

35 ft. - 142 ft. BOOM

(POWER PINNED)

PCSA CLASS 10-151

RATED LIFTING CAPACITIES IN POUNDS

ON OUTRIGGERS FULLY EXTENDED - 360°

ON OUTRIGGERS FULLY EXTENDED - 360°										
Radius			Aain Booi					Power	32 ft.	32 ft.
in .	(Power Pinned Fly Retracted)				Pin. Fly & 85 ft.	Ext. & 85 ft.	Ext. & 110 ft.			
Feet	*35	40	45	55	65	75	85	110	117	142
10	100,000	74,000	72,000	64,000				See	See	See
	(65)	(68)	(71)	(75)				Warning Note C	Warning Note D	Warning Note E
12	80,000	69,800	65,500	58,000	44,700					
	(61)	(65)	(68)	(73)	(76)					1
15	70,000	61,000	57,000	50,300	43,500					
	(55.5)	(60)	(64)	(69.5)	(73)	l				
20	53,000	50,300	46,800	40,800	37,400	35,000	31,000			
	(44.5)	(51)	(56.5)	(63.5)	(68.5)	(72)	(74.5)	ł		İ
25	37,550	37,550	37,550	34,200	31,200	29,200	27,000	20,000	17,500	
	(31)	(41)	(48.5)	(57.5)	(63.5)	(68)	(71)	(76)	(76)	
30		26,200	26,200	26,200	26,200	24,700	23,500	17,000	15,600	
		(28)	(39)	(51)	(58.5)	(63.5)	(67.5)	(74)	(74)	
35			19,620	19,620	19,620	19,620	19,620	14,550	13,500	9,600
<u> </u>			(26.5)	(44)	(53)	(59)	(63.5)	(71)	(71,5)	(76)
40				15,120	15,120	15,120	15,120	12,720	11,900	8,550
				(35.5)	(47)	(54.5)	(60)	(68)	(69)	(74.5)
45				11,850	11,850	11,850	11,850	11,300	10,600	7,680
				(24.5)	(40.5)	(49.5)	(55.5)	(65)	(66)	(72.5)
50					9,650	9,650	9,650	10,000	9,600	6,940
					(32.5)	(44)	(51.5)	(62)	(63.5)	(70.5)
55	-				7,680	7,680	7,680	8,850	8,700	6,280
					(22.5)	(38)	(46.5)	(59)	(61)	(68)
60						6,120	6,120	7,900	7,950	5,760
						(31)	(41.5)	(56)	(58)	(66)
65						4,810	4,810	6,730	6,900	5,230
						(21.5)	(36)	(52.5)	(55)	(63.5)
70							3,830	5,660	5,810	4,800
							(29.5)	(49)	(52)	(61)
75							2,930	4,580	4,750	4,490
0.0							(20.5)	(45.5)	(48.5)	(58.5)
80								3,760	3,890	4,140
0.5								(41.5)	(45)	(56)
85								2,970	3,230	3,670
90								(37)	(41.5)	(53.5)
90								2,400	2,590	3,080
95								(32)	(37.5)	(51)
90								1,860	2,030	2,560
100								(26.5)	(33)	(48)
100					}		Į	1,360	1,520	2,100
105								(18.5)	(28)	(45)
105									1,020	1,680
110	<u> </u>							·	(21.5)	(42)
110			1	Ì		.				1,300
L	L									(38.5)

A6-829-001476C & -002139A

ON RUBBER CAPACITIES

Radius in	Stationary Capacity	2.5 MPH Capacity	Stationary Capacity
Feet	Defined Arc (1) Over Front	Boom Centered (2) Over Front	360° Arc
10	45,550 (a)	36,540 (a)	40,650 (a)
12	37,650 (a)	32,150 (a)	30,000 (b)
15	30,750 (a)	26,470 (a)	21,500 (b)
20	24,250 (b)	19,910 (b)	12,460 (c)
25	19,150 (c)	15,340 (c)	7,840 (c)
30	13,190 (c)	11,720 (c)	4,840 (c)
35	9,310 (c)	9,020 (c)	2,640 (c)
40	6,840 (c)	6,520 (c)	1,270 (c)
45	5,200 (c)	4,790 (c)	

