



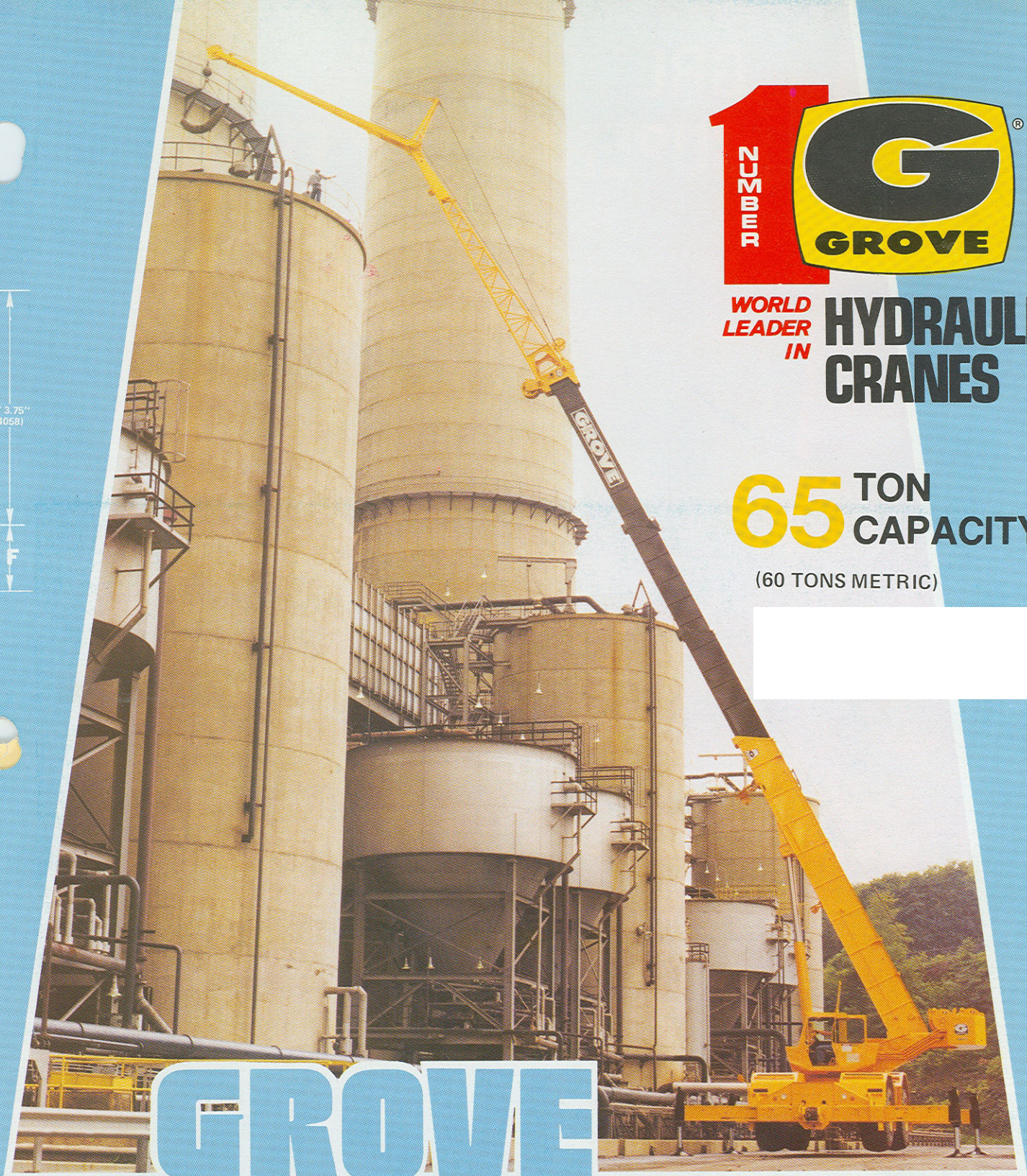
WORLD LEADER IN HYDRAULIC CRANES

65 TON CAPACITY

(60 TONS METRIC)

