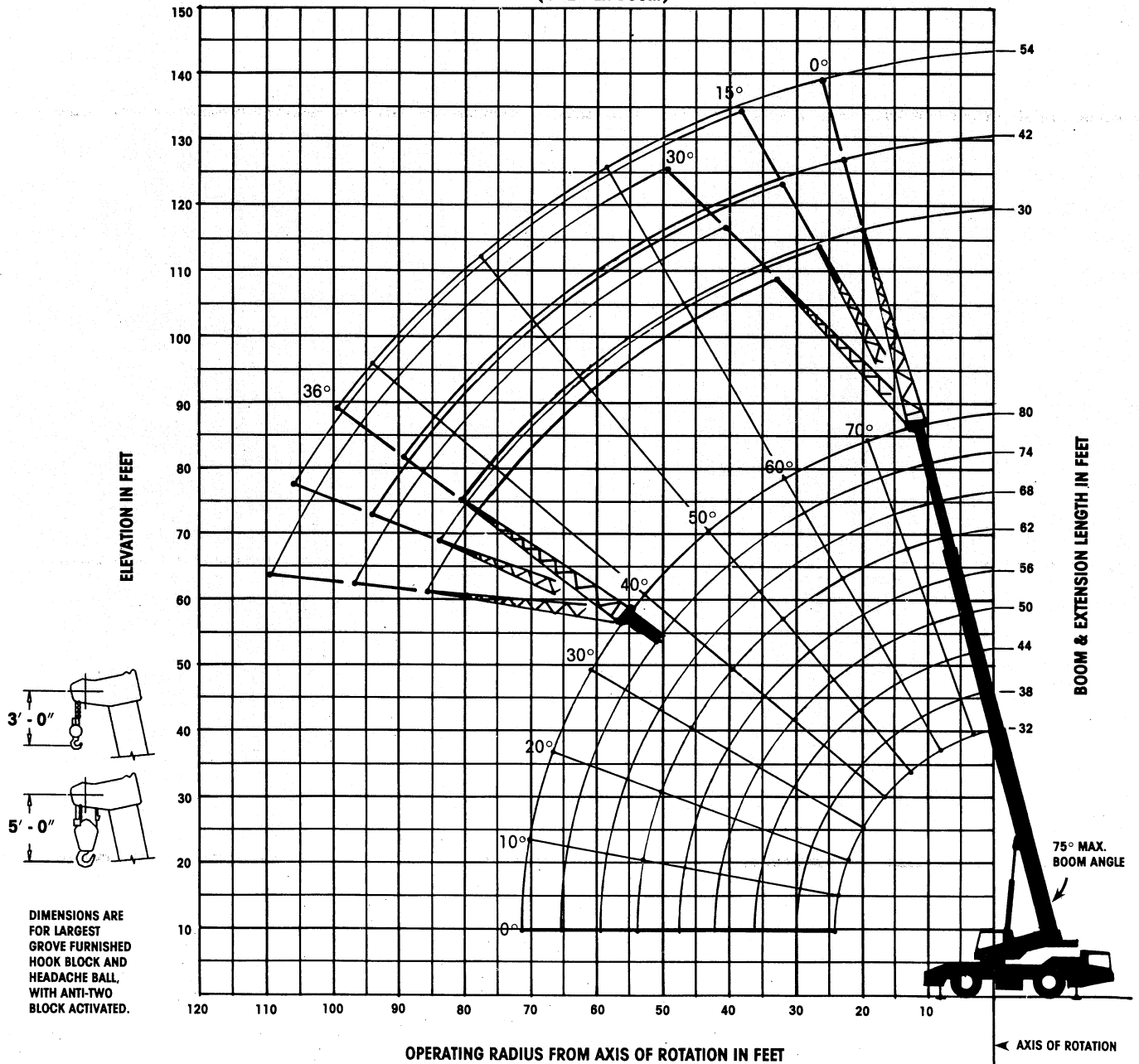




AT745

All terrain hydraulic crane / 32 ft.-80 ft. boom

RANGE DIAGRAM
(UNLADEN BOOM)