A6-829-001488C

ON OUTRIGGERS FULLY EXTENDED -

10		- I V	<u> </u>	mud	ON COTHIGGERS FOLLY EXTENDED								
Teet			Main Boom Length in Feet										
10			(Power Pinned Fly Retracted)										
(65) (68) (71) (75) 44,700 12 80,000 69,800 65,500 58,000 44,700 61,000 61,000 57,000 50,300 44,500 76 76 77,000 61,000 57,000 50,300 43,500 43,500 37,400 35,000 31,00 20,660 64,800 40,800 37,400 35,000 31,00 27,0 (74 74							65	· 75	85				
12	1 10	ט					1		1				
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(31)	25	5	41,000										
30 32,700 (28) 29,300 (51) 24,700 (63.5) 23,5 (67.67.67.67.67.67.67.67.67.67.67.67.67.6			(31)	(41)	(48.5)								
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35 24,688 (24,68) (23,000 (21,300 (63) (59) (63) (59) (63) (79) (79) (79) (79) (79) (79) (79) (79		_		(28)			(58.5)		(67.5				
18,390	35	۱ ۱						21,300	20,1				
(35.5)		\dashv			(26.5)				(63.5				
45	40	'							17,5				
(24.5)	45	_											
50 10,860 (32.5) (44) (51.8 55 8,890 (22.5) (38) (46.9 60 7,420 7,4 65 6,190 6,190 6,190 (21.5) (36) 70 5,0 75 4,3 (20.5 80 20.5 85 90 90 95 100 105 110 115 120 10,860 (10,860 (10,860 (10)) (44) (51.8) 8,890 (22.5) (38) (46.9 4,3 (21.5) (36) (21.5) (36) (22.5 5,0 (20.5 4,3 (20.5 100	43	1					•						
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55 8,890 (22.5) 8,890 (38) (46.9) 60 7,420 7,4 65 6,190 6,1 (21.5) (36) 5,0 (29.5) 70 5,0 (20.5) 80 20.5 85 90 95 100 105 110 115 120 120	"												
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125	120	Т											
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NOTES FOR ON RUBBER

Maximum Permissible Boom Length:

(a) 35 f (b) 45 f (1) Defined Ar track CL..
(2) Mechanical Chart based on and 50/65 PSI reduced for lowe Capacities appea structural streng as a capacity lim Capacities do no ance with SAE J Capacities are a surface only.
32 ft. boom extent of permitted fo

ft. - 142 ft. BOOM

(POWER PINNED)

PCSA CLASS 10-151



ACITIES IN POUNDS

,600

3) ,550

1.5)

2.5)

,680

,940

).5)

280

;) ,760

<u>,230</u>

3.5)

