

Luffing Jib Raising Procedure

16000 MAX-ER

Luffing Jib No. 59 on Boom No. 58 HL
with 98.4 ft (30,0 m) Mast No. 59A
Wheeled Counterweight

Recommended Boom and Luffing Jib Raising and Lowering Procedure

Machine must be equipped with 332,000 lb (150 590 kg) crane counterweight, 120,000 lb (54 430 kg) carbody counterweight and 0 lb (0 kg), 335,400 lb (152 140 kg) or 511,400 lb (231 970 kg) wheeled counterweight. Refer to luffing jib rigging assembly **No. A13416** for boom and luffing jib make-up of inserts, straps, struts, strut raising procedure, jib stop setup and operation, and miscellaneous parts, etc. Refer to Operator's Manual for setup and installation.

NOTE: 0 lb (0 kg) wheeled counterweight is equivalent to machine equipped with 332,000 lb (150 590 kg) crane counterweight and 120,000 lb (54 430 kg) carbody counterweight with 98.4 ft (30,0 m) mast No. 59A.

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

Caution: Anytime luffing jib point rollers are in contact with ground during raising or lowering procedure, disengage swing lock and release swing brake.

Raising:

Position jib stop to clear jib butt. Luff up jib strut until straps on inserts are clear of strap supports. Slowly raise boom while jib point rollers are allowed to roll on ground. Tension

should be applied to luffing jib hoist to keep jib straps above strap supports. Boom up until boom to luffing jib angle reaches 145 degrees. Lower jib stops to operating position. 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.

Lowering:

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 rollers contact ground. Continue to lower boom while luffing jib rollers roll along ground until boom to luffing jib angle reaches 145 degrees. Position jib stop to clear jib butt. Keep enough tension on luffing jib hoist to keep jib straps above strap supports. Continue to lower boom while luffing jib rollers roll 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. 59 | | Boom to Luffing Jib Angle | Luffing Jib No. 59 | | Boom to Luffing Jib Angle |
| Feet | Meters | Feet | Meters | Degrees | Feet | Meters | Degrees |
| 137.8 | 42,0 | 78.7 - 137.8 | 24,0 - 42,0 | 145 | 78.7 - 98.4 | 24,0 - 30,0 | 145 |
| | | 157.5 - 255.9 | 48,0 - 78,0 | 90 | 118.1 - 216.5 | 36,0 - 66,0 | 90 |
| | | 275.6 | 84,0 | 70 | 236.2 - 275.6 | 72,0 - 84,0 | 70 |
| 157.5 | 48,0 | 78.7 | 24,0 | 145 | 78.7 - 157.5 | 24,0 - 48,0 | 90 |
| | | 98.4 - 216.5 | 30,0 - 66,0 | 90 | 177.2 - 275.6 | 54,0 - 84,0 | 70 |
| | | 236.2 - 275.6 | 72,0 - 84,0 | 70 | | | |
| 177.2 | 54,0 | 78.7 - 157.5 | 24,0 - 48,0 | 90 | 78.7 - 216.5 | 24,0 - 66,0 | 70 |
| | | 177.2 - 275.6 | 54,0 - 84,0 | 70 | | | |
| 196.9 | 60,0 | 78.7 - 216.5 | 24,0 - 66,0 | 70 | — | — | — |
| Load blocks, hook and weight ball on ground until boom and luffing jib are erected. | | | | | | | |

Luffing Jib Raising Procedure

Luffing Jib No. 59 on Boom No. 58 HL
with 98.4 ft (30,0 m) Mast No. 59A
Wheeled Counterweight