GROVE

RT865

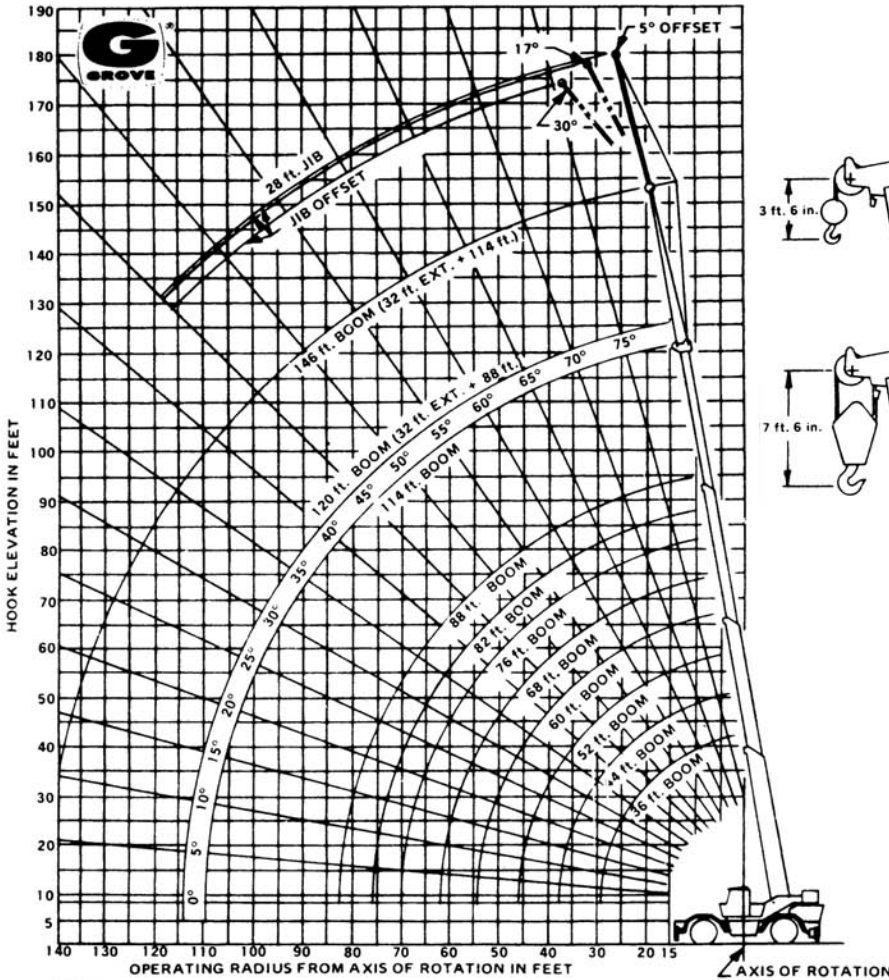


GROVE®

RT865

65 TON CAPACITY
36 ft. - 146 ft. BOOM

RANGE DIAGRAM



JIB CAPACITIES IN POUNDS 28 ft. "A" FRAME JIB ON OUTRIGGERS - 360°

Boom Angle	5° OFFSET		17° OFFSET		30° OFFSET	
	Radius (ref.) ft.	Caps. (lbs.)	Radius (ref.) ft.	Caps. (lbs.)	Radius (ref.) ft.	Caps. (lbs.)
80°	32.6	10,000	38.1	8,450	42.3	6,430
75°	47.1	8,720	52.2	7,430	56.4	5,870
70°	61.2	7,430	65.8	6,520	70.1	5,510
65°	74.8	6,330	78.9	5,600	82.8	4,770
60°	87.8	5,230	91.4	4,680	94.9	4,130
55°	100.2	3,270	103.2	3,040	106.2	3,040
50°	111.8	2,210	114.2	2,100	116.8	2,100
45°	122.3	1,340	124.4	1,220	126.4	1,220