,800

) ,490

3.5) ,140

3) ,670

3.5) ,080

,560

3) ,100

5) ,680

,300

ON OUTRIGGERS FULLY EXTENDED - OVER FRONT

	Radius	Main Boom Length in Feet							Power	32 ft.	32 ft.
. ,6	in	(Power Pinned Fly Retracted)						Pin. Fly & 85 ft.	Ext. & 85 ft.	Ext. & 110 ft.	
	Feet	*35	40	45	55	65	75	85	110	117	142
	10	100,000	74,000	72,000	64,000				See Warning	See	5ee
		(65)	(68)	(71)	(75)				Note C	Warning Note D	Warning Note E
	12	80,000	69,800	65,500	58,000	44,700			<u> </u>		
		(61)	(65)	(68)	(73)	(76)		L]
	15	70,000	61,000	57,000	50,300	43,500					
		(55.5)	(60)	(64)	(69.5)	(73)				<u></u>	
	20	53,000	50,300	46,800	40,800	37,400	35,000	31,000			
		(44.5)	(51)	(56.5)	(63.5)	(68.5)	(72)	(74.5)			
	25	41,000	41,000	39,600	34,200	31,200	29,200	27,000	20,000	17,500	
		(31)	(41)	(48.5)	(57.5)	(63.5)	(68)	(71)	(76)	(76)	
	30		32,700	32,700	29,300	26,500	24,700	23,500	17,000	15,600	i
	35		(28)	(39)	(51)	(58.5)	(63.5)	(67.5)	(74)	(74)	
	35			24,680	24,680	23,000	21,300	20,100	14,550	13,500	9,600
	40			(26.5)	(44)	(53)	(59)	(63.5)	(71)	(71.5)	(76)
	40				18,390	18,390	18,390	17,500	12,720	11,900	8,550
	45				(35.5)	(47)	(54.5)	(60)	(68)	(69)	(74.5)
	45				13,580 (24.5)	13,580 (40.5)	13,580 (49.5)	13,580	11,300	10,600	7,680
	- 50				(24.5)	10,860	10,860	(55.5)	(65)	(66)	(72.5)
	30					(32.5)	(44)	10,860	10,000	9,600	6,940
	55					8,890	8,890	(51.5) 8,890	(62) 8,850	(63.5) 8,700	(70.5)
	33					(22.5)	(38)	(46.5)	(59)	(61)	6,280 (68)
	60					(22.5)	7,420	7,420	7,900	7,950	5,760
	"						(31)	(41.5)	(56)	(58)	(66)
	65						6,190	6,190	7,100	7,350	5,230
• •			200	100		eraje dig	(21.5)	(36)	(52.5)	(55)	(63.5)
ı	70						1= 1.15/	5,040	6,400	6,800	4,800
ı								(29.5)	(49)	(52)	(61)
ĺ	75							4,300	5,720	5,890	4,490
								(20.5)	(45.5)	(48.5)	(58.5)
	80								4,880	4,990	4,140
									(41.5)	(45)	(56)
	85		1						4,090	4,150	3,880
									(37)	(41.5)	(53.5)
	90								3,340	3,570	3,620
									(32)	(37.5)	(51)
	95								2,680	3,040	3,360
	100								(26.5)	(33)	(48)
	100							1	2,140	2,510	2,970
	105								(18.5)	(28)	(45)
	105									1,950	2,460
	110.								<u>_</u>	(21.5)	(42)
	110.		+ 1 -	•*						1,420	2,000
	115									(10.5)	(38:5)
	113										1,650
	120										(35)
	120						- 1	.			1,330
	125										1,020
	123]				(26)
	L			l				l	A 6-829-0	01470C &	<u> </u>
									7-0-045-0	, JUL 47 UC , 64	-002133A

NOTES FOR ON OUTRIGGERS

- A. Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity limitation. Capacities do not exceed 85% of tipping loads as determined by test in accordance with SAE recommended practice crane load stability test code - SAE J-765.
- *B. Capacities for the 35 ft. boom length shall be lifted with boom fully retracted. If boom is not fully retracted, capacities shall not exceed those shown for the 40 ft. boom length.
- C. For boom lengths less than 110 ft. with power pinned fly extended, the rated loads are determined by boom angle only in the column headed by 110 ft. boom. For boom angles not shown, use rating of next lower boom angle.
- D. For boom lengths less than 117 ft. with power pinned fly retracted and 32 ft. boom ext. erected, the rated loads are determined by boom angle only in the column headed by 117 ft. boom. For boom angles not shown, use rating of next lower boom angle.
- E. For boom lengths less than 142 ft. with power pinned fly extended and 32 ft. boom ext. erected, the rated loads are determined by boom angle only in the column headed by 142 ft. boom. For boom angles not shown, use rating of next lower boom angle.
- F. Boom angle is the included angle between horizontal and the axis of the boom base section after lifting rated load.
- G. WARNING: For Krueger L.M.I. option when using 32 ft. boom extension and/or power pinned fly, the Krueger L.M.I. rating will apply for full boom extension (power pinned fly extended) only.

