



# TMS250

## 25 TON CAPACITY

### 32 ft. - 106 ft. BOOM

(FULL POWER)  
PCSA CLASS 10-67  
85% OF TIPPING

### RATED LIFTING CAPACITY

32 ft. - 106 ft. BOOM

#### ON OUTRIGGERS FULLY EXTENDED - OVER SIDE

Radius in Feet	Main Boom Length in Feet									26 ft. Ext. (2° Offset) + 80 ft.	26 ft. Tele. (2° Offset) + 80 ft.	46 ft. Tele. (2° Offset) + 80 ft.
	*32	38	44	50	56	62	68	74	80	**106	**106	**126
10	50,000 (64)	50,000 (68)	50,000 (72)									
12	46,000 (60)	46,000 (65)	46,000 (69)	44,900 (72.5)	40,500 (74.5)							
15	42,000 (53.5)	42,000 (59.5)	42,000 (65)	40,200 (68.5)	36,000 (71.5)	28,200 (72.5)	26,000 (74.5)					
20	26,650 (41.5)	26,650 (50.5)	26,650 (57)	26,650 (62)	26,650 (65.5)	24,500 (67.5)	23,000 (70)	21,500 (72.5)	20,000 (73.5)			
25	16,700 (24.5)	16,700 (39.5)	16,700 (49)	16,700 (55)	16,700 (59.5)	16,700 (62.5)	16,700 (65.5)	16,700 (68)	16,700 (69.5)	10,000 (75)	9,370 (75)	
30		11,460 (25)	11,460 (39)	11,460 (47.5)	11,460 (53)	11,460 (57)	11,460 (60.5)	11,460 (64)	11,460 (65.5)	9,550 (73)	8,950 (73)	
35			8,550 (26.5)	8,550 (38.5)	8,550 (46)	8,550 (51)	8,550 (55.5)	8,550 (59.5)	8,550 (61.5)	8,360 (70)	7,760 (70)	3,250 (74.5)
40				6,680 (27.5)	6,680 (38)	6,680 (45)	6,680 (50)	6,680 (54.5)	6,680 (57)	7,410 (67)	6,810 (67)	3,080 (72.5)
45				5,240 (6.5)	5,240 (28.5)	5,240 (37.5)	5,240 (44)	5,240 (49.5)	5,240 (52.5)	6,630 (64)	6,030 (64)	2,920 (70)
50					4,080 (13)	4,080 (29)	4,080 (37.5)	4,080 (43.5)	4,080 (48)	5,470 (61)	4,880 (61)	2,760 (67.5)
55						3,160 (16.5)	3,160 (29.5)	3,160 (37.5)	3,160 (42.5)	4,210 (57.5)	3,680 (57.5)	2,600 (65)
60							2,420 (18.5)	2,420 (30)	2,420 (37)	3,300 (54)	2,780 (54)	2,450 (62.5)
65								1,820 (20.5)	1,820 (30)	2,600 (50.5)	2,120 (50.5)	2,320 (60)
70									1,340 (21.5)	1,980 (46.5)	1,520 (46.5)	2,200 (57)
75										1,420 (42.5)	1,100 (42.5)	2,030 (54)
80										900 (38.5)		1,570 (51.5)
85												1,120 (48)

NOTE: Boom Angles are in degrees.

A6-829-002609A & -004528 & -002549B

**NOTES:**

Capacities appearing above 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 J-765.

\*Capacities for 32 ft. boom length shall be lifted with boom fully retracted. If the boom is not fully retracted, capacities shall not exceed those shown for the 38 ft. boom length.

\*\*For boom lengths less than fully extended while boom extension is erected, the rated loads are determined by boom angle:

a. For 26 ft. boom ext., use only the column headed by 106 ft. boom.

b. For 26 ft. boom ext. and 22 ft. jib combination, see note No. 1 on jib capacity chart A6-829-004523.

c. For 26 ft. - 46 ft. telescopic boom ext. (retracted), use only the column headed by 106 ft. boom.

d. For 26 ft. - 46 ft. telescopic boom ext. (extended), use only the column headed by 126 ft. boom.

