

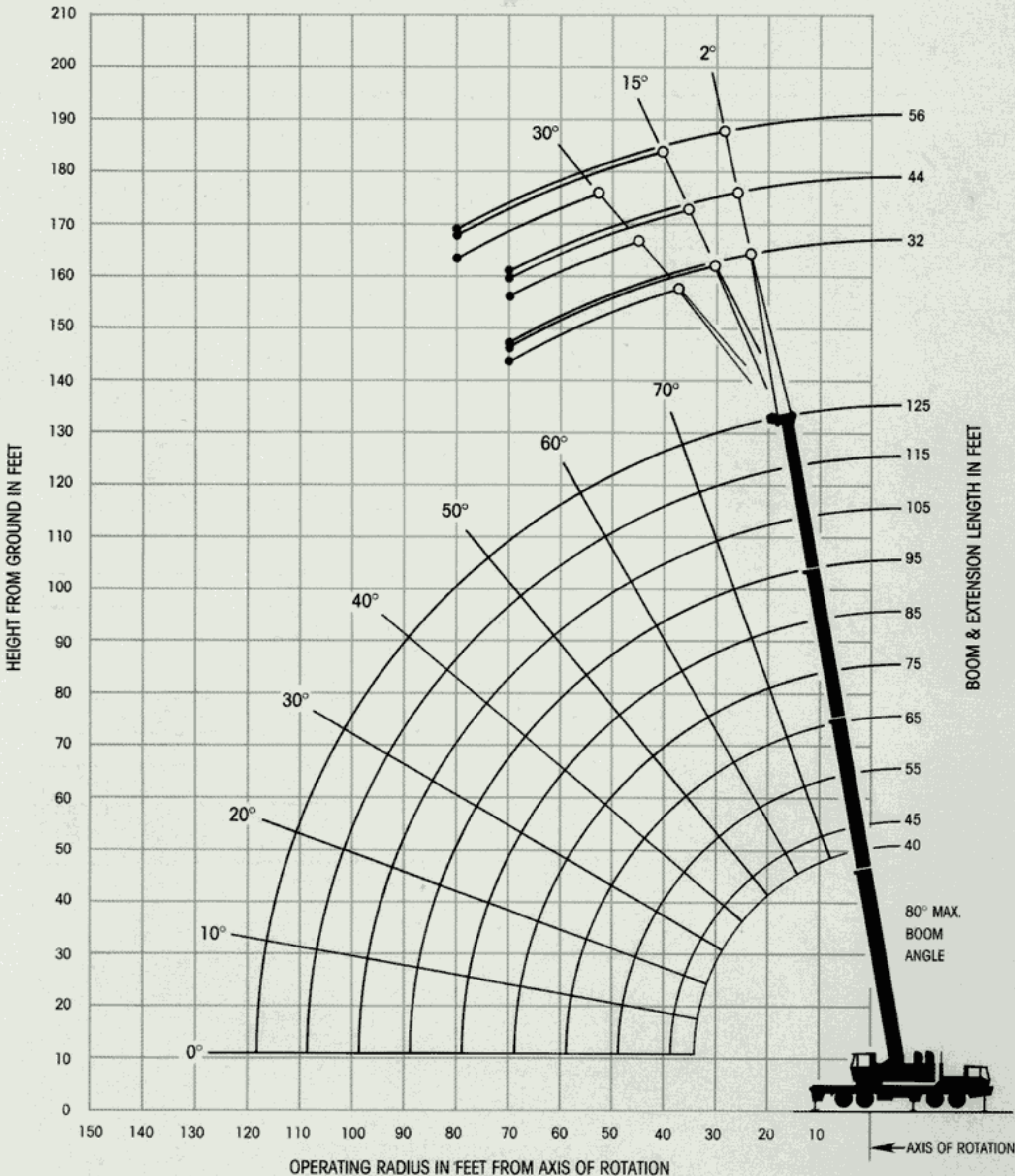


**GROVE**  
worldwide

# TMS875B

Carrier-mounted hydraulic crane/85% Domestic  
40 ft. -125 ft. full power

**WORKING RANGE DIAGRAM  
(BOOM DEFLECTION NOT SHOWN)**





40 FT. - 125 FT BOOM  
 ON OUTRIGGERS WITHOUT COUNTERWEIGHT - 360°

Radius in Feet	Main Boom Length in Feet									
	40	45	55	65	75	85	95	105	115	125
10	140,500 (72)	115,000 (74.5)	113,500 (77.5)	84,650 (80)						
12	115,000 (68.5)	114,500 (71.5)	113,500 (75.5)	84,650 (78)	55,450 (80)					
15	89,400 (64)	88,800 (67.5)	87,950 (72)	81,200 (75.5)	55,450 (77.5)	55,450 (79.5)	49,900 (80.5)			
20	58,250 (55)	58,000 (60)	57,450 (66.5)	56,950 (70.5)	55,450 (73.5)	55,450 (76)	49,900 (78)	38,800 (79.5)	27,500 (80.5)	23,000 (81)
25	32,750 (44.5)	35,700 (52)	32,600 (60.5)	32,500 (65.5)	33,400 (69.5)	29,600 (72.5)	35,750 (75)	37,100 (77)	27,500 (78.5)	23,000 (80)
30	21,500 (31)	21,100 (42.5)	20,450 (54)	19,800 (60.5)	20,450 (65.5)	19,700 (69)	22,900 (71.5)	23,750 (74)	24,600 (76)	23,000 (77.5)
35		14,800 (30)	13,750 (46.5)	12,650 (55)	13,200 (61)	9,900 (65)	15,500 (68.5)	16,250 (71)	17,000 (73)	17,750 (75)
40			8,410 (38)	7,870 (49)	8,510 (56)	7,130 (61)	10,750 (65)	11,450 (68)	12,150 (70.5)	12,800 (72.5)
45			5,110 (27)	4,620 (42.5)	5,250 (51)	5,040 (57)	7,450 (61.5)	8,100 (65)	8,750 (68)	9,370 (70)
50				2,220 (35)	2,850 (46)	3,930 (52.5)	5,010 (58)	5,630 (62)	6,250 (65)	6,840 (67.5)
60							1,660 (50)	2,230 (55)	2,810 (59)	3,360 (62)
70										1,070 (56.5)
Minimum boom angle (deg.) for indicated length (no load)										39.5