A6-829-003001

NOTES FOR ON RUBBER CAPACITIES

(1) Defined Arc - Left front track CL to right front track CL.

track CL.

(2) Mechanical swing lock pin must be engaged.

Chart based on 25.5x25 (22 ply)/26.5x25 (26 ply) tires and 50/65 PSI cold inflation pressure. Loads must be reduced for lower inflation pressures.

Capacities appearing above the BOLD LINE are based on structural strength and tipping should not be relied upon as a capacity limitation.

Capacities do not exceed 85% of tipping loads in accordance with SAE J-765.

Capacities are applicable with machine on a firm level surface only.

surface only.

32 ft. boom extension and extended power pinned section not permitted for on rubber lifts.

Maximum Permissible Boom Length:

FULL HYDRAULIC SEF-PROPERED CR

JIB CAPACITIES IN POUNDS 24 ft. JIB and 32 ft. EXT. Combination

Main	Min.		Max.
Boom	5°	17°	30°
Angle	Offset	Offset	Offset
76°	6,000	5,200	4,600
70	4,300	3,940	3,650
65	3,430	3,200	3,010
60	2,760	2,600	2,470
55	2,220	2,110	2,020

A6-829-001823G

Notes for Jib Capacities

- 1. 24 ft. jib and 32 ft. ext. combination may be used for single line lifting crane service only. Capacities are based on structural strength of 24 ft. jib and 32 ft. ext. combination at given main boom angle. When lifting with 24 ft. jib and 32 ft. ext., capacities must not exceed structural capacity of jib combination at given main boom angle or stability capacity of applicable boom length listed in boom capacity chart for actual working radius, whichever is less.
- Maximum total length of boom including 32 ft. ext. for purpose of erecting 24 ft. jib below 10° is 92 ft.
- WARNING: Operation of machine with heavier loads than the capacities
- warring: Operation or machine with neavier loads than the capacities listed is strictly prohibited. Machine tipping with jib occurs rapidly and without advance warning.

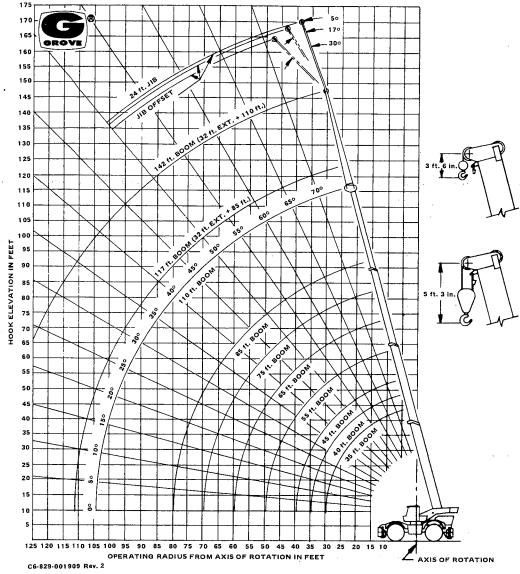
 24 FT. JIB WARNING: For total boom length including 32 ft. ext. greater than 92 ft. with 24 ft. jib in working position the boom angle must not be less than 500 since loss of stability will occur causing a displace condition. tipping condition.

