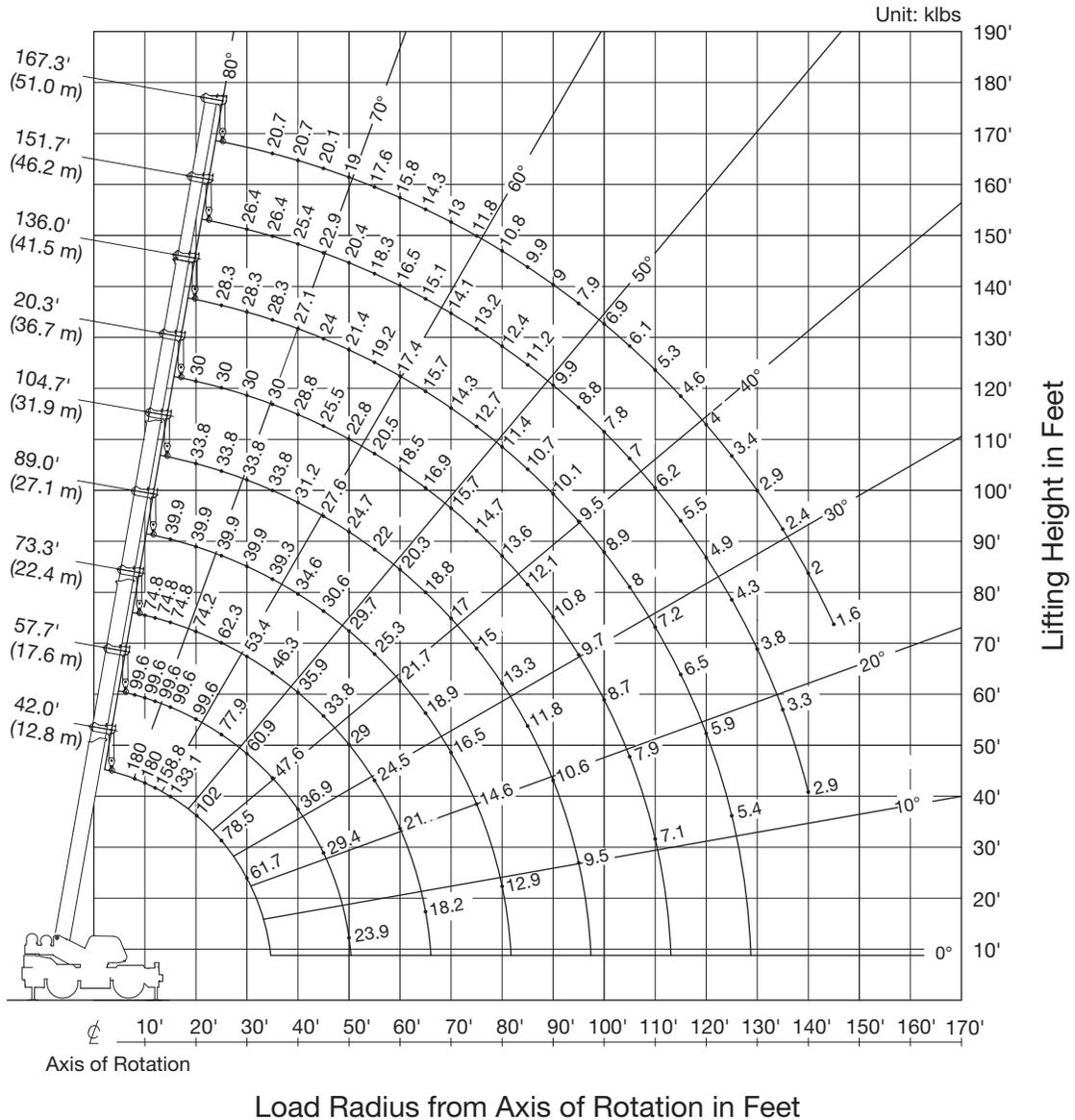
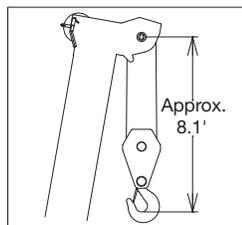


