



MODEL: **GR-1600XL**

SPEC No.: **GR-1600-2-00102**

DATA FOR OPERATION

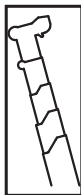
NOT TO BE TAKEN AWAY

TADANO LTD.

GR-1600XL SPECIFICATIONS

Model	: GR-1600XL
Capacity	: 160Ton (145 metric ton) at 8' (2.44m)
Boom Length	: 42.8' (13.1m) to 200.1' (61.0m) (6 sections)
Jib Length	: 33.8' (10.3m), 59.1' (18.0m) (5° ~ 40° offset)
Single Top Length	: 2' 3 ⁹ / ₁₆ " (0.7m) (27° offset)
Available Speeds	
Boom Extension	: 157.3' (47.9m) / 450s
Boom Elevation	: 20° to 60° / 28s
Single Line Speed	
Main Winch Low	: 318fpm (97m/min) at the 4th layer
Main Winch High	: 446fpm (136m/min) at the 4th layer
Aux. Winch Low	: 318fpm (97m/min) at the 4th layer
Aux. Winch High	: 446fpm (136m/min) at the 4th layer
Slewing	: 1.3min ⁻¹ {rpm}
Outrigger Extended Width	: 26' 10 ⁷ / ₈ " (8.2m)
Outrigger Float Size	: ϕ 1' 10 ¹ / ₂ " (ϕ 0.57m)
Max. Load on Outrigger Float	: 159,800lbs (72,500kg)
Tail Swing Radius	: 15' 1" (4.6m)
Wire Rope Main Winch	: ³ / ₄ " (19mm) diameter 1050' (320m) length
Aux. Winch	: ³ / ₄ " (19mm) diameter 738' (225m) length

GR-1600XL RATED LIFTING CAPACITIES (IN POUNDS)



COUNTERWEIGHT 40,100lbs (18.2t)
ON OUTRIGGERS FULLY EXTENDED 26' 10 7/8" (8.20m) SPREAD
360° ROTATION

	A		1	2	9	10	1	2	9	10	1	2	10	11	1	2	10	11
	B		1	2	26	28	3	12	27	29	4	13	30	32	5	14	31	33
C	D		42.8' (13.1m)		57.2' (17.4m)		71.6' (21.8m)		86.1' (26.2m)		100.5' (30.6m)							
8'	*320,000	81,600	200,000	174,200	81,600	174,200	174,200	81,600	174,200	174,200	81,600	174,200	174,200	127,000				
10'	241,400	81,600	200,000	174,200	81,600	174,200	174,200	81,600	174,200	174,200	81,600	174,200	174,200	127,000				
12'	214,500	81,600	200,000	174,200	81,600	174,200	174,200	81,600	174,200	174,200	81,600	174,200	174,200	127,000				
15'	182,500	81,600	182,300	174,200	81,600	174,200	174,200	81,600	174,200	174,200	81,600	174,200	174,200	127,000				
20'	143,700	81,600	143,700	144,600	70,500	81,600	143,300	144,800	81,600	138,700	66,600	81,600	117,100	103,600	56,400	81,600	111,800	106,300
25'	115,300	81,600	115,300	116,400	61,500	81,600	114,900	116,800	81,600	116,200	58,000	81,600	103,600	103,600	50,500	81,600	94,400	106,300
30'	92,600	81,400	92,600	93,700	54,700	76,300	92,200	94,100	51,400	93,500	44,800	73,600	93,000	93,000	44,800	78,700	71,400	95,000
35'	48,700	74,300	76,500	77,600	49,200	68,800	76,100	78,000	46,100	77,400	39,900	66,100	79,600	79,600	39,900	71,200	63,500	78,900
45'		58,000	54,500	55,800	41,000	57,300	53,800	56,000	38,100	54,900	32,800	54,900	55,300	58,000	32,800	60,000	51,800	56,900
50'					37,900	51,400	44,100	46,700	35,300	50,500	30,200	50,500	45,900	48,900	30,200	51,400	44,800	47,800
60'					33,300	37,500	31,100	33,500	30,400	38,100	25,800	38,100	32,400	35,300	25,800	37,500	31,500	34,400
65'									28,700	33,300	24,000	33,300	27,800	30,600	24,000	32,600	26,700	29,500
75'									25,600	25,800	21,400	25,800	20,700	23,600	21,400	22,500	19,600	22,500
80'											20,100				20,100	22,500	17,000	19,600
90'											18,300				18,300	18,100	12,800	15,400
E	68,300	73,400	71,700	75,200	53,400	70,800	66,800	70,500	53,400	68,800	69,400	68,800	67,200	69,400	53,400	67,700	65,500	66,600
F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Telescoping conditions (%)

Tele.1	0	0	0	0	0	0	0	0	0	0	0	0	45	0	0	0	90	45
Tele.2	0	0	45	0	0	0	45	45	0	45	0	0	45	45	0	45	45	45
Tele.3	0	0	0	45	0	0	0	45	0	45	0	45	45	45	0	45	45	45
Tele.4	0	0	0	0	0	45	0	0	45	0	45	45	0	45	90	45	0	45
Tele.5	0	45	0	0	90	45	0	0	90	0	90	45	0	0	90	45	0	0
G	22	6	14	14	6	6	12	12	6	6	6	6	10	9	6	6	8	8

*Over front with special equipment

NOTE : The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-C) is based on the standard number of parts of line listed in the chart.

A : Boom block

B : Boom number

C : Boom length in feet

D : Load radius in feet

E : Maximum capacity without boom pin

F : Minimum boom angle (°) for indicated length (no load)

G : Number of parts of line

RATED LIFTING CAPACITIES

GR-1600XL RATED LIFTING CAPACITIES (IN POUNDS)



COUNTERWEIGHT 40,100lbs (18.2t)
ON OUTRIGGERS FULLY EXTENDED 26' 10 7/8" (8.20m) SPREAD
360° ROTATION

A	1	2	11	3	1	2	3	1	4	5	3	1	6	7	1	7	1	8
B	6	15	34	17	7	16	18	8	20	21	19	9	22	23	10	24	11	25
C	114.9' (35.0m)																	
D	129.3' (39.4m)																	
20'	54,900	77,600	84,700	64,800		66,400	57,300	39,200	43,000		48,700							
25'	50,000	77,600	74,700	61,700	46,500	61,100	56,200	39,200	43,000	52,700	48,700	33,500		37,900				
30'	45,400	77,600	65,700	56,900	42,300	54,900	52,700	38,800	41,700	48,900	48,700	33,500	41,700	37,900	29,800	33,100		
35'	40,600	74,700	58,400	52,700	37,700	45,000	46,700	32,600	37,000	42,300	43,000	32,800	37,700	36,200	29,800	33,100	26,500	22,900
45'	33,300	58,900	47,600	44,800	30,900	41,000	43,900	30,000	34,600	38,600	39,200	30,600	35,500	34,000	29,800	32,000	26,500	22,900
50'	30,600	50,000	43,400	41,700	28,200	34,800	37,700	25,800	30,200	32,600	33,500	26,700	31,100	29,800	27,100	28,400	26,000	22,900
60'	26,200	36,400	33,100	36,600	24,000	30,200	32,800	24,000	28,200	30,200	31,100	25,100	28,900	28,000	25,600	26,900	24,700	22,700
65'	24,300	31,500	28,400	34,200	22,300	22,900	25,600	21,200	25,100	23,100	24,500	22,300	23,600	24,900	22,900	24,000	22,300	20,500
75'	21,400	24,300	21,200	26,700	19,400	20,100	22,700	19,800	23,600	20,300	21,600	20,900	20,700	22,500	21,600	21,400	21,200	19,600
80'	20,100	21,400	18,500	23,800	18,300	15,700	18,100	17,900	19,000	15,900	17,200	18,700	16,100	17,900	18,700	16,800	17,600	17,600
90'	18,100	17,000	14,100	19,200	16,300	13,900	16,300	17,000	17,000	13,900	15,200	17,400	14,300	15,900	16,800	15,000	15,900	15,900
95'	17,200	15,000	12,300	17,400	15,400	10,800	13,200	15,000	13,900	11,000	12,100	14,300	11,200	12,800	13,700	11,900	12,800	12,800
105'	15,700	12,100	9,500	14,300	13,900	9,700	11,900	13,700	12,600	9,700	10,800	13,000	9,900	11,500	12,300	10,600	11,500	11,500
110'					13,200	7,500	9,900	11,500	10,400	7,500	8,600	10,600	7,700	9,300	10,100	8,400	9,000	9,000
120'					11,700			10,400	9,500	6,400	7,700	9,700	6,800	8,400	9,000	7,500	8,200	8,200
125'								9,500	8,600	5,700	6,800	8,800	6,000	7,500	8,200	6,600	7,300	7,300
130'													7,300	6,000	6,600	5,100	5,700	5,700
140'													6,600	5,300	6,000	4,400	5,100	5,100
145'															4,900	3,100	3,700	3,700
155'															4,400	2,400	3,300	3,300
160'																	2,200	2,200
170'																	26,500	22,900
E	53,400	65,700	69,400	53,400	46,500	66,400	53,400	39,200	43,000	52,700	48,700	33,500	41,700	37,900	29,800	33,100	26,500	22,900
F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	21	32

Telescoping conditions (%)

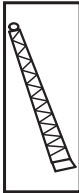
Tele.1	0	45	90	0	0	90	45	0	45	90	90	0	90	45	45	90	90	100
Tele.2	0	45	45	45	0	45	45	45	45	90	45	90	90	90	90	90	90	100
Tele.3	45	45	45	45	90	45	45	90	45	45	45	90	90	90	90	90	90	100
Tele.4	90	45	45	45	90	45	45	90	90	45	45	90	45	90	90	90	90	100
Tele.5	90	45	0	90	90	45	90	90	90	45	90	90	45	45	90	45	90	100
G	6	6	7	6	4	6	6	4	4	4	4	4	4	4	4	4	4	4

A : Boom block
B : Boom number
C : Boom length in feet
D : Load radius in feet
E : Maximum capacity without boom pin
F : Minimum boom angle (°) for indicated length (no load)
G : Number of parts of line

NOTE :The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-C) is based on the standard number of parts of line listed in the chart.

GR – 1600XL RATED LIFTING CAPACITIES (IN POUNDS)

COUNTERWEIGHT 40,100lbs (18.2t) ON OUTRIGGERS FULLY EXTENDED 26' 10 7/8" (8.20m) SPREAD 360° ROTATION														
C		Boom length in feet						C						
		200.1'(61.0m) Boom + 33.8'(10.3m) Hydraulic offset jib												
		5° Tilt		20° Tilt		40° Tilt		5° Tilt		20° Tilt		40° Tilt		
R	W	R	W	R	W	R	W	R	W	R	W			
81.5	48.2'	12,100	57.1'	12,100	66.9'	11,200	81.5	42.3'	13,700	51.5'	13,700	61.4'	12,800	
81	51.2'	12,100	61.0'	12,100	69.2'	11,000	81	45.0'	13,700	54.1'	13,700	63.3'	12,600	
80	56.4'	12,100	65.3'	11,900	74.2'	10,800	80	49.9'	13,700	58.7'	13,400	67.6'	12,100	
79	61.7'	12,100	69.6'	11,500	78.7'	10,400	79	54.8'	13,700	63.3'	13,000	71.9'	11,900	
78	67.3'	12,100	74.2'	11,000	82.7'	10,100	78	59.7'	13,700	67.6'	12,600	75.5'	11,500	
77	71.9'	11,900	80.1'	10,800	86.9'	9,900	77	64.3'	13,700	71.9'	12,300	79.7'	11,200	
76	76.4'	11,500	83.0'	10,400	91.2'	9,700	76	68.2'	13,200	76.1'	11,900	83.3'	10,800	
75	89.6'	11,000	87.6'	10,100	94.8'	9,300	75	72.5'	12,800	79.7'	11,500	87.3'	10,600	
73	102.0'	10,600	96.1'	9,700	103.0'	8,800	73	80.7'	11,900	87.9'	10,800	94.8'	10,100	
70	110.0'	9,500	108.0'	8,800	114.0'	8,400	70	92.5'	11,000	99.4'	10,100	105.0'	9,500	
68	122.0'	9,000	116.0'	8,400	121.0'	7,900	68	100.0'	10,400	106.0'	9,500	112.0'	9,000	
65	121.0'	8,400	127.0'	7,900	132.0'	7,500	65	111.0'	9,500	117.0'	8,800	122.0'	8,400	
63	129.0'	7,900	134.0'	7,500	138.0'	7,300	63	118.0'	9,300	124.0'	8,600	128.0'	8,200	
60	138.0'	7,100	144.0'	6,600	147.0'	6,200	60	128.0'	8,600	133.0'	8,200	137.0'	7,700	
58	144.0'	6,000	149.0'	5,700	152.0'	5,300	58	134.0'	7,700	139.0'	7,300	142.0'	6,800	
55	152.0'	4,600	157.0'	4,400	160.0'	4,200	55	142.0'	6,400	147.0'	6,000	150.0'	5,700	
53	157.0'	4,000	162.0'	3,700	165.0'	3,500	53	147.0'	5,500	152.0'	5,300	154.0'	4,900	
50	165.0'	2,900	170.0'	2,900	172.0'	2,600	50	155.0'	4,400	159.0'	4,200	161.0'	4,000	
48	170.0'	2,400	174.0'	2,200	176.0'	2,200	48	160.0'	4,000	163.0'	3,500	165.0'	3,500	
G														
		1								1,800				
G														



C :Loaded boom angle (°)
R :Load radius in feet

C :Loaded boom angle (°)
R :Load radius in feet
W :Rated lifting capacity in pounds
G :Number of parts of line

NOTE :The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-C) is based on the standard number of parts of line listed in the chart.

GR-1600XL RATED LIFTING CAPACITIES (IN POUNDS)

COUNTERWEIGHT 40,100lbs (18.2t) ON OUTRIGGERS FULLY EXTENDED 26' 10 7/8" (8.20m) SPREAD 360° ROTATION														
C		Boom length in feet						Boom length in feet						
		172.5'(52.6m) Boom + 33.8'(10.3m) Hydraulic offset jib						114.9'(35.0m) Boom + 33.8'(10.3m) Hydraulic offset jib						
		5° Tilt		20° Tilt		40° Tilt		5° Tilt		20° Tilt		40° Tilt		
	R	W	R	W	R	W	R	W	R	W	R	W		
81.5		37.1'	15,900	46.9'	15,900	57.1'	15,000	81.5			29.2'	23,400	37.1'	16,100
81		39.4'	15,900	49.2'	15,900	59.1'	14,800	81			30.5'	23,100	38.4'	15,900
80		44.0'	15,900	53.5'	15,900	63.0'	14,300	80			33.1'	22,500	41.0'	15,700
79		48.6'	15,900	57.7'	15,400	66.6'	13,900	79			35.8'	22,000	43.3'	15,400
78		52.8'	15,900	61.7'	15,000	70.2'	13,400	78			39.0'	21,400	45.9'	15,200
77		57.4'	15,900	65.3'	14,600	73.8'	13,000	77			41.3'	20,900	48.6'	15,200
76		61.7'	15,900	69.2'	14,100	77.4'	12,800	76			43.6'	20,500	50.9'	15,000
75		64.3'	15,200	73.2'	13,700	80.7'	12,300	75	38.7'	28,200	46.3'	20,100	53.2'	14,800
73		72.2'	14,300	80.1'	12,800	87.6'	11,900	73	44.0'	26,900	51.2'	19,200	57.7'	14,300
70		84.3'	13,000	90.6'	11,900	97.1'	11,000	70	51.2'	24,900	58.7'	18,100	64.6'	13,900
68		91.5'	12,300	97.8'	11,500	104.0'	10,600	68	56.4'	23,800	63.3'	17,400	68.9'	13,700
65		102.0'	11,500	107.0'	10,600	113.0'	9,900	65	63.3'	22,300	70.2'	16,800	75.1'	13,400
63		109.0'	11,000	114.0'	10,100	118.0'	9,700	63	67.9'	21,200	74.8'	16,300	79.4'	13,200
60		118.0'	10,100	123.0'	9,700	127.0'	9,300	60	74.8'	19,800	81.4'	15,700	85.3'	13,000
58		123.0'	9,300	128.0'	8,600	132.0'	8,200	58	79.1'	19,200	85.3'	15,200	89.2'	12,800
55		131.0'	7,700	136.0'	7,300	139.0'	6,800	55	85.3'	18,100	91.5'	14,800	94.8'	12,600
53		136.0'	6,800	141.0'	6,400	143.0'	6,000	53	89.2'	17,400	95.1'	14,300	98.1'	12,600
50		143.0'	5,500	147.0'	5,300	150.0'	5,100	50	95.1'	16,800	101.0'	14,100	103.0'	12,600
48		148.0'	4,900	152.0'	4,600	154.0'	4,400	48	98.8'	15,900	104.0'	13,900	106.0'	12,300
45		154.0'	4,000	158.0'	3,700	159.0'	3,500	45	104.0'	14,100	109.0'	13,400	111.0'	12,300
43		158.0'	3,300	162.0'	3,100			43	107.0'	13,200	112.0'	12,600		
40		164.0'	2,600	167.0'	2,400			40	112.0'	12,100	116.0'	11,500		
38		168.0'	2,200	171.0'	2,000			38	115.0'	11,200	119.0'	10,800		
G								35	119.0'	10,400	123.0'	10,100		
								33	122.0'	9,900	125.0'	9,500		
								30	125.0'	9,300	128.0'	9,000		
								28	128.0'	8,800	130.0'	8,600		
								25	131.0'	8,400	133.0'	8,200		
								23	132.0'	7,900				
								20	135.0'	7,500				
G								G						
														2

C :Loaded boom angle (°)
R :Load radius in feet

C :Loaded boom angle (°)

R :Load radius in feet

W :Rated lifting capacity in pounds

G :Number of parts of line

NOTE :The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-C) is based on the standard number of parts of line listed in the chart.

GR – 1600XL RATED LIFTING CAPACITIES (IN POUNDS)

COUNTERWEIGHT 40,100lbs (18.2t) ON OUTRIGGERS FULLY EXTENDED 26' 10 7/8" (8.20m) SPREAD 360° ROTATION															
				Boom length in feet								C			
				200.1'(61.0m) Boom + 59.1'(18.0m) Hydraulic offset jib											
				5° Tilt		20° Tilt		40° Tilt		5° Tilt		20° Tilt		40° Tilt	
C	R	W	R	W	R	W	R	W	R	W	R	W			
	81.5	56.1'	8,200	72.2'	8,200	88.9'	7,100	81.5	47.9'	8,800	65.6'	8,800	81.0'	7,300	
	81	59.1'	8,200	74.5'	8,200	91.9'	7,100	81	49.2'	8,800	68.2'	8,800	83.7'	7,300	
	80	65.3'	8,200	81.0'	8,200	97.1'	6,800	80	56.4'	8,800	73.8'	8,800	88.6'	7,100	
	79	70.9'	8,200	86.3'	8,200	102.0'	6,800	79	61.7'	8,800	78.1'	8,600	92.9'	7,100	
	78	76.8'	8,200	91.5'	7,900	107.0'	6,600	78	66.6'	8,800	83.3'	8,400	97.4'	7,100	
	77	82.0'	8,200	96.1'	7,700	112.0'	6,600	77	71.9'	8,800	87.6'	8,200	102.0'	6,800	
	76	87.9'	8,200	101.0'	7,500	116.0'	6,600	76	77.1'	8,800	92.5'	7,900	106.0'	6,800	
	75	93.5'	8,200	106.0'	7,300	119.0'	6,400	75	82.0'	8,800	97.1'	7,900	110.0'	6,600	
	73	103.0'	7,700	115.0'	6,800	129.0'	6,200	73	92.2'	8,800	106.0'	7,700	118.0'	6,600	
	70	117.0'	7,100	128.0'	6,400	140.0'	5,700	70	106.0'	8,200	119.0'	7,300	129.0'	6,400	
	68	126.0'	6,800	135.0'	6,000	147.0'	5,500	68	114.0'	7,700	127.0'	7,100	137.0'	6,200	
	65	138.0'	6,200	149.0'	5,700	158.0'	5,300	65	126.0'	7,300	138.0'	6,600	147.0'	6,200	
	63	147.0'	6,000	156.0'	5,500	164.0'	5,100	63	135.0'	7,100	146.0'	6,400	154.0'	6,000	
	60	156.0'	4,900	164.0'	4,200	172.0'	3,700	60	146.0'	6,400	155.0'	5,700	162.0'	5,300	
	58	162.0'	4,000	170.0'	3,500	177.0'	3,100	58	152.0'	5,500	161.0'	4,900	167.0'	4,400	
	55	171.0'	2,900	178.0'	2,400	185.0'	2,200	55	160.0'	4,400	169.0'	4,000	175.0'	3,500	
	53	177.0'	2,200	184.0'	2,000	190.0'	1,800	53	165.0'	3,500	175.0'	3,300	179.0'	2,900	
	G														

C :Loaded boom angle (°)

B :Load radius in feet

1

C :Loaded boom angle (°)
R :Load radius in feet
W :Rated lifting capacity in pounds
G :Number of parts of line

NOTE :The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-C) is based on the standard number of parts of line listed in the chart.