Capacities with 11,000 lbs. counterweight

On Outriggers - 360°

RADIUS IN FEET	MAIN BOOM LENGTH IN FEET									
	32	38	44	50	56	62	68	74	80	
9	90000									
10	77000	59900	58000	54550	49700	46150	43250			
12	59950	57600	55500	50850	46000	42450	39150	36550	30000	
15	52450	52450	51450	46450	41750	37850	34550	32150	29550	
20	38950	38950	38950	38950	36150	31850	28850	26700	25000	
25		27700	27700	27700	27700	27500	24750	22750	21150	
30			21100	21100	21100	21100	21100	19800	18200	
35				16550	16550	16550	16550	16550	15900	
40					13500	13500	13500	13500	13500	
45						11250	11250	11250	11250	
50							9490	9490	9490	
55								8090	8090	
60									6940	
65										5980

(75% of Tipping)

RADIUS IN FEET	STATIONARY CAPACITY BOOM CENTRED (7) OVER REAR	PICK & CARRY UP TO 4 KPH BOOM CENTRED (7) OVER REAR
10	31400 (B)	23500 (A)
12	27650 (B)	20650 (B)
15	23100 (C)	17250 (B)
20	17600 (D)	13150 (C)
25	13500 (E)	10350 (D)
30	10500 (E)	8400 (D)
35	8300 (F)	6350 (E)
40	6450 (G)	4630 (E)
45	5000 (H)	2840 (F)
50	3850 (I)	2190 (G)
55	2800 (I)	1640 (G)
60	1850 (I)	1170 (H)
65	1200 (I)	

Maximum Permissible Boom Lengths

- (A) 32' (D) 50' (G) 68'
- (B) 38' (E) 56' (H) 74'
- (C) 44' (F) 62' (I) 80'

30' - 54' Telescopic Swingaway (On Outriggers - 360°)

RADIUS IN FEET	30' LENGTH						42' LENGTH						54' LENGTH							
	0° OFFSET		15° OFFSET		30° OFFSET		0° OFFSET		15° OFFSET		30° OFFSET		0° OFFSET		15° OFFSET		30° OFFSET			
	ANG	LOAD	ANG	LOAD	ANG	LOAD	ANG	LOAD	ANG	LOAD	ANG	LOAD	ANG	LOAD	ANG	LOAD	ANG	LOAD		
25	75.0	12500					75.0	9090												
30	72.5	10750	75.0	7300			74.5	8860					75.0	6600						
35	69.5	9460	73.0	6780	75.0	4950	72.0	8090	75.0	5090			74.0	6080						
40	66.5	8400	70.0	6240	73.5	4730	69.5	7370	73.5	4890			72.0	5590	75.0	3750				
45	63.5	7510	66.5	5770	70.0	4450	66.5	6680	71.0	4600	75.0	3750	69.5	5160	74.5	3670				
50	60.0	6770	63.5	5350	67.0	4200	64.0	6040	68.5	4340	72.5	3580	67.0	4770	72.0	3440				
55	57.0	6150	60.5	4970	64.0	3990	61.0	5420	65.5	4100	70.0	3430	64.5	4430	69.5	3230	75.0	2690		
60	53.5	5510	57.0	4630	60.5	3810	58.5	4990	62.5	3890	67.0	3290	62.5	4120	67.0	3060	72.5	2550		
65	50.0	4915	53.5	4310	56.5	3650	55.5	4620	59.5	3700	63.5	3170	59.5	3840	64.5	2900	70.0	2440		
70	46.5	4320	49.0	4030	53.0	3500	52.5	4250	56.5	3520	60.5	3070	57.0	3580	62.0	2750	67.0	2340		
75	42.5	3750	45.5	3660	49.0	3360	49.0	3800	53.5	3360	57.0	2970	54.5	3350	69.0	2630	64.0	2260		
80	38.0	3175	41.5	3150	44.5	3140	45.5	3420	50.0	3175	53.5	2890	51.5	3130	56.0	2510	61.0	2190		
85	33.0	2600	36.5	2600	39.0	2600	42.0	3030	46.0	3030	49.5	2800	48.5	2920	53.0	2400	58.0	2130		
90	27.5	2000	31.0	2000	33.0	2000	38.0	2650	42.0	2650	45.5	2630	45.5	2735	50.0	2310	55.0	2070		
95								34.0	2270	38.0	2270	40.5	2270	42.0	2560	46.5	2200	51.0	2020	
100								29.0	1900	33.0	1900	35.0	1820	38.5	2340	43.0	2120	47.0	1970	
105													34.0	2030	39.0	2040	42.5	1920		
110													30.5	1710	34.5	1710	37.0	1710		