# GR-900XLL-4 WORKING RANGE CHART

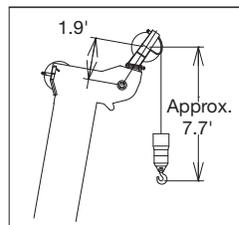
## SMART CW1 360° ROTATION



BOOM



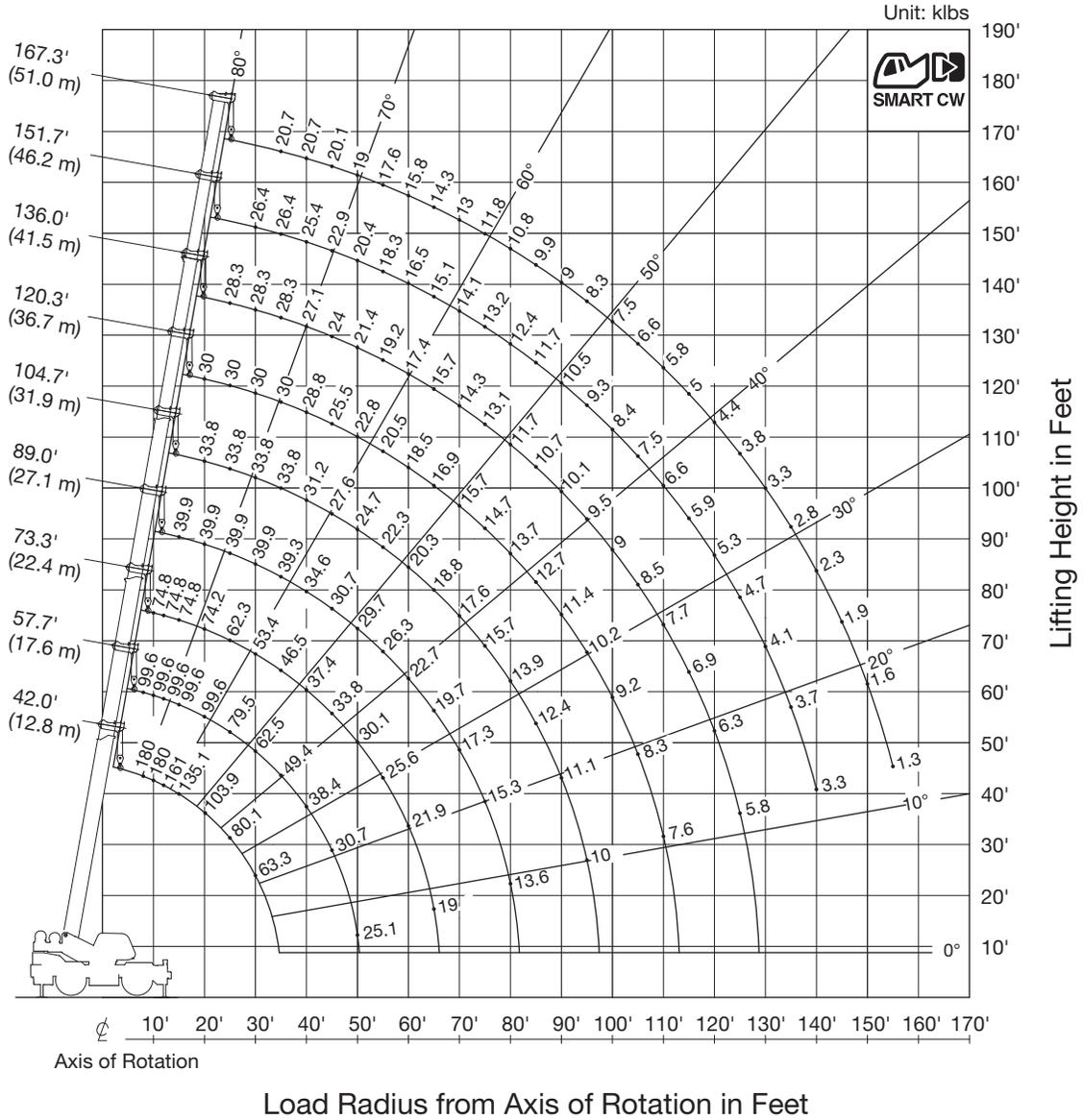
SINGLE TOP



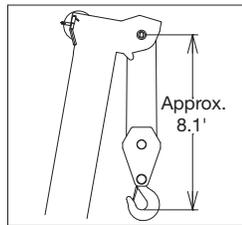
NOTE: Boom geometry shown is for unloaded condition and machine standing level on firm supporting surface. Boom deflection and subsequent radius and boom angle change must be accounted for when applying load to hook. When boom length is same as telescoping mode 1 and 2, it show large load.

# GR-900XLL-4 WORKING RANGE CHART

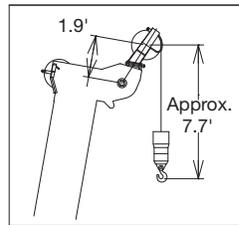
## SMART CW2 360° ROTATION



BOOM



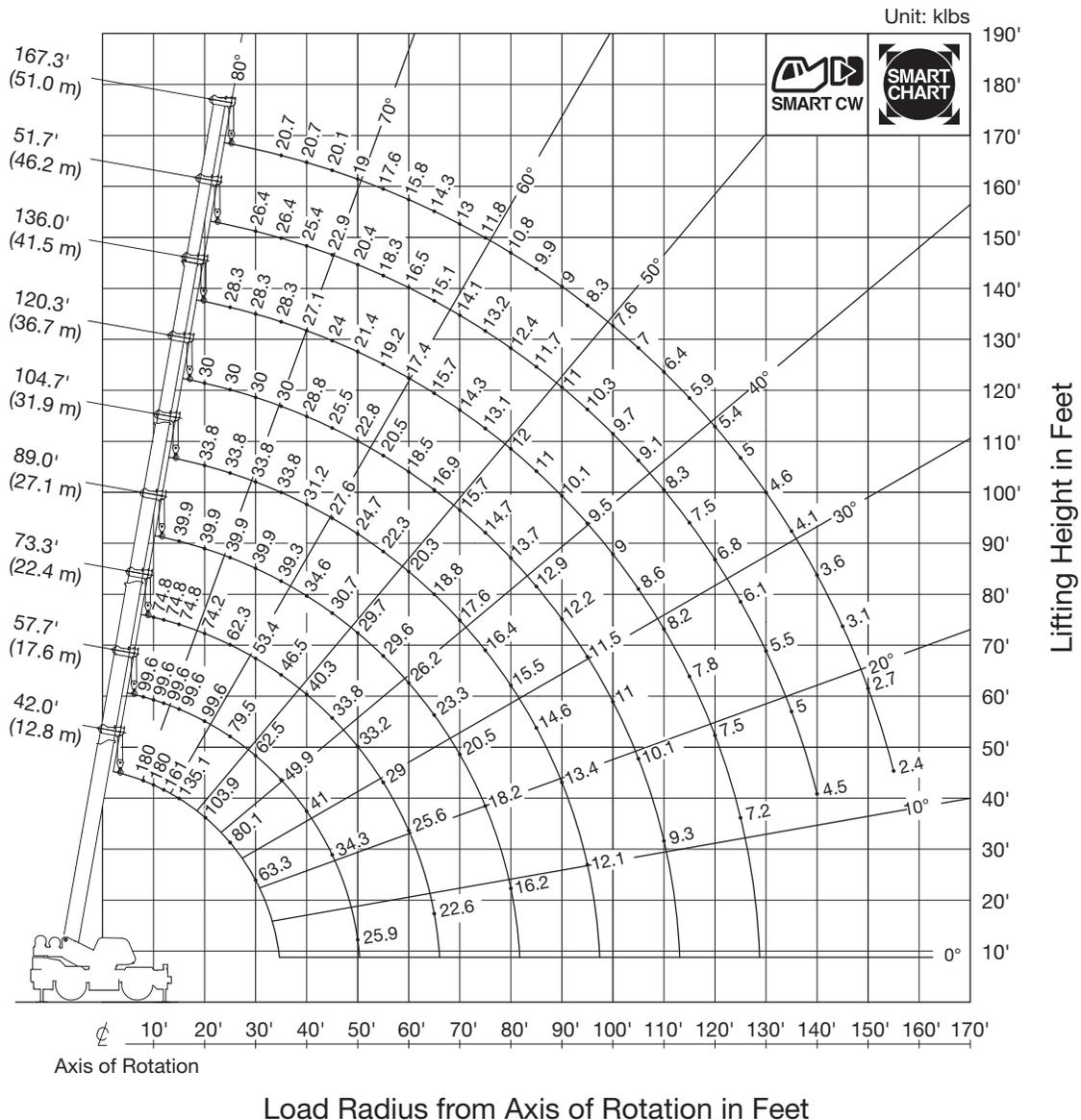
SINGLE TOP



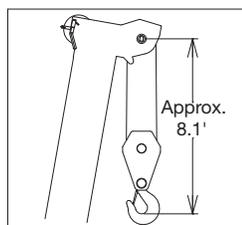
NOTE: Boom geometry shown is for unloaded condition and machine standing level on firm supporting surface. Boom deflection and subsequent radius and boom angle change must be accounted for when applying load to hook. When boom length is same as telescoping mode 1 and 2, it show large load.