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| 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 | | 335,400 lb (152 140 kg) Wheeled Counterweight at 36.1 ft (11 m) Position | | | 511,400 lb (231 970 kg) Wheeled Counterweight at 36.1 ft (11 m) Position | | | |
| | | Luffing Jib No. 59 | | Boom to Luffing Jib Angle | Luffing Jib No. 59 | | Boom to Luffing Jib Angle | |
| Feet | Meters | Feet | Meters | Degrees | Feet | Meters | Degrees | |
| 137.8 | 42,0 | 78.7 - 275.6 | 24,0 - 84,0 | 145 | 78.7 - 275.6 | 24,0 - 84,0 | 145 | |
| 157.5 | 48,0 | 78.7 - 255.9 275.6 | 24,0 - 78,0 84,0 | 145 90 | 78.7 - 275.6 | 24,0 - 84,0 | 145 | |
| 177.2 | 54,0 | 78.7 - 236.2 255.9 - 275.6 | 24,0 - 72,0 78,0 - 84,0 | 145 90 | 78.7 - 275.6 | 24,0 - 84,0 | 145 | |
| 196.9 | 60,0 | 78.7 - 196.9 216.6 - 275.6 | 24,0 - 60,0 66,0 - 84,0 | 145 90 | 78.7 - 275.6 | 24,0 - 84,0 | 145 | |
| 216.5 | 66,0 | 78.7 - 157.5 177.2 - 275.6 | 24,0 - 48,0 54,0 - 84,0 | 145 90 | 78.7 - 255.9 275.6 | 24,0 - 78,0 84,0 | 145 90 | |
| 236.2 | 72,0 | 78.7 - 118.1 137.8 - 275.6 | 24,0 - 36,0 42,0 - 84,0 | 145 90 | 78.7 - 216.5 236.2 - 275.6 | 24,0 - 66,0 72,0 - 84,0 | 145 90 | |
| 255.9 | 78,0 | 78.7 98.4 - 216.5 236.2 - 275.6 | 24,0 30,0 - 66,0 72,0 - 84,0 | 145 90 70 | 78.7 - 177.2 196.9 - 275.6 | 24,0 - 54,0 60,0 - 84,0 | 145 90 | |
| 275.6 | 84,0 | 78.7 - 98.4 118.1 - 275.6 | 24,0 - 30,0 36,0 - 84,0 | 90 70 | 78.7 - 137.8 157.5 - 275.6 | 24,0 - 42,0 48,0 - 84,0 | 145 90 | |
| 295.3 | 90,0 | — | — | — | 78.7 - 118.1 137.8 - 255.9 275.6 | 24,0 - 36,0 42,0 - 78,0 84,0 | 145 90 70 | |
| 315.0 | 96,0 | — | — | — | 78.7 - 137.8 157.5 - 275.6 | 24,0 - 42,0 48,0 - 84,0 | 90 70 | |
| Load blocks, hook and weight ball on ground until boom and luffing jib are erected. | | | | | | | | |

Luffing Jib Raising Procedure

16000 MAX-ER

Luffing Jib No. 59 on Boom No. 58 HL
with 98.4 ft (30,0 m) Mast No. 59A
Wheeled Counterweight

| 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 | | 335,400 lb (152 140 kg) Wheeled Counterweight at 42.7 ft (13 m) Position | | | 511 400 lb (231 970 kg) Wheeled Counterweight at 42.7 ft (13 m) Position | | |
| | | Luffing Jib No. 59 | | Boom to Luffing Jib Angle | Luffing Jib No. 59 | | Boom to Luffing Jib Angle |
| Feet | Meters | Feet | Meters | Degrees | Feet | Meters | Degrees |
| 138.7 | 42,0 | 78.7 - 275.6 | 24,0 - 84,0 | 145 | 78.7 - 275.6 | 24,0 - 84,0 | 145 |
| 157.5 | 48,0 | 78.7 - 275.6 | 24,0 - 84,0 | 145 | 78.7 - 275.6 | 24,0 - 84,0 | 145 |
| 177.2 | 54,0 | 78.7 - 255.9 275.6 | 24,0 - 78,0 84,0 | 145 90 | 78.7 - 275.6 | 24,0 - 84,0 | 145 |
| 196.9 | 60,0 | 78.7 - 216.5 236.2 - 275.6 | 24,0 - 66,0 72,0 - 84,0 | 145 90 | 78.7 - 275.6 | 24,0 - 84,0 | 145 |
| 216.5 | 66,0 | 78.7 - 177.2 196.9 - 275.6 | 24,0 - 54,0 60,0 - 84,0 | 145 90 | 78.7 - 275.6 | 24,0 - 84,0 | 145 |
| 236.2 | 72,0 | 78.7 - 157.5 177.2 - 275.6 | 24,0 - 48,0 54,0 - 84,0 | 145 90 | 78.7 - 255.9 275.6 | 24,0 - 78,0 84,0 | 145 90 |
| 255.9 | 78,0 | 78.7 - 118.1 137.8 - 255.9 275.6 | 24,0 - 36,0 42,0 - 78,0 84,0 | 145 90 70 | 78.7 - 216.5 236.2 - 275.6 | 24,0 - 66,0 72,0 - 84,0 | 145 90 |
| 275.6 | 84,0 | — 78.7 - 177.2 196.9 - 275.6 | — 24,0 - 54,0 60,0 - 84,0 | — 90 70 | 78.7 - 177.2 196.9 - 275.6 | 24,0 - 54,0 60,0 - 84,0 | 145 90 |
| 295.3 | 90,0 | 78.7 - 275.6 | 24,0 - 84,0 | 70 | 78.7 - 137.8 157.5 - 275.6 | 24,0 - 42,0 48,0 - 84,0 | 145 90 |
| 315.0 | 96,0 | — | — | — | 78.7 - 98.4 118.1 - 236.2 255.9 - 275.6 | 24,0 - 30,0 36,0 - 72,0 78,0 - 84,0 | 145 90 70 |
| Load blocks, hook and weight ball on ground until boom and luffing jib are erected. | | | | | | | |