GR – 1600XL RATED LIFTING CAPACITIES (IN POUNDS)

COUNTERWEIGHT 40,100lbs (18.2t) ON OUTRIGGERS FULLY EXTENDED 26' 10 7/8" (8.20m) SPREAD 360° ROTATION											
C		Boom length in feet						Boom length in feet			
		172.5'(52.6m) Boom + 59.1'(18.0m) Hydraulic offset jib						114.9'(35.0m) Boom + 59.1'(18.0m) Hydraulic offset jib			
		5° Tilt		20° Tilt		40° Tilt		5° Tilt		20° Tilt	
		R	W	R	W	R	W	R	W	R	W
81.5	45.0'	10,400	61.7'	9,700	76.1'	7,500		27.6'	14,100	44.6'	11,900
81	47.6'	10,400	64.3'	9,700	78.4'	7,500		29.2'	14,100	45.9'	11,700
80	52.8'	10,400	69.2'	9,500	82.7'	7,500		32.8'	14,100	49.2'	11,500
79	57.7'	10,400	73.5'	9,300	86.6'	7,300		36.1'	14,100	52.5'	11,200
78	63.0'	10,400	78.1'	9,000	90.9'	7,300		39.7'	14,100	55.5'	11,000
77	67.3'	10,400	82.0'	8,800	94.8'	7,300		42.7'	14,100	58.4'	10,600
76	72.2'	10,400	86.3'	8,600	98.1'	7,100		46.3'	14,100	61.0'	10,400
75	76.8'	10,400	90.9'	8,600	102.0'	7,100		49.2'	14,100	64.0'	10,100
73	86.6'	10,100	98.8'	8,200	110.0'	6,800		55.8'	13,200	70.2'	9,900
70	98.4'	9,500	111.0'	7,700	120.0'	6,600		64.6'	12,300	78.1'	9,300
68	114.0'	9,300	118.0'	7,500	127.0'	6,600		70.9'	11,700	83.7'	9,000
65	119.0'	8,800	129.0'	7,300	136.0'	6,400		79.4'	11,000	91.5'	8,600
63	126.0'	8,400	135.0'	7,100	143.0'	6,400		84.7'	10,600	96.5'	8,400
60	136.0'	7,700	145.0'	6,800	152.0'	6,200		92.5'	10,100	104.0'	7,900
58	142.0'	6,800	151.0'	6,000	156.0'	5,500		97.4'	9,700	109.0'	7,900
55	151.0'	5,500	159.0'	4,900	163.0'	4,400		105.0'	9,300	115.0'	7,500
53	189.0'	4,900	164.0'	4,200	168.0'	3,700		110.0'	9,000	120.0'	7,500
50	164.0'	3,700	172.0'	3,300	174.0'	2,900		116.0'	8,600	126.0'	7,300
48	170.0'	3,100	177.0'	2,900	178.0'	2,400		121.0'	8,400	130.0'	7,300
45	177.0'	2,400	183.0'	2,000	184.0'	1,800		127.0'	8,200	135.0'	7,100
43	182.0'	1,800						131.0'	7,900	138.0'	7,100
G				1				137.0'	7,700	143.0'	6,800
								143.0'	7,500	146.0'	6,800
								145.0'	7,300	150.0'	6,800
								148.0'	7,300	153.0'	6,800
								152.0'	6,800	156.0'	6,600
								155.0'	6,600	157.0'	6,200
								158.0'	6,200	160.0'	6,000
								160.0'	6,000		
								162.0'	5,500		
G				1							

C :Loaded boom angle (°)

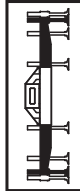
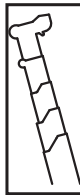
R :Load radius in feet

W :Rated lifting capacity in pounds

G :Number of parts of line

NOTE :The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-C) is based on the standard number of parts of line listed in the chart.

GR-1600XL RATED LIFTING CAPACITIES (IN POUNDS)



COUNTERWEIGHT 40,100lbs (18.2t)
ON OUTRIGGERS MID EXTENDED 23' 11 3/8" (7.30m) SPREAD
360° ROTATION

A	1	2	9	10	1	2	9	10	1	2	10	11	1	2	10	11
B	1	2	26	28	3	12	27	29	4	13	30	32	5	14	31	33
C	42.8'	57.2'	71.6'	86.1'	100.5'	111.800	127.000	145.500	164.000	182.500	201.000	219.500	238.000	256.500	275.000	293.500
D	13.1m	17.4m	21.8m	26.2m	30.6m	35.0m	39.4m	43.8m	48.2m	52.6m	57.0m	61.4m	65.8m	70.2m	74.6m	79.0m
8'	267,000	81,600	200,000	174,200	81,600	81,600	174,200	174,200	81,600	81,600	174,200	174,200	81,600	81,600	174,200	174,200
10'	233,700	81,600	200,000	174,200	81,600	81,600	174,200	174,200	81,600	81,600	174,200	174,200	81,600	81,600	174,200	174,200
12'	206,800	81,600	200,000	174,200	81,600	81,600	174,200	174,200	81,600	81,600	174,200	174,200	81,600	81,600	174,200	174,200
15'	175,300	81,600	175,000	174,200	81,600	81,600	174,200	174,200	81,600	81,600	174,200	174,200	81,600	81,600	174,200	174,200
20'	137,100	81,600	137,100	138,000	70,500	81,600	136,700	138,200	66,600	81,600	137,800	117,100	56,400	81,600	94,400	106,300
25'	111,100	81,600	111,100	112,000	61,500	81,600	110,700	112,400	58,000	81,600	112,000	103,600	50,500	81,600	81,400	106,300
30'	92,400	81,400	92,400	93,300	54,700	76,300	91,900	93,700	51,400	73,600	93,000	93,000	44,800	78,700	71,400	94,600
35'	48,700	73,900	68,600	70,300	49,200	68,800	67,900	71,000	46,100	66,100	69,900	73,600	39,900	71,200	63,500	72,300
45'		46,700	42,300	44,100	41,000	49,200	41,700	44,300	38,100	49,800	43,400	46,700	32,800	49,200	42,500	45,600
50'					37,900	41,000	33,700	36,400	35,300	41,400	35,500	38,600	30,200	41,000	34,400	37,500
60'					29,800	29,500	23,100	25,600	30,400	30,200	24,500	27,600	25,800	29,500	23,600	26,500
65'									27,600	26,000	20,700	23,600	24,000	25,600	19,600	22,500
75'									21,400	20,100	14,800	17,600	21,400	19,400	13,700	16,500
80'													19,200	17,000	11,500	14,100
90'													15,400	13,200	7,700	10,600
E	68,300	73,400	71,700	75,200	53,400	70,800	66,800	70,500	53,400	68,800	67,200	69,400	53,400	67,700	65,500	66,600
F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NOTE : The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-C) is based on the standard number of parts of line listed in the chart.

- A : Boom block
- B : Boom number
- C : Boom length in feet
- D : Load radius in feet
- E : Maximum capacity without boom pin
- F : Minimum boom angle (°) for indicated length (no load)
- G : Number of parts of line

GR - 1600XL RATED LIFTING CAPACITIES (IN POUNDS)



COUNTERWEIGHT 40,100lbs (18.2t) ON OUTRIGGERS MID EXTENDED 23'11 3/8" (7.30m) SPREAD 360° ROTATION

A	1	2	11	3	1	3	1	4	5	3	1	6	7	1	7	1	8			
B	6	15	34	17	7	16	18	8	20	21	9	22	23	10	24	11	25			
C																				
D	114.9' (35.0m)				129.3' (39.4m)				143.7' (43.8m)				158.1' (48.2m)				172.5' (52.6m)			
20'	54,900	77,600	84,700	64,800			57,300													
25'	50,000	77,600	74,700	61,700	46,500	66,400	57,300	39,200	43,000											
30'	45,400	77,600	65,700	56,900	42,300	61,100	56,200	39,200	43,000	52,700	48,700	37,900								
35'	40,600	74,700	58,400	52,700	37,700	54,900	52,700	38,800	41,700	48,900	43,000	41,700	37,900	29,800	33,100					
45'	33,300	47,800	44,300	44,800	30,900	45,000	46,700	32,600	37,000	42,300	43,000	37,000	36,200	29,800	33,100	26,500	22,900			
50'	30,600	39,700	36,400	41,700	28,200	38,400	41,200	30,000	34,600	38,600	39,200	35,500	34,000	29,800	32,000	26,500	22,900			
60'	26,200	28,400	25,400	31,100	24,000	27,100	29,800	25,800	30,200	27,300	28,900	27,800	29,500	27,100	28,400	26,000	22,900			
65'	24,300	24,500	21,400	26,900	22,300	23,100	25,800	24,000	26,700	23,400	24,700	23,800	25,600	25,600	24,500	24,700	22,700			
75'	21,400	18,300	15,200	20,700	19,400	17,000	19,600	21,200	20,500	17,200	18,500	17,600	19,400	20,300	18,300	19,200	19,200			
80'	19,600	15,900	13,000	18,300	18,300	14,800	17,200	19,200	18,100	14,800	16,300	15,200	17,000	17,900	15,900	16,800	16,800			
90'	15,700	12,100	9,300	14,600	15,400	10,800	13,200	15,200	14,100	11,000	12,300	11,500	13,000	13,900	12,100	13,000	13,000			
95'	14,100	10,600	7,700	13,000	13,900	9,300	11,700	13,700	12,600	9,500	10,800	9,900	11,500	12,300	10,600	11,200	11,500			
105'	11,500	8,200	5,300	10,400	11,200	6,800	9,300	11,000	9,900	6,800	8,200	7,300	8,800	9,700	7,900	8,600	8,600			
110'					10,100	5,700	8,200	9,900	8,800	5,700	7,100	6,200	7,700	8,600	6,800	7,500	7,500			
120'					8,200	4,000	6,400	7,900	6,800	3,700	5,100	4,200	5,700	6,600	4,900	5,500	5,700			
125'								7,100	6,000	3,100	4,400	3,300	4,900	5,700	4,000	4,900	4,900			
130'								6,400	5,300	2,200	3,500	2,600	4,200	5,100	3,300	4,000	4,000			
140'													2,900	3,700		2,600	2,600			
145'													2,400	3,100		2,200	2,200			
E	53,400	65,700	69,400	53,400	46,500	66,400	53,400	39,200	43,000	52,700	48,700	41,700	37,900	29,800	33,100	26,500	22,900			
F	0	0	0	0	0	0	0	0	0	14	0	26	0	28	33	36	43			
Telescoping conditions (%)																				
Tele.1	0	45	90	0	0	90	45	0	45	90	90	45	45	90	90	90	100			
Tele.2	0	45	45	45	0	45	45	45	45	90	45	90	90	90	90	90	100			
Tele.3	45	45	45	45	90	45	45	90	45	45	45	90	90	90	90	90	100			
Tele.4	90	45	45	45	90	45	45	90	90	45	45	45	90	90	90	90	100			
Tele.5	90	45	0	90	90	45	90	90	90	45	90	45	45	90	45	90	100			
G	6	6	7	6	4	6	6	4	4	4	4	4	4	4	4	4	4			

A : Boom block
B : Boom number
C : Boom length in feet
D : Load radius in feet
E : Maximum capacity without boom pin
F : Minimum boom angle (°) for indicated length (no load)
G : Number of parts of line

NOTE :The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML -C) is based on the standard number of parts of line listed in the chart.

GR – 1600XL RATED LIFTING CAPACITIES (IN POUNDS)

COUNTERWEIGHT 40,100lbs (18.2t) ON OUTRIGGERS MID EXTENDED 23' 11 3/8" (7.30m) SPREAD 360° ROTATION											
C		Boom length in feet						Boom length in feet			
		200.1'(61.0m) Boom + 33.8'(10.3m) Hydraulic offset jib						187.0'(57.0m) Boom + 33.8'(10.3m) Hydraulic offset jib			
		5° Tilt		20° Tilt		40° Tilt		5° Tilt		20° Tilt	
C	G	R	W	R	W	R	W	R	W	R	W
		81.5	48.2'	12,100	57.1'	12,100	66.9'	42.3'	13,700	51.5'	13,700
		81	51.2'	12,100	61.0'	12,100	69.2'	45.0'	13,700	54.1'	13,700
		80	56.4'	12,100	65.3'	11,900	74.2'	49.9'	13,700	58.7'	13,400
		79	61.7'	12,100	69.6'	11,500	78.7'	54.8'	13,700	63.3'	13,000
		78	67.3'	12,100	74.2'	11,000	82.7'	59.7'	13,700	67.6'	12,600
		77	71.9'	11,900	80.1'	10,800	86.9'	64.3'	13,700	71.9'	12,300
		76	76.4'	11,500	83.0'	10,400	91.2'	68.2'	13,200	76.1'	11,900
		75	80.4'	11,000	87.6'	10,100	94.8'	72.5'	12,800	79.7'	11,500
		73	90.0'	10,600	96.1'	9,700	103.0'	80.7'	11,900	87.9'	10,800
		70	102.0'	9,500	108.0'	8,800	114.0'	92.5'	11,000	99.4'	10,100
		68	110.0'	9,000	116.0'	8,200	121.0'	100.0'	10,400	106.0'	9,500
		65	118.0'	6,600	125.0'	6,200	129.0'	110.0'	8,600	116.0'	7,900
		63	124.0'	5,500	131.0'	5,100	135.0'	116.0'	7,300	121.0'	6,600
		60	133.0'	4,000	139.0'	3,500	143.0'	124.0'	5,500	130.0'	5,100
		58	139.0'	3,100	145.0'	2,900	149.0'	130.0'	4,400	135.0'	4,200
		55	148.0'	2,000	153.0'	1,800		138.0'	3,300	143.0'	3,100
		53						144.0'	2,600	148.0'	2,400
		50						152.0'	1,800		
		G									

C :Loaded boom angle (°)

R :Load radius in feet

W :Rated lifting capacity in pounds

G :Number of parts of line

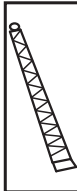
NOTE :The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML –C)

is based on the standard number of parts of line listed in the chart.

GR-1600XL RATED LIFTING CAPACITIES (IN POUNDS)

COUNTERWEIGHT 40,100lbs (18.2t) ON OUTRIGGERS MID EXTENDED 23' 11 3/8" (7.30m) SPREAD 360° ROTATION															
C		Boom length in feet						C		Boom length in feet					
		172.5'(52.6m) Boom + 33.8'(10.3m) Hydraulic offset jib								114.9'(35.0m) Boom + 33.8'(10.3m) Hydraulic offset jib					
		5° Tilt		20° Tilt		40° Tilt				5° Tilt		20° Tilt		40° Tilt	
R	W	R	W	R	W	R	W	R	W	R	W	R	W		
81.5	37.1'	15,900	46.9'	15,900	57.1'	15,000	57.1'	15,000	81.5			29.2'	23,400	37.1'	16,100
81	39.4'	15,900	49.2'	15,900	59.1'	14,800	59.1'	14,800	81			30.5'	23,100	38.4'	15,900
80	44.0'	15,900	53.5'	15,900	63.0'	14,300	63.0'	14,300	80			33.1'	22,500	41.0'	15,700
79	48.6'	15,900	57.7'	15,400	66.6'	13,900	66.6'	13,900	79			35.8'	22,000	43.3'	15,400
78	52.8'	15,900	61.7'	15,000	70.2'	13,400	70.2'	13,400	78			39.0'	21,400	45.9'	15,200
77	57.4'	15,900	65.3'	14,600	73.8'	13,000	73.8'	13,000	77			41.3'	20,900	48.6'	15,200
76	61.7'	15,900	69.2'	14,100	77.4'	12,800	77.4'	12,800	76			43.6'	20,500	50.9'	15,000
75	64.3'	15,200	73.2'	13,700	80.7'	12,300	80.7'	12,300	75	38.7'	28,200	46.3'	20,100	53.2'	14,800
73	72.2'	14,300	80.1'	12,800	87.6'	11,900	87.6'	11,900	73	44.0'	26,900	51.2'	19,200	57.7'	14,300
70	84.3'	13,000	90.6'	11,900	97.1'	11,000	97.1'	11,000	70	51.2'	24,900	58.7'	18,100	64.6'	13,900
68	91.5'	12,300	97.8'	11,500	104.0'	10,600	104.0'	10,600	68	56.4'	23,800	63.3'	17,400	68.9'	13,700
65	100.0'	10,400	107.0'	9,500	112.0'	8,600	112.0'	8,600	65	63.3'	22,300	70.2'	16,800	75.1'	13,400
63	106.0'	8,800	112.0'	7,900	117.0'	7,500	117.0'	7,500	63	67.9'	21,200	74.8'	16,300	79.4'	13,200
60	115.0'	6,800	120.0'	6,200	124.0'	5,700	124.0'	5,700	60	74.8'	19,800	81.4'	15,700	85.3'	13,000
58	120.0'	5,700	125.0'	5,300	129.0'	4,900	129.0'	4,900	58	79.1'	18,500	85.3'	15,200	89.2'	12,800
55	128.0'	4,400	133.0'	4,000	136.0'	3,700	136.0'	3,700	55	85.0'	15,900	91.5'	14,800	94.8'	12,600
53	133.0'	3,500	137.0'	3,300	141.0'	3,100	141.0'	3,100	53	88.9'	14,600	95.5'	13,400	98.1'	12,600
50	140.0'	2,400	144.0'	2,200	147.0'	2,200	147.0'	2,200	50	94.5'	12,600	101.0'	11,700	103.0'	11,200
48	145.0'	2,000	149.0'	1,800					48	98.1'	11,500	104.0'	10,800	106.0'	10,400
G		1						2							

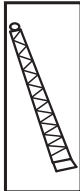
GR-1600XL RATED LIFTING CAPACITIES (IN POUNDS)

COUNTERWEIGHT 40,100lbs (18.2t) ON OUTRIGGERS MID EXTENDED 23' 11 3/8" (7.30m) SPREAD 360° ROTATION																						
																						
C	Boom length in feet										C	Boom length in feet										
	200.1'(61.0m) Boom + 59.1'(18.0m) Hydraulic offset jib											187.0'(57.0m) Boom + 59.1'(18.0m) Hydraulic offset jib										
	5° Tilt		20° Tilt		40° Tilt		5° Tilt		20° Tilt			40° Tilt		5° Tilt		20° Tilt		40° Tilt				
	R	W	R	W	R	W	R	W	R	W		R	W	R	W	R	W					
81.5	56.1'	8,200	72.2'	8,200	88.9'	7,100	81.5	47.9'	8,800	65.6'	8,800	81.0'	7,300	81	49.2'	8,800	68.2'	8,800	83.7'	7,300		
80	65.3'	8,200	81.0'	8,200	97.1'	6,800	80	56.4'	8,800	73.8'	8,800	88.6'	7,100	79	61.7'	8,800	78.1'	8,600	92.9'	7,100		
78	76.8'	8,200	91.5'	7,900	107.0'	6,600	78	66.6'	8,800	83.3'	8,400	97.4'	7,100	77	71.9'	8,800	87.6'	8,200	102.0'	6,800		
76	87.9'	8,200	101.0'	7,500	116.0'	6,600	76	77.1'	8,800	92.5'	7,900	106.0'	6,800	75	82.0'	8,800	97.1'	7,900	110.0'	6,600		
73	103.0'	7,700	115.0'	6,800	129.0'	6,200	73	92.2'	8,800	106.0'	7,700	118.0'	6,600	70	106.0'	8,200	119.0'	7,300	129.0'	6,400		
68	125.0'	6,400	135.0'	5,500	145.0'	4,600	68	114.0'	7,700	126.0'	6,800	135.0'	6,000	65	124.0'	6,200	135.0'	5,300	144.0'	4,600		
63	141.0'	3,500	150.0'	3,100	159.0'	2,600	63	131.0'	5,100	141.0'	4,200	150.0'	3,700	60	140.0'	3,500	150.0'	3,100	158.0'	2,600		
60	151.0'	2,400	159.0'	2,000			58	146.0'	2,900	156.0'	2,400	163.0'	2,000	55	155.0'	1,800						
G							1		G							1						

C :Loaded boom angle (°)
R :Load radius in feet
W :Rated lifting capacity in pounds
G :Number of parts of line

NOTE :The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-C) is based on the standard number of parts of line listed in the chart.