# GR-900XLL-4 WORKING RANGE CHART

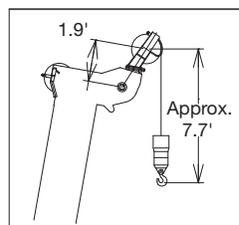
## SMART CW2 SMART CHART



BOOM



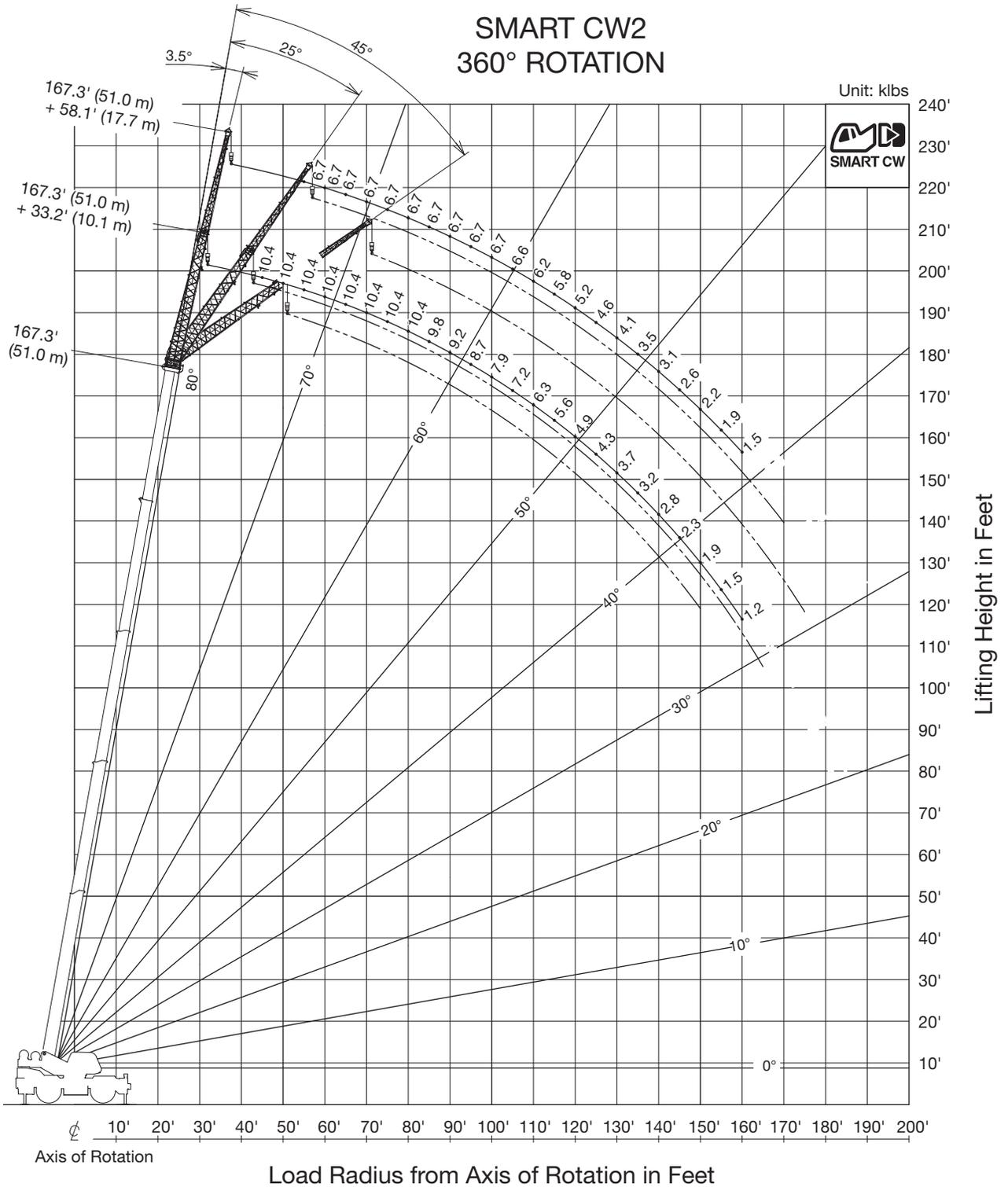
SINGLE TOP



NOTE: Boom geometry shown is for unloaded condition and machine standing level on firm supporting surface. Boom deflection and subsequent radius and boom angle change must be accounted for when applying load to hook. When boom length is same as telescoping mode 1 and 2, it show large load.

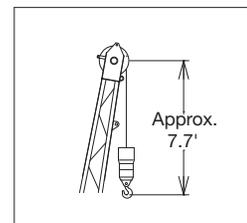


# GR-900XLL-4 WORKING RANGE CHART



NOTE: Jib geometry shown are for unloaded condition and machine standing level on firm supporting surface. Boom deflection and subsequent radius and boom angle change must be accounted for when applying load to hook.

JIB





# GR-900XLL-4 RATED LIFTING CAPACITIES (IN POUNDS)

COUNTERWEIGHT 24,700lbs (11.2 t) ON OUTRIGGERS FULLY EXTENDED 23' 11-3/8" (7.3 m) SPREAD 360° ROTATION SMART CW1																					
B \ A	42.0'	57.7'	73.3'		89.0'		104.7'		120.3'		136.0'		151.7'		167.3'						
	(12.8 m)	(17.6 m)	(22.4 m)		(27.1 m)		(31.9 m)		(36.7 m)		(41.5 m)		(46.2 m)		(51 m)						
8	180,000	99,600																			
10	180,000	99,600	74,800	33,800																	
12	158,800	99,600	74,800	33,800																	
15	133,100	99,600	74,800	33,800	39,900	29,700															
20	102,000	99,600	74,200	33,800	39,900	29,700	33,800	27,700	30,000	27,600											
25	78,500	77,900	62,300	33,800	39,900	29,700	33,800	27,700	30,000	27,600	28,300	27,500									
30	61,700	60,900	53,400	33,800	39,900	29,700	33,800	27,700	30,000	27,600	28,300	26,100	26,400	24,100							
35		47,600	46,300	33,800	39,300	29,700	33,800	27,700	30,000	27,400	28,300	23,900	26,400	23,600	20,700						
40		36,900	35,900	33,800	34,600	29,700	31,200	27,700	28,800	25,000	27,100	21,500	25,400	22,000	20,700						
45		29,400	28,500	33,800	30,600	29,700	27,600	26,300	25,500	23,000	24,000	19,500	22,900	20,500	20,100						
50		23,900	23,000	29,000	25,000	29,700	24,700	23,900	22,800	21,200	21,400	17,800	20,400	19,100	19,000						
55			18,800	24,500	20,800	25,300	21,800	22,000	20,500	19,800	19,200	16,300	18,300	17,600	17,600						
60			15,400	21,000	17,400	21,700	18,400	20,300	18,500	18,200	17,400	15,000	16,500	16,200	15,800						
65			12,800	18,200	14,600	18,900	15,700	18,800	16,400	16,900	15,700	14,000	14,900	15,100	14,300						
70					12,300	16,500	13,400	17,000	14,100	15,700	14,300	13,000	13,600	14,100	13,000						
75					10,400	14,600	11,400	15,000	12,200	14,700	12,700	12,100	12,400	13,200	11,800						
80					8,800	12,900	9,800	13,300	10,500	13,600	11,000	11,400	11,300	12,400	10,800						
85							8,400	11,800	9,100	12,100	9,600	10,700	10,000	11,200	9,900						
90							7,200	10,600	7,900	10,800	8,400	10,100	8,800	9,900	9,000						
95							6,100	9,500	6,800	9,700	7,300	9,500	7,600	8,800	7,900						
100									5,800	8,700	6,300	8,900	6,700	7,800	6,900						
105									5,000	7,900	5,500	8,000	5,800	7,000	6,100						
110									4,300	7,100	4,700	7,200	5,000	6,200	5,300						
115											4,000	6,500	4,300	5,500	4,600						
120											3,400	5,900	3,700	4,900	4,000						
125											2,900	5,400	3,200	4,300	3,400						
130												2,700	3,800	2,900							
135													2,200	3,300	2,400						
140														1,800	2,900						
145															1,600						
D	0°														10°	0°	12°	0°	15°	13°	26°
Telescoping mode	1, 2	1	1	2	1	2	1	2	1	2	1	2	1	2	1, 2						
2nd Boom	0	50	100	0	100	0	100	0	100	0	100	0	100	50	100						
3rd Boom	0	0	0	33	16	50	33	67	50	83	67	100	83	100	100						
4th Boom	0	0	0	33	16	50	33	67	50	83	67	100	83	100	100						
Top Boom	0	0	0	33	16	50	33	67	50	83	67	100	83	100	100						

