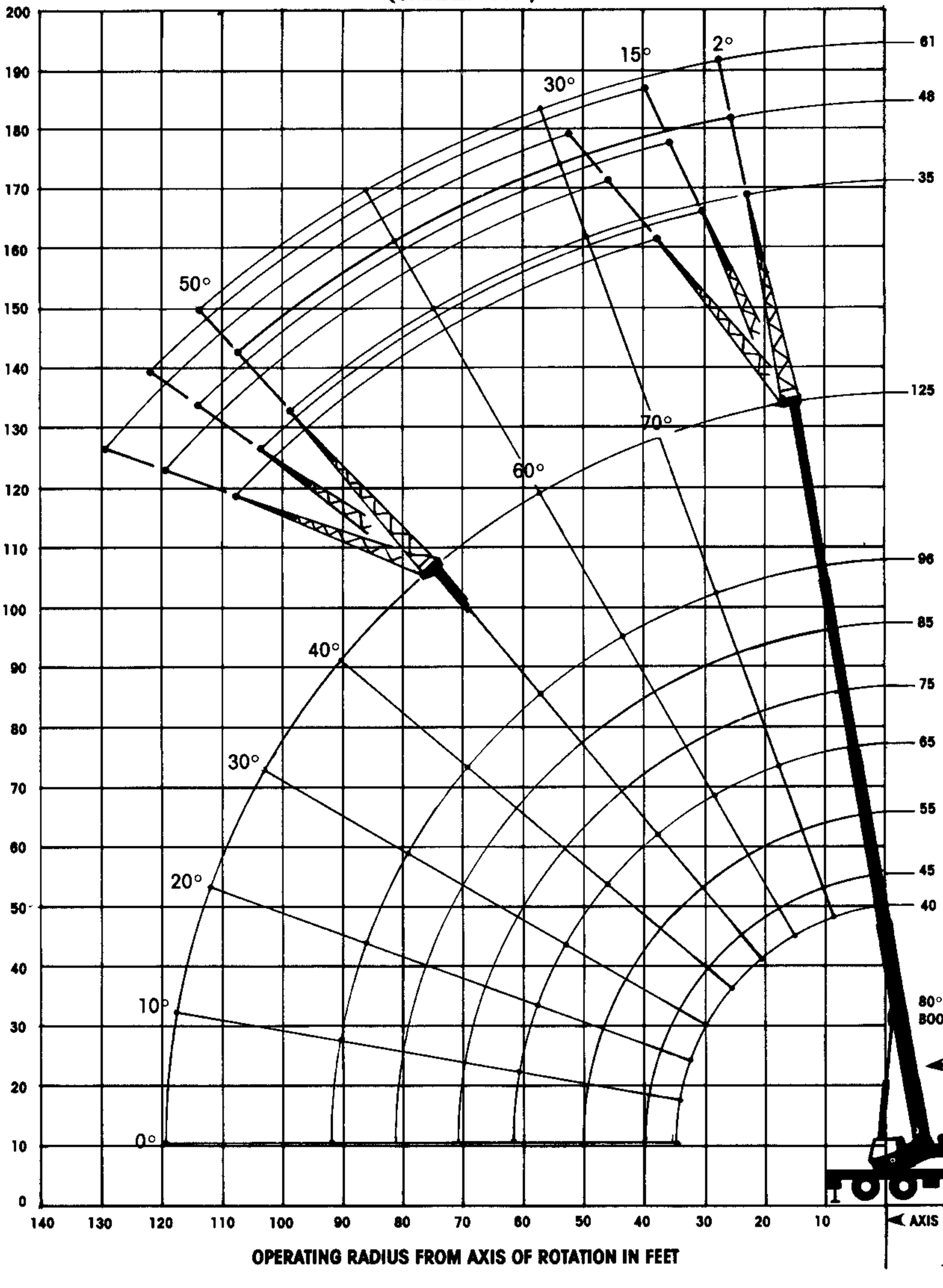
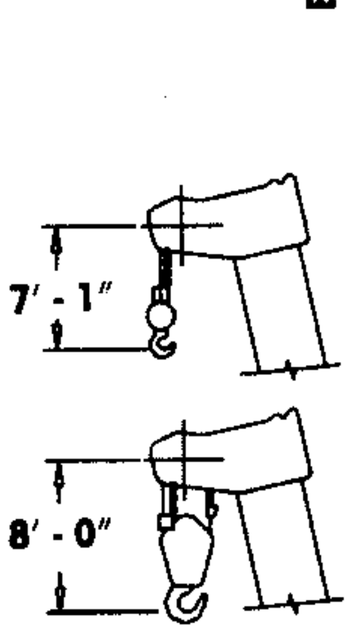
AT865

All terrain hydraulic crane/40 ft.-125 ft. full power boom

RANGE DIAGRAM (UNLADEN BOOM)





DIMENSIONS ARE FOR LARGEST GROVE FURNISHED HOOK BLOCK AND HEADACHE BALL, WITH ANTI-TWO BLOCK ACTIVATED.