Maximum boom length (ft.) at 0 deg. boom angle (no load)										85

Note: ( ) Boom angles are in degrees.

Lifting Capacities On Outriggers - 360 Degrees At Zero Degree Boom Angle										
Boom Angle	Main Boom Length in Feet									
	40	45	55							
0°	16,500 (33.7)	10,300 (39.1)	3,650 (49.1)							

Note: ( ) Reference radii in feet.



**40 FT. - 125 FT. BOOM TELE EXTENSION  
ON OUTRIGGERS WITHOUT COUNTERWEIGHT - 360°**

Radius in Feet	32 ft. LENGTH			44 ft. LENGTH			56 ft. LENGTH		
	2° OFFSET	15° OFFSET	30° OFFSET	2° OFFSET	15° OFFSET	30° OFFSET	2° OFFSET	15° OFFSET	30° OFFSET
25	*16,000 (81.6)								
30	16,000 (81)			*10,000 (81.6)					
35	16,000 (79)	*12,300 (81.6)		10,000 (81)			*7,500 (81.6)		
40	13,550 (77)	11,600 (80.5)	*9,000 (81.6)	10,000 (79)	9,000 (81.5)		7,500 (81)		
45	9,890 (75.5)	9,890 (78.5)	8,700 (80)	10,000 (77.5)	8,750 (79.5)		7,500 (79.5)		
50	7,190 (73.5)	7,190 (76.5)	7,190 (78)	9,000 (75.5)	8,300 (78)	6,000 (81.5)	7,500 (78)	6,000 (80)	
60	3,470 (69.5)	3,470 (72.5)	3,470 (74)	5,860 (72)	5,860 (74.5)	5,700 (77.5)	5,040 (74.5)	5,040 (76.5)	4,700 (80.5)
70	1,040 (65.5)	1,040 (68.5)	1,040 (70)	2,790 (68)	2,790 (70.5)	2,790 (74)	2,770 (71)	2,770 (73.5)	2,770 (77)
80							1,160 (67.5)	1,160 (70)	1,160 (73.5)

\*This capacity based upon maximum boom angle.

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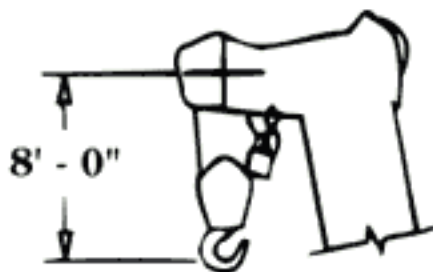
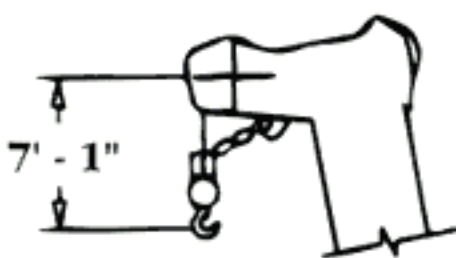
**WEIGHT REDUCTIONS FOR  
LOAD HANDLING DEVICES**

32 - 56 ft. Tele. Ext.	
*Stowed -	1,062 lbs.
*Erected (ret.) -	8,514 lbs.
*Erected (ext.) -	11,136 lbs.