COUNTERWEIGHT 24,700lbs (11.2 t) ON OUTRIGGERS FULLY EXTENDED 23' 11-3/8" (7.3 m) SPREAD 360° ROTATION SMART CW1																				
C \ A	42.0'	57.7'	73.3'		89.0'		104.7'		120.3'		136.0'									
	B (12.8 m)	B (17.6 m)	B (22.4 m)	B (22.4 m)	B (27.1 m)	B (27.1 m)	B (31.9 m)	B (31.9 m)	B (36.7 m)	B (36.7 m)	B (41.5 m)	B (41.5 m)	B (46.2 m)	B (46.2 m)	B (51 m)					
0°	35.2	19,700	50.7	10,900	66.1	4,600	66.1	9,500	81.7	3,200	81.8	6,700	97.2	1,800	97.2	5,100	112.1	4,400	126.7	3,900
Telescoping mode	1, 2	1	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2

- A: Boom length in feet
- B: Load radius in feet
- C: Loaded boom angle (°)
- D: Minimum boom angle (°) for indicated length (no load)

NOTE: The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-E2) is based on the standard number of parts of line listed in the chart. Standard number of parts of line for each boom length should be according to the following table.

Boom length in feet (meters)	42.0' (12.8 m)	42.0' to 73.3' (12.8 m to 22.4 m)	73.3' to 167.3' (22.4 m to 51 m)	Single top jib
Telescoping mode	1, 2	1	2	1, 2
Number of parts of line	16	8	4	1





# GR-900XLL-4 RATED LIFTING CAPACITIES (IN POUNDS)

COUNTERWEIGHT 24,700 lbs (11.2 t) ON OUTRIGGERS FULLY EXTENDED 23' 11-3/8" (7.3 m) SPREAD 360° ROTATION SMART CW1						
B	167.3' (51 m) Boom + 33.2' (10.1 m) JIB			167.3' (51 m) Boom + 58.1' (17.7 m) JIB		
	3.5° Offset	25° Offset	45° Offset	3.5° Offset	25° Offset	45° Offset
45	10,400					
50	10,400					
55	10,400			6,700		
60	10,400			6,700		
65	10,400	10,400		6,700		
70	10,400	10,400		6,700		
75	10,400	10,200		6,700	6,200	
80	10,400	9,500		6,700	6,100	
85	9,800	9,000		6,700	5,900	
90	9,200	8,500		6,700	5,800	4,800
95	8,500	8,000		6,700	5,600	4,700
100	7,500	7,600		6,700	5,500	4,600
105	6,700	7,200		6,600	5,400	4,500
110	5,800	6,700		6,200	5,300	4,400
115	5,100	5,900		5,400	5,200	4,300
120	4,500	5,200		4,800	5,000	4,200
125	3,900	4,500		4,200	4,900	4,200
130	3,300	3,900		3,600	4,600	4,100
135	2,800	3,400		3,100	4,200	4,000
140	2,400	2,800		2,700	3,700	4,000
145	1,900	2,400		2,200	3,200	3,800
150	1,500	1,900		1,900	2,700	3,200
155		1,500		1,500	2,300	2,800
160					1,900	2,300
165					1,500	1,900
170						1,500
Telescoping mode	1, 2		1, 2		1, 2	

COUNTERWEIGHT 24,700 lbs (11.2 t) ON OUTRIGGERS FULLY EXTENDED 23' 11-3/8" (7.3 m) SPREAD 360° ROTATION SMART CW1						
B	151.7' (46.2 m) Boom + 33.2' (10.1 m) JIB			151.7' (46.2 m) Boom + 58.1' (17.7 m) JIB		
	3.5° Offset	25° Offset	45° Offset	3.5° Offset	25° Offset	45° Offset
40	12,500	11,500				
45	12,500	11,500				
50	12,500	11,500				
55	12,500	11,500	12,500	11,500		
60	12,500	11,500	12,500	11,500	10,000	10,000
65	12,500	11,500	12,100	11,100	9,800	9,700
70	12,500	11,500	11,700	10,300	9,600	9,500
75	12,500	10,900	11,400	9,700	9,400	9,200
80	11,700	10,300	11,000	9,100	9,200	8,600
85	10,700	9,800	10,700	8,500	9,100	8,200
90	9,800	8,600	10,100	8,000	8,900	7,700
95	8,700	8,000	9,300	7,600	8,800	7,300
100	7,700	7,600	8,600	7,100	8,700	6,900
105	6,800	7,100	7,600	6,800	8,000	6,600
110	6,000	6,700	6,700	6,400	7,200	6,200
115	5,200	6,200	6,000	6,100	6,300	6,000
120	4,600	5,600	5,200	5,800	5,600	5,700
125	4,000	5,000	4,600	5,400	4,900	5,400
130	3,400	4,400	3,900	4,900	4,200	5,000
135	2,900	3,900	3,400	4,300	3,600	4,500
140	2,400	3,400	2,900	3,800		
145	2,000	3,000	2,400	3,300		
150	1,600	2,600	2,000	2,900		
155	1,300	2,200	1,500	2,400		
160	900	1,900	1,100	2,100		
165		1,500		1,700		
170		1,300				
175		1,000				
180						
185						
Telescoping mode	1	2	1	2	1	2

COUNTERWEIGHT 24,700 lbs (11.2 t) ON OUTRIGGERS FULLY EXTENDED 23' 11-3/8" (7.3 m) SPREAD 360° ROTATION SMART CW1						
B	120.3' (36.7 m) Boom + 33.2' (10.1 m) JIB			120.3' (36.7 m) Boom + 58.1' (17.7 m) JIB		
	3.5° Offset	25° Offset	45° Offset	3.5° Offset	25° Offset	45° Offset
30	14,600	14,600				
35	14,600	14,600				
40	14,600	14,600	14,400			
45	14,600	14,600	13,800	13,600		
50	14,600	14,600	13,200	13,000	10,400	10,400
55	14,600	14,600	12,700	12,500	10,200	10,100
60	14,600	14,400	12,200	12,000	9,900	9,800
65	14,600	13,400	11,800	11,600	9,700	9,600
70	14,600	12,600	11,400	11,200	9,500	9,400
75	13,900	12,400	11,000	10,800	9,300	9,200
80	12,400	11,700	10,700	10,500	9,200	9,100
85	10,900	11,000	10,400	10,200	9,000	8,900
90	9,600	10,300	10,100	9,900	8,900	8,800
95	8,500	9,800	9,300	9,700	8,800	8,700
100	7,500	9,300	8,200	9,200	8,600	8,600
105	6,600	8,800	7,200	8,700	7,600	8,500
110	5,800	7,900	6,300	8,300	6,600	8,300
115	5,000	7,200	5,500	7,600	5,800	7,800
120	4,400	6,500	4,800	6,900		
125	3,700	5,900	4,100	6,200		
130	3,200	5,400	3,500	5,600		
135	2,700	4,900	2,900	5,000		
140	2,200	4,400				
145	1,800	4,000				
150						
155						
160						
165						
170						
Telescoping mode	1	2	1	2	1	2

