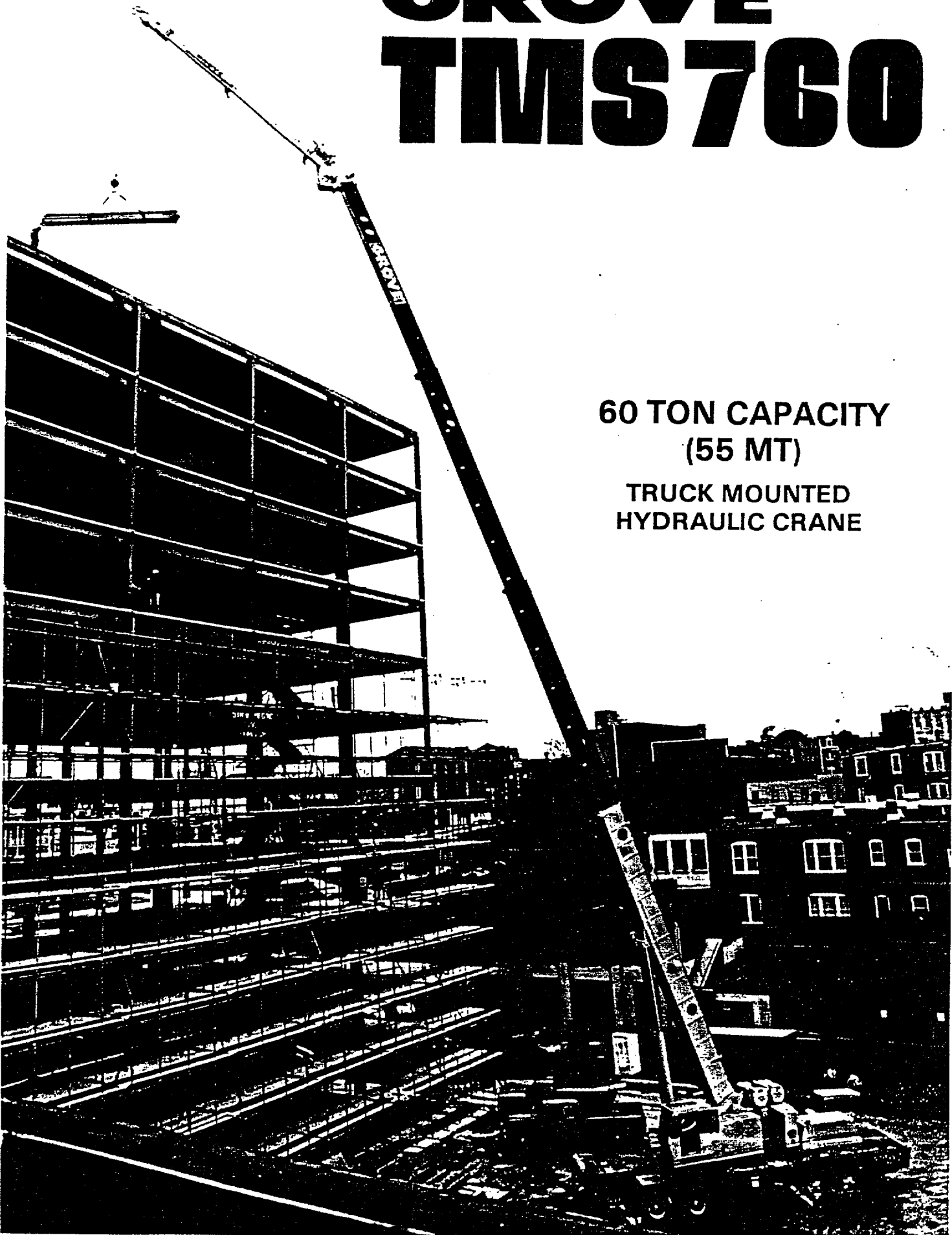


GROVE® TMS760

60 TON CAPACITY
(55 MT)

TRUCK MOUNTED
HYDRAULIC CRANE



PRINCIPAL FEATURES OF THE GROVE TMS760

- 60 tons (55 MT) maximum lifting capacity on outriggers
- The only 60 ton (55 MT) rated truck mounted crane currently manufactured in the U.S.A.
- Gross vehicle weight under 90,000 lbs. (40 824 kgs) for a fully equipped unit
- Patented aerial pinned boom design can be extended and pinned in position by the operator from within the cab
- 150' (45.7m) reach standard, with patented aerial pinned boom design and standard 35' (10.7m) offsetable lattice swingaway
- 186' (56.7m) available reach with optional 125' (38.1m) aerial pinned boom and 35'-61' (10.7 - 18.6m) telescoping offsetable lattice swingaway
- 192' (58.5m) tip height with long boom - telescoping swingaway combination is the industry standard. All transportable to the job site without the need for additional conveyances
- All swingaways offered are offsetable 2°, 15° and 30°. This enables the end-user to achieve attachment angles normally associated with a jib, but with the superior capacities common to a swingaway