\*Reduction of main boom capacities.

AUXILIARY BOOM HEAD	178 lbs.
HOOKBLOCKS & HEADACHE BALLS:	
80 Ton, 6 Sheave	1,930 lbs.*
45 Ton, 3 Sheave	1,095 lbs.*
15 Ton, 1 Sheave	380 lbs.*
10 Ton Headache Ball	560 lbs.*
7 1/2 Ton Headache Ball	338 lbs.*

\*Refer to rating plate for actual weight.



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

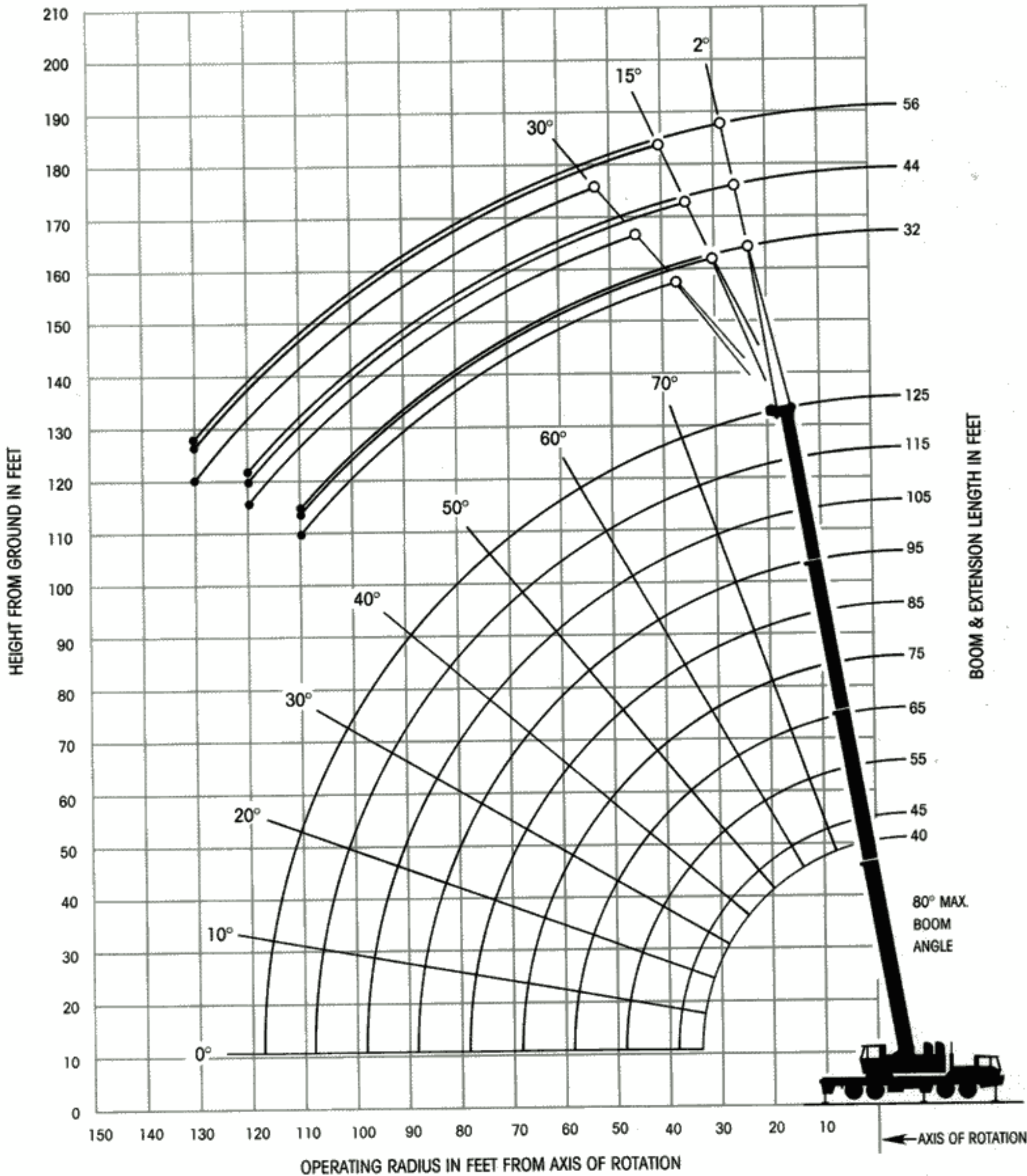


GROVE®  
worldwide

# TMS875B

Carrier-mounted hydraulic crane/85% Domestic  
40 ft. -125 ft. full power boom

WORKING RANGE DIAGRAM  
(BOOM DEFLECTION NOT SHOWN)