Luffing Jib Raising Procedure

Luffing Jib No. 59 on Boom No. 58 HL
with 98.4 ft (30,0 m) Mast No. 59A
Wheeled Counterweight

16000 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 | | 335,400 lb (152 140 kg) Wheeled Counterweight at 49.2 ft (15 m) Position | | | 511,400 lb (231 970 kg) Wheeled Counterweight at 49.2 ft (15 m) Position | | |
| | | Luffing Jib No. 59 | | Boom to Luffing Jib Angle | Luffing Jib No. 59 | | Boom to Luffing Jib Angle |
| Feet | Meters | Feet | Meters | Degrees | Feet | Meters | Degrees |
| 137.8 | 42,0 | 78.7 - 275.6 | 24,0 - 84,0 | 145 | 78.7 - 275.6 | 24,0 - 84,0 | 145 |
| 157.5 | 48,0 | 78.7 - 275.6 | 24,0 - 84,0 | 145 | 78.7 - 275.6 | 24,0 - 84,0 | 145 |
| 177.2 | 54,0 | 78.7 - 275.6 | 24,0 - 84,0 | 145 | 78.7 - 275.6 | 24,0 - 84,0 | 145 |
| 196.9 | 60,0 | 78.7 - 236.2 | 24,0 - 72,0 | 145 | 78.7 - 275.6 | 24,0 - 84,0 | 145 |
| | | 255.9 - 275.6 | 78,0 - 84,0 | 90 | | | |
| 216.5 | 66,0 | 78.7 - 216.5 | 24,0 - 66,0 | 145 | 78.7 - 275.6 | 24,0 - 84,0 | 145 |
| | | 236.2 - 275.6 | 72,0 - 84,0 | 90 | | | |
| 236.2 | 72,0 | 78.7 - 177.2 | 24,0 - 54,0 | 145 | 78.7 - 275.6 | 24,0 - 84,0 | 145 |
| | | 196.9 - 275.6 | 60,0 - 84,0 | 90 | | | |
| 255.9 | 78,0 | 78.7 - 137.8 | 24,0 - 42,0 | 145 | 78.7 - 255.9 | 24,0 - 78,0 | 145 |
| | | 157.5 - 275.6 | 48,0 - 84,0 | 90 | 275.6 | 84,0 | 90 |
| 275.6 | 84,0 | 78.7 - 98.4 | 24,0 - 30,0 | 145 | 78.7 - 216.5 | 24,0 - 66,0 | 145 |
| | | 118.1 - 236.2 | 36,0 - 72,0 | 90 | 236.2 - 275.6 | 72,0 - 84,0 | 90 |
| | | 255.9 - 275.6 | 78,0 - 84,0 | 70 | | | |
| 295.3 | 90,0 | 78.7 - 118.1 | 24,0 - 36,0 | 90 | 78.7 - 177.2 | 24,0 - 54,0 | 145 |
| | | 137.8 - 275.6 | 42,0 - 84,0 | 70 | 196.9 - 275.6 | 60,0 - 84,0 | 90 |
| 315.0 | 96,0 | — | — | — | 78.7 - 137.8 | 24,0 - 42,0 | 145 |
| | | | | | 157.5 - 275.6 | 48,0 - 84,0 | 90 |
| Load blocks, hook and weight ball on ground until boom and luffing jib are erected. | | | | | | | |