- Single stage outriggers give a 24' (7.3m) spread
- Grove-built 11' (3.4m) wide 8x4 carrier
- Optional carrier mounted outrigger controls further increase efficiency of operation in job areas of uneven terrain
- Choice of three turbo-charged diesel engines featuring low sound levels, minimum fuel consumption and efficient high altitude performance
- End-user has flexibility of choosing either a manual or automatic transmission with each backed by an auxiliary transmission for lower job site travel speeds at governed RPMs
- Optional counterweight removal system, for travel in weight-restrictive areas
- Standard "low effort" control valves for smooth, precise operation
- Standard 5th outrigger jack enables 360° operation. Also proper outrigger retraction sequence is ensured when master switch is activated from any control station

The superior lifting characteristics, excellent tip height and overall efficiency of the TMS760 offers the customer the maximum crane value, all keeping in line with the Grove commitment to the total investment concept

GROVE MANUFACTURING COMPANY

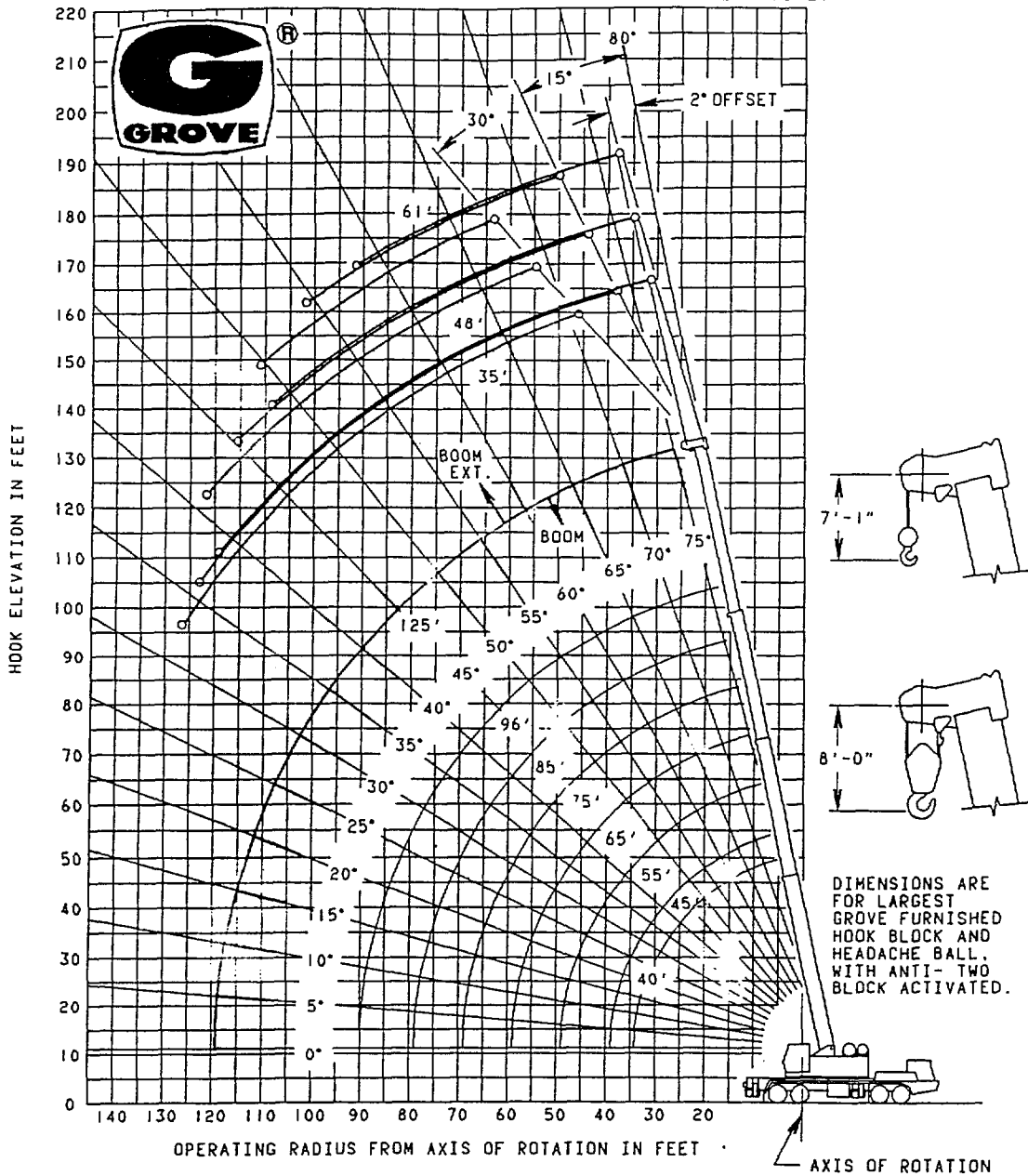
Division of Kidde, Inc.

