



# TMS300B

**40 TON CAPACITY**  
**34 ft. - 136 ft. BOOM**

**(POWER PINNED)**  
**85% OF TIPPING**

## RATED LIFTING CAPACITIES I

ON OUTRIGGERS FULLY EXTENDED - OVER SIDE

Radius in Feet	Main Boom Length in Feet (Power Pinned Fly Retracted)									Power Pin. Fly & 81 ft.	32 ft. Ext. & 81 ft.	32 ft. Ext. & 104 ft.	
	*34	38	44	50	56	62	68	74	81				
10	80,000 (69)	68,000 (71.5)	64,000 (74.5)	60,000 (76.5)							104 See Warning Note 4	113 See Warning Note 5	136 See Warning Note 6
12	65,000 (65)	62,500 (68)	57,500 (71.5)	54,000 (74)	51,000 (76)	49,000 (77.5)							
15	57,000 (59.5)	55,000 (63)	50,000 (67.5)	46,500 (70.5)	43,900 (73)	41,900 (74.5)	40,000 (76.5)	38,600 (77.5)					
20	46,890 (48.5)	43,000 (54)	39,500 (60)	36,500 (64)	34,500 (67.5)	32,700 (70)	31,400 (72)	30,000 (73.5)	28,700 (76)				
25	29,450 (35.5)	29,450 (44)	29,450 (52)	29,450 (57.5)	28,100 (61.5)	26,500 (65)	25,300 (67.5)	24,200 (69.5)	23,100 (72)	20,000 (77)	17,500 (77.5)		
30	20,560 (14)	20,560 (31)	20,560 (43)	20,560 (50)	20,560 (55.5)	20,560 (59.5)	20,560 (62.5)	20,000 (65.5)	19,000 (68)	17,750 (74.5)	15,400 (75.5)		
35			15,450 (31.5)	15,450 (42)	15,450 (49)	15,450 (54)	15,450 (57.5)	15,450 (61)	15,450 (64.5)	15,600 (71.5)	13,700 (73)	9,600 (77.5)	
40			11,410 (13.5)	11,410 (32)	11,410 (41.5)	11,410 (47.5)	11,410 (52.5)	11,410 (56.5)	11,410 (60)	13,100 (68.5)	12,200 (70.5)	8,750 (75.5)	
45				8,450 (18)	8,450 (32.5)	8,450 (41)	8,450 (47)	8,450 (51.5)	8,450 (56)	10,990 (65.5)	10,800 (67.5)	7,900 (73)	
50					6,630 (20.5)	6,630 (33)	6,630 (40.5)	6,630 (46)	6,630 (51.5)	8,750 (62)	8,970 (64.5)	7,050 (71)	
55						5,280 (22.5)	5,280 (33)	5,280 (40)	5,280 (46.5)	7,130 (59)	7,300 (61.5)	6,350 (68.5)	
60							4,090 (24)	4,090 (33.5)	4,090 (41)	5,650 (55.5)	5,890 (58.5)	5,800 (66)	
65								3,060 (3)	3,060 (25)	3,060 (35)	4,500 (52)	4,760 (55.5)	5,190 (63.5)
70									2,150 (11.5)	2,150 (27.5)	3,600 (48)	3,780 (52.5)	4,440 (61.5)
75										1,300 (17)	2,840 (44)	3,000 (49)	3,690 (58.5)
80											2,150 (40)	2,340 (45)	2,950 (56)
85											1,550 (35)	1,740 (41)	2,370 (53.5)
90											1,020 (29.5)	1,170 (37)	1,930 (50.5)
95												1,530 (47.5)	
100												1,130 (44.5)	

NOTE: Boom angles are in degrees.

A6-829-006311 & -002137D

Radius in Feet	Main Boom Length in Feet (Power Pinned Fly Retracted)	
	*34	38
10	80,000 (69)	68,000 (71.5)
12	65,000 (65)	62,500 (68)
15	57,000 (59.5)	55,000 (63)
20	47,000 (48.5)	43,000 (54)
25	35,675 (35.5)	33,300 (44)
30	25,200 (14)	25,200 (31)
35		
40		
45		
50		
55		
60		
65		
70		
75		
80		
85		
90		
95		
100		
105		
110		
115		
120		

NOTE: Boom angles are in degrees.