For boom angles not shown, use rating of next lower boom angle.

Boom angle is the included angle between horizontal and the longitudinal axis of the boom base section after lifting rated load.

ITY  
OOM

# GROVE®

## FULL HYDRAULIC

# CARRIER-MOUNTED CRANE

ITIES IN POUNDS

BOOM

ON OUTRIGGERS FULLY EXTENDED - OVER REAR

Radius in Feet	Main Boom Length in Feet									26ft. Ext. (2°Offset) + 80 ft.	26ft. Tele. (2°Offset) + 80 ft.	46ft. Tele. (2°Offset) + 80 ft.
	*32	38	44	50	56	62	68	74	80	**106	**106	**126
10	50,000 (64)	50,000 (68)	50,000 (72)									
12	46,000 (60)	46,000 (65)	46,000 (69)	44,900 (72.5)	40,500 (74.5)							
15	42,000 (53.5)	42,000 (59.5)	42,000 (65)	40,200 (68.5)	36,000 (71.5)	28,200 (72.5)	26,000 (74.5)					
20	30,000 (41.5)	30,000 (50.5)	30,000 (57)	30,000 (62)	30,000 (65.5)	24,500 (67.5)	23,000 (70)	21,500 (72.5)	20,000 (73.5)			
25	20,220 (24.5)	20,220 (39.5)	20,220 (49)	20,220 (55)	20,220 (59.5)	20,220 (62.5)	18,500 (65.5)	18,200 (68)	17,500 (69.5)	10,000 (75)	9,370 (75)	
30		14,310 (25)	14,310 (39)	14,310 (47.5)	14,310 (53)	14,310 (57)	14,310 (60.5)	14,310 (64)	14,310 (65.5)	9,550 (73)	8,950 (73)	
35			11,320 (26.5)	11,320 (38.5)	11,320 (46)	11,320 (51)	11,320 (55.5)	11,320 (59.5)	11,320 (61.5)	8,360 (70)	7,760 (70)	3,250 (74.5)
40				8,900 (27.5)	8,900 (38)	8,900 (45)	8,900 (50)	8,900 (54.5)	8,900 (57)	7,410 (67)	6,810 (67)	3,080 (72.5)
45				7,250 (6.5)	7,250 (28.5)	7,250 (37.5)	7,250 (44)	7,250 (49.5)	7,250 (52.5)	6,630 (64)	6,030 (64)	2,920 (70)
50					6,140 (13)	6,140 (29)	6,140 (37.5)	6,140 (43.5)	6,140 (48)	5,980 (61)	5,380 (61)	2,760 (67.5)
55						5,090 (16.5)	5,090 (29.5)	5,090 (37.5)	5,090 (42.5)	5,430 (57.5)	4,820 (57.5)	2,600 (65)
60							4,150 (18.5)	4,150 (30)	4,150 (37)	4,960 (54)	4,350 (54)	2,450 (62.5)
65								3,390 (20.5)	3,390 (30)	4,190 (50.5)	3,600 (50.5)	2,320 (60)
70									2,830 (21.5)	3,490 (46.5)	2,890 (46.5)	2,200 (57)
75										2,900 (42.5)	2,300 (42.5)	2,100 (54)
80										2,400 (38.5)	1,800 (38.5)	2,010 (51.5)
85										1,990 (33.5)	1,390 (33.5)	1,920 (48)
90										1,650 (27.5)	1,040 (28)	1,850 (45)
95										1,380 (20.5)		1,600 (41.5)
100										1,130 (8.5)		1,260 (37.5)
105												930 (33)

NOTE: Boom Angles are in degrees.