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NOTES FOR JIB CAPACITIES

- All capacities are in pounds. Capacities are based on structural strength of 28 ft. and 32 ft. boom extension combination at given main boom angle regardless of main boom length. Note: Two part lifting service is required with Krueger LMJ; at any other time, single or two part line may be used.)
- WARNING:** Operation of machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with jib occurs rapidly and without advance warning.
- 28 FT. JIB WARNING:** For main boom length with power pinned fly extended greater than 82 ft. with 32 ft. boom extension and 28 ft. jib in working position, the boom angle must not be less than 40° since loss of stability will occur causing a tipping condition. The boom angle is not restricted for main boom length with power pinned fly extended equal to or less than 82 ft. This warning applies for jib erection purposes also.
- WARNING:** Lifting on rubber with 32 ft. boom extension or 28 ft. jib and 32 ft. boom extension combination is prohibited.
- Reference radii listed are for fully extended main boom only.

WEIGHT REDUCTIONS FOR LOAD HANDLING DEVICES

32 ft. BOOM EXTENSION	
†STOWED	- 640 lbs.
†ERECTED	- 3,584 lbs.
28 ft. Jib & 32 ft. Boom Ext. Combination	
†STOWED	- 1,063 lbs.
†ERECTED	- 9,396 lbs.
††ERECTED	- 2,111 lbs.

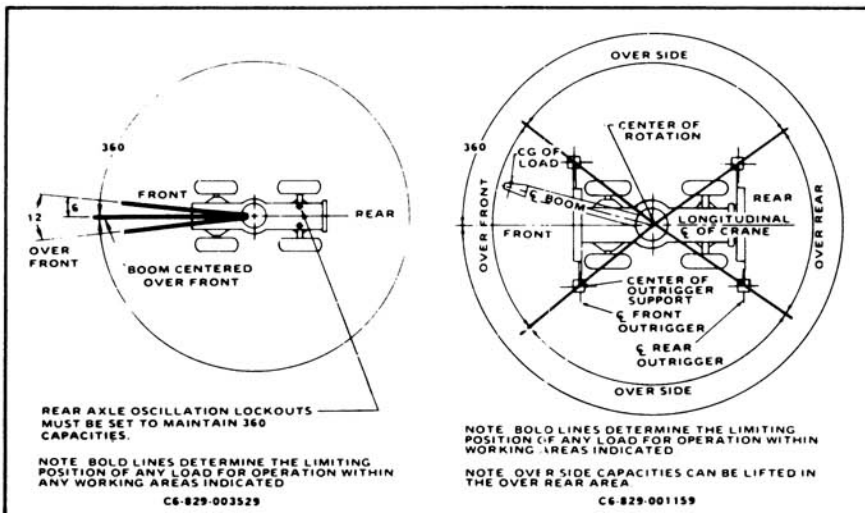
† Reduction of main boom capacities.
†† Reduction of 32 ft. Ext. capacities.

HOOK BLOCK

65 Ton, 5 Sheave	1,900 lbs.
15 Ton, 1 Sheave	580 lbs.
10 Ton Headache Ball	500 lbs.
7½ Ton Headache Ball	300 lbs.
Auxiliary Boom Head	220 lbs.

NOTE: All Load Handling Devices and Boom Attachments are Considered Part of the Load and Suitable Allowances MUST BE MADE for Their Combined Weights. Weights are for Grove furnished equipment.

LIFTING AREA DIAGRAMS



REAR AXLE OSCILLATION LOCKOUTS MUST BE SET TO MAINTAIN 360 CAPACITIES.