### NOTES FOR ON OUTRIGGERS

- Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity. Tipping loads as determined by test in accordance with SAE recommended practice-crane load stability test code - SAE E-101.
- Boom angle is the included angle between horizontal and the axis of the boom base section after lifting rated load.
- For boom lengths less than 104 ft. with power pinned fly extended, the rated loads are determined by boom angle only. For boom angles not shown, use rating of next lower boom angle.
- For boom lengths less than 113 ft. with power pinned fly retracted and 32 ft. boom ext. erected, the rated loads are determined by 113 ft. boom. For boom angles not shown, use rating of next lower boom angles.
- For boom lengths less than 136 ft. with power pinned fly extended and 32 ft. boom ext. erected, the rated loads are determined by 136 ft. boom. For boom angles not shown, use rating of next lower boom angle.

# 300B

CAPACITY  
6 ft. BOOM

(PINNED)  
TIPPING

# GROVE®

## FULL HYDRAULIC CARRIER-MOUNTED CRANE

### CAPACITIES IN POUNDS

ON OUTRIGGERS FULLY EXTENDED - OVER REAR

Radius in Feet	Main Boom Length in Feet (Power Pinned Fly Retracted)									Power Pin Fly & 81 ft.	32 ft. Ext. & 81 ft.	32 ft. Ext. & 104 ft.					
	*34	38	44	50	56	62	68	74	81								
10	80,000 (69)	68,000 (71.5)	64,000 (74.5)	60,000 (76.5)						See Warning Note 4	See Warning Note 5	See Warning Note 6					
12	65,000 (65)	62,500 (68)	57,500 (71.5)	54,000 (74)	51,000 (76)	49,000 (77.5)											
15	57,000 (59.5)	55,000 (63)	50,000 (67.5)	46,500 (70.5)	43,900 (73)	41,900 (74.5)	40,000 (76.5)	38,600 (77.5)									
20	47,000 (48.5)	43,000 (54)	39,500 (60)	36,500 (64)	34,500 (67.5)	32,700 (70)	31,400 (72)	30,000 (73.5)	28,700 (76)								
25	35,675 (35.5)	33,300 (44)	31,000 (52)	30,000 (57.5)	28,100 (61.5)	26,500 (65)	25,300 (67.5)	24,200 (69.5)	23,100 (72)	20,000 (77)	17,500 (77.5)						
30	25,200 (14)	25,200 (31)	25,200 (43)	25,200 (50)	23,500 (55.5)	22,100 (59.5)	21,000 (62.5)	20,000 (65.5)	19,000 (68)	17,750 (74.5)	15,400 (75.5)						
35			19,340 (31.5)	19,340 (42)	19,340 (49)	18,700 (54)	17,700 (57.5)	16,800 (61)	16,000 (64.5)	15,600 (71.5)	13,700 (73)	9,600 (77.5)					
40			15,190 (13.5)	15,190 (32)	15,190 (41.5)	15,190 (47.5)	15,190 (52.5)	14,400 (56.5)	13,600 (60)	13,100 (68.5)	12,200 (70.5)	8,750 (75.5)					
45				12,310 (18)	12,310 (32.5)	12,310 (41)	12,310 (47)	12,310 (51.5)	11,700 (56)	11,300 (65.5)	10,800 (67.5)	7,900 (73)					
50					10,000 (20.5)	10,000 (33)	10,000 (40.5)	10,000 (46)	10,000 (51.5)	9,930 (62)	9,410 (64.5)	7,050 (71)					
55						8,180 (22.5)	8,180 (33)	8,180 (40)	8,180 (46.5)	8,710 (59)	8,230 (61.5)	6,350 (68.5)					
60							6,650 (24)	6,650 (33.5)	6,650 (41)	7,680 (55.5)	7,240 (58.5)	5,800 (66)					
65								5,280 (3)	5,280 (25)	5,280 (35)	6,800 (52)	6,380 (55.5)	5,200 (63.5)				
70									4,140 (11.5)	4,140 (27.5)	5,990 (48)	5,640 (52.5)	4,750 (61.5)				
75										3,320 (17)	5,000 (44)	4,910 (49)	4,350 (58.5)				
80											4,060 (40)	4,090 (45)	4,050 (56)				
85												3,290 (35)	3,420 (41)	3,700 (53.5)			
90													2,730 (29.5)	2,830 (37)	3,280 (50.5)		
95														2,210 (22.5)	2,330 (32)	2,870 (47.5)	
100															1,680 (10.5)	1,890 (26.5)	2,470 (44.5)
105																1,470 (19)	2,080 (41)
110																	1,700 (37.5)
115																	1,340 (33.5)
120																	1,010 (29)