Constant improvement and engineering progress makes 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. Color stripes shown are a registered trademark of Kidde, Inc.

Form No.: LCEAT745-187-10M

GROVE MANUFACTURING COMPANY

Division of Kidde, Inc.

KIDDE

Shady Grove, Pennsylvania 17256-0021

Capacities with 2,200 lbs. counterweight

On Outriggers - 360°

RADIUS IN FEET	MAIN BOOM LENGTH IN FEET								
	32	38	44	50	56	62	68	74	80
9	90000								
10	77000	59900	58000	54550	49700	46150	43250		
12	59950	57600	55500	50850	46000	42450	39150	36550	30000
15	52450	52450	51450	46450	41750	37850	34550	32150	29550
20	38950	38950	38950	38950	36150	31850	28850	26700	25000
25		26250	26250	26250	26250	26250	24750	22750	21150
30			18850	18850	18850	18850	18850	18850	18200
35				14200	14200	14200	14200	14200	14200
40					11100	11100	11100	11100	11100
45						8920	8920	8920	8920
50							7270	7270	7270
55								5990	5990
60									4960
65									4130

**20.5 x 25 Tires
(75% of Tipping)**

RADIUS IN FEET	STATIONARY CAPACITY	PICK & CARRY UP TO 2.5 MPH
10	31400 (B)	23500 (A)
12	27650 (B)	20650 (B)
15	23100 (C)	17250 (B)
20	14850 (D)	13150 (C)
25	10150 (E)	10150 (D)
30	7430 (E)	7430 (D)
35	5600 (F)	5600 (E)
40	4290 (G)	4290 (E)
45	3310 (H)	2840 (F)
50	2540 (I)	2190 (G)
55	1930 (I)	1640 (G)
60	1420 (I)	1170 (H)
65	1010 (I)	

**Maximum Permissible
Boom Lengths**

- (A) 32' (D) 50' (G) 68'
 (B) 38' (E) 56' (H) 74'
 (C) 44' (F) 62' (I) 80'

**30' - 54' Telescopic Swingaway
(On Outriggers - 360°)**

RADIUS IN FEET	30' LENGTH						42' LENGTH						54' LENGTH							
	0° OFFSET		15° OFFSET		30° OFFSET		0° OFFSET		15° OFFSET		30° OFFSET		0° OFFSET		15° OFFSET		30° OFFSET			
	ANG	LOAD	ANG	LOAD	ANG	LOAD	ANG	LOAD	ANG	LOAD	ANG	LOAD	ANG	LOAD	ANG	LOAD	ANG	LOAD		
25	75.0	12500					75.0	9090												
30	72.5	10750	75.0	7300			74.5	8860					75.0	6600						
35	69.5	9460	73.0	6780	75.0	4950	72.0	8090	75.0	5090			74.0	6080						
40	66.5	8400	70.0	6240	73.5	4730	69.5	7370	73.5	4890			72.0	5590	75.0	3750				
45	63.5	7510	66.5	5770	70.0	4450	66.5	6680	71.0	4600	75.0	3750	69.5	5160	74.5	3670				
50	60.0	6770	63.5	5350	67.0	4200	64.0	6040	68.5	4340	72.5	3580	67.0	4770	72.0	3440				
55	57.0	6150	60.5	4970	64.0	3990	61.0	5420	65.5	4100	70.0	3430	64.5	4430	69.5	3230	75.0	2690		
60	53.5	5420	57.0	4630	60.5	3810	58.5	4990	62.5	3890	67.0	3290	62.5	4120	67.0	3060	72.5	2550		
65	50.0	4490	53.5	4310	56.5	3650	55.5	4620	59.5	3700	63.5	3170	59.5	3840	64.5	2900	70.0	2440		
70	46.5	3710	49.0	3710	53.0	3500	52.5	4250	56.5	3520	60.5	3070	57.0	3580	62.0	2750	67.0	2340		
75	42.5	3050	45.5	3050	49.0	3050	49.0	3580	53.5	3360	57.0	2970	54.5	3350	59.0	2630	64.0	2260		
80	38.0	2490	41.5	2490	44.5	2490	45.5	2950	50.0	2950	53.5	2890	51.5	3130	56.0	2510	61.0	2190		
85	33.0	2000	36.5	2000	39.0	2000	42.0	2400	46.0	2400	49.5	2400	48.5	2870	53.0	2400	58.0	2130		
90	27.5	1580	31.0	1580	33.0	1580	38.0	1920	42.0	1920	45.5	1920	45.5	2420	50.0	2310	55.0	2070		
95								34.0	1500	38.0	1500	40.5	1500	42.0	2030	46.5	2030	51.0	2020	
100								29.0	1130	33.0	1130	35.0	1130	38.5	1680	43.0	1680	47.0	1680	
105													34.0	1370	39.0	1370	42.5	1370		
110													30.5	1090	34.5	1090	37.0	1090		

