Luffing Jib Raising Procedure

MLC300

Luffing Jib No. LJ10:501 on
Boom No. B10:500
with Fixed Position Counterweight
at 4,1 m Position

Recommended boom and luffing jib raising and lowering procedure

MLC300 SERIES 1 must be equipped with 140 200 kg counterweight; MLC300 SERIES 2 must be equipped with 180 200 kg counterweight; MLC300 SERIES 3 must be equipped with 200 200 kg counterweight. Refer to Luffing Jib Rigging **No. 81023383** for boom and luffing jib make-up of inserts, straps, struts, strut raising and lowering procedure, jib stop operation and miscellaneous parts, etc. Refer to the Operator Manual for setup and installation.

Caution: Any time luffing jib point rollers are in contact with ground during raising or lowering procedure, release swing brake. *Structural damage can occur.*

Caution: Do not under any condition allow boom-to-luffing jib angle to become less than 70 degrees. *Structural damage can occur.*

Warning: Machines manufactured prior to S/N 607860 require rotating bed modification No. 84054771 before use of this chart. *Structural damage can occur.*

Raising:

Starting position for the jib stops is resting on the boom top's jib stop lugs. Luff up jib strut until straps on inserts are clear of strap supports. Slowly raise boom while luffing jib point rollers are allowed to roll on ground. Tension should be applied to luffing jib hoist to keep jib straps clear of strap supports. Boom up and luff down until boom-to-luffing jib angle reaches value specified in Tables 1 thru 3 or luffing 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 83 degrees or the operating radius is within capacity chart and the luffing jib is above horizontal. If boom-to-luffing jib angle is greater than 145 degrees, lower luffing jib to obtain this angle to allow jib stops to properly position.

Warning: Failure to lower luffing jib to 145 degree boom-to-luffing jib angle will not allow jib stops to engage. *Structural damage and/or loss of luffing jib stability can occur.*

Lowering:

Position boom at 83 degrees prior to lowering luffing jib. Lower luffing jib until boom-to-luffing jib angle reaches value specified in Tables 1 thru 3. Lower boom until luffing jib point rollers contact ground. If luffing jib is hanging vertical, raise luffing jib a few degrees forward of vertical. Should luffing jib fail to roll along ground it may be necessary to provide outside assistance. Continue to lower boom while luffing jib rolls along ground. Keep enough tension on luffing jib hoist to keep jib straps clear of strap supports.

Warning: Do not under any condition allow boom-to-luffing jib angle to become greater than 145 degrees before luffing jib point rollers contact ground. Jib stop may engage boom top during lowering. *Structural damage can occur.*

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Refer to Tables 1 thru 3 for raising ability with the maximum weight of load blocks, hooks, weight ball, slings and hoist lines beneath boom and jib point sheaves. For block weights shown with #, load blocks, hooks, weight ball and slings must remain on ground until combined weights are within rated capacity of chart.

Table 1

MLC300 SERIES 1									
Boom Length	Boom to Luffing Jib Angle	Over End of Blocked Crawlers				Over End or Side of Crawlers				Boom to Luffing Jib Angle
		Weight Under Load Point								
		Boom	Jib	Boom	Jib	Boom	Jib	Boom	Jib	
		#	#	3 600 kg	2 800 kg	#	#	3 600 kg	2 800 kg	
Meters	Degrees	Luffing Jib Length - Meters								Degrees
30,0	145	24,0 - 36,0		24,0		24,0		—		145
	90	24,0 - 72,0		24,0 - 60,0		24,0 - 60,0		24,0 - 48,0		90
	70	24,0 - 84,0		24,0 - 84,0		24,0 - 78,0		24,0 - 78,0		70
36,0	145	24,0		—		—		—		145
	90	24,0 - 60,0		24,0 - 48,0		24,0 - 48,0		—		90
	70	24,0 - 84,0		24,0 - 84,0		24,0 - 78,0		24,0 - 72,0		70
42,0	145	—		—		—		—		145
	90	24,0 - 42,0		—		—		—		90
	70	24,0 - 84,0		24,0 - 60,0		24,0 - 42,0		—		70
48,0	70	36,0 - 42,0		—		—		—		70
	(a)70	24,0 - 60,0		—		—		—		(a)70
(a) Requires lower boom point to be removed.										
Warning: Crane must remain in-line with crawlers when raising over end of blocked crawlers until operating radius and crane configuration is within 360 degree chart. *Crane tipping or structural damage can occur.*										