**40 FT. - 125 FT. BOOM**  
**ON OUTRIGGERS FULLY EXTENDED - 360°**

Radius in Feet	Main Boom Length in Feet									
	40	45	55	65	75	85	95	105	115	125
10	150,000 (72)	115,000 (74.5)	113,500 (77.5)	84,650 (80)						
12	129,000 (68.5)	115,000 (71.5)	113,500 (75.5)	84,650 (78)	55,450 (80)					
15	101,000 (64)	100,500 (67.5)	99,750 (72)	81,200 (75.5)	55,450 (77.5)	55,450 (79.5)	49,900 (80.5)			
20	72,250 (55)	71,650 (60)	70,850 (66.5)	62,250 (70.5)	55,450 (73.5)	55,450 (76)	49,900 (78)	38,800 (79.5)	27,500 (80.5)	23,000 (81)
25	54,600 (44.5)	54,000 (52)	53,250 (60.5)	49,850 (65.5)	46,600 (69.5)	44,800 (72.5)	42,000 (75)	38,800 (77)	27,500 (78.5)	23,000 (80)
30	43,000 (31)	42,450 (42.5)	41,700 (54)	41,150 (60.5)	38,500 (65.5)	37,000 (69)	35,850 (71.5)	33,750 (74)	25,700 (76)	23,000 (77.5)
35		34,250 (30)	33,550 (46.5)	33,000 (55)	32,450 (61)	31,100 (65)	30,150 (68.5)	28,450 (71)	21,900 (73)	23,000 (75)
40			27,100 (38)	26,150 (49)	26,650 (56)	26,600 (61)	25,800 (65)	24,350 (68)	18,900 (70.5)	21,050 (72.5)
45			21,200 (27)	20,400 (42.5)	20,900 (51)	21,900 (57)	22,300 (61.5)	21,100 (65)	16,500 (68)	18,500 (70)
50				16,150 (35)	16,650 (46)	17,600 (52.5)	18,550 (58)	18,500 (62)	14,650 (65)	16,350 (67.5)
60					10,800 (32.5)	11,650 (43)	12,550 (50)	13,050 (55)	11,750 (59)	13,000 (62)
70						7,880 (30.5)	8,630 (41)	9,110 (47.5)	9,590 (52.5)	10,050 (56.5)
80							5,860 (29)	6,310 (39)	6,770 (45.5)	7,210 (50.5)
90								4,240 (28)	4,680 (37.5)	5,090 (44)
100									3,090 (27)	3,460 (36)
110										2,160 (25.5)
Minimum boom angle (deg.) for indicated length (no load)										0
Maximum boom length (ft.) at 0 deg. boom angle (no load)										125

Note: ( ) Boom angles are in degrees.

**Lifting Capacities On Outriggers - 360 Degrees At Zero Degree Boom Angle**

Boom Angle	Main Boom Length in Feet									
	40	45	55	65	75	85	95	105	115	125
0°	30,400 (33.7)	24,900 (39.1)	17,600 (49.1)	10,750 (59.1)	7,420 (69.1)	5,430 (79.1)	3,960 (89.1)	2,830 (99.1)	1,930 (109.1)	1,230 (118.7)

Note: ( ) Reference radii in feet.



# NOTES FOR LIFTING CAPACITIES

**"WARNING: THIS CHART IS ONLY A GUIDE. The Notes below are for illustration only and should not be relied upon to operate the crane. The individual crane's load chart, operating instructions and other instruction plates must be read and understood prior to operating the crane".**

1. 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 (75% of tipping load on rubber) as determined by SAE J765 OCT80 Crane Stability Test Code.
2. Capacities given do not include the weight of hookblocks, slings, auxiliary lifting equipment and load handling devices. Their weights **MUST** be added to the load to be lifted. When more than minimum required reeving is used, the additional rope weight shall be considered part of the load.
3. All capacities are for crane on firm, level surface. It may be necessary to have structural supports under the outrigger floats or tires to spread the load to a larger bearing surface.
4. 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.
5. For outrigger operation, ALL outriggers shall be fully extended with tires raised free of ground before raising the boom or lifting loads.
6. Tires shall be inflated to the recommended pressure before lifting on rubber.
7. Unless otherwise stated, capacities are with powered boom sections equally extended.
8. Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity limitation.
9. With tele-boom extension in working position and main boom length greater than 70 ft., boom angle must not be less than 30°.