AT745

Radius in Feet	Main Boom Length in Feet								
	32	38	44	50	56	62	68	74	80
9	90,000								
10	77,000	59,900	58,000	54,550	49,700	46,150	43,250		
12	59,950	57,600	55,500	50,850	46,000	42,450	39,150	36,550	30,000
15	52,450	52,450	51,450	46,450	41,750	37,850	34,550	32,150	29,550
20	38,950	38,950	38,950	38,950	36,150	31,850	28,850	26,700	25,000
25		27,700	27,700	27,700	27,700	27,500	24,750	22,750	21,150
30			21,100	21,100	21,100	21,100	21,100	19,800	18,200
35				16,550	16,550	16,550	16,550	16,550	15,900
40					13,000	13,000	13,000	13,000	13,000
45					10,400	10,400	10,400	10,400	10,400
50						8,490	8,490	8,490	8,490
55							7,020	7,020	7,020
60								5,860	5,860
65									4,910

NOTES FOR LIFTING CAPACITIES

GENERAL:

- Rated loads as shown on lift chart pertain to this machine as originally manufactured and equipped. Modifications to the machine or use of optional equipment other than that specified can result in a reduction of capacity.
- This chart is intended as a guide only. The individual crane's load chart operating instructions and other instruction plates give details of the conditions under which the crane may be operated safely. ALL OF THESE INSTRUCTIONS MUST BE READ AND UNDERSTOOD PRIOR TO OPERATING THE CRANE.

SETUP:

- The machine shall be leveled on a firm supporting surface. Depending on the nature of the supporting surface, it may be necessary to have structural supports under the outrigger 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 crane weight before operating the boom or lifting loads.
- If machine is equipped with front jack cylinder, the front jack cylinder shall be set in accordance with 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.
- 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 allowable loads. For clamshell or concrete bucket operation, weight of bucket and load must not exceed 80% of rated lifting capacities.
- 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 as determined by SAE J765 OCT80 Crane Stability Test Code.

- Rated loads include the weight of hook block, slings and auxiliary lifting devices and their weights shall be subtracted from the listed rating to obtain the net load to be lifted. When more than the minimum required hoist reeving is used, the additional rope weight shall be considered part of the load to be handled.
- Rated loads do not account for wind on lifted load or boom. It is recommended when wind velocity is above 20 mph (32km/h), rated loads and boom lengths shall be appropriately reduced.
- 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.
- Handling of personnel from the boom is not authorized except with equipment furnished and installed by Grove Manufacturing Company.
- Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity limitation.

DEFINITIONS:

- Operating Radius: Horizontal distance from a projection of the axis of rotation 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 by the lift cable.
- Side Load: Horizontal force applied to the lifted load either on the ground or in the air.