 Ft. boom cannot be raised with 247,800 Lb. hanging counterweight.