GR – 1600XL RATED LIFTING CAPACITIES (IN POUNDS)

COUNTERWEIGHT 40,100lbs (18.2t) ON OUTRIGGERS MID EXTENDED 23' 11 3/8" (7.30m) SPREAD 360° ROTATION																					
																					
C	Boom length in feet								C	Boom length in feet											
	172.5'(52.6m) Boom + 59.1'(18.0m) Hydraulic offset jib									114.9'(35.0m) Boom + 59.1'(18.0m) Hydraulic offset jib											
	5° Tilt				20° Tilt					5° Tilt				20° Tilt							
	R	W	R	W	R	W	R	W		R	W	R	W	R	W						
81.5	45.0'	10,400	61.7'	9,700	76.1'	7,500			81.5	30.2'	14,100	44.6'	11,900	58.7'	8,200						
81	47.6'	10,400	64.3'	9,700	78.4'	7,500			81	31.5'	14,100	45.9'	11,700	60.4'	8,200						
80	52.8'	10,400	69.2'	9,500	82.7'	7,500			80	35.1'	14,100	49.2'	11,500	63.3'	7,900						
79	57.7'	10,400	73.5'	9,300	86.6'	7,300			79	38.4'	14,100	52.5'	11,200	65.9'	7,900						
78	63.0'	10,400	78.1'	9,000	90.9'	7,300			78	41.7'	14,100	55.5'	11,000	68.6'	7,900						
77	67.3'	10,400	82.0'	8,800	94.8'	7,300			77	44.6'	14,100	58.4'	10,600	71.2'	7,700						
76	72.2'	10,400	86.3'	8,600	98.1'	7,100			76	47.9'	14,100	61.0'	10,400	73.8'	7,700						
75	76.8'	10,400	90.9'	8,600	102.0'	7,100			75	51.2'	14,100	64.0'	10,100	76.4'	7,700						
73	86.6'	10,100	98.8'	8,200	110.0'	6,800			73	57.1'	13,200	70.2'	9,900	81.7'	7,500						
70	98.4'	9,500	111.0'	7,700	120.0'	6,600			70	65.9'	12,300	78.1'	9,300	88.9'	7,300						
68	114.0'	9,300	118.0'	7,500	127.0'	6,600			68	71.5'	11,700	83.7'	9,000	93.5'	7,100						
65	116.0'	7,500	128.0'	6,400	135.0'	5,500			65	80.1'	11,000	91.5'	8,600	100.0'	7,100						
63	123.0'	6,200	134.0'	5,300	141.0'	4,600			63	85.3'	10,600	96.5'	8,400	105.0'	7,100						
60	132.0'	4,600	142.0'	4,000	148.0'	3,500			60	93.2'	10,100	104.0'	7,900	112.0'	6,800						
58	138.0'	3,700	148.0'	3,300	154.0'	2,900			58	98.1'	9,700	109.0'	7,900	116.0'	6,800						
55	147.0'	2,600	156.0'	2,200	161.0'	2,000			55	105.0'	9,300	115.0'	7,500	122.0'	6,600						
53	153.0'	2,000							53	110.0'	9,000	120.0'	7,500	125.0'	6,600						
G								1	50	117.0'	8,600	126.0'	7,300	130.0'	6,600						
									48	121.0'	8,400	130.0'	7,300	134.0'	6,600						
									45	127.0'	7,500	135.0'	6,800	138.0'	6,400						
									43	131.0'	6,800	138.0'	6,200								
									40	136.0'	6,000	143.0'	5,500								
									38	139.0'	5,500	146.0'	5,100								
									35	144.0'	4,900	150.0'	4,600								
									33	147.0'	4,400	152.0'	4,200								
									30	151.0'	4,000	155.0'	3,700								
									28	154.0'	3,700	157.0'	3,500								
									25	157.0'	3,300	159.0'	3,300								
									23	159.0'	3,100										
									20	162.0'	2,900										
									G												
																	1				

C :Loaded boom angle (°)
R :Load radius in feet

C :Loaded boom angle (°)

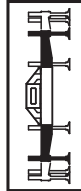
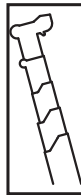
R :Load radius in feet

W :Rated lifting capacity in pounds

G :Number of parts of line

NOTE :The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-C) is based on the standard number of parts of line listed in the chart.

GR-1600XL RATED LIFTING CAPACITIES (IN POUNDS)



COUNTERWEIGHT 40,100lbs (18.2t)
ON OUTRIGGERS MID EXTENDED 18' 1/2" (5.50m) SPREAD
360° ROTATION

A	1	1	1	9	10	1	2	12	9	10	1	4	13	2	10	11	1	2	10	11	1	5	14	31	10	11
B	1	2	2	26	28	3	1	3	27	29	10	4	13	2	30	32	5	14	31	32	5	14	31	10	11	
C	42.8'	57.2' (17.4m)					71.6' (21.8m)					86.1' (26.2m)					100.5' (30.6m)									
D	13.1m	57.2' (17.4m)					71.6' (21.8m)					86.1' (26.2m)					100.5' (30.6m)									
8'	247,100	81,600	200,000	174,200	174,200	81,600	81,600	174,200	174,200	174,200	81,600		81,600			127,000										
10'	213,600	81,600	200,000	174,200	174,200	81,600	81,600	174,200	174,200	174,200	81,600		81,600		145,500	127,000										
12'	187,000	81,600	186,700	174,200	174,200	81,600	81,600	174,200	174,200	174,200	81,600	81,600	81,600	81,600	145,500	127,000										
15'	156,300	81,600	156,300	157,200	157,200	81,600	81,600	155,900	157,600	157,600	81,600	78,300	81,600	81,600	145,500	127,000										
20'	120,600	81,600	120,600	121,500	121,500	70,500	81,600	120,200	121,900	121,900	81,600	66,600	81,600	81,600	121,300	117,100	56,400	81,600	94,400	106,300						
25'	84,700	81,600	84,700	86,400	86,400	61,500	81,600	83,800	87,100	87,100	81,600	58,000	81,600	81,600	86,200	89,900	50,500	81,600	81,400	88,800						
30'	60,200	65,000	60,200	61,700	61,700	54,700	67,700	59,500	62,400	62,400	67,700	51,400	68,300	61,500	65,000	65,000	44,800	67,700	60,400	63,700						
35'	44,800	49,600	45,000	46,500	46,500	49,200	52,000	44,300	47,000	47,000	52,000	46,100	52,500	46,100	49,400	49,400	39,900	52,000	45,200	48,300						
45'		31,500	27,600	28,900	28,900	34,000	33,700	26,900	29,300	29,300	33,700	35,700	34,200	28,400	31,500	31,500	32,800	33,700	27,600	30,400						
50'						28,000	28,000	21,400	23,800	23,800	28,000	30,000	28,400	22,900	25,800	25,800	30,200	28,000	22,000	24,900						
60'						20,100	19,800	13,700	15,900	15,900	19,800	21,800	20,300	15,000	17,900	17,900	22,000	19,800	14,100	16,800						
65'												18,700	17,400	12,100	15,000	15,000	19,000	17,000	11,200	13,900						
75'												14,100	12,800	7,900	10,600	10,600	14,300	12,300	6,800	9,500						
80'																	12,600	10,600	5,100	7,700						
90'																	9,700	7,700	2,400	5,100						
E	68,300	73,400	71,700	75,200	75,200	53,400	70,800	66,800	70,500	70,500	68,800	53,400	68,800	67,200	69,400	69,400	53,400	67,700	65,500	66,600						
F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0						
Telescoping conditions (%)																										
Tele.1	0	0	0	0	0	0	0	0	45	0	45	0	0	0	45	0	0	0	90	45						
Tele.2	0	0	45	0	0	0	0	0	45	45	0	0	0	0	45	45	0	45	45	45						
Tele.3	0	0	0	0	45	0	0	0	0	45	0	0	45	0	45	45	0	45	45	45						
Tele.4	0	0	0	0	0	0	0	45	0	0	0	45	45	0	45	45	90	45	0	45						
Tele.5	0	45	0	0	0	90	45	0	0	0	0	90	45	45	0	0	90	45	0	0						
G	22	6	14	14	14	6	6	6	12	12	6	6	6	6	10	9	6	6	8	8						

GR-1600XL RATED LIFTING CAPACITIES (IN POUNDS)



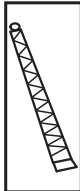
COUNTERWEIGHT 40,100lbs (18.2t) ON OUTRIGGERS MID EXTENDED 18' 1/2" (5.50m) SPREAD 360° ROTATION

A	1	2	11	3	1	2	3	1	4	5	3	1	6	7	1	7	1	8
B	6	15	34	17	7	16	18	8	20	21	19	9	22	23	10	24	11	25
C	114.9' (35.0m)																	
D	129.3' (39.4m)																	
20'	54,900	77,600	84,700	64,800			57,300		43,000		48,700		158.1' (48.2m)			172.5' (52.6m)		
25'	50,000	77,600	74,700	61,700	46,500	66,400	57,300	39,200	43,000	52,700	48,700	33,500						
30'	45,400	66,400	62,600	56,900	42,300	61,100	56,200	38,200	43,000	48,900	48,700	33,500	41,700	37,900				
35'	40,600	50,700	47,200	52,700	37,700	49,200	52,200	38,800	41,700	48,900	48,700	33,500	41,700	37,900	29,800	33,100		
45'	33,300	32,600	29,300	35,300	30,900	31,300	34,000	32,600	35,100	31,500	33,100	32,800	32,000	33,700	29,800	32,800	26,500	22,900
50'	30,600	26,900	23,600	29,300	28,200	25,600	28,200	30,000	29,300	25,800	27,300	29,500	26,200	28,000	28,900	26,900	26,500	22,900
60'	22,500	18,700	15,700	21,200	22,300	17,400	20,100	22,000	20,900	17,600	19,200	21,400	18,100	19,800	20,700	19,000	19,800	19,800
65'	19,400	15,900	12,800	18,300	19,400	14,600	17,000	19,200	18,100	14,800	16,100	18,300	15,200	17,000	17,900	15,900	16,800	16,800
75'	14,800	11,200	8,400	13,700	14,600	10,100	12,600	14,600	13,400	10,100	11,500	13,700	10,600	12,300	13,200	11,200	12,100	12,100
80'	13,000	9,500	6,600	11,900	12,800	8,400	10,600	12,600	11,500	8,400	9,700	11,900	8,800	10,400	11,200	9,500	10,400	10,400
90'	10,100	6,600	3,700	8,800	9,900	5,300	7,700	9,700	8,600	5,500	6,800	8,800	6,000	7,500	8,400	6,600	7,500	7,500
95'	8,800	5,500	2,600	7,700	8,600	4,200	6,600	8,400	7,300	4,400	5,500	7,700	4,600	6,400	7,100	5,300	6,200	6,200
105'	6,800	3,500		5,700	6,600	2,200	4,600	6,400	5,300	2,400	3,500	5,700	2,600	4,200	5,100	3,300	4,200	4,200
110'					5,700		3,700	5,500	4,400		2,600	4,900		3,300	4,200	2,400	3,300	3,300
120'					4,200		2,400	4,000	3,100			3,300			2,600			
125'								3,300	2,400									
130'								2,900										
E	53,400	65,700	69,400	53,400	46,500	66,400	53,400	39,200	43,000	52,700	48,700	33,500	41,700	37,900	29,800	33,100	26,500	22,900
F	0	0	25	0	0	27	0	0	19	38	32	35	44	37	41	48	50	54
Telescoping conditions (%)																		
Tele.1	0	45	90	0	0	90	45	0	45	90	90	0	90	45	45	90	90	100
Tele.2	0	45	45	45	0	45	45	45	45	90	45	90	90	90	90	90	90	100
Tele.3	45	45	45	45	90	45	45	90	45	45	45	90	90	90	90	90	90	100
Tele.4	90	45	45	45	90	45	45	90	90	45	45	90	45	90	90	90	90	100
Tele.5	90	45	0	90	90	45	90	90	90	45	90	90	45	45	90	45	90	100
G	6	6	7	6	4	6	6	4	4	4	4	4	4	4	4	4	4	4

A : Boom block
B : Boom number
C : Boom length in feet
D : Load radius in feet
E : Maximum capacity without boom pin
F : Minimum boom angle (°) for indicated length (no load)
G : Number of parts of line

NOTE :The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-C) is based on the standard number of parts of line listed in the chart.

GR-1600XL RATED LIFTING CAPACITIES (IN POUNDS)

COUNTERWEIGHT 40,100lbs (18.2t) ON OUTRIGGERS MID EXTENDED 18' 1/2" (5.50m) SPREAD 360° ROTATION																									
																									
C	Boom length in feet								C	Boom length in feet															
	200.1'(61.0m) Boom + 33.8'(10.3m) Hydraulic offset jib									187.0'(57.0m) Boom + 33.8'(10.3m) Hydraulic offset jib															
	5° Tilt				20° Tilt					40° Tilt				5° Tilt				20° Tilt				40° Tilt			
	R	W	R	W	R	W	R	W		R	W	R	W	R	W	R	W	R	W						
	81.5	48.2'	12,100	57.1'	12,100	66.9'	11,200			81.5	42.3'	13,700	51.5'	13,700	61.4'	12,800		81	45.0'	13,700	54.1'	13,700	63.3'	12,600	
80	56.4'	12,100	65.3'	11,900	74.2'	10,800		80	49.9'	13,700	58.7'	13,400	67.6'	12,100		79	54.8'	13,700	63.3'	13,000	71.9'	11,900			
78	67.3'	12,100	74.2'	11,000	82.7'	10,100		78	59.7'	13,700	67.6'	12,600	75.5'	11,500		77	64.3'	13,700	71.9'	12,300	79.7'	11,200			
76	76.4'	11,500	83.0'	10,400	91.2'	9,700		76	68.2'	13,200	76.1'	11,900	83.3'	10,800		75	72.5'	12,800	79.7'	11,500	87.3'	10,600			
73	86.6'	8,600	93.8'	7,700	99.7'	6,800		73	79.7'	10,800	86.6'	9,700	92.5'	8,600		70	88.9'	7,700	95.8'	7,100	101.0'	6,400			
68	103.0'	4,400	109.0'	4,000	115.0'	3,700		68	95.5'	6,200	102.0'	5,500	107.0'	5,100		65	105.0'	4,200	111.0'	3,700	115.0'	3,500			
65	112.0'	2,600	119.0'	2,400	124.0'	2,200		63	111.0'	3,100	116.0'	2,900	121.0'	2,600		60	120.0'	1,800							
G								G								G									

C :Loaded boom angle (°)

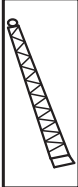
R :Load radius in feet

W :Rated lifting capacity in pounds

G :Number of parts of line

NOTE :The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-C) is based on the standard number of parts of line listed in the chart.

GR-1600XL RATED LIFTING CAPACITIES (IN POUNDS)

 COUNTERWEIGHT 40,100lbs (18.2t) ON OUTRIGGERS MID EXTENDED 18' 1/2" (5.50m) SPREAD 360° ROTATION 																			
C		Boom length in feet						C				Boom length in feet							
		200.1'(61.0m) Boom + 59.1'(18.0m) Hydraulic offset jib										187.0'(57.0m) Boom + 59.1'(18.0m) Hydraulic offset jib							
		5° Tilt		20° Tilt		40° Tilt						5° Tilt		20° Tilt		40° Tilt			
		R	W	R	W	R	W					R	W	R	W	R	W		
81.5		56.1'	8,200	72.2'	8,200	88.9'	7,100	81.5	47.9'	8,800	65.6'	8,800	81.0'	7,300					
81		59.1'	8,200	74.5'	8,200	91.9'	7,100	81	49.2'	8,800	68.2'	8,800	83.7'	7,300					
80		65.3'	8,200	81.0'	8,200	97.1'	6,800	80	56.4'	8,800	73.8'	8,800	88.6'	7,100					
79		70.9'	8,200	86.3'	8,200	102.0'	6,800	79	61.7'	8,800	78.1'	8,600	92.9'	7,100					
78		76.8'	8,200	91.5'	7,900	107.0'	6,600	78	66.6'	8,800	83.3'	8,400	97.4'	7,100					
77		82.0'	8,200	96.1'	7,700	112.0'	6,600	77	71.9'	8,800	87.6'	8,200	102.0'	6,800					
76		87.9'	8,200	101.0'	7,300	114.0'	6,000	76	77.1'	8,800	92.5'	7,900	106.0'	6,800					
75		93.2'	7,700	104.0'	6,400	117.0'	5,300	75	82.0'	8,800	97.1'	7,900	110.0'	6,600					
73		99.1'	6,000	110.0'	4,900	123.0'	4,000	73	90.6'	7,700	104.0'	6,400	115.0'	5,300					
70		109.0'	3,700	120.0'	3,100	132.0'	2,400	70	101.0'	5,300	114.0'	4,400	124.0'	3,500					
68		116.0'	2,600					68	108.0'	4,000	120.0'	3,300	130.0'	2,600					
G								65	118.0'	2,400	130.0'	2,000							
		1						1						1					
G								G											

C :Loaded boom angle (°)

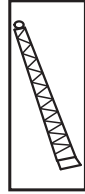
R :Load radius in feet

W :Rated lifting capacity in pounds

G :Number of parts of line

NOTE :The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-C) is based on the standard number of parts of line listed in the chart.

GR-1600XL RATED LIFTING CAPACITIES (IN POUNDS)



COUNTERWEIGHT 40,100lbs (18.2t)
ON OUTRIGGERS MID EXTENDED 18' 1/2" (5.50m) SPREAD
360° ROTATION

C	Boom length in feet					
	172.5'(52.6m) Boom + 59.1'(18.0m) Hydraulic offset jib					
	5° Tilt		20° Tilt		40° Tilt	
	R	W	R	W	R	W
81.5	45.0'	10,400	61.7'	9,700	76.1'	7,500
81	47.6'	10,400	64.3'	9,700	78.4'	7,500
80	52.8'	10,400	69.2'	9,500	82.7'	7,500
79	57.7'	10,400	73.5'	9,300	86.6'	7,300
78	63.0'	10,400	78.1'	9,000	90.9'	7,300
77	67.3'	10,400	82.0'	8,800	94.8'	7,300
76	72.2'	10,400	86.3'	8,600	98.1'	7,100
75	76.8'	10,400	90.9'	8,600	102.0'	7,100
73	85.3'	9,500	98.4'	7,700	109.0'	6,400
70	94.8'	6,600	107.0'	5,500	117.0'	4,600
68	101.0'	5,300	114.0'	4,200	123.0'	3,500
65	111.0'	3,300	123.0'	2,900	131.0'	2,200
63	117.0'	2,400	128.0'	2,000		
G	1					

C	Boom length in feet					
	114.9'(35.0m) Boom + 59.1'(18.0m) Hydraulic offset jib					
	5° Tilt		20° Tilt		40° Tilt	
	R	W	R	W	R	W
81.5	30.2'	14,100	44.6'	11,900	58.7'	8,200
81	31.5'	14,100	45.9'	11,700	60.4'	8,200
80	35.1'	14,100	49.2'	11,500	63.3'	7,900
79	38.4'	14,100	52.5'	11,200	65.9'	7,900
78	41.7'	14,100	55.5'	11,000	68.6'	7,900
77	44.6'	14,100	58.4'	10,600	71.2'	7,700
76	47.9'	14,100	61.0'	10,400	73.8'	7,700
75	51.2'	14,100	64.0'	10,100	76.4'	7,700
73	57.1'	13,200	70.2'	9,900	81.7'	7,500
70	65.9'	12,300	78.1'	9,300	88.9'	7,300
68	71.5'	11,700	83.7'	9,000	93.5'	7,100
65	80.1'	11,000	91.5'	8,600	100.0'	7,100
63	85.3'	10,600	96.5'	8,400	105.0'	7,100
60	93.2'	9,900	104.0'	7,900	112.0'	6,800
58	97.8'	8,800	108.0'	7,500	116.0'	6,800
55	105.0'	7,300	115.0'	6,400	121.0'	5,700
53	109.0'	6,400	118.0'	5,500	125.0'	5,100
50	115.0'	5,300	124.0'	4,600	129.0'	4,200
48	119.0'	4,600	128.0'	4,000	133.0'	3,700
45	125.0'	3,700	134.0'	3,300	137.0'	3,100
43	129.0'	3,300	137.0'	2,900		
40	135.0'	2,600	142.0'	2,200		
38	138.0'	2,200	144.0'	2,000		
35	143.0'	1,800				
G	1					

C :Loaded boom angle (°)

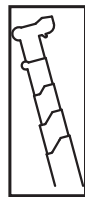
R :Load radius in feet

W :Rated lifting capacity in pounds

G :Number of parts of line

NOTE :The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-C) is based on the standard number of parts of line listed in the chart.