Constant improvement and engineering progress make it necessary that we reserve the right to make specification, equipment, and price changes without notice. Illustrations shown may include optional equipment and accessories and may not include all standard equipment.



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Form No.: LCTMS875B 40'-125' Boom Dom. 292 P/N: 3-656

Printed in U.S.A.

## 40 FT.-125 FT. BOOM TELE. EXTENSION ON OUTRIGGERS - 360°

Radius in Feet	32 ft. LENGTH			44 ft. LENGTH			56 ft. LENGTH		
	2' OFFSET	15' OFFSET	30' OFFSET	2' OFFSET	15' OFFSET	30' OFFSET	2' OFFSET	15' OFFSET	30' OFFSET
25	16,000 (81.6)								
30	16,000 (81)			10,000 (81.6)					
35	16,000 (79)	12,300 (81.6)		10,000 (81)			7,500 (81.6)		
40	15,800 (77)	11,600 (80.5)	9,000 (81.6)	10,000 (79)	9,000 (81.5)		7,500 (81)		
45	15,600 (75.5)	11,000 (78.5)	8,700 (80)	10,000 (77.5)	8,750 (79.5)		7,500 (79.5)		
50	14,650 (73.5)	10,500 (76.5)	8,500 (78)	9,000 (75.5)	8,300 (78)	6,000 (81.5)	7,500 (78)	6,000 (80)	
60	12,850 (69.5)	9,500 (72.5)	8,000 (74)	8,400 (72)	7,500 (74.5)	5,700 (77.5)	7,500 (74.5)	5,900 (76.5)	4,700 (80.5)
70	9,880 (65.5)	8,600 (68.5)	7,300 (70)	7,800 (68)	6,850 (70.5)	5,400 (74)	6,800 (71)	5,550 (73.5)	4,450 (77)
80	6,900 (61)	6,900 (64)	6,600 (65.5)	6,300 (64.5)	6,300 (66.5)	5,000 (70)	6,100 (67.5)	5,100 (70)	4,150 (73.5)
90	4,690 (56.5)	4,690 (59.5)	4,690 (61)	5,190 (60.5)	5,190 (62.5)	4,800 (65.5)	5,500 (64)	4,700 (66)	3,900 (69.5)
100	2,980 (52)	2,980 (55)	2,980 (56)	4,430 (56)	4,430 (58.5)	4,430 (61.5)	4,500 (60)	4,350 (62.5)	3,700 (66)
110	1,610 (46.5)	1,610 (49.5)	1,610 (50.5)	2,890 (52)	2,890 (54)	2,890 (56.5)	3,730 (56)	3,730 (58.5)	3,500 (61.5)
120				1,620 (47)	1,620 (49)	1,620 (51.5)	2,510 (52)	2,510 (54)	2,510 (57.5)
130							1,460 (47.5)	1,460 (49.5)	1,460 (52.5)

NOTE: ( ) Boom angles are in degrees.

\*This capacity is based upon maximum boom angle.

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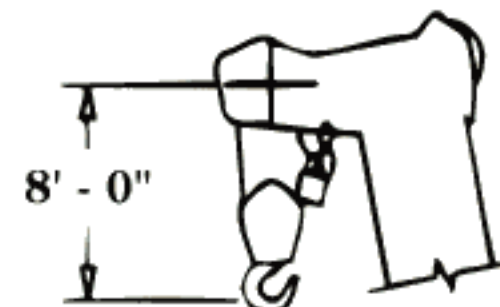
## WEIGHT REDUCTIONS FOR LOAD HANDLING DEVICES

32 - 56 ft. Tele. Ext.	
*Stowed -	1,062 lbs.
*Erected (ret.) -	8,514 lbs.
*Erected (ext.) -	11,136 lbs.

\*Reduction of main boom capacities.

AUXILIARY BOOM HEAD	178 lbs.
HOOKBLOCKS & HEADACHE BALLS:	
80 Ton, 6 Sheave	1,930 lbs.*
45 Ton, 3 Sheave	1,095 lbs.*
15 Ton, 1 Sheave	380 lbs.*
10 Ton Headache Ball	560 lbs.*
7 1/2 Ton Headache Ball	338 lbs.*

\*Refer to rating plate for actual weight.



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