NOTE BOLD LINES DETERMINE THE LIMITING POSITION OF ANY LOAD FOR OPERATION WITHIN ANY WORKING AREAS INDICATED

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NOTE BOLD LINES DETERMINE THE LIMITING POSITION OF ANY LOAD FOR OPERATION WITHIN WORKING AREAS INDICATED

NOTE OVER SIDE CAPACITIES CAN BE LIFTED IN THE OVER REAR AREA

C6-829-001159



RT865

65 TON CAPACITY
36 ft. - 146 ft. BOOM

(POWER PINNED FLY)
PCSA CLASS 10-312
85% OF TIPPING

GROVE®

FULL HYDRAULIC

SELF-PROPELLED CRANE

RATED LIFTING CAPACITIES IN POUNDS

36 ft. - 136 ft. BOOM

ON OUTRIGGERS FULLY EXTENDED - 360°

ON OUTRIGGERS FULLY EXTENDED - OVER FRONT

Radius in Feet	Main Boom Length in Feet (Power Pinned Fly Retracted)								88 ft. PowerPin. Fly Ext.	32 ft. Ext. & 88 ft.	32 ft. Ext. & 114 ft.
	36	44	52	60	68	76	82	88	114	120	146
10	130,000 (67)	106,700 (71.5)	101,600 (74.5)	100,000 (77)	96,700 (79)				See Warning Note 17	See Warning Note 18	See Warning Note 19
12	120,000 (63)	106,700 (68.5)	101,600 (72)	96,500 (75)	87,850 (77)	84,700 (78.5)					
15	103,450 (57.5)	103,450 (64)	95,300 (68.5)	84,900 (72)	79,180 (74.5)	77,550 (76)	70,250 (77.5)	64,500 (79)			
20	80,650 (47)	80,650 (56.5)	80,650 (62.5)	70,550 (66.5)	64,310 (70)	63,800 (72)	59,400 (74)	55,000 (75.5)	38,750 (80)	23,600 (79.5)	
25	62,200 (34)	62,200 (48)	62,200 (55.5)	60,150 (61)	54,000 (65.5)	49,700 (67.5)	47,150 (70.5)	45,600 (72)	34,000 (77)	21,300 (80)	22,500 (80)
30		48,450 (38)	48,450 (48.5)	48,450 (55.5)	46,650 (60.5)	42,750 (63.5)	40,450 (66.5)	39,150 (68.5)	30,300 (74.5)	19,500 (74.5)	20,400 (78.5)
35	See Warning Note 16	39,500 (24.5)	39,500 (40.5)	39,500 (49.5)	39,500 (55.5)	37,300 (58.5)	35,200 (62.5)	34,050 (65)	27,250 (71.5)	17,950 (72)	18,000 (76.5)
40			31,220 (30.5)	31,220 (42.5)	31,220 (50)	31,220 (54)	31,000 (58.5)	29,550 (61.5)	24,750 (69)	16,600 (69.5)	16,000 (74.5)
45			24,800 (14.5)	24,800 (34.5)	24,800 (44)	24,800 (49)	24,800 (54)	24,800 (57.5)	22,650 (66)	15,500 (66.5)	14,620 (72.5)
50				19,880 (24)	19,880 (37.5)	19,880 (43.5)	19,880 (49.5)	19,880 (53.5)	20,800 (63)	14,500 (64)	13,730 (70)
60					13,280 (17.5)	13,280 (30.5)	13,280 (39)	13,280 (44)	17,050 (57)	12,850 (58.5)	11,450 (66)
70						9,200 (24.5)	9,200 (33)	9,200 (35)	12,480 (50.5)	11,550 (52.5)	9,540 (61.5)
80							6,180 (14)	9,100 (43)	9,530 (46)	9,530 (46)	8,090 (56.5)
90								6,670 (34.5)	6,970 (38.5)	6,970 (38.5)	7,080 (51.5)
100								4,710 (23)	4,920 (29.5)	4,920 (29.5)	5,830 (46)
110									3,240 (15.5)	4,120 (40)	
120											2,800 (33)
130											1,840 (24)
Min. boom angle (deg.) for indicated length (no load)								0	0	0	10
Max. boom length (ft.) at 0 deg. boom angle (no load)								88	114	120	140