GR-1600XL RATED LIFTING CAPACITIES (IN POUNDS)



COUNTERWEIGHT 0lbs (Ot)
ON OUTRIGGERS FULLY EXTENDED 26' 10 7/8" (8.20m) SPREAD
360° ROTATION

A	1	1	1	9	10	10	1	2	9	10	1	2	1	11	2	10	11
B	1	2		26	28		3	12	27	29	4	13	5	32	14	31	33
C	42.8'	100.5' (30.6m)															
D	13.1m	86.1' (26.2m)															
	8'	265,900	81,600	200,000	174,200	174,200	81,600	81,600	174,200	174,200							
	10'	232,600	81,600	200,000	174,200	174,200	81,600	81,600	174,200	174,200		81,600		127,000			
	12'	205,500	81,600	200,000	174,200	174,200	81,600	81,600	174,200	174,200	81,600	81,600	145,500	127,000			
	15'	173,300	81,600	173,300	174,200	174,200	81,600	81,600	172,800	170,400	78,300	81,600	145,500	127,000		81,600	106,300
	20'	128,500	81,600	128,500	129,900	129,900	70,500	81,600	128,100	130,300	66,600	81,600	129,600	117,100	56,400	81,600	106,300
	25'	98,300	81,600	98,300	99,400	99,400	61,500	81,600	97,900	99,900	58,000	81,600	99,200	101,900	50,500	81,600	101,000
	30'	68,800	75,000	68,800	71,000	71,000	54,700	76,300	68,100	71,700	51,400	73,600	70,500	75,000	44,800	78,500	73,400
	35'	48,500	54,200	48,700	50,700	50,700	49,200	57,100	48,100	51,100	46,100	57,800	50,300	54,000	39,900	57,100	52,900
	45'		32,400	28,000	29,500	29,500	35,100	34,800	27,100	30,000	37,000	35,500	29,100	32,400	32,800	34,800	31,300
	50'						28,400	28,200	21,200	23,800	30,400	28,900	22,900	26,000	30,200	28,400	24,900
	60'						19,600	19,600	13,000	15,400	21,600	20,100	14,600	17,400	21,800	19,600	16,300
	65'										18,300	17,000	11,500	14,300	18,700	16,500	13,200
	75'										13,700	12,300	7,300	9,900	13,900	11,700	8,800
	80'														12,100	9,900	7,100
	90'														9,300	7,100	4,400
E	68,300	73,400	71,700	75,200	70,500	66,800	70,800	70,500	53,400	68,800	67,200	69,400	53,400	67,700	65,500	66,600	66,600
F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0
Telescoping conditions (%)																	
Tele.1	0	0	0	0	0	0	0	0	45	0	0	0	45	0	0	90	45
Tele.2	0	0	0	45	0	0	0	0	45	45	0	0	45	45	0	45	45
Tele.3	0	0	0	0	45	0	0	0	0	45	0	45	45	45	0	45	45
Tele.4	0	0	0	0	0	0	0	45	0	0	45	45	0	45	90	45	0
Tele.5	0	45	0	0	0	0	90	45	0	0	90	45	0	0	90	45	0
G	22	6	14	14	14	12	6	6	12	12	6	6	10	9	6	8	8

NOTE : The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-C) is based on the standard number of parts of line listed in the chart.

- A : Boom block
- B : Boom number
- C : Boom length in feet
- D : Load radius in feet
- E : Maximum capacity without boom pin
- F : Minimum boom angle (°) for indicated length (no load)
- G : Number of parts of line

GR – 1600XL RATED LIFTING CAPACITIES (IN POUNDS)



COUNTERWEIGHT 0lbs (Ot) ON OUTRIGGERS FULLY EXTENDED 26' 10 7/8" (8.20m) SPREAD 360° ROTATION

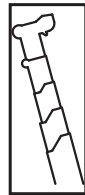


	A	1	2	11	3	1	2	3	1	4	5	3	1	6	7	1	7	1	8
B	6	15	34	17	3	7	16	18	8	20	21	19	9	22	23	10	24	11	25
C																			
D		114.9' (35.0m)					129.3' (39.4m)			143.7' (43.8m)				158.1' (48.2m)		172.5' (52.6m)		187.0' (57.0m)	200.1' (61.0m)
20'	54,900	77,600	84,700	64,800			66,400	57,300	39,200	43,000		48,700							
25'	50,000	77,600	74,700	61,700		46,500	61,100	57,300	38,200	43,000	52,700	48,700	33,500		37,900				
30'	45,400	76,700	65,700	56,900		42,300	53,800	52,700	38,800	41,700	48,900	48,700	33,500	41,700	37,900	29,800	33,100		
35'	40,600	55,600	51,400	52,700		37,700	32,200	35,100	32,600	36,400	32,400	34,200	32,800	32,800	35,100	29,800	33,100	26,500	22,900
45'	33,300	33,500	30,000	36,600		30,900	25,800	28,700	30,000	29,800	26,000	27,600	30,200	26,500	28,400	29,500	26,900	26,500	22,900
50'	30,600	27,100	23,800	30,000		28,200	17,000	19,600	22,000	20,700	17,200	18,700	21,200	17,600	19,600	20,500	18,300	18,700	18,300
60'	22,300	18,300	15,200	20,900		22,300	13,900	16,500	18,700	17,600	14,300	15,700	18,100	14,600	16,300	17,400	15,200	15,700	15,200
65'	19,200	15,200	12,100	17,900		19,000	9,300	11,900	13,900	12,800	9,500	11,000	13,200	9,900	11,700	12,600	10,400	11,000	10,600
75'	14,300	10,600	7,700	13,000		14,100	7,500	10,100	12,100	11,000	7,700	9,000	11,200	8,200	9,900	10,600	8,600	9,300	8,800
80'	12,300	8,800	6,000	11,200		12,300	4,600	7,100	9,000	7,900	4,900	6,200	8,400	5,100	6,800	7,700	5,500	6,200	6,000
90'	9,500	6,000	3,100	8,400		9,300	3,500	6,000	7,700	6,800	3,500	5,100	7,100	3,700	5,700	6,400	4,200	4,900	4,600
95'	8,400	4,900		7,100		7,900		4,000	5,700	4,900		3,100	5,100		3,500	4,400		2,900	
105'	6,400	3,100		5,300		6,000		3,300	4,900	4,000		2,200	4,200		2,600	3,500			
110'						5,300			3,500	2,400			2,900						
120'						3,700			2,900				2,200						
125'									2,400										
130'									2,400										
E	53,400	65,700	69,400	53,400		46,500	66,400	53,400	39,200	43,000	52,700	48,700	33,500	41,700	37,900	29,800	33,100	26,500	22,900
F	0	0	30	0	0	0	36	22	12	27	44	36	35	49	43	46	53	55	60
Telescoping conditions (%)																			
Tele.1	0	45	90	0	0	0	90	45	0	45	90	90	0	90	45	45	90	90	100
Tele.2	0	45	45	45	0	0	45	45	45	45	90	45	90	90	90	90	90	90	100
Tele.3	45	45	45	45	45	90	45	45	90	45	45	45	90	90	90	90	90	90	100
Tele.4	90	45	45	45	45	90	45	45	90	90	45	45	90	45	90	90	90	90	100
Tele.5	90	45	0	90	90	90	45	90	90	90	45	90	90	45	45	90	45	90	100
G	6	6	7	6	6	4	6	6	4	4	4	4	4	4	4	4	4	4	4

NOTE :The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML –C) is based on the standard number of parts of line listed in the chart.

- A : Boom block
- B : Boom number
- C : Boom length in feet
- D : Load radius in feet
- E : Maximum capacity without boom pin
- F : Minimum boom angle (°) for indicated length (no load)
- G : Number of parts of line

GR-1600XL RATED LIFTING CAPACITIES (IN POUNDS)



COUNTERWEIGHT 0lbs (Ot)
ON OUTRIGGERS MID EXTENDED 23' 11 3/8" (7.30m) SPREAD
360° ROTATION

	A	1	2	9	10	1	2	9	10	1	2	9	10	1	2	9	10	11	31	11
	B	1		26	28	3	12	27	29	4	13	30	32	5	14	31	33			
	C	42.8'	57.2'	71.6'	86.1'	100.5'	111.800	127.000	145.500	166.200	187.000	205.500	227.000	250.000	274.000	300.000	328.000	360.000	390.000	420.000
	D	(13.1m)	(17.4m)	(21.8m)	(26.2m)	(30.6m)	(35.0m)	(39.4m)	(43.8m)	(48.2m)	(52.6m)	(57.0m)	(61.4m)	(65.8m)	(70.2m)	(74.6m)	(79.0m)	(83.4m)	(87.8m)	(92.2m)
8'		256,800	81,600	200,000	174,200	81,600	81,600	174,200	174,200	81,600	81,600	174,200	174,200	81,600	81,600	174,200	174,200	81,600	81,600	174,200
10'		223,500	81,600	200,000	174,200	81,600	81,600	174,200	174,200	81,600	81,600	174,200	174,200	81,600	81,600	174,200	174,200	81,600	81,600	174,200
12'		196,700	81,600	196,400	174,200	81,600	81,600	174,200	174,200	81,600	81,600	174,200	174,200	81,600	81,600	174,200	174,200	81,600	81,600	174,200
15'		164,900	81,600	164,900	165,800	81,600	81,600	164,500	166,200	81,600	81,600	164,500	166,200	81,600	81,600	164,500	166,200	81,600	81,600	166,200
20'		127,400	81,600	127,400	128,300	70,500	81,600	127,000	128,800	66,600	81,600	128,100	129,000	56,400	81,600	128,100	129,000	56,400	81,600	129,000
25'		77,200	81,600	77,200	79,400	61,500	81,600	76,300	80,200	58,000	81,600	78,900	83,800	50,500	81,600	78,900	83,800	50,500	81,600	82,200
30'		50,500	56,400	50,700	52,700	54,700	59,300	49,800	53,400	51,400	60,200	52,200	56,200	44,800	59,500	50,900	54,900	44,800	59,500	54,900
35'		35,500	40,800	35,700	37,500	43,700	43,400	34,800	37,900	46,100	44,100	37,000	40,800	39,900	43,700	35,900	39,500	39,900	43,700	39,500
45'			23,800	19,400	20,900	26,200	26,000	18,700	21,400	28,400	26,700	20,500	23,800	28,700	26,200	19,400	22,700	28,700	26,200	19,400
50'						21,200	20,900	13,900	16,300	23,100	21,400	15,700	18,700	23,400	20,900	14,600	17,600	23,400	20,900	14,600
60'						13,900	13,700	7,300	9,700	15,900	14,300	8,800	11,700	16,100	13,900	7,700	10,600	16,100	13,900	7,700
65'										13,200	11,700	6,400	9,300	13,400	11,200	5,300	8,200	13,400	11,200	5,300
75'										9,300	7,900	2,600	5,500	9,500	7,300		4,400	9,500	7,300	
80'														7,900	6,000		2,900	7,900	6,000	
90'														5,700	3,500			5,700	3,500	
E		68,300	73,400	71,700	75,200	53,400	70,800	66,800	70,500	53,400	68,800	67,200	69,400	53,400	67,700	65,500	66,600	53,400	67,700	65,500
F		0	0	0	0	0	0	0	0	0	0	15	0	0	0	40	31	0	0	40

NOTE : The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-C) is based on the standard number of parts of line listed in the chart.

- A : Boom block
- B : Boom number
- C : Boom length in feet
- D : Load radius in feet
- E : Maximum capacity without boom pin
- F : Minimum boom angle (°) for indicated length (no load)
- G : Number of parts of line

GR – 1600XL RATED LIFTING CAPACITIES (IN POUNDS)

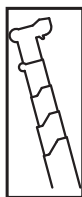


COUNTERWEIGHT 0lbs (Ot) ON OUTRIGGERS MID EXTENDED 23' 11 3/8" (7.30m) SPREAD 360° ROTATION

A	1	2	3	11	17	3	1	7	2	16	18	3	1	8	20	4	5	19	3	1	9	22	6	7	23	10	1	7	24	11	8																																							
B	6	15	34	11	34	17	3	1	7	16	18	3	1	8	20	4	5	19	3	1	9	22	6	7	23	10	1	7	24	11	8																																							
C	114.9' (35.0m)										129.3' (39.4m)										143.7' (43.8m)										158.1' (48.2m)										172.5' (52.6m)										187.0' (57.0m)										200.1' (61.0m)									
D	20'	54,900	77,600	84,700	64,800		57,300		46,500	66,400	57,300	39,200	43,000		48,700			48,700			33,500				37,900																																													
	25'	50,000	77,600	74,700	61,700		57,300		46,500	56,000	56,200	39,200	43,000	52,700	48,700			48,700			33,500				37,900																																													
	30'	45,400	58,000	53,600	56,900	42,300	56,000	42,300	37,700	40,600	43,900	38,800	41,700	40,800	42,500	28,000	24,300	41,400	29,800	33,100				37,900																																														
	35'	40,600	42,100	38,100	45,400	29,100	43,600	29,100	37,700	40,600	43,900	38,800	41,700	40,800	42,500	28,000	24,300	41,400	29,800	33,100				37,900																																														
	45'	29,300	24,900	21,400	27,800	23,800	18,300	23,800	23,800	23,600	26,500	28,900	27,600	23,800	25,400	20,300	19,200	24,300	20,900	19,800	26,200	27,300	25,100	26,200	20,900	22,000	19,800	20,900	26,200	20,900	22,900																																							
	50'	23,800	19,800	16,300	22,500	16,500	11,200	16,500	16,500	18,300	21,200	23,600	22,300	18,700	20,300	15,400	11,900	19,200	20,900	19,800	26,200	27,300	25,100	26,200	20,900	22,000	19,800	20,900	26,200	20,900	22,900																																							
	60'	16,500	12,600	9,500	15,200	13,900	8,800	13,900	13,900	5,100	7,500	13,700	12,300	9,000	10,400	12,800	9,500	11,900	13,900	14,800	12,800	12,800	12,100	11,200	11,200	12,100	10,100	11,200	11,200	11,200	13,700																																							
	65'	13,900	10,100	7,100	12,600	9,700	5,100	9,700	9,700	3,500	6,000	7,900	8,400	5,100	6,600	8,800	5,500	7,300	7,300	8,200	6,400	6,400	7,300	7,300	7,300	8,200	6,400	7,300	7,300	7,300	11,200																																							
	75'	9,900	6,200	3,300	8,800	8,200	3,500	8,200	8,200	2,600	7,500	9,500	8,400	5,100	6,600	8,800	5,500	7,300	7,300	8,200	6,400	6,400	7,300	7,300	7,300	8,200	6,400	7,300	7,300	7,300	7,300																																							
	80'	8,400	4,900		7,300	7,300	3,500	8,200	8,200	2,600	6,000	7,900	8,400	5,100	6,600	8,800	5,500	7,300	7,300	8,200	6,400	6,400	7,300	7,300	7,300	8,200	6,400	7,300	7,300	7,300	7,300																																							
	90'	6,000	2,400		4,900	4,900	3,500	8,200	8,200	2,600	6,000	7,900	8,400	5,100	6,600	8,800	5,500	7,300	7,300	8,200	6,400	6,400	7,300	7,300	7,300	8,200	6,400	7,300	7,300	7,300	7,300																																							
	95'	4,900			3,700	3,700	2,600	5,700	5,700	2,600	6,000	7,900	8,400	5,100	6,600	8,800	5,500	7,300	7,300	8,200	6,400	6,400	7,300	7,300	7,300	8,200	6,400	7,300	7,300	7,300	7,300																																							
	105'	3,300			2,200	2,200	2,600	5,700	5,700	2,600	6,000	7,900	8,400	5,100	6,600	8,800	5,500	7,300	7,300	8,200	6,400	6,400	7,300	7,300	7,300	8,200	6,400	7,300	7,300	7,300	7,300																																							
	110'																																																																					
E	53,400	65,700	69,400	53,400	53,400	46,500	66,400	53,400	39,200	43,000	52,700	48,700	43,000	52,700	48,700	33,500	41,700	37,900	29,800	33,100	26,500	26,500	33,100	37,900	29,800	33,100	26,500	26,500	26,500	22,900	22,900																																							
F	0	28	41	0	0	22	44	34	34	39	50	46	45	55	50	52	55	50	52	59	60	60	59	50	52	52	59	60	60	64	64																																							
Telescoping conditions (%)																																																																						
Tele.1	0	45	90	0	45	0	90	45	0	45	90	45	0	45	90	45	90	45	90	45	90	45	90	45	90	45	90	45	90	100	100																																							
Tele.2	0	45	45	45	45	0	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45																																							
Tele.3	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45																																							
Tele.4	90	45	45	45	45	90	45	45	90	45	45	90	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45																																							
Tele.5	90	45	45	45	45	90	45	90	90	45	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90																																							
G	6	6	7	6	6	6	6	6	4	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4																																							

A : Boom block
B : Boom number
C : Boom length in feet
D : Load radius in feet
E : Maximum capacity without boom pin
F : Minimum boom angle (°) for indicated length (no load)
G : Number of parts of line

NOTE :The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML –C) is based on the standard number of parts of line listed in the chart.



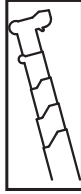
COUNTERWEIGHT 0lbs (0t)
ON OUTRIGGERS MID EXTENDED 18' 1/2" (5.50m) SPREAD
360° ROTATION

A	1	1	1	10	1	2	9	10	1	2	9	10	1	2	1	11	2	10	11
B	1	2	26	28	3	12	27	29	4	13	30	32	5	14	31	33			
C	71.6' (21.8m)																		
D	86.1' (26.2m)																		
E	100.5' (30.6m)																		
F																			
G																			
Tele.1	Telescoping conditions (%)																		
Tele.2																			
Tele.3																			
Tele.4																			
Tele.5																			
G																			

G: Number of parts of line

NOTE : The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-C) is based on the standard number of parts of line listed in the chart.

GR-1600XL RATED LIFTING CAPACITIES (IN POUNDS)



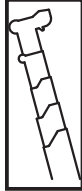
COUNTERWEIGHT 0lbs (0t)
ON OUTRIGGERS MID EXTENDED 18' 1/2" (5.50m) SPREAD
360° ROTATION

[illegible]

A : Boom block
B : Boom number

D : Load radius in feet
E : Maximum capacity without boom pin
F : Minimum boom angle (°) for indicated length (no load)
G : Number of parts of line

GR-1600XL RATED LIFTING CAPACITIES (IN POUNDS)

COUNTERWEIGHT 0lbs (0t) ON OUTRIGGERS MIN EXTENDED 9' 9 3/4" (2.99m) SPREAD 360° ROTATION													
													
A	1	2	9	10	1	2	9	10	1	2	10	11	
B	1	2	26	28	3	12	27	29	4	13	30	32	
C	42.8' (13.1m)		57.2' (17.4m)		71.6' (21.8m)		86.1' (26.2m)						
D	8'	10'	12'	15'	20'	25'	30'	35'	45'	50'			
	175,500	81,600	165,600	169,300	81,600	81,600	152,800	159,200					
	102,500	81,600	102,500	105,200	81,600	81,600	97,900	103,000					
	68,300	75,400	68,300	70,500	79,400	78,900	67,500	71,400	81,600	79,100	68,800	101,900	74,100
	42,500	48,500	42,500	44,500	51,800	51,400	41,900	45,200	54,200	52,200	44,300	48,300	48,300
	22,300	27,100	22,300	24,000	30,000	29,800	21,600	24,500	32,200	30,400	23,600	27,100	30,400
	12,100	16,500	12,100	13,700	19,200	19,000	11,700	14,100	21,200	19,600	13,400	16,500	16,500
	6,000	10,100	6,200	7,500	12,600	12,300	5,500	7,900	14,600	13,000	7,300	10,100	10,100
		6,000		3,300	8,200	8,200		3,700	10,100	8,600		6,000	
					2,900	2,600			4,400	3,100			
									2,600				
E	68,300	73,400	71,700	75,200	53,400	70,800	66,800	70,500	53,400	68,800	67,200	69,400	
F	30	29	45	43	40	40	58	54	46	50	64	58	
Telescoping conditions (%)													
Tele.1	0	0	0	0	0	0	45	0	0	0	45	0	
Tele.2	0	0	45	0	0	0	45	45	0	0	45	45	
Tele.3	0	0	0	45	0	0	0	45	0	45	45	45	
Tele.4	0	0	0	0	0	45	0	0	45	45	0	45	
Tele.5	0	45	0	0	90	45	0	0	90	45	0	0	
G	22	6	14	14	6	6	12	12	6	6	10	9	

NOTE : The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-C) is based on the standard number of parts of line listed in the chart.

