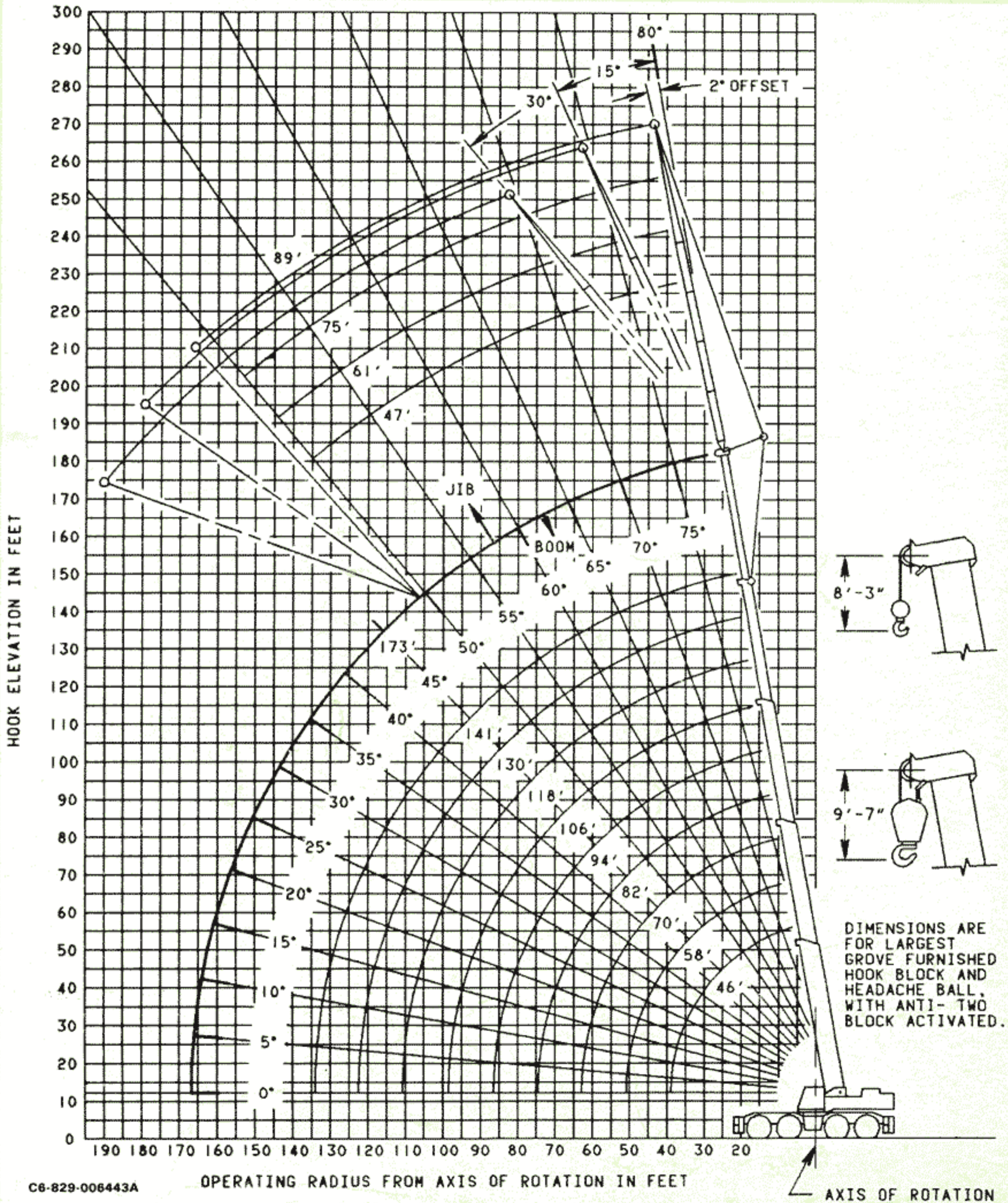


# RT1650

89 ft. (27.0m)  
JIB CAPACITIES

## ENGLISH



# 650

(27.0m)  
CAPACITIES

# GROVE®

FULL HYDRAULIC

# SELF-PROPELLED CRANE

CAPACITIES  
360°

DS

75 ft. JIB						89 ft. JIB					
2° OFFSET		15° OFFSET		30° OFFSET		2° OFFSET		15° OFFSET		30° OFFSET	
Ref. Rad.	Load lbs.	Ref. Rad.	Load lbs.	Ref. Rad.	Load lbs.	Ref. Rad.	Load lbs.	Ref. Rad.	Load lbs.	Ref. Rad.	Load lbs.
48.2	9,470	64.4	5,760	79.8	3,280	53.7	7,300	72.6	3,970	90.7	1,790
59.2	8,790	74.8	5,310	89.6	3,090	65.2	6,560	83.6	3,590	101.2	1,400
70.2	7,880	85.1	4,920	99.2	2,920	76.7	5,950	94.5	2,970	111.5	1,270
81.0	7,110	95.2	4,580	108.8	2,780	88.0	5,380	105.2	2,690	121.6	1,160
91.6	6,470	105.1	4,280	117.8	2,640	99.1	4,700	115.7	2,450		
102.1	5,930	114.8	4,000	126.8	2,370	110.1	4,210	125.9	2,240		
112.3	5,460	124.3	3,620	135.6	2,130	120.8	3,780	136.0	2,050		
122.4	4,310	133.6	3,270	144.1	1,340	131.4	3,430	145.8	1,790		
132.3	3,300	142.6	2,960			141.7	2,480				
151.2	1,670	159.8	1,510								

A6-829-006692

AMS

22.8 m JIB						27.0 m JIB					
2° OFFSET		15° OFFSET		30° OFFSET		2° OFFSET		15° OFFSET		30° OFFSET	
Ref. Rad.	Load kg	Ref. Rad.	Load kg	Ref. Rad.	Load kg	Ref. Rad.	Load kg	Ref. Rad.	Load kg	Ref. Rad.	Load kg
14.7	4,295	19.6	2,610	24.3	1,485	16.4	3,310	22.1	1,800	27.6	810
18.1	3,985	22.8	2,405	27.3	1,400	19.9	2,975	25.5	1,625	30.8	635
21.4	3,570	25.9	2,230	30.2	1,320	23.4	2,695	28.8	1,345	34.0	575
24.7	3,225	29.0	2,075	33.1	1,260	26.8	2,440	32.1	1,220	37.1	525
27.9	2,930	32.0	1,940	35.9	1,195	30.2	2,130	35.3	1,110		
31.1	2,685	35.0	1,810	38.7	1,075	33.6	1,905	38.4	1,015		
34.2	2,475	37.9	1,640	41.3	965	36.8	1,710	41.5	925		
37.3	1,950	40.7	1,480	43.9	605	40.1	1,555	44.4	810		
40.3	1,495	43.5	1,340			43.2	1,120				
46.1	755	48.7	680								