NOTE: Boom angles are in degrees.

A6-829-006309A & -002137D

### CAPACITIES

capacity. Rated by suspended standing on a th outriggers nded to their free of crane lifting loads. distance from he centerline with loads

ation, weight 80% of rated

ns must be

telescoped is angle, boom to telescope ing capacity

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s is between for the next

### OUTRIGGERS

should not be relied upon as a capacity limitation. Capacities do not exceed 85% of crane load stability test code - SAE J-765.

section after lifting rated load.

e determined by boom angle only in the column headed by 104 ft. boom. For boom

erected, the rated loads are determined by boom angle only in the column headed

erected, the rated loads are determined by boom angle only in the column headed

# TMS300B

40 TON CAPACITY  
34 ft. - 136 ft. BOOM

(POWER PINNED)  
85% OF TIPPING

## 32 FT. OFFSETTABLE EXTENSION (360° w/FIFTH FRONT JACK)

Main Boom Angle (Deg.)	0° OFFSET		15° OFFSET		30° OFFSET	
	Rad. Ref. ft.	Cap. lbs.	Rad. Ref. ft.	Cap. lbs.	Rad. Ref. ft.	Cap. lbs.
<b>POWER PINNED FLY RETRACTED</b>						
75	28.4	18,200	34.4	10,300	38.6	6,900
70	37.4	14,900	43.2	9,000	47.2	6,400
65	46.1	10,500	51.7	8,000	55.5	6,100
60	54.5	6,990	59.7	5,380	63.4	4,440
55	62.4	4,670	67.3	3,560	70.7	2,890
50	69.8	3,040	74.3	2,240	77.5	1,750
45	76.7	1,850	80.7	1,260		
<b>POWER PINNED FLY EXTENDED</b>						
75	37.6	11,000	43.8	8,500	47.6	6,400
70	48.6	9,200	54.4	7,500	58.1	5,900
65	59.3	6,220	64.7	4,620	68.2	3,760
60	69.5	3,450	74.5	2,410	77.7	1,820
55	79.2	1,560				