- A : Boom block
- B : Boom number
- C : Boom length in feet
- D : Load radius in feet
- E : Maximum capacity without boom pin
- F : Minimum boom angle (°) for indicated length (no load)
- G : Number of parts of line

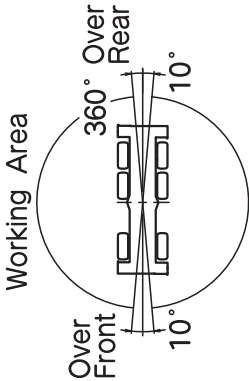
GR-1600XL RATED LIFTING CAPACITIES (IN POUNDS)

WITHOUT COUNTERWEIGHT ON RUBBER STATIONARY											
A B		Over front and rear				360° Rotation					
		42.8' (13.1m)		57.2' (17.4m)		42.8' (13.1m)		57.2' (17.4m)		71.6' (21.8m)	
		C		C		C		C		C	
8'		73	22,000	78	22,000	81	22,000	73	22,000	81	22,000
10'		70	22,000	76	22,000	79	22,000	70	22,000	79	22,000
12'		67	22,000	73	22,000	77	22,000	67	20,500	77	22,000
15'		63	22,000	70	22,000	75	22,000	63	13,700	75	19,400
20'		54	14,800	65	18,100	71	19,600	54	6,200	65	9,900
25'		45	9,000	59	12,300	66	14,100			59	4,900
30'		33	3,500	53	7,700	62	9,700			62	3,300
35'				45	4,000	57	6,000				
D		0		41		54		49		56	
		Telescoping conditions (%)									
Tele.1		0		0		0		Telescoping conditions (%)			
Tele.2		0		0		0		0		0	
Tele.3		0		0		0		0		0	
Tele.4		0		0		0		0		0	
Tele.5		0		45		90		0		45	
E		4		4		4		4		4	

A : Boom length in feet
B : Load radius in feet
C : Loaded boom angle (°)
D : Minimum boom angle (°) for indicated length (no load)
E : Number of parts of line

NOTE : • The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-C) 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.

ON RUBBER STATIONARY



WEIGHT REDUCTIONS FOR AUXILIARY
LOAD HANDLING EQUIPMENT

Notes for boom lift

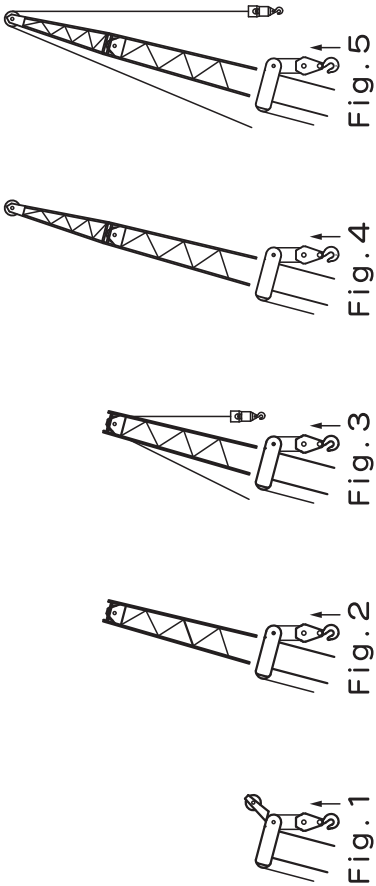
The rated lifting capacity values for boom lift assume that the jib is stowed onto the specified position and the main winch is used.
If boom lift is performed while the jib is mounted onto the boom head (Fig. 2 to Fig. 5), crane operation is allowed only when both the outrigger extension width is 18' 1/2" (5.50m) or over, and the counterweight mass is 40,100 lbs (18.2t) or over.
A precautionary alarm is output when the moment load ratio reaches 70%, and a limit alarm is output when the moment reaches 80%.
When the extension width of even one of the outriggers is 9' 9-3/4" (2.99m), or the counterweight mass is 0 lbs (0t), crane operation is not allowed because of a lack of capacity.

Notes for single top lift or jib lift

The rated lifting capacity values for single top lift or jib lift assume that the main winch is used.
If you use the auxiliary winch for jib lift or single top lift, deduct the mass of the main hook block from the rated lifting capacity values. (#2)

Load Handling Equipment		
110	Short ton (100metric ton), 8 Sheave Hook Block (See Hook Block for actual weight)	2,380 (lbs.)
Aux. Hook (See Hook for actual weight)		660 (lbs.)

Lifting from Main Boom with		
#1	Base and/or Top Jib stowed on base boom	0 (lbs.)
	Single Top stowed on top boom	0 (lbs.)
	Single Top erected but not used	0 (lbs.) Fig.1
Lifting from 33.8' (10.3m) Base Jib with		
	25.3' (7.7m) Top Jib erected but not used	Prohibited
	25.3' (7.7m) Top Jib stowed on 33.8' (10.3m) Base Jib	Prohibited



Note *Capacity deductions are for TADANO supplied equipment only.
1 . Correct status of Jib, mount or dismount, should be inputted into the LOAD MOMENT INDICATOR (AML-C) by Jib status switch.
2 . The winch which is lifting load should be defined in the LOAD MOMENT INDICATOR (AML-C) by main winch/auxiliary winch selector switch.

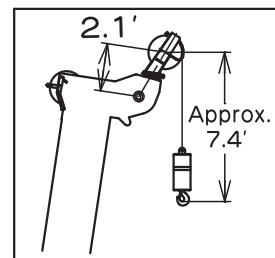
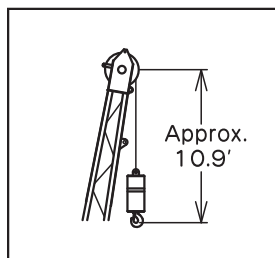
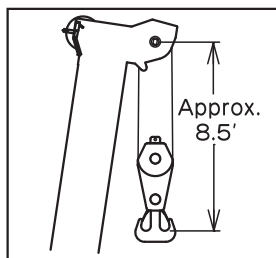
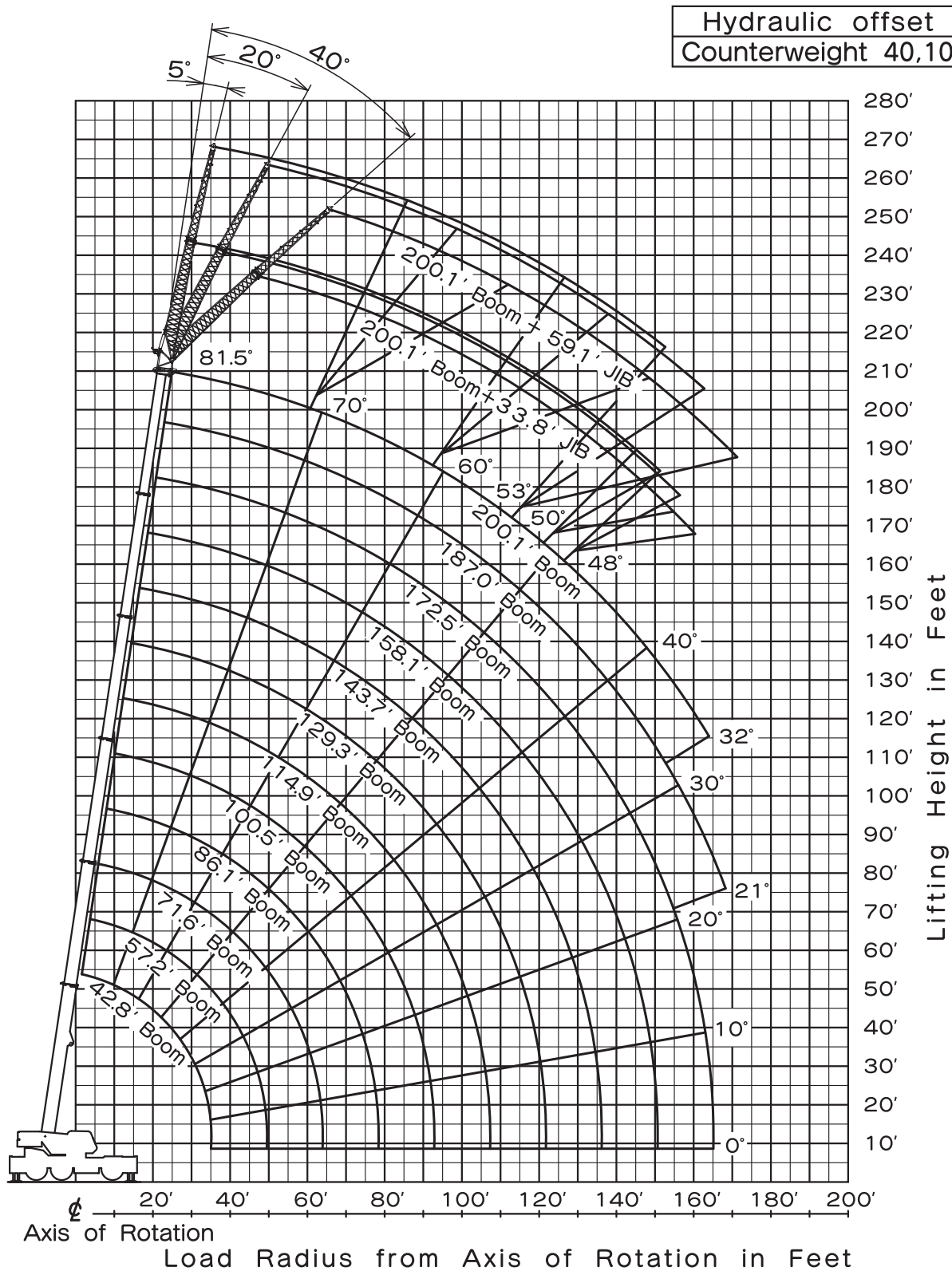
HOISTING PERFORMANCE

Main or auxiliary hoist 15" (0.382m) drum 3/4" (19mm) wire rope					
Layer	Line pulls		drum grooved lagging		
	Available		Total wire rope		
	Low				
	Lbs.	kgf	Feet	Meters	
1st	21,800	9,900	147.0	44.8	
2nd	19,900	9,010	306.4	93.4	
3rd	18,200	8,270	478.7	145.9	
4th	16,800	7,640	663.4	202.2	
5th	15,600	7,090	860.6	262.3	
6th	14,600	6,620	1070.2	326.2	
7th ¹	13,700	6,210	1292.3	393.9	

¹ 7th layer of wire rope is not recommended for hoisting operations.

GR-1600XL WORKING RANGE CHART

FE5041



NOTE: 1. Boom and 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.

WARNING AND OPERATING INSTRUCTIONS (I)

FE5041

NOTES FOR LIFTING CAPACITIES

GENERAL

1. RATED LIFTING CAPACITIES apply only to the machine as originally manufactured and normally equipped by TADANO LTD. Modifications to the machine or use of optional equipment other than that specified can result in a reduction of capacity.
2. Hydraulic cranes can be hazardous if improperly operated or maintained. Operation and maintenance of this machine must be in compliance with information, in the Operation and Maintenance Manual supplied with the crane. If this manual is missing, order a replacement through the distributor.
3. The operator and other personnel associated with this machine shall fully acquaint themselves with the latest American National Standards Institute (ANSI) safety standards for cranes.

SET UP

1. Rated lifting capacities on the chart are the maximum allowable crane capacities and are based on the machine standing level on firm supporting surface under ideal job conditions. Depending on the nature of the supporting surface, it may be necessary to have structural supports under the outrigger floats or tires to spread the loads to a larger bearing surface.
2. For outrigger operation, outriggers shall be properly extended with tires free of supporting surface before operating crane.

OPERATION

1. Rated lifting capacities have been tested to and meet minimum requirements of SAE J1063-Cantilevered Boom Crane Structures Method of Test.
2. Rated lifting capacities do not exceed 85% of the tipping load on outriggers fully extended as determined by SAE J765-Crane Stability Test Code.
Rated lifting capacities for partially extended outriggers are determined from the formula, $\text{Rated Lifting Capacities} = (\text{Tipping Load} - 0.1 \times \text{Tip Reaction}) / 1.25$.
3. Rated lifting capacities above thick lines in the chart are based on crane strength and those below, on its stability. They are based on actual load radius increased by boom deflection.
4. The weight of handling device such as hook blocks, slings, etc., must be considered as part of the load and must be deducted from the lifting capacities.
5. Rated lifting capacities 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 tires, operating speeds, side loads, etc. Side pull on the boom or jib is extremely dangerous. Such action can damage the boom, jib or swing mechanism, and lead to overturning of the crane.
6. Rated lifting capacities do not account for wind on lifted load or boom. We recommend against working under the condition that the load is out of control due to a strong wind. During boom lift, consider that the rated lifting capacity is reduced by 50% when the wind speed is 20mph (9m/s) to 27mph (12m/s); reduced by 70% when the wind speed is 27mph (12m/s) to 31mph (14m/s). If the wind speed is 31mph (14m/s) or over, stop operation. During jib lift, stop operation if the wind speed is 20mph (9m/s) or over.
7. Rated lifting capacities at load radius shall not be exceeded. Do not tip the crane to determine allowable loads.
8. Do not operate at boom lengths, radii, or boom angle, where no capacities are shown. Crane may overturn without any load on the hook.
9. When boom length is between values listed, refer to the rated lifting capacities of the next longer and next shorter booms for the same radius. The lesser of the two rated lifting capacities shall be used.
10. When making lifts at a load radius not shown, use the next longer radius to determine allowable capacity.
11. Load per line should not exceed 15,900lbs. (7,200kg) for main winch and auxiliary winch.
12. Check the actual number of parts of line with LOAD MOMENT INDICATOR (AML-C) before operation. Maximum lifting capacity is restricted by the number of parts of line of LOAD MOMENT INDICATOR (AML-C). Limited capacity is as determined from the formula, Single line pull for main winch 15,900lbs. (7,200kg) $\times$ number of parts of line.
13. The boom angle before loading should be greater to account for deflection.
For rated lifting capacities, the loaded boom angle and the load radius is for reference only.
14. Maximum capacity without boom pin is shown in the chart.
15. Do not operate extension or retraction of the boom with loads.
16. For lifting capacity of single top, deduct the weight of the load handling equipment from the rated lifting capacity of the boom. For the lifting capacity of single top, the net capacity shall not exceed 15,900lbs. (7,200kg) including main boom hook mass attached to the boom.
17. When the base jib or top jib or both jibs are removed, set the jib status switch to the DISMOUNTED position.
18. When erecting and stowing jib, be sure to retain it by hand or by other means to prevent its free movement.
19. Use "ANTI-TWO-BLOCK" disable switch when erecting and stowing jib and when stowing hook block. While the switch is pushed, the hoist does not stop, even when overwind condition occurs.
20. For selected boom length or less with jib, rated lifting capacities are determined by loaded boom angle only in the column headed "selected boom + jib".
21. Outriggers shall be extended 26' 10"-7/8" (8.2m) spread when installing or removing removable counterweight.

DEFINITIONS

1. Load Radius: Horizontal distance from a projection of the axis of rotation to supporting surface before loading to the center of the vertical hoist line or tackle with load applied.
2. Loaded Boom Angle: The angle between the boom base section and the horizontal, after lifting the rated lifting capacity at the load radius.
3. Working Area: Area measured in a circular arc about the centerline of rotation.
4. Freely Suspended Load: Load hanging free with no direct external force applied except by the hoist line.
5. Side Load: Horizontal side force applied to the lifted load either on the ground or in the air.

WARNING AND OPERATING INSTRUCTIONS (II)

NOTES FOR ON-RUBBER LIFTING CAPACITIES

1. 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.
2. On-rubber lifting is only permitted without counterweight and stationary. Creep operation is prohibited.
Rated lifting capacities shown in the chart are based on condition that crane is set on firm level surfaces with suspension-fully retracted. Those above thick lines are based on tire capacity and those below, on crane stability. They are based on actual load radius increased by tire deformation and boom deflection.
3. Rated lifting capacities are based on proper tire inflation, capacity and condition. Damaged tires are hazardous to safe operation of crane.
4. Tires shall be inflated to correct air pressure.

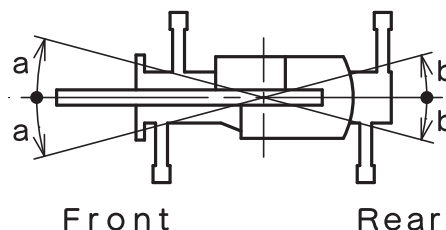
Tires	Air Pressure
26.5R25☆☆	94psi (650kPa)

5. Over front and rear operation shall be performed within 10 degrees.
6. On-rubber lifting with "jib" is not permitted. Maximum permissible boom length is 71.6'. (21.8m).
7. When making lift on-rubber stationary, set parking brake.

NOTES FOR LOAD MOMENT INDICATOR (AML-C)

1. 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.
2. 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 pop-up window closes.
 - 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 pop-up window closes.
 - When erecting and stowing jib, select the status of jib set (Jib lift indicator symbol flickers).
3. 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 stationary operation, the on-rubber state indicator symbol flickers.
 - Press the lift state select key to register the lift state.
 However, pay attention to the following.
 - (1) For stationary operation.
 - The front and rear capacities are attainable only when the over front or rear position.
 - When a load is lifted in the front or rear position and then swung to the side area, make sure the value of the LOAD MOMENT INDICATOR (AML-C) is below the 360° lifting capacity.
4. This machine is equipped with an automatic swing stopping device. (For the details, see Operation and Maintenance Manual.) But, operate very carefully because the automatic swing stop does not work in the following cases.
 - When the "P.T.O." switch is set to "OVERRIDE" and the "OVERRIDE" key switch outside the cab is on.
5. During crane operation, make sure that the displays on front panel are in accordance with actual operating conditions.
6. The displayed values of LOAD MOMENT INDICATOR (AML-C) 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 swinging, lifting loads shall be appropriately reduced.
7. LOAD MOMENT INDICATOR (AML-C) 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-C) aids in place of good operating practice can cause an accident. The operator must exercise caution to assure safety.
8. The lifting capacity for over-side area differs depending on the outrigger extension width. Work with the capacity corresponding to the extension width. The lifting capacities for over-front and over-rear areas are for "outriggers fully extended". However, the areas (angle a,b) differ depending on the outrigger extension width.