LIFTING AREA DIAGRAMS ON OUTRIGGERS ON RUBBER OVER SIDE OVER SIDE CENTER OF CENTER OF CG OF LOAD CG OF REAR LONGITUDINAL C OF CRANE FRONT E FRON HEEL TRACK LONGITUDINAL E FRONT OUTRIGGER OVER SIDE OVER SIDE NOTE: BOLD LINES DETERMINE THE LIMITING POSITION OF ANY LOAD FOR OPERATION WITHIN WORKING AREAS INDICATED. NOTE: BOLD LINES DETERMINE THE LIMITING POSITION OF ANY LOAD FOR OPERATION WITHIN ANY WORKING AREAS INDICATED. NOTE: OVER SIDE CAPACITIES CAN BE LIFTED IN THE OVER REAR AREA. NOTE: OVER SIDE CAPACITIES CAN BE LIFTED IN THE OVER REAR AREA. C6-829-001159-1 C6-829-001158-1

ROV

RT 75S

RANGE DIAGRAM



NOTES FOR LIFTING CAPACITIES

NOTES FOR LIFTING CAPACITIES

1. Do not exceed any rated lifting capacity. Rated lifting capacities are based on freely suspended loads with the machine leveled and standing on a firm supporting surface. Ratings with outriggers are based on outriggers being extended to their maximum position and tires raised free of crane weight before extending the boom or lifting loads.

2. Practical working loads for each particular job shall be established by the user depending on operating condition to include: the supporting surface, wind and other factors affecting stability, hazardous surroundings, experience of personnel, handling of load, etc. No attempt must be made to move a load horizontally on the ground in any direction.

3. Operating radius is the horizontal distance from the axis of rotation before loading to the centerline of the vertical hoist line or tackle with loads applied.

4. "On Rubber" lifting (if permitted) depends on proper tire inflation, capacity and condition. "On Rubber" loads may be transported at a maximum vehicle speed of 2.5 mi/hr (4 Km/hr) on a firm and level surface under conditions specified.

5. Jibs may be used for lifting crane service only. Jib capacities are based on structural strength of jib or main boom and on main boom angle.

6. Operation is not intended or approved for any conditions outside of those shown hereon. Handling of personnel from the boom is not authorized except with equipment furnished and installed by Grove Manufacturing Company.

7. For clamshell or concrete bucket operation, weight of bucket and load must not exceed 80% of rated lifting capacities.

8. Power-telescoping boom sections must be extended equally at all times. Long can tilever booms can create a tipping condition.

9. The maximum load which may be telescoped is limited by hydraulic pressure,

position.

9. The maximum load which may be telescoped is limited by hydraulic pressure, boom angle, boom lubrication, etc. It is safe to attempt to telescope any load within the limits of rated lifting capacity chart.

10. With certain boom and hoist tackle combinations, maximum capacities may not be obtainable with standard cable lengths.

11. With certain boom and load combinations, raising of load with boom lift cylinders may not be possible. Operational safety is not affected by this condition.

12. Keep load handling devices a minimum of 12 inches (30 cm) below boom head when lowering or extending boom.

13. If actual boom length and/or radius is between values listed, use lifting capacity for the next longer rated length and/or radius. maximum load which may

for the next longer rated length and/or radius.

All load handling devices and boom attachments are considered part of the load and suitable allowances must be made for their combined weights.

Operation of this equipment in excess of rating charts or disregard of the instructions is hazardous and voids the warranty and manufacturer's liability.

A6-829-002565

WEIGHT REDUCTION FOR LOAD HANDLING DEVICES

32 ft. BOOM EXTENSION †STOWED - 402 lbs. †ERECTED - 2,567 lbs. 24 ft. JIB & 32 ft. EXT. COMB. †ERECTED - 5,800 lbs. ††ERECTED - 1,200 lbs.

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

HOOK BLOCK 50 Ton, 4 Sheave 15 Ton, 1 Sheave 700 lbs. 310 lbs. 190 lbs. Auxiliary Boom Head 5 Ton, Headache Ball 7½ Ton, Headache Ball 10 Ton, Headache Ball 150 lbs 300 lbs 500 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.



GROVE MANUFACTURING COMPANY KIDDE

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Printed in U.S.A. (10-79-7.5M)

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