A6-829-002603 & -002549B  
&-004539

# TMS250

25 TON CAPACITY  
32 ft. - 106 ft. BOOM  
85% OF TIPPING

## JIB CAPACITIES IN POUNDS 22 ft. JIB and 26 ft. EXT. Combination OVER SIDE AND REAR

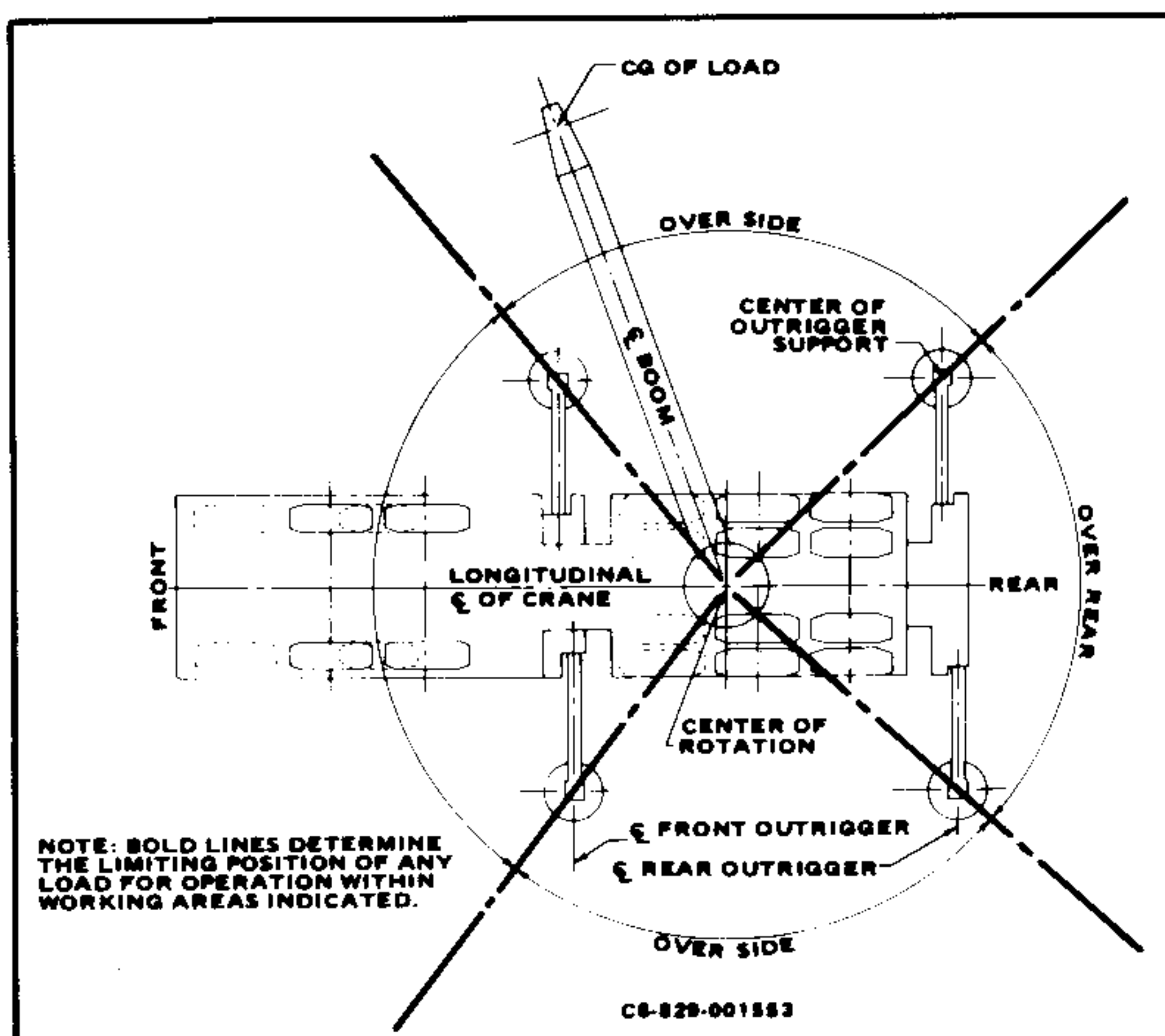
MAIN BOOM ANGLE	5° OFFSET		17° OFFSET		30° OFFSET	
	Radius (Ref.) Ft.	Cap. lbs.	Radius (Ref.) Ft.	Cap. lbs.	Radius (Ref.) Ft.	Cap. lbs.
75°	37.4	6,500	41.5	6,000	46.3	5,000
70	44.9	4,930	49.3	4,400	53.5	4,400
65	54.9	3,400	59.1	3,010	62.7	3,010
60	64.4	2,360	68.4	2,000	71.3	2,000
55	73.5	1,420	77.2	1,260	79.6	1,260
50	81.8	850	85.3	750	87.0	680