B: Load radius in feet

# GR-900XLL-4 RATED LIFTING CAPACITIES (IN POUNDS)

COUNTERWEIGHT 24,700 lbs (11.2 t) ON OUTRIGGERS FULLY EXTENDED 23' 11-3/8" (7.3 m) SPREAD 360° ROTATION SMART CW2				COUNTERWEIGHT 24,700 lbs (11.2 t) ON OUTRIGGERS FULLY EXTENDED 23' 11-3/8" (7.3 m) SPREAD 360° ROTATION SMART CW2			
B	167.3' (51 m) Boom + 33.2' (10.1 m) JIB			B	167.3' (51 m) Boom + 58.1' (17.7 m) JIB		
	3.5° Offset	25° Offset	45° Offset		3.5° Offset	25° Offset	45° Offset
45	10,400			45			
50	10,400			50			
55	10,400			55	6,700		
60	10,400			60	6,700		
65	10,400	10,400		65	6,700		
70	10,400	10,400	9,800	70	6,700		
75	10,400	10,200	9,400	75	6,700	6,200	
80	10,400	9,500	9,000	80	6,700	6,100	
85	9,800	9,000	8,500	85	6,700	5,900	
90	9,200	8,500	8,100	90	6,700	5,800	4,800
95	8,700	8,000	7,700	95	6,700	5,600	4,700
100	7,900	7,600	7,300	100	6,700	5,500	4,600
105	7,200	7,200	6,900	105	6,600	5,400	4,500
110	6,300	6,800	6,600	110	6,200	5,300	4,400
115	5,600	6,300	6,300	115	5,800	5,200	4,300
120	4,900	5,600	6,000	120	5,200	5,000	4,200
125	4,300	4,900	5,300	125	4,600	4,900	4,200
130	3,700	4,300	4,700	130	4,100	4,600	4,100
135	3,200	3,800	4,100	135	3,500	4,400	4,000
140	2,800	3,200	3,500	140	3,100	4,100	4,000
145	2,300	2,800	3,000	145	2,600	3,500	3,900
150	1,900	2,300	2,500	150	2,200	3,100	3,600
155	1,500	1,900		155	1,900	2,600	3,100
160	1,200	1,500		160	1,500	2,200	2,700
165		1,100		165		1,900	2,200
170				170		1,500	1,800
175				175			1,400
Telescoping mode	1, 2	1, 2	1, 2	Telescoping mode	1, 2	1, 2	1, 2

COUNTERWEIGHT 24,700 lbs (11.2 t) ON OUTRIGGERS FULLY EXTENDED 23' 11-3/8" (7.3 m) SPREAD 360° ROTATION SMART CW2						COUNTERWEIGHT 24,700 lbs (11.2 t) ON OUTRIGGERS FULLY EXTENDED 23' 11-3/8" (7.3 m) SPREAD 360° ROTATION SMART CW2					
B	151.7' (46.2 m) Boom + 33.2' (10.1 m) JIB					B	151.7' (46.2 m) Boom + 58.1' (17.7 m) JIB				
	3.5° Offset	25° Offset	45° Offset				3.5° Offset	25° Offset	45° Offset		
40	12,500	11,500				40					
45	12,500	11,500				45					
50	12,500	11,500				50	7,600	7,200			
55	12,500	11,500	12,500	11,500		55	7,600	7,200			
60	12,500	11,500	12,500	11,500	10,000	60	7,600	7,200			
65	12,500	11,500	12,100	11,100	9,800	65	7,600	7,200			
70	12,500	11,500	11,700	10,300	9,600	70	7,600	7,200	6,500	6,500	
75	12,500	10,900	11,400	9,700	9,400	75	7,600	7,200	6,300	6,300	
80	11,700	10,300	11,000	9,100	9,200	80	7,600	7,200	6,200	6,100	5,000
85	10,700	9,800	10,700	8,500	9,100	85	7,600	7,200	6,000	5,900	4,900
90	9,800	8,600	10,100	8,000	8,900	90	7,600	7,200	5,900	5,800	4,800
95	9,000	8,000	9,300	7,600	8,800	95	7,300	7,000	5,700	5,600	4,700
100	8,200	7,600	8,600	7,100	8,700	100	7,100	6,500	5,600	5,500	4,600
105	7,300	7,100	7,900	6,800	8,000	105	6,900	6,100	5,400	5,400	4,500
110	6,500	6,700	7,200	6,400	7,400	110	6,700	5,800	5,300	5,300	4,400
115	5,700	6,300	6,400	6,100	6,800	115	6,200	5,400	5,200	5,100	4,300
120	5,000	6,000	5,600	5,800	6,000	120	5,500	5,100	5,000	4,800	4,200
125	4,400	5,400	5,000	5,500	5,200	125	4,900	4,800	4,900	4,600	4,100
130	3,800	4,800	4,400	5,200	4,600	130	4,300	4,600	4,700	4,300	4,100
135	3,300	4,300	3,800	4,700	4,000	135	3,800	4,300	4,600	4,100	4,000
140	2,800	3,800	3,300	4,100		140	3,300	4,100	4,200	3,900	3,800
145	2,400	3,300	2,800	3,600		145	2,800	3,700	3,700	3,700	3,700
150	2,000	2,900	2,300	3,200		150	2,400	3,400	3,200	3,500	3,500
155	1,600	2,500	1,900	2,800		155	2,100	3,000	2,800	3,400	3,300
160	1,300	2,200	1,500	2,400		160	1,700	2,600	2,300	3,200	3,200
165		1,900	1,100	2,000		165	1,400	2,300	1,900	2,800	
170		1,500				170	1,100	2,000	1,600	2,400	
175		1,300				175		1,700	1,200	2,100	
180						180		1,400	1,700		
185						185		1,200	1,400		
Telescoping mode	1	2	1	2	1	2	1	2	1	2	