A6-829-008514 & -008518

## CAPACITIES FOR 32 FT. - 56 FT. TELE. OFFSETTABLE EXTENSION (360° w/FIFTH FRONT JACK)

Main Boom Angle	32 ft. LENGTH				44 ft. LENGTH				56 ft. LENGTH					
	0° OFFSET		15° OFFSET		0° OFFSET		15° OFFSET		0° OFFSET		15° OFFSET		30° OFFSET	
	Rad. Ref. (ft.)	Cap. lbs.	Rad. Ref. (ft.)	Cap. lbs.	Rad. Ref. (ft.)	Cap. lbs.	Rad. Ref. (ft.)	Cap. lbs.	Rad. Ref. (ft.)	Cap. lbs.	Rad. Ref. (ft.)	Cap. lbs.	Rad. Ref. (ft.)	Cap. lbs.
<b>POWER PINNED FLY RETRACTED</b>														
75°	28.4	17,500	34.4	9,600	38.6	6,500	33.1	11,700	42.1	6,400	49.7	4,500	36.3	8,900
70	37.4	14,200	43.2	8,300	47.2	5,800	43.3	9,400	52.0	5,200	59.1	3,900	47.8	7,100
65	46.1	10,050	51.7	7,300	55.5	5,400	53.3	7,700	61.6	4,800	68.0	3,700	59.0	5,700
60	54.5	6,530	59.7	4,900	63.4	3,950	62.9	5,260	70.6	3,660	76.4	2,710	69.7	4,420
55	62.4	4,200	67.3	3,080	70.7	2,400	72.0	3,420	79.2	2,300	84.2	1,660	79.9	2,830
50	69.8	2,560	74.3	1,760	77.5	1,260	80.5	2,120	87.1	1,310			89.5	1,730
45	76.7	1,370					88.5	1,160						
<b>POWER PINNED FLY EXTENDED</b>														
75°	37.6	10,300	43.8	7,800	47.6	6,000	42.6	8,700	52.6	5,800	59.6	4,200	48.3	7,500
70	48.6	7,500	54.4	6,800	58.1	5,300	54.9	7,100	64.3	5,200	70.8	3,900	61.4	5,900
65	59.3	5,730	64.7	4,120	68.2	3,250	66.9	5,040	75.5	3,370	81.5	2,440	74.0	4,310
60	69.5	2,950	74.5	1,910	77.7	1,310	78.4	2,900	86.1	1,810	91.5	1,180	86.1	2,600
55	79.2	1,060												

A6-829-008500 & -008504

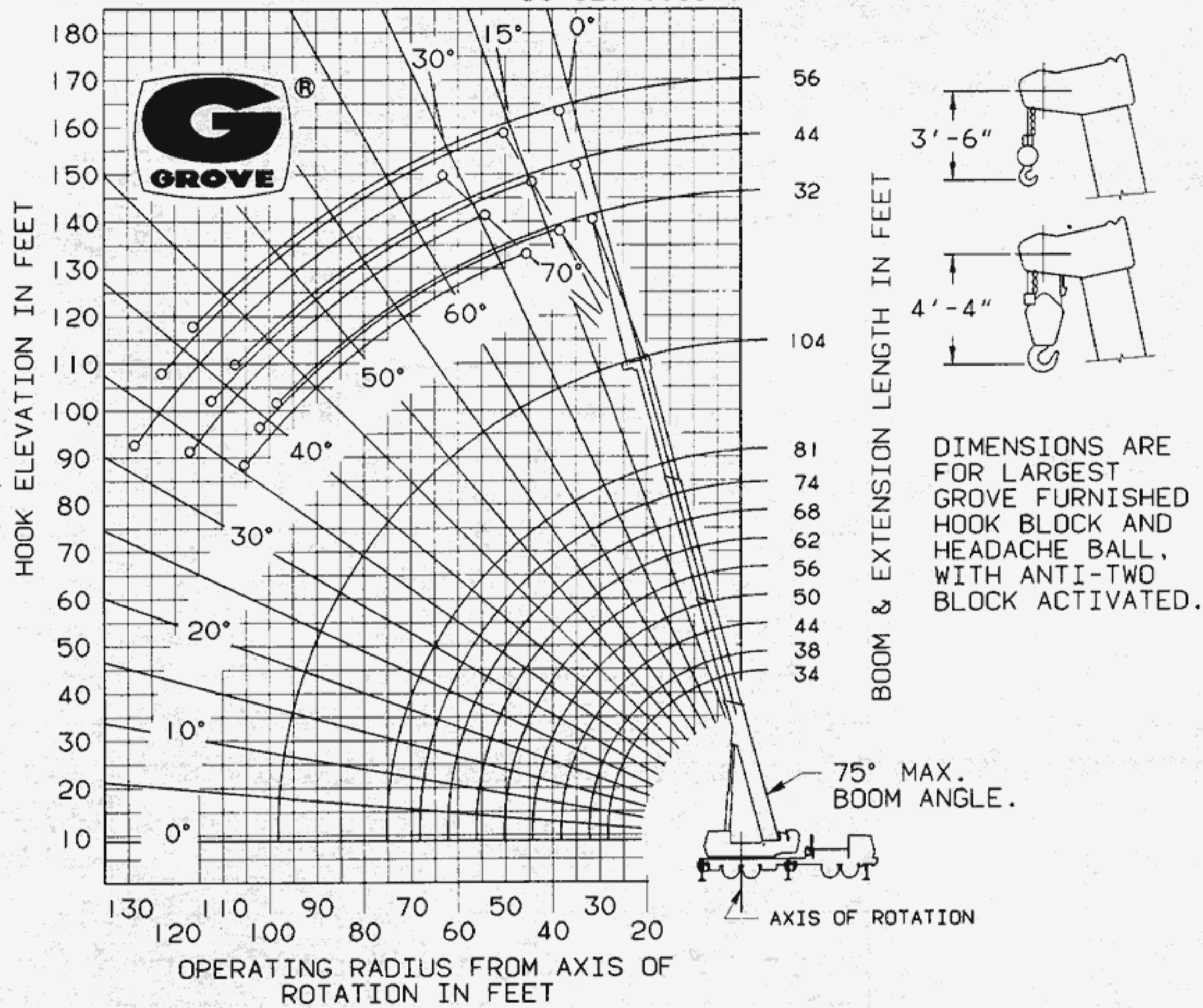
## NOTES FOR LIFTING WITH 32 FT. OR 32 FT.-56 FT. OFFSETTABLE EXTENSIONS