Extended Width	23' 11 3/8" (7.3m)	18' 1/2" (5.5m)
Angle a°	25 (middle)	15 (middle)
Angle b°	30 (middle)	15 (middle)



JIB HANDLING INSTRUCTIONS (I)

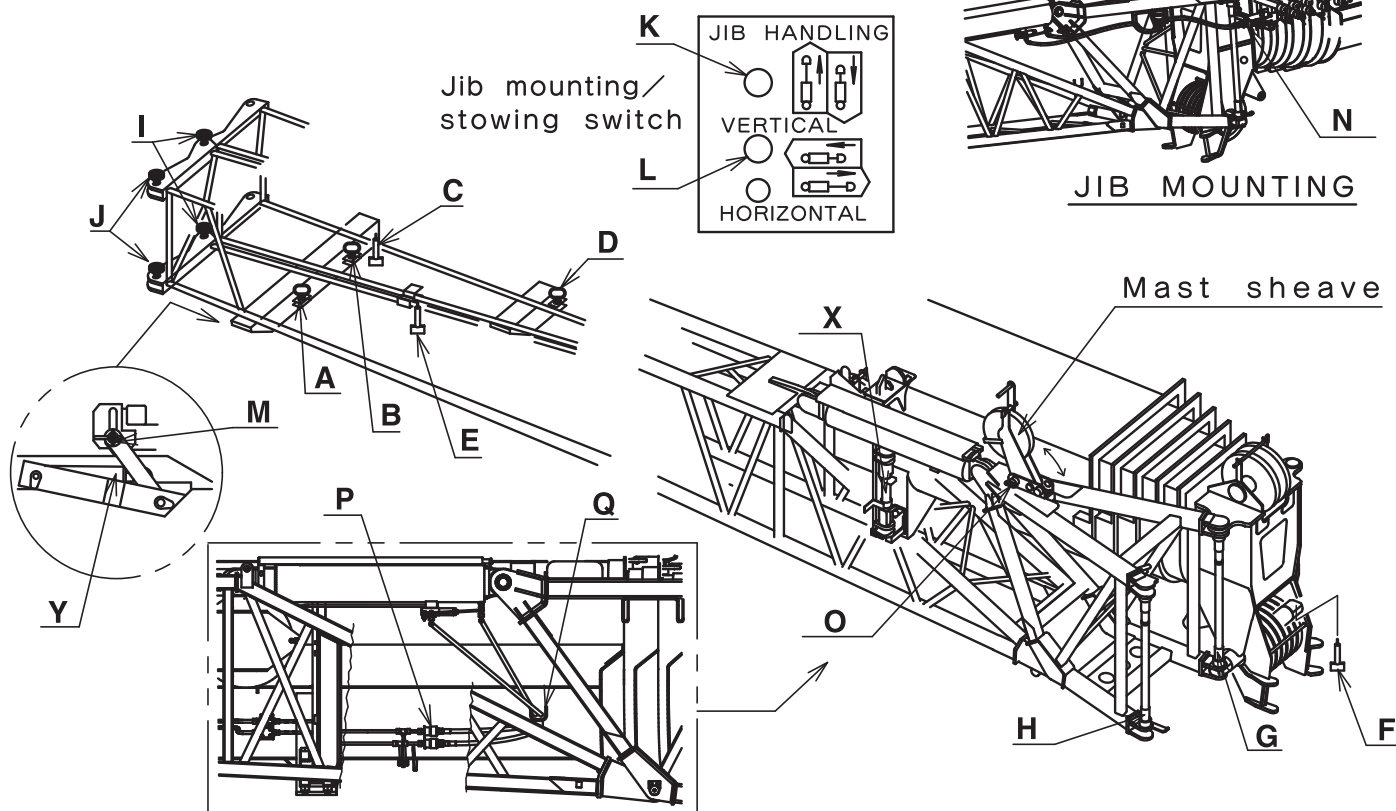
These instructions are excerpts from the operation manual of the crane. Before you start actual work, be sure to refer to the operation manual.

NOTES FOR MOUNTING THE BASE JIB

1. Fully retract the boom and raise the boom to a $-0.5^{\circ} \sim 0^{\circ}$ angle. And fully retract the jib tilt cylinder.
WARNING: Keep the boom fully retracted while mounting the jib. Don't lower the boom to angle below -1° , or this action could cause the boom and jib to disengage and drop off.
2. NOTICE: Hydraulic cylinder (X) (Y) can't be operated unless the boom is fully retracted. Select the JIB SET status on the load moment indicator.
WARNING: Never forget to select JIB SET status. The load moment indicator's control functions is deactivated when the JIB SET status is selected on the load moment indicator. Mount the jib carefully with no load on the crane.
3. Remove the hydraulic hoses (2 hoses) on the right side of the base section of the boom from their stowing position (P) and hang them over the guide (Q) on the base jib.
4. Attach the tagline to the base jib head.
5. Remove the connecting pin (I), stowing pin (A) and set pin (E).
WARNING: Make sure that either the stowing pin or pivot pin (G) is in position before starting any operation. Without these pins in position, the jib will drop off when an operation is started.
6. Swing the jib out away from the boom until it hits the stopper.
7. Insert the pivot pin (G).
8. Retract jib fixing cylinder (X) completely by operating switch (K).
NOTICE: Jib offsetting cylinder (Y) can't be operated unless jib fixing cylinder (X) is fully retracted.
9. Fully extend the jib offsetting cylinder by operating switch (L).
10. Remove the connecting pin (M) and swing the jib forward with tagline.
11. Insert the connecting pin (H) after making sure the pin (F) is locked.
12. Remove the tagline from the base jib.
13. Erect the mast sheave to upright position and insert the pin (O).
14. Connect the hydraulic hoses on the jib side to the hydraulic hoses on the boom head (N).
15. Connect the leads of the anti-two-block device.

NOTES FOR MOUNTING THE BASE AND TOP JIB

1. Perform the steps 1-4 described in the "MOUNTING THE BASE JIB" section.
NOTICE: Strictly follow the warnings and notices in the "MOUNTING THE BASE JIB" section.
2. Remove the stowing pin (A), (B), (D) and set pin (C).
WARNING: Make sure the connecting pin (I) is inserted, or the jib will drop off when the stowing pin (A), (B) and (D) are removed. Make sure that either the stowing pin or pivot pin (G) is in position before starting any operation. Without these pins in position, the jib will drop off when an operation is started.
3. Swing the jib out away from the boom until it hits the stopper.
4. Perform the steps 7-14 described in the "MOUNTING THE BASE JIB" section.
5. Attach the tagline to the top jib head.
6. Hold the tagline and remove the set pin (E) with the jib handle.
7. Swing the top jib forward and insert the connecting pin (J).
8. Connect the leads of the anti-two-block device.



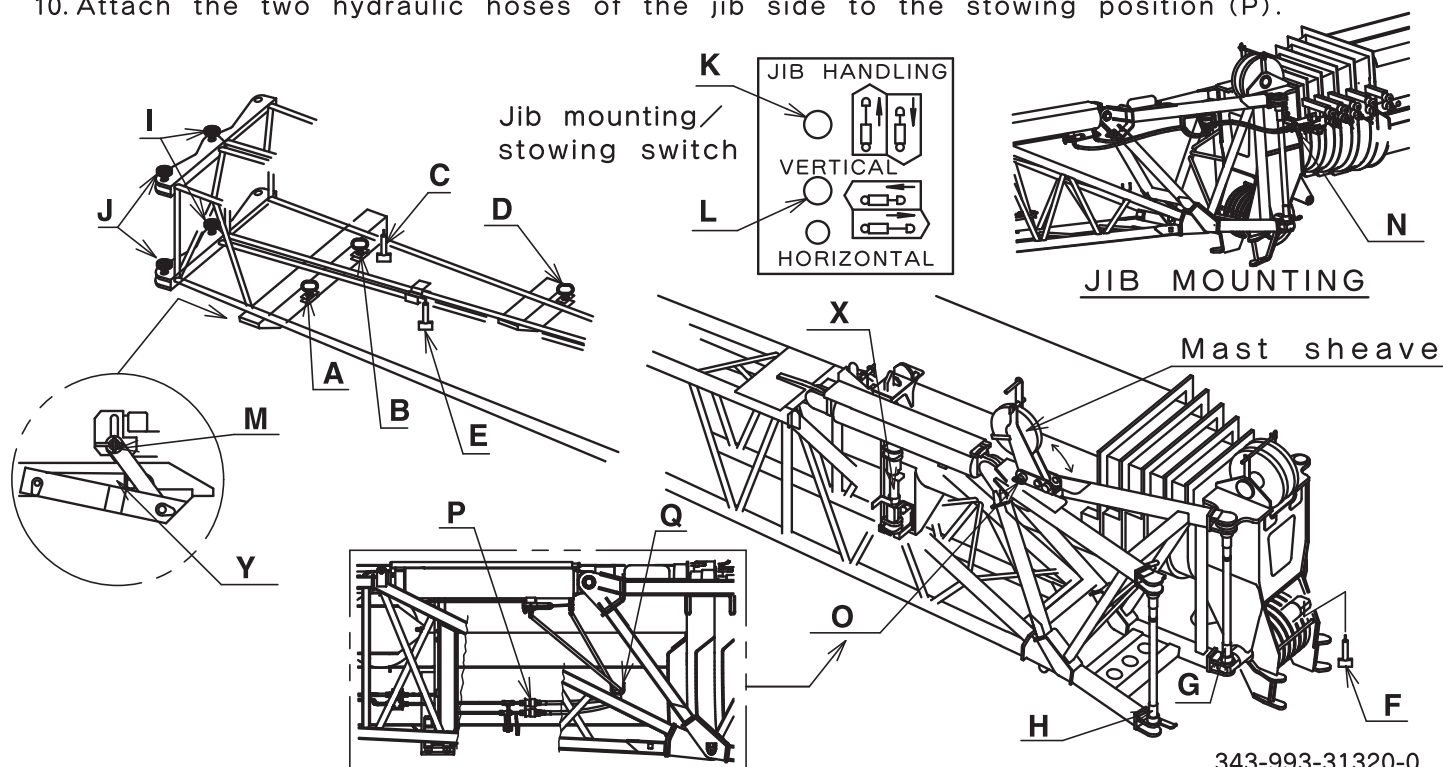
These instructions are excerpts from the operation manual of the crane. Before you start actual work, be sure to refer to the operation manual.

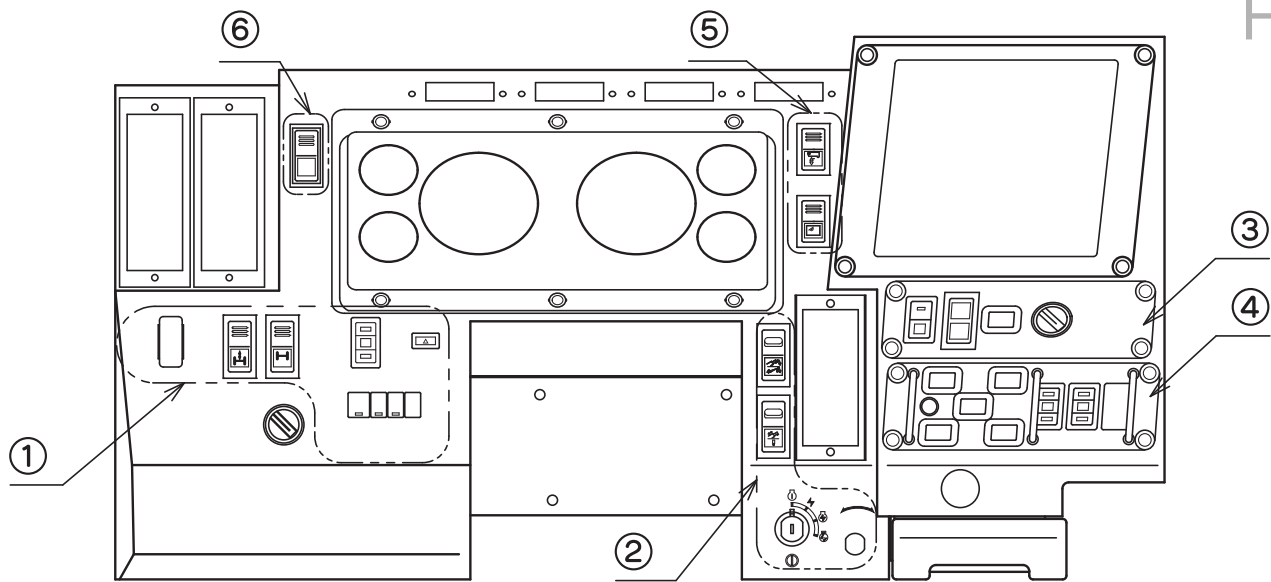
NOTES FOR STOWING THE BASE JIB

1. Fully retract the boom and raise the boom to a $-0.5^{\circ} \sim 0^{\circ}$ angle.
And fully retract the jib tilt cylinder.
WARNING: Keep the boom fully retracted while stowing the jib. Don't lower the boom to angle below -1° , or this action could cause the boom and jib to disengage and drop off.
NOTICE: Hydraulic cylinder (X) (Y) can't be operated unless the boom is fully retracted.
2. Select the JIB SET status on the load moment indicator.
WARNING: Never forget to select JIB SET status. The load moment indicator's control functions is deactivated when the JIB SET status is selected on the load moment indicator.
Stow the jib carefully with no load on the crane.
3. Remove the hydraulic hoses (2 hoses) from the hydraulic hoses on the boom head (N), and hang them over the guide (Q) on the base jib.
4. Lay the mast sheave to stowed position.
5. Free the set pin (E) so that it can fix the base jib when the jib is stowed.
6. Attach the tagline to the base jib head.
7. Remove the connecting pin (H) using the jib handle.
8. Use the jib handle to pull the set pin (F) down. Lock the set pin (F) in place by turning clockwise.
9. Swing the jib toward the boom until pin (M) connects the base jib.
10. Fully retract the jib offsetting cylinder by operating switch (L).
11. Extend jib fixing cylinder (X) completely by operating switch (K).
12. Remove the pivot pin (G).
- WARNING:** Make sure that either the stowing pin or pivot pin (G) is in position before starting any operation. Without these pins in position, the jib will drop off when an operation is started.
13. Remove the tagline from the base jib.
14. Push the jib toward the boom until the set pin (E) connects the base jib and top jib.
15. Insert the stowing pin (A) for the base jib. Insert the connecting pin (I) to connect the base jib and top jib.
16. Attach the two hydraulic hoses of the jib side to the stowing position (P).