KIDDE

DISTRIBUTED BY
SOUTH TEXAS EQUIPMENT CO., INC.
1495 N. POST OAK 681-1351
HOUSTON, TEXAS 77055

RANGE DIAGRAM

C6-829-006621



WEIGHT REDUCTION FOR LOAD HANDLING DEVICES

35 ft. BOOM EXTENSION	
†Stowed	556 lbs.
†Erected	4,683 lbs.
35 ft. - 61 ft. TELE BOOM EXT.	
†Stowed	774 lbs.
†Erected (Retracted)	6,438 lbs.
†Erected (Extended)	8,658 lbs.

†Reduction of main boom capacities.

HOOKBLOCKS	
60 Ton, 4 Sheave	1,274 lbs.
40 Ton, 3 Sheave	640 lbs.
15 Ton, 1 Sheave	290 lbs.
10 Ton Headache Ball	560 lbs.
7 1/2 Ton Headache Ball	338 lbs.
5 Ton Headache Ball	172 lbs.
Auxiliary Boom Head	178 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.

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.



GROVE MANUFACTURING COMPANY
 Division of Kidde, Inc.
KIDDE

Box 21, Shady Grove, Pennsylvania 17256
 Phone: (717) 597-8121 Telex: 842308 Cable: GROVE MFG

DATE: 1183-10M

Distributed by:

SOUTH
 147

TMS760

60 TON CAPACITY
40 ft. - 125 ft. BOOM
(POWER PINNED FLY)
PCSA CLASS 10-240

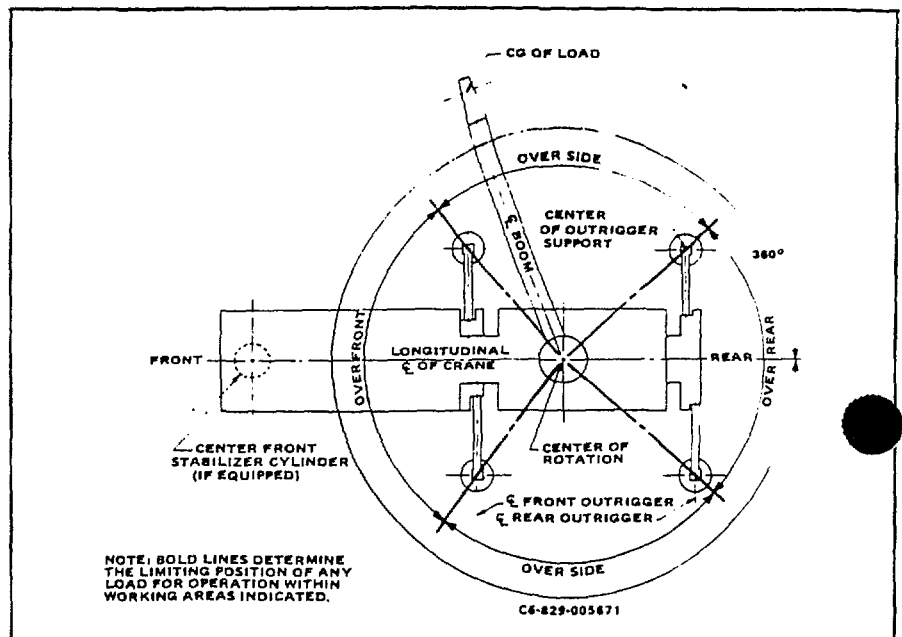
JIB CAPACITIES IN POUNDS
35 FT. FIXED LENGTH BOOM EXTENSION
ON OUTRIGGERS 360°