- All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping load, in accordance with SAE J-765 OCT80.
- 32 ft., 44 ft., & 56 ft. boom extension lengths maybe used for double or single line lifting service. Double line lifting service is required when the unit is equipped with a Krueger L.M.I.
- Rated load is based on loaded main boom angle with reference to horizontal, regardless of main boom length. (Ref. radius is for fully extended boom and power pinned fly extended 104 ft. boom length or power pinned fly retracted 81 ft. boom length, whichever the case may be.)  
WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
- WARNING: The Krueger L.M.I. will not compensate for reeving/ rigging accessories on the main boom nose or auxiliary boom nose when programmed to monitor the boom extension. Remove all reeving/ rigging accessories from main boom when using boom extension.
- Capacities listed are with fully extended outriggers only.
- \*BOOM EXTENSION WARNING FOR POWER PINNED FLY EXTENDED:**  
\*Warning for 32 ft. Boom Extension: For main boom length greater than 68 ft. with 32 ft. tele. offsettable or offsettable boom extension in working position, the boom angle must not be less than 50 since loss of stability will occur causing a tipping condition. The boom angle is not restricted for main boom length equal to or less than 68 ft.  
\*Warning for 44 ft. & 56 ft. Boom Extension: For main boom length greater than 68 ft. with 44 ft. or 56 ft. tele. boom extension in working position, the boom angle must not be less than 53 since loss of stability will occur causing a tipping condition. The boom angle is not restricted for main length equal to or less than 68 ft.
- \*BOOM EXTENSION WARNING FOR POWER PINNED FLY RETRACTED:**  
\*Warning for 32 ft. Boom Extension: For main boom length greater than 62 ft. with 32 ft. tele. offsettable or offsettable boom extension 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 equal to or less than 62 ft.  
\*Warning for 44 ft. & 56 ft. Boom Extension: For main boom length greater than 56 ft. with 44 ft. or 56 ft. tele. boom extension in working position, the boom angle must not be less than 44 since loss of stability will occur causing a tipping condition. The boom angle is not restricted for main length equal to or less than 56 ft.