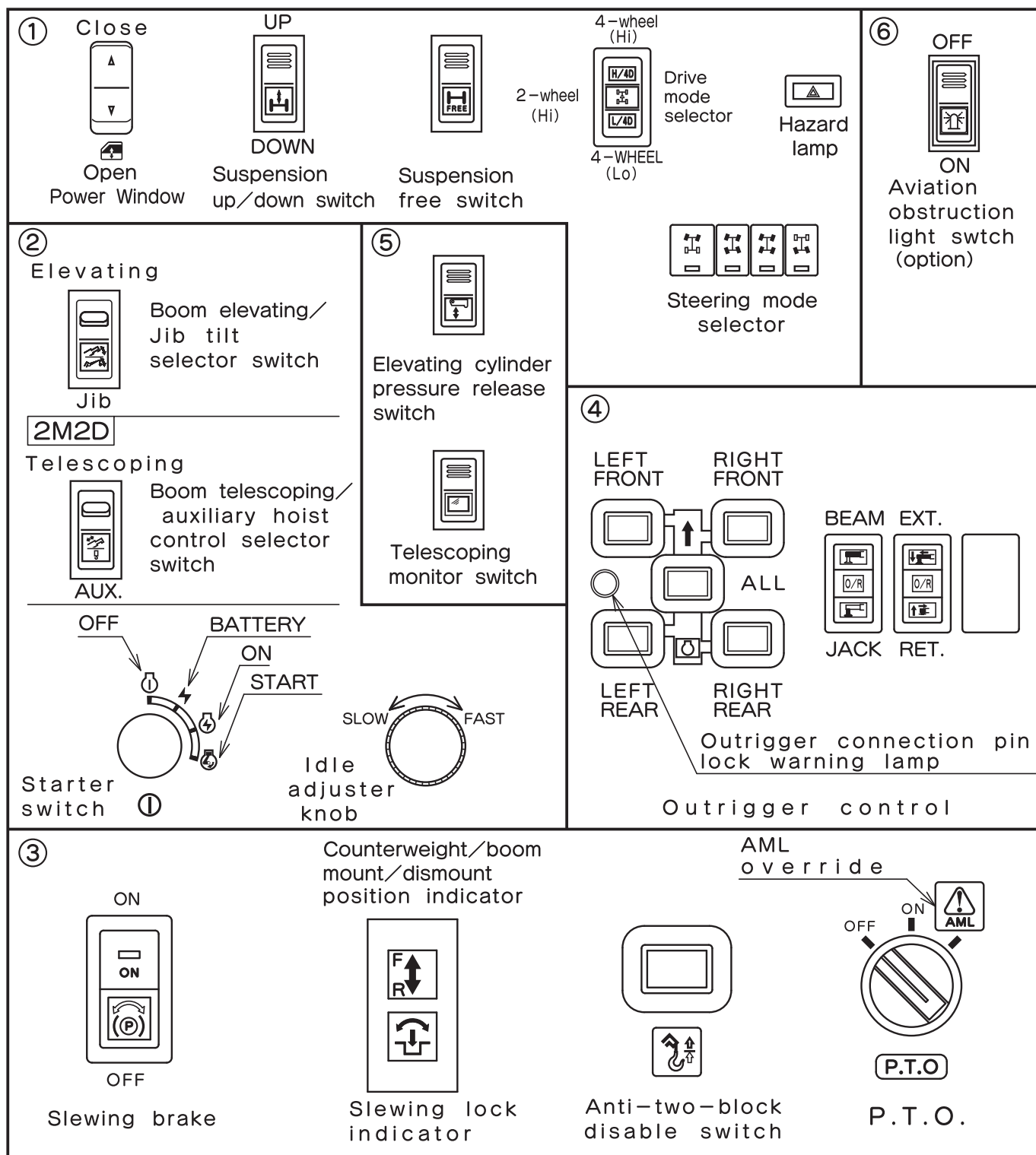
NOTES FOR STOWING THE BASE AND TOP JIB

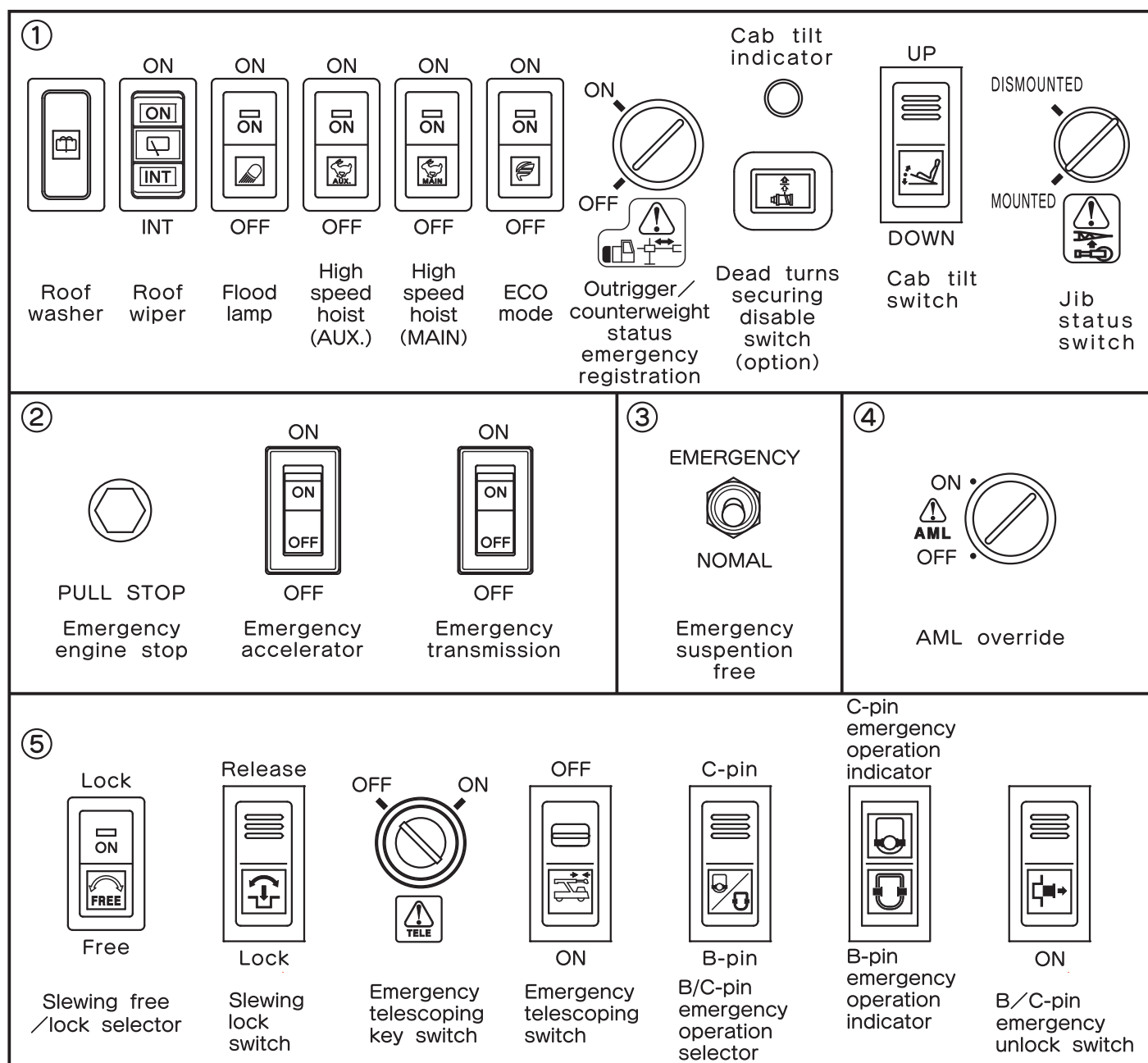
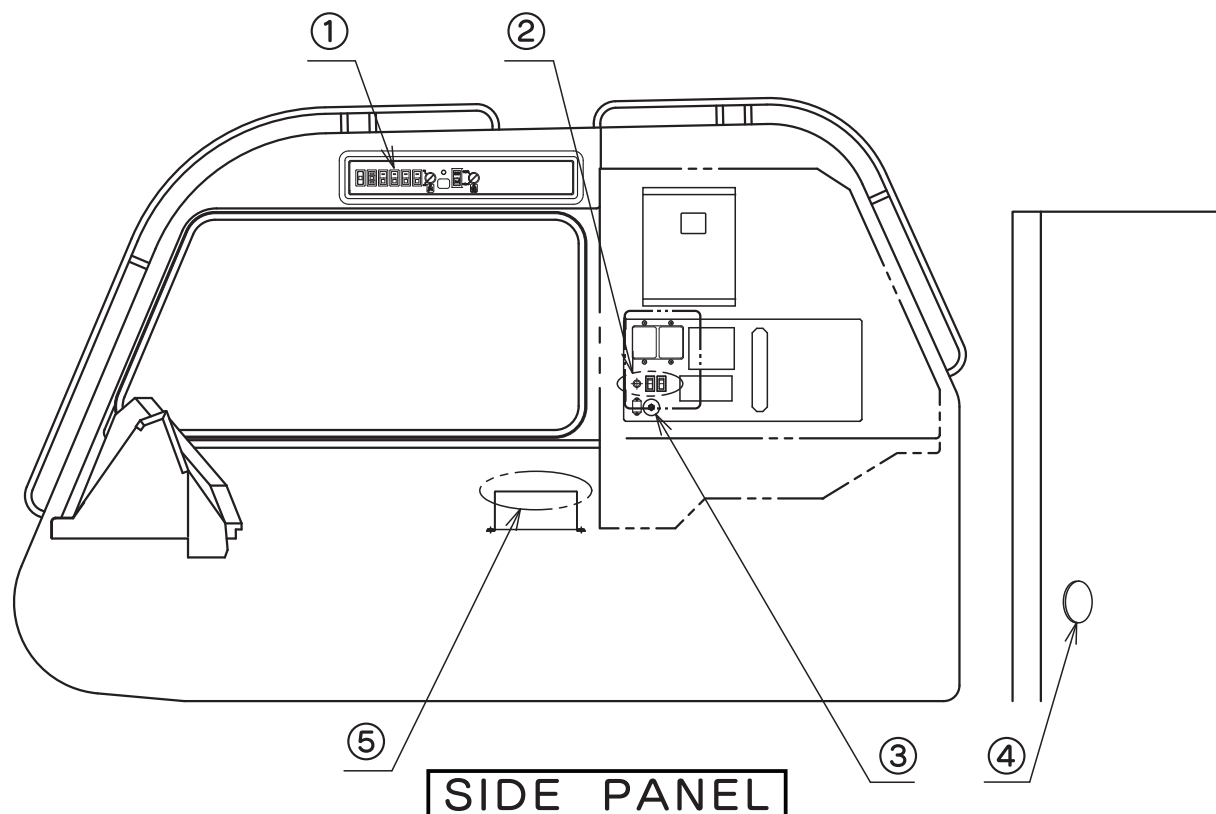
1. Perform the steps 1-4 described in the "STOWING THE BASE JIB" section.
NOTICE: Strictly follow the warnings and notices in the "STOWING THE BASE JIB" section.
2. Free the set pin (E) so that it can fix the top jib to the base jib. Also free the set pin (C) so that it can fix the top jib to the boom.
3. Remove the connecting pin (J) that connects the base jib and the top jib. Then stow it onto the stowage support.
4. Attach the tagline to the top jib head.
5. Pull the tagline to stow the top jib onto the base jib. Then make sure that the set pin (E) connects the top jib and the base jib.
6. Remove the tagline from the top jib and attach the tagline to the base jib head.
7. Perform the steps 7-13 described in the "STOWING THE BASE JIB" section.
NOTICE: Strictly follow the warnings and notices in the "STOWING THE BASE JIB" section.
8. Push the jib toward the boom until the set pin (C) connects the jib and the boom.
9. Insert the stowing pin (A) for the base jib. Insert the connecting pin (B) (D) to connect the base jib and top jib.
10. Attach the two hydraulic hoses of the jib side to the stowing position (P).





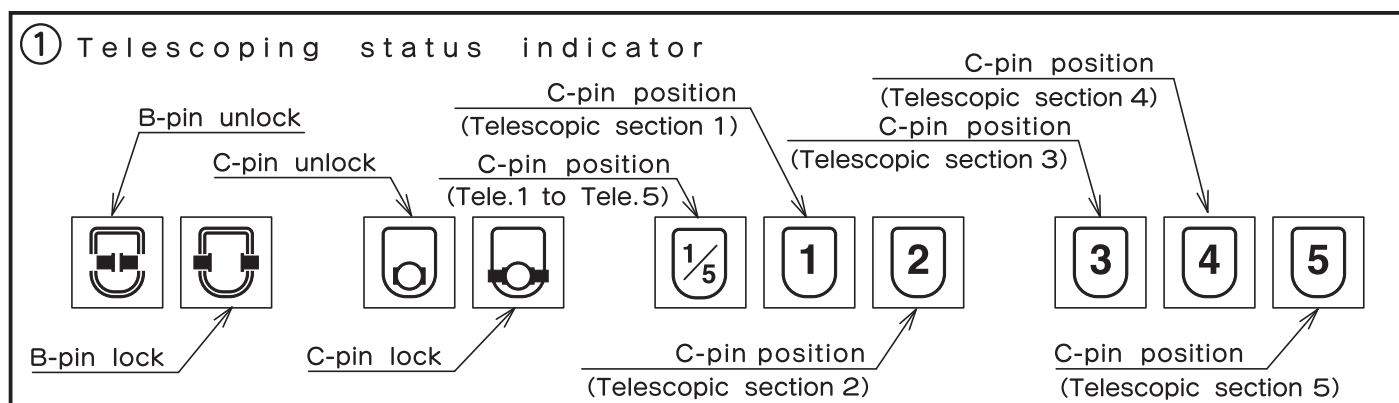
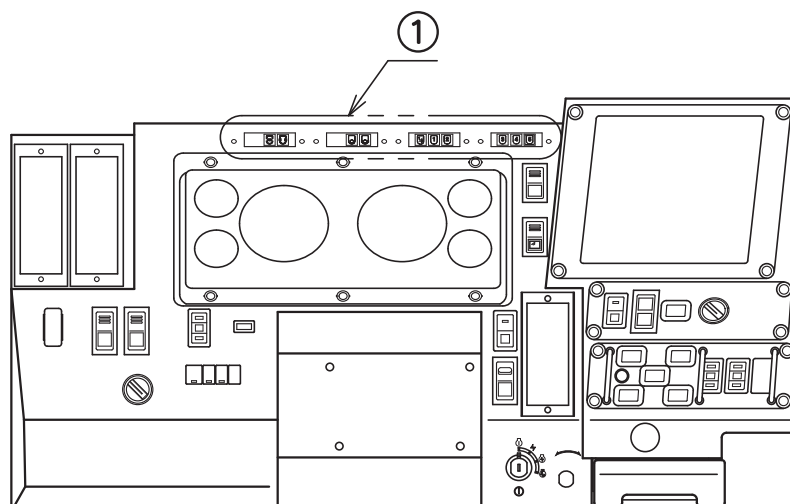
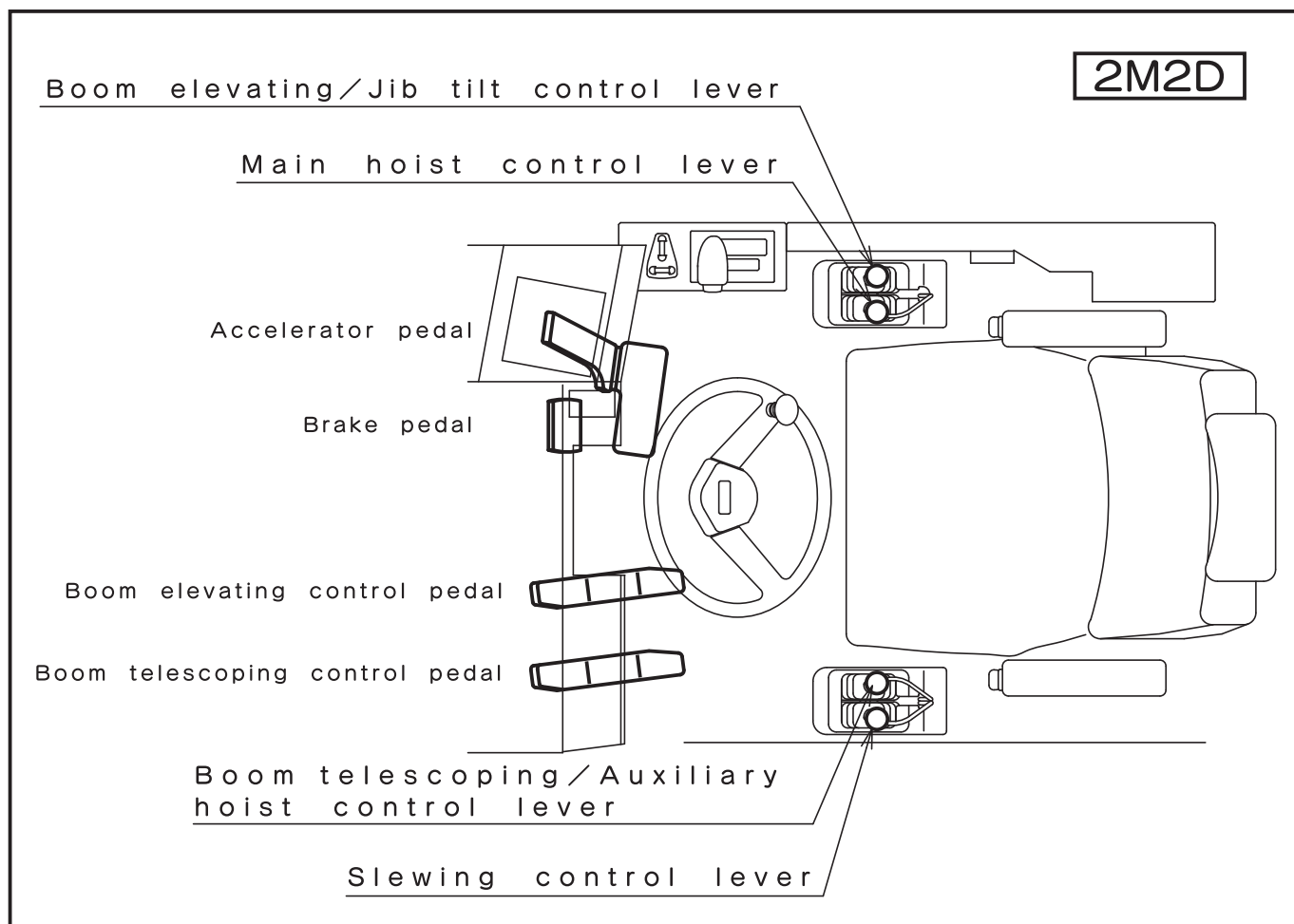
INSTRUMENT PANEL





ARRANGEMENT OF CONTROL LEVERS AND PEDALS

— ISO LAYOUT —



COUNTERWEIGHT HANDLING INSTRUCTIONS (I)

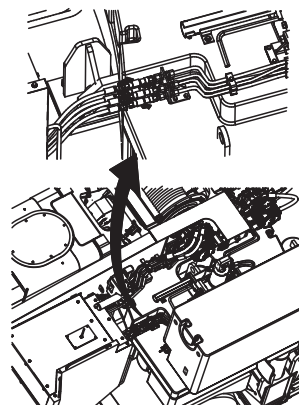
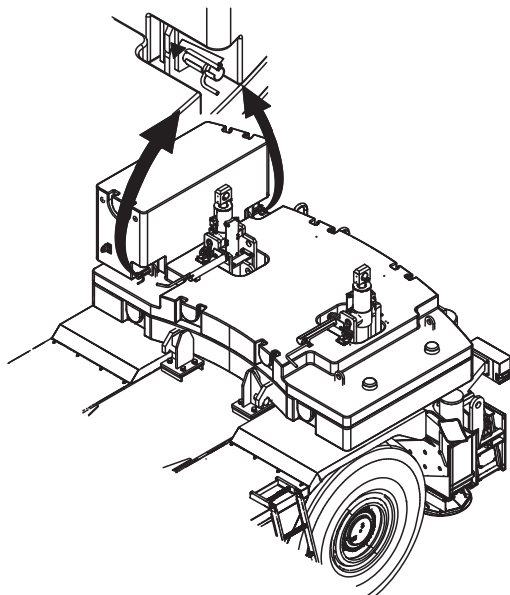
FE5041

These instructions are excerpts from the operation manual of the crane. Before you start actual work, be sure to refer to the operation manual.

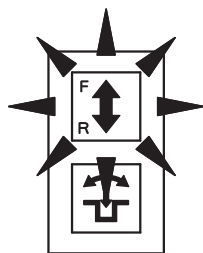
NOTES FOR MOUNTING THE COUNTERWEIGHT

1. Place the standard weight on the carrier.
2. Place the extra weight on the standard weight.
3. Fix the standard weight and extra weight with the counterweight connection pins (2 points).
8. Connect the hydraulic hoses for counterweight mounting/dismounting. Connect the hoses so that the markings on the hydraulic hoses match the markings on the support on the counterweight.

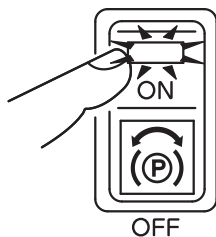
NOTICE: Do not perform slewing operation until the counterweight is mounted. The hydraulic hoses can be damaged.



4. Mount the other extra weight in the same manner.
5. Slew the boom rearward until the counterweight/boom mount/dismount position indicator lights up.

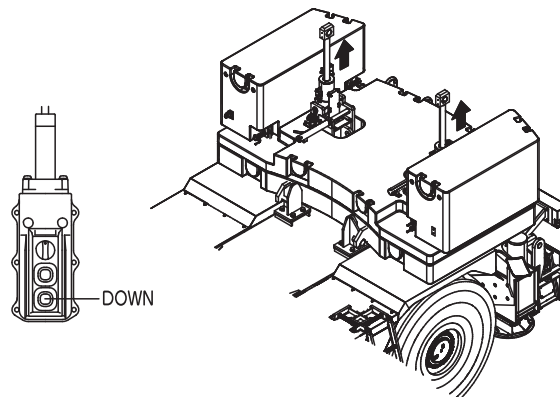


6. Set the slewing brake switch to "ON".
•The indicator lamp built in the switch lights up.

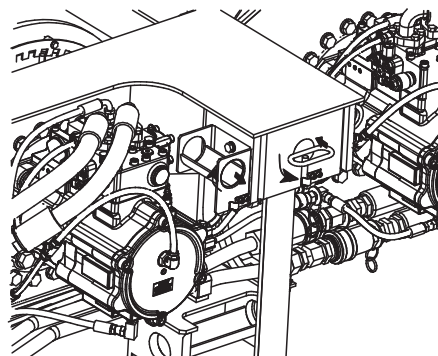


7. Connect the mounting/dismounting remote controller.

9. Extend the cylinders fully by pushing the "DOWN" button on the mounting/dismounting remote controller.



10. Insert the left and right counterweight cylinder connection pins and turn the pins to fix them.



COUNTERWEIGHT
HANDLING INSTRUCTION

COUNTERWEIGHT HANDLING INSTRUCTIONS (I)

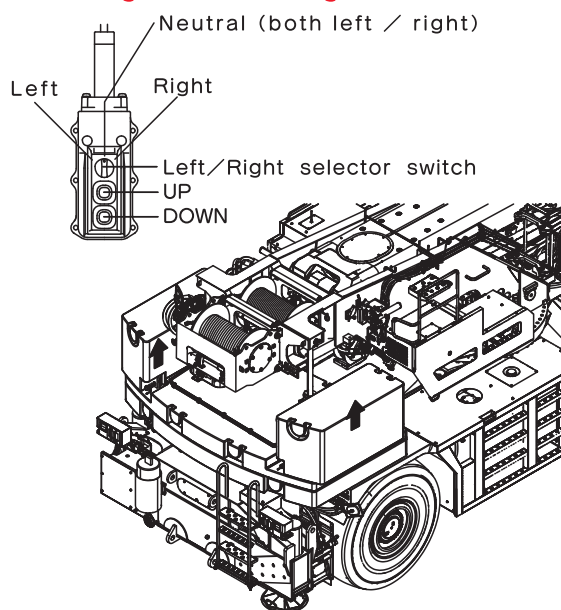
These instructions are excerpts from the operation manual of the crane. Before you start actual work, be sure to refer to the operation manual.

NOTES FOR MOUNTING THE COUNTERWEIGHT

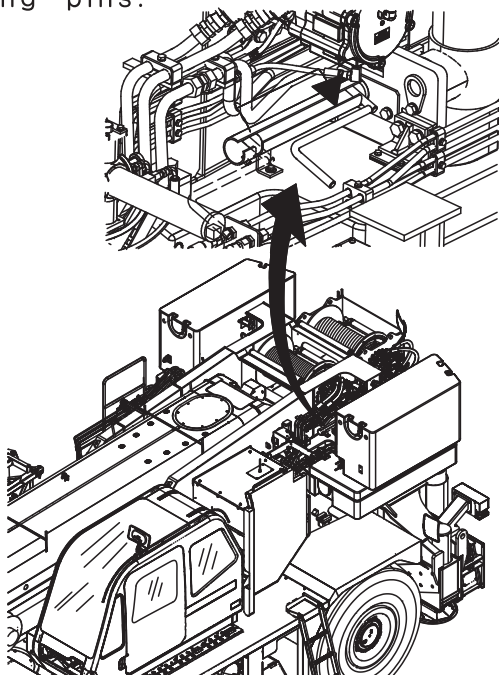
11. Retract the cylinders by pushing the "UP" button on the mounting/dismounting remote controller. Make sure that the counterweight is leveled during operation.

• The counterweight is lifted up.

WARNING: Stop the operation immediately if the counterweight is inclined left or right significantly. If operation is continued in this state, the counterweight cylinders can be damaged, causing the counterweight to fall. In order to make the counterweight leveled, turn the selector switch to "LEFT" or "RIGHT" and push the "UP" or "DOWN" button as required on the mounting/dismounting remote controller.



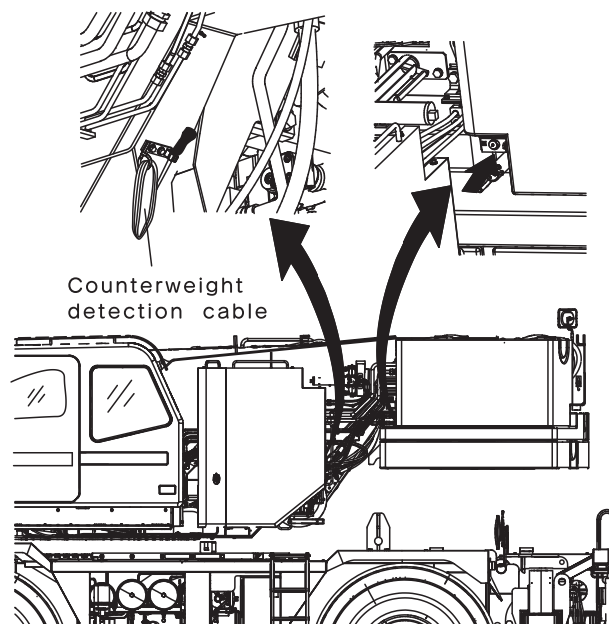
12. Insert the left and right counterweight fixing pins.



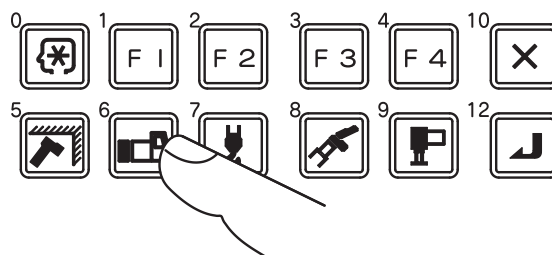
13. Extend the cylinders slightly by pushing the "DOWN" button on the mounting/dismounting remote controller so that the counterweight is supported by the counterweight fixing pin.

14. Tighten the anti-oscillation bolts for the counterweight (1 each at the right/left) until they are in contact with the counterweight lightly, and fix them with nuts.

15. Connect the counterweight detection cable. Take out the connector from the stowing position at the rear of the slewing table, and connect it to the port for the counterweight detection cable.