A6-829-004523

1. 22 ft. jib and 26 ft. boom extension combination may be used for single line lifting crane service only. Capacities are based on structural strength of 22 ft. and 26 ft. boom extension combination at given main boom angle regardless of main boom length. When lifting with 22 ft. jib and 26 ft. boom extension, 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.
2. **WARNING:** Operation of machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with jib occurs rapidly and without advance warning.
3. Maximum total length of boom including 26 ft. boom extension for purpose of erecting 22 ft. jib below 10° elevation is 85 ft.
4. **22 FT. JIB WARNING:** For total boom length including 26 ft. boom extension greater than 85 ft. with 22 ft. jib in working position, the boom angle must not be less than 45° since loss of stability will occur causing a tipping condition.
5. Reference radii listed are for fully extended main boom only.

**NOTE:** 22 ft. jib used only with 26 ft. round tube swingaway.

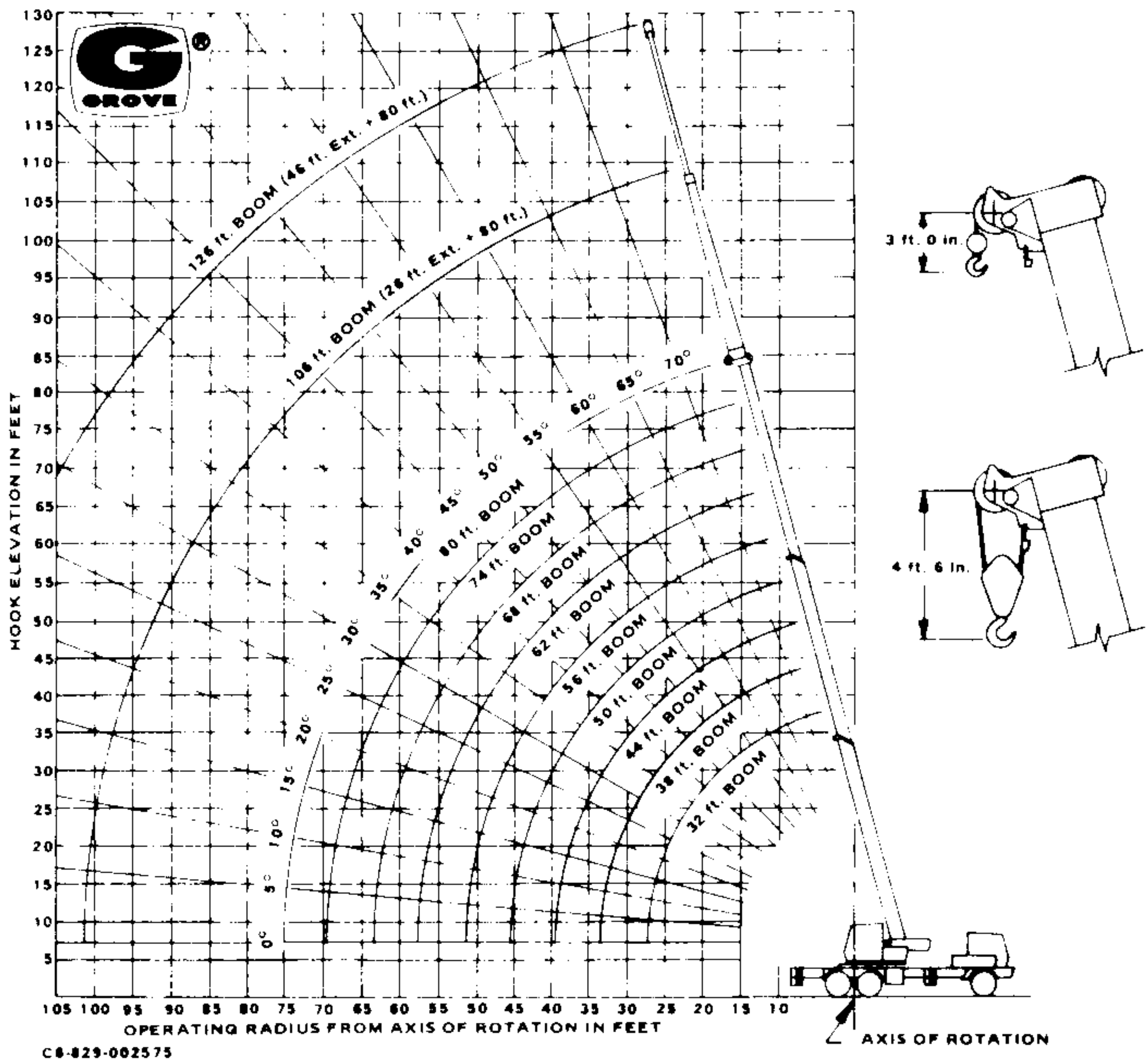
## LIFTING AREA DIAGRAM



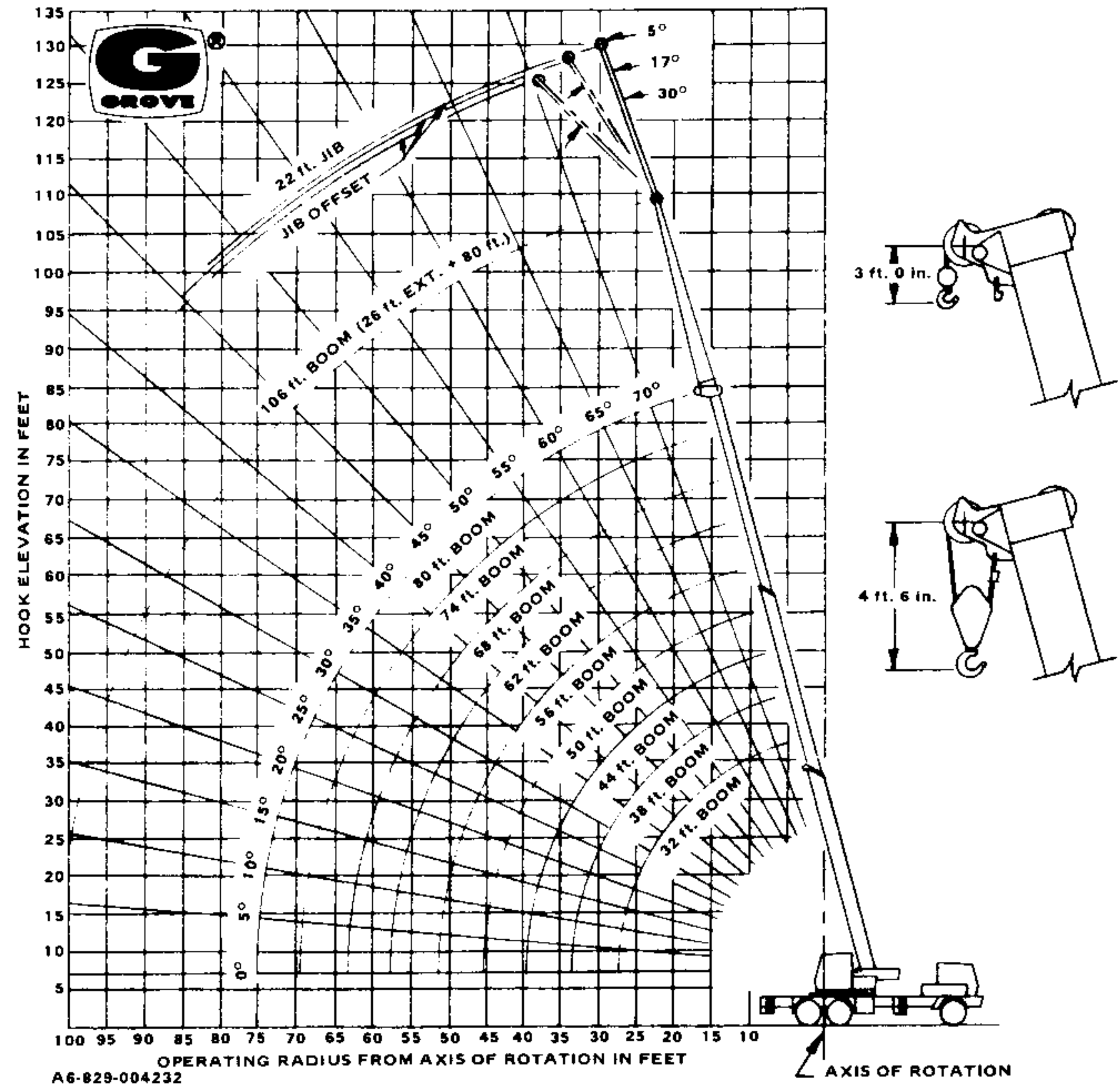