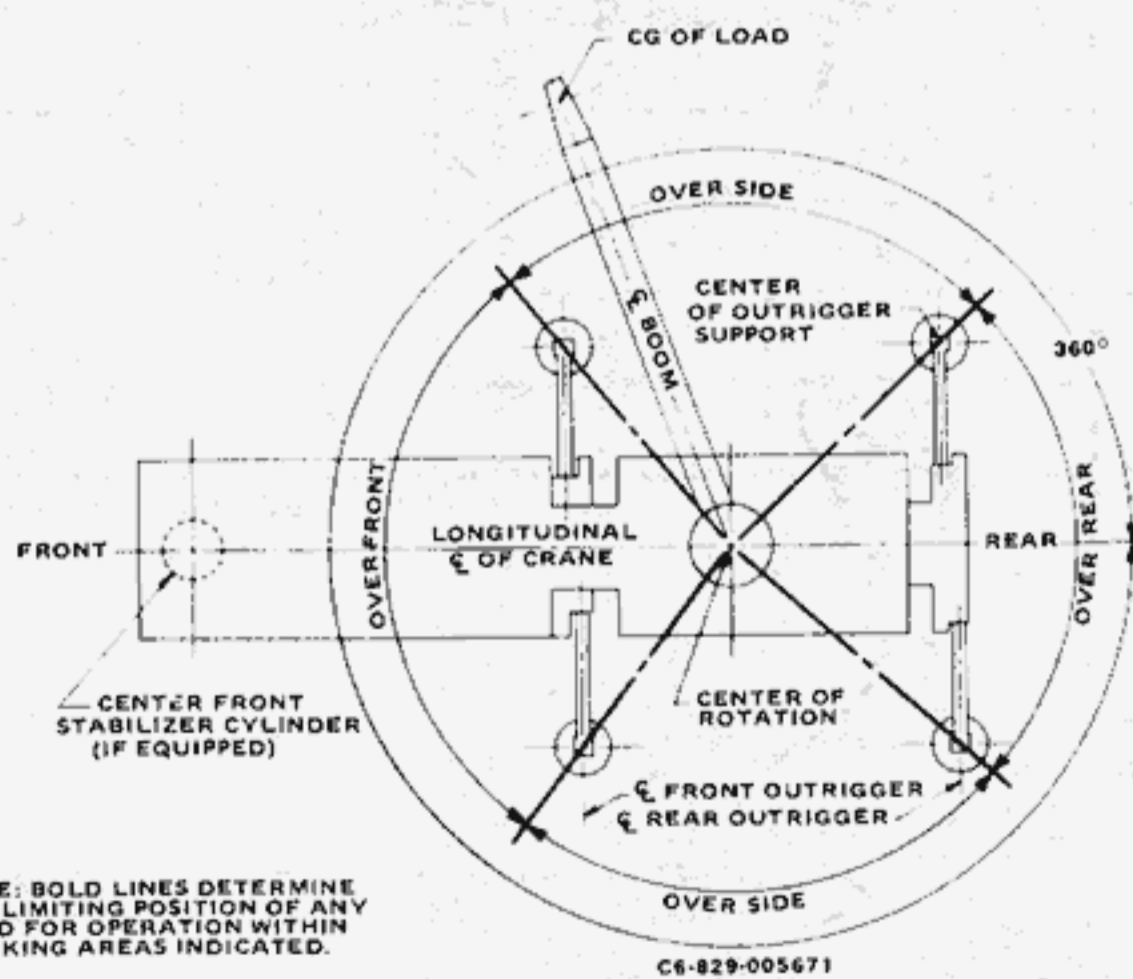
# GROVE® TMS300B

RANGE DIAGRAM

D6-829-008519



LIFTING AREA DIAGRAM



WEIGHT REDUCTIONS

32 ft. FIXED EXT.	
†Stowed	- 703 lbs.
†Erected	- 6,015 lbs.

32 ft. - 56 ft. TELE. EXT.	
†Stowed	- 916 lbs.
†Erected (Retracted)	- 7,631 lbs.
†Erected (Extended)	- 9,944 lbs.
†Red. of main boom capacities.	

When lifting over swingaway and/or jib combination, deduct total weight of all load handling devices reeved over main boom nose directly from swingaway or jib capacity.

HOOKBLOCKS:	
40 Ton, 3 Sheave	. 640 lbs.
Auxiliary Boom Head	. 190 lbs.
10 Ton Headache Ball	. 560 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 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. 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.
3. For clamshell or concrete bucket operation, weight of bucket and load must not exceed 80% of rated lifting capacities.
4. Power-telescoping boom sections must be extended equally at all times.
5. 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.
6. Keep load handling devices a minimum of 12 inches (30 cm) below boom head when lowering or extending boom.
7. If actual boom length and/or radius is between values listed, use lifting capacity for the next longer rated length and/or radius.



**GROVE MANUFACTURING COMPANY**

Division of Kidde, Inc

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