Radius in Feet	Main Boom Length in Feet (Power Pinned Fly Retracted)								88 ft. PowerPin. Fly Ext.	32 ft. Ext. & 88 ft.	32 ft. Ext. & 114 ft.
	36	44	52	60	68	76	82	88	114	120	146
10	130,000 (67)	106,700 (71.5)	101,600 (74.5)	100,000 (77)	96,700 (79)				See Warning Note 17	See Warning Note 18	See Warning Note 19
12	120,000 (63)	106,700 (68.5)	101,600 (72)	96,500 (75)	87,850 (77)	84,700 (78.5)					
15	103,450 (57.5)	103,450 (64)	95,300 (68.5)	84,900 (72)	79,180 (74.5)	77,550 (76)	70,250 (77.5)	64,500 (79)			
20	80,650 (47)	80,650 (56.5)	80,650 (62.5)	70,550 (66.5)	64,310 (70)	63,800 (72)	59,400 (74)	55,000 (75.5)	38,750 (80)	23,600 (79.5)	
25	62,200 (34)	62,200 (48)	62,200 (55.5)	60,150 (61)	54,000 (65.5)	49,700 (67.5)	47,150 (70.5)	45,600 (72)	34,000 (77)	21,300 (80)	22,500 (80)
30		48,450 (38)	48,450 (48.5)	48,450 (55.5)	46,650 (60.5)	42,750 (63.5)	40,450 (66.5)	39,150 (68.5)	30,300 (74.5)	19,500 (74.5)	20,400 (78.5)
35	See Warning Note 16	39,500 (24.5)	39,500 (40.5)	39,500 (49.5)	39,500 (55.5)	37,300 (58.5)	35,200 (62.5)	34,050 (65)	27,250 (71.5)	17,950 (72)	18,000 (76.5)
40				34,400 (30.5)	34,400 (42.5)	34,400 (50)	32,900 (54)	31,000 (58.5)	29,550 (61.5)	24,750 (69)	16,600 (69.5)
45				29,250 (14.5)	29,250 (34.5)	29,250 (44)	29,250 (49)	29,250 (54)	27,500 (57.5)	26,550 (66)	15,500 (66.5)
50					24,350 (24)	24,350 (37.5)	24,350 (43.5)	24,350 (49.5)	23,750 (53.5)	20,800 (63)	14,500 (64)
60						17,060 (17.5)	17,060 (30.5)	17,060 (39)	17,060 (44)	17,900 (57)	12,850 (58.5)
70							12,000 (24.5)	12,000 (33)	14,550 (50.5)	11,550 (52.5)	9,540 (61.5)
80								8,560 (14)	11,250 (43)	10,500 (46)	8,090 (56.5)
90									8,670 (34.5)	8,710 (38.5)	7,080 (51.5)
100									6,560 (23)	6,660 (29.5)	6,260 (46)
110										4,950 (15.5)	5,570 (40)
120											4,320 (33)
130											3,220 (24)
Min. boom angle (deg.) for indicated length (no load)								0	0	0	0
Max. boom length (ft.) at 0 deg. boom angle (no load)								88	114	120	146

NOTE: Boom angles are in degrees

NOTE: Boom angles are in degrees.