## RANGE DIAGRAMS

WITH 26 - 46 ft. TELE. EXT.



WITH 26 ft. EXT. & 22 ft. JIB



## WEIGHT REDUCTIONS FOR LOAD HANDLING DEVICES

### 26 ft. BOOM EXTENSION

26 ft. Boom Extension with 32-80 ft. Boom
† Stowed - 461 lbs.
† Erected - 1,850 lbs.

26-46 Tele. Boom Ext. with 32-80 ft. Boom
† Stowed - 400 lbs.
† Erected - 2,700 lbs. (26 ft. retracted)
† Erected - 3,450 lbs. (46 ft. extended)

† Reduction of main boom capacities.

### 22 ft. JIB

22 ft. Jib & 26 ft. Boom Ext. Combination
† Stowed - 704 lbs.
† Erected - 4,260 lbs.
†† Erected - 1,115 lbs.
22 ft. Jib Only Stowed on Base Section
† Stowed - 243 lbs.

† Reduction of main boom capacities.  
†† Reduction of 26 ft. Ext. capacities.

25 Ton, 3 Sheave Hookblock	-	516 lbs.
25 Ton, 4 Sheave Hookblock	-	561 lbs.
7 1/2 Ton Headache Ball	-	300 lbs.
5 Ton Headache Ball	-	150 lbs.
Auxiliary Boom Head	-	110 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.

## NOTES TO LIFTING CAPACITIES

- 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.
- Practical working loads for each particular job shall be established by the user depending on operating conditions; including 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.
- 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.
- "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.
- 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.
- 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.
- For clamshell or concrete bucket operation, weight of bucket and load must not exceed 80% of rated lifting capacities.
- Power-telescoping boom sections must be extended equally at all times. Long cantilever booms can create a tipping condition when in extended and lowered position.
- 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.
- With certain boom and hoist tackle combinations, maximum capacities may not be obtainable with standard cable lengths.
- 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.
- Keep load handling devices a minimum of 12 inches (30 cm) below boom head when lowering or extending boom.
- If actual boom length and/or radius are between values listed, use lifting capacity 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.



**GROVE MANUFACTURING COMPANY**

Division of Walter Kidde & Company, Inc.

**KIDDE**

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