COUNTERWEIGHT 24,700 lbs (11.2 t) ON OUTRIGGERS FULLY EXTENDED 23' 11-3/8" (7.3 m) SPREAD 360° ROTATION SMART CW2						COUNTERWEIGHT 24,700 lbs (11.2 t) ON OUTRIGGERS FULLY EXTENDED 23' 11-3/8" (7.3 m) SPREAD 360° ROTATION SMART CW2					
B	120.3' (36.7 m) Boom + 33.2' (10.1 m) JIB					B	120.3' (36.7 m) Boom + 58.1' (17.7 m) JIB				
	3.5° Offset	25° Offset	45° Offset				3.5° Offset	25° Offset	45° Offset		
30	14,600	14,600				30					
35	14,600	14,600				35					
40	14,600	14,600	14,400			40	9,900	8,700			
45	14,600	14,600	13,800	13,600		45	9,900	8,700			
50	14,600	14,600	13,200	13,000	10,400	50	9,900	8,700			
55	14,600	14,600	12,700	12,500	10,200	55	9,900	8,700			
60	14,600	14,400	12,200	12,000	9,900	60	9,900	8,700	7,200	7,000	
65	14,600	13,400	11,800	11,600	9,700	65	9,600	8,700	7,000	6,800	
70	14,600	12,600	11,400	11,200	9,500	70	9,100	8,700	6,700	6,500	5,300
75	13,900	12,400	11,000	10,800	9,300	75	8,700	8,400	6,500	6,300	5,200
80	12,800	11,700	10,700	10,500	9,200	80	8,300	8,000	6,300	6,200	5,000
85	11,500	11,000	10,400	10,200	9,000	85	8,000	7,700	6,100	6,000	4,900
90	10,200	10,300	10,100	9,900	8,900	90	7,700	7,400	5,800	5,800	4,700
95	9,000	9,800	9,800	9,700	8,800	95	7,400	7,100	5,600	5,500	4,600
100	8,000	9,300	8,700	9,200	8,700	100	7,100	6,900	5,400	5,300	4,500
105	7,000	8,800	7,700	8,700	8,000	105	6,800	6,600	5,200	5,200	4,400
110	6,200	8,300	6,800	8,300	7,100	110	6,600	6,400	5,100	5,000	4,300
115	5,400	7,600	6,000	7,900	6,200	115	6,400	6,200	4,900	4,900	4,200
120	4,800	6,900	5,200	7,300		120	5,700	6,000	4,800	4,700	4,200
125	4,100	6,300	4,500	6,600		125	5,100	5,800	4,600	4,600	4,100
130	3,600	5,800	3,900	6,000		130	4,500	5,600	4,500	4,500	4,100
135	3,100	5,200	3,300	5,400		135	4,000	5,300	4,400	4,300	4,000
140	2,600	4,700				140	3,500	5,100	4,100	4,300	4,000
145	2,200	4,300				145	3,000	4,900	3,600	4,200	
150						150	2,600	4,400	3,100	4,100	
155						155	2,200	4,100	2,600	4,000	
160						160	1,900	3,700	2,200	3,900	
165						165	1,500	3,400			
170						170	1,200	3,100			
Telescoping mode	1	2	1	2	1	2	1	2	1	2	

B: Load radius in feet

# GR-900XLL-4 RATED LIFTING CAPACITIES (IN POUNDS)

COUNTERWEIGHT 24,700 lbs (11.2 t)  
ON OUTRIGGERS FULLY EXTENDED 23' 11-3/8" (7.3 m) SPREAD  
SMART CHART  
SMART CW2

B	167.3' (51 m) Boom + 33.2' (10.1 m) JIB			167.3' (51 m) Boom + 58.1' (17.7 m) JIB		
	3.5° Offset	25° Offset	45° Offset	3.5° Offset	25° Offset	45° Offset
45	10,400					
50	10,400					
55	10,400			6,700		
60	10,400	10,400		6,700		
65	10,400	10,400	9,800	6,700		
70	10,400	10,400	9,600	6,700		
75	10,400	10,200	9,400	6,700	6,200	
80	10,400	9,500	9,000	6,700	6,100	
85	9,800	9,000	8,500	6,700	5,900	
90	9,200	8,500	8,100	6,700	5,800	4,800
95	8,700	8,000	7,700	6,700	5,600	4,700
100	7,900	7,600	7,300	6,700	5,500	4,600
105	7,300	7,200	6,900	6,600	5,400	4,500
110	6,700	6,800	6,600	6,200	5,300	4,400
115	6,100	6,500	6,300	5,800	5,200	4,300
120	5,600	5,900	6,000	5,500	5,000	4,200
125	5,100	5,400	5,600	5,200	4,900	4,200
130	4,700	5,000	5,100	4,900	4,600	4,100
135	4,300	4,600	4,700	4,500	4,400	4,000
140	3,900	4,200	4,300	4,100	4,200	4,000
145	3,500	3,800	3,900	3,700	4,000	3,900
150	3,100	3,400	3,500	3,400	3,800	3,700
155	2,700	3,100		3,000	3,500	3,500
160	2,300	2,700		2,600	3,200	3,400
165	2,000	2,300		2,300	2,900	3,100
170	1,700	1,900		1,900	2,600	2,800
175	1,300	1,500		1,600	2,200	2,500
180	1,100	1,200		1,300	1,900	
185				1,100	1,500	
190					1,200	
Telescoping mode	1, 2	1, 2	1, 2	1, 2	1, 2	1, 2

COUNTERWEIGHT 24,700 lbs (11.2 t)  
ON OUTRIGGERS FULLY EXTENDED 23' 11-3/8" (7.3 m) SPREAD  
SMART CHART  
SMART CW2

B	151.7' (46.2 m) Boom + 33.2' (10.1 m) JIB						151.7' (46.2 m) Boom + 58.1' (17.7 m) JIB					
	3.5° Offset		25° Offset		45° Offset		3.5° Offset		25° Offset		45° Offset	
40	12,500	11,500										
45	12,500	11,500										
50	12,500	11,500										
55	12,500	11,500	12,500	11,500								
60	12,500	11,500	12,500	11,500	10,000	10,000						
65	12,500	11,500	12,100	11,100	9,800	9,700						
70	12,500	11,500	11,700	10,300	9,600	9,500						
75	12,500	10,900	11,400	9,700	9,400	9,200						
80	11,700	10,300	11,000	9,100	9,200	8,600						
85	10,700	9,800	10,700	8,500	9,100	8,200						
90	9,800	8,600	10,100	8,000	8,900	7,700						
95	9,000	8,000	9,300	7,600	8,800	7,300						
100	8,200	7,600	8,600	7,100	8,700	6,900						
105	7,600	7,100	7,900	6,800	8,000	6,600						
110	7,000	6,700	7,300	6,400	7,400	6,200						
115	6,400	6,300	6,700	6,100	6,800	6,000						
120	5,900	6,000	6,200	5,800	6,300	5,700						
125	5,400	5,700	5,700	5,500	5,800	5,400						
130	5,000	5,400	5,200	5,200	5,300	5,200						
135	4,600	5,100	4,800	5,000	4,900	4,900						
140	4,100	4,900	4,400	4,700								
145	3,600	4,500	3,900	4,600								
150	3,200	4,100	3,400	4,300								
155	2,700	3,600	3,000	3,900								
160	2,300	3,200	2,500	3,400								
165	2,000	2,900	2,100	3,000								
170	1,600	2,500										
175	1,300	2,200										
180												
185												
190												
Telescoping mode	1	2	1	2	1	2	1	2	1	2	1	2

COUNTERWEIGHT 24,700 lbs (11.2 t)  
ON OUTRIGGERS FULLY EXTENDED 23' 11-3/8" (7.3 m) SPREAD  
SMART CHART  
SMART CW2

B	120.3' (36.7 m) Boom + 33.2' (10.1 m) JIB						120.3' (36.7 m) Boom + 58.1' (17.7 m) JIB					
	3.5° Offset		25° Offset		45° Offset		3.5° Offset		25° Offset		45° Offset	
30	14,600	14,600										
35	14,600	14,600										
40	14,600	14,600	14,400									
45	14,600	14,600	13,800	13,600								
50	14,600	14,600	13,200	13,000	10,400	10,400						
55	14,600	14,600	12,700	12,500	10,200	10,100						
60	14,600	14,400	12,200	12,000	9,900	9,800						
65	14,600	13,400	11,800	11,600	9,700	9,600						
70	14,600	12,600	11,400	11,200	9,500	9,400						
75	13,900	12,400	11,000	10,800	9,300	9,200						
80	12,800	11,700	10,700	10,500	9,200	9,100						
85	11,700	11,000	10,400	10,200	9,000	8,900						
90	10,800	10,300	10,100	9,900	8,900	8,800						
95	10,000	9,800	9,900	9,700	8,800	8,700						
100	9,200	9,300	9,400	9,200	8,700	8,600						
105	8,500	8,800	8,700	8,700	8,600	8,500						
110	7,900	8,300	8,100	8,300	8,200	8,300						
115	7,000	7,900	7,500	7,900	7,600	7,900						
120	6,300	7,500	6,700	7,500								
125	5,600	7,200	6,000	7,200								
130	4,900	6,900	5,200	6,800								
135	4,300	6,500	4,600	6,500								
140	3,800	6,000										
145	3,300	5,500										
150												
155												
160												
165												
170												
Telescoping mode	1	2	1	2	1	2	1	2	1	2	1	2