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Luffing Jib No. LJ10:501 on
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Table 2

MLC300 SERIES 2									
Boom Length	Boom to Luffing Jib Angle	Over End of Blocked Crawlers				Over End or Side of Crawlers				Boom to Luffing Jib Angle
		Weight Under Load Point								
		Boom	Jib	Boom	Jib	Boom	Jib	Boom	Jib	
		#	#	3 600 kg	2 800 kg	#	#	3 600 kg	2 800 kg	
Meters	Degrees	Luffing Jib Length - Meters								Degrees
30,0	145	24,0 - 48,0		24,0 - 36,0		24,0 - 42,0		24,0 - 30,0		145
	90	24,0 - 90,0		24,0 - 78,0		24,0 - 78,0		24,0 - 66,0		90
	70	24,0 - 96,0		24,0 - 90,0		24,0 - 90,0		24,0 - 90,0		70
36,0	145	24,0 - 36,0		24,0		24,0		—		145
	90	24,0 - 78,0		24,0 - 66,0		24,0 - 66,0		24,0 - 48,0		90
	70	24,0 - 96,0		24,0 - 84,0		24,0 - 90,0		24,0 - 84,0		70
42,0	145	24,0		—		—		—		145
	90	24,0 - 66,0		24,0 - 48,0		24,0 - 48,0		—		90
	70	24,0 - 96,0		24,0 - 60,0		24,0 - 90,0		24,0 - 60,0		70
48,0	90	24,0 - 42,0		—		—		—		90
	70	24,0 - 66,0		24,0 - 42,0		24,0 - 48,0		—		70
	(a)70	24,0 - 84,0		—		24,0 - 78,0		—		(a)70
54,0	70	30,0 - 36,0		—		—		—		70
	(a)90	24,0 - 42,0		—		—		—		(a)90
	(a)70	30,0 - 48,0		—		36,0 - 42,0		—		(a)70

(a) Requires lower boom point to be removed.

Warning: Crane must remain in-line with crawlers when raising over end of blocked crawlers until operating radius and crane configuration is within 360 degree chart. *Crane tipping or structural damage can occur.*

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Table 3

MLC300 SERIES 3									
Boom Length	Boom to Luffing Jib Angle	Over End of Blocked Crawlers				Over End or Side of Crawlers				Boom to Luffing Jib Angle
		Weight Under Load Point								
		Boom	Jib	Boom	Jib	Boom	Jib	Boom	Jib	
		#	#	3 600 kg	2 800 kg	#	#	3 600 kg	2 800 kg	
Meters	Degrees	Luffing Jib Length - Meters								Degrees
30,0	145	24,0 - 60,0		24,0 - 48,0		24,0 - 48,0		24,0 - 36,0		145
	90	24,0 - 96,0		24,0 - 84,0		24,0 - 84,0		24,0 - 72,0		90
	70	24,0 - 96,0		24,0 - 90,0		24,0 - 90,0		24,0 - 90,0		70
36,0	145	24,0 - 48,0		24,0 - 30,0		24,0 - 36,0		—		145
	90	24,0 - 90,0		24,0 - 72,0		24,0 - 72,0		24,0 - 60,0		90
	70	24,0 - 96,0		24,0 - 84,0		24,0 - 90,0		24,0 - 84,0		70
42,0	145	24,0 - 36,0		—		—		—		145
	90	24,0 - 78,0		24,0 - 60,0		24,0 - 60,0		24,0 - 36,0		90
	70	24,0 - 96,0		24,0 - 60,0		24,0 - 90,0		24,0 - 60,0		70
48,0	90	24,0 - 60,0		24,0		24,0		—		90
	70	24,0 - 78,0		24,0 - 42,0		24,0 - 78,0		42,0		70
	(a)70	24,0 - 96,0		—		24,0 - 96,0		—		(a)70
54,0	70	30,0 - 42,0		—		—		—		70
	(a)90	24,0 - 60,0		—		—		—		(a)90
	(a)70	30,0 - 60,0		—		30,0 - 60,0		—		(a)70

(a) Requires lower boom point to be removed.

Warning: Crane must remain in-line with crawlers when raising over end of blocked crawlers until operating radius and crane configuration is within 360 degree chart. *Crane tipping or structural damage can occur.*