RT865

65 TON CAPACITY
36 ft. - 146 ft. BOOM

(POWER PINNED FLY)
PCSA CLASS 10-312
85% OF TIPPING

GROVE®

FULL HYDRAULIC
SELF-PROPELLED CRANE

ON RUBBER CAPACITIES

29.5x25 (28 ply) TIRES

33.25x29 (26 ply) TIRES

Radius in Feet	Stationary Capacity	Stationary Capacity	Pick & Carry Cap. Up to 2.5 MPH	Radius in Feet	Stationary Capacity	Stationary Capacity	Pick & Carry Cap. Up to 2.5 MPH
	Defined Arc (3) Over Front	360° Arc	Boom Centered Over Front (7)		Defined Arc (3) Over Front	360° Arc	Boom Centered (7) Over Front
10	79,500 (a)	53,800 (a)	68,830 (a)	10	94,000 (a)	64,800 (a)	89,880 (a)
12	67,500 (a)	43,210 (a)	59,920 (a)	12	80,400 (a)	52,400 (a)	78,630 (a)
15	58,070 (a)	32,960 (a)	49,740 (a)	15	67,300 (a)	40,400 (a)	65,770 (a)
20	46,850 (a)	21,630 (a)	37,980 (a)	20	54,300 (a)	27,100 (a)	50,940 (a)
25	37,100 (b)	15,510 (b)	30,830 (a)	25	43,000 (b)	18,910 (b)	41,700 (a)
30	30,200 (b)	10,670 (b)	25,040 (b)	30	32,020 (b)	12,650 (b)	32,020 (b)
35	22,910 (c)	7,540 (c)	19,910 (b)	35	23,350 (c)	8,810 (c)	15,930 (b)
40	17,480 (d)	4,900 (c)	16,260 (c)	40	17,870 (d)	5,910 (c)	12,720 (c)
45	13,770 (e)	2,970 (e)	13,530 (c)	45	14,100 (e)	3,600 (e)	10,330 (c)
50	10,930 (e)	1,660 (e)	10,930 (d)	50	11,220 (e)	2,020 (e)	8,360 (d)
60	6,700 (f)		3,330 (c)	60	6,940 (f)		5,140 (e)
70	3,810 (g)		1,160 (g)	70	4,010 (g)		2,730 (g)
80	1,570 (h)			80	1,740 (h)		

A6-829-005134

A6-829-005118

Maximum Permissible Boom Length: (Power Pinned Fly Retracted)

(a) 36 ft. (e) 68 ft.
(b) 44 (f) 76
(c) 52 (g) 82
(d) 60 (h) 88

Front (No Load)	Min. Boom Angle (deg.) for Indicated Length	Main Boom 88 Ft.	Main Boom 114 Ft.	114 Ft. Boom +32 Ft. Ext.
150°	Max. Boom Length (ft.) at 0 degree Boom Angle	88.0	119.39	128.0
(No Load)	Min. Boom Angle (deg.) for Indicated Length	46	52	59
	Max. Boom Length (ft.) at 0 degree Boom Angle	60.0	75.0	100.0

NOTES FOR RUBBER CAPACITIES

- Capacities are in pounds and do not exceed 85% of tipping loads as determined by test in accordance with SAE J-765.
- Capacities are applicable to machines equipped with:

Cold Inflation	2.5 MPH
75 PSI	65 PSI
65 PSI	50 PSI
- Defined Arc - Over front includes $\pm 6^\circ$ on either side of longitudinal centerline of machine. (Ref. drawing C6-829-003529.)
- Capacities are applicable only with machine on firm level surface.
- Axle lockouts must be functioning before lifting on rubber. (Check automatic lockout system for proper functioning; refer to "Operation and Maintenance Manual" for description of a proper functioning axle lockout system.)
- All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. See lifting capacity chart for tire used. Damaged tires are hazardous to safe operation of crane.
- For pick and carry operation, boom must be centered over front of machine, mechanical swing lock engaged, and load restrained from swinging. When handling loads in the structural range with capacities close to maximum ratings, travel should be reduced to creep speeds.
- On rubber lifting with power pinned fly extended, boom extension or jib is not permitted.
- Creep - not over 200 feet (61 meters) of movement in any 30-minute period, and not exceeding 1 mph (1.6 kph).

NOTES FOR LIFTING CAPACITIES

GENERAL:

- 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.
- Construction equipment can be hazardous if improperly operated or maintained. Operation and maintenance of this machine shall be in compliance with the information in the operator's, parts, and safety manuals supplied with this machine. If these manuals are missing, order replacements from the manufacturer through the distributor.
- The operator and other personnel associated with this machine shall fully acquaint themselves with the latest applicable American National Standards Institute (ANSI) Safety Standards for cranes.