B: Load radius in feet

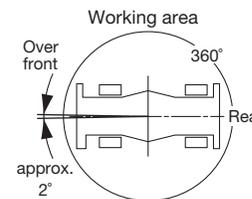
# GR-900XLL-4 RATED LIFTING CAPACITIES (IN POUNDS)

COUNTERWEIGHT 24,700lbs (11.2 t) ON RUBBER STATIONARY SMART CW1									
Over front					360° Rotation				
B \ A	42.0' (12.8 m)	73.3' (22.4 m)	89.0' (27.1 m)	104.7' (31.9 m)	B \ A	42.0' (12.8 m)	73.3' (22.4 m)	89.0' (27.1 m)	104.7' (31.9 m)
12	65,000				12	43,000			
15	53,700				15	32,600			
20	40,400	33,800	29,700		20	19,400	22,900	22,900	
25	31,400	33,800	29,700	27,700	25	12,500	15,700	16,400	16,800
30	24,200	27,300	27,800	27,700	30	8,100	11,200	11,800	12,200
35		21,200	21,700	22,000	35		8,100	8,700	9,100
40		16,800	17,400	17,800	40		5,800	6,400	6,800
45		13,600	14,200	14,500	45		4,100	4,700	5,100
50		11,100	11,600	12,000	50		2,800	3,400	3,700
55		9,100	9,700	10,000	55		1,700	2,300	2,600
60		7,500	8,000	8,400	60				
65		6,200	6,700	7,100	65				
70			5,600	5,900	70				
75			4,700	5,000	75				
80			3,900	4,200	80				
85				3,400	85				
90				2,800	90				
95				2,300	95				
D	0°				D	0°	29°	43°	50°
Telescoping mode	1, 2	2	2	2	Telescoping mode	1, 2	2	2	2
2nd Boom	0	0	0	0	2nd Boom	0	0	0	0
3rd Boom	0	33	50	67	3rd Boom	0	33	50	67
4th Boom	0	33	50	67	4th Boom	0	33	50	67
Top Boom	0	33	50	67	Top Boom	0	33	50	67

COUNTERWEIGHT 24,700lbs (11.2 t) ON RUBBER STATIONARY SMART CW1									
C \ A	42.0' (12.8 m)		73.3' (22.4 m)		89.0' (27.1 m)		104.7' (31.9 m)		
0°	35.2	18,400	66.1	5,100	81.8	3,300	97.2	2,200	

COUNTERWEIGHT 24,700lbs (11.2 t) ON RUBBER CREEP SMART CW1									
Over front									
B \ A	42.0' (12.8 m)	73.3' (22.4 m)	89.0' (27.1 m)	104.7' (31.9 m)					
12	50,600								
15	41,400								
20	30,400	33,300	29,700						
25	23,200	26,100	26,700	27,000					
30	17,900	20,900	21,500	21,900					
35		17,000	17,600	17,900					
40		13,900	14,500	14,900					
45		11,400	12,000	12,400					
50		9,400	10,000	10,400					
55		7,700	8,300	8,700					
60		6,300	6,900	7,300					
65		5,100	5,700	6,100					
70			4,700	5,000					
75			3,800	4,100					
80			3,000	3,300					
85				2,600					
90				2,000					
95				1,500					
D	0°								
Telescoping mode	1, 2	2	2	2					
2nd Boom	0	0	0	0					
3rd Boom	0	33	50	67					
4th Boom	0	33	50	67					
Top Boom	0	33	50	67					

COUNTERWEIGHT 24,700lbs (11.2 t) ON RUBBER CREEP SMART CW1									
C \ A	42.0' (12.8 m)		73.3' (22.4 m)		89.0' (27.1 m)		104.7' (31.9 m)		
0°	35.2	13,800	66.1	4,200	81.8	2,400	97.2	1,400	



- A: Boom length in feet
- B: Load radius in feet
- C: Loaded boom angle (°)
- D: Minimum boom angle (°) for indicated length (no load)

NOTE: The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-E2) is based on the standard number of parts of line listed in the chart.  
Standard number of parts of line for on-rubber operation should be according to the chart.

Boom length in feet (meters)	42.0' (12.8 m)	42.0' to 104.7' (12.8 m to 31.9 m)	Single top jib
Number of parts of line	6	4	1

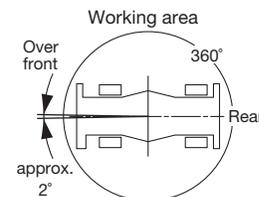
# GR-900XLL-4 RATED LIFTING CAPACITIES (IN POUNDS)

COUNTERWEIGHT 24,700lbs (11.2 t) ON RUBBER STATIONARY SMART CW2												
Over front					360° Rotation							
B	A	42.0' (12.8 m)	73.3' (22.4 m)	89.0' (27.1 m)	104.7' (31.9 m)	B	A	42.0' (12.8 m)	73.3' (22.4 m)	89.0' (27.1 m)	104.7' (31.9 m)	
	12		67,600					12				
15		56,000				15						
20		42,300	33,800	29,700		20		21,800				
25		33,000	33,800	29,700	27,700	25		14,200	17,500			
30		25,900	29,000	29,400	27,700	30		9,500	12,600	13,200	13,200	
35			22,600	23,000	23,300	35			9,300	9,900	10,300	
40			18,000	18,600	18,800	40			6,900	7,500	7,900	
45			14,600	15,200	15,500	45			5,000	5,600	6,000	
50			12,000	12,500	12,900	50			3,600	4,200	4,600	
55			9,900	10,500	10,800	55			2,500	3,000	3,400	
60			8,200	8,800	9,100	60			1,500	2,100	2,400	
65			6,900	7,400	7,700	65				1,300		
70				6,200	6,500	70						
75				5,200	5,600	75						
80				4,400	4,700	80						
85					3,900	85						
90					3,300	90						
95					2,800	95						
D	0°				D	0°				20°	37°	47°
Telescoping mode	1, 2	2	2	2	Telescoping mode	1, 2	2	2	2	2	2	
2nd Boom	0	0	0	0	2nd Boom	0	0	0	0	0	0	
3rd Boom	0	33	50	67	3rd Boom	0	33	50	67	67	67	
4th Boom	0	33	50	67	4th Boom	0	33	50	67	67	67	
Top Boom	0	33	50	67	Top Boom	0	33	50	67	67	67	

COUNTERWEIGHT 24,700lbs (11.2 t) ON RUBBER STATIONARY SMART CW2									
C	A	42.0' (12.8 m)		73.3' (22.4 m)		89.0' (27.1 m)		104.7' (31.9 m)	
		B	(12.8 m)	B	(22.4 m)	B	(27.1 m)	B	(31.9 m)
0°		35.2	19,900	66.1	5,700	81.8	3,700	97.2	2,600
0°		35.2	6,200						