A6-829-006693

**WEIGHT REDUCTION FOR LOAD HANDLING DEVICES**

main boom  
loss of

purpose of

as part of  
(27.0 m)

ing/rigging  
nose when  
accessories

mm] wire

46 - 173 ft. Boom with:	lbs.	kg
47 ft. (14.2m) Jib Erected -	9,425	4,270
61 ft. (18.5m) Jib Erected -	13,611	6,167
75 ft. (22.8m) Jib Erected -	18,416	8,344
89 ft. (27.0m) Jib Erected -	24,085	10,925

HOOKBLOCK	lbs.	kg
30 Ton (27.2 MT) 1 Sheave . . . . .	1,022	464
15 Ton (13.6 MT) Headache Ball . . . . .	803	364
10 Ton (9.1 MT) Headache Ball . . . . .	560	254
Auxiliary Boom Head . . . . .	261	118

† Reduction of main boom capacities.

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.



# RT1

## 89 ft. (27.0 m) JIB CAPACITY

### RATED LIFTING CAPACITY ON OUTRIGGERS

#### POUNDS

Loaded Main Boom Angle	47 ft. JIB						61 ft. JIB					
	2° OFFSET		15° OFFSET		30° OFFSET		2° OFFSET		15° OFFSET		30° OFFSET	
	Ref.* Rad.	Load lbs.**	Ref. Rad.	Load lbs.	Ref. Rad.	Load lbs.	Ref. Rad.	Load lbs.	Ref. Rad.	Load lbs.	Ref. Rad.	Load lbs.
80°	42.8	14,900	52.5	12,600	61.4	8,120	44.7	12,500	58.3	8,530	70.7	5,350
77.5	52.2	14,450	61.8	11,650	70.4	7,750	54.9	11,650	68.1	7,440	80.2	5,070
75	61.6	14,000	71.1	10,850	79.3	7,410	65.1	10,700	77.8	6,940	89.4	4,830
72.5	70.8	13,600	80.2	10,150	88.0	7,120	75.1	9,740	87.4	6,510	98.5	4,610
70	79.9	12,450	89.2	9,550	96.6	6,860	85.0	8,910	96.8	6,130	107.4	4,420
67.5	88.8	11,350	98.0	8,980	104.9	6,630	94.8	8,220	106.0	5,810	116.2	4,250
65	97.6	9,990	106.6	7,940	113.1	6,430	104.3	7,620	115.0	5,520	124.7	3,900
62.5	106.2	8,900	115.0	7,490	121.1	6,210	113.7	6,390	123.8	4,440	132.9	2,990
60	114.6	7,640	123.2	7,050	128.9	5,560	122.8	5,240	132.4	3,490	140.9	2,180
55	130.8	5,540	138.9	5,180	143.5	4,920	140.4	3,380	148.8	1,940		
50	145.9	3,900	153.6	3,670	157.2	3,510	157.0	1,960				