Main Boom Angle	2° OFFSET		15° OFFSET		30° OFFSET	
	Rad. Ref. ft.	Cap. lbs.	Rad. Ref. ft.	Cap. lbs.	Rad. Ref. ft.	Cap. lbs.
80°	33.3	15,000	38.3	9,150	43.4	7,610
75	45.9	12,500	50.9	8,330	55.8	6,870
70	58.1	9,510	63.0	7,460	67.9	6,170
65	69.9	7,480	74.7	6,490	79.3	5,400
60	81.2	6,050	85.7	5,350	90.2	4,790
55	91.8	5,000	96.1	4,490	100.3	3,890
50	101.7	3,850	105.8	3,240	109.8	2,780
45	110.8	2,730	114.5	2,240	118.2	1,930
40	119.1	1,880	122.4	1,480	125.8	1,280

A6-829-007225

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads, in accordance with SAE J-765a.
2. 35 ft. (10.6 m) boom extension length may be used for double line lifting service only.
3. 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 125 ft. (38.0 m) length only).
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.
4. 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.
5. Capacities listed are with fully extended outriggers only.
6. 35 ft. (10.6 m) BOOM EXTENSION WARNING: For main boom length greater than 92 ft. (28.0 m) with 35 ft. (10.6 m) fixed length boom extension in working position, the boom angle must not be less than 36° 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 92 ft. (28.0 m). This warning applies for boom extension erection purposes also.

LIFTING AREA DIAGRAM





TV

60 TC
40 ft. -
(POWER)
PCSA

RATED LIFTING

ON OUTRIGGERS FULLY EXTENDED - 360°

Radius in Feet	Main Boom Length in Feet (Power Pinned Fly Retracted)							Power Pin. Fly & 96 ft.
	40	45	55	65	75	85	96	
10	120,000 (72)	90,000 (74)	87,300 (77.5)	82,250 (79.5)				See Warning Note 18
12	100,000 (68.5)	85,400 (71.5)	83,000 (75)	77,400 (78)	60,550 (80)			
15	85,000 (63.5)	79,700 (67)	74,000 (72)	70,500 (75)	55,050 (78)	48,850 (79.5)	33,500 (81.5)	
20	64,800 (54.5)	64,400 (60)	58,700 (66)	55,250 (70.5)	47,250 (74)	41,600 (76)	33,500 (78.5)	21,000 (81.5)
25	51,500 (44.5)	51,400 (51.5)	47,800 (60)	44,100 (65.5)	41,400 (69.5)	36,100 (72.5)	33,000 (75)	21,000 (79)
30	41,750 (31)	41,750 (42)	39,900 (53.5)	36,300 (60.5)	34,250 (65.5)	31,300 (69)	28,150 (72)	19,050 (76.5)
35		33,800 (30)	33,800 (46)	31,100 (55)	28,650 (61)	26,500 (65)	23,800 (68.5)	16,800 (74.5)
40	See Warning Note 16		24,000 (38)	24,000 (49)	24,000 (56.5)	22,800 (61)	20,350 (65.5)	15,000 (72)
45			19,000 (26.5)	19,000 (42.5)	19,000 (51.5)	19,000 (57)	17,600 (62)	13,500 (69.5)
50				15,500 (34.5)	15,500 (46)	15,500 (53)	15,350 (58.5)	12,250 (67)
60					10,200 (32.5)	10,200 (43)	10,200 (50.5)	10,300 (61.5)
70						7,000 (30.5)	7,000 (42)	8,300 (56)
80							4,500 (30.5)	6,560 (50)
90								5,140 (43)
100								3,000 (35.5)
110								2,000 (25)
Minimum boom angle (deg.) for indicated length (no load)							0	0
Maximum boom length (ft.) at 0 deg. boom angle (no load)							96	125

NOTE: Boom angles are in degrees.

A6-829-007084 & -007007A

GENERAL:

- Rated loads as shown on capacity chart pertain to this crane as originally manufactured. Modifications to the crane or use of optional equipment other than that specified result in a reduction of capacity. Use only the jib or boom extension supplied with this crane. Do not substitute jibs or boom extensions without the written approval of Grove Mfg. Co.
 - Construction equipment can be hazardous if improperly operated or maintained. Operator maintenance shall be in compliance with the information in the Operator's and Safety Manual, Service and Parts Manuals supplied with this crane. If these manuals are missing, obtain replacements from the manufacturer.
 - The operator and other personnel associated with this crane shall fully acquaint themselves with the latest applicable American National Standards Institute (ANSI) Safety Standards for cranes.
- #### SETUP:
- The crane shall be leveled on a firm supporting surface. Depending on the nature of the surface, it may be necessary to have structural supports of sufficient strength under the 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 contact with the ground before operating the boom or lifting loads.
 - When equipped with front jack cylinder, the front jack cylinder shall be set in accordance with the written procedure.
 - When 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 achieved with standard cable lengths.
 - Rotation resistant wire rope is best suited for single line lifting operations. Consult the manufacturer for specific recommendations concerning multiple part reeving.
 - Do not transport crane with boom extension or jib erected.