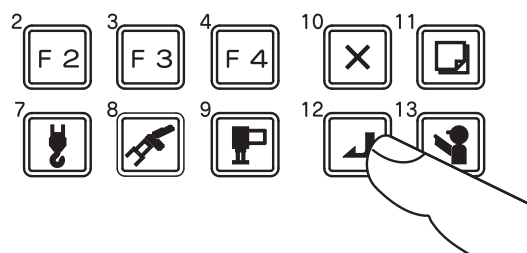


16. Push the counterweight status select key.



17. Make sure that the mass of the counterweight indicated on the load moment indicator corresponds with the actual crane condition.

18. Push the set key to register the setting.



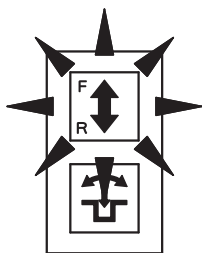
COUNTERWEIGHT HANDLING INSTRUCTIONS (II)

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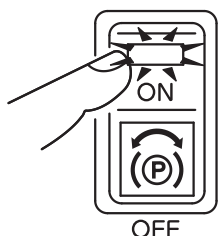
These instructions are excerpts from the operation manual of the crane. Before you start actual work, be sure to refer to the operation manual.

NOTES FOR DISMOUNTING THE COUNTERWEIGHT

1. Slew the boom rearward until the counterweight/boom mount/dismount position indicator lights up.



2. Set the slewing brake switch to "ON".
 - The indicator lamp built in the switch lights up.



3. Loosen the anti-oscillation bolts for the counterweight (1 each at the right/left) until the end of the bolts are approx. 1/5 inches (5mm) away from the surface of the counterweight, and fix the bolts with nuts.

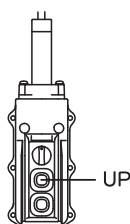
4. Disconnect the counterweight detection cable from the port for the counterweight detection cable. Stow the removed counterweight detection cable in the stowing support at the rear of the slewing table.

NOTICE: Do not lower counterweight while the counterweight detection cable is connected.

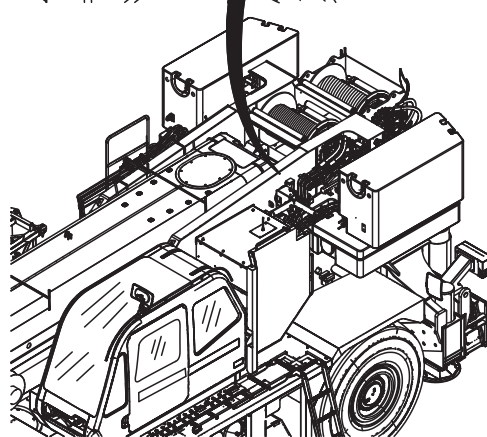
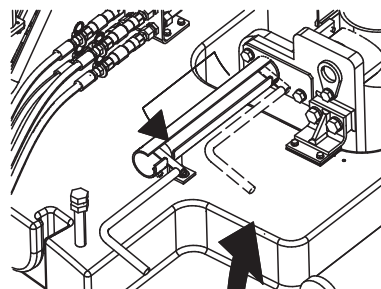
It can result in damaging the counterweight detection cable.

5. Connect the mounting/dismounting remote controller.

6. Retract the cylinders fully by pushing the "UP" button on the mounting/dismounting remote controller.

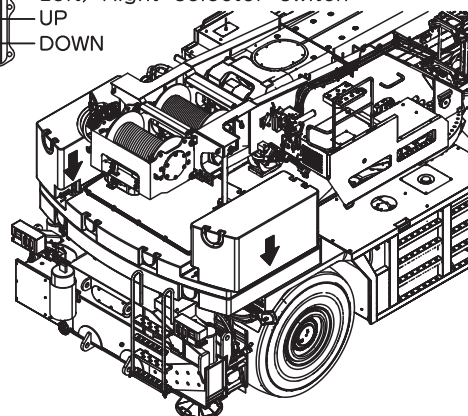
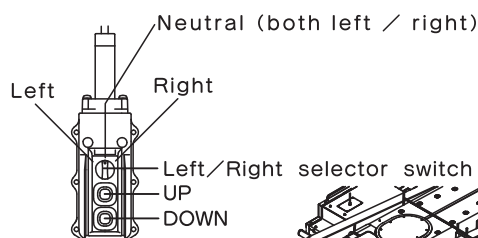


7. Pull out the left and right counterweight fixing pins.



8. Extend the cylinders by pushing the "DOWN" button on the mounting/dismounting remote controller. Make sure that the counterweight is leveled during operation.
 - The counterweight is lowerd.

WARNING: Stop the operation immediately if the counterweight is inclined left or right significantly. If operation is continued in this state, the counterweight cylinders can be damaged, causing the counterweight to fall. In order to make the counterweight leveled, turn the selector switch to "LEFT" or "RIGHT" and push the "UP" or "DOWN" button as required on the mounting/dismounting remote controller.



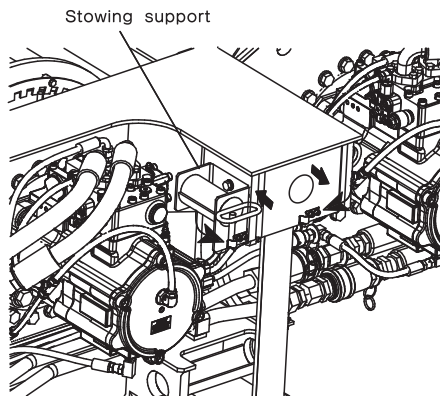
COUNTERWEIGHT HANDLING INSTRUCTIONS (I)

FE5041

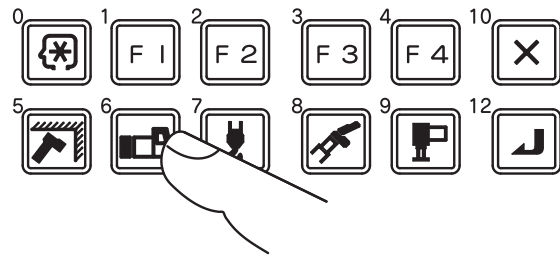
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NOTES FOR DISMOUNTING THE COUNTERWEIGHT

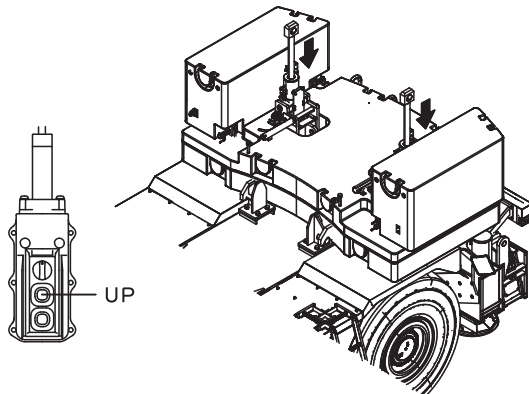
9. Pull out the left and right connection pins by turning them.



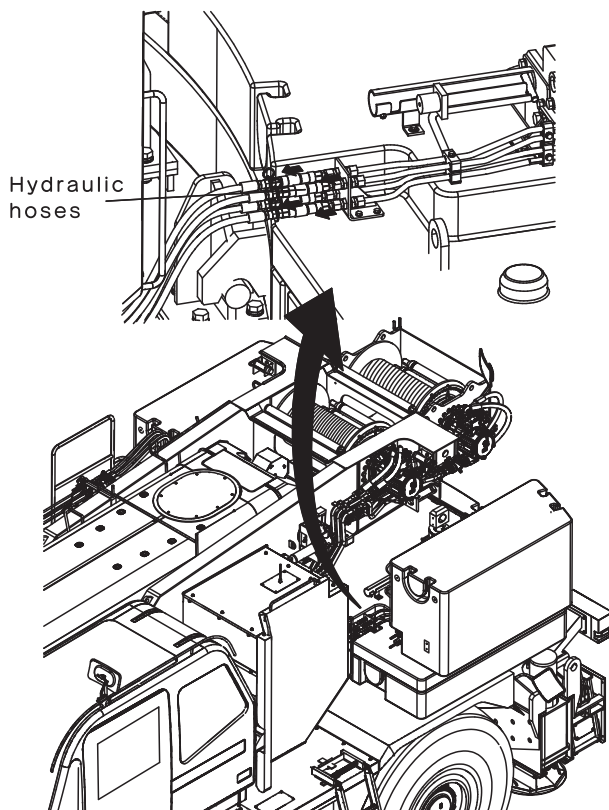
12. Push the counterweight status select key.



10. Retract the cylinders fully by pushing the "UP"

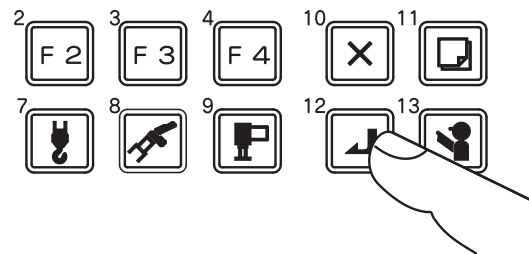


11. Disconnect the hydraulic hoses for mounting/dismounting counterweight.

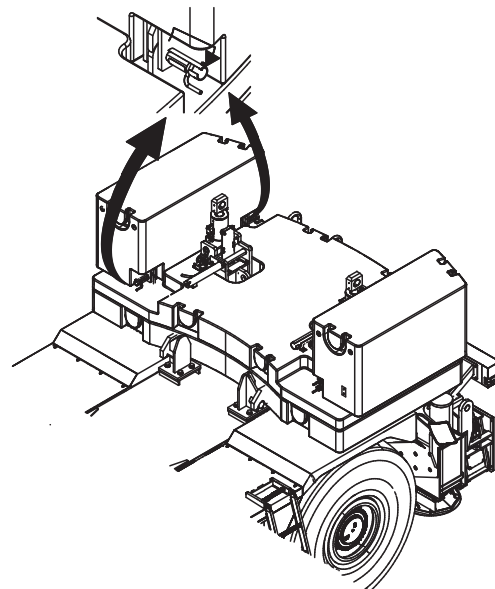


13. Check that the mass of the counterweight indicated on the load moment indicator is 0.0klbs.

14. Push the set key to register the setting.



15. Pull out the counterweight fixing pins.



16. Lift up the extra weight and load it onto the trailer.

17. Dismount the other extra weight in the same manner.

18. Lift up the standard weight and load it onto the trailer.

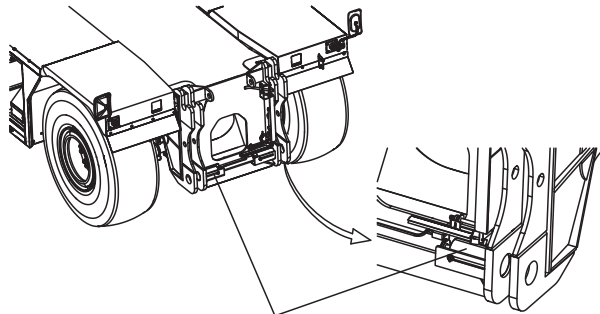
OUTRIGGER HANDLING INSTRUCTIONS (I)

FE5041

These instructions are excerpts from the operation manual of the crane. Before you start actual work, be sure to refer to the operation manual.

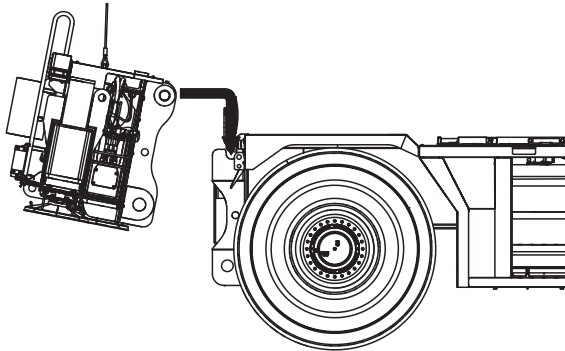
NOTES FOR MOUNTING THE OUTRIGGER UNIT

1. Check that the outrigger mounting/dismounting cylinders are fully retracted, and the outrigger connection pins are fully pulled out.

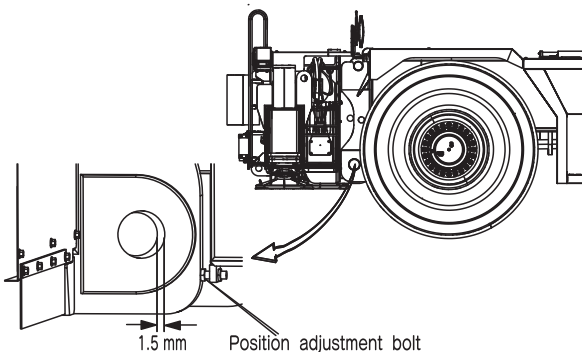


Mounting and Dismounting cylinder

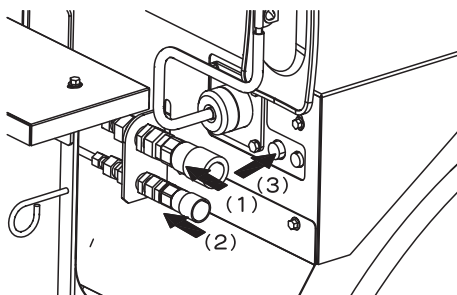
2. Lift up the outrigger unit and mount it so that the upper outrigger connection pins will be engaged in the support on the chassis frame



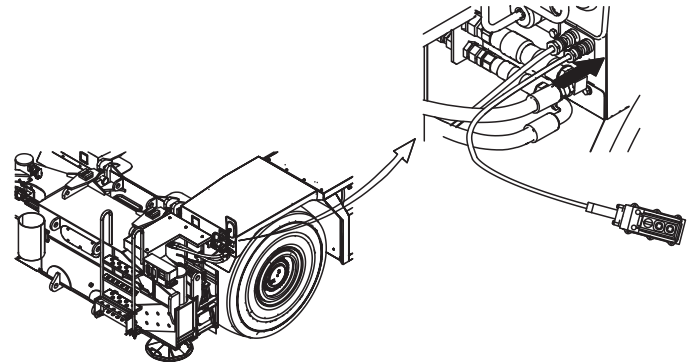
3. Wind down the winch until the outrigger unit does not move forward or backward.
 - The boss hole support on the lower side of the outrigger unit will be in contact with the position adjustment bolt as shown in the illustration.



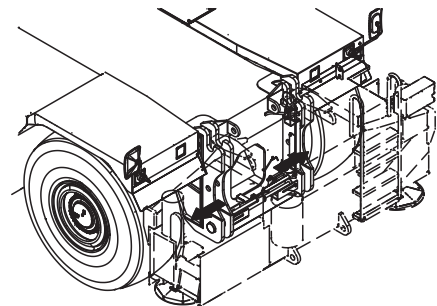
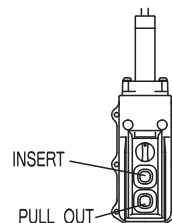
4. Connect the connectors of the electric cable and hydraulic hose connectors in the order of (1), (2), and (3).



5. Take out the mounting/dismounting remote controller and connect it to the connection port at the carrier frame.

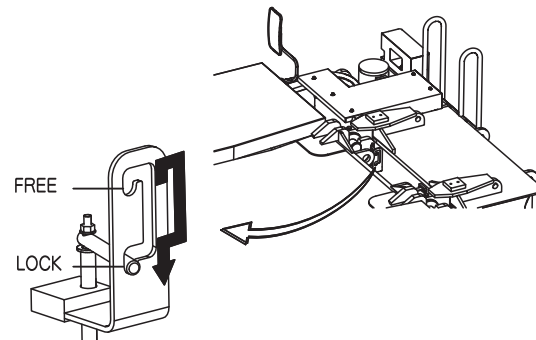


6. Push the "INSERT" button on the mounting/dismounting remote controller.
 - The outrigger mounting/dismounting cylinder is extended and the outrigger connection pins are engaged.



WARNING : If the crane is operated while the outrigger connection pins are not securely inserted, the crane can overturn and cause a serious accident. Visually check that the outrigger mounting/dismounting cylinder is fully extended and the left and right outrigger connection pins are securely inserted.

7. Set the lock support on the outrigger mounting/dismounting cylinder to "LOCK".



8. Disconnect the mounting/dismounting remote controller.

OUTRIGGERS
HANDLING INSTRUCTION

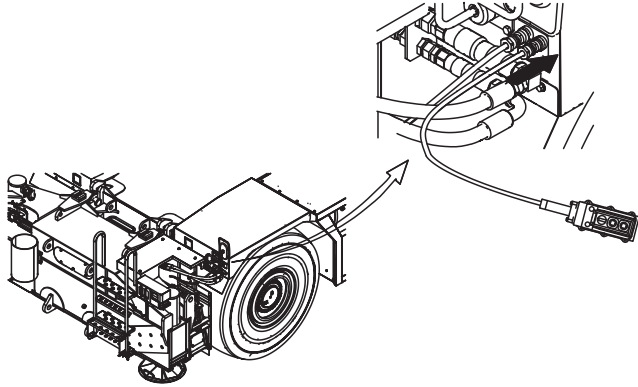
OUTRIGGER HANDLING INSTRUCTIONS (II)

FE5041

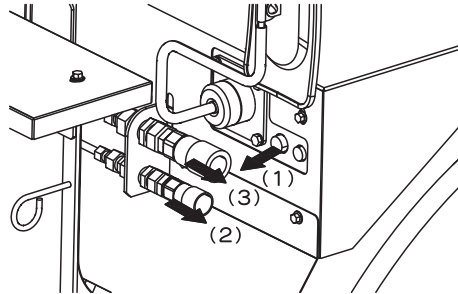
These instructions are excerpts from the operation manual of the crane. Before you start actual work, be sure to refer to the operation manual.

NOTES FOR DISMOUNTING THE OUTRIGGER UNIT

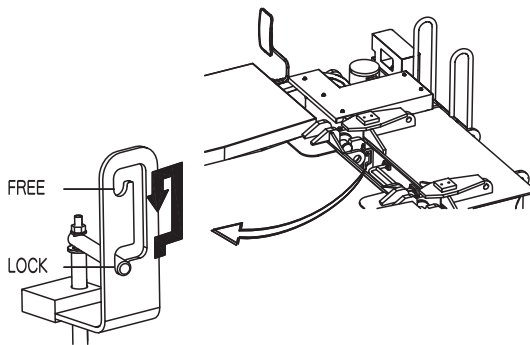
1. Take out the mounting/dismounting remote controller and connect it to the connection port at the carrier frame.



4. Disconnect the connectors of the electric cable and hydraulic hoses in the order of (1), (2), and (3), and stow them in their stowing positions.

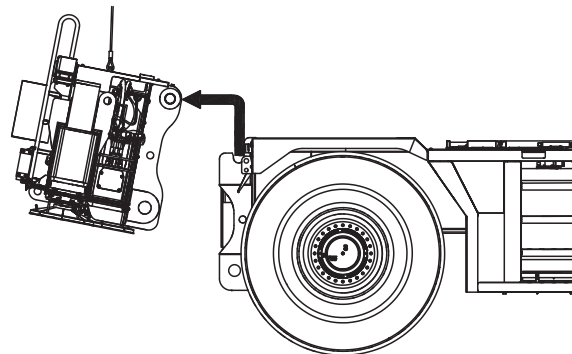


2. Set the lock support on the outrigger mounting/dismounting cylinder to "FREE".

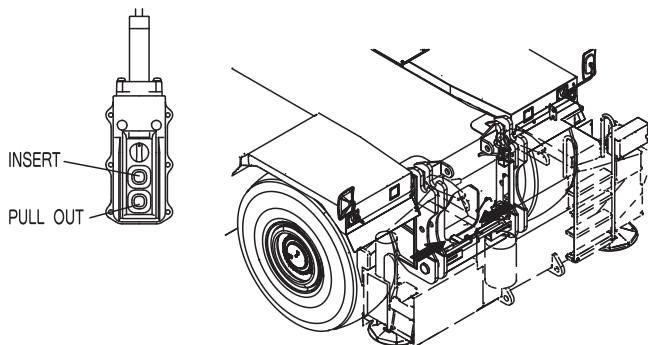


5. Disconnect the mounting/dismounting remote controller.

6. Lift up the outrigger unit and load it on to the trailer.



3. Push the "PULL OUT" button on the mounting/dismounting remote controller, so that the outrigger mounting/dismounting cylinder is fully retracted and the outrigger connection pins are completely pulled out.



WARNING: When you place the outrigger unit, place it on wood blocks. If the outrigger unit is supported with the floats, the outrigger unit may lose its balance and fall, resulting in a serious accident.