\* Reference radius (feet) refers to fully extended boom and appropriate jib length  
 \*\* Capacities at loaded main boom angle

#### KILOGRAMS

Loaded Main Boom Angle	14.2 m JIB						18.5 m JIB					
	2° OFFSET		15° OFFSET		30° OFFSET		2° OFFSET		15° OFFSET		30° OFFSET	
	Ref.* Rad.	Load kg**	Ref. Rad.	Load kg	Ref. Rad.	Load kg	Ref. Rad.	Load kg	Ref. Rad.	Load kg	Ref. Rad.	Load kg
80°	13.1	6,755	16.0	5,715	18.7	3,680	13.6	5,665	17.8	3,865	21.5	2,425
77.5	15.9	6,550	18.8	5,280	21.5	3,515	16.7	5,280	20.8	3,370	24.4	2,295
75	18.8	6,350	21.7	4,920	24.2	3,360	19.8	4,850	23.7	3,145	27.3	2,190
72.5	21.6	6,165	24.4	4,600	26.8	3,225	22.9	4,415	26.6	2,950	30.0	2,090
70	24.4	5,645	27.2	4,330	29.4	3,110	25.9	4,040	29.5	2,780	32.7	2,000
67.5	27.1	5,145	29.9	4,070	32.0	3,005	28.9	3,725	32.3	2,635	35.4	1,925
65	29.7	4,530	32.5	3,600	34.5	2,915	31.8	3,455	35.1	2,500	38.0	1,765
62.5	32.4	4,035	35.1	3,395	36.9	2,815	34.6	2,895	37.7	2,010	40.5	1,355
60	34.9	3,465	37.5	3,195	39.3	2,520	37.4	2,375	40.4	1,580	43.0	985
55	39.9	2,510	42.3	2,345	43.7	2,230	42.8	1,530	45.3	875		
50	44.5	1,765	46.8	1,660	47.9	1,590	47.9	885				

\* Reference radius (m) refers to fully extended boom and appropriate jib length  
 \*\* Capacities at loaded main boom angle