COUNTERWEIGHT 24,700lbs (11.2 t) ON RUBBER CREEP SMART CW2									
Over front									
B	A	42.0' (12.8 m)	73.3' (22.4 m)	89.0' (27.1 m)	104.7' (31.9 m)				
	12		53,300						
15		43,600							
20		32,300	33,800	29,700					
25		24,800	27,600	28,200	27,700				
30		19,300	22,300	22,900	23,200				
35			18,100	18,700	19,100				
40			14,900	15,500	15,900				
45			12,300	12,900	13,300				
50			10,200	10,800	11,200				
55			8,500	9,100	9,500				
60			7,000	7,600	8,000				
65			5,800	6,400	6,800				
70				5,300	5,700				
75				4,400	4,700				
80				3,600	3,900				
85					3,200				
90					2,500				
95					2,000				
D	0°								
Telescoping mode	1, 2	2	2	2					
2nd Boom	0	0	0	0					
3rd Boom	0	33	50	67					
4th Boom	0	33	50	67					
Top Boom	0	33	50	67					

COUNTERWEIGHT 24,700lbs (11.2 t) ON RUBBER CREEP SMART CW2									
C	A	42.0' (12.8 m)		73.3' (22.4 m)		89.0' (27.1 m)		104.7' (31.9 m)	
		B	(12.8 m)	B	(22.4 m)	B	(27.1 m)	B	(31.9 m)
0°		35.2	14,700	66.1	4,800	81.8	3,000	97.2	1,900



- A: Boom length in feet
- B: Load radius in feet
- C: Loaded boom angle (°)
- D: Minimum boom angle (°) for indicated length (no load)

NOTE: The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-E2) is based on the standard number of parts of line listed in the chart. Standard number of parts of line for on-rubber operation should be according to the chart.

Boom length in feet (meters)	42.0' (12.8 m)	42.0' to 104.7' (12.8 m to 31.9 m)	Single top jib
Number of parts of line	6	4	1

# WARNING AND OPERATING INSTRUCTIONS FOR ON RUBBER LIFTING CAPACITIES

- Rated lifting capacities on-rubber are in pounds and do not exceed 75% of tipping loads as determined by SAE J765-Crane Stability Test Code.
- Rated lifting capacities shown in the chart are based on condition that crane is set on firm level surfaces with suspension-lock applied. They are based on actual load radius increased by tire deformation and boom deflection.
- If the suspension-lock cylinders contain air, the axle will not be locked completely and rated lifting capacities may not be obtainable. Bleed the cylinders according to the operation safety and maintenance manual.
- Rated lifting capacities are based on proper tire inflation, capacity and condition. Damaged tires are hazardous to safe operation of crane.
- Tires shall be inflated to correct air pressure.
- Over front operation shall be performed within 2 degrees in front of chassis.
- On-rubber lifting with "jib" is not permitted. Maximum permissible boom length is 104.7 ft. (31.9 m).
- When making lift on-rubber stationary, set parking brake.
- For creep operation, boom must be centered over front of machine, slewing lock engaged, and load restrained from slewing. Travel slowly and keep the lifted load as close to the ground as possible, and especially avoid any abrupt steering, accelerating or braking.
- Do not operate the crane while carrying the load.
- Creep is motion for crane not to travel more than 200 ft. (60 m) in any 30 minute period and to travel at the speed of less than 1 mph (1.6 km/h).
- For creep operation, choose the drive mode and proper gear according to the road or working condition.

Tires	Air Pressure
29.5-25 36PR	68 psi. (470 kPa)
29.5-25 40PR	67 psi. (465 kPa)

## NOTES FOR LOAD MOMENT INDICATOR (AML-E2)

- Set AML select keys in accordance with the actually operating crane conditions and don't fail to make sure, before crane operation, that the displays on front panel are correct.
- When operating crane on outriggers:
  - Set "P.T.O." switch to "ON".
  - Press the outrigger state select key to register for the outrigger operation. If the display agrees with the actual state, press the set key to register. After the completion of the registration, the display returns to the crane operation status.
  - Press the lift state select key to register the lift state to be used (single top/jib/boom).
  - Each time the lift state select key is pressed, the display changes. If the display agrees with the actual state, press the set key to register. After the completion of the registration, the display returns to the crane operation status.
  - When erecting and stowing jib, select the status of jib set (Jib state indicative symbol lights up).
- When operating crane on-rubber:
  - Set "P.T.O." switch to "ON".
  - Press the outrigger state select key to register for the on-rubber operation. Each time the outrigger state select key is pressed, the display changes. Select the creep operation, the on-rubber state indicator symbol lights up.
  - Press the lift state select key to register the lift state. However, pay attention to the following.
    - For stationary operation.
      - The front capacities are attainable only when the over front position symbol comes on.
      - When the boom is more than 2 degrees from centered over front of chassis, 360° capacities are in effect.
      - When a load is lifted in the front position and then slewed to the side area, make sure the value of the LOAD MOMENT INDICATOR (AML-E2) is below the 360° lifting capacity.
    - For creep operation.
      - The creep capacities are attainable only when boom is in the straight forward position of chassis and the over front position symbol is on. If boom is not in the straight forward position of chassis, never lift load.
- This machine is equipped with an automatic slewing stopping device. (For the details, see Operation Manual.) But, operate very carefully because the automatic slewing stop does not work in the following cases.
  - During on-rubber operation.
  - When the "P.T.O." switch is set to "OVERRIDE" and the "OVERRIDE" key switch outside the cab is on.
- During crane operation, make sure that the displays on front panel are in accordance with actual operating conditions.
- The displayed values of LOAD MOMENT INDICATOR (AML-E2) are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stopping of loads, supporting surface conditions, inflation of tire, operating speed, side loads, etc.  
For safe operation, it is recommended when extending and lowering boom or slewing, lifting loads shall be appropriately reduced.
- LOAD MOMENT INDICATOR (AML-E2) is intended as an aid to the operator. Under no condition should it be relied upon to replace use of capacity charts and operating instruction. Sole reliance upon LOAD MOMENT INDICATOR (AML-E2) aids in place of good operating practice can cause an accident. The operator must exercise caution to assure safety.
- The lifting capacity differs depending on the outrigger extension width and slewing position.  
Work with the capacity corresponding to the outrigger extension width and slewing position.  
For the relationship among the outrigger extension width, slewing position and lifting capacities, refer to the working area charts.

## GR-900XLL-4 AXLE WEIGHT DISTRIBUTION CHART

	Pounds			Kilograms		
	GWV	Front	Rear	GWV	Front	Rear
Base machine	123,550	61,600	61,950	56,040	27,940	28,100
Remove:						
1. 7.3 ton (6.6 metric ton) hook block	-360	-550	190	-165	-251	86
2. 100 ton (90.7 metric ton) hook block	-1,900	-3,460	1,590	-850	-1,571	721
3. Top jib	-740	-1,180	440	-336	-534	198
4. Base jib	-1,910	-4,160	2,250	-867	-1,886	1,019
5. Removable Counterweight	-24,700	9,470	-34,160	-11,200	4,296	-15,496