SETUP:

- 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.
- For outrigger operation, outriggers shall be fully extended with tires raised free of crane weight before operating the boom or lifting loads.
- If machine is equipped with front jack cylinder, the front jack cylinder shall be set in accordance with written procedure.
- If machine is equipped with extendable counterweight, the counterweight shall be fully extended before operation.
- Tires shall be inflated to the recommended pressure before lifting on rubber.
- With certain boom and hoist tackle combinations, maximum capacities may not be obtainable with standard cable lengths.

OPERATION:

- 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.
- Rated loads do not exceed 85% of the tipping load as determined by SAE Crane Stability Test Code J-765a.
- Rated loads include the weight of hook block, slings and auxiliary lifting devices and their weights shall be subtracted from the listed ratings to obtain the net load to be lifted.
- Load ratings are based on freely suspended loads. No attempt shall be made to move a load horizontally on the ground in any direction.
- Rated loads do not account for wind on lifted load or boom. It is recommended when wind velocity is above 20 mph (32 km/h), rated loads and boom lengths shall be appropriately reduced.
- Rated loads are for lift crane service only.
- Do not operate at a radius or boom length where capacities are not listed. At these positions, the machine may overturn without any load on the hook.
- 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.
- 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.

- For safe operation, the user shall make due allowances for his particular job conditions, such as: soft or uneven ground, out of level conditions, high winds, side loads, pendulum action, jerking or sudden stopping of loads, hazardous conditions, experience of personnel, two machine lifts, traveling with loads, electric wires, etc. Side pull on boom or jib is extremely dangerous.
 - Power telescoping boom sections must be extended equally at all times.
 - Handling of personnel from the boom is not authorized except with equipment furnished and installed by Grove Manufacturing Company.
 - Keep load handling devices a minimum of 12 inches (30 cm) below boom head when lowering or extending boom.
 - Loaded boom angles give an approximation of the operating radius at specified boom lengths. The boom angle before loading should be greater to account for deflection.
 - Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity limitation.
 - Capacities for the 36 ft. (11.0 m) boom length shall be lifted with boom fully retracted, capacities shall not exceed those shown for the 44 ft. (13.4 m) boom length.
 - For boom lengths less than 114 ft. (34.6 m) with power pinned fly extended, the rated loads are determined by boom angle in the column headed by 114 ft. (34.6 m) boom (power fly extended). For boom angles not shown, use rating of next lower boom angle. For this load column, the extended power pinned operational mode is to be selected on the Krueger L.M.I.*
 - For boom lengths less than 120 ft. (36.5 m) with power pinned fly retracted and 32 ft. (9.8 m) boom extension erected, the rated loads are determined by boom angle only in the column headed by 120 ft. (36.5 m) boom (power pinned fly retracted). For this load column the retracted power pinned fly plus 32 ft. (9.8 m) boom extension operational mode is to be selected on the Krueger L.M.I.*
 - For boom lengths less than 146 ft. (44.4 m) with power pinned fly extended and 32 ft. (9.8 m) boom extension erected the rated loads are determined by boom angle only in the column headed by 146 ft. (44.4 m) boom. For boom angles not shown use rating of next lower boom angle. For this load column, the 32 ft. (9.8 m) boom extension operational mode is to be selected on the Krueger L.M.I.*
- *WARNING: The Krueger L.M.I. readings are accurate only if all powered boom sections are fully extended.

DEFINITIONS:

- Operating Radius:** Horizontal distance from a projection of the axis of rotation to the supporting surface before loading to the center of the vertical hoist line or tackle with load applied.
- 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.
- Working Area:** Areas measured in a circular arc about the center line of rotation as shown on the working area diagram.
- Freely Suspended Load:** Load hanging free with no direct external force applied except by the lift cable.
- Side Load:** Horizontal force applied to the lifted load either on the ground or in the air.