OPERATION:

- Rated loads at rated radius shall not be exceeded. Do not tip the machine to determine rated loads. For clamshell operation, weight of load must not exceed 80% of rated lifting capacity.
- All rated loads have been tested to and meet minimum requirements of SAE J-1063 - C Boom Crane Structures - Method of Test, and do not exceed 85% of the tip capacity determined by SAE J-765a Crane Stability Test Code.
- Rated loads include the weight of hook block, slings and auxiliary lifting devices. Combined weights shall be subtracted from the listed ratings to obtain the net load weight lifted.
- Load ratings are based on freely suspended loads. No attempt shall be made to move loads.

S760

1 CAPACITY
125 ft. BOOM
1 PINNED FLY)
CLASS 10-240

GROVE

FULL HYDRAULIC
CARRIER-MOUNTED CRAN

3 CAPACITIES IN POUNDS

5/10
10

35 FT. - 61 FT. TELE BOOM EXTENSION ON OUTRIGGERS - 360°

Main Boom Angle	35 ft. EXTENSION						48 ft. EXTENSION						61 ft. EXTENSION					
	2° OFFSET		15° OFFSET		30° OFFSET		2° OFFSET		15° OFFSET		30° OFFSET		2° 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.	Rad. Ref. ft.	Cap. lbs.	Rad. Ref. ft.	Cap. lbs.
80°	33.3	14,660	38.3	8,820	43.4	7,280	38.8	8,820	49.0	7,720	59.2	5,520	41.3	6,620	54.5	5,740	67.7	4,410
75	45.9	12,200	50.9	8,000	55.8	6,540	52.8	8,070	62.2	6,690	71.8	4,910	56.4	6,180	68.8	4,940	81.2	3,760
70	58.1	9,180	63.0	7,130	67.9	5,840	66.3	7,430	75.1	5,500	83.8	4,210	71.1	6,040	82.8	4,120	94.3	3,200
65	69.9	7,150	74.7	6,160	79.3	5,070	79.4	6,010	87.3	4,640	95.2	3,680	85.3	4,890	96.0	3,500	106.7	2,800
60	81.2	5,720	85.7	5,020	90.2	4,460	91.8	4,810	99.0	3,990	106.0	3,260	98.8	4,070	108.6	3,030	118.2	2,490
55	91.8	4,670	96.1	4,050	100.3	3,390	103.8	3,920	109.8	3,250	115.9	2,790	111.8	3,350	120.3	2,660	128.8	2,240
50	101.7	3,320	105.8	2,730	109.8	2,270	114.8	2,850	119.9	2,210	124.9	1,880	123.8	2,540	131.2	1,740	138.7	1,420
45	110.8	2,210	114.5	1,720	118.2	1,420	125.0	1,890	129.0	1,390	133.0	1,160						

A6-829-007021A

- All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads, in accordance with SAE J-765a.
- 35 ft. (10.6 m), 48 ft. (14.6 m) & 61 ft. (18.5 m) boom extension lengths may be used for double line lifting service only.
- 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 125 ft. (38.0 m) length only.)
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.
- *35 ft. (10.6 m) & 48 ft. (14.6 m) Boom Extension Warning: For main boom length greater than 92 ft. (28.0 m) with 35 ft. (10.6 m) or 48 ft. (14.6 m) tele. boom extension in working position, the boom angle must not be less than 43° 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 92 ft. (28.0 m).
*61 ft. (18.5 m) Boom Extension Warning: For main boom length greater than 89 ft. (27.1 m) with 61 ft. (18.5 m) tele. boom extension in working position, the boom angle must not be less than 46° 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 89 ft. (27.1 m).
*This warning applies for boom extension erection purposes also.

NOTES FOR LIFTING CAPACITIES

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- 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 crane 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 18 inches (45.7 cm) below boom head at all times.
- The boom angle before loading should be greater than the loaded boom angle 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 40 ft. (12.1 m) boom length shall be lifted with boom fully retracted. If boom is not fully retracted, capacities shall not exceed those shown for the 45 ft. (13.7 m) boom length.
- Radius less than 30 ft. (10 m) not recommended when lifting over front of machine.
- For boom lengths less than 125 ft. (38.0 m) with power pinned fly extended, the rated loads are determined by boom angle in the column headed by 125 ft. (38.0 m) boom (power pinned 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.
*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 with the rated boom length.
- 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 gravity.