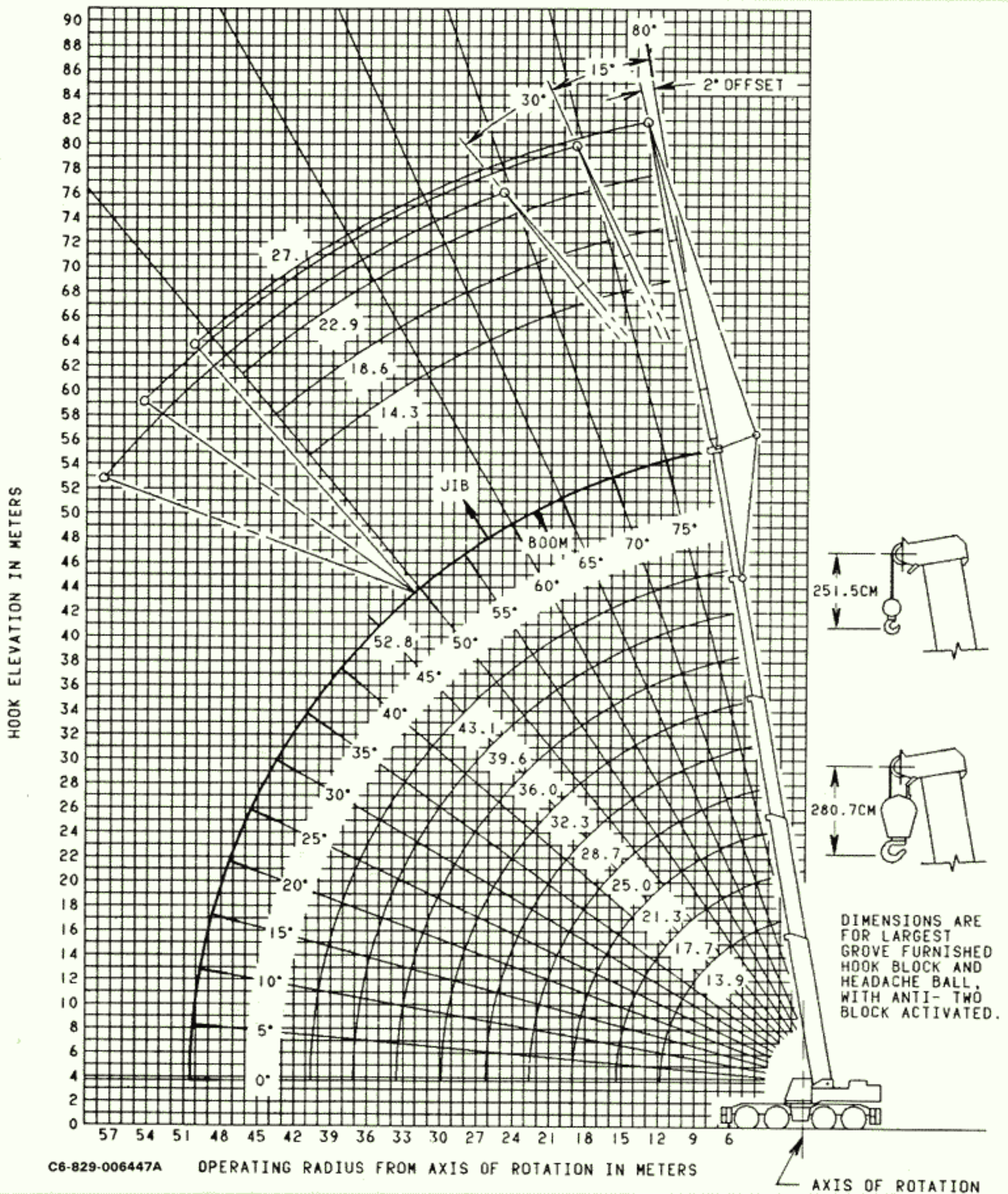
#### JIB CAPACITY NOTES

- All capacities above the bold line are based on structural strength of jib and do not exceed 85% of tipping load, in accordance with SAE J-765.
- 47 ft. (14.2 m), 61 ft. (18.5 m), 75 ft. (22.8 m) & 89 ft. (27.0 m) jibs may be used for two-part 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 173 ft. (52.8 m). The Krueger L.M.I. system will give an accurate radius indication for this condition only.)  
**WARNING:** Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with every jib occurs rapidly and without advance warning.
- 47 ft. (14.2 m) JIB **WARNING:** With 47 ft. (14.2 m) jib and main boom fully extended, the boom angle must not be less than 45° since loss of stability will occur causing a tipping condition.  
 61 ft. (18.5 m) JIB **WARNING:** With 61 ft. (18.5 m) jib and main boom fully extended, the boom angle must not be less than 45° since loss of stability will occur causing a tipping condition.  
 75 ft. (22.8 m) JIB **WARNING:** With 75 ft. (22.8 m) jib and main boom fully extended, the boom angle must not be less than 50° since loss of stability will occur causing a tipping condition.
- 89 ft. (27.0 m) JIB **WARNING:** With 89 ft. (27.0 m) jib and main boom fully extended, the boom angle must not be less than 55° since loss of stability will occur causing a tipping condition.
- JIB ERECTION NOTES:  
 Maximum length of main boom including extended fly for erecting jib below 30° main boom angle is:  
 47 ft. (14.2 m) Jib - 136 ft. (41.5 m)  
 61 ft. (18.5 m) Jib - 129 ft. (39.3 m)  
 75 ft. (22.8 m) Jib - 122 ft. (37.2 m)  
 89 ft. (27.0 m) Jib - 115 ft. (35.3 m)
- Capacities listed are with fully extended outriggers only.
- Use of the 33 ft.-58 ft. (10.0 m-17.7 m) tele. boom extension on the 47 ft. (14.2 m), 61 ft. (18.5 m), 75 ft. (22.8 m) or 89 ft. (27.0 m) jib assemblies is strictly prohibited.
- WARNING:** The Krueger L.M.I. will not compensate for reeving accessories on the main boom nose or auxiliary boom nose. The system is programmed to monitor the jib. Remove all reeving/rigging from main boom when using jib.
- Jib lifting capacities with auxiliary hoist only (3/4 in. [19 mm] rope).

# GROVE®

# RT1650

RANGE DIAGRAMS 89 ft. (27.0m) JIB  
METRIC



C6-829-006447A

OPERATING RADIUS FROM AXIS OF ROTATION IN METERS

AXIS OF ROTATION



**GROVE MANUFACTURING COMPANY**

Division of Kidde, Inc.

**KIDDE**

Box 21, Shady Grove, Pennsylvania 17256

Phone: (717) 597-8121 Telex: 842308 Cable: GROVE MFG

DATE: 883-15M  
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