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.

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.

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 - 137.8 157.5 - 255.9 275.6	24,0 - 42,0 48,0 - 78,0 84,0	145 90 70	78.7 - 98.4 118.1 - 216.5 236.2 - 275.6	24,0 - 30,0 36,0 - 66,0 72,0 - 84,0	145 90 70
157.5	48,0	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 - 157.5 177.2 - 275.6	24,0 - 48,0 54,0 - 84,0	90 70
177.2	54,0	78.7 - 157.5 177.2 - 275.6	24,0 - 48,0 54,0 - 84,0	90 70	— —	— —	— —
196.9	60,0	78.7 - 177.2	24,0 - 54,0	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

16000 MAX-ER

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 - 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
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

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 - 137.8 157.5 - 275.6	24,0 - 42,0 48,0 - 84,0	145 90	78.7 - 255.9 275.6	24,0 - 78,0 84,0	145 90
255.9	78,0	78.7 - 98.4 118.1 - 255.9 275.6	24,0 - 30,0 36,0 - 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 - 157.5 177.2 - 275.6	24,0 - 48,0 54,0 - 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 - 255.9	24,0 - 78,0	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

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 - 236.2 255.9 - 275.6	24,0 - 72,0 78,0 - 84,0	145 90	78.7 - 275.6	24,0 - 84,0	145
216.5	66,0	78.7 - 196.9 216.5 - 275.6	24,0 - 60,0 66,0 - 84,0	145 90	78.7 - 275.6	24,0 - 84,0	145
236.2	72,0	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
255.9	78,0	78.7 - 137.8 157.5 - 275.6	24,0 - 42,0 48,0 - 84,0	145 90	78.7 - 236.2 255.9 - 275.6	24,0 - 72,0 78,0 - 84,0	145 90
275.6	84,0	78.7 - 98.4 118.1 - 216.5 236.2 - 275.6	24,0 - 30,0 36,0 - 66,0 72,0 - 84,0	145 90 70	78.7 - 216.5 236.2 - 275.6	24,0 - 66,0 72,0 - 84,0	145 90
295.3	90,0	78.7 - 118.1 137.8 - 275.6	24,0 - 36,0 42,0 - 84,0	90 70	78.7 - 177.2 196.9 - 275.6	24,0 - 54,0 60,0 - 84,0	145 90
315.0	96,0	—	—	—	78.7 - 137.8 157.5 - 275.6	24,0 - 42,0 48,0 - 84,0	145 90
Load blocks, hook and weight ball on ground until boom and luffing jib are erected.							

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