Maximum capacity 65 Tons

85% OF TIPPING - ON OUTRIGGERS
75% OF TIPPING - ON RUBBER

RATED LIFTING CAPACITIES IN POUNDS

CAPACITIES FOR 17,600 LBS. COUNTERWEIGHT

35 ft. Fixed Extension
(On Outriggers - 360°)

Radius in Feet	35'0" Fixed Extension					
	2° Offset		15° Offset		30° Offset	
	Ang	Load	Ang	Load	Ang	Load
30	80.0	16,500				
35	78.5	15,650	79.5	11,650		
40	76.0	14,000	78.0	11,100		
45	74.0	12,400	76.0	10,450	79.0	8,500
50	72.0	11,400	74.0	9,950	77.0	7,950
55	70.0	10,600	72.0	9,400	75.0	7,450
60	68.0	9,750	70.0	8,800	73.0	7,100
65	66.0	8,900	68.0	8,200	71.0	6,750
70	63.5	8,000	66.5	7,650	69.0	6,400
80	59.5	6,900	62.0	6,450	64.5	5,750
90	55.0	5,900	58.0	5,250	59.5	4,800
100	50.0	4,400	53.0	4,100	54.0	3,500

On Rubber

Radius in Feet	Static to 1 MPH	3 MPH
10	39,000	26,400
12	30,200	23,500
15	24,800	19,700
20	16,100	15,000
25	10,500	10,500
30	6,950	6,950
35	4,400	4,400

On Outriggers - 360°

Radius in Feet	Main Boom Lengths (4th Section Fully Retracted)							4th Sec Fully Exten'd 125'0"
	40'0"	45'0"	55'0"	65'0"	75'0"	85'0"	96'3"	
10	130,000	90,500	87,000					
12	115,000	90,500	83,000	73,000	60,000			
15	94,000	90,000	76,000	65,500	58,000	48,500		
20	70,000	70,000	65,500	54,500	47,500	41,500	33,500	
25	56,500	56,600	56,700	46,500	41,500	37,000	32,500	24,250
30	41,500	41,600	41,700	39,400	36,200	34,000	30,500	23,650
35		31,500	31,600	31,700	31,800	29,500	25,500	19,800
40			25,000	25,100	25,100	25,200	24,300	17,650
50				16,400	16,450	16,500	16,600	14,250
60					11,200	11,250	11,300	11,300
70						7,600	7,700	8,950
80							5,000	6,800
90								4,800
100								3,150

35 ft. to 61 ft. Telescopic Swingaway
(On Outriggers - 360°)

Radius in Feet	35'0" to 61'0" Telescopic Swingaway																	
	35'0"						48'0"						61'0"					
	2° Offset		15° Offset		30° Offset		2° Offset		15° Offset		30° Offset		2° Offset		15° Offset		30° Offset	
	Ang	Load	Ang	Load	Ang	Load	Ang	Load	Ang	Load	Ang	Load	Ang	Load	Ang	Load	Ang	Load
30	80.0	16,500					**	10,800										
35	78.0	15,650	79.5	11,650			80.0	9,600					**	8,000				
40	76.0	14,000	78.0	11,100			78.5	9,100	**	7,850			80.0	7,900				
45	74.0	12,400	76.0	10,450	79.0	8,500	77.0	8,650	80.0	7,450			78.0	7,600	**	5,950		
50	72.0	11,400	74.0	9,950	77.0	7,950	75.0	8,350	78.0	7,050			76.0	7,250	80.0	5,750		
55	70.0	10,600	72.0	9,400	75.0	7,450	73.0	7,900	76.5	6,700	80.5	5,250	74.5	6,850	78.5	5,500		
60	68.0	9,750	70.0	8,800	73.0	7,100	71.0	7,350	74.5	6,300	78.5	5,000	73.0	6,500	77.0	5,250		
65	66.0	8,900	68.0	8,200	71.0	6,750	69.0	6,900	72.5	5,900	76.5	4,750	71.0	6,200	75.0	5,050	80.0	4,200
70	63.5	8,000	66.5	7,650	69.0	6,400	67.0	6,600	70.5	5,600	74.5	4,500	69.5	5,950	73.5	4,850	78.0	3,950
80	59.5	6,900	62.0	6,450	64.5	5,750	63.0	6,300	67.0	5,050	70.5	4,000	66.0	5,350	70.0	4,300	74.5	3,450
90	55.0	5,900	58.0	5,250	59.5	4,800	59.0	5,600	62.5	4,350	66.0	3,700	62.0	4,850	66.5	3,900	70.5	3,100
100	50.0	4,400	53.0	4,100	54.0	3,500	55.0	4,750	58.0	3,750	61.0	3,100	58.5	4,300	62.5	3,550	66.5	2,950
110							50.5	3,700	53.5	3,100	56.5	2,600	54.5	3,700	58.5	3,100	62.5	2,650
120							46.5	2,500	49.5	2,600	51.0	2,250			54.5	2,650	58.0	2,450
130															50.5	2,000	53.5	2,100

**Capacities are based on the maximum obtainable boom angle.

Form No.: LCEAT865-887-10M

GROVE MANUFACTURING COMPANY
Division of Kidde, Inc.
KIDDE
Shady Grove, Pennsylvania 17256-0021

CAPACITIES FOR 6,600 LBS. COUNTERWEIGHT

35 ft. Fixed Extension
(On Outriggers - 360°)

Radius in Feet	35'0" Fixed Extension					
	2° Offset		15° Offset		30° Offset	
	Ang	Load	Ang	Load	Ang	Load
30	80.0	16,500				
35	78.5	15,650	79.5	11,650		
40	76.0	14,000	78.0	11,100		
45	74.0	12,400	76.0	10,450	79.0	8,500
50	72.0	11,400	74.0	9,950	77.0	7,950
55	70.0	10,600	72.0	9,400	75.0	7,450
60	68.0	9,750	70.0	8,800	73.0	7,100
65	66.0	8,900	68.0	8,200	71.0	6,750
70	63.5	7,800	66.5	7,650	69.0	6,400
80	59.5	5,600	62.0	6,200	64.5	5,750
90	55.0	3,800	58.0	4,350	59.5	4,800
100	50.0	2,450	53.0	2,850	54.0	3,300

On Rubber

Radius in Feet	Static to 1 MPH	3 MPH
10	29,500	28,000
12	23,300	23,300
15	16,500	16,500
20	10,000	10,000
25	5,900	5,900
30	3,300	3,300
35	1,500	1,500

On Outriggers - 360°

Radius in Feet	Main Boom Lengths (4th Section Fully Retracted)							4th Sec Fully Exten'd
	40'0"	45'0"	55'0"	65'0"	75'0"	85'0"	96'3"	125'0"
10	130,000	90,500	87,000					
12	114,000	90,500	83,000	73,000	60,000			
15	93,000	89,500	76,000	65,500	58,000	48,500		
20	68,000	68,000	65,500	54,500	47,500	41,500	33,500	
25	47,500	47,600	47,700	46,000	41,500	37,000	32,500	24,250
30	33,500	33,600	33,700	33,800	33,900	34,000	30,500	23,650
35		25,000	25,100	25,200	25,300	25,400	25,500	19,800
40			19,600	19,700	19,800	19,900	20,000	17,650
50				12,300	12,400	12,500	12,600	14,000
60					7,800	7,900	8,000	9,900
70						4,700	4,800	6,800
80							2,450	4,550
90								2,600

35 ft. to 61 ft. Telescopic Swingaway
(On Outriggers - 360°)

Radius In Feet	35'0" to 61'0" Telescopic Swingaway																	
	35'0"						48'0"						61'0"					
	2° Offset		15° Offset		30° Offset		2° Offset		15° Offset		30° Offset		2° Offset		15° Offset		30° Offset	
	Ang	Load	Ang	Load	Ang	Load	Ang	Load	Ang	Load	Ang	Load	Ang	Load	Ang	Load	Ang	Load
30	80.0	16,500					**	10,800										
35	78.0	15,650	79.5	11,650			80.0	9,600					**	8,000				
40	76.0	14,000	78.0	11,100			78.5	9,100	**	7,850			80.0	7,900				
45	74.0	12,400	76.0	10,450	79.0	8,500	77.0	8,650	80.0	7,450			78.0	7,600	**	5,950		
50	72.0	11,400	74.0	9,950	77.0	7,950	75.0	8,350	78.0	7,050			76.0	7,250	80.0	5,750		
55	70.0	10,600	72.0	9,400	75.0	7,450	73.0	7,900	76.5	6,700	80.5	5,250	74.5	6,850	78.5	5,500		
60	68.0	9,750	70.0	8,800	73.0	7,100	71.0	7,350	74.5	6,300	78.5	5,000	73.0	6,500	77.0	5,250		
65	66.0	8,900	68.0	8,200	71.0	6,750	69.0	6,900	72.5	5,900	76.5	4,750	71.0	6,200	75.0	5,050	80.0	4,200
70	63.5	7,800	66.5	7,650	69.0	6,400	67.0	6,600	70.5	5,600	74.5	4,500	69.5	5,950	73.5	4,850	78.0	3,950
80	59.5	5,600	62.0	6,200	64.5	5,750	63.0	6,200	67.0	5,050	70.5	4,000	66.0	5,350	70.0	4,300	74.5	3,450
90	55.0	3,800	58.0	4,350	59.5	4,000	59.0	4,500	62.5	4,350	66.0	3,700	62.0	4,850	66.5	3,900	70.5	3,100
100	50.0	2,450	53.0	2,850	54.0	3,300	55.0	3,100	58.0	3,650	61.0	3,100	58.5	3,650	62.5	3,550	66.5	2,950
110							50.5	2,000	53.5	3,000	56.5	2,600	54.5	2,500	58.5	3,050	62.5	2,650
120											51.0	1,850			54.5	2,100	58.0	2,450
130																	53.5	1,650

**Capacities are based on the maximum obtainable boom angle.

CAPACITIES WITH NO COUNTERWEIGHT

On Outriggers - 360°

Radius in Feet	Main Boom Lengths (4th Section Fully Retracted)							4th Sec Fully Exten'd 125'0"
	40'0"	45'0"	55'0"	65'0"	75'0"	85'0"	96'3"	
10	130,000	90,500	87,000					
12	114,000	90,500	83,000	73,000	60,000			
15	90,000	89,500	76,000	65,500	58,000	48,500		
20	63,500	63,600	63,800	54,500	47,500	41,500	33,500	
25	40,000	40,100	40,200	40,200	40,300	37,000	32,500	24,250
30	28,000	28,100	28,100	28,200	28,200	28,300	28,300	23,650
35		20,500	20,600	20,600	20,700	20,700	20,800	19,000
40			16,200	16,200	16,300	16,300	16,400	17,650
50				9,500	9,500	9,500	9,500	11,900
60					5,400	5,400	5,400	7,600
70						2,650	2,650	4,800
80								2,750

On Rubber

Radius in Feet	Static to 1 MPH	3 MPH
10	27,000	27,000
12	20,500	20,500
15	14,300	14,300
20	7,800	7,800
25	4,100	4,100
30	1,500	1,500

NOTES FOR LIFTING CAPACITIES

GENERAL:

1. Rated loads as shown on lift chart pertain to this machine as originally manufactured and equipped. Modifications to the machine or use of optional equipment other than that specified can result in a reduction of capacity.
2. This chart is intended as a guide only. The individual crane's load chart operating instructions and other instruction plates give details of the conditions under which the crane may be operated safely. ALL OF THESE INSTRUCTIONS MUST BE READ AND UNDERSTOOD PRIOR TO OPERATING THE CRANE.

SETUP:

1. The machine shall be leveled on a firm supporting surface. 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 load to a larger bearing surface.
2. For outrigger operation, outriggers shall be fully extended with tires raised free of crane weight before operating the boom or lifting loads.
3. If machine is equipped with front jack cylinder, the front jack cylinder shall be set in accordance with written procedure.
4. When equipped with extendable counterweight, the counterweight shall be fully extended before operation.
5. Tires shall be inflated to the recommended pressure before lifting on rubber.
6. Do not transport crane with boom extension or jib erected.

OPERATION:

1. Rated loads at rated radius shall not be exceeded. Do not tip the machine to determine allowable loads. For clamshell or concrete bucket operation, weight of bucket and load must not exceed 80% of rated lifting capacities.
2. All rated loads have been tested to and meet minimum requirements of SAE J1063 OCT80 - Cantilevered Boom Crane Structures - Method of Test, and do not exceed 85% of the tipping load on outriggers as determined by SAE J765 OCT80 Crane Stability Test Code.
3. Rated loads include the weight of hook block, slings and auxiliary lifting devices and their weights shall be subtracted from the listed rating to obtain the net load to be lifted. When more than the minimum required hoist reeving is used, the additional rope weight shall be considered part of the load to be handled.
4. Rated loads do not account for wind on lifted load or boom. It is recommended when wind velocity is above 20 mph (32km/h), rated loads and boom lengths shall be appropriately reduced.
5. The maximum load which can be telescoped is not definable because of variations in loadings and crane maintenance, but it is safe to attempt retraction and extension within the limits of the capacity chart.
6. When either boom length or radius or both are between values listed, the smallest load shown at either the next larger radius or boom length shall be used.
7. Handling of personnel from the boom is not authorized except with equipment furnished and installed by Grove Manufacturing Company.
8. Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity limitation.

DEFINITIONS:

1. Operating Radius: Horizontal distance from a projection of the axis of rotation to the center of the vertical hoist line or tackle with load applied.
2. Loaded Boom Angle (Shown in Parenthesis on Main Boom Capacity Chart): is the angle between the boom base section and the horizontal, after lifting the rated load at the rated radius with the rated boom length.
3. Working Area: Areas measured in a circular arc about the center line of rotation as shown on the working area diagram.
4. Freely Suspended Load: Load hanging free with no direct external force applied except by the lift cable.
5. Side Load: Horizontal force applied to the lifted